APPENDIX C

TRANSPORTATION IMPACT STUDY

UNIVERSITY COMMUNITY PLAN AMENDMENT

Transportation Impact Study

JUNE 2016 | FINAL

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1 EXECUTIVE SUMMARY

The purpose of the study is to evaluate the future transportation mode operations in the University community under four different network alternatives. The network alternatives vary by the inclusion or exclusion of two network modifications currently identified in the community plan: the Regents Road bridge crossing over Rose Canyon, and increased through lanes on Genesee Avenue between State Route 52 and Nobel Drive. The evaluation includes walkshed coverage and qualitative evaluation for pedestrians, quantitative level of stress and qualitative evaluation for bicycle facilities and connections, and level of service and travel time calculations for vehicles.

Network Alternatives

Four alternatives, labeled as A through D, were evaluated. The assumptions remained constant for each network, with the only differences noted as follows:

Future Year Network Scenarios	Alternative A	Alternative B	Alternative C	Alternative D
Regents Road Bridge	Yes	Yes	No	No
Genesee Avenue (Nobel – SR-52)	6 lanes	4 lanes	6 lanes	4 lanes

Active Transportation

There are no major changes to the pedestrian network planned for the University community. Site-specific improvements will need to be included as new development or redevelopment occurs. The Mid-Coast trolley project would provide pedestrian connections to existing facilities at each transit station in the community. The City will continue to upgrade curb ramps, crosswalks and traffic signal operations as part of their ongoing maintenance and operations programs. Specific pedestrian improvements are recommended at the following locations:

- *Nobel Drive at I-5; improve connections for the new transit center at La Jolla Village Square.*
- *Improve access to the pedestrian bridge across La Jolla Village Drive on the west side of the La Jolla Village Drive and Villa La Jolla Drive intersection*
- *Re-evaluate the need for the pedestrian bridge planned for La Jolla Village Drive just west of Genesee Avenue;*
- *Move the pedestrian crossing at the intersection of Torrey Pines Road and La Jolla Village Drive from the east leg of the intersection to the west leg;*
- *Install a new signal at the intersection of Eastbound La Jolla Village Drive and Gilman Drive to improve pedestrian safety;*
- *Install a new signal at the intersection of Genesee Avenue and State Route 52 Westbound ramps to improve pedestrian safety;*

The Regents Road bridge would provide an additional location to cross Rose Canyon at grade with existing roadways. Regardless of the alternative, pedestrian facilities would continue to be provided along Genesee Avenue across Rose Canyon.

This document provides an updated recommended bicycle network for the community that includes a mix of separated paths (Class I), bicycle lanes (Class II) including buffers, bicycle routes (Class III), and

protected bicycle lanes (Class IV). The proposed network provides more facilities with buffers or separation from vehicles than what was identified originally in the City's' Bicycle Master Plan. The completed network would reduce the bicycle level of traffic stress along the roadways where investments are made in bicycle facilities. It is recommended that signals along Class II and IV routes include detection for bicyclists and consideration of additional improvements such as bicycle boxes, no right-turn-on-red restrictions, and bicycle signal heads.

The bicycle network would be the same for each alternative, except for the type of facility that would be provided at the Regents Road and Genesee Avenue connections across Rose Canyon. With Alternatives A and B, the Regents Road bridge would provide an additional north-south bicycle facility connection for the community. Alternatives C and D also include the option of an active transportation bridge connecting Regents Road across Rose Canyon. Bicycle facilities would be provided on Genesee Avenue with each alternative, either as buffered Class II bicycle lanes (Alternatives A and D), or a separated facility shared with pedestrians (Alternatives B and C).

Public Transit

A key focus of the Regional Transportation Plan prepared by the San Diego Association of Governments (SANDAG) is to develop an ambitious and far-reaching transit network that significantly expands its role in our transportation network. This regional goal greatly applies to the transit network in the University community, as there have been significant investments made in the transit network that will be operational in the near future. As identified in the SANDAG 2050 Regional Transportation Plan (2050 RTP), these improvements include different transit options such as Light Rail Transit (LRT), Bus Rapid Transit (BRT), and High Frequency (Rapid) Local Bus. The Future Year conditions include transit projects identified in the 2050 RTP that are planned to be implemented by Year 2035.

Transit performance was evaluated primarily on auto travel time in the community, which is summarized as follows:

- *The auto travel time along Genesee Avenue is greatly affected by the network alternative. Alternative A results in significantly less travel time from one end of the community to the other when compared to other alternatives. Alternative D has the longest travel times along Genesee Avenue.*
- *The auto travel times along La Jolla Village Drive and Nobel Drive vary slightly between the alternatives but are not heavily influenced by the network alternative.*
- *The auto travel time along Regents Road is similar for Alternatives A and B, and similar for Alternatives C and D. There is not a good comparison between all alternatives as providing the bridge connection is a different travel pattern to evaluate and increases the overall distance traveled along Regents Road. No conclusions can be made from the Regents Road travel time analyses. Feedback received from MTS was that the Regents Road bridge would likely not be a candidate for many transit routes, so transit travel time in Regents Road may not be an important consideration.*

As identified by MTS, one of the key chokepoints identified that cause delays for buses in the community was the portion of Genesee Avenue between Nobel Drive and Governor Drive. For Alternatives C and D, the Genesee Avenue cross-section between Nobel Drive and State Route 52 should be evaluated to consider the implementation of transit bypass lanes at congested areas and intersections.

Street Network

A traffic model was prepared by SANDAG for existing and future community build-out conditions. Traffic counts obtained in 2015 were used to calibrate the existing model results. Using the attributes included in the calibrated existing model and the adopted community land uses, the future land use assumptions and roadway network variations were input and run to estimate future volumes.

Alternative D Travel Pattern Results

Alternative D represents a network that is similar to what currently exists with the planned network changes currently in the community facility financing plan, excluding the Regents Road bridge and Genesee Avenue project. These other network changes are described in depth within the report. Travel patterns under this alternative would remain similar to existing patterns.

Alternative A Travel Pattern Results

The changes in travel patterns for Alternative A show that Regents Road would experience increased volumes from one end of the community to the other. Lebon Drive would experience increased traffic as it acts as an alternative route to travel between Regents Road and La Jolla Village Drive. La Jolla Village Drive and Nobel Drive would experience some decreased volumes as people utilize Regents Road and Genesee Avenue to travel through the community rather than getting to and from the freeways on these corridors. Genesee Avenue across Rose Canyon and Governor Drive between Regents Road and Genesee Avenue would have reduced volumes. Volumes on I-5 and I-805 would be reduced as travel patterns shift towards using SR-52 for accessing North University on the Regents Road bridge. In general, travel decisions within the community are anticipated to rely less on the freeways and more on the internal community roadways.

Alternative B Travel Pattern Results

The changes in travel patterns for Alternative B would generally be similar to Alternative A, except the travel pattern decision changes would not reach vehicles on La Jolla Village Drive and Nobel Drive like they would for Alternative A.

Alternative C Travel Pattern Results

The change in travel patterns for Alternative C would primarily be drivers utilizing the increased capacity Genesee Avenue via SR-52 rather the I-5 and I-805 freeways adjacent to the community. There would be increased volume on Genesee Avenue across Rose Canyon.

Impacts

A total of 80 intersections throughout the community were analyzed to determine the operations during morning and afternoon peak periods. A total of 68 roadway segments throughout the community were analyzed using a volume-based daily capacity evaluation. Roadway segment travel times (based on speed) and midday intersection analyses were performed for intersections along Genesee Avenue, La Jolla Village Drive, Nobel Drive, and Regents Road. The following represents a summary of the intersection and roadway segment operations and travel time within the community.

The number of intersection locations that would operate at poor LOS (E or F) during at least one peak period and the number of locations that would be considered to have a significant impact when compared to existing conditions is as follows:

- *Alternative A: 29 locations operate at unacceptable LOS, 28 of which are a significant impact.*
- *Alternative B: 29 locations operate at unacceptable LOS, 29 of which are a significant impact.*
- *Alternative C: 31 locations operate at unacceptable LOS, 29 of which are a significant impact.*
- *Alternative D: 31 locations operate at unacceptable LOS, 30 of which are a significant impact.*

The number of roadway segment locations that would operate at poor LOS (E or F) using a volume-based analysis and the number of locations that would be considered to have a significant impact when compared to existing conditions is as follows:

- *Alternative A: 21 locations operate at unacceptable LOS, 19 of which are a significant impact.*
- *Alternative B: 23 locations operate at unacceptable LOS, 21 of which are a significant impact.*
- *Alternative C: 22 locations operate at unacceptable LOS, 20 of which are a significant impact.*
- *Alternative D: 23 locations operate at unacceptable LOS, 21 of which are a significant impact.*

The speed-based evaluations were performed using the roadway network associated with that alternative and the future peak-hour traffic volumes. A summary of the significant impacts by alternative when compared to existing conditions is as follows:

- *Alternative A would have significant impacts to all four corridors.*
- *Alternative B would have significant impacts to all four corridors.*
- *Alternative C would have significant impacts to three of the four corridors (no impact to Regents Road).*
- *Alternative D would have significant impacts to three of the four corridors (no impact to Regents Road).*

Freeways

Freeway operations for the adjacent Interstate 5, Interstate 805, and State Route 52 facilities were analyzed to determine the operations of the mainline and ramp connections. While the speed and density varies for each alternative, the number of locations that would operate at poor LOS (E or F) during at least one peak period and the number of locations that would be considered to have a significant impact when compared to existing conditions is the same for each alternative.

- *I-5 has one segment location with poor operations and a significant impact.*
- *All of I-805 (four segments) has poor operations and significant impacts.*
- *All of SR-52 (three segments) has poor operations and significant impacts.*

Similar to the freeway mainline analysis, the number of metered freeway on-ramp locations that would experience delays over 15 minutes and the number of metered on-ramp locations that would be considered to have a significant impact when compared to existing conditions is the same for each alternative.

- *Seven of the metered freeway on-ramps for I-5 have poor operations and significant impacts.*
- *One metered on-ramp for I-805 has poor operations and a significant impact.*

In general, the failing freeway segments are those that move traffic towards the University community in the morning and away from the University community in the afternoon.

Mitigations

Potential mitigation measures were identified for each location that would have a potential significant impact. Recommendations as to whether or not the mitigation measures should be implemented were then provided based on an evaluation of the network as a whole, and the effects that the vehicle-based mitigation measure would have on other modes of transportation and adjacent properties.

The locations where the mitigation measures are recommended are summarized in tables on the next few pages. Specific details regarding the mitigations are provided in the body of the document.

The number of intersections continuing to operate at unacceptable LOS during one or more peak periods after the implementation of the recommended mitigation measures is as follows:

Alternative A: 17 locations
Alternative B: 17 locations
Alternative C: 20 locations
Alternative D: 20 locations

The number of roadway segment locations continuing to operate at unacceptable LOS after the implementation of the recommended mitigation measures is as follows:

Alternative A: 16 locations
Alternative B: 15 locations
Alternative C: 16 locations
Alternative D: 17 locations

Vehicle speeds generally are increased along the corridors with the capacity improvements identified as mitigation to intersections and roadway segments.

Emergency Response

An emergency response time evaluation was performed for the area south of Rose Canyon, east of Interstate 5, west of Genesee Avenue, and north of State Route 52. The current response time to this area does not meet City goals. The average response time increases by a couple minutes regardless of the alternative selected. The Fire Department does not use average travel time as a quantifier when determining response time effectiveness, they use a 90% fractile which cannot be forecast in the future. However, based on the finding that average response times are expected to increase and existing response times are not currently meeting the City's goal response times, it can be concluded that regardless of the alternative selected, a new fire station would be beneficial to improve emergency response times in this area of the community.

Intersections Recommended for Mitigation Measures

ID	Intersection	Alt A (Regents Bridge & 6-lane Genesee)	Alt B (Regents Bridge & 4-lane Genesee)	Alt C (No Regents Bridge & 6-lane Genesee)	Alt D (No Regents Bridge & 4-lane Genesee)
2	Genesee Ave & John Hopkins Dr (S)	X	X	X	X
14	Genesee Ave & Nobel Dr		X		
15	Genesee Ave & Decoro St	X	X	X	X
17	Genesee Ave & Governor Dr	X	X	X	X
18	Genesee Ave & SR-52 WB Ramps	X	X	X	X
21	La Jolla Village Dr & Torrey Pines Rd	X	X	X	X
23b	La Jolla Village Dr EB & Gilman Dr	X	X	X	X
24	La Jolla Village Dr & Villa La Jolla Dr	X	X	X	X
34	Miramar Rd & Eastgate Mall	X	X	X	X
59	Regents Rd & Arriba St	X	X		
60	Regents Rd & Governor Dr	X	X		
69	Gilman Dr & I-5 SB Ramps			X	X
73	Towne Centre Dr & Eastgate Mall	X	X	X	X
76	Executive Way & Executive Dr	X	X	X	X
77	Judicial Dr & Eastgate Mall	X	X	X	X
79	Governor Dr & I-805 NB Ramps	X	X	X	X

Roadway Segments Recommended for Mitigation Measures

Roadway Segment	Alt A (Regents Bridge& 6-lane Genesee)	Alt B (Regents Bridge& 4-lane Genesee)	Alt C (No Regents Bridge& 6-lane Genesee)	Alt D (No Regents Bridge& 4-lane Genesee)
Eastgate Mall, Judicial Drive to Eastgate Drive	X	X	X	X
Eastgate Mall, Eastgate Drive to Miramar Road	X	X	X	X
Genesee Avenue, La Jolla Village Drive to Esplanade Court			X	X
Genesee Avenue, Nobel Drive to Centurion Square		X		X
Genesee Avenue, Centurion Square to Governor Drive		X		X
Genesee Avenue, Governor Drive to SR-52 WB Ramps		X		X
La Jolla Village Drive, I-5 NB Ramps to Towne Centre Drive	X	X	X	X

Corridors Recommended for Mitigation Measures

Corridor	Alt A (Regents Bridge& 6-lane Genesee)	Alt B (Regents Bridge& 4-lne Genesee)	Alt C (No Regents Bridge& 6-lane Genesee)	Alt D (No Regents Bridge& 4-lane Genesee)
Genesee Avenue	X	X	X	X
La Jolla Village Drive	X	X	X	X
Nobel Drive	X	X	X	X
Regents Road	X	X		

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1 INTRODUCTION

The following report has been prepared to determine and evaluate the traffic impacts associated with potential changes in the mobility network within the University community as part of a Community Plan Amendment. The purpose of the study is to evaluate the future transportation mode operations with inclusion or exclusion of two network modifications currently identified in the community plan: the Regents Road bridge crossing over Rose Canyon, and increased through lanes on Genesee Avenue between State Route 52 and Nobel Drive. The evaluation includes walkshed coverage and qualitative evaluation for pedestrians, quantitative level of stress and qualitative evaluation for bicycle facilities and connections, and level of service and travel time calculations for vehicles.

BACKGROUND

The University community is located at the northern border of the City of San Diego, encompassing the University Town Center, Torrey Pines, and the University of California San Diego (UCSD). The area commonly referred to as the “golden triangle”, bounded by Interstate 5 (I-5), Interstate 805 (I-805), and State Route 52 (SR-52), is located within the University community. **Figure 1-1** depicts the location of the University community in a regional context and **Figure 1-2** shows the community boundary in a localized context.

The future mobility network for the community is being updated using the adopted future land use. Specifically, the effort focuses on two projects currently in the community plan’s mobility network to determine if they should remain in the plan: 1) the construction of Regents Road bridge to cross Rose Canyon; and 2) the modification of Genesee Avenue to six lanes between Nobel Drive and State Route 52. Other community mobility network considerations are included in the evaluation to provide a comprehensive look at the future network.

REPORT LAYOUT

Due to the large amount of data required to represent four network alternatives, the body of the report includes summary tables that cover all alternatives and alternative-specific recommendations are included in the appendices:

Appendix A contains the future analysis results and recommended network for **Alternative A**.

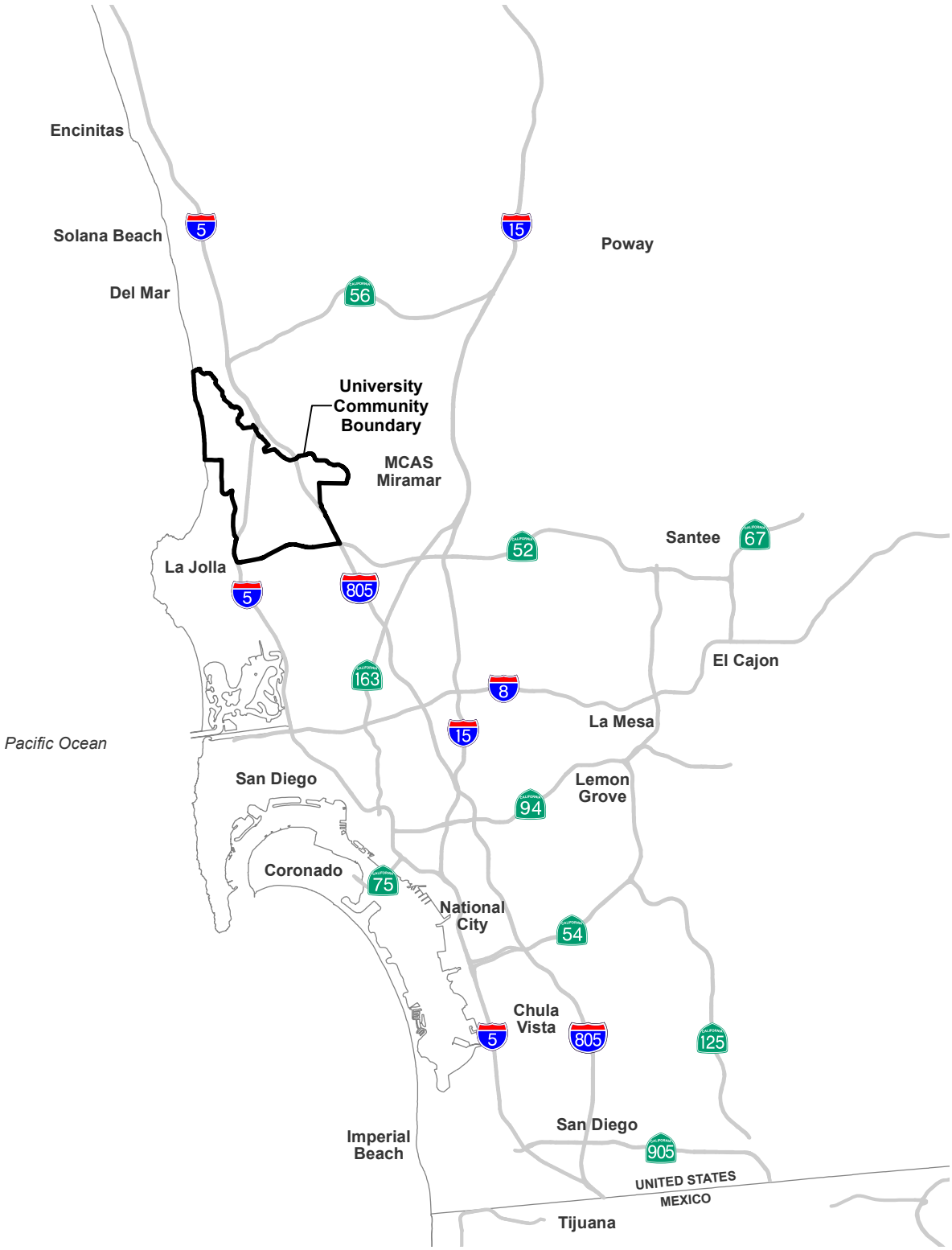
Appendix B contains the future analysis results and recommended network for **Alternative B**.

Appendix C contains the future analysis results and recommended network for **Alternative C**.

Appendix D contains the future analysis results and recommended network for **Alternative D**.

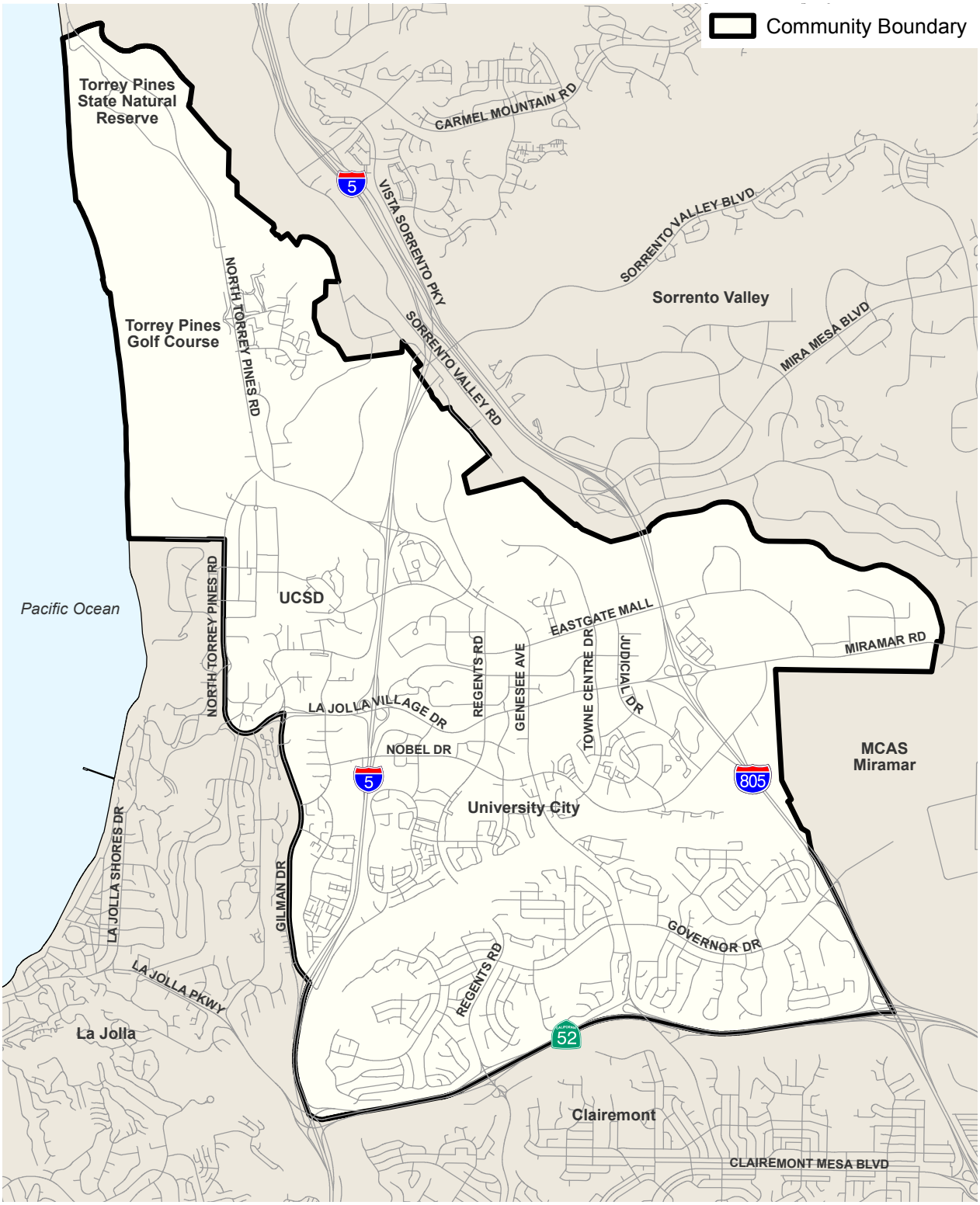
The intent is that information on specific alternatives can be obtained quickly from the associated Appendix rather than finding the correct figure within the report. That said, it is important that at least Appendices A through D are included as part of this document when published and read.

FIGURE 1-1



Regional Vicinity Map

FIGURE 1-2



Community Boundary

2 STUDY AREA FACILITIES AND ANALYSIS SCENARIOS

The following section describes the study area included and the alternatives being evaluated.

STUDY AREA

INTERSECTIONS

Intersections to be studied were selected based on several factors, which included the following:

- Existing Circulation Element roadways intersecting with other existing Circulation Element roadways where both roadways function or are classified as a collector or higher
- Anticipated Circulation Element roadways intersecting with other existing and/or anticipated Circulation Element roadways where both roadways function or are classified as a collector or higher
- Key intersections where both intersecting streets meet one of the following conditions:
    - 4-lanes (or greater)
    - 3-lanes and carries over 15,000 Average Daily Traffic (ADT)
    - 2-lanes and carries over 10,000 ADT
- Intersections that provide access to/from freeways located within the University community
- Signalized intersections along corridors where travel time analysis is performed

It should be noted that some intersections selected for the study area fall just outside the University community boundary. However, these intersections were included in the analysis because they may influence or impact the flow of transportation within the community.

Based on the criteria listed above, a total of 80 intersections were selected for inclusion in the analysis study area. **Table 2-1** provides a list of the intersections and assigns an identification number to each intersection for use in this study. **Figure 2-1** graphically displays the location of each of the study intersections.

ROADWAY SEGMENTS AND CORRIDORS

Roadway segments to be studied were selected based on several factors, which included the following:

- Existing Circulation Element roadways functioning or classified as a collector or higher
- Anticipated Circulation Element roadways functioning or classified as a collector or higher
- Roadways providing access to/from freeways

Based on the criteria listed above, a total of 68 roadway segments were selected for analyses. **Figure 2-2** graphically displays the location of each of the roadway segments in the community selected for analyses.

Four corridors were selected to have travel time analysis performed to understand the flow of traffic through the community: La Jolla Village Drive, Genesee Avenue, Nobel Drive, and Regents Road.

FREEWAY SEGMENTS AND RAMPS

Freeway segments adjacent to the community and freeway entrance ramps that are controlled by ramp meters are included in the study area. **Figure 2-3** graphically displays the location of each of the freeway segments and entrance ramps included in the analysis study area, including facilities along I-5, I-805, and SR-52.

Table 2-1 Study Intersections

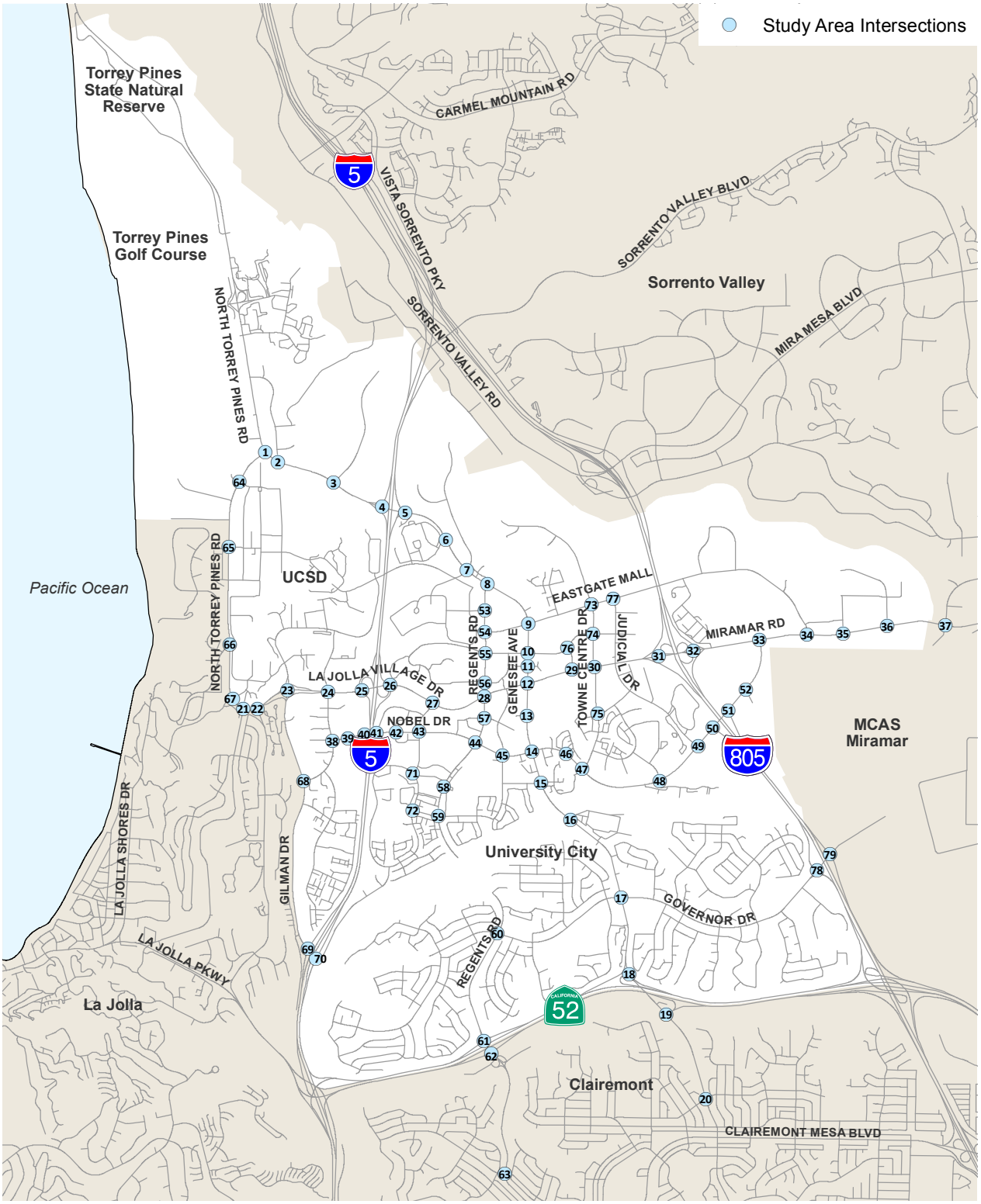
ID	Intersection
1	Genesee Ave & N. Torrey Pines Rd
2	Genesee Ave & John Hopkins Dr (S)
3	Genesee Ave & Science Center Dr
4	Genesee Ave & I-5 SB Ramps
5	Genesee Ave & I-5 NB Ramps
6	Genesee Ave & Scripps Hospital
7	Genesee Ave & Campus Point Dr
8	Genesee Ave & Regents Rd
9	Genesee Ave & Eastgate Mall
10	Genesee Ave & Executive Dr
11	Genesee Ave & Executive Square
12	Genesee Ave & La Jolla Village Dr
13	Genesee Ave & Esplanade Ct
14	Genesee Ave & Nobel Dr
15	Genesee Ave & Decoro St
16	Genesee Ave & Centurion Square
17	Genesee Ave & Governor Dr
18	Genesee Ave & SR-52 WB Ramps
19	Genesee Ave & SR-52 EB Ramps
20	Genesee Ave & Appleton St/Lehrer Dr
21	La Jolla Village Dr & Torrey Pines Rd
22	La Jolla Village Dr & La Jolla Scenic Dr
23a	La Jolla Village Dr WB & Gilman Dr
23b	La Jolla Village Dr EB & Gilman Dr (unsignalized; side-street stop controlled)
24	La Jolla Village Dr & Villa La Jolla Dr
25	La Jolla Village Dr & I-5 SB Off-Ramps
26	La Jolla Village Dr & I-5 NB Off-Ramps
27	La Jolla Village Dr & Lebon Dr

ID	Intersection
28	La Jolla Village Dr & Regents Rd
29	La Jolla Village Dr & Executive Way
30	La Jolla Village Dr & Towne Centre Dr
31	La Jolla Village Dr & I-805 SB Ramps
32	La Jolla Village Dr & I-805 NB Ramps
33	Miramar Rd & Nobel Dr
34	Miramar Rd & Eastgate Mall
35	Miramar Rd & Miramar Mall
36	Miramar Rd & Miramar Place
37	Miramar Rd & Camino Santa Fe
38	Nobel Dr & Villa La Jolla Dr
39	Nobel Dr & La Jolla Village Square Dwy
40	Nobel Dr & I-5 SB On Ramp
41	Nobel Dr & I-5 NB Off-Ramp/University Center Ln
42	Nobel Dr & Caminito Plaza Centro
43	Nobel Dr & Lebon Dr
44	Nobel Dr & Regents Rd
45	Nobel Dr & Costa Verde Blvd/Cargill Ave
46	Nobel Dr & Lombard Place
47	Nobel Dr & Towne Centre Dr
48	Nobel Dr & Shoreline Dr
49	Nobel Dr & Judicial Dr
50	Nobel Dr & I-805 SB On-Ramp
51	Nobel Dr & I-805 NB Off-Ramp
52	Nobel Dr & Avenue of Flags
53	Regents Rd & County Day Ln/ Health Science Dr
54	Regents Rd & Eastgate Mall
55	Regents Rd & Executive Dr

Table 2-1 Study Intersections (continued)

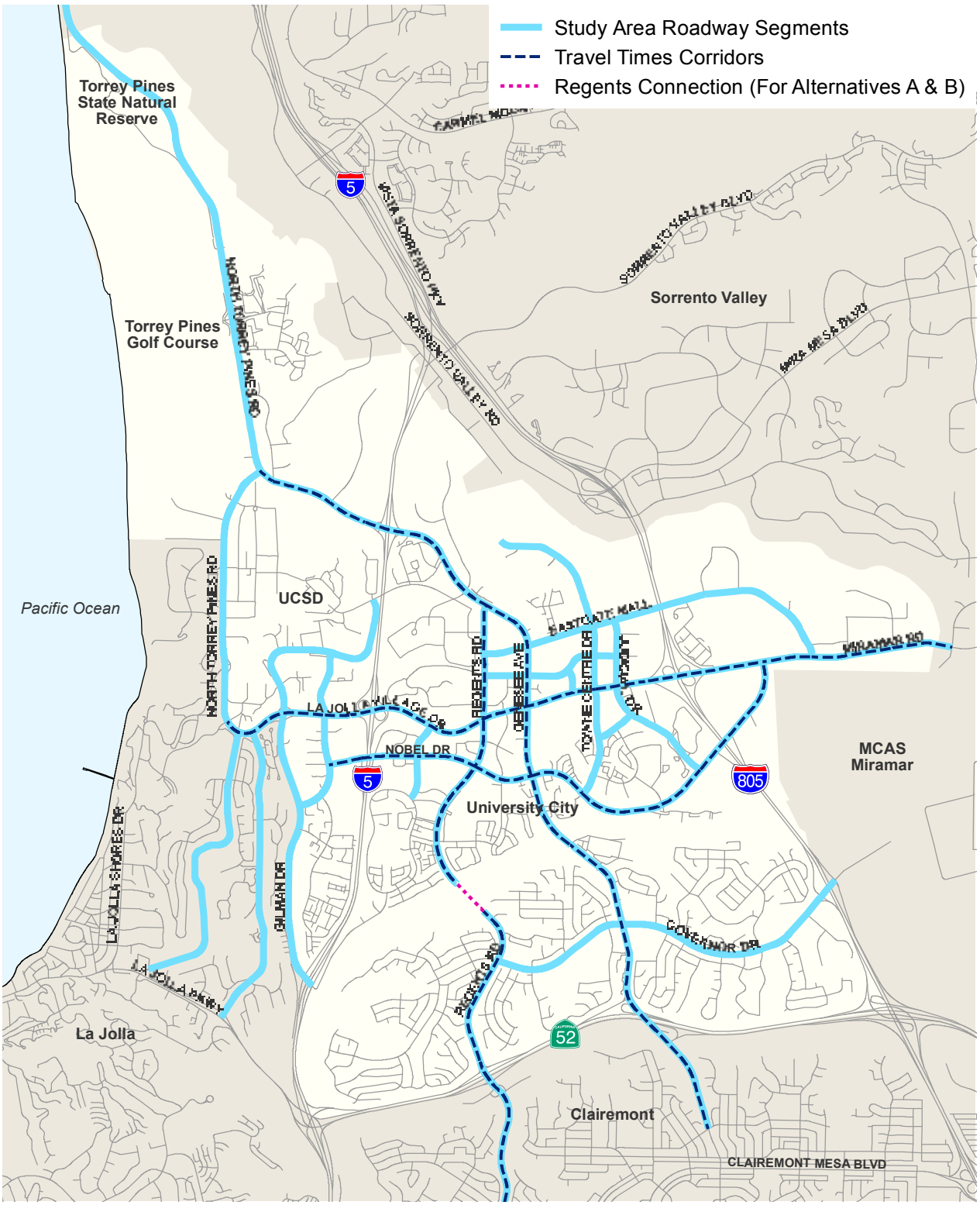
ID	Intersection
56	Regents Rd & Regents Park Row
57	Regents Rd & Plaza De Palmas
58	Regents Rd & Berino Ct
59	Regents Rd & Arriba St
60	Regents Rd & Governor Dr
61	Regents Rd & SR-52 WB Ramps
62	Regents Rd & SR-52 EB Ramps
63	Regents Rd & Luna Ave
64	N. Torrey Pines Rd & UCSD Northpoint Dwy
65	N. Torrey Pines Rd & Pangea Dr
66	N. Torrey Pines Rd & La Jolla Shores Dr
67	N. Torrey Pines Rd & Revelle College Dr
68	Gilman Dr & Villa La Jolla Dr
69	Gilman Dr & I-5 SB Ramps
70	Gilman Dr & I-5 NB Ramps
71	Palmilla Dr & Lebon Dr
72	Palmilla Dr & Ariba St
73	Towne Centre Dr & Eastgate Mall
74	Towne Centre Dr & Executive Dr
75	Towne Centre Dr & Golden Haven Dr
76	Executive Way & Executive Dr
77	Judicial Dr & Eastgate Mall
78	Governor Dr & I-805 SB Ramps
79	Governor Dr & I-805 NB Ramps

FIGURE 2-1



Study Area: Intersections

FIGURE 2-2



Study Area: Roadways

FIGURE 2-3

Study Area: Freeways and Ramps

ANALYSIS SCENARIOS

A total of five scenarios were analyzed as part of the project.

- Existing Conditions (2015)
- Future Year Alternative A
- Future Year Alternative B
- Future Year Alternative C
- Future Year Alternative D

Existing Conditions

1) Existing Conditions: Represents the traffic conditions of the street network as it exists in 2015. An existing conditions report was prepared under separate cover and provides additional information on the network in its current configuration. Appendix E contains the existing conditions information used as a baseline for this report.

Future Year Conditions

2) Future Year Conditions: The future community build-out conditions were developed based on land use and network assumptions within the University Community Plan area and superimposed on the SANDAG 2035 regional model. Four alternatives, labeled as A through D, were evaluated. **Table 2-2** summarizes the network differences for each alternative.

Table 2-2 Network Alternatives

Future Year Network Scenarios	Alternative A	Alternative B	Alternative C	Alternative D
Regents Road Bridge	Yes	Yes	No	No
Genesee Avenue (Nobel – SR-52)	6 lanes	4 lanes	6 lanes	4 lanes

ANALYSES INCLUDED

The evaluation process includes the following analyses:

- Qualitative look at pedestrian network connectivity
- Bicycle level of traffic stress
- Transit travel times using corridor speed
- Levels of service at all study intersections for the AM and PM peak-hours during a typical weekday
- Levels of service for the majority of study intersections along Genesee Avenue, La Jolla Village Drive, Nobel Drive, and Regents Road during the midday peak-hour during a typical weekday
- Levels of service for roadway segments within the community based on average daily traffic and theoretical capacity based on the roadway classification
- Levels of service along corridors within the community based on average speed
- Levels of service along freeway segments adjacent to the community based on density
- Length of queues and delays at freeway entrance ramps that have ramp meter operations

3 METHODOLOGY

The following section describes the methodology used to perform capacity analyses and determine significant impacts.

PEDESTRIAN NETWORK CONNECTIVITY AND BARRIERS

The existing conditions report provided an overview of where pedestrian connections currently are provided, areas that have missing pedestrian facilities, and barriers that may impede pedestrian connectivity. Based on that information, a few specific pedestrian connection areas were selected for further evaluation and are discussed in this report.

BICYCLE LEVEL OF TRAFFIC STRESS

The Mineta Transportation Institute published Low-Stress Bicycling and Network Connectivity *(2012)* which establishes a methodology for evaluating the level of stress for bicyclists riding on a designated bicycle facility associated with specific factors. The Mineta Transportation Institute document, developed by Mekuria et. al., used the City of San Jose as a test case to apply the methodology. This methodology applies a level of traffic stress (LTS) on a scale of LTS 1 (lowest stress) to LTS 4 (highest stress) for the following criteria:

- Roadway Classifications
- Roadway Speeds
- Bicycle Facility Type
- Bike Lane and Buffer Widths
- Intersection Control
- Bike Lane configuration at Intersections
- Parking Lane width
- Existing Transit Routes

LTS 1 facilities present little traffic stress and demand little attention from cyclists. They are suitable for almost all cyclists and attractive enough for a relaxing bike ride. LTS 2 facilities are suitable to most adult cyclists but demand more attention than might be expected from children. LTS 3 starts to introduce a stress level that not all adult cyclists feel comfortable with. LTS 4 is the highest level of stress and may be used by experienced bicyclists or not used at all.

Per the methodology guidance, both directions of a roadway segment are independently assigned a score between LTS 1 and LTS 4 based on several criteria shown in **Tables 3-1** through **3-7**. The resulting directional roadway level of traffic stress is the worst level of stress assigned to a segment from the several individual criteria scores. Where a table cell shows a result of "(no effect)", the resulting LTS for that situation is equal to the lower adjacent LTS.

Data on roadway classifications, speeds, bicycle facility type, and intersection control were compiled using field observations of roadway segments and intersections for classified roadways in the University community. This information was supplemented with measurement estimates and documentation of bike lane configurations at intersections taken from aerial imagery.

Table 3-1 Criteria for Bike Lanes Alongside a Parking Lane

	LTS ≥ 1	LTS ≥ 2	LTS ≥ 3	LTS ≥ 4
Street Width** (through lanes per direction)	1	(no effect)	2 or more	(no effect)
Sum of bike lane and parking lane width	15 ft. or more	14 or 14.5 ft.*	13.5 ft or less	(no effect)
Speed Limit or prevailing speed	25 mph or less	30 mph	35 mph	40 mph
Bike Lane Blockage	Rare	(no effect)	Frequent	(no effect)

Source: Mineta Transportation Institute, 2012

Note: (no effect)=factor does not trigger an increase to this level of traffic stress.

* If speed limit < 25 mph or Class= residential, then any width is acceptable for LTS 2.

Table 3-2 Criteria for Bike Lanes Not Alongside a Parking Lane

	LTS ≥ 1	LTS ≥ 2	LTS ≥ 3	LTS ≥ 4
Street Width (through lanes per direction)	1	2, if directions are separated by a raised median	More than 2 or 2 without a separating median	(no effect)
Bike Lane width (includes marked buffer and paved gutter)	6 ft. or more	5.5 ft or less	(no effect)	(no effect)
Speed Limit or prevailing speed	30 mph or less	(no effect)	35 mph	40 mph or more
Bike Lane Blockage	Rare	(no effect)	Frequent	(no effect)

Source: Mineta Transportation Institute, 2012

Note: (no effect)=factor does not trigger an increase to this level of traffic stress.

Table 3-3 Criteria for Level of Traffic Stress in Mixed Traffic

Speed Limits	Street Width		
	2-3 Lanes	4-5 Lanes	6+ Lanes
Up to 25 mph	LTS 1* or 2*	LTS 3	LTS 4
30 mph	LTS 2* or 3*	LTS 4	LTS 4
35+ mph	LTS 4	LTS 4	LTS 4

Source: Mineta Transportation Institute, 2012

Note: * Use lower value for streets without marked centerlines or classified as residential and with fewer than 3 lanes; use higher values otherwise.

Table 3-4 Level of Traffic Stress Criteria for Pocket Bike Lanes

Configuration	Level of Traffic Stress
Single right-turn lane up to 150 ft. long, starting abruptly while the bike lane continues straight, and having intersection angle and curb radius such that turning speed $\leq$ 15 mph.	LTS $\geq$ 2
Single right-turn lane up to 150 ft. long, starting abruptly while the bike lane continues straight, and having intersection angle and curb radius such that turning speed $\leq$ 20 mph.	LTS $\geq$ 3
Single right-turn lane in which the bike lane shifts to the left but the intersection angle and curb radius are such that turning speed is $\leq$ 15 mph.	LTS $\geq$ 3
Single right-turn lane with any other configuration; dual right-turn lanes; or right-turn lane along with an option (through-right) lane.	LTS $\geq$ 4

Source: Mineta Transportation Institute, 2012

Table 3-5 Level of Traffic Stress Criteria for Mixed Traffic in the Presence of a Right-turn Lane

Configuration	Level of Traffic Stress
Single right-turn lane with length $\leq$ 75 ft. and intersection angle and curb radius limit turning speed to 15 mph.	(No effect on LTS)
Single right-turn lane with length between 75 ft. and 150 ft., and intersection angle and curb radius limit turning speed to 15 mph.	LTS $\geq$ 3
Otherwise	LTS = 4

Source: Mineta Transportation Institute, 2012

Table 3-6 Level of Traffic Stress Criteria for Unsignalized Crossings Without a Median Refuge

Speed Limit of Street Being Crossed	Width of Street Being Crossed		
	Up to 3 lanes	4-5 lanes	6+ lanes
Up to 25 mph	LTS 1	LTS 2	LTS 4
30 mph	LTS 1	LTS 2	LTS 4
35 mph	LTS 2	LTS 3	LTS 4
40 mph	LTS 3	LTS 4	LTS 4

Source: Mineta Transportation Institute, 2012

Table 3-7 Level of Traffic Stress Criteria for Unsignalized Crossings with a Median Refuge at Least Six Feet Wide

Speed Limit of Street Being Crossed	Width of Street Being Crossed		
	Up to 3 lanes	4-5 lanes	6+ lanes
Up to 25 mph	LTS 1	LTS 1	LTS 2
30 mph	LTS 1	LTS 2	LTS 3
35 mph	LTS 2	LTS 3	LTS 4
40 mph	LTS 3	LTS 4	LTS 4

Source: Mineta Transportation Institute, 2012

SIGNALIZED AND UNSIGNALIZED INTERSECTION LEVEL OF SERVICE

The Highway Capacity Manual (*HCM)* published by the Transportation Research Board establishes procedures to evaluate highway facilities and rate their ability to process traffic volumes. The terminology "level of service" is used to provide a qualitative evaluation based on certain quantitative calculations, which are related to empirical values. The criteria for the various levels of service designations for intersections are given in **Table 3-8**.

Level of service (LOS) for signalized intersections is defined in terms of delay, which is a measure of driver discomfort, frustration, fuel consumption, and loss of travel time. Specifically, LOS criteria are stated in terms of the average control delay per vehicle for the peak 15-minute period within the hour analyzed. The average control delay includes initial deceleration delay, queue move-up time, and final acceleration time in addition to the stop delay.

LOS for unsignalized intersections is determined by the computed or measured control delay and is defined for each movement. At an all-way stop control intersection, the delay reported is the average control delay of all movements at the intersection. At a one-way or two-way stop control intersection, the delay reported represents the worst movement, which is typically the left-turn from the minor street approach.

Synchro 9 (Trafficware) software was used to analyze the operations of both signalized and unsignalized intersections. Synchro provides the option to report methodologies for both 2010 and 2000 editions of the HCM. The 2010 version of the HCM is similar to the 2000 HCM methodologies but focused more on specific controller set ups. Due to the changes in the 2010 HCM, there are several limitations within Synchro that do not allow results to be produced for an intersection. Some of these limitations include:

- Exclusive pedestrian phases
- Exclusive U-turn phases
- Right turn overlaps with through movements
- Permissive left turns yielding to pedestrians at a T-intersection
- Split phasing

Since approximately thirty of the intersections within the community would not be able to produce results using the 2010 HCM methodology, the 2000 HCM methodology was used for the intersection analysis.

The following list contains the assumptions used for the existing conditions intersection analyses:

- HCM 2000 methodology
- Peak-hour factor (PHF) = Measured in field PHFs were used for the analysis
- Percent of heavy vehicle (PHV) = 2 percent
- Pedestrians & Bicycles = Volumes measured in field
- Signal Timing = Existing signal timing was used for all existing signalized intersections

The acceptable Level of Service (LOS) standard for intersections in the City of San Diego is LOS D.

Table 3-8 LOS Criteria for Intersections

LOS	Control Delay (sec/veh)		Description
	Signalized Intersections (a)	Unsignalized Intersections (b)	
A	≤10.0	≤10.0	Operations with very low delay and most vehicles do not stop.
B	>10.0 and ≤20.0	>10.0 and ≤15.0	Operations with good progression but with some restricted movement.
C	>20.0 and ≤35.0	>15.0 and ≤25.0	Operations where a significant number of vehicles are stopping with some backup and light congestion.
D	>35.0 and ≤55.0	>25.0 and ≤35.0	Operations where congestion is noticeable, longer delays occur, and many vehicles stop. The proportion of vehicles not stopping declines
E	>55.0 and ≤80.0	>35.0 and ≤50.0	Operations where there is significant delay, extensive queuing, and poor progression.
F	>80.0	>50.0	Operations that is unacceptable to most drivers, when the arrival rates exceed the capacity of the intersection.

Notes:

(a) 2000 Highway Capacity Manual, Chapter 18, Page 6, Exhibit 18-4

(b) 2000 Highway Capacity Manual, Chapter 19, Page 2, Exhibit 19-1 and Chapter 20, Page 3, Exhibit 20-2

ROADWAY SEGMENT CAPACITY LEVEL OF SERVICE ANALYSIS

In order to determine the operations along the study area roadway segments, capacity thresholds and associated LOS have been developed by the City of San Diego and is used as a reference. **Table 3-9** presents this information. The segment traffic volumes under LOS E as shown in this table are considered to be the capacity of the roadway. It should be noted that the values listed in the table are planning-level estimates only. The actual operations of a roadway segment would be affected by the type and frequency of traffic control, terrain, lane width, percent of heavy vehicles, and other factors.

Table 3-9 City of San Diego Roadway Segment Capacity and LOS Summary

Road Class	Lanes	Cross Section[1]	A	B	C	D	E
Freeway	8		60,000	84,000	120,000	140,000	150,000
Freeway	6		45,000	63,000	90,000	110,000	120,000
Freeway	4		30,000	42,000	60,000	70,000	80,000
Expressway	6	102/122	30,000	42,000	60,0000	70,000	80,000
Prime Arterial*	8		35,000	50,000	70,000	75,000	80,000
Prime Arterial	6	102/122	25,000	35,000	50,000	55,000	60,000
Major Arterial*	7		22,500	31,500	45,000	50,000	55,000
Major Arterial	6	102/122	20,000	28,000	40,000	45,000	50,000
Major Arterial*	5		17,500	24,500	35,000	40,000	45,000
Major Arterial	4	78/98	15,000	21,000	30,000	35,000	40,000
Collector	4	72/92	10,000	14,000	20,000	25,000	30,000
Collector (continuous left-turn lane)*	3		7,500	10,500	15,000	18,750	22,500
Collector(No center lane) (continuous left-turn lane)	4 2	64/84 50/70	5,000	7,000	10,000	13,000	15,000
Collector (No fronting property)	2	40/60	4,000	5,500	7,500	9,000	10,000
Collector (commercial-industrial fronting)	2	50/70	2,500	3,500	5,00	6,500	8,000
Collector (multifamily)	2	40/60	2,500	3,500	5,000	6,500	8,000
Sub-Collector (single-family)	2	36/56	---	---	2,200	---	---

Notes:

The volumes and the average daily level of service listed above are only intended as a general planning guideline.

Levels of service are not applied to residential streets since their primary purpose is to serve abutting lots, not carry through traffic. Levels of service normally apply to roads carrying through traffic between major trip generators and attractors.

[1]Cross Section: Curb to Curb width (feet)/Right-of-way width (feet)

Sources:

City of San Diego Traffic Impact Study Manual, Table 2, Page 8, July 1998.

*City of San Diego Planning Department Mobility Staff Input

CORRIDOR SPEED ANALYSIS

Four corridors within the community were selected for analysis of travel time during the peak hours in addition to the estimated daily capacity; these corridors include Genesee Avenue, La Jolla Village Drive, Nobel Drive, and Regents Road. Genesee Avenue and La Jolla Village Drive are the primary arterials serving the community. Nobel Drive and Regents Road are major roads that provide alternative routes. The corridor travel time analysis is simulated using the Synchro software. The analysis was performed using the 2000 HCM methodology which provides a computation of LOS using average vehicle travel speed. This average speed is computed by adding the running time between signalized intersections assuming free flow speed along the corridor and the control delay associated with each signalized intersection. **Table 3- 10** presents the arterial LOS criteria based on the urban street class and average travel speed.

Table 3-10 HCM 2000 Urban Street LOS Criteria

Urban Street Class	**I**	**II**	**III**	**IV**
Range of free-flow speeds (FFS)	55 to 45 mi/h	45 to 35 mi/h	35 to 30 mi/h	35 to 25 mi/h
Typical FFS	50 mi/h	40 mi/h	35 mi/h	30 mi/h
LOS	**Average Travel Speed (mi/h)**			
A	> 42	> 35	> 30	> 25
B	>34 – 42	> 28 – 35	> 24 – 30	> 19 – 25
C	> 27 – 34	> 22 – 28	> 18 – 24	> 13 – 19
D	> 21 – 27	> 17 – 22	> 14 – 18	> 9 – 13
E	> 16 – 21	> 13 – 17	> 10 – 14	> 7 -9
F	≤ 16	≤ 13	≤ 10	≤ 7

Source: HCM 2000, Exhibit 15-2

FREEWAY SEGMENTS

Freeway segments were analyzed during the AM and PM peak hours based on the methodologies outlined in the 2000 HCM. The free-flow speed of each freeway segment was calculated based on a base free-flow speed of 65 mph, which is consistent with Caltrans' requirements for analyzing freeway segments. Factors affecting the free-flow speed of each segment include the lane width, lateral clearance, number of lanes, interchange density, and geometric design. Based on each segment's free-flow speed, the density was calculated, which is the primary factor for determining the segment's LOS. **Table 3-11** presents the freeway segment criteria based on density.

Table 3-11 HCM 2000 Freeway Segment LOS Criteria

LOS	Density Range (pc/mi/ln)*
A	0 – 11
B	> 11 – 18
C	> 18 – 26
D	> 26 – 35
E	> 35 – 45
F	>45

Source: HCM 2000, Page 23-3
* passenger car per mile per lane

FREEWAY RAMP METERS

Ramp metering is a means of controlling the volume of traffic entering the freeway with the goal of improving the safety, traffic operations, and flow on the freeway main lanes. Freeway ramp meter analysis estimates the peak hour queues and delays at freeway ramps by comparing existing volumes to the meter rate at the given location. The fixed rate and uniform 15-minute maximum delay approaches are two approaches that are currently accepted by the City. The fixed rate approach is based solely on the specific time intervals that ramp meters are programmed to release traffic. The uniform 15-minute approach is based on the assumption that any demand exceeding 15-minutes will seek an alternate route or will choose to use the ramp during other time periods when the traffic demand is lower. The fixed rate approach was utilized in this study to analyze freeway ramp meters.

The excess demand at a freeway ramp forms the basis for calculating the maximum queues and maximum delays anticipated at each location. Substantial queues and delays can form where demand significantly exceeds the meter rate. This approach assumes a static rate throughout the course of the peak hour; however, Caltrans has indicated that the meter rates operate in a traffic responsive mode and based on the level of traffic using the on-ramp. To the extent possible, the meter rate in the field is set such that the queue length does not exceed the available storage, smooth flows on the freeway mainline are maintained, and there is no interference to arterial traffic.

Existing meter rates were provided by Caltrans and include a range between the least and most restrictive rates. Since many of the freeways operate at or above its capacity during the peak hours, the most restrictive rate was used for the analysis.

The following list contains the assumptions used for the existing conditions ramp meter analyses based on field observations:

- Storage length measured from recent aerials of the area
- 20% High Occupancy Vehicle (HOV)
- 80% Single Occupancy Vehicle (SOV) and evenly distributed between the SOV lanes
- 25-foot vehicle length

SIGNIFICANCE THRESHOLDS

The City of San Diego and Caltrans have developed acceptable threshold standards to determine the significance of project impacts to intersections, roadway segments, freeway segments, and freeway ramp metering. At intersections, the measurement of effectiveness (MOE) is based on allowable increases in delay. Along roadway segments and freeway segments, the MOE is based on allowable increases in the volume-to-capacity (v/c) ratio. Along corridors, the MOE is based on allowable increases in speed. At a freeway ramp meter, the MOE is based on allowable increases in delay, measured in minutes.

LOS F is not acceptable for any approach leg except for side streets on an interconnected arterial system. If vehicle trips from a project cause an intersection approach leg to operate at LOS F, except in the cases of side streets on an interconnected arterial system, this would be considered a significant project traffic impact that requires mitigation. At intersections that are expected to operate at LOS E or F without the project, the allowable increase in delay is two seconds at LOS E and one second at LOS F with the addition of the project. If vehicle trips from a project cause the delay at an intersection to increase by more than the allowable threshold, this would be considered a significant project impact that requires mitigation. Also, if the project causes an intersection that was operating at an acceptable LOS to operate at LOS E or F, this would be considered a significant project impact that requires mitigation.

For roadway segments that are forecasted to operate at LOS E or F with the project, the allowable increase in v/c ratio is 0.02 at LOS E and 0.01 at LOS F. If vehicle trips from a project cause the v/c ratio to increase by more than the allowable threshold, this would be considered a significant project traffic impact that requires mitigation. Also, if the project causes a street segment that was operating at an acceptable LOS to operate at LOS E or F, this would be considered a significant impact that requires mitigation.

Where the roadway segment operates at LOS E or F, if the intersections at the ends of the segment are calculated to operate at an acceptable LOS with the project; and a peak hour HCM arterial analysis for the same segment shows that the segment operates at an acceptable LOS with the project; then the project impacts are determined to be less than significant and no mitigation is required. If analysis shows either the intersections or segment under the peak hour HCM analysis do not operate acceptably, the project impacts are considered significant and unmitigated, requiring the adoption of findings of infeasibility and a statement of over-riding considerations before the project may be approved.

In certain instances mitigation may not be required even if a roadway segment operates at LOS E or LOS F. In such cases the following three conditions must all be met:

1. The roadway is built to its ultimate classification per the community plan;
2. The intersections on both ends of the failing segment operate at an acceptable LOS; and
3. An HCM arterial analysis indicates an acceptable LOS on the segment.

For corridor travel times, the allowable increase in speed is 0.5 miles per hour (mph) at LOS E and 1 mph at LOS F. If vehicle trips from a project cause the speed to decrease by more than the allowable threshold, this would be considered a significant project traffic impact that requires mitigation.

For freeway segments that are forecasted to operate at LOS E or F with the project, the allowable increase in v/c ratio is 0.01 at LOS E and 0.005 at LOS F. If vehicle trips from a project cause the v/c ratio to increase by more than the allowable threshold, this would be considered a significant project traffic impact that requires mitigation. Also, if the project causes a freeway segment that was operating at an acceptable LOS to operate at LOS E or F, this would be considered a significant impact that requires mitigation.

If vehicle trips from a project cause a metered ramp with a delay of 15 minutes per vehicle or higher to increase its delay by more than 2 minutes per vehicle, this would be considered a significant project traffic impact that requires mitigation if the freeway segment operates at LOS E or F.

Table 3-12 shows the criteria for determining levels of significance for the different facilities in the study area.

Table 3-12 Significance Criteria For Facilities in Study Area

Facility	Measures of Effectiveness (MOE)	Significance Threshold [(a)]
Intersection	Seconds of Delay	>2.0 seconds at LOS E or >1.0 second at LOS F
Roadway Segment	ADT, v/c Ratio	>0.02 at LOS E, or >0.01 at LOS F
Corridor	Speed	>1.0 mph at LOS E, or >0.5 mph at LOS F
Freeway Segment	v/c Ratio	>0.01 at LOS E, or >0.005 at LOS F
Freeway Ramp Meter	Minutes of delay per vehicle	>2.0 minutes for freeway segments operating at LOS E, and > 1.0 minutes for freeway segments operating at LOS F. The criteria only apply for ramp meters where the delay without project is 15 minutes or higher.

Source: City of San Diego Significance Determination Thresholds, page 72, January 2011.

Notes:

(a) Significance threshold applies only when the type of facility operates at LOS E or F.

If a project adds any increment of delay to cause the operations of an intersection to go from LOS D to either LOS E or LOS F, then the project is considered to cause a significant impact.

4 EXISTING SETTING

This section describes the existing mobility network within the University community.

SUMMARY OF EXISTING FACILITIES

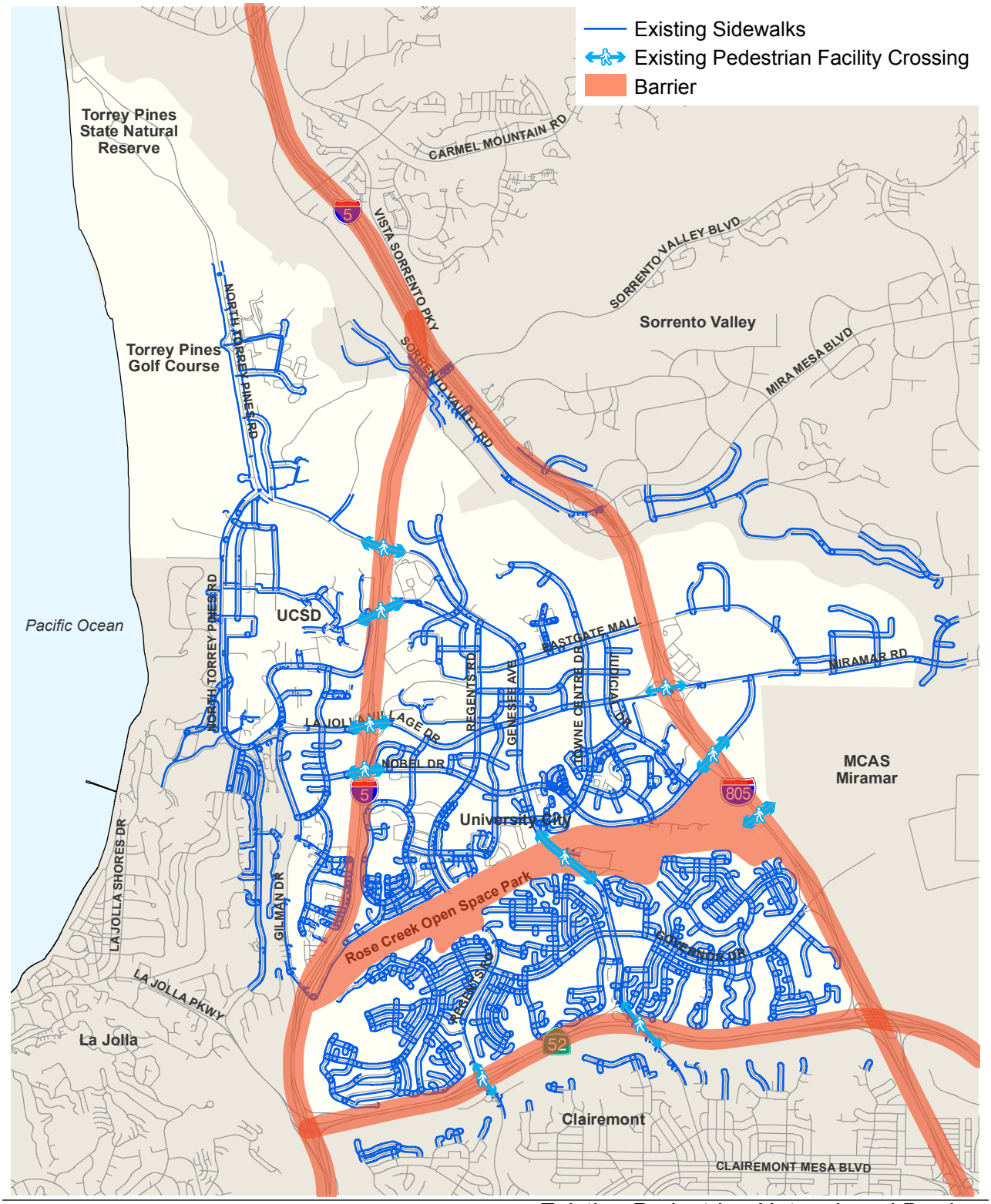
Data regarding the existing setting was collected in May of 2015 and is documented in more detail in the University Community Existing Conditions Report. A summary of the network is provided in the following figures:

- **Figure 4-1** illustrates the existing pedestrian network and barriers;
- **Figure 4-2** illustrates the existing bicycle network;
- **Figure 4-3** illustrates the existing roadway classifications;
- **Figure 4-4** illustrates the transit network; and
- **Appendix E** provides the existing intersection geometrics.

This information is used as a baseline for comparison to the Future Year () network evaluations.

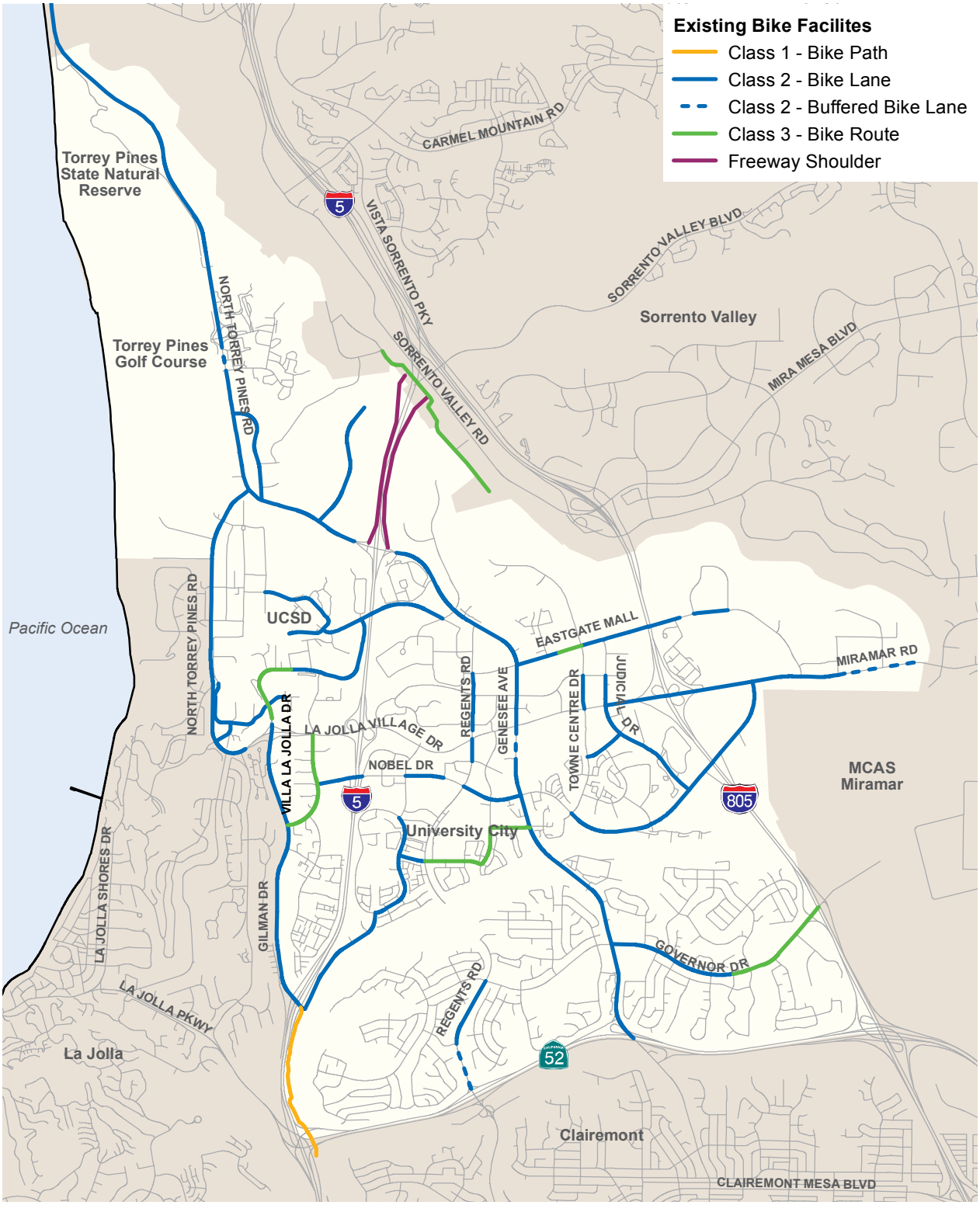
When preparing this report and from comments provided by the community, some minor discrepancies were found in the Existing Conditions Report. Information provided in this report is more current and supersedes information provided in the Existing Conditions Report.

FIGURE 4-1



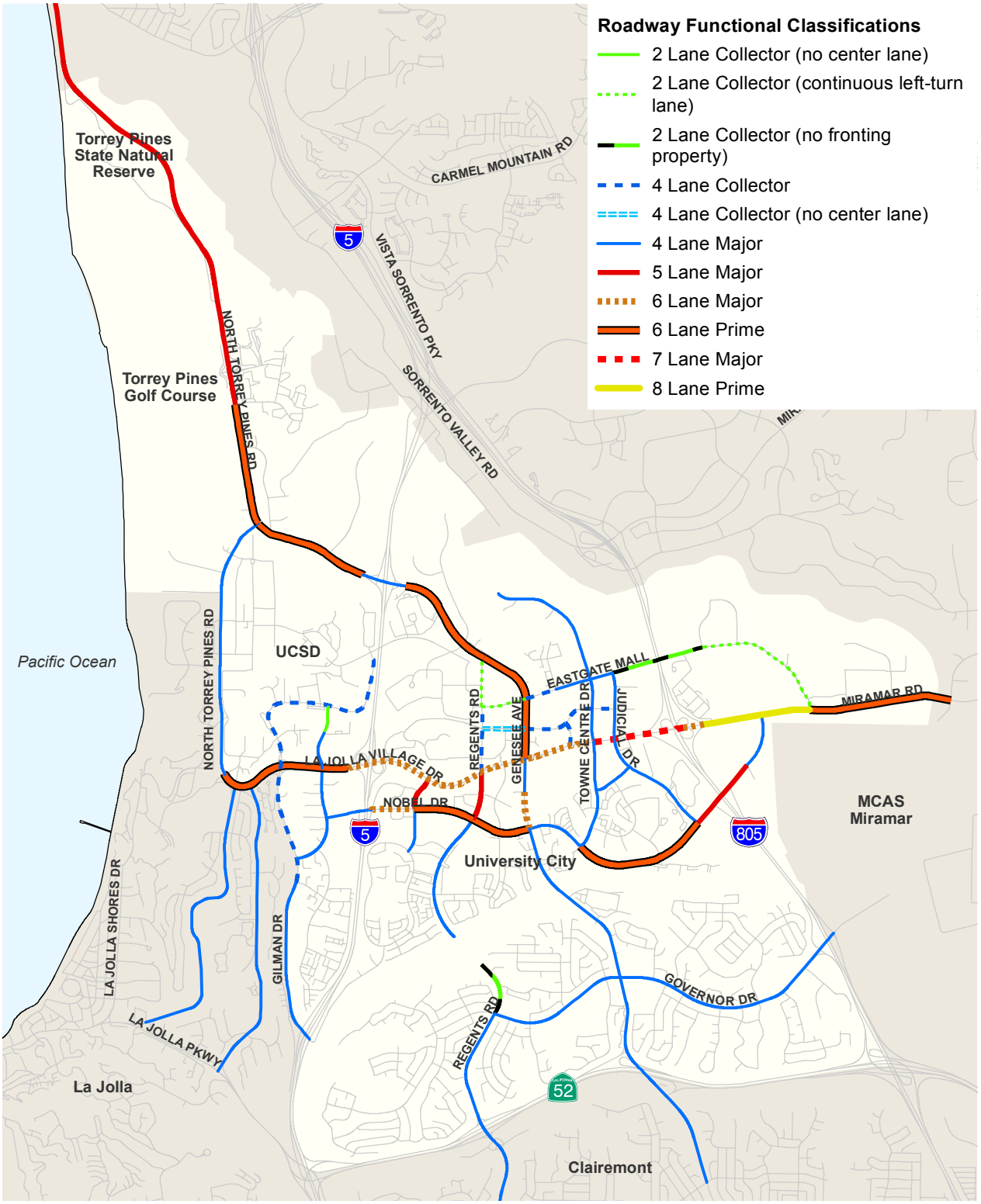
Existing Pedestrian Network and Barriers

FIGURE 4-2



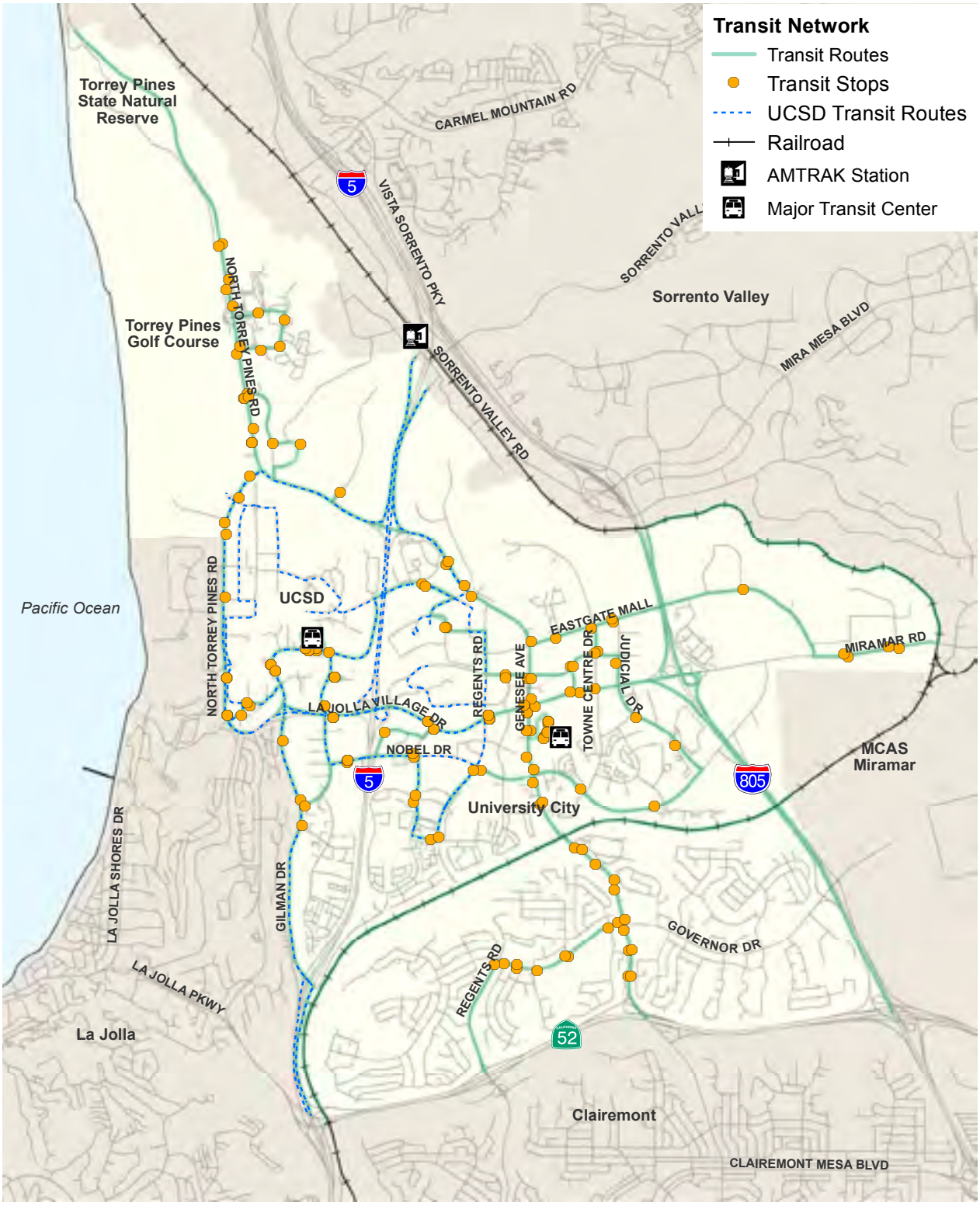
Existing Bicycle Network

FIGURE 4-3



Roadway Functional Classifications

FIGURE 4-4



Existing Transit Routes

DESCRIPTION OF ROAD NETWORK

The following section provides a description of the existing Circulation Element streets within the University community. Ultimate roadway classifications are taken from the current University Community Plan, last updated October 2014. The portions of the roadways described are intended to reflect the areas within the given community, and may not reflect the entirety of the roadway. Functional classifications are based on field observations performed during preparation of this report. The City of San Diego Bicycle Master Plan (City BMP) proposes several bicycle facilities in this Community as noted in the roadway descriptions below.

URBAN STREETS

Eastgate Mall functions as a two-way east-west, 2 and 4-lane Collector. Between Regents Road and Genesee Avenue, Eastgate Mall is a 2-lane Collector with a continuous two-way left-turn lane, angled parking on both sides of the street and a curb to curb width of 70 feet. The posted speed limit is 25 mph. Between Genesee Avenue and Easter Way, Eastgate Mall is a 4-lane Collector with a continuous two-way left-turn lane, no parking, bike lanes on both sides of the street and a curb to curb width of 70 feet. Eastgate Mall turns into a 4-lane Major Arterial with a raised median, no parking, bike lanes on both sides of the street and a curb to curb width of 70 feet between Easter Way and the I-805 Freeway Overpass. The posted speed limit is 35 mph. Within these segments, Eastgate Mall is lined with sidewalks and curbs on both sides of the street. Over the I-805 Freeway Overpass, Eastgate Mall is classified as a 2-lane Collector with no parking, bike lanes on both sides of the street, and a curb to curb width of 40 feet. Within this segment, Eastgate Mall is lined with sidewalks on the south side of the street and curbs on both sides. The posted speed limit is 45 mph. Eastgate Mall between Eastgate Drive and Miramar Road is classified as a 2-lane Collector with a continuous left-turn lane, and a curb to curb width of 50 feet. Within this segment, the roadway has sidewalk, curb, and parking on the north side of the street. The posted speed limit is 45 mph. The ultimate adopted Community Plan street classification for Eastgate Mall is a 4-lane Collector between Regents Road and Genesee Avenue, a 4-way Major between Genesee Avenue and Towne Centre Drive and a 4-lane Collector between Towne Centre Drive and Miramar Road. The City BMP proposes Eastgate Mall as a Class II (Bike Lane) facility throughout the extents of the roadway.

Executive Drive functions as a two-way east-west, 4-lane Collector with a continuous two-way left-turn lane and a curb to curb width of 60 feet from Regents Road to Regents Park Row and 70 feet from Regents Park Row to Judicial Drive. Executive Drive is lined with sidewalks and curbs with parallel parking available on both sides of the street for the entire length of the street except for the segment between Regents Park Row and Genesee Avenue. The posted speed limit is 30 mph. Executive Drive has been built to the ultimate adopted Community Plan street classification except for the segment between Towne Centre Drive and Judicial Drive which is classified as a 4-lane Major. The City BMP proposes Executive Drive as a Class III (Bike Route) facility.

Executive Way functions as a two-way north-south, 4-lane Collector with a continuous two-way left-turn lane and a curb to curb width of 70 feet. Executive Way is lined with sidewalks and curbs with parallel parking available on both sides of the street for the entire length of the street. Executive Way has reached the ultimate adopted Community Plan street classification.

Genesee Avenue functions as a two-way north-south, 4 and 6-lane Arterial. Between North Torrey Pines Road and I-5, Genesee Avenue is a 6-lane Prime Arterial with bike lanes on both sides of the street, no parking, raised medians, and a curb to curb width ranging from 80 feet to 120 feet. Over I-5, Genesee Avenue turns into a 4-lane Major Arterial with no parking or bike lanes and a curb to curb width of 70 feet. Genesee Avenue between I-5 and Regents Road is a 6-lane Prime Arterial with bike lanes on both sides of the street, no parking, raised medians and a curb to curb width of 110 feet. Genesee Avenue between Regents Road and La Jolla

Villa is a 6-lane Major Arterial with bike lanes on both sides of the street, no parking, raised medians and a curb to curb width of 110 feet. Between La Jolla Village Drive and Esplanade Court, Genesee Avenue is a 4-Lane Major Arterial with bike and bus lanes, raised medians, no parking, and a curb to curb width of 110 feet. Genesee Avenue between Esplanade Court and Nobel Drive is a 6-lane Major Arterial with parking on the west side of the street, bike lanes on both sides of the street, raised medians, and a curb to curb width of 110 feet. Between Nobel Drive and Lehrer Drive, Genesee Avenue is a 4-lane Major Arterial with no parking, bike lanes on both sides of the street, raised medians, and a curb to curb width of 80 feet. Genesee Avenue is lined with sidewalks and curbs on both sides of the street for the entire length of the street. The posted speed limit is 45 mph. Access to I-5 and SR-52 is provided on Genesee Avenue. The ultimate adopted Community Plan street classification for Genesee Avenue is a 6-lane Collector between Nobel Drive and SR-52 Ramps and a 4-lane Major Arterial between the SR-52 Ramps and Lehrer Drive. Genesee has reached the ultimate adopted Community Plan street classification on all other road segments.

Gilman Drive functions as a two-way north-south, 4-lane Collector between UCSD Campus and Via Alicante with bike lanes on both sides of the street and a curb to curb width of 90 feet. Throughout this segment, Gilman Drive is lined with sidewalks and curbs with parallel parking available on the west side of the street, with parking available on both sides of the street between Evening Way and Villa La Jolla Drive. Gilman Drive between Via Alicante and I-5 is classified as a 4-lane Major Arterial with bike lanes, raised medians, and a curb to curb width of 70 feet. Parallel parking is only available on the west side of the street in front of the housing development north of Gilman Court. Between the housing development and I-5, Gilman Drive is lined with sidewalks and curbs on the west side of the street. The posted speed limit is 45 mph. Access to I-5 is provided at the southern terminus of Gilman Drive. The ultimate adopted Community Plan street classification for Gilman Drive is a 4-lane Major.

Golden Haven Drive functions as a two-way east-west, 4-lane Major Arterial with bike lanes on both sides of the street, no parking, raised medians and a curb to curb width of 74 feet. Golden Haven Drive is lined with sidewalks and curbs on both sides of the street for the entire length of the street. The posted speed limit is 35 mph. The ultimate adopted Community Plan street classification for Golden Haven Drive has been built.

Governor Drive functions as a two-way east-west, 4-lane Major Arterial with raised medians and a curb to curb width of 70 feet. Governor Drive is lined with sidewalks and curbs on both sides of the street for the entire length of the street. Parallel parking is available on both sides of the street along most segments of the roadway west of Gullstrand Street. Bike lanes are on both sides of the street between Genesee Avenue and Gullstrand Street. The posted speed limit is 35 mph. Access to I-805 is provided at the eastern terminus of Governor Drive. The ultimate adopted Community Plan street classification for Governor Drive is a 4-lane Major. The City BMP proposes Governor Drive west of Genesee Avenue as a Class II (Bike Lane) or III (Bike Route).

Judicial Drive functions as a two-way north-south, 4-lane Major Arterial with raised medians and a curb to curb width of 80 feet. Judicial Drive is lined with sidewalks and curbs on both sides of the street for the entire length of the street. Parallel parking is available north of Executive Drive with bike lanes on both sides of the street south of Executive Drive. Judicial Drive has reached its ultimate adopted Community Plan street classification. The City BMP proposes Judicial Drive as a Class II (Bike Lane) facility north of Executive Drive.

La Jolla Scenic Drive functions as a two-way north-south, 4-lane Major Arterial with raised medians and a curb to curb width of 80 feet. La Jolla Scenic Drive is lined with sidewalks and curbs with parallel parking available on both sides of the street for the entire length of the street. The ultimate adopted Community Plan does not include a street classification for La Jolla Scenic Drive. The City BMP proposes La Jolla Scenic Drive as a Class II (Bike Lane) facility.

La Jolla Village Drive functions as a two-way east-west, 6-lane Prime Arterial between Revelle College Drive and the I-5 SB Ramps and a 6-lane Major Arterial between the I-5 SB Ramps and the I-805 SB Ramps. La Jolla Village Drive has a curb to curb width of 120 feet and is lined with sidewalks and curbs on both sides of the street except between I-5 and Lebon Drive where sidewalk is only on the south side of the street. Parallel parking is available on both sides of the street east of I-5 and bike lanes are on both sides of the street west of La Jolla Scenic Drive. The posted speed limit is 45 mph. Access to I-5 and I-805 is provided along La Jolla Village Drive. The ultimate adopted Community Plan street classification for La Jolla Village Drive is a 8-lane Primary Arterial between Villa La Jolla Drive and the I-5 Ramps and Judicial Drive and the I-805 Ramps. All other segments of La Jolla Village Drive have reached their ultimate adopted Community Plan street classification. The City BMP proposes La Jolla Village Drive as a Class II (Bike Lane) facility.

Lebon Drive functions as a two-way north-south, 4 and 5-lane Major Arterial. Between Palmilla Drive and Nobel Drive, Lebon Drive is classified as a 4-lane Major Arterial with raised medians and a curb to curb width of 80 feet. Throughout this segment, parallel parking is available on both sides of the street. This segment is also classified as a Class III (Bike Route) facility. Lebon Drive between Nobel Drive and La Jolla Village Drive is classified as a 5-lane Major Arterial with raised medians, no parking, and a curb to curb width of 80 feet. Lebon Drive is lined with sidewalks and curbs on both sides of the street for the entire length of the street. The posted speed limit is 35 mph. The ultimate adopted Community Plan street classification for Lebon Drive has been reached. The City BMP proposes all of Lebon Drive as a Class II (Bike Facility) facility.

Miramar Road functions as a two-way east-west, 6 and 8-lane Prime Arterial. Between I-805 and Eastgate Mall, Miramar Road is classified as an 8-lane Prime Arterial with raised medians, bike lanes, no parking and a curb to curb width of 124 feet. Between Eastgate Mall and Camino Santa Fe, Miramar Road is classified as a 6-lane Prime Arterial with raised medians, bike lanes, no parking and a curb to curb width of 100 feet. Miramar Road is lined with sidewalks and curbs on both sides of the street east of Nobel Drive. West of Nobel Drive, Miramar Road has sidewalks and curbs on the north side of the street. Miramar Road has buffered bike lane facilities between Miramar Mall and Camino Santa Fe. The posted speed limit is 50 mph. Access to I-805 is provided on Miramar Road. The ultimate adopted Community Plan street classification for Miramar Road has been reached.

North Torrey Pines Road functions as a two-way north-south, 4 and 6-lane Arterial. Between Science Park Road and Genesee Avenue, North Torrey Pines Road is classified as a 6-lane Prime Arterial with raised medians, bike lanes, no parking, and a curb to curb width of 120 feet. Between Genesee Avenue and Revelle College Drive, North Torrey Pines Road is classified as a 6-lane and 4-lane Major Arterial with raised medians, bike lanes, no parking, and a curb to curb width of 80 feet. North Torrey Pines Road is lined with sidewalks and curbs on both sides of the street for the entire length of the street. The posted speed limit is 45 mph. The ultimate adopted Community Plan street classification for North Torrey Pines Road has been reached.

Nobel Drive functions as a two-way east-west, 4, 5 and 6-lane Arterial. Between Villa La Jolla Drive and I-5, Nobel Drive is classified as a 4-lane Major Arterial with raised medians, bike lanes, no parking, and a curb to curb width of 80 feet. Nobel Drive between I-5 and Genesee Avenue is classified as a 6-lane Major Arterial with raised medians and a curb to curb width of 100 feet. Parallel parking is available on both sides of the street between Lebon Drive and Regents Road. Throughout the rest of the segments, Nobel drive has bike lanes on both sides of the street. The posted speed limit is 40 mph. Nobel Drive turns into a 4-lane Major Arterial between Genesee Avenue and Towne Centre Drive with raised medians, parallel parking available on the south side of the street between Lombard Place and Via Las Rambles, and a curb to curb width of 90 feet. The posted speed limit is 35 mph. Between Towne Centre Drive and Judicial Drive, Nobel Drive is classified as a 6-lane Prime Arterial with raised medians, bike lanes, no parking, and a curb to curb width of 100 feet. The posted speed limit is 45 mph. Between Judicial Drive and Avenue of Flags, Nobel Drive is classified as a 5-lane Major

Arterial with raised medians, bike lanes, no parking and a curb to curb width of 100 feet. Nobel Drive from Avenue of Flags to Miramar Road is classified as a 4-lane Major Arterial with raised medians, bike lanes, no parking, and a curb to curb width of 80 feet. Nobel Drive is lined with sidewalks and curbs on both sides of the street for the entire length of the street. Access to I-5 and I-805 is provided along Nobel Drive. The ultimate adopted Community Plan street classification for Nobel Drive has been reached for all segments. The City BMP proposes Nobel Drive a Class II (Bike Lane) facility between Genesee Avenue and Towne Centre Drive.

Regents Road functions as a two-way north-south roadway that is divided by Rose Canyon. North of Rose Canyon between Genesee Avenue and Eastgate Mall, Regents Road is classified as a 2-lane Collector with a continuous left-turn lane, no parking, and a curb to curb width of 40. The posted speed limit is 25 mph. Between Eastgate Mall and La Jolla Village Drive, Regents Road is classified as a 4-lane Collector with a continuous left-turn lane, bike lanes, no parking, and a curb to curb width of 65 feet. Regents Road between La Jolla Village Drive and Nobel Drive is classified as a 5-lane Major Arterial with raised medians, parallel parking on both sides of the street and a curb to curb width of 90 feet. South of Nobel Drive, Regents Road is classified as a 4-lane Major Arterial with raised medians, parallel parking on both sides of the street, and a curb to curb width of 70 feet. North of Rose Canyon, Regents Road is lined with sidewalks and curbs on both sides of the street for the entire length of the street. The posted speed limit is 40 mph. The City BMP proposes Regents Road as a Class II (Bike Lane) or a Class III (Bike Route) facility south of Nobel Drive. South of Rose Canyon north of Governor Drive, Regents Road is classified as a 2-lane Collector with no parking and a curb to curb width of 30 feet. Between Governor Drive and Luna Avenue, Regents Road is classified as a 4-lane Major Arterial with raised medians, bike lanes, no parking, and a curb to curb width of 80 feet. Regents Road has buffered bike lanes between Pennant Way and Luna Avenue. South of Rose Canyon, Regents Road is lined with sidewalks and curbs on the east side of the street for the entire length of the street. The posted speed limit is 50 mph. Access to SR-52 is provided along Regents Road. The ultimate adopted Community Plan street classification for Regents Road is a 4-lane Major. The City BMP proposes Regents Road as a Class II (Bike Lane) or Class III (Bike Route) facility north of Governor Drive.

Torrey Pines Road functions as a two-way north-south, 4-lane Major Arterial with raised medians, bike lanes, and a curb to curb width of 60 feet. Torrey Pines Road is lined with sidewalks and curbs on both sides of the street for the entire length of the street. The ultimate adopted Community Plan does not include a street classification for Torrey Pines Road.

Towne Centre Drive functions as a two-way north-south, 4-lane Major Arterial with raised medians and a curb to curb width of 80 feet. Towne Centre Drive is lined with sidewalks and curbs on both sides of the street. Parallel parking available on both sides of the street for the majority of the street. Towne Centre Drive between Executive Drive and La Jolla Village Drive has bike lanes with no parking on both sides of the street. The posted speed limit is 40 mph. The ultimate adopted Community Plan street classification for Towne Centre Drive has been reached. The City BMP proposes Towne Centre Drive as a Class II (Bike Lane) or Class III (Bike Route) facility.

Villa La Jolla Drive functions as a two-way north-south roadway. South of VA Medical Center, Villa La Jolla Drive is classified as a 4-lane Major Arterial with raised medians, a posted speed limit of 40 mph, parallel parking on both sides of the street, and a curb to curb width of 80 feet. North of the VA Medical Center, Regents Road is classified as a 2-lane Collector with no parking and a curb to curb width of 26 feet. Villa La Jolla Drive is lined with sidewalks and curbs on both sides of the street for the entire length of the street. The posted speed limit is 25 mph. The ultimate adopted Community Plan street classification for Villa La Jolla Drive has been reached.

FREEWAYS

Interstate 5 is a significant north-south interstate that traverses the United States from the Mexican border to the Canadian border through the states of California, Oregon, and Washington. Within California, I-5 connects the following major metropolitan areas: San Diego, Los Angeles, Sacramento, and the eastern portion of the San Francisco Bay Area. I-5 is located on the western half of the University community and has interchanges at Genesee Avenue, La Jolla Village Drive, Gilman Drive, and Nobel Drive.

Interstate 805 is largely contained within the San Diego metropolitan area. Termini are both located along Interstate 5, one near the Mexico border and the other near the Torrey Pines State Reserve and the University of California at San Diego. I-805 is located on the eastern half of the University community and has interchanges at La Jolla Village Drive/Miramar Road, Nobel Drive, and Governor Drive.

State Route 52 is an east-west state highway that connects La Jolla on the west end at the termini with I-5 within Santee on the east end. SR-52 is located on the south side of the University community and has interchanges at interstate at Regents Road and Genesee Avenue.

TRAFFIC VOLUMES

Most of the peak-hour intersection turning movements and roadway segment traffic data were obtained in May of 2015 as part of the data collection process for this project. Three intersections along Nobel Drive had data collected in November 2015. The existing traffic volume data is contained in **Appendix E**.

INTERSECTION ANALYSIS

Peak-hour LOS analyses were performed for the morning (AM) and afternoon (PM) peak hour at each of the intersections within the study area. A midday peak hour was also evaluated at intersections along Genesee Avenue, La Jolla Village Drive, Nobel Drive, and Regents Road. The analyses represent the one-hour timeframe that experiences the highest total intersection volume at each individual location.

The following locations have coordinated signal timing plans for the listed time of day;

- Genesee Avenue - All Intersections (AM, Midday, PM)
- La Jolla Village Drive - All Intersections (AM, Midday, PM)
- Miramar Road - Miramar Mall, Miramar Place and Camino Santa Fe (AM, Midday, PM)
- Regents Road - Regents Park Row (AM)
- Regents Road - Nobel Drive (AM, PM)
- Regents Road - Luna Avenue (AM, Midday, PM)
- Regents Road - Plaza De Palmas (PM)
- Nobel Drive - Costa Verde Boulevard, Caminito Plaza Centro, (AM, Midday, PM)
- Nobel Drive - I-5 Ramps (Midday, PM)
- N. Torrey Pines Road - Pangea Drive, UCSD Northpoint Driveway (AM, PM)
- N. Torrey Pines Road - La Jolla Shores Drive (PM)
- Gilman Drive - Villa La Jolla Drive (AM, PM)

Table 4-1 presents the LOS analysis results for the study intersections. **Figures 4-5** through **4-7** illustrate the morning, midday and afternoon peak-hour LOS results for each of the study area intersections.

As shown in the results,

- Genesee Avenue experiences poor LOS around the I-5 interchange and south of Nobel Drive to the SR-52 interchange during both the AM and PM peak periods;
- La Jolla Village Drive experiences poor LOS at the intersection of Villa La Jolla Drive and between Regents Road and the I-805 interchange during both the AM and PM peak periods;
- Miramar Road experiences poor LOS during the PM peak periods;
- Nobel Drive experiences some delay but maintains acceptable LOS;
- Regents Road experiences poor LOS at the SR-52 interchange during both the AM and PM peak periods;
- Gilman Drive experiences poor LOS at the I-5 interchange during the PM peak hour; and
- Governor Drive experiences poor LOS at the I-805 Northbound ramps during the PM peak hour.

Table 4-1 Existing Conditions Summary of Intersection Analysis

ID	Intersection	Control	Peak Hour	Existing	
				Delay (a)	LOS (b)
1	Genesee Ave & N. Torrey Pines Rd	Signal	AM	23.8	C
			MID	26.6	C
			PM	38.9	D
2	Genesee Ave & John Hopkins Dr (S)	Signal	AM	17.9	B
			MID	34.6	C
			PM	27.6	C
3	Genesee Ave & Science Center Dr	Signal	AM	12.4	B
			MID	8.1	A
			PM	13.6	B
4	Genesee Ave & I-5 SB Ramps	Signal	AM	66.3	**E**
			MID	30.9	C
			PM	69.7	**E**
5	Genesee Ave & I-5 NB Ramps	Signal	AM	43.7	D
			MID	145.2	**F**
			PM	ECL	**F**
6	Genesee Ave & Scripps Hospital	Signal	AM	20.2	C
			MID	23.7	C
			PM	21.3	C
7	Genesee Ave & Campus Point Dr	Signal	AM	28.9	C
			MID	29.4	C
			PM	42.0	D
8	Genesee Ave & Regents Rd	Signal	AM	29.6	C
			MID	13.7	B
			PM	12.6	B
9	Genesee Ave & Eastgate Mall	Signal	AM	36.6	D
			MID	42.4	D
			PM	34.0	C
10	Genesee Ave & Executive Dr	Signal	AM	19.2	B
			MID	19.8	B
			PM	31.4	C
11	Genesee Ave & Executive Square	Signal	AM	14.1	B
			MID	18.7	B
			PM	19.2	B
12	Genesee Ave & La Jolla Village Dr	Signal	AM	76.5	**E**
			MID	56.1	**E**
			PM	35.9	D

Notes:

Bold values indicate intersections operating at LOS E or F.
ECL = Exceeds Calculable Limit. Reported when delay exceeds 180 seconds.

(a) Delay refers to the average control delay for the entire intersection, measured in seconds per vehicle. At a two-way stop-controlled intersection, delay refers to the worst movement.
(b) LOS calculations are based on the methodology outlined in the *2000 Highway Capacity Manual* and performed using Synchro 9.0

Table 4-1 Existing Conditions Summary of Intersection Analysis (Continued)

ID	Intersection	Control	Peak Hour	Existing	
				Delay (a)	LOS (b)
13	Genesee Ave and Esplanade Ct	Signal	AM	21.4	C
			MID	36.2	D
			PM	38.2	D
14	Genesee Ave & Nobel Dr	Signal	AM	32.9	C
			MID	38.6	D
			PM	42.6	D
15	Genesee Ave & Decoro St	Signal	AM	28.6	C
			MID	17.6	B
			PM	119.8	**F**
16	Genesee Ave & Centurion Square	Signal	AM	66.6	**E**
			MID	13.2	B
			PM	14.3	B
17	Genesee Ave & Governor Dr	Signal	AM	67.4	**E**
			MID	28.6	C
			PM	66.5	**E**
18	Genesee Ave & SR-52 WB Ramps	SSSC	AM	27.5	D
			MID	13.2	B
			PM	371.8	**F**
19	Genesee Ave & SR-52 EB Ramps	Signal	AM	55.8	**E**
			MID	37.6	D
			PM	132.0	**F**
20	Genesee Ave & Appleton St/Lehrer Dr	Signal	AM	109.8	**F**
			MID	28.6	C
			PM	43.0	D
21	La Jolla Village Dr & Torrey Pines Rd	Signal	AM	27.4	C
			MID	30.0	C
			PM	106.2	**F**
22	La Jolla Village Dr & La Jolla Scenic Dr	Signal	AM	23.1	C
			MID	11.3	B
			PM	21.4	C
23a	La Jolla Village Dr WB & Gilman Dr	Signal	AM	14.8	B
			MID	11.6	B
			PM	20.0	C
23b	La Jolla Village Dr EB & Gilman Dr	SSSC	AM	13.0	B
			MID	10.4	B
			PM	24.5	C

Notes:

Bold values indicate intersections operating at LOS E or F.
SSSC = Side Street Stop Control

(a) Delay refers to the average control delay for the entire intersection, measured in seconds per vehicle. At a two-way stop-controlled intersection, delay refers to the worst movement.
(b) LOS calculations are based on the methodology outlined in the *2000 Highway Capacity Manual* and performed using Synchro 9.0

Table 4-1 Existing Conditions Summary of Intersection Analysis (Continued)

ID	Intersection	Control	Peak Hour	Existing	
				Delay (a)	LOS (b)
24	La Jolla Village Dr & Villa La Jolla Dr	Signal	AM	55.4	**E**
			MID	140.4	**F**
			PM	202.2	**F**
25	La Jolla Village Dr & I-5 SB Off-Ramps	Signal	AM	31.5	C
			MID	29.7	C
			PM	52.8	D
26	La Jolla Village Dr & I-5 NB Off-Ramps	Signal	AM	38.3	D
			MID	27.0	C
			PM	32.9	C
27	La Jolla Village Dr & Lebon Dr	Signal	AM	30.7	C
			MID	18.2	B
			PM	39.3	D
28	La Jolla Village Dr & Regents Rd	Signal	AM	55.0	D
			MID	48.4	D
			PM	132.4	**F**
29	La Jolla Village Dr & Executive Way	Signal	AM	18.9	B
			MID	35.7	D
			PM	62.6	**E**
30	La Jolla Village Dr & Towne Centre Dr	Signal	AM	80.6	**F**
			MID	49.3	D
			PM	124.2	**F**
31	La Jolla Village Dr & I-805 SB Ramps	Signal	AM	112.8	**F**
			PM	17.7	B
32	La Jolla Village Dr & I-805 NB Ramps	Signal	AM	34.0	C
			PM	41.4	D
33	Miramar Rd & Nobel Dr	Signal	AM	16.6	B
			MID	12.3	B
			PM	35.3	D
34	Miramar Rd & Eastgate Mall	Signal	AM	17.0	B
			PM	91.8	**F**
35	Miramar Rd & Miramar Mall	Signal	AM	16.7	B
			PM	13.1	B
36	Miramar Rd & Miramar Place	Signal	AM	18.8	B
			PM	7.3	A
37	Miramar Rd & Camino Santa Fe	Signal	AM	36.8	D
			PM	81.4	**F**

Notes:

Bold values indicate intersections operating at LOS E or F.

(a) Delay refers to the average control delay for the entire intersection, measured in seconds per vehicle. At a two-way stop-controlled intersection, delay refers to the worst movement.
(b) LOS calculations are based on the methodology outlined in the *2000 Highway Capacity Manual* and performed using Synchro 9.0

Table 4-1 Existing Conditions Summary of Intersection Analysis (Continued)

ID	Intersection	Control	Peak Hour	Existing	
				Delay (a)	LOS (b)
38	Nobel Dr & Villa La Jolla Dr	Signal	AM	17.0	B
			MID	18.5	B
			PM	32.8	C
39	Nobel Dr & La Jolla Village Square Dwy	Signal	AM	19.8	B
			MID	33.7	C
			PM	45.4	D
40	Nobel Dr & I-5 SB On Ramp	Signal	AM	3.7	A
			MID	17.1	B
			PM	13.4	B
41	Nobel Dr & University Center Ln/I-5 NB Off-Ramp	Signal	AM	13.6	B
			MID	19.4	B
			PM	17.0	B
42	Nobel Dr & Caminito Plaza Centro	Signal	AM	13.9	B
			MID	11.4	B
			PM	15.3	B
43	Nobel Dr & Lebon Dr	Signal	AM	25.5	C
			MID	19.9	B
			PM	29.9	C
44	Nobel Dr & Regents Rd	Signal	AM	48.4	D
			MID	45.8	D
			PM	53.6	D
45	Nobel Dr & Costa Verde Blvd/Cargill Ave	Signal	AM	45.9	D
			MID	43.3	D
			PM	52.1	D
46	Nobel Dr & Lombard Place	Signal	AM	9.5	A
			MID	16.0	B
			PM	22.3	C
47	Nobel Dr & Towne Centre Dr	Signal	AM	22.8	C
			MID	20.0	C
			PM	30.5	C
48	Nobel Dr & Shoreline Dr	Signal	AM	35.0	C
			MID	13.9	B
			PM	19.6	B
49	Nobel Dr & Judicial Dr	Signal	AM	13.8	B
			MID	11.7	B
			PM	17.9	B

Notes:

Bold values indicate intersections operating at LOS E or F.
(a) Delay refers to the average control delay for the entire intersection, measured in seconds per vehicle. At a two-way stop-controlled intersection, delay refers to the worst movement.
(b) LOS calculations are based on the methodology outlined in the *2000 Highway Capacity Manual* and performed using Synchro 9.0

Table 4-1 Existing Conditions Summary of Intersection Analysis (Continued)

ID	Intersection	Control	Peak Hour	Existing	
				Delay (a)	LOS (b)
50	Nobel Dr & I-805 SB On-Ramp	Signal	AM	3.2	A
			MID	4.0	A
			PM	3.7	A
51	Nobel Dr & I-805 NB Off-Ramp	Signal	AM	18.6	B
			MID	14.5	B
			PM	15.8	B
52	Nobel Dr & Avenue of Flags	Signal	AM	3.0	A
			MID	5.6	A
			PM	3.0	A
53	Regents Rd & County Day Ln/ Health Science Dr	Signal	AM	17.8	B
			MID	11.6	B
			PM	35.5	D
54	Regents Rd & Eastgate Mall	Signal	AM	12.3	B
			MID	5.6	A
			PM	16.2	B
55	Regents Rd & Executive Dr	Signal	AM	8.4	A
			MID	9.7	A
			PM	18.9	B
56	Regents Rd & Regents Park Row	Signal	AM	21.2	C
			MID	14.1	B
			PM	29.4	C
57	Regents Rd & Plaza De Palmas	Signal	AM	11.8	B
			MID	8.2	A
			PM	15.1	B
58	Regents Rd & Berino Ct	Signal	AM	24.7	C
			MID	5.7	A
			PM	11.3	B
59	Regents Rd & Arriba St	Signal	AM	27.6	C
			MID	14.3	B
			PM	25.2	C
60	Regents Rd & Governor Dr	Signal	AM	24.0	C
			MID	16.0	B
			PM	21.9	C
61	Regents Rd & SR-52 WB Ramps	Signal	AM	40.0	D
			MID	25.3	C
			PM	37.6	D
62	Regents Rd & SR-52 EB Ramps	Signal	AM	99.1	**F**
			MID	22.1	C
			PM	57.0	**E**

Notes:

Bold values indicate intersections operating at LOS E or F.

(a) Delay refers to the average control delay for the entire intersection, measured in seconds per vehicle. At a two-way stop-controlled intersection, delay refers to the worst movement.

(b) LOS calculations are based on the methodology outlined in the *2000 Highway Capacity Manual* and performed using Synchro 9.0

Table 4-1 Existing Conditions Summary of Intersection Analysis (Continued)

ID	Intersection	Control	Peak Hour	Existing	
				Delay (a)	LOS (b)
63	Regents Rd & Luna Ave	Signal	AM	42.6	D
			PM	61.6	**E**
64	N. Torrey Pines Rd & UCSD Northpoint Dwy	Signal	AM	23.6	C
			PM	28.5	C
65	N. Torrey Pines Rd & Pangea Dr	Signal	AM	9.2	A
			PM	17.3	B
66	N. Torrey Pines Rd & La Jolla Shores Dr	Signal	AM	40.4	D
			PM	60.6	**E**
67	N. Torrey Pines Rd & Revelle College Dr	Signal	AM	17.5	B
			PM	30.1	C
68	Gilman Dr & Villa La Jolla Dr	Signal	AM	15.7	B
			PM	15.1	B
69	Gilman Dr & I-5 SB Ramps	Signal	AM	9.7	A
			PM	169.1	**F**
70	Gilman Dr & I-5 NB Ramps	Signal	AM	16.8	B
			PM	17.6	B
71	Palmilla Dr & Lebon Dr	Signal	AM	7.4	A
			PM	7.4	A
72	Palmilla Dr & Ariba St	Signal	AM	7.0	A
			PM	7.7	A
73	Towne Centre Dr & Eastgate Mall	Signal	AM	25.7	C
			PM	39.9	D
74	Towne Centre Dr & Executive Dr	Signal	AM	18.1	B
			PM	38.1	D
75	Towne Centre Dr & Golden Haven Dr	Signal	AM	13.2	B
			PM	11.4	B
76	Executive Way & Executive Dr	Signal	AM	12.3	B
			PM	13.4	B
77	Judicial Dr & Eastgate Mall	Signal	AM	23.0	C
			PM	25.9	C
78	Governor Dr & I-805 SB Ramps	SSSC	AM	14.7	B
			PM	14.6	B
79	Governor Dr & I-805 NB Ramps	SSSC	AM	ECL	**F**
			PM	ECL	**F**

Notes:

Bold values indicate intersections operating at LOS E or F.

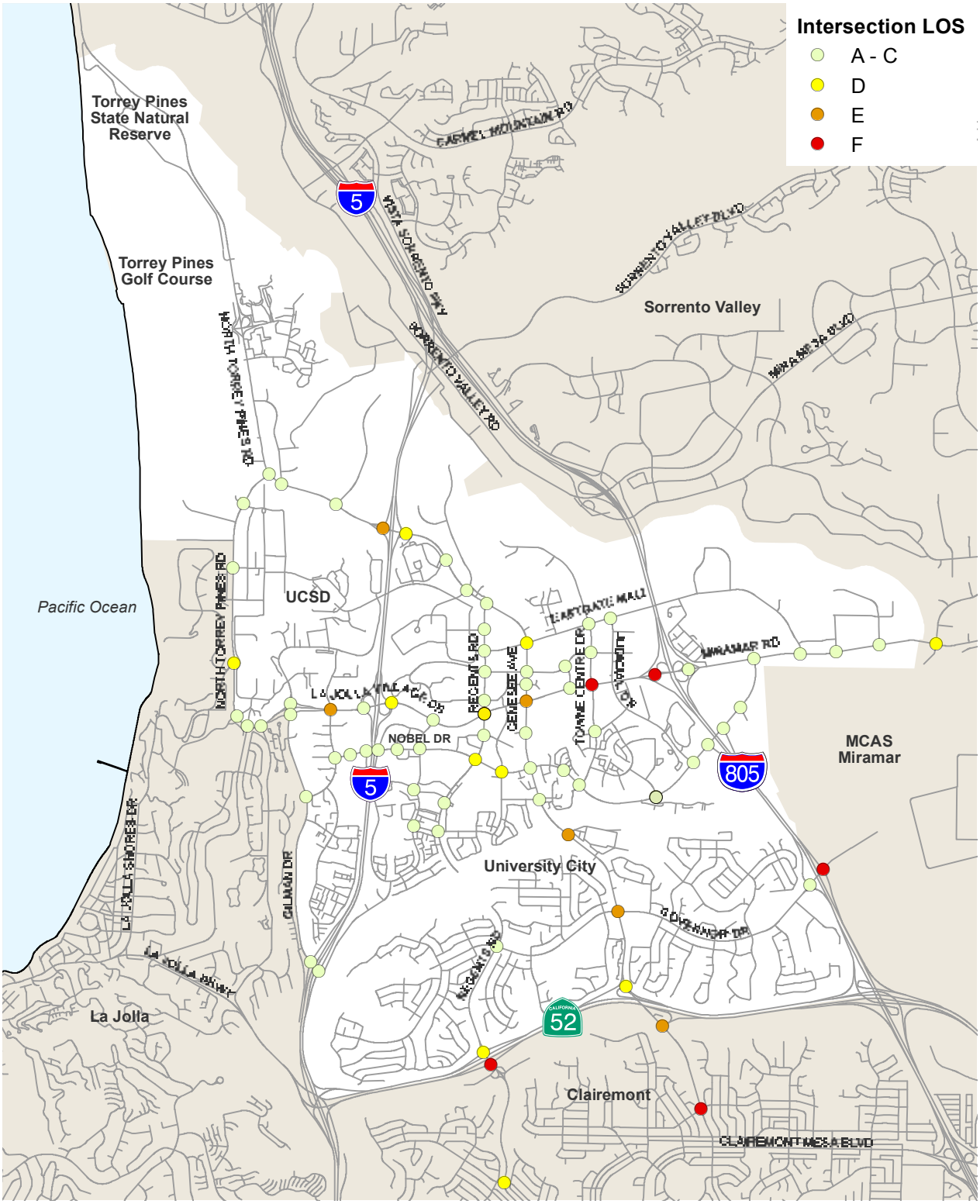
ECL = Exceeds Calculable Limit. Reported when delay exceeds 180 seconds.

SSSC = Side Street Stop Control

(a) Delay refers to the average control delay for the entire intersection, measured in seconds per vehicle. At a two-way stop-controlled intersection, delay refers to the worst movement.

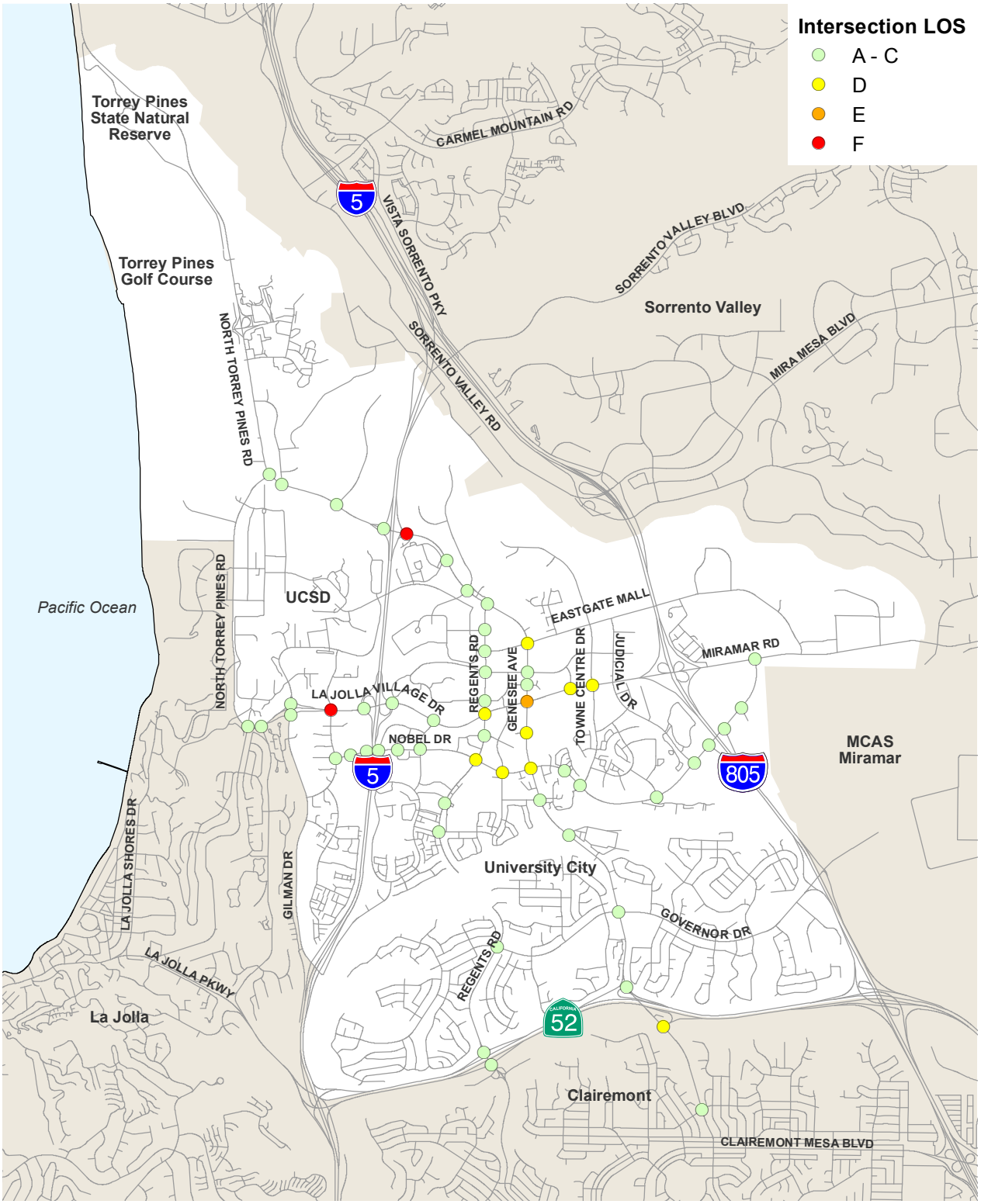
(b) LOS calculations are based on the methodology outlined in the *2000 Highway Capacity Manual* and performed using Synchro 9.0

FIGURE 4-5



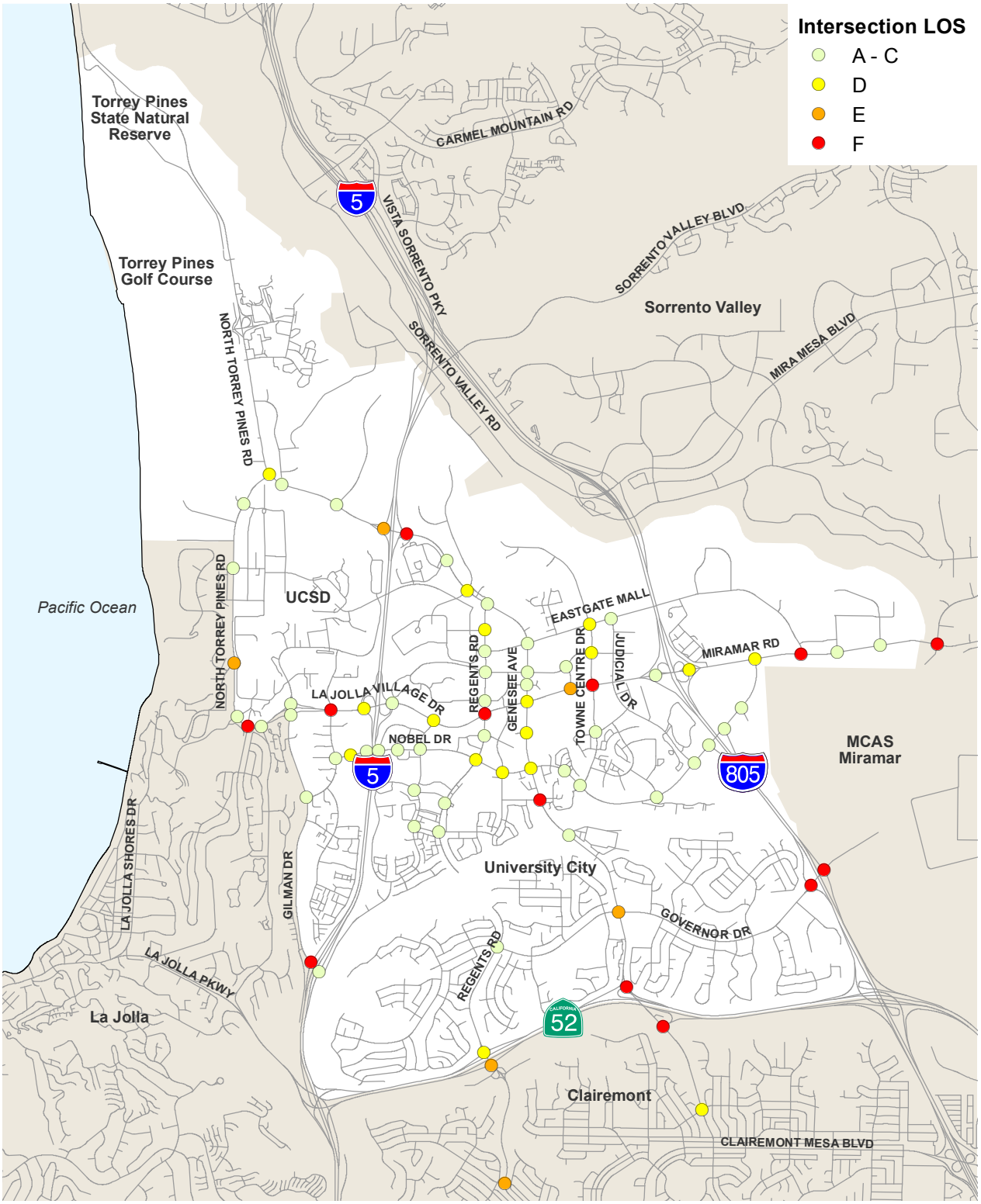
Existing AM Intersection Level of Service Summary

FIGURE 4-6



Existing Midday Intersection Level of Service Summary

FIGURE 4-7



Existing PM Intersection Level of Service Summary

ROADWAY SEGMENT ADT BASED ANALYSIS

Each roadway segment in the study area was evaluated by comparing the daily traffic volume with the roadway's theoretical capacity based on its classification. The capacity represents the maximum daily volume before the roadway is expected to begin to operate at a LOS E. This volume-to-capacity comparison (v/c ratio) is a planning tool used to determine the general traffic demand on a segment and its sensitivity to delays.

Table 4-2 presents the results of the roadway segment analysis for a typical weekday. As shown in the table, it is estimated that all roadway segments function at an acceptable LOS D or better in the study area, except for the following segments.

- Eastgate Mall – between Judicial Drive and Eastgate Drive
  - 2-lane Collector, Freeway Overpass (LOS F)
- Eastgate Mall – between Eastgate Drive and Miramar Road
  - 2-lane Collector (LOS E)
- Genesee Avenue – between I-5 SB Ramps and I-5 NB Ramps
  - 6-lane Prime Arterial (LOS F)
- La Jolla Village Drive – between Villa La Jolla Drive and I-5 SB Ramps
  - 6-lane Prime Arterial (LOS F)
- La Jolla Village Drive – between I-5 SB Ramps and I-5 NB Ramps
  - 6-lane Major Arterial (LOS F)
- La Jolla Village Drive – between Genesee Avenue and Towne Centre Drive
  - 6-lane Major Arterial (LOS E)
- La Jolla Village Drive – between Towne Centre Drive and I-805 SB Ramps
  - 7-lane Major Arterial (LOS F)
- Miramar Road – between I-805 SB Ramps and I-805 NB Ramps
  - 6-lane Major Arterial (LOS F)
- Miramar Road – between Eastgate Mall and Camino Santa Fe
  - 6-lane Prime Arterial (LOS F)

Figure 4-8 illustrates the existing LOS results for each of the roadway segments in the study area based on the volume-to-capacity analysis methodology. The segments with LOS E or F have volumes above their theoretical capacity, typically resulting in periods of congestion.

Table 4-2 Existing Conditions Summary of Roadway Segment ADT Based Analysis

Roadway Segment	Roadway Classification (a)	LOS E CAPACITY	ADT (b)	V/C RATIO (c)	LOS
Eastgate Mall					
Regents Rd to Genesee Ave	2-lane Collector (continuous left-turn lane)	15,000	6,187	0.412	B
Genesee Ave to Easter Way	4-lane Collector	30,000	14,767	0.492	C
Easter Way to Judicial Dr	4-lane Major Arterial	40,000	11,115	0.278	A
Judicial Dr to Eastgate Dr (Freeway Overpass)	2 -lane Collector (no fronting property)	10,000	10,096	1.010	**F**
Eastgate Dr to Miramar Rd	2-lane Collector (continuous left-turn lane)	15,000	14,668	0.978	**E**
Executive Drive					
Regents Rd to Genesee Ave	4-lane Collector (no center lane)	15,000	4,397	0.293	A
Genesee Ave to Judicial Dr	4 -lane Collector	30,000	5,914	0.197	A
Executive Way					
Executive Dr to La Jolla Village Dr	4 -lane Collector	30,000	5,923	0.197	A
Genesee Avenue					
N. Torrey Pines Rd to I-5 SB Ramps	6-lane Prime Arterial	60,000	35,124	0.585	C
I-5 SB Ramps to I-5 NB Ramps	4-lane Major Arterial	40,000	49,051	1.226	**F**
I-5 NB Ramps to Regents Rd	6-lane Prime Arterial	60,000	48,542	0.809	C
Regents Rd to La Jolla Village Dr	6 -lane Major Arterial	40,000	29,457	0.589	C
La Jolla Village Dr to Esplande Ct	4 -lane Major Arterial	40,000	28,054	0.701	C
Esplande Ct to Nobel Dr	6 -lane Major Arterial	50,000	23,744	0.475	B
Nobel Dr to Centurion Square	4-lane Major Arterial	40,000	30,922	0.773	D
Centurion Square to SR-52 WB Ramps	4-lane Major Arterial	40,000	30,325	0.758	D
SR-52 WB Ramps to SR-52 EB Ramps	4-lane Major Arterial	40,000	31,170	0.779	D
SR-52 EB Ramps to Lehrer Dr	4 -lane Major Arterial	40,000	30,581	0.765	D
Gilman Drive					
UCSD Campus to La Jolla Village Dr	4-lane Collector	30,000	10,069	0.336	B
La Jolla Village Dr to Via Alicante	4-lane Collector	30,000	15,095	0.503	C
Via Alicante to I-5 SB Ramps	4-lane Major Arterial	40,000	17,138	0.428	B
I-5 SB Ramps to I-5 NB Ramps	4 -lane Major Arterial	40,000	11,873	0.297	A
Golden Haven Drive					
Towne Centre Dr to Judicial Dr	4-lane Major Arterial	40,000	6,712	0.168	A

Notes:
Bold values indicate roadway segments operating at LOS E or F.
(a) Existing road classifications are based on field work conducted May 13, 2015.
(b) Average Daily Traffic (ADT) volumes for the roadway segments were provided by Accurate Video Counts Inc and measured in April and May 2015.
(c) The v/c Ratio is calculated by dividing the ADT volume by each respective roadway segment's capacity.

Table 4-2 Existing Conditions Summary of Roadway Segment ADT Based Analysis (Continued)

Roadway Segment	Roadway Classification (a)	LOS E Capacity	ADT (b)	V/C RATIO (c)	LOS
Governor Drive					
Regents Rd to Genesee Ave	4-lane Major Arterial	40,000	16,796	0.420	B
Genesee Ave to I-805 SB Ramps	4-laneMajor Arterial	40,000	19,737	0.493	B
I-805 SB Ramps to I-805 NB Ramps	4-lane Major Arterial	40,000	10,417	0.260	A
Judicial Drive					
Eastgate Mall to La Jolla Village Dr	4-lane Major Arterial	40,000	4,828	0.121	A
La Jolla Village Dr to Nobel Dr	4-lane Major Arterial	40,000	6,574	0.164	A
La Jolla Scenic Drive					
La Jolla Village Dr to community boundary	4-lane Major Arterial	40,000	7,928	0.198	A
La Jolla Village Drive					
Revelle College Dr to Villa La Jolla Dr	6-lane Prime Arterial	60,000	44,520	0.742	C
Villa La Jolla Dr to I-5 SB Ramps	6-lane Prime Arterial	60,000	62,258	1.038	**F**
I-5 SB Ramps to I-5 NB Ramps	6-lane Major Arterial	50,000	51,391	1.028	**F**
I-5 NB Ramps to Lebon Dr	6-lane Major Arterial	50,000	44,335	0.887	D
Lebon Dr to Regents Rd	6-lane Major Arterial	50,000	42,863	0.857	D
Regents Rd to Genesee Ave	6-lane Major Arterial	50,000	38,474	0.769	C
Genesee Ave to Towne Centre Dr	6-lane Major Arterial	50,000	45,117	0.902	**E**
Towne Centre Dr to I-805 SB Ramps	8-lane Major Arterial	80,000	58,833	0.735	C
Lebon Drive					
Palmilla Drive to Nobel Dr	4-lane Major Arterial	40,000	11,192	0.280	A
Nobel Drive to La Jolla Village Dr	5-lane Major Arterial	45,000	9,212	0.205	A
Miramar Road					
I-805 SB Ramps to I-805 NB Ramps	6-lane Prime Arterial	60,000	66,139	1.102	**F**
I-805 NB Ramps to Nobel Dr	8-lane Prime Arterial	80,000	47,991	0.600	B
Nobel Dr to Eastgate Mall	8-lane Prime Arterial	80,000	64,557	0.807	C
Eastgate Mall to Camino Santa Fe	6-lane Prime Arterial	60,000	67,748	1.129	**F**
North Torrey Pines Road					
Science Park Rd to Genesee Ave	6-lane Prime Arterial	60,000	29,303	0.488	B
Genesee Ave to Revelle College Dr	4-lane Major Arterial	40,000	21,760	0.544	C

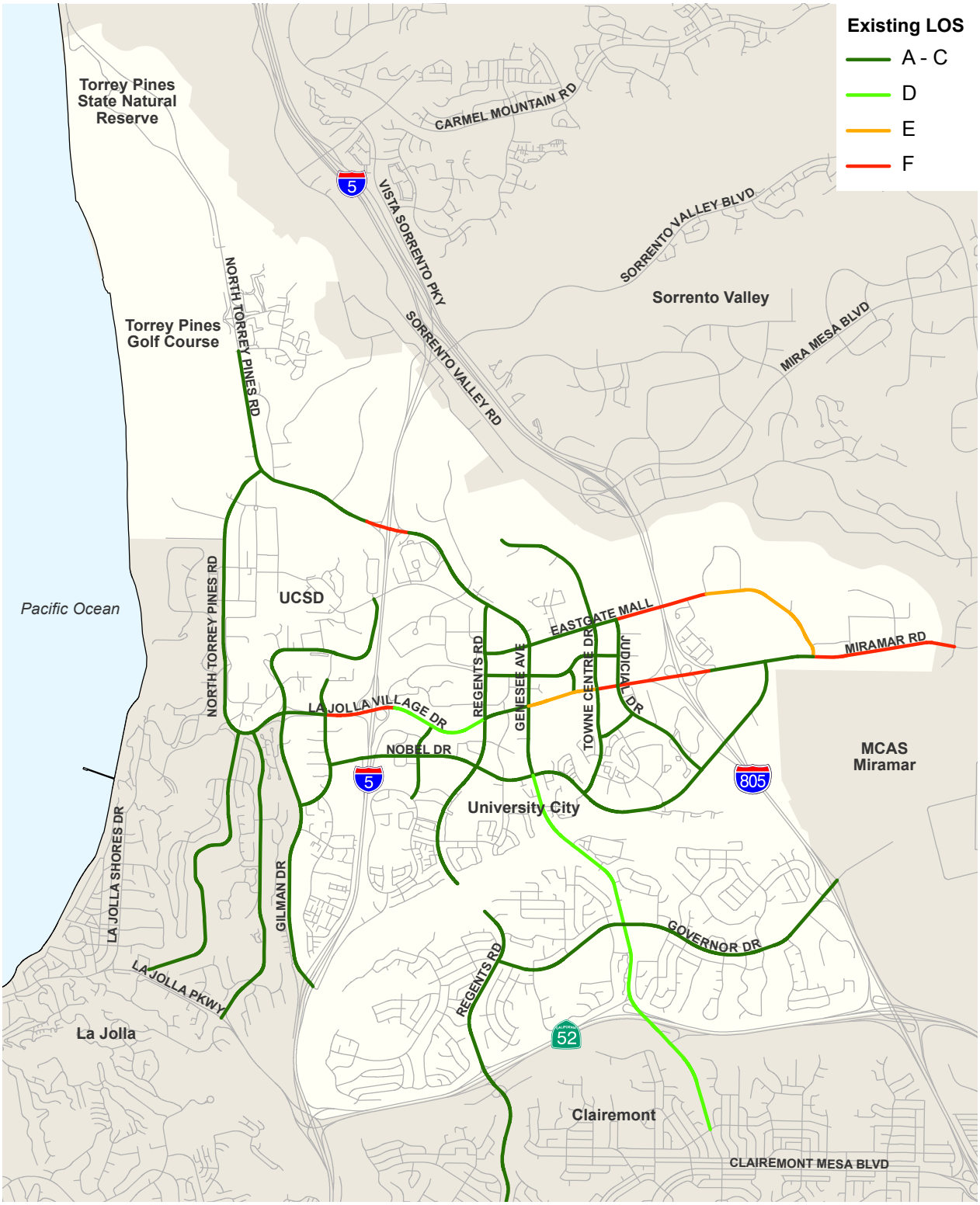
Notes:
Bold values indicate roadway segments operating at LOS E or F.
(a) Existing road classifications are based on field work conducted May 13, 2015.
(b) Average Daily Traffic (ADT) volumes for the roadway segments were provided by Accurate Video Counts Inc and measured in April and May 2015.
(c) The v/c Ratio is calculated by dividing the ADT volume by each respective roadway segment's capacity.

Table 4-2 Existing Conditions Summary of Roadway Segment ADT Based Analysis (Continued)

Roadway Segment	Roadway Classification (a)	LOS E Capacity	ADT (b)	V/C RATIO (c)	LOS
Nobel Drive					
Villa La Jolla Dr to I-5 SB On Ramp	4-lane Major Arterial	40,000	26,284	0.657	C
I-5 SB On Ramp to I-5 NB Off Ramp/University Center Lane	4-lane Major Arterial	40,000	27,642	0.691	C
I-5 NB Off Ramp/University Center Lane to Lebon Dr	6-lane Major Arterial	50,000	21,546	0.431	B
Lebon Dr to Regents Rd	6-lane Major Arterial	50,000	21,256	0.425	B
Regents Rd to Genesee Ave	6-lane Major Arterial	50,000	19,772	0.395	A
Genesee Ave to Towne Centre Dr	4-lane Major Arterial	40,000	18,484	0.462	B
Towne Centre Dr to Judicial Dr	6-lane Prime Arterial	60,000	17,261	0.288	A
Judicial Dr to Avenue of Flags	5-lane Major Arterial	45,000	24,125	0.536	B
Avenue of Flags to Miramar Rd	4-lane Prime Arterial	50,000	20,648	0.413	B
Regents Road					
Genesee Ave to Eastgate Mall	2-lane Collector (continuous left-turn lane)	15,000	6,260	0.417	B
Eastgate Mall to La Jolla Village Dr	4-lane Collector	30,000	15,245	0.508	C
La Jolla Village Dr to Nobel Dr	5-lane Major Arterial	45,000	16,525	0.367	A
Nobel Dr to Rose Canyon (end)	4-lane Major Arterial	40,000	10,688	0.267	A
Rose Canyon (end) to Governor Dr	2-lane Collector (no fronting property)	10,000	1,940	0.194	A
Governor Dr to SR-52 WB Ramps	4-lane Major Arterial	40,000	16,181	0.405	B
SR-52 WB Ramps to SR-52 EB Ramps	4-lane Major Arterial	40,000	19,957	0.499	B
SR-52 EB Ramps to Luna Ave	4-lane Major Arterial	40,000	21,268	0.532	C
Torrey Pines Road					
La Jolla Village Drive to community boundary	4-lane Major Arterial	40,000	26,620	0.666	C
Towne Centre Drive					
End to La Jolla Village Dr	4-lane Major Arterial	40,000	20,121	0.503	B
La Jolla Village Dr to Nobel Dr	4-lane Major Arterial	40,000	13,785	0.345	A
Villa La Jolla Drive					
Gilman Dr (South) to Nobel Dr	4-lane Major Arterial	40,000	6,896	0.172	A
Nobel Dr to La Jolla Village Dr	4-lane Major Arterial	40,000	16,011	0.400	B
La Jolla Village Dr to VA Medical Center	4-lane Major Arterial	40,000	19,865	0.497	B

Notes: **Bold** values indicate roadway segments operating at LOS E or F.
(a) Existing road classifications are based on field work conducted May 13, 2015.
(b) Average Daily Traffic (ADT) volumes for the roadway segments were provided by Accurate Video Counts Inc and measured in April and May 2015.
(c) The v/c Ratio is calculated by dividing the ADT volume by each respective roadway segment's capacity.

FIGURE 4-8



Existing Average Daily Traffic Level of Service Summary

CORRIDOR SPEED BASED ANALYSIS

A speed-based travel time analysis of key corridors within the University community was conducted during peak hours of the day. This analysis evaluates the roadway segment LOS perceived by auto users based on the average speed a vehicle maintains along the corridor. The following corridors were evaluated:

- Genesee Avenue (Lehrer Drive to North Torrey Pines Road)
- La Jolla Village Drive (Torrey Pines Road to Camino Santa Fe)
- Nobel Drive (La Jolla Village Square to Miramar Road)
- Regents Road (Genesee Avenue to Arriba Street, and Governor Drive to Luna Avenue)

The travel time information along each corridor was calculated using Synchro software and actual travel time information. A comparison of the two methods is provided to depict how well the simulation reflects actual travel times. This comparison is helpful in determining the accuracy of future travel time simulations. In general, the simulated travel times were longer than observed travel times because the simulation uses average approach delay, which does not account for the timed signal progression that occurs in the community. Also, the observed travel times represent an average time of several runs within a 2-hour timeframe, while the simulation uses the highest 1-hour volume at each intersection. Based on this comparison, the future travel time simulations compared to existing travel time simulations should show an accurate representation of change in delay, but would be expected to show a higher travel time than what would truly be experienced.

A summary of speed-based LOS along all four corridors are presented at the end of the section in **Figures 4-9** through **4-11**.

Genesee Avenue

The Genesee Avenue corridor is approximately 4.5 miles and goes through 18 traffic signals. The average speed along Genesee between North Torrey Pines Road and Lehrer Drive is estimated to be about 20 miles per hour during both peak periods and in both directions. Below 20 mph is equivalent to a LOS E. **Table 4-3** summarizes the total travel time, average speed, and resulting LOS for traveling from one end of the community to the other on Genesee Avenue.

In the morning peak, congestion is shown near Executive Square, new Campus Point Drive, and at the I-5 ramps. In the afternoon peak, congestion occurs consistently from Decoro Street to Eastgate Mall.

It should be noted that the interchange at I-5 was under construction at the time of these travel times for interchange improvements that will ultimately improve operations in that vicinity. However, the construction did not significantly affect the travel time runs.

La Jolla Village Drive/Miramar Road

The La Jolla Village Drive corridor is approximately 4.2 miles and goes through 17 traffic signals. The travel times were found to be faster than the estimated simulation times. **Table 4-4** summarizes the total travel time, average speed, and resulting LOS for traveling from one end of the community to the other on La Jolla Village Drive.

In the morning peak, the average speed along La Jolla Village Drive/Miramar Road is estimated to be around 20 miles per hour in the eastbound direction and less than 15 miles per hour in the westbound direction. The westbound direction has major congestion between the I-805 ramps and Genesee Avenue, and again near the I-5 ramps. The eastbound direction has noticeable congestion between the I-5 ramps and Genesee Avenue

In the afternoon peak, the average speed along La Jolla Village Drive/Miramar Road is estimated in the simulation to be about 12 miles per hour in the eastbound direction and 17 miles per hour in the westbound direction. The travel times showed an average speed of just under 30 miles per hour in both directions. Congestion at a couple key intersections significantly reduce travel speeds on the corridor. In the eastbound direction, the Towne Centre Drive intersection shows extreme congestion; in the westbound direction, Miramar Mall shows extreme congestion.

Nobel Drive

The Nobel Drive corridor is approximately 3.0 miles and goes through 16 traffic signals. **Table 4-5** summarizes the total travel time, average speed, and resulting LOS for traveling from one end of the community to the other on Nobel Drive.

The average speed along Nobel Drive between La Jolla Village Square and Miramar Road is estimated to be about 20 miles per hour in the morning peak period and closer to 15 miles per hour during the afternoon peak. Below 20 mph is equivalent to a LOS E.

Congestion is shown near the I-5 interchange, Genesee Avenue, and the I-805 interchange during both peak periods. During the field-collected travel time runs there were additional delays and congestion along Nobel Drive during the midday peak, especially near the commercial areas near Villa La Jolla.

Regents Road

The northern section of the Regents Road corridor is approximately 1.5 miles and goes through 9 traffic signals. **Table 4-6** summarizes the total travel time, average speed, and resulting LOS for traveling on the northern side of Regents Road. The average speed along Regents Road between Arriba Street and Genesee Avenue is estimated to be about 15 miles per hour in both peak periods and both directions. Below 15 mph is equivalent to a LOS F.

The southern section of the Regents Road corridor is approximately 1.5 miles and goes through 3 traffic signals. **Table 4-7** summarizes the total travel time, average speed, and resulting LOS for traveling on the southern side of Regents Road. The average speed along Regents Road between Luna Avenue and Governor Drive is estimated to be about 40 miles per hour in the morning peak period in both directions and about 20 miles per hour in the afternoon peak in both directions.

Table 4-3 Genesee Avenue Based Analysis

Corridor	Direction	Peak	Travel Time (sec)	Speed (mph)	LOS
Genesee Avenue					
SR-52 Ramps - N Torrey Pines Road	Northbound	AM Travel Time	821	19.6	**E**
		AM Simulation	845	19.0	**E**
		PM Travel Time	655	20.0	**E**
		PM Simulation	800	24.5	D
N Torrey Pines Road – SR-52 Ramps	Southbound	AM Travel Time	626	25.2	D
		AM Simulation	677	23.3	D
		PM Travel Time	1216	17.9	**E**
		PM Simulation	875	19.1	**E**

Notes:
Travel Time = Average value from field based travel time runs
Simulation = Synchro analysis value

Table 4-4 La Jolla Village Drive Speed Based Analysis

Corridor	Direction	Peak	Travel Time (sec)	Speed (mph)	LOS
La Jolla Village Drive / Miramar Road					
N Torrey Pines Rd - Camino Santa Fe	Eastbound	AM Travel Time	526	28.7	C
		AM Simulation	725	20.8	**E**
		PM Travel Time	546	27.6	C
		PM Simulation	1313	11.5	**F**
Camino Santa Fe - N Torrey Pines Rd	Westbound	AM Travel Time	663	22.8	D
		AM Simulation	1074	14.0	**F**
		PM Travel Time	567	26.6	D
		PM Simulation	897	16.8	**E**

Table 4-5 Nobel Drive Speed Based Analysis

Corridor	Direction	Peak	Travel Time (sec)	Speed (mph)	LOS
Nobel Drive					
La Jolla Village Sq – Miramar Rd	Eastbound	AM Travel Time	458	22.8	C
		AM Simulation	630	16.6	**E**
		PM Travel Time	554	15.4	**E**
		PM Simulation	682	19.0	D
Miramar Rd – La Jolla Village Sq	Westbound	AM Travel Time	466	21.4	D
		AM Simulation	578	17.2	D
		PM Travel Time	531	18.8	D
		PM Simulation	676	14.8	**E**

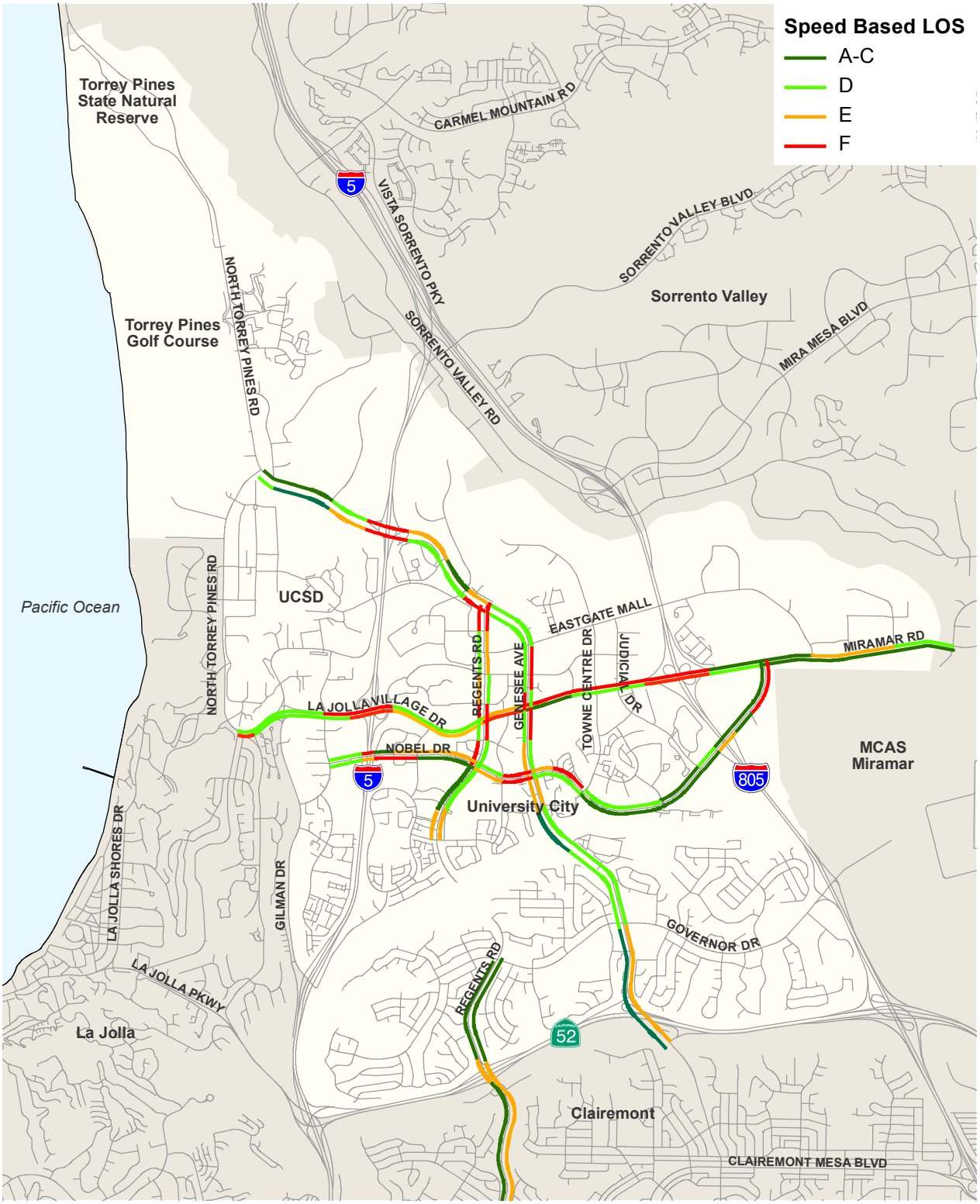
Table 4-6 Regents Road (Northern Section) Based Analysis

Corridor	Direction	Peak	Travel Time (sec)	Speed (mph)	LOS
Regents Road (Northern Section)					
Arriba St – Genesee Ave	Northbound	AM Travel Time AM Simulation	416 407	12.2 12.5	**E** **E**
		PM Travel Time PM Simulation	296 349	17.1 14.5	D **E**
Genesee Ave – Arriba St	Southbound	AM Travel Time AM Simulation	289 343	17.6 14.8	D **E**
		PM Travel Time PM Simulation	385 390	13.2 13.0	**E** **F**

Table 4-7 Regents Road (Southern Section) Based Analysis

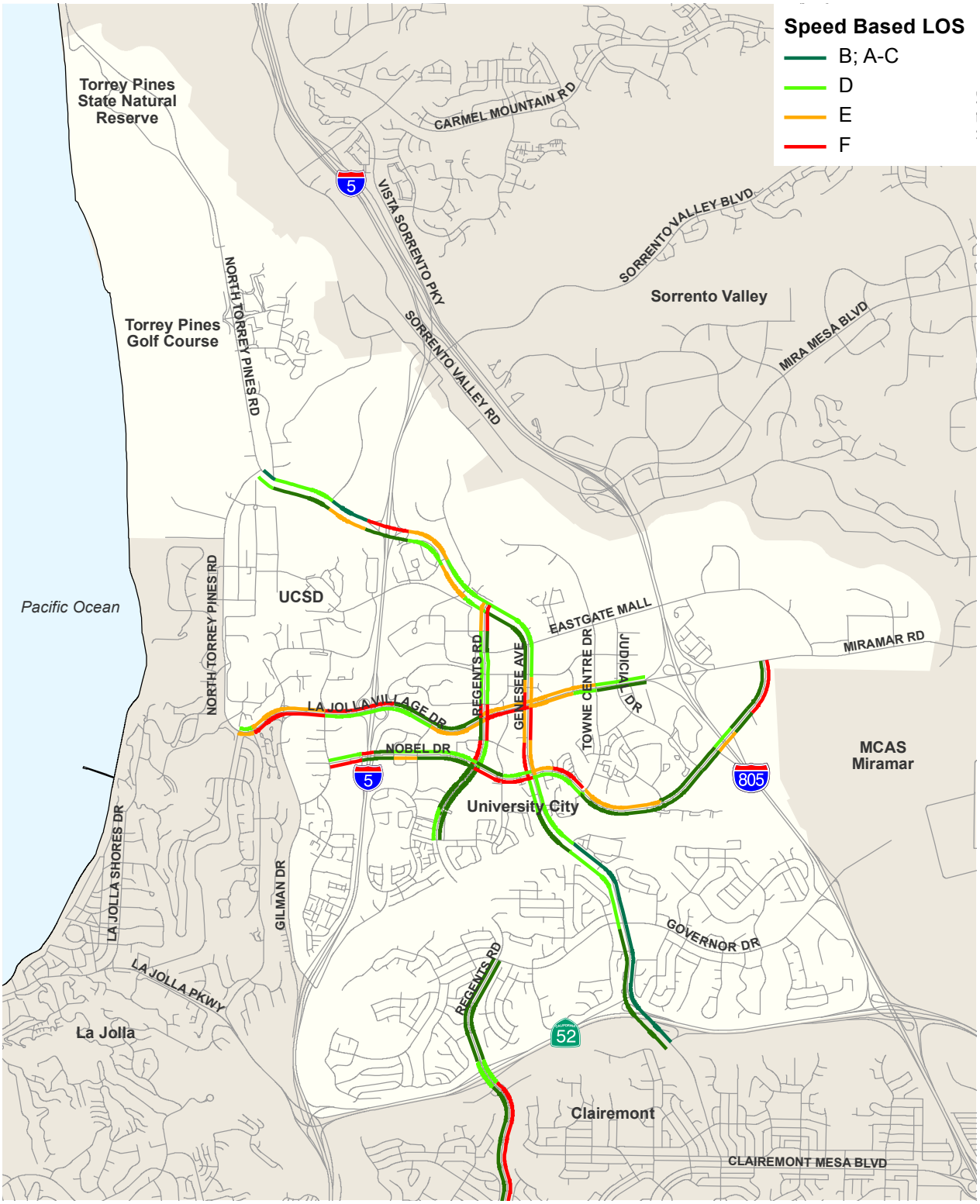
Corridor	Direction	Peak	Travel Time (sec)	Speed (mph)	LOS
Regents Road (Southern Section)					
Luna Ave – Governor Dr	Northbound	AM Travel Time AM Simulation	131 373	40.7 14.3	A D
		PM Travel Time PM Simulation	125 253	42.6 21.0	A C
Governor Dr – Luna Ave	Southbound	AM Travel Time AM Simulation	102 256	52.2 20.8	A D
		PM Travel Time PM Simulation	116 308	25.2 17.3	B D

FIGURE 4-9



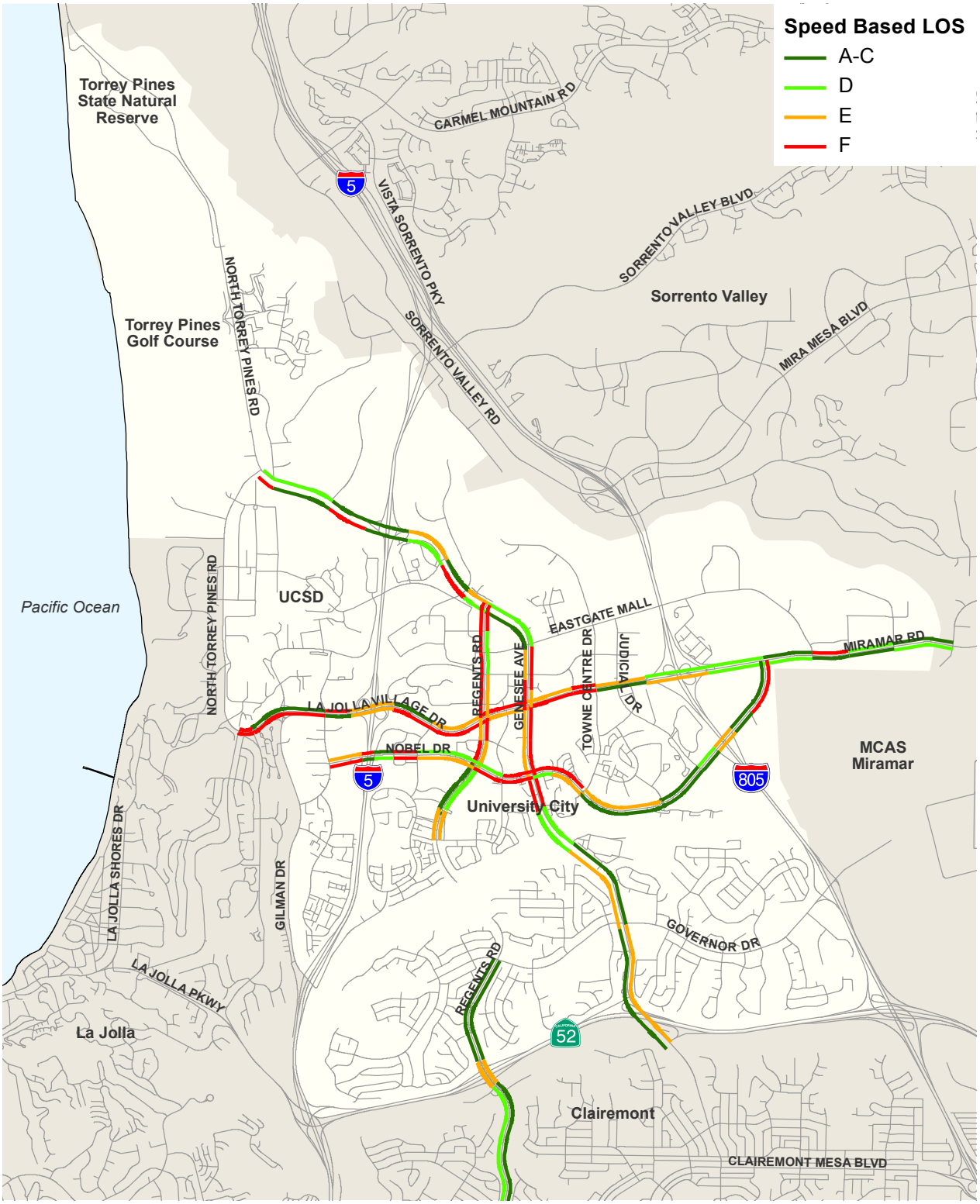
Existing AM Roadway Segment Speed Based Level of Service Summary

FIGURE 4-10



Existing Midday Roadway Segment Speed Based Level of Service Summary

FIGURE 4-11



Existing PM Roadway Segment Speed Based Level of Service Summary

FREEWAY SEGMENTS

Freeway volumes were obtained from Caltrans and reflect the latest Year 2013 volumes that had been collected at the time of this report. The freeways were evaluated using procedures for a freeway mainline as outlined in the HCM.

Table 4-8 displays the LOS analysis results for the freeway segments adjacent to the community during the morning and afternoon peak hours. As shown in the table, the freeway segments surrounding the University community operate with an LOS D or better for all segments except the following:

- Interstate 5 shows LOS E and F between SR-52 and Gilman Drive during the AM and PM peak, respectively. During the AM peak, the failing LOS appears in the northbound direction, in the PM peak the failing LOS appears in the southbound direction.
- Interstate 805 shows LOS E or F at each of the study segments in both peak periods. The failing LOS shows up in the northbound direction during the AM peak and in the southbound direction during the PM peak.
- State Route 52 shows LOS E for the segment between Genesee Avenue and I-805 during the AM peak and LOS F between the segments of Regents Road and I-805 during the PM peak. All failing segments are in the eastbound direction.

In general, the failing segments are those that move traffic towards the University community in the morning and away from the University community in the afternoon. **Figure 4-12** illustrates the LOS along the freeways during the morning peak. **Figure 4-13** illustrates the LOS along the freeways during the afternoon peak. **Appendix K** includes the "k" and "d" factors published by Caltrans that are included in the analysis.

FREEWAY ENTRANCE RAMPS

Freeway entrance ramps that currently have ramp meters installed and in operation were evaluated to determine the delay and queue associated with the ramp meters. Calculations were made using the peak hour demand at the entrance ramp and the current meter rate to quantify the number and frequency of vehicles that are processed through the meter. The excess demand not being processed is then quantified along with its respective queue length. Ramp volumes were obtained from the intersection turning movements collected in May 2015. Appendix K contains the ramp meter rates provided by Caltrans.

Table 4-9 displays the results of the freeway ramp meters in the study area. It should be noted that the I-5/Genesee Avenue interchange was under construction at the time of this study and ramp meters were removed and not operating. As shown in the table, the meter rate adequately controls the expected demand with delays resulting in less than 15 minutes, except at the following location:

- I-805 SB & Nobel Drive, PM peak (21 minute delay)

It is expected that delays over 15 minutes lead people to use an alternate route or choose to use the ramp during a different time period. The existing ramp meter rate at this location is 229 vehicles per hour per lane. If the ramp meter rate was adjusted to be 240 vehicles per hour per lane or more, then the delays would be reduced to less than 15-minutes.

Figure 4-12 illustrates that no freeway entrance ramps are over capacity during the morning peak. Figure 4-13 illustrates the following ramps that are over capacity during the afternoon peak:

- I-5 SB & Gilman Drive
- I-5 SB & La Jolla Village Drive (WB to SB)

- I-5 SB & La Jolla Village Drive (EB to SB)
- I-805 SB & Nobel Drive
- I-805 SB and Governor Drive

Field observations were made at each of the entrance ramp locations to evaluate whether calculation results were accurate. Where calculation results were not accurate, the meter rate used in the calculations was adjusted to reflect queue lengths from field observations.

Table 4-8 Existing Summary of Freeway Segment Level of Service

	Freeway Segment	Dir	Number of Lanes	Peak-Hour Volume (a)		Speed (mph) (b)		Density (pc/mi/ln)		LOS (c)	
				AM	PM	AM	PM	AM	PM	AM	PM
I-5	SR-52 to Gilman Dr	NB	4	8,785	6,154	56	56	44.4	31.1	**E**	D
		SB	4	5,120	8,970	56	56	28.8	45.4	D	**F**
	Gilman Dr to Nobel Dr	NB	4	5,424	6,449	61	60	26.5	30.3	D	D
		SB	4	6,565	5,687	60	61	30.9	26.5	D	D
	Nobel Dr to La Jolla Village Dr	NB	4	4,795	5,702	56	56	28.8	28.9	D	D
		SB	4	5,804	5,028	56	56	29.4	28.8	D	D
	La Jolla Village Dr to Genesee Ave	NB	4	5,225	6,213	56	56	28.8	31.4	D	D
		SB	4	6,325	5,479	56	56	32.0	28.8	D	D
I-805	SR-52 to Governor Dr	NB	4	8,560	6,066	56	56	43.3	30.7	**E**	D
		SB	4	3,142	9,834	56	56	28.8	49.8	D	**F**
	Governor Dr to Nobel Dr	NB	4	9,272	5,618	56	56	46.7	28.8	**F**	D
		SB	4	3,745	8,505	56	56	28.8	42.8	D	**E**
	Nobel Dr to La Jolla Village Dr	NB	4	8,316	5,039	56	56	42.1	28.8	**E**	D
		SB	4	3,359	7,628	56	53	28.8	41.1	D	**E**
	La Jolla Village Dr to Mira Mesa Blvd	NB	4	8,269	5,010	56	56	41.8	28.8	**E**	D
		SB	4	3,340	7,584	56	53	28.8	40.7	D	**E**
SR-52	I-5 to Regents Rd	EB	3	2,483	4,468	55	55	29.6	30.7	D	D
		WB	3	3,757	2,804	55	55	29.6	29.6	D	D
	Regents Rd to Genesee Ave	EB	2	3,199	4,316	53	53	33.9	45.7	D	**F**
		WB	2	3,564	2,945	53	53	32.1	32.1	D	D
	Genesee Ave to I-805	EB	2	3,486	4,704	56	57	35.2	46.7	**E**	**F**
		WB	2	3,884	3,210	57	57	28.4	28.4	D	D

Notes:

(a) Peak-hour volumes were estimated by applying the K and D factors to the published 2013 Caltrans AADT volumes.

(b) The speed was calculated from a base free-flow speed (BFFS) of 65 mph.

(c) The LOS for the respective freeway segments were based on the methodologies contained in Chapter 23 of the *2000 Highway Capacity Manual*.

Table 4-9 Existing Summary of Freeway Ramp Metering Operations

On-Ramp	Peak Hour	Number of Lanes		Storage Length (ft)		Meter Rate (veh/hr/ln) (a)	Ramp Volume (per lane)			Excess Demand (veh/hr)		Delay (min) (c)		Queue Length (ft/ln)	
		GP	HOV	GP	HOV		Total	GP	HOV	GP	HOV	GP	HOV	GP	HOV
I-5 SB & Gilman Dr	AM	2	1	570	570	n/a	735	294	147						
	PM					635 *	1615	646	323	22	0	2	0	275	0
I-5 SB & Nobel Dr	AM	2	1	490	370	n/a	407	163	81						
	PM					528	1162	465	232	0	0	0	0	0	0
I-5 NB & La Jolla Village Dr (WB to NB)	AM	1	0	715	n/a	n/a	488	390	98						
	PM					555	544	435	109	0	0	0	0	0	0
I-5 NB & La Jolla Village Dr (EB to NB)	AM	1	1	410	410	n/a	844	675	169						
	PM					n/a (b)	1248	998	250						
I-5 SB & La Jolla Village Dr (WB to SB)	AM	1	1	535	475	n/a	314	251	63						
	PM					865 *	1095	876	219	11	0	1	0	275	0
I-5 SB & La Jolla Village Dr (EB to SB)	AM	1	1	355	265	n/a	221	177	44						
	PM					570 *	820	656	164	86	0	9	0	2150	0
I-805 NB & La Jolla Village Dr (WB to NB)	AM	1	1	1850	1090	804	481	385	96	0	0	0	0	0	0
	PM					n/a	446	357	89						
I-805 NB & La Jolla Village Dr (EB to NB)	AM	1	1	780	780	746	802	642	160	0	0	0	0	0	0
	PM					n/a	1371	1097	274						
I-805 SB & La Jolla Village Dr (WB to SB)	AM	1	1	1290	1290	n/a	497	398	99						
	PM					704	640	512	128	0	0	0	0	0	0
I-805 SB & La Jolla Village Dr (EB to SB)	AM	2	1	2220	920	n/a	441	177	88						
	PM					593	1016	407	203	0	0	0	0	0	0
I-805 SB & Nobel Dr	AM	2	1	915	915	n/a	680	272	136						
	PM					229	671	269	134	80	0	**21**	0	1000	0
I-805 NB Governor Dr	AM	1	1	485	485	385	395	316	79	0	0	0	0	0	0
	PM					n/a	337	270	67						
I-805 SB & Governor Dr	AM	1	0	515	n/a	n/a	484	387	97						
	PM					768	1015	812	203	44	0	3	0	1100	0

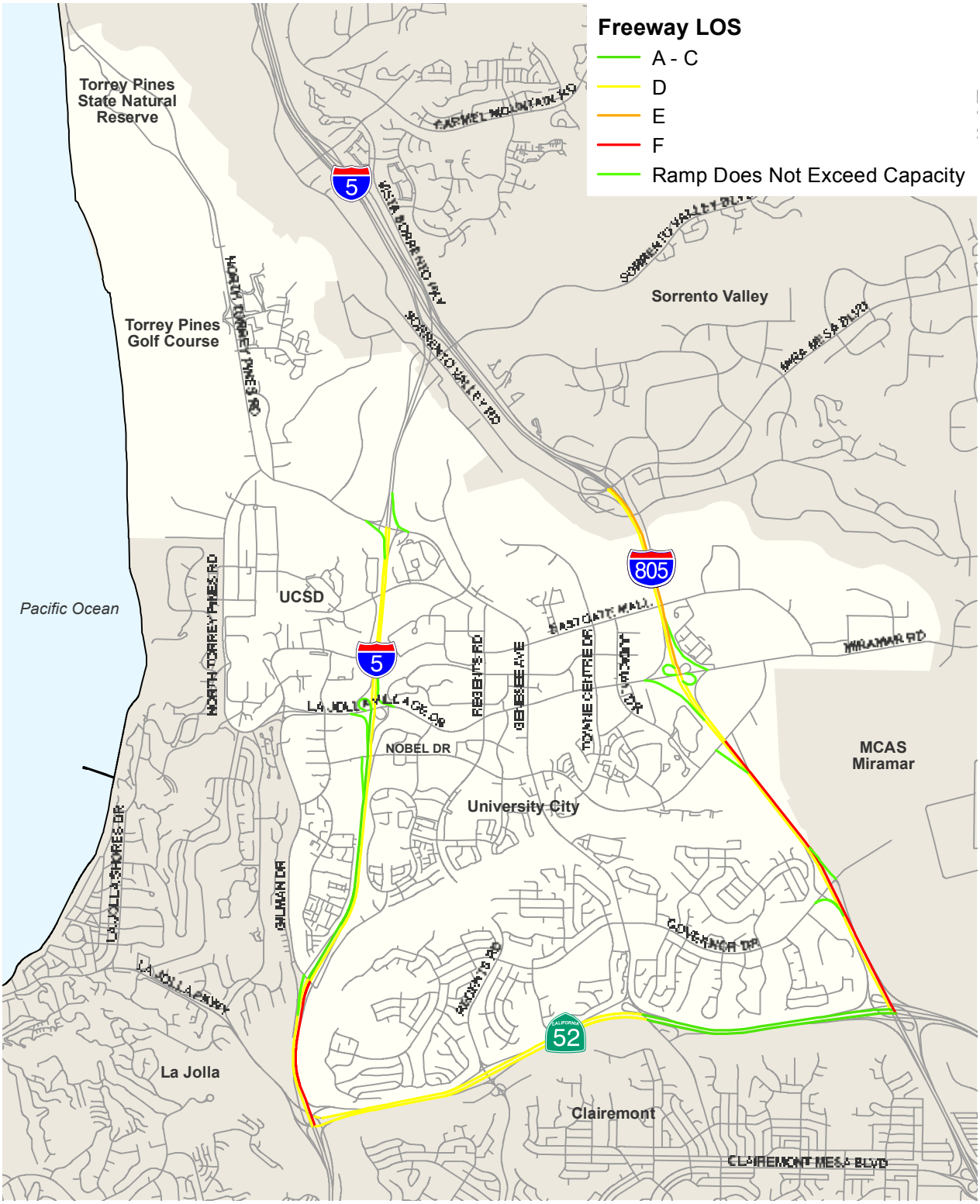
Notes:

(a) The ramp meter rate represents the most restrictive rate obtained from Caltrans. Cells that contain an "*" indicate meter rates that were manually adjusted to reflect queue lengths from field observations.

(b) A ramp meter rate ranging between 643 to 996 veh/hr/ln was provided by Caltrans, but field observations indicated that the ramp was not turned on.

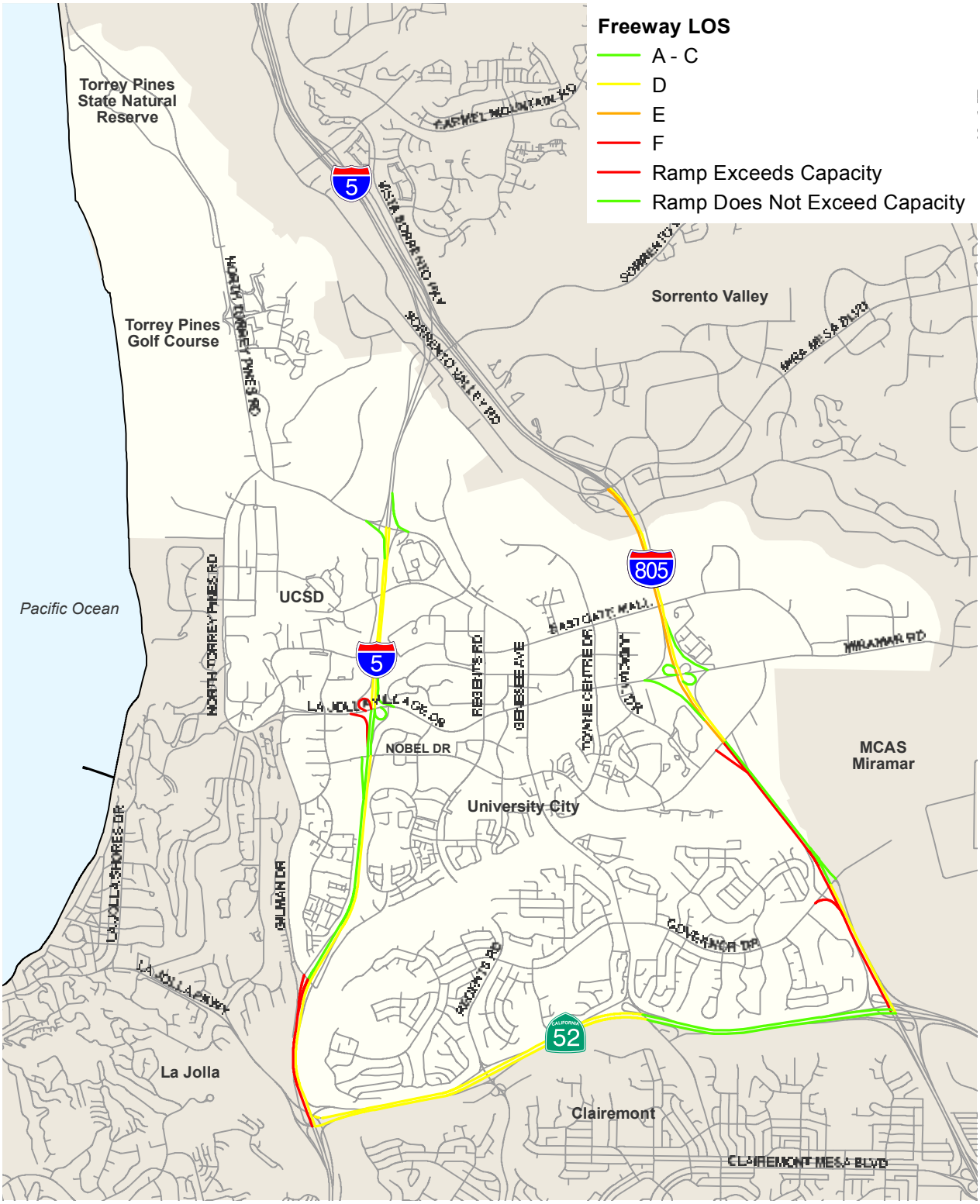
(c) Delays exceeding 15-minutes are shown in **bold** font.

FIGURE 4-12



Existing AM Freeway Operations Summary

FIGURE 4-13



Existing PM Freeway Operations Summary

5 ACTIVE TRANSPORTATION: WALKABLE COMMUNITY

SANDAG collects and maintains an inventory of the sidewalks within and adjacent to the University community. This information was used to create a baseline pedestrian network and to help determine existing pedestrian facilities versus missing facilities and connections within the community. The data is not all-inclusive, but has the necessary information to determine the adequacy of pedestrian connections. Figure 4-1 presented an overview of the pedestrian network inventory within the community. It is important to note that the sidewalk inventory available does not include private entities, such as the UCSD campus, nor separated trails, such as those within Rose Canyon.

FUTURE NETWORK CHANGES

There are no major changes to the pedestrian network planned for the University community. Site-specific improvements will need to be included as new development or redevelopment occurs. The City will continue to upgrade curb ramps and traffic signal operations as part of their ongoing maintenance and operations programs.

ACCESS TO TRANSIT

Each transit stop within the University community was evaluated for its accessibility through the sidewalk network. A 0.25-mile walkshed was calculated from each transit stop, allowing the simulated pedestrian to only utilize available sidewalks and crossings. The evaluation is purely distance based and does not have any factors related to time. **Figure 5-1** summarizes the results of the walkshed analysis performed for the existing transit network.

The northern and central areas within the community provide good pedestrian facilities to access transit. Most of the area is covered within a 0.25-mile walkshed. The southern part of the community is not well served, with only the areas very close to Governor Drive and Genesee Avenue having good pedestrian connections. Residential neighborhoods within the southwestern and southeastern areas of the “golden triangle” do not have public transit facilities located within a 0.25-mile walkshed.

The Mid-Coast trolley project would provide pedestrian connections to existing facilities at each transit station in the community.

COMMUNITY RECOMMENDATIONS

In general, sidewalks and curb ramps are provided along the majority of the roadways in the University community. The isolated sections of sidewalk that are missing are mostly constrained by bridge widths, do not have fronting property and are in a residential area where sidewalk is provided on the opposite side, or have special considerations. However, some segments such as Miramar Road between Eastgate Mall and Miramar Place and North Torrey Pines Road between Muir College Drive and Pangea Drive, among other sections of some residential streets, should be considered for the addition of sidewalk. Curb ramps throughout the community should continue to be implemented where they are not provided, and existing curb ramps should be updated to meet accessibility standards.

Crosswalks throughout the community should be upgraded to high-visibility crosswalks, such as continental (zebra) striping. With most roadways having high speeds and heavy volumes, additional crosswalk visibility would help notify drivers of an upcoming crosswalk and potential for pedestrian activity.

There are several schools located within the University community. The community would benefit from safe routes to school projects that improve pedestrian safety between residential areas and schools. Improved pedestrian access may reduce the number of vehicles driving to schools in the mornings and afternoons.

Pedestrian bridges are provided at certain locations within the community core retail area where pedestrian interactions between land uses separated by a roadway are frequent and traffic volumes on the roadway are especially high. These separated facilities improve the pedestrian experience as it removes pedestrians from potential conflict points with vehicles and eliminates wait times at signals. The planned Mid-Coast trolley stations will include raised platforms along Genesee Avenue that will provide access to the transit system and also act as a pedestrian crossing. Pedestrian facilities for each new trolley station will connect to the existing sidewalk network.

The new transit center planned at La Jolla Village Square is expected to be difficult to access from Nobel Drive with the current pedestrian crossing locations. It is recommended that a pedestrian facility is considered on the east side of the La Jolla Village Square parking lot, connecting to Nobel Drive at the intersection with the I-5 Southbound ramps. A pedestrian crossing could be provided on the west side of that signalized intersection to provide access to the retail shops on the north side of Nobel Drive. This would improve connectivity between the transit center and adjacent retail, as well as provide an alternative pedestrian access to La Jolla Village Square.

The pedestrian overcrossing located along La Jolla Village Drive just west of Villa La Jolla Drive has poor accessibility from either end, which limits its usefulness. It is recommended that a pedestrian trail is provided on the northern end of the overcrossing, providing a connection to the signalized intersection of Villa La Jolla Drive and VA Medical Center. This would encourage better use of the overcrossing for the VA and UCSD users north of La Jolla Village Drive and retail and residential uses south of La Jolla Village Drive.

There is a planned pedestrian overcrossing in the North University City (NUC) Public Facilities Financing Plan (PFFP) (NUC-1) that would be located on La Jolla Village Drive just west of Genesee Avenue. The location of that planned overcrossing is no longer a logical pedestrian connection. Originally, the overcrossing was planned to connect retail developments and be a part of a pedestrian bridge network that included another bridge crossing Genesee Avenue. The Genesee Avenue bridge crossing is being removed as part of the Mid-Coast Trolley project. As a result, the planned pedestrian overcrossing should be reconsidered. The Community Plan Amendment process will not be specifically addressing this issue and assessment of the removal of the bridge will be either studied by the development applicant or handled in the forthcoming Community Plan Update.

At the intersection of Torrey Pines Road and La Jolla Village Drive, it is recommended to move the pedestrian crossing from the east leg of the intersection to the west leg of the intersection. One of the heavy movements at this intersection is the northbound right-turn, which currently crosses the pedestrian pathway when they have a green light. Moving the pedestrian crossing to the other side of the intersection removes pedestrians from potential conflict points with vehicles when vehicles have a green light. Currently, the pedestrians cross at the same time that all northbound movements have a green light. Instead, the pedestrian crossing should be activated when the westbound left-turns and northbound right-turns have a green light, allowing pedestrians to cross concurrently with the northbound right-turns and be separated from the path of travel.

The Eastbound La Jolla Village Drive and Gilman Drive intersection is currently side-street stop-controlled. It has a short pedestrian crossing and curb ramps on the west side that provides an adequate crossing point. There is no pedestrian crossing and a free right-turn provided on the east side, with no sidewalk on the northeast corner. Pedestrians on the east side of Gilman Drive approaching this intersection are

required to go up to La Jolla Village Drive as no other pedestrian crossing option is provided. The recommended traffic signal at this intersection would allow for pedestrians on the east side to cross Gilman Drive to get to the sidewalk available on the west side. It would also provide additional attention to pedestrian crossing on the west side with a striped crosswalk and signal- controlled movements.

At the intersection of Genesee Avenue and SR-52 Westbound ramps, the sidewalk on the west side of Genesee Avenue ends just prior to the free right-turn from Genesee Avenue to westbound SR-52. No pedestrian crossing or facility is provided from that point south until Luna Avenue. The recommended traffic signal at this location would provide a location for pedestrians on the west side to cross to the east side of Genesee Avenue to utilize the existing sidewalk. Further, the recommended reconfiguration of the ramps would remove the southbound to westbound free right-turn movement which is a hazard for pedestrians.

Alternatives A and B

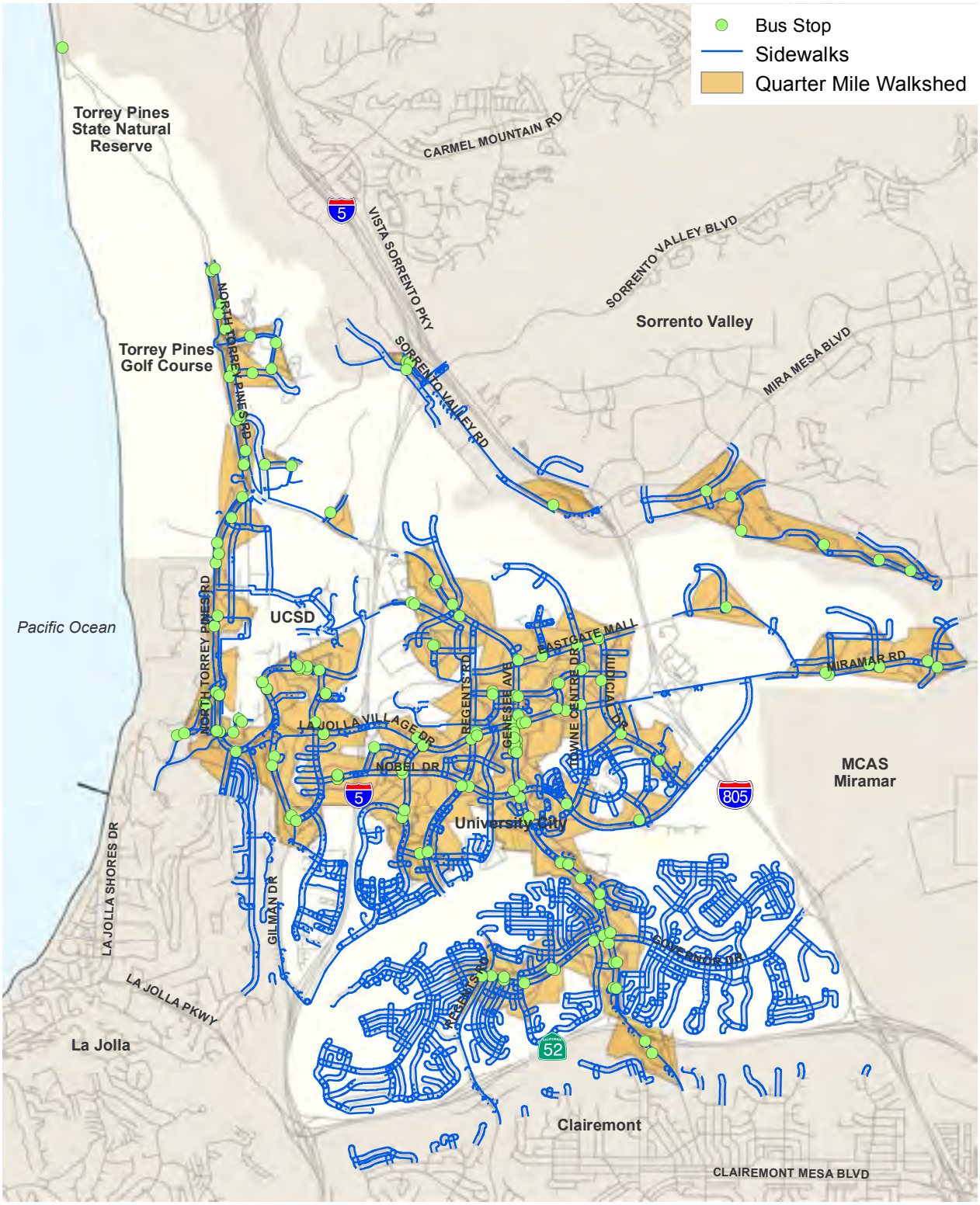
With implementation of Alternatives A and B, the Regents Road bridge would create a new pedestrian crossing over Rose Canyon. The bridge structure is approximately a quarter mile in length. There are retail uses north of the bridge at the northwest corner of Regents Road and Arriba Street and south of the bridge at the northeast corner of Regents Road and Governor Drive. It is anticipated that the bridge would have less than moderate use and would not be a key pedestrian connection for the community.

Regardless of the alternative, pedestrian facilities would continue to be provided along Genesee Avenue across Rose Canyon.

Alternatives C and D

With implementation of Alternatives C and D, the Regents Road bridge would not be built and there would be no change to the existing pedestrian network at or near Rose Canyon. Regardless of the alternative, pedestrian facilities would continue to be provided along Genesee Avenue across Rose Canyon.

FIGURE 5-1

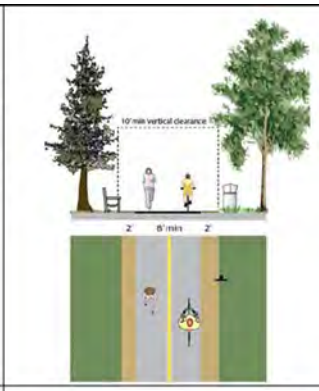
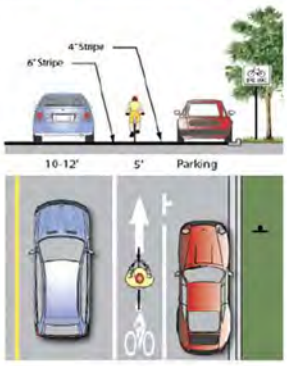


Transit Walkshed Analysis Summary

6 ACTIVE TRANSPORTATION: BICYCLING

The City of San Diego has developed a network of designated Class I, II, and III bikeways as part of their Bicycle Master Plan efforts. A Class I facility is a bike path that provides for bicycles to travel on a paved right-of-way completely separated from any street or highway. A Class II facility is a bike lane that provides bicycles an exclusive or semi-exclusive lane of travel on a roadway separated by a painted line. A Class III facility is a bike route that provides for a shared use with pedestrian or motor vehicle traffic and is only identified by signage and/or pavement markings. **Table 6-1** provides more description and illustrates the types of bikeway identified in the City of San Diego Bicycle Master Plan (BMP).

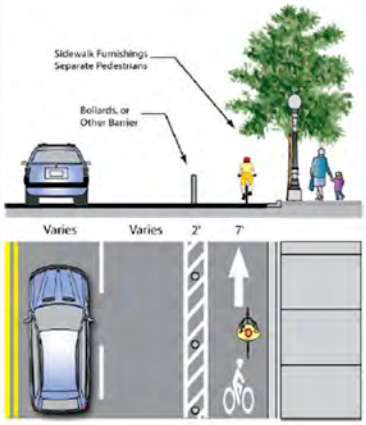
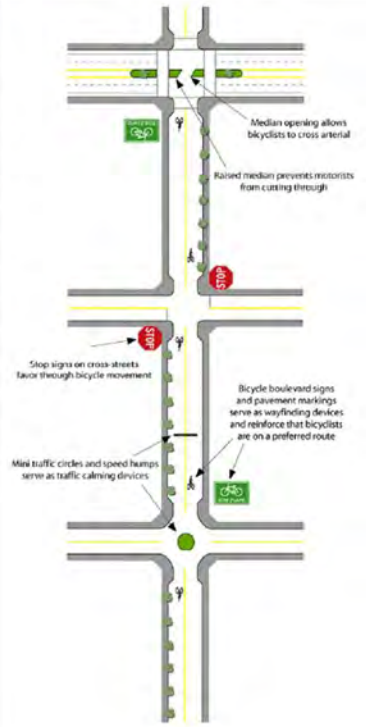
Table 6-1 Regional Bicycle Facility Classifications

Class I – Bike Path Bike paths are bikeways that are physically separated from vehicular traffic. Also termed shared-use paths, bike paths accommodate bicycle, pedestrian, and other non-motorized travel. Paths can be constructed in roadway right-of-way or independent right-of-way. Bike paths provide critical connections in the region where roadways are absent or are not conducive to bicycle travel.	
Class II - Bike Lanes Bike lanes are defined by pavement markings and signage used to allocate a portion of a roadway for exclusive or preferential bicycle travel. Within the regional corridor system, bike lanes should be enhanced with treatments that improve safety and connectivity by addressing site-specific issues. Such treatments include innovative signage, intersection treatments, and bicycle loop detectors.	
Class III - Bike Routes Bike routes are located on shared roadways that accommodate vehicles and bicycles in the same travel lane. Established by signs, bike routes provide continuity to other bike facilities or designate preferred routes through corridors with high demand. Within the regional corridor system, bike routes should be enhanced with treatments that improve safety and connectivity by addressing site-specific issues.	

Source: *SANDAG Regional Bicycle Plan*, dated April 2010 (ALTA Planning)

Two additional bicycle facilities, Cycle Track (referred to as a Class IV Bicycle Lane by the City of San Diego) and Bicycle Boulevard, have been adopted into the SANDAG Regional Bike Plan (RBP). A Class IV Bicycle Lane is a bicycle facility that is located within the roadway right-of-way but essentially functions as a separated facility. Bicycle Boulevards are roadways where physical improvements such as traffic calming and diversions are intended to provide priority to bicyclists. Bicycle Boulevards are typically installed on local roads with a low volume of vehicles. **Table 6-2** further explains the two new bicycle facilities.

Table 6-2 Additional Bicycle Facility Classifications

Cycle Tracks A cycle track is a hybrid type bicycle facility that combines the experience of a separated path with the on-street infrastructure of a conventional bike lane. Cycle tracks are bikeways located in roadway right-of-way but separated from vehicle lanes by physical barriers or buffers. Cycle tracks provide for one-way bicycle travel in each direction adjacent to vehicular travel lanes and are exclusively for bicycle use. Cycle tracks are not recognized by Caltrans Highway Design Manual as a bikeway facility. Development of cycle track on segments of the regional corridor system is proposed through experimental, pilot projects.	
Bicycle Boulevards Bicycle boulevards are local roads or residential streets that have been enhanced with traffic calming and other treatments to facilitate safe and convenient bicycle travel. Bicycle boulevards accommodate bicyclists and motorists in the same travel lanes, typically without specific vehicle or bicycle lane delineation. These roadway designations prioritize bicycle travel above vehicular travel. The treatments applied to create a bike boulevard heighten motorists' awareness of bicyclists and slow vehicle traffic, making the boulevard more conducive to safe bicycle and pedestrian activity. Bicycle boulevard treatments include signage, pavement markings, intersection treatments, traffic calming measures and can include traffic diversions. Bicycle boulevards are not defined as bikeways by Caltrans Highway Design Manual; however, the basic design features of bicycle boulevards comply with Caltrans standards.	

Source: *SANDAG Regional Bicycle Plan*, dated April 2010 (ALTA Planning)

FUTURE NETWORK CHANGES

The following table summarizes improvements to the bicycle network in the University community that are recommended as part of this Community Plan Amendment. These recommendations would be the same for each of the four alternatives.

Table 6-3 Recommended Bicycle Improvements

	Improvement	Facility Classification	Corridors	Funding
1	**I-5 Bicycle Path** - Caltrans is constructing a bicycle path connecting Roselle Street with Voigt Drive. This path will include an active transportation bridge over Genesee Avenue. The existing bicycle lanes allowed on the shoulders of I-5 between Genesee Avenue and Roselle Street would be removed due to this facility upgrade.	1	I-5/UCSD	Caltrans
2	**I-5 Bicycle Path Extension to Gilman Bridge** - UCSD will extend the bicycle path along I-5 from Voigt Road to Gilman Drive bridge. The length of this segment is 0.4 miles.	1	I-5/UCSD	UCSD
3	**Rose Canyon/San Clemente Canyon Connections** - Provide a path connecting Rose Canyon, San Clemente Canyon and South University (at Blothe Avenue). These connections will require a bridge to cross the railroad tracks. The length of this segment within the community is 0.3 miles.	1	Coastal Trail I-5/UCSD Rose Canyon	FBA
4	**Marian Bear Trail** - construct a trail along existing dirt trail connecting Standley Recreation Center with San Clemente Trail. This improvement should be completed when San Clemente Trail is improved to a Class 1 facility. The length of this segment is 0.5 miles.	1	none	FBA
5	**Executive Drive** - Designate bicycle lanes from Judicial Drive to Nobel Road/Miramar Street by narrowing travel lanes and removing parking. This segment is 0.8 miles in length.	2	Executive	FBA
6	**Judicial Drive** - Provide bicycle lanes between Executive Drive and Eastgate Mall by narrowing travel lanes and removing parking. This segment is 0.2 miles.	2	Judicial	FBA
7	**Via La Jolla** - Construct bicycle lanes from Gilman Drive to La Jolla Village Drive. The length of this segment is 0.6 miles.	2	none	FBA
8	**Gilman Drive (UCSD Segment)** - This project would construct a bridge over I-5 with bicycle lanes. Additionally, UCSD has identified projects to upgrade facilities on Gilman to bicycle lanes connecting to City facilities at La Jolla Village Drive.	2	UCSD	UCSD
9	**Voigt Drive (UCSD)** - Voigt Drive will be realigned to connect directly with the Genesee Avenue/Campus Point Drive intersection and its bridge over I-5 will be widened. Bicycle lanes will be provided.	2	UCSD	Mid Coast LRT

Table 6-3 Recommended Bicycle Improvements (continued)

	Improvement	Facility Classification	Corridors	Funding
10	**Blothe Avenue and Stressman Street Bicycle Route** - Designate all of Blothe Avenue and Stressman Street from Blothe Avenue to Governor Drive as a bicycle route connecting South University with bicycle paths on the fringe of the community. These segments are approximately 1 mile in length.	3	none	FBA
11	**Eastgate Mall** - Designate as a bicycle route between Genesee Avenue and Regents Road. Use traffic calming techniques to slow vehicular speeds for this segment which is adjacent to a park and school. This segment is 0.25 miles in length.	3	Eastgate Coastal Trail	FBA
12	**Governor Drive** - Designate as a protected bicycle lane within the existing right-of-way. In areas where space is limited, designate as bicycle lanes. This segment is 2.6 miles long.	4	Governor	FBA
13	**Nobel Drive** - Designate as protected bicycle lanes from Miramar Road to the I-5 northbound ramps. This improvement will require narrowing of travel lanes and removal of on-street parking. This segment is 3.1 miles in length.	4	Nobel	FBA & SANDAG
14	**Eastgate Mall** - Designate as protected bicycle lanes from Miramar Road to Genesee Avenue. This would accomplished through a combination of widen the roadway, narrowing travel lane widths, road diets, or parking removal. This segment is 1.85 miles in length.	4	Eastgate Coastal Trail	FBA
15	**Regents Road North** - Designate this segment as protected bicycle lanes from the southern terminus at Rose Canyon to Genesee Avenue. This segment would be improved through a combination of narrow travel lanes and parking removal. This segment is 1.7 miles in length.	4	Regents	FBA
16	**Regents Road South** - Designate this segment as protected bicycle lanes from the northern terminus of the road at Rose Canyon to the SR-52 eastbound ramps. This segment is 1.1 miles in length.	4	Regents	FBA
17	**Gilman Drive** - Construct protected bicycle lanes from the existing terminus of the Rose Canyon path at I-5/La Jolla Colony to La Jolla Village Drive (WB ramps). The protected lanes would be two-way and on the west side of Gilman Drive from I-5 to Evening Way, where the northbound lanes would cross at a new traffic signal. From Evening Way to La Jolla Village and the UCSD campus, the protected lanes would become one-way. The length of this segment is 1.7 miles.	4	I-5/UCSD	FBA

The following table summarizes additions to the bicycle network in the University community that are recommended for **only Alternatives A and B**:

Table 6-4 Additional Recommended Bicycle Improvements – Alternatives A and B

	Improvement	Facility Classification	Corridors	Funding
18	**Regents Road Bridge** - With completion of a bridge over Rose Canyon (for autos), construct protected bicycle lanes from the existing terminus of Regents Road north of the canyon to the existing terminus south of the canyon. This segment is approximately 0.3 miles in length.	4	Regents	FBA

The following table summarizes additions to the bicycle network in the University community that are recommended for **only Alternative C.**

Table 6-5 Additional Recommended Bicycle Improvements – Alternative C **and D**

	Improvement	Facility Classification	Corridors	Funding
19	**Regents Road Bridge** – Construct an active transportation bridge that would be used only by bicycles, pedestrians, and emergency vehicles from the existing terminus of Regents Road north of the canyon to the existing terminus south of the canyon. This segment is approximately 0.3 miles in length.	1	Genesee	FBA

The following table shows an addition to the bicycle network in the University community that is recommended for **only Alternatives B and C**:

Table 6-6 Additional Recommended Bicycle Improvements – Alternatives B and C

	Improvement	Facility Classification	Corridors	Funding
20	**Genesee Avenue** – Construct a shared-use trail adjacent to the travel lanes between Nobel Drive and SR-52 WB ramps. The existing sidewalks would be widening to 12 feet in width to accommodate both pedestrians and bicyclists. This segment is 1.35 miles in length.	1	Genesee	FBA

The following table summarizes improvements that are not included in the community plan, but are depicted in San Diego Association of Government's Bicycle Master Plan.

Table 6-7 Additional Bicycle Improvements – SANDAG

Improvement		Facility Classification	Corridors	Funding
21	**Rose Canyon Bicycle Path** - Extend from the existing trail at I-5/La Jolla Colony to Nobel Drive, generally following dirt paths on the north side of the railroad tracks. Provide connections to Nobel Drive and Genesee Avenue. Total length of the segment is 2.4 miles.	1	Coastal Trail	SANDAG
22	**Roselle Canyon Bicycle Path** - Construct a trail along existing dirt path connecting Eastgate Mall and Roselle Street. Path is 1.4 miles in length.	1	Coastal Trail	SANDAG

The resulting bicycle network maps are provided in **Appendices A – D**.

BICYCLE LEVEL OF TRAFFIC STRESS

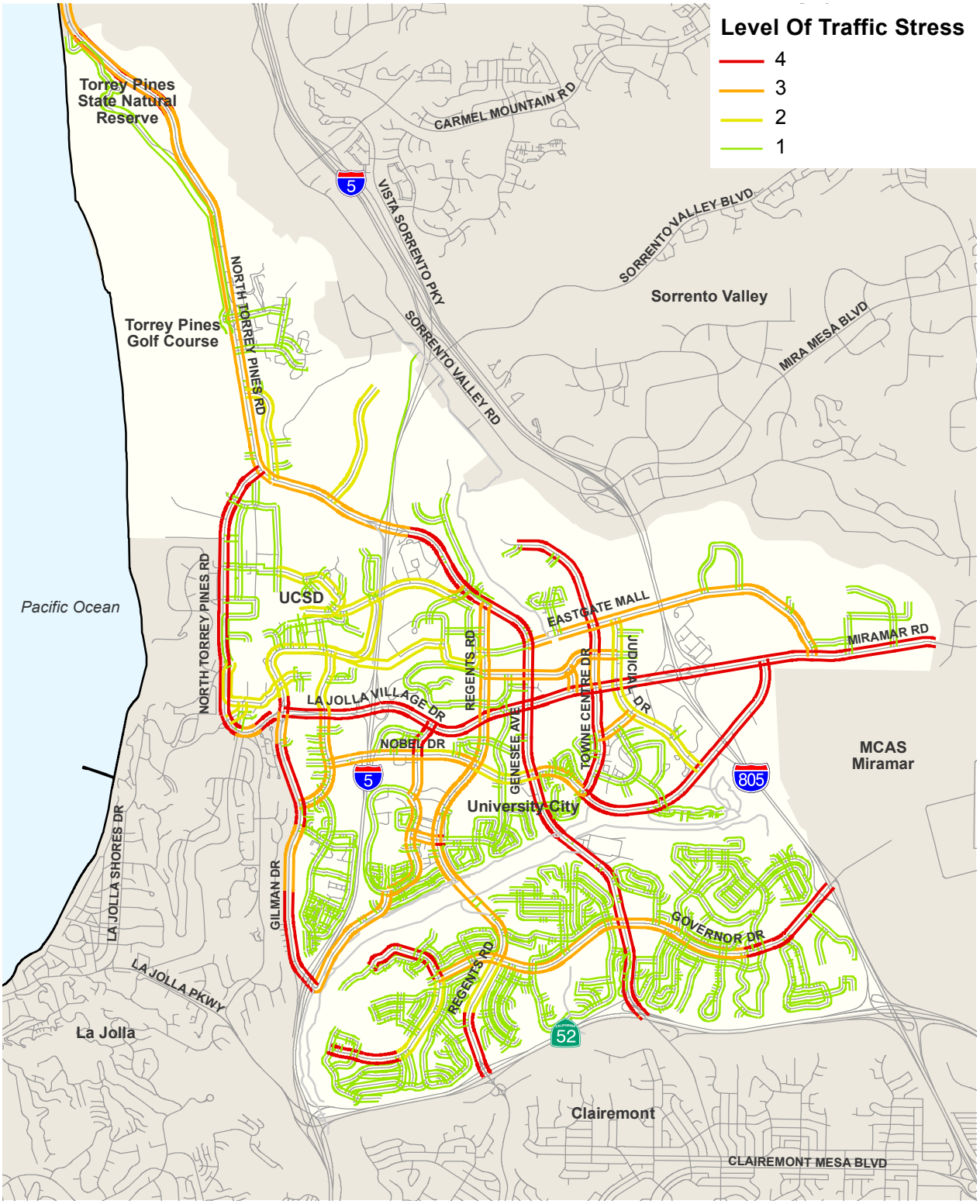
The Bicycle Level of Traffic Stress (BLTS) analysis was completed to summarize the biking conditions in the community. **Figure 6-1** summarizes the LTS score for each direction of roadway segments throughout the community with the recommended improvements in place. The results would not change between alternatives except for the area where the Regents Road bridge would be. Without the bridge, there would not be a bicycle facility, nor an associated LTS score for the segment.

With the completed bicycle network in the community, the BLTS is reduced along the corridors where there is an investment in bicycle facilities. These corridors include Eastgate Mall, Nobel Drive, Regents Road, Governor Drive, and the I-5 freeway. The BLTS methodology allows for moderate improvements in score with buffered or separated bicycle facilities, but has limits to how much the stress level can change since speed and number of lanes play a factor in the analysis and remain unchanged on several roadways. The proposed bicycle network includes several separated facilities that would provide bicyclists increased comfort that is not reflected in the BLTS scoring.

ADDITIONAL RECOMMENDATIONS

The effectiveness of bicycle facilities is a combination of the facility provided along the side of the road and its continuity through each intersection. The recommended facilities along the roadways are described in the previous section. To address safety concerns for bicycles at intersections, it is recommended that signals along Class II and IV facilities include detection for bicyclists and consideration of additional improvements such as bicycle boxes, no right-turn-on-red restrictions for vehicles, and bicycle signal head indications.

FIGURE 6-1



Completed Network Bicycle Level of Traffic Stress
Alternatives A & B

7 FUTURE YEAR VEHICLE NETWORK

This chapter discusses the vehicle network analyses and variations in results between the different network alternatives being considered.

FUTURE YEAR VOLUME FORECASTS

LAND USE ASSUMPTIONS

The adopted community land use was considered in this study. The land use assumptions for future conditions were consistent across each Alternative. **Table 7-1** shows the land use and trip generation comparison between base year 2008 and the adopted community plan. An estimated 271,502 new trips are planned for the community. The origin and destination assumptions associated with trips generated by these land uses was set constant for each of the alternatives. This determination was made to be able to understand the change in patterns between alternatives solely based on the available network change, and not mixed with network and user mode-choice and origin-destination decision changes.

MODEL CALIBRATION PROCESS

A traffic model was prepared by SANDAG for existing and future community build-out conditions. Traffic counts obtained in May of 2015 were used to calibrate the existing model results. Using the attributes included in the calibrated existing model, the future adopted land use assumptions including community plan amendments currently under review, initiated community plan amendments, and proposed roadway network variations were input and run to estimate future volumes. Based on the existing calibration exercise and the future volume projections, several post-model adjustments were made. Details of the adjustments are provided in **Appendix F**. Adjustments were typically required when the model-to-volume comparison was greater than 10%. The existing model did not have the Judicial Drive connection that exists and was present when traffic counts were obtained in 2015 and was included in the future models, so some locations greater than 10% were not adjusted due to the change in traffic patterns associated with this connection. The same post-model adjustments were made to each alternative except on Regents Road where volume adjustments were needed for the no bridge.

The model data provides roadway and freeway volumes, and was not used for intersection volumes. Future peak hour turning movements at the study area intersections were developed using methodologies from National Cooperative Highway Research Program (NCHRP) 255 – Highway Traffic Data for Urbanized Area Project Planning and Design, Chapter 8. NCHRP Report 255 is a compilation of the best techniques that are currently being used in urban areas to forecast future traffic volumes. These techniques were identified through a survey of state and local agencies with follow-up field visits to obtain detailed information on procedural steps and typical applications. The method used to forecast the future turning movement volumes evaluation is the NCHRP's "Directional Volume Forecast". For this method, existing and future daily traffic volumes, existing peak hour turning movements, and projected peak hour "K" and directional "D" factors are used to calculate future year turning movements. Existing daily segment traffic volumes and peak hour intersection turning movements were counted in the field. Future daily traffic volumes were obtained from the forecast model forecast. Using the "Directional Volume Forecast" technique, the existing turning movements at each study area intersection were factored based on increases in daily approach traffic and existing K and D factors. Each respective movement was derived using an iterative approach that balances the inflows and outflows for each approach. The supporting worksheets for calculating future volumes and the resulting peak hour intersection turning movement volumes are included in **Appendices A - F**.

Table 7-1 Community Trip Generation Changes between Existing and Future Year Build-out

Land Use	Existing Intensity	Build-out Intensity	Change in Intensity	Change in Vehicle Trips
Education	35,524 students	40,544 students	+5,020 students	+13,636
Industrial	12,019,028 sf	17,966,143 sf	+5,947,115 sf	+58,717
Institutional	894,721 sf	1,536,462 sf	+641,741 sf	+19,864
Multi Family	19,574 units	23,239 units	+3,665 units	+21,302
Office Commercial	5,998,245 sf	7,161,999 sf	+1,163,754 sf	+53,587
Open Space	2049 ac	2049 ac	0	0
Parking	0	0	0	0
Parks	109 ac	109 ac	0	0
Railroads	0	0	0	0
Recreation	390 ac	390 ac	0	0
Recreational	13.5 ac	13.5 ac	0	0
Retail Commercial	2,348,490 sf	4,008,160 sf	+1,659,670 sf	+100,878
Roads	0	0	0	0
Single Family	4,774 units	4,783 units	+9 units	+81
Vacant	0	0	0	0
Visitor Commercial	2,214 rooms	2,575 rooms	+361 rooms	+3,437

SUMMARY OF PLANNED PROJECTS

The following projects are included in the North University City (NUC) Public Facilities Financing Plan (FFP) and were included in the network for each alternative:

- (NUC-13) Regents Road between Genesee Avenue and Eastgate Mall changed from 2-lane Collector (continuous left-turn lane) to a 4-lane Major Arterial
- (NUC-24) Genesee Avenue between I-5 SB Ramps and I-5 NB Ramps changed from a 4-lane Major Arterial to a 8-lane Prime Arterial
- (NUC-50) Miramar Road between Eastgate Mall and Miramar Mall changed from a 6-lane Prime Arterial to a 7-lane Prime Arterial
- Genesee Avenue between La Jolla Village Drive and Esplanade Court changed from a 4-lane Major Arterial to a 6-lane Major Arterial (temporarily 4-lane Major Arterial until completion of transit projects)

In addition to the above, the following roadway changes take place depending on the alternative:

Alternative A

- (NUC-A) Genesee Avenue from Nobel Drive to SR-52 WB Ramps changed from a 4-lane Major Arterial to a modified 6-lane Major Arterial
- (NUC-18) Regents Road Bridge spanning Rose Canyon
- (NUC-18) Regents Road between Rose Canyon and Governor Drive changed from a 2-lane Collector (no fronting property) to a 4-lane Collector

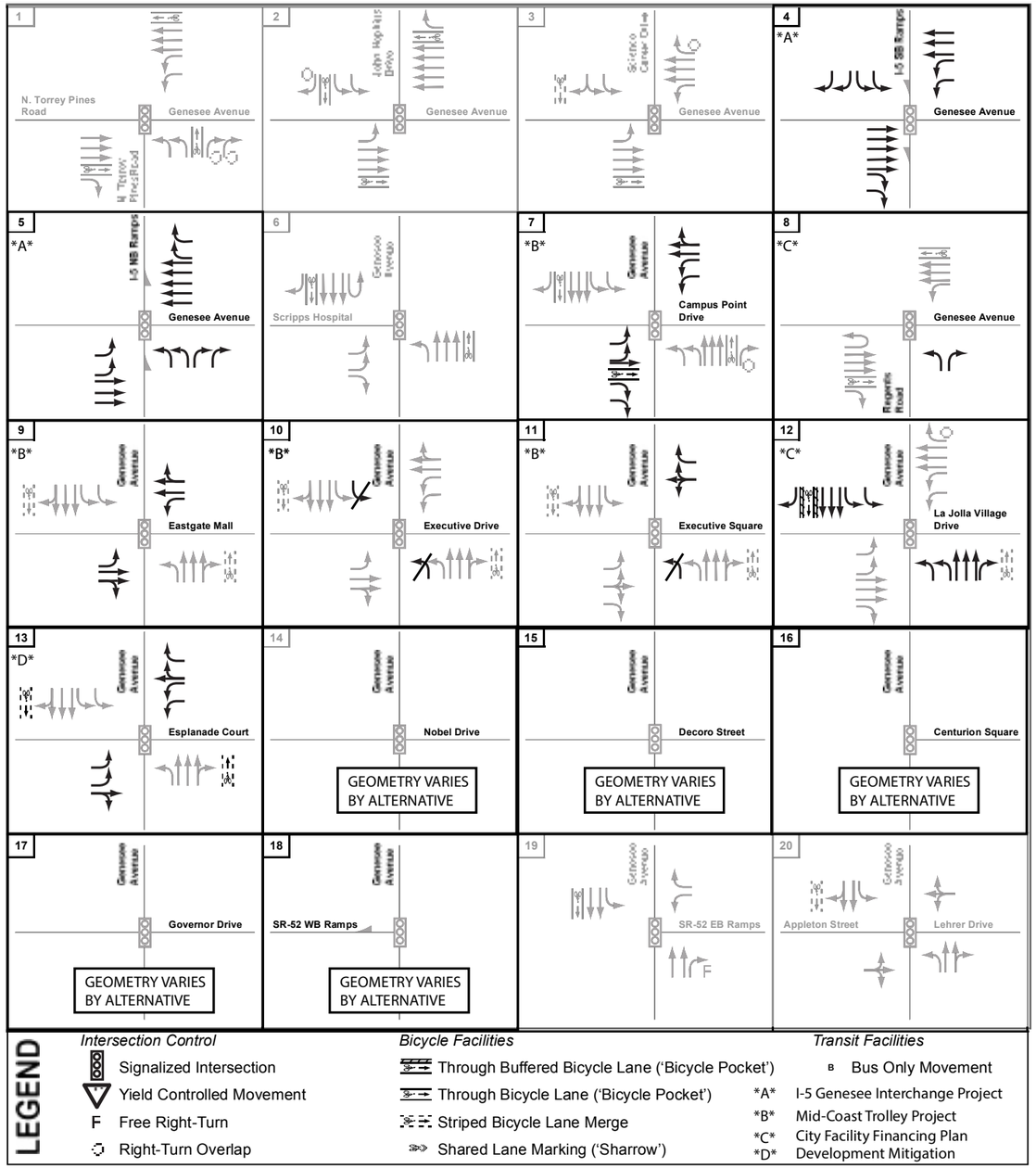
Alternative B

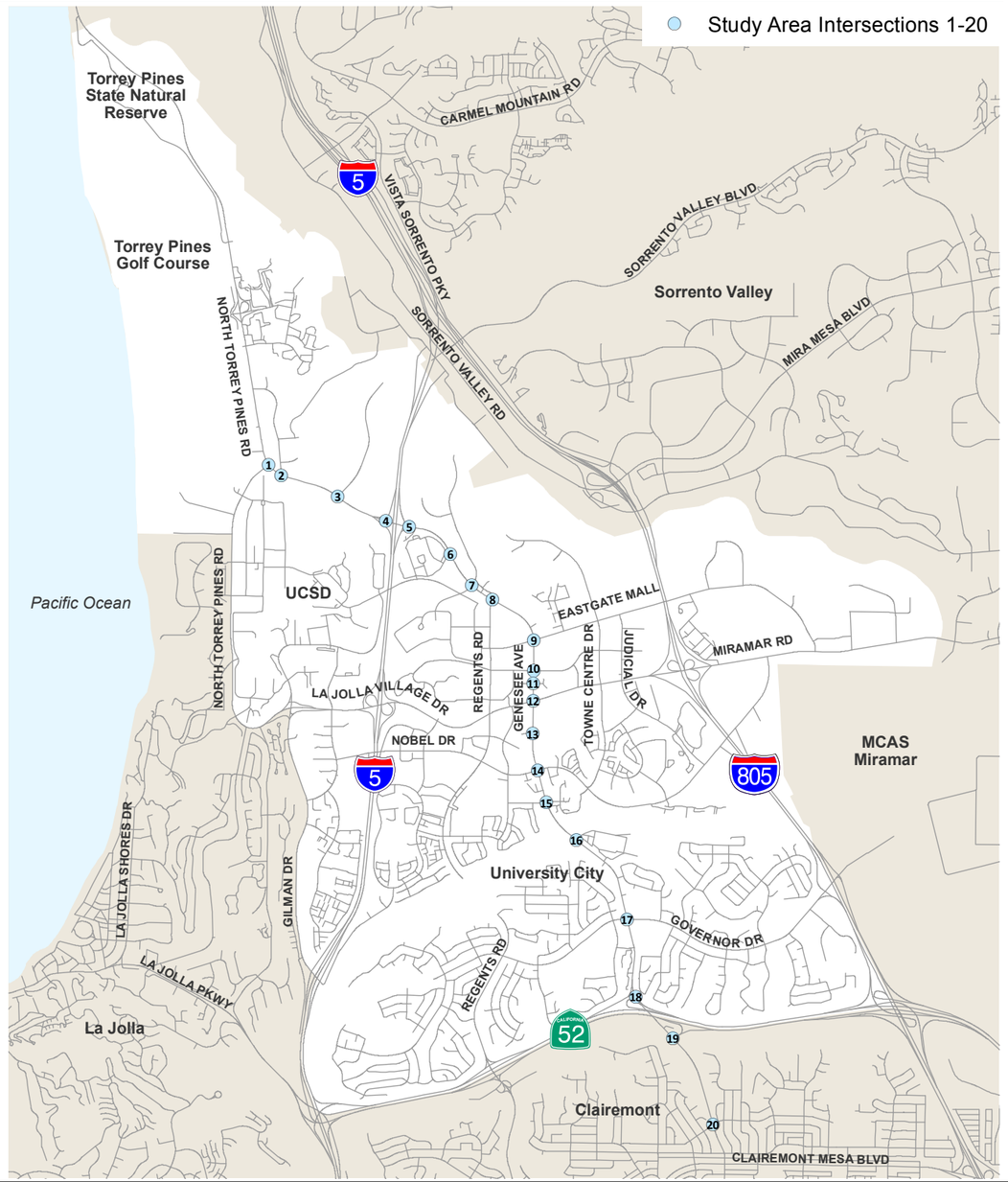
- (NUC-18) Regents Road Bridge spanning Rose Canyon
- (NUC-18) Regents Road between Rose Canyon and Governor Drive changed from a 2-lane Collector (no fronting property) to a 4-lane Collector

Alternative C

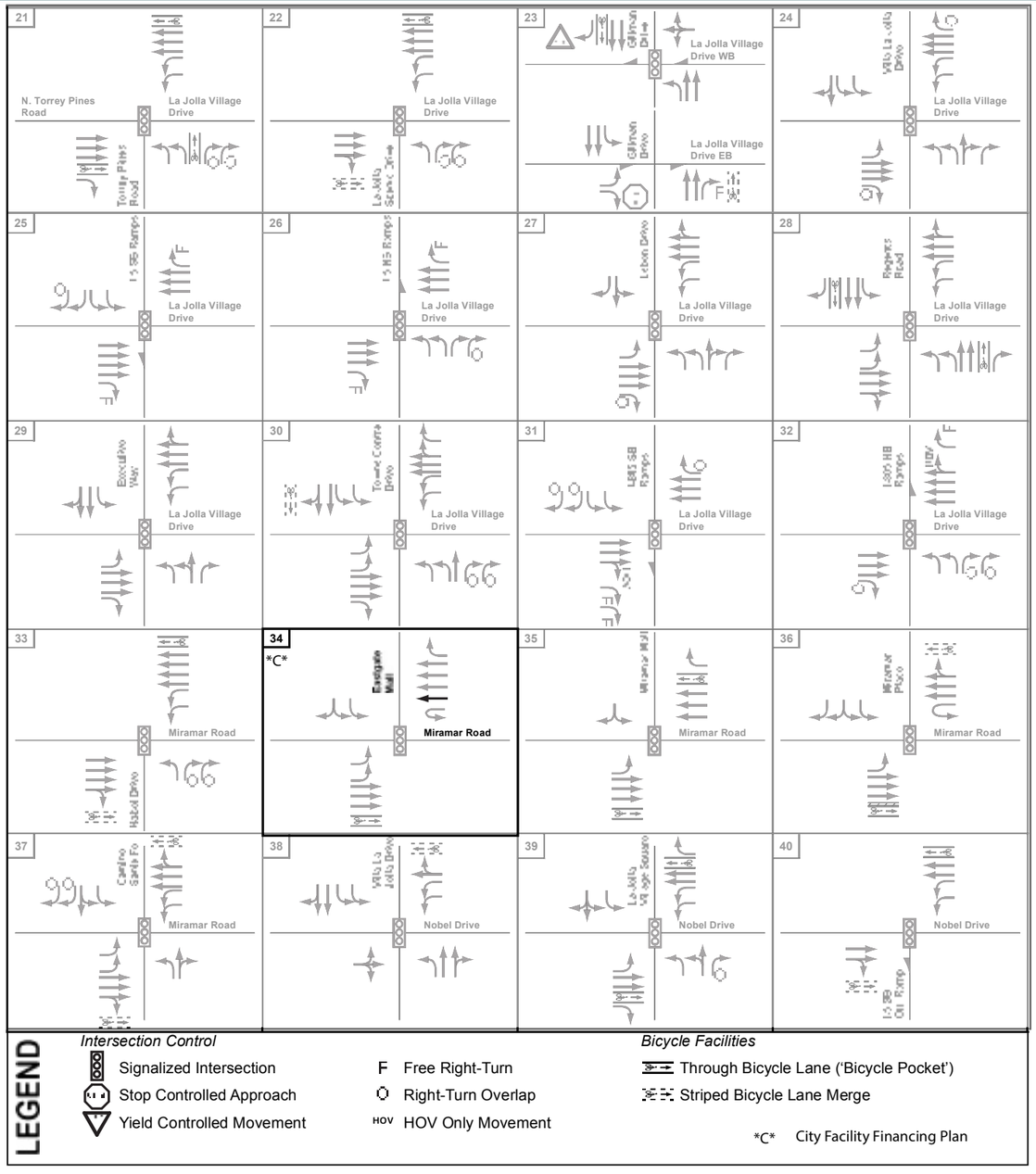
- (NUC-A) Genesee Avenue from Nobel Drive to SR-52 WB Ramps changed from a 4-lane Major Arterial to a modified 6-lane Major Arterial

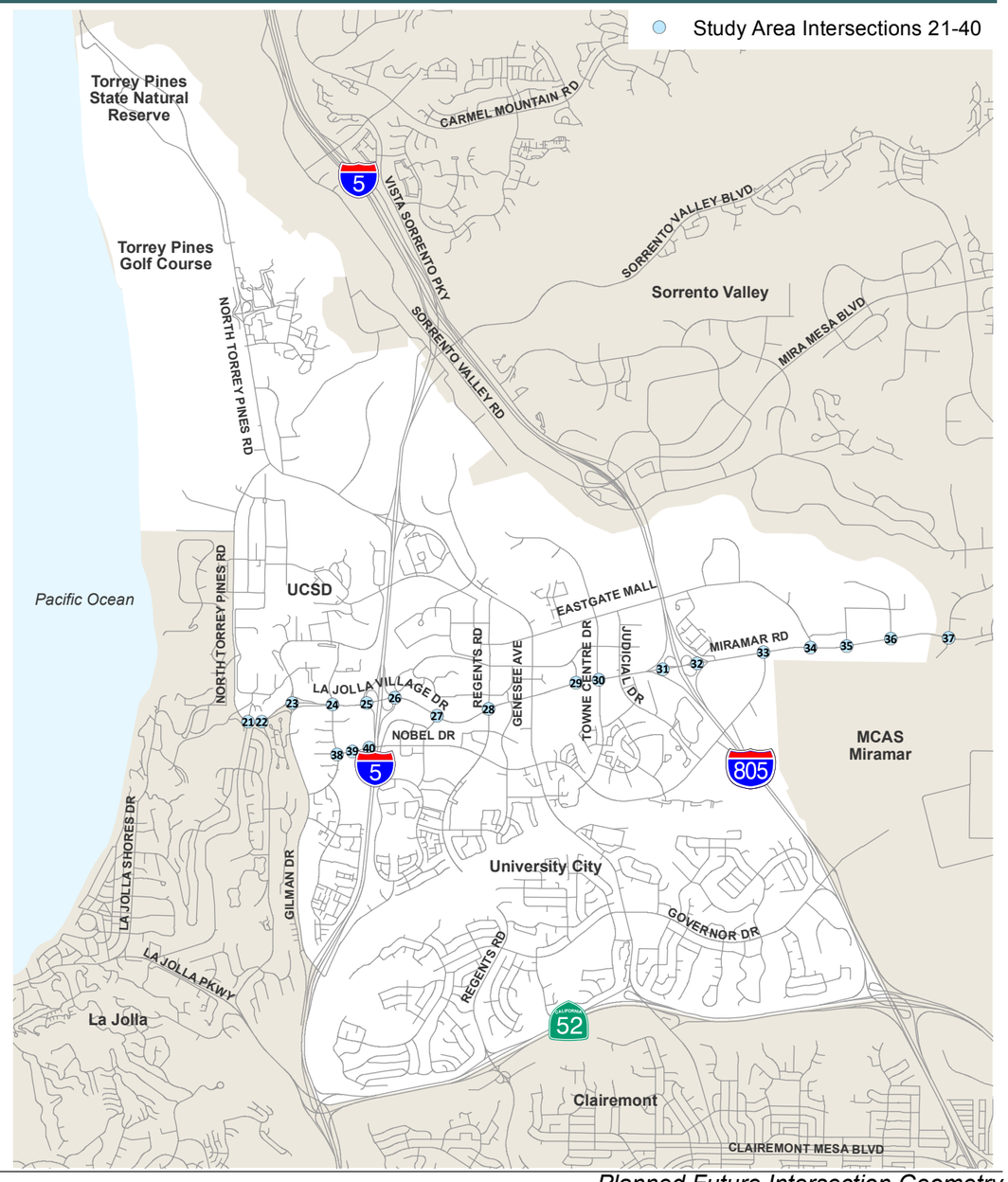
The resulting network geometry at each individual intersection is illustrated in **Figures 7-1 through 7-5**.



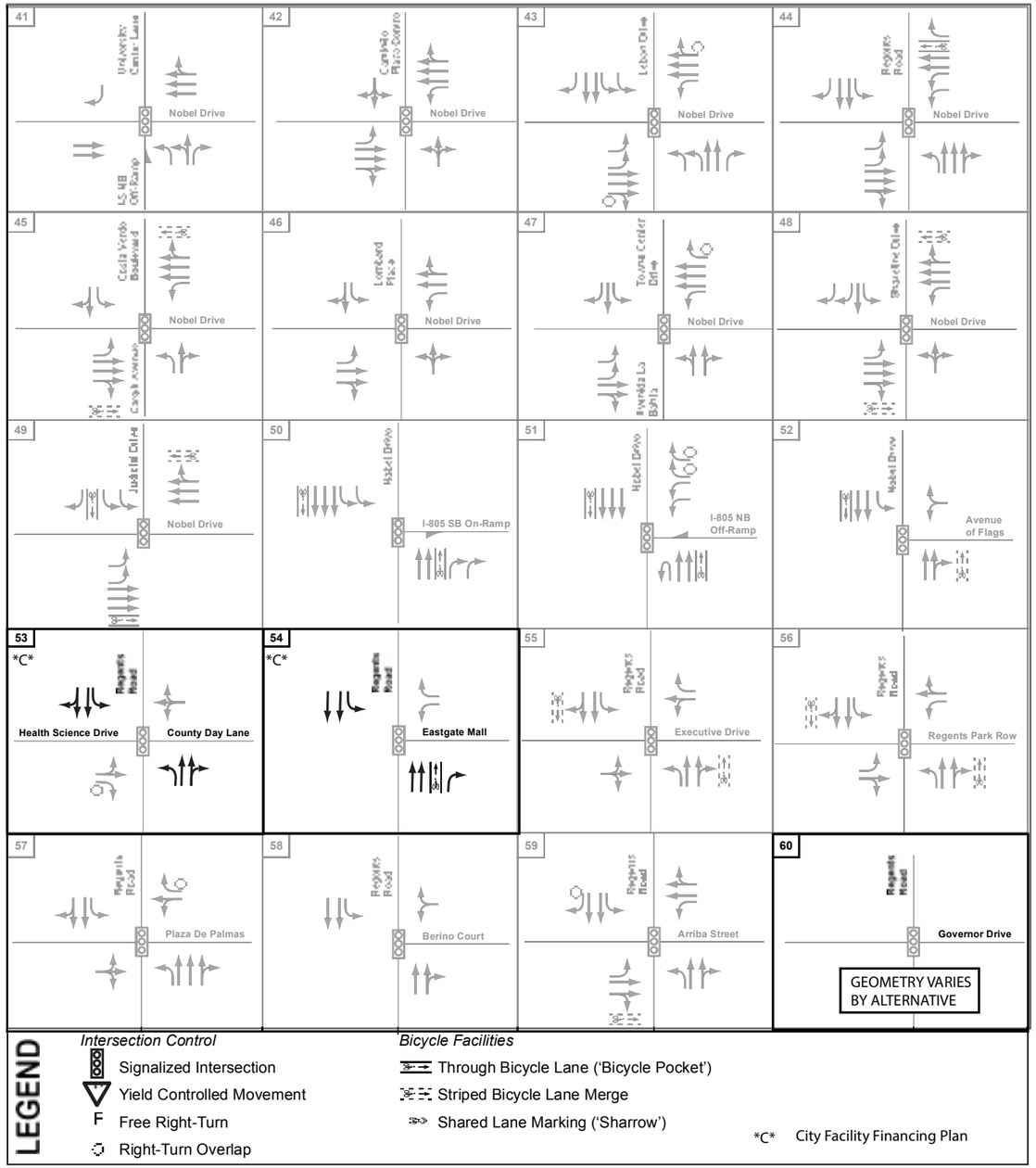


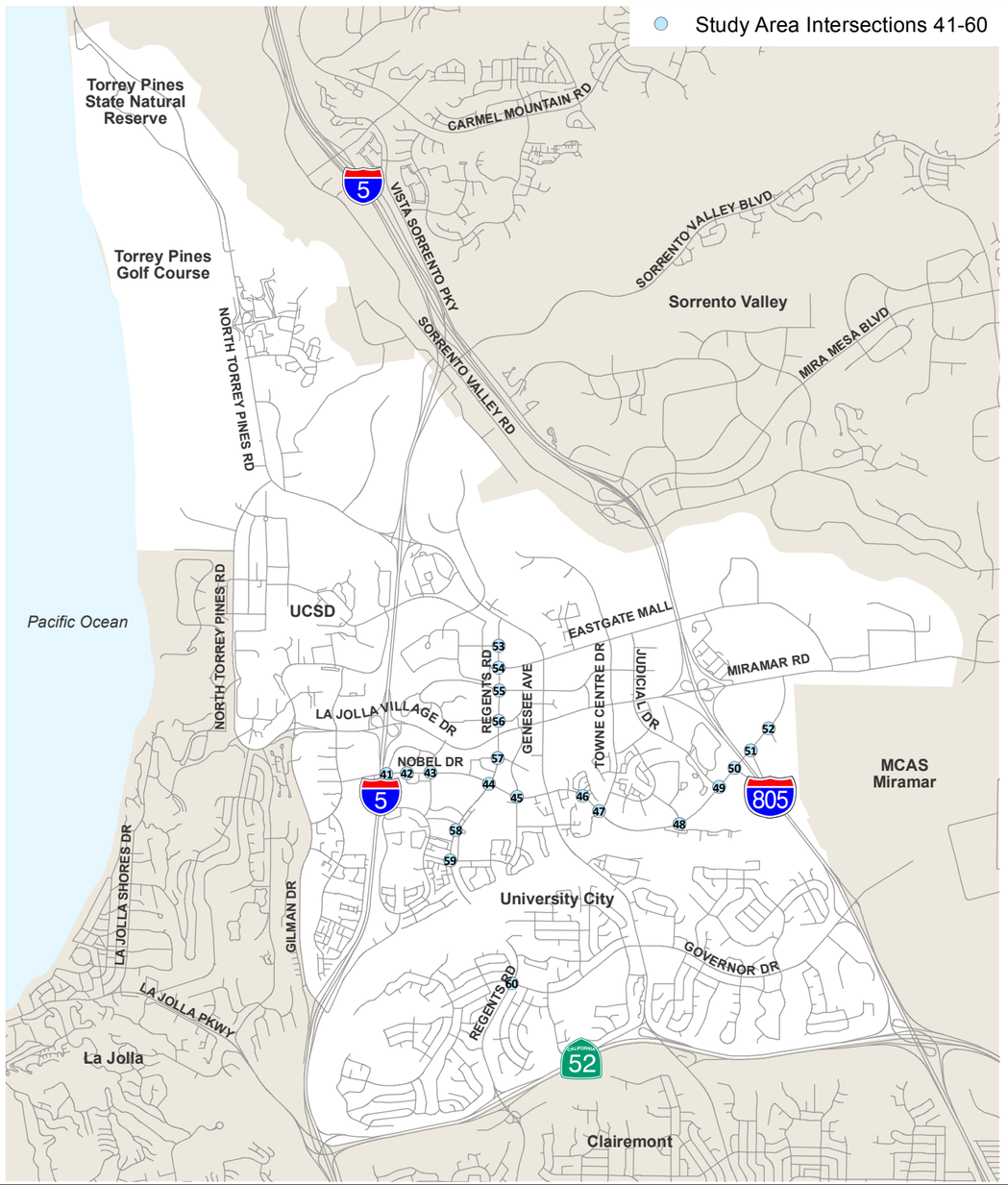
Planned Future Intersection Geometry
Intersections 1-20



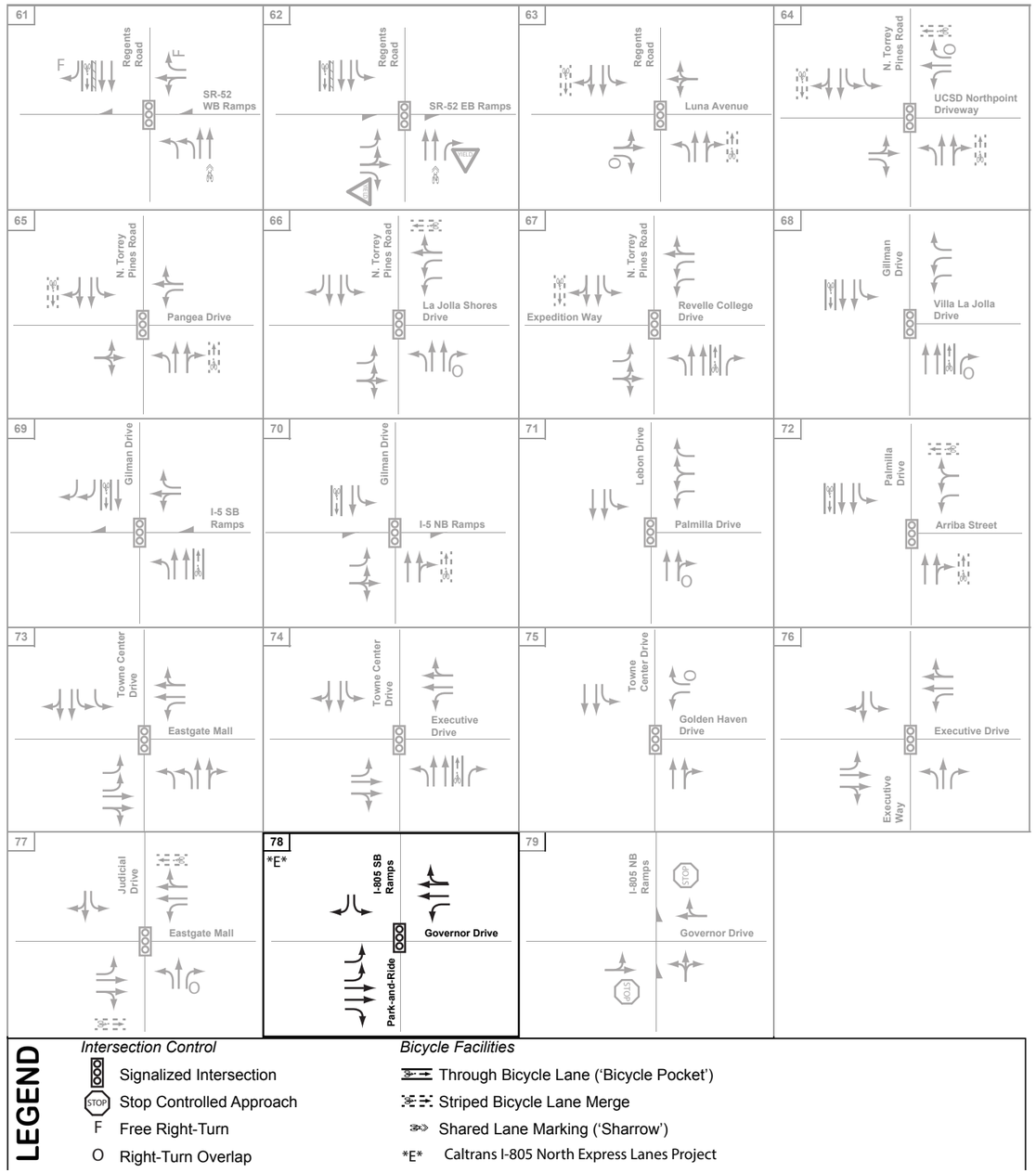


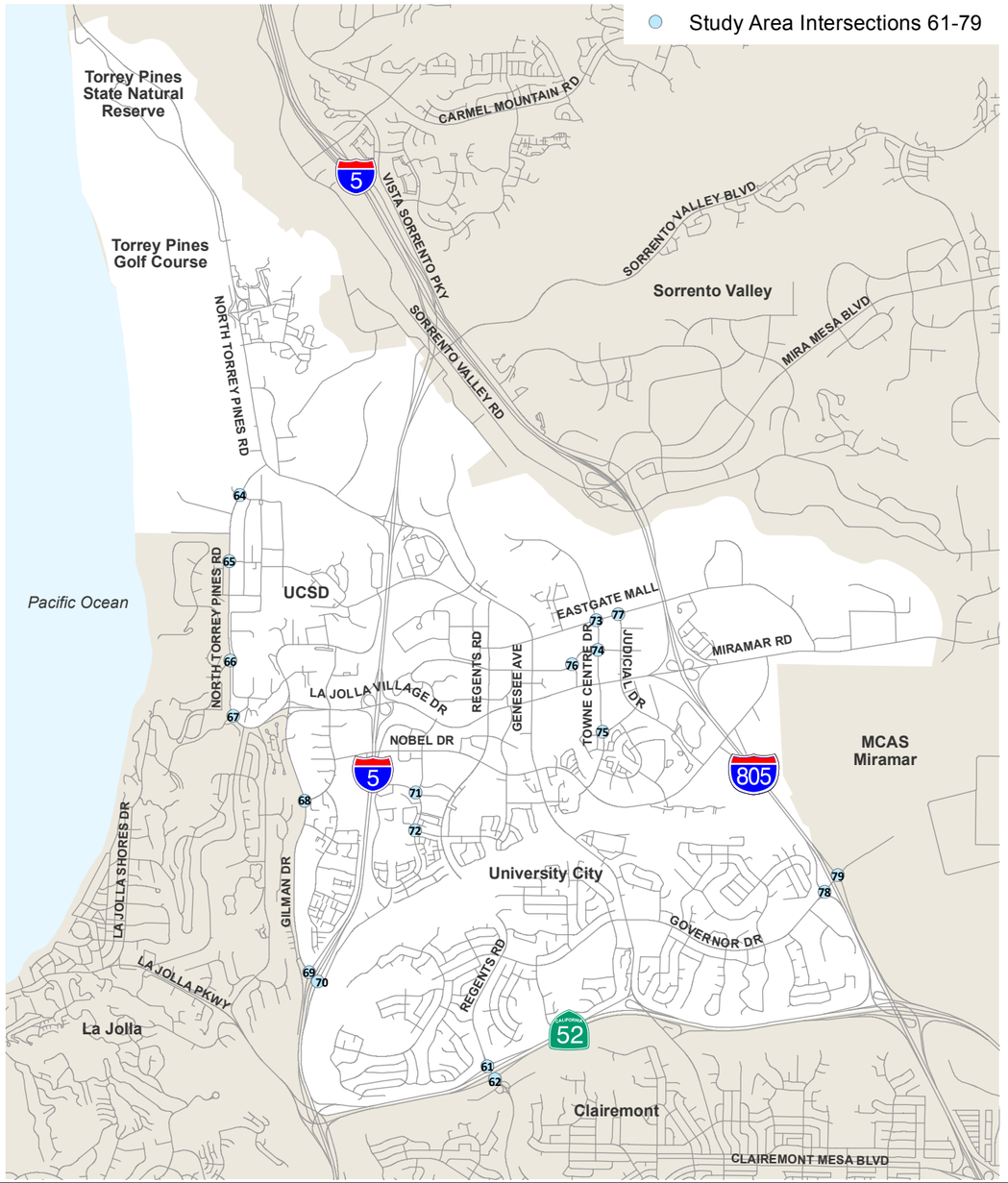
Planned Future Intersection Geometry
Intersections 21-40



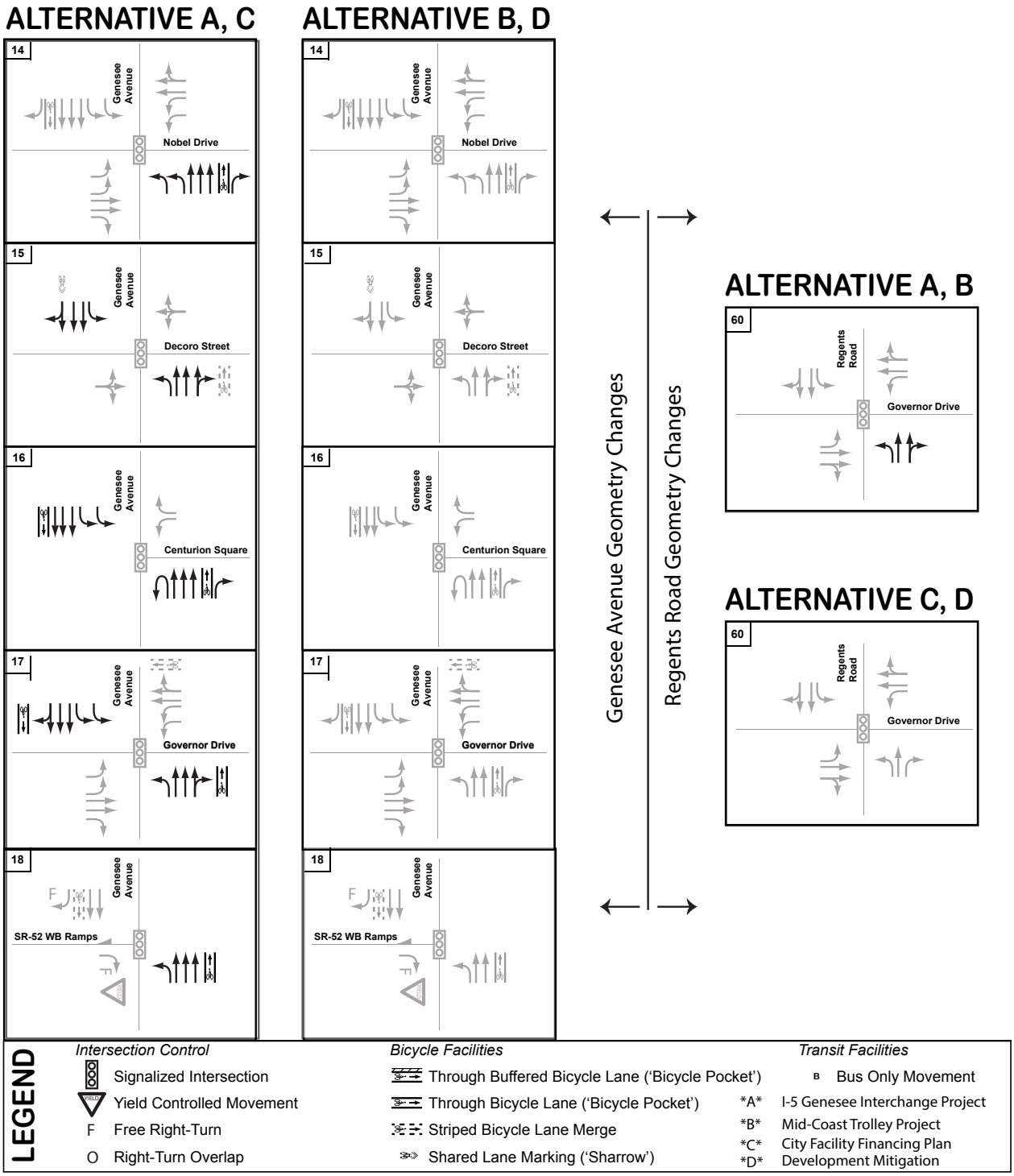


Planned Future Intersection Geometry
Intersections 41-60





Planned Future Intersection Geometry
Intersections 61-79



Planned Future Intersection Geometry: Variations by Alternative

TRAVEL PATTERNS BY ALTERNATIVE

Alternative D represents a network that is similar to what currently exists with the planned network changes described above. As such, travel patterns would remain similar.

Figure 7-6 illustrates the origins and destinations north and south of Rose Canyon that utilize the Genesee Avenue bridge crossing under Alternative D. Every trip across the canyon has an origin on one side of the canyon and destination on the other side. As such, the total of all origins and destinations north of the canyon equals 100% and the total of all origins and destinations south of the canyon equals 100%. On the north side of the canyon, the majority (87%) of people are utilizing North University area, with about 10% expected to be in the UCSD footprint and about 3% traveling outside of the community to the east. On the south side of the canyon, about 44% are utilizing the South University community, about 41% are traveling between Clairemont, 14% are freeway traffic, and the remaining 1% travel between La Jolla.

Each of the other three alternatives were compared to Alternative D to determine how travel patterns would change in response to changes in the network.

Alternative A

Figure 7-7 illustrates the changes that occur with the implementation of Alternative A. Regents Road would experience increased volumes from one end of the community to the other. Lebon Drive would experience increased traffic as it acts as an alternative route to get between Regents Road and La Jolla Village Drive. La Jolla Village Drive and Nobel Drive would experience some decreased volumes as people utilize Regents Road and Genesee Avenue to travel through the community rather than getting to and from the freeway on these corridors. Genesee Avenue across Rose Canyon and Governor Drive between Regents Road and Genesee Avenue would have reduced volumes. Volumes on I-5 and I-805 would be reduced. SR-52 would have some increases and some decreases as people change their travel pattern to exit into the community off SR-52 rather than travel to I-5 or I-805 to exit into the community. In general, travel decisions internal to the community are changed to rely less on the freeways and more on the internal community roadways.

Figure 7-8 illustrates the origins and destinations north and south of Rose Canyon that would utilize one of the two bridge crossings with the implementation of Alternative A. On the north side of the canyon, the majority of people are utilizing North University area, with about 10% expected to be in the UCSD footprint and about 5% traveling outside of the community. This is pretty similar to Alternative D. On the south side of the canyon, about 40% are utilizing the South University community, about 38% are traveling between Clairemont, 20% are freeway traffic, and the remaining 2% travel between La Jolla. There is increased access to the freeways south of the community for this alternative when compared to Alternative D. It is estimated that about 60% of crossings use Genesee Avenue and 40% use Regents Road.

Alternative B

Figure 7-9 illustrates the changes that occur with the implementation of Alternative B. The changes would generally be similar to Alternative A, except the travel pattern decision changes would not reach vehicles on La Jolla Village Drive and Nobel Drive like they did on Alternative A.

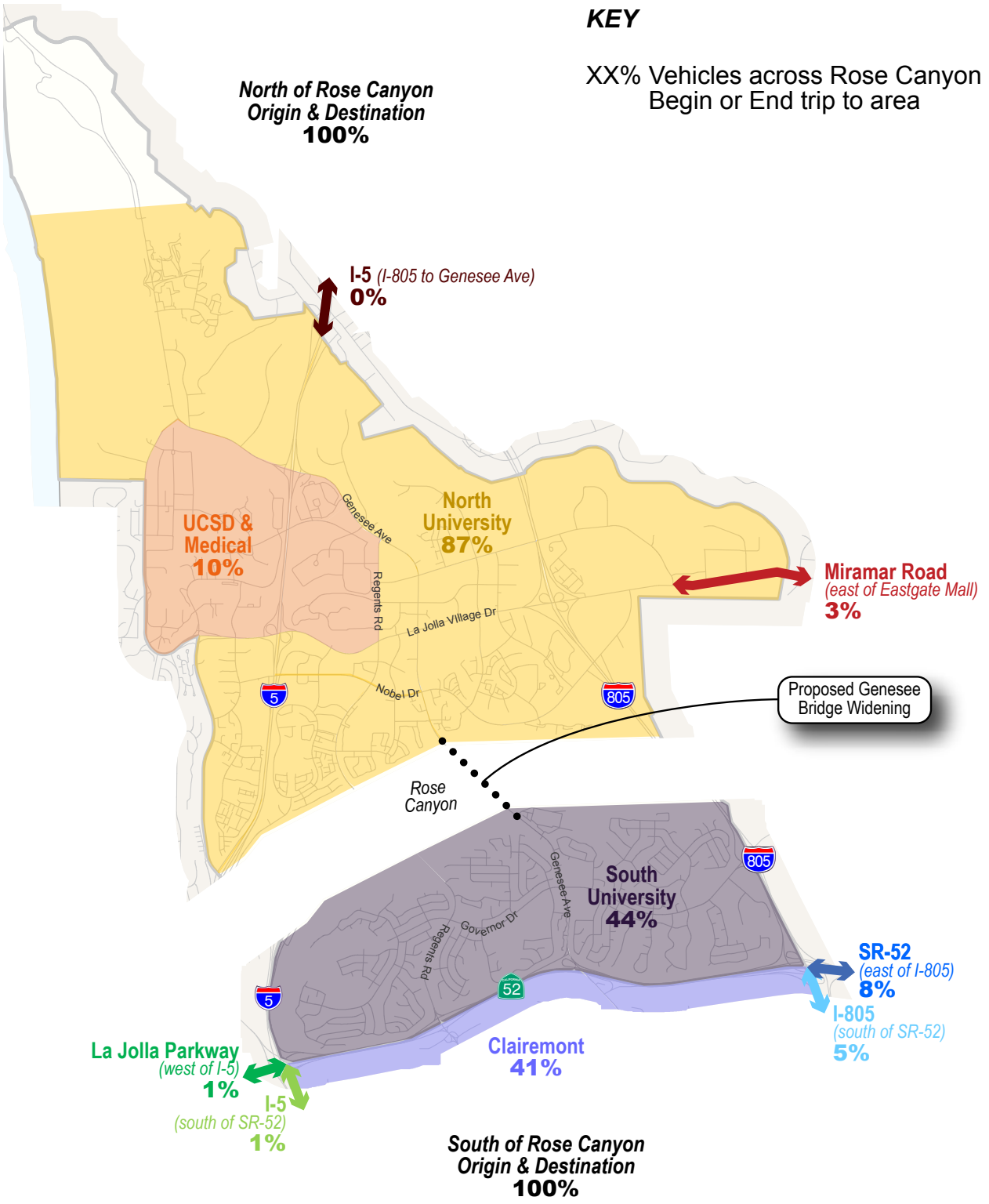
Figure 7-10 illustrates the origins and destinations north and south of Rose Canyon that would utilize one of the two bridge crossings with the implementation of Alternative B. The patterns would be similar to Alternative A, with about 55% of crossings use Genesee Avenue and 45% use Regents Road.

Alternative C

Figure 7-11 illustrates the changes that occur with the implementation of Alternative C. The change in travel patterns would primarily be people utilizing SR-52 to reach Genesee Avenue rather the I-5 and I-805 freeways adjacent to the community. There would be increased volume on Genesee Avenue across Rose Canyon.

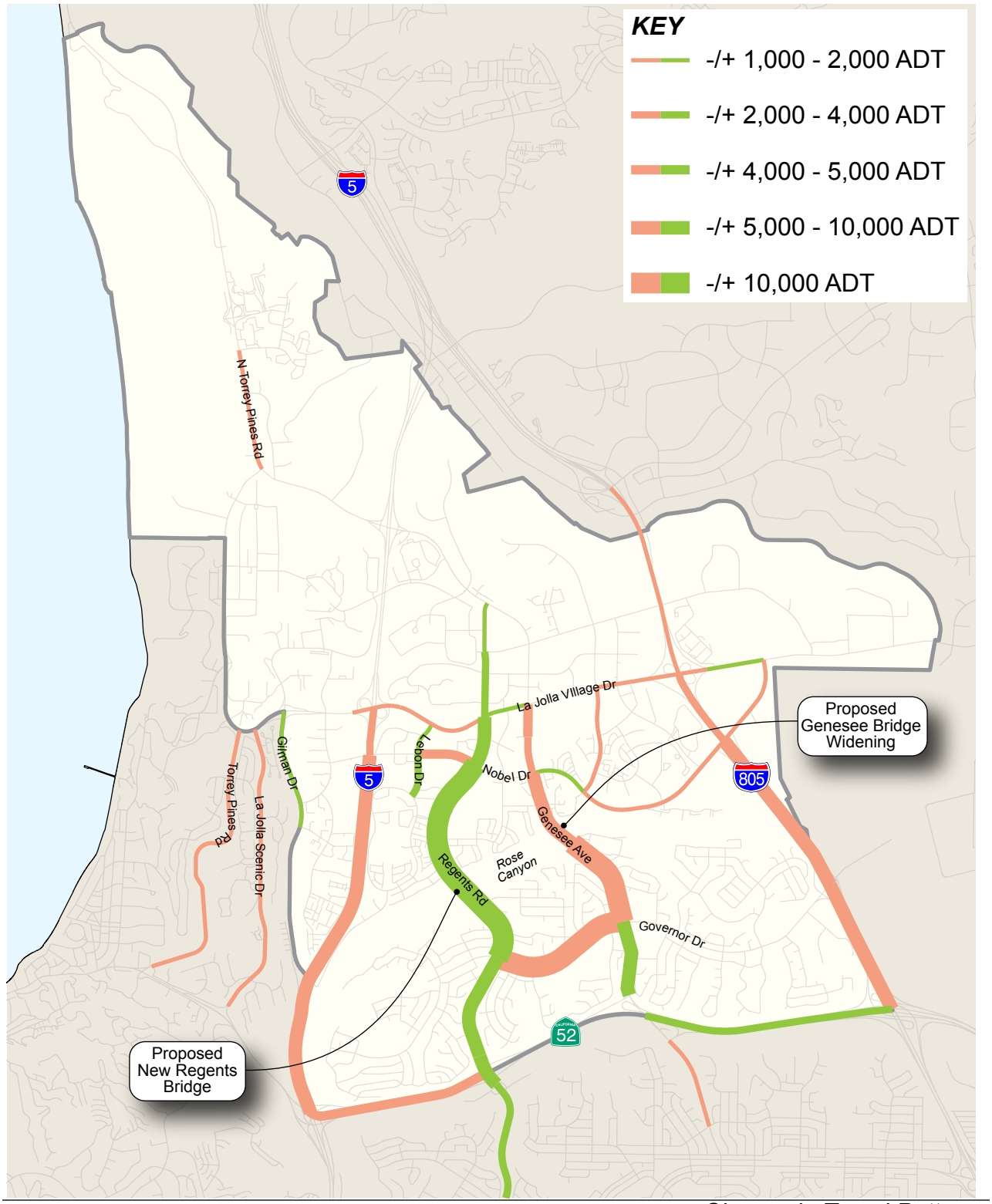
Figure 7-12 illustrates the origins and destinations north and south of Rose Canyon that would utilize the Genesee Avenue bridge crossing with the implementation of Alternative C. The patterns would be similar to Alternative D, with approximately 3% more vehicles traveling through the south side of the community to access freeways.

FIGURE 7-6

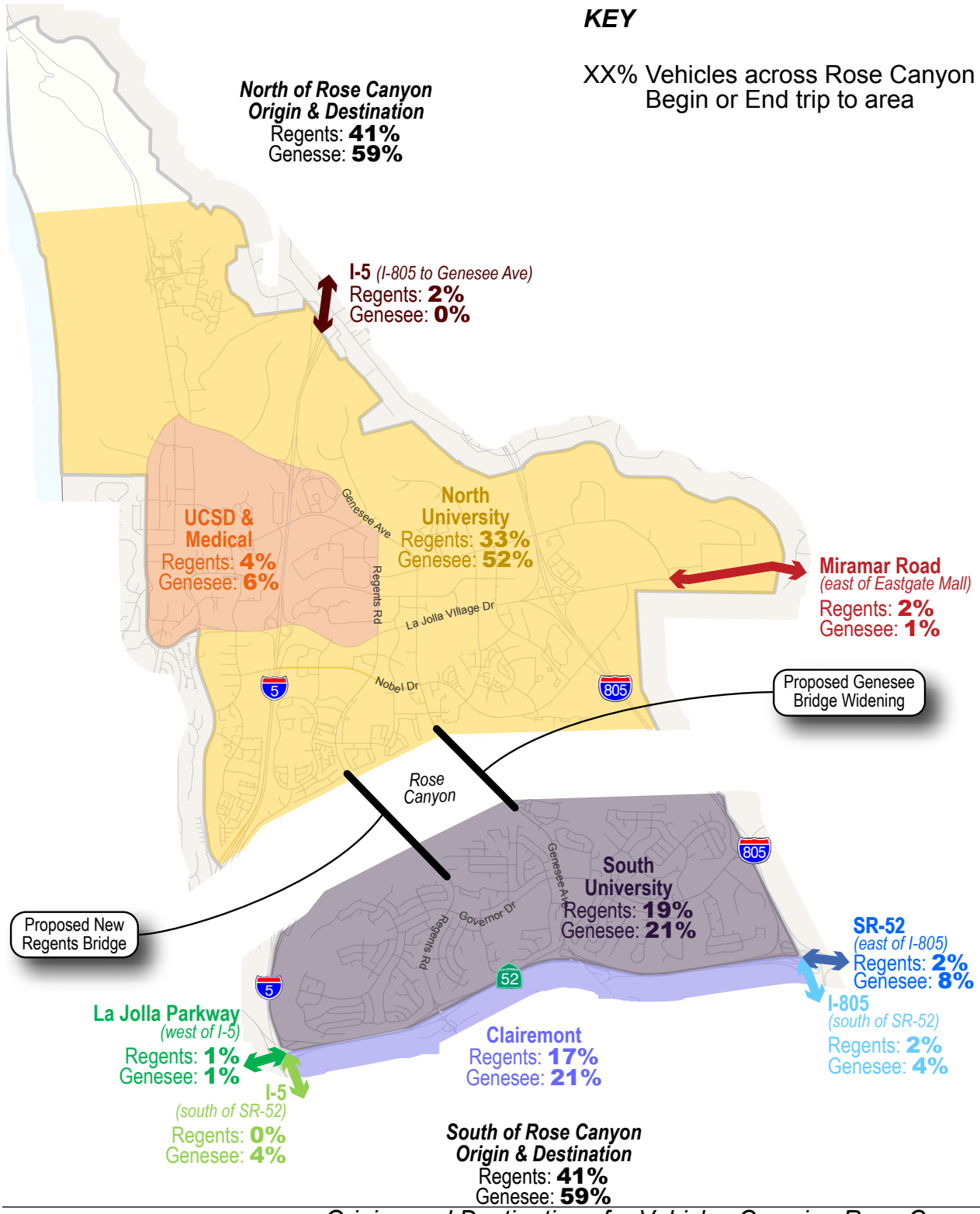


Origins and Destinations for Vehicles Crossing Rose Canyon Alternative D

FIGURE 7-7

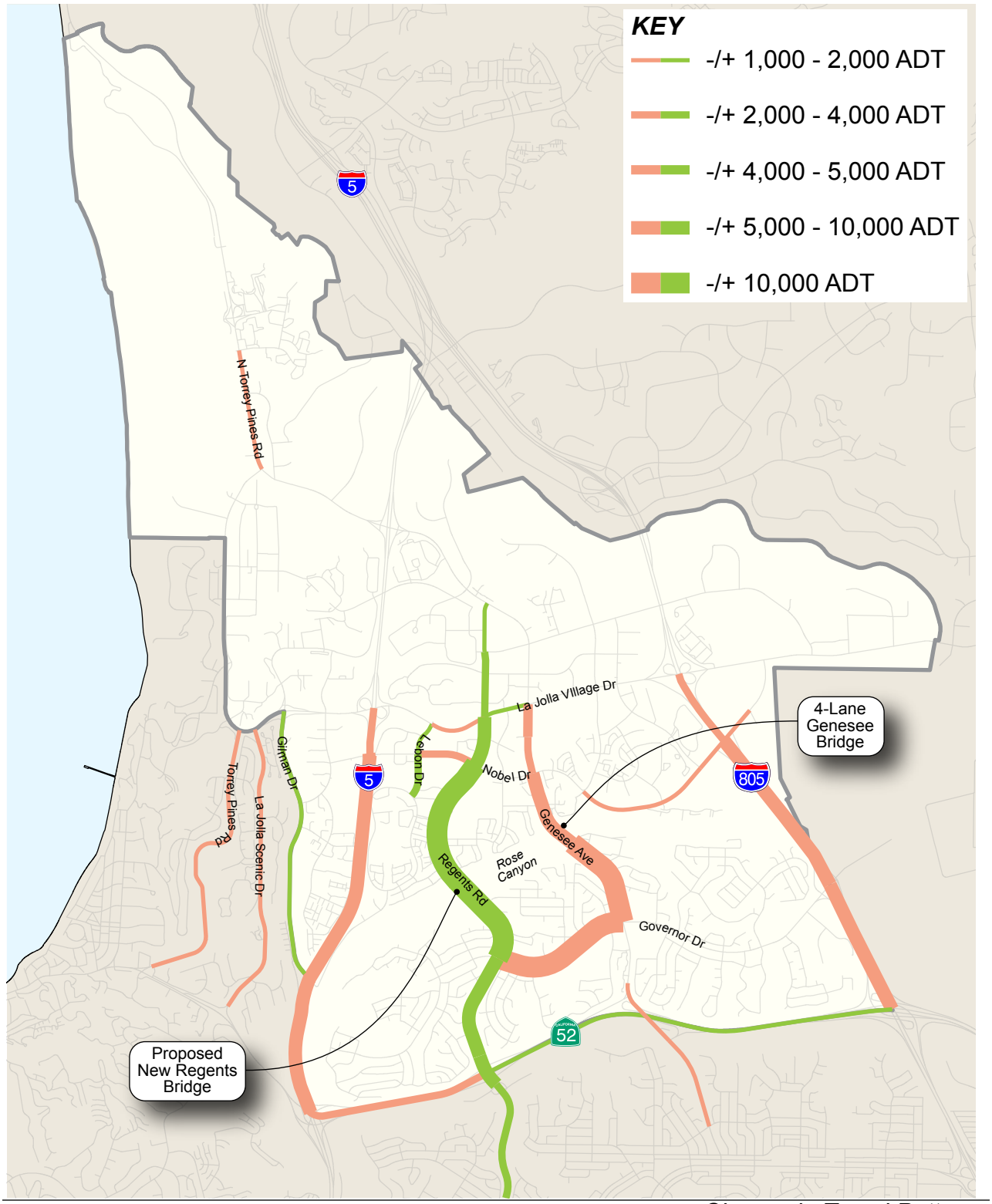


Change in Travel Patterns
Alternative A

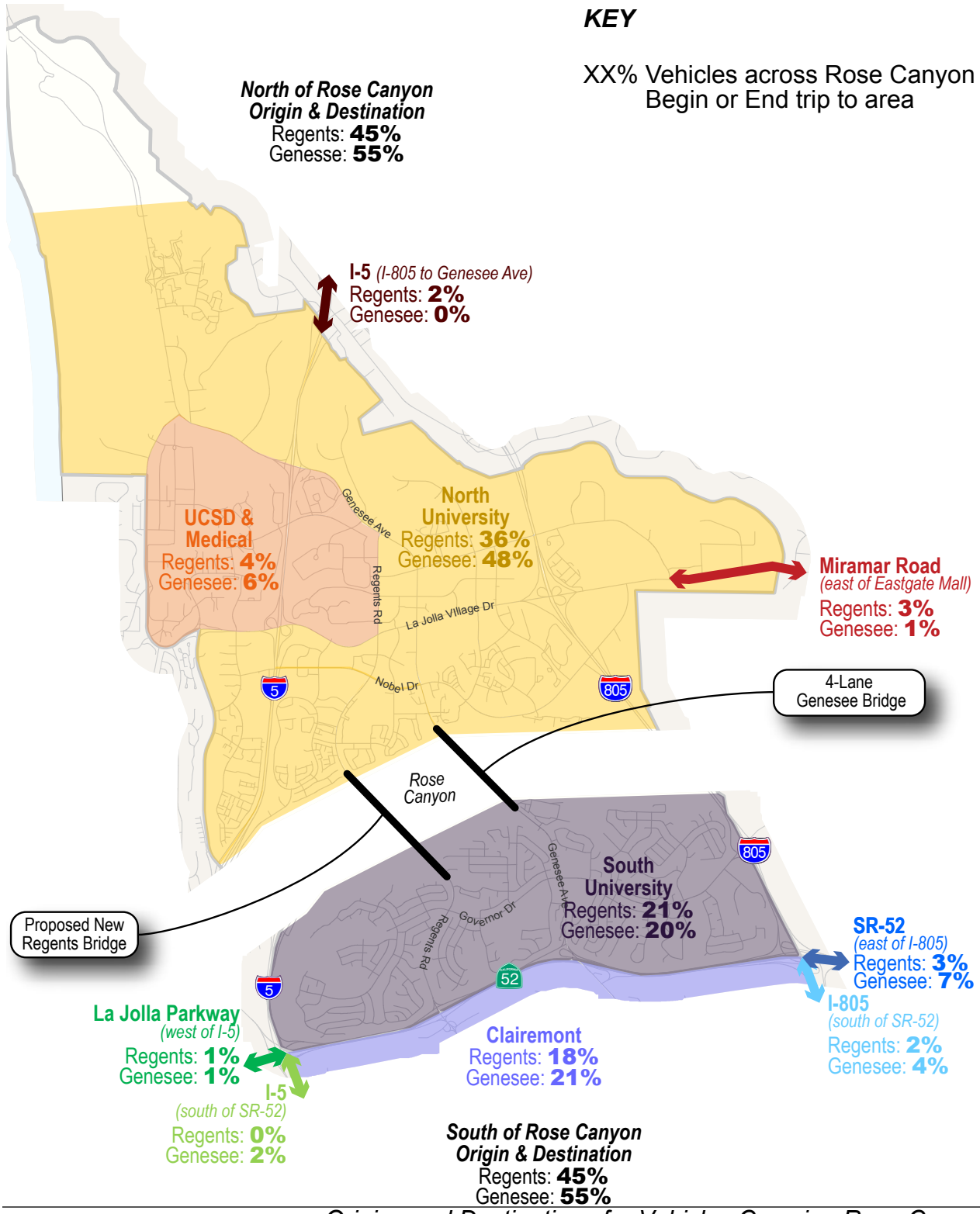


Origins and Destinations for Vehicles Crossing Rose Canyon Alternative A

FIGURE 7-9

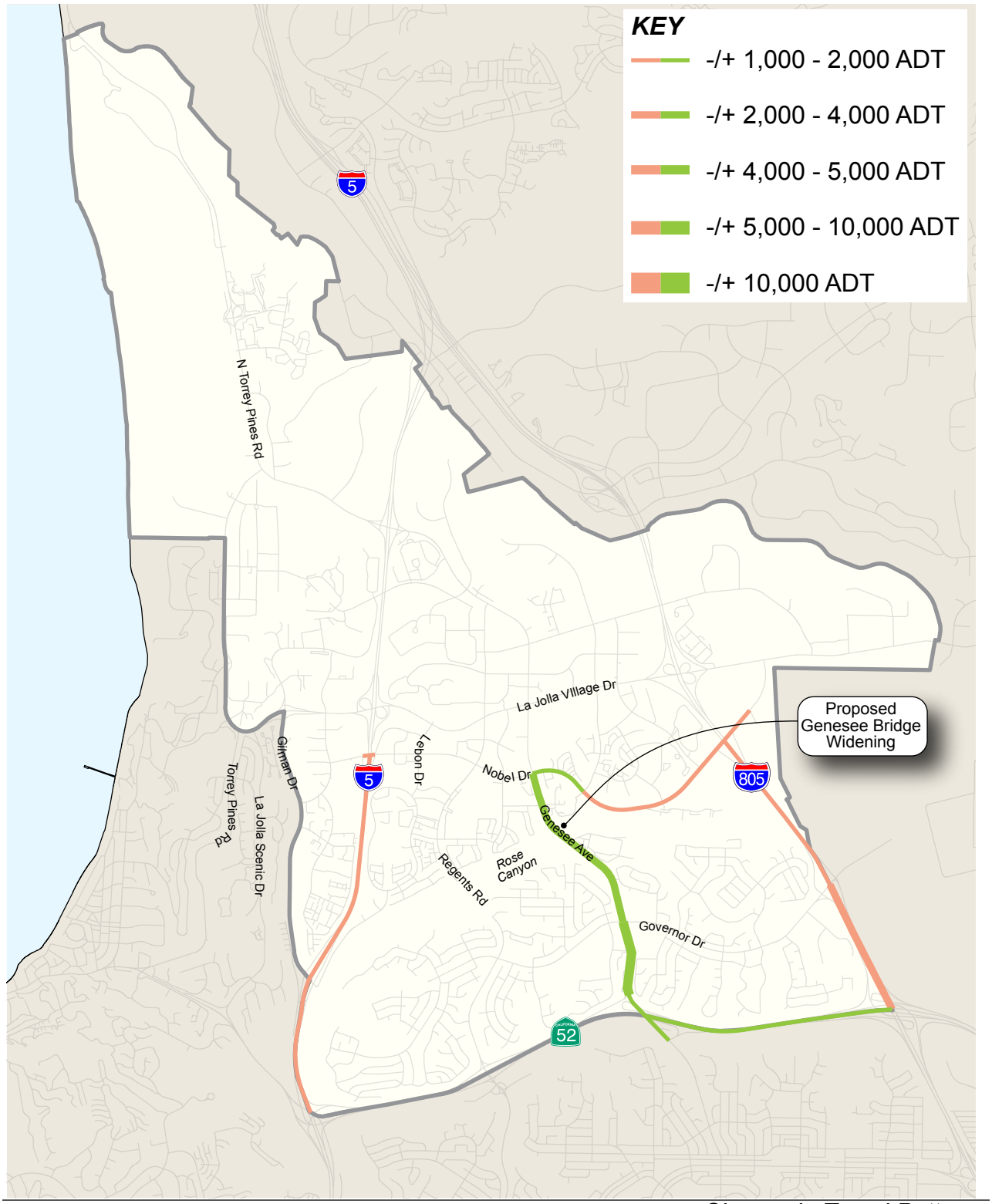


Change in Travel Patterns
Alternative B

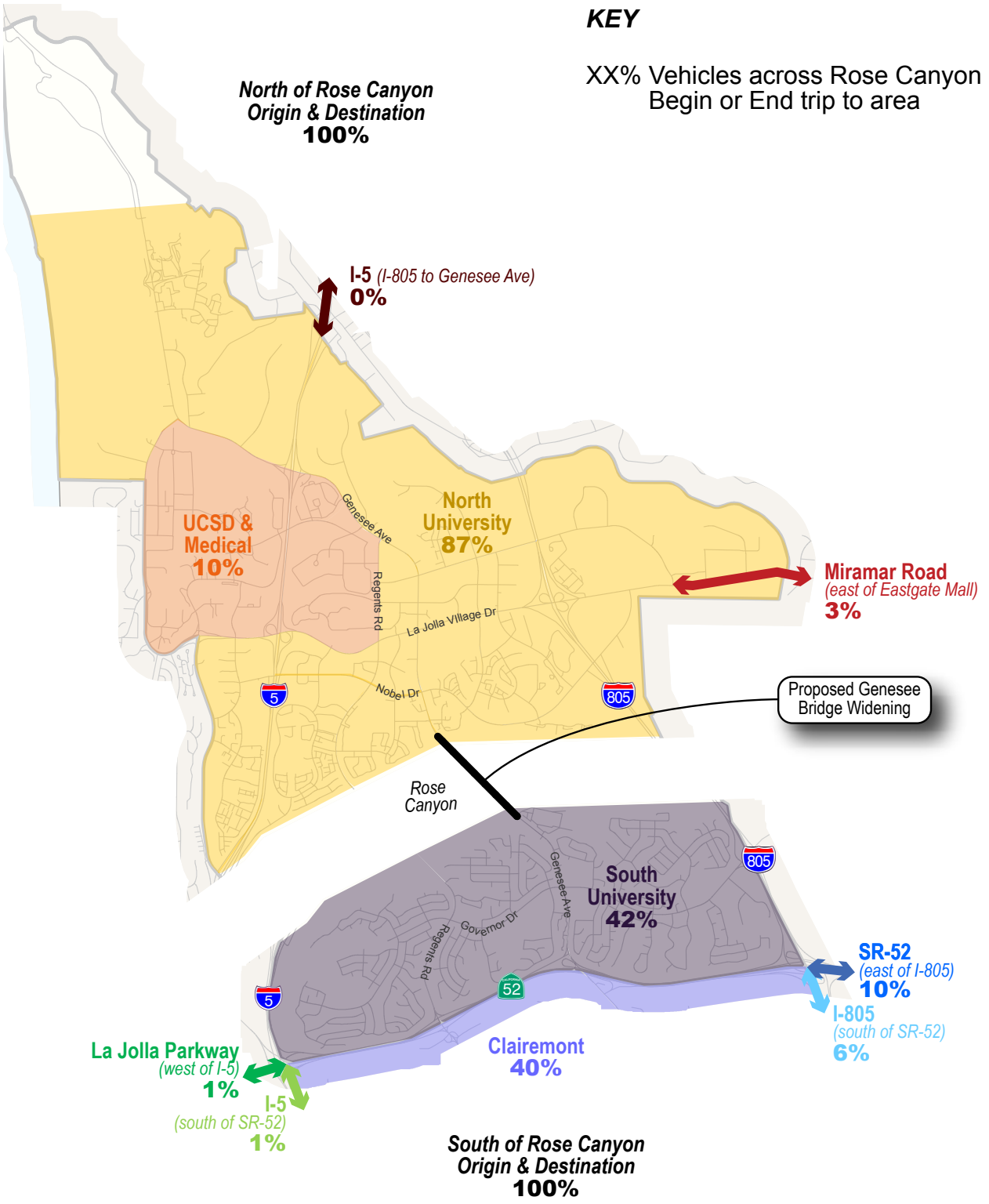


Origins and Destinations for Vehicles Crossing Rose Canyon Alternative B

FIGURE 7-11



Change in Travel Patterns
Alternative C



Origins and Destinations for Vehicles Crossing Rose Canyon
Alternative C

INTERSECTIONS

Table 7-2 displays the LOS analysis results for the study intersections for each alternative, using the roadway network associated with that alternative and the future peak-hour traffic volumes. The findings are illustrated in **Appendices A - D.** The number of locations that would operate at poor LOS (E or F) during at least one peak period and the number of locations that would be considered to have a significant impact when compared to existing conditions is as follows:

- Alternative A: 29 locations operate at unacceptable LOS, 28 of which are a significant impact.
- Alternative B: 29 locations operate at unacceptable LOS, 29 of which are a significant impact.
- Alternative C: 31 locations operate at unacceptable LOS, 29 of which are a significant impact.
- Alternative D: 31 locations operate at unacceptable LOS, 30 of which are a significant impact.

Appendices G - J contain the peak-hour intersections LOS calculation worksheets.

ROADWAY SEGMENT VOLUME-BASED

Table 7-3 displays the LOS analysis results for the volume-based roadway segments evaluation for each alternative, using the roadway network associated with that alternative and the future daily traffic volumes. The findings are illustrated in **Appendices A - D.** The number of locations that would operate at poor LOS (E or F) and the number of locations that would be considered to have a significant impact when compared to existing conditions is as follows:

- Alternative A: 21 locations operate at unacceptable LOS, 19 of which are a significant impact.
- Alternative B: 23 locations operate at unacceptable LOS, 21 of which are a significant impact.
- Alternative C: 22 locations operate at unacceptable LOS, 20 of which are a significant impact.
- Alternative D: 23 locations operate at unacceptable LOS, 21 of which are a significant impact.

ROADWAY SEGMENT SPEED-BASED

Table 7-4 displays the LOS analysis results for the speed-based roadway segments evaluation for Alternatives A and B, which include the Regents Road Bridge, **Table 7-5** displays the LOS analysis results for the speed-based roadway segments evaluation for Alternatives C and D, which does not include the Regents Road Bridge. Each evaluation was performed using the roadway network associated with that alternative and the future peak-hour traffic volumes. The findings are illustrated in **Appendices A - D.** A summary of the significant impacts by alternative when compared to existing conditions is as follows:

- Alternative A would have significant impacts to all four corridors.
- Alternative B would have significant impacts to all four corridors.
- Alternative C would have significant impacts to three of the four corridors.
- Alternative D would have significant impacts to three of the four corridors.

Table 7-6 provides a summary of the significant impacts by corridor and peak period for each alternative.

Appendices G - J contain tables and graphs that summarize the travel time details along each corridor.

Table 7-2 Future Year Intersection Analysis Summary

ID	Intersection	Control	Peak Hour	Existing		Future Alt A Regents Bridge 6-lane Genesee			Future Alt B Regents Bridge 4-lane Genesee			Future Alt C No Bridge 6-lane Genesee			Future Alt D No Bridge 4-lane Genesee		
				Delay (a)	LOS (b)	Delay (a)	LOS (b)	Impact?	Delay (a)	LOS (b)	Impact?	Delay (a)	LOS (b)	Impact?	Delay (a)	LOS (b)	Impact?
1	Genesee Ave & N. Torrey Pines Rd	Signal	AM	23.8	C	22.2	C		22.2	C		22.5	C		22.3	C	
			MID	26.6	C	22.2	C		22.2	C		21.8	C		22.2	C	
			PM	38.9	D	36.2	D		36.5	D		49.2	D		38.5	D	
2	Genesee Ave & John Hopkins Dr (S)	Signal	AM	17.9	B	132.3	**F**	**Yes**	128.9	**F**	**Yes**	115.9	**F**	**Yes**	98.5	**F**	**Yes**
			MID	34.6	C	47.7	D		46.9	D		43.8	D		40.2	D	
			PM	27.6	C	44.2	D		43.4	D		39.4	D		35.4	D	
3	Genesee Ave & Science Center Dr	Signal	AM	12.4	B	17.4	B		17.5	B		17.4	B		17.3	B	
			MID	8.1	A	8.3	A		8.4	A		8.4	A		8.3	A	
			PM	13.6	B	15.9	B		15.9	B		15.7	B		15.4	B	
4	Genesee Ave & I-5 SB Ramps	Signal	AM	66.3	**E**	39.3	D		39.4	D		39.8	D		40.9	D	
			MID	30.9	C	30.0	C		30.3	C		30.4	C		31.7	C	
			PM	69.7	**E**	35.2	D		35.2	D		35.3	D		35.4	D	
5	Genesee Ave & I-5 NB Ramps	Signal	AM	43.7	D	48.8	D		48.5	D		49.7	D		49.3	D	
			MID	145.2	**F**	35.2	D		34.5	C		35.2	D		35.3	D	
			PM	ECL	**F**	29.0	C		28.7	C		29.2	C		29.5	C	
6	Genesee Ave & Scripps Hospital	Signal	AM	20.2	C	60.7	**E**	**Yes**	60.2	**E**	**Yes**	61.3	**E**	**Yes**	61.3	**E**	**Yes**
			MID	23.7	C	63.3	**E**	**Yes**	62.2	**E**	**Yes**	62.2	**E**	**Yes**	61.5	**E**	**Yes**
			PM	21.3	C	74.8	**E**	**Yes**	72.3	**E**	**Yes**	72.6	**E**	**Yes**	71.5	**E**	**Yes**
7	Genesee Ave & Campus Point Dr	Signal	AM	28.9	C	39.0	D		39.0	D		40.2	D		40.2	D	
			MID	29.4	C	31.9	C		32.0	C		31.7	C		31.8	C	
			PM	42.0	D	48.4	D		47.7	D		43.6	D		43.8	D	
8	Genesee Ave & Regents Road	Signal	AM	29.6	C	28.3	C		29.1	C		24.4	C		24.3	C	
			MID	13.7	B	14.0	B		14.1	B		12.3	B		12.4	B	
			PM	12.6	B	27.9	C		28.1	C		26.0	C		25.8	C	
9	Genesee Ave & Eastgate Mall	Signal	AM	36.6	D	50.5	D		49.9	D		51.3	D		53.0	D	
			MID	42.4	D	35.9	D		36.5	D		37.6	D		37.0	D	
			PM	34.0	C	36.5	D		36.8	D		37.4	D		38.2	D	
10	Genesee Ave & Executive Dr	Signal	AM	19.2	B	22.9	C		22.6	C		23.6	C		23.3	C	
			MID	19.8	B	19.4	B		19.5	B		20.4	C		20.7	C	
			PM	31.4	C	37.2	D		37.1	D		39.1	D		39.4	D	
11	Genesee Ave & Executive Square	Signal	AM	14.1	B	13.3	B		13.6	B		14.9	B		14.8	B	
			MID	18.7	B	33.5	C		33.4	C		32.5	C		32.9	C	
			PM	19.2	B	50.7	D		48.4	D		43.1	D		44.3	D	
12	Genesee Ave & La Jolla Village Dr	Signal	AM	77.1	**E**	121.5	**F**	**Yes**	120.0	**F**	**Yes**	119.7	**F**	**Yes**	121.4	**F**	**Yes**
			MID	56.1	**E**	48.5	D		48.4	D		51.4	D		51.2	D	
			PM	35.8	D	48.8	D		48.5	D		59.0	**E**	**Yes**	59.5	**E**	**Yes**

Notes:

Bold values indicate intersections operating at LOS E or F.

(a) Delay refers to the average control delay for the entire intersection, measured in seconds per vehicle. At a two-way stop-controlled intersection, delay refers to the worst movement.

(b) LOS calculations are based on the methodology outlined in the *2010 Highway Capacity Manual* and performed using Synchro 9.0

Table 7-2 Future Year Intersection Analysis Summary (continued)

ID	Intersection	Control	Peak Hour	Existing		Future Alt A Regents Bridge 6-lane Genesee			Future Alt B Regents Bridge 4-lane Genesee			Future Alt C No Bridge 6-lane Genesee			Future Alt D No Bridge 4-lane Genesee		
				Delay (a)	LOS (b)	Delay (a)	LOS (b)	Impact?	Delay (a)	LOS (b)	Impact?	Delay (a)	LOS (b)	Impact?	Delay (a)	LOS (b)	Impact?
13	Genesee Ave and Esplanade Ct	Signal	AM	21.4	C	36.8	D		40.9	D		40.6	D		54.5	D	
			MID	36.2	D	79.2	**E**	**Yes**	84.5	**F**	**Yes**	87.6	**F**	**Yes**	90.6	**F**	**Yes**
			PM	38.2	D	86.4	**F**	**Yes**	93.8	**F**	**Yes**	102.4	**F**	**Yes**	97.9	**F**	**Yes**
14	Genesee Ave & Nobel Dr	Signal	AM	32.9	C	36.1	D		65.1	**E**	**Yes**	36.2	D		97.9	**F**	**Yes**
			MID	38.6	D	39.6	D		40.0	D		39.7	D		40.0	D	
			PM	42.6	D	60.6	**E**	**Yes**	59.5	**E**	**Yes**	110.9	**F**	**Yes**	91.2	**F**	**Yes**
15	Genesee Ave & Decoro St	Signal	AM	28.6	C	24.0	C		38.0	D		28.7	C		112.1	**F**	**Yes**
			MID	17.6	B	22.9	C		21.3	C		16.9	B		20.0	B	
			PM	119.8	**F**	69.0	**E**		161.2	**F**	**Yes**	184.1	**F**	**Yes**	314.4	**F**	**Yes**
16	Genesee Ave & Centurion Square	Signal	AM	66.6	**E**	30.3	C		42.0	D		65.6	**E**		154.1	**F**	**Yes**
			MID	13.2	B	20.2	C		11.6	B		9.3	A		11.3	B	
			PM	14.3	B	9.2	A		16.5	B		20.5	C		95.2	**F**	**Yes**
17	Genesee Ave & Governor Dr	Signal	AM	67.4	**E**	102.0	**F**	**Yes**	93.7	**F**	**Yes**	145.8	**F**	**Yes**	163.7	**F**	**Yes**
			MID	28.6	C	31.9	C		29.7	C		40.0	D		38.3	D	
			PM	66.5	**E**	51.4	D		86.1	**F**	**Yes**	142.9	**F**	**Yes**	110.3	**F**	**Yes**
18	Genesee Ave & SR-52 WB Ramps	SSSC	AM	27.5	D	27.7	D		36.9	**E**	**Yes**	40.5	**E**	**Yes**	45.9	**E**	**Yes**
			MID	13.2	B	15.4	C		14.7	B		15.1	C		14.6	B	
			PM	371.8	**F**	783.3	**F**	**Yes**	640.3	**F**	**Yes**	719.4	**F**	**Yes**	603.8	**F**	**Yes**
19	Genesee Ave & SR-52 EB Ramps	Signal	AM	55.8	**E**	53.2	D		49.9	D		62.2	**E**	**Yes**	69.6	**E**	**Yes**
			MID	37.6	D	42.1	D		40.2	D		45.3	D		54.0	D	
			PM	132.0	**F**	50.0	D		48.3	D		52.8	D		62.7	**E**	
20	Genesee Ave & Appleton St/Lehrer Dr	Signal	AM	109.8	**F**	166.2	**F**	**Yes**	161.5	**F**	**Yes**	185.0	**F**	**Yes**	184.1	**F**	**Yes**
			MID	28.6	C	32.5	C		32.8	C		34.9	C		35.1	D	
			PM	43.0	D	60.9	**E**	**Yes**	59.5	**E**	**Yes**	67.0	**E**	**Yes**	66.4	**E**	**Yes**
21	La Jolla Village Dr & Torrey Pines Rd	Signal	AM	27.4	C	49.1	D		49.3	D		52.9	D		53.1	D	
			MID	30.0	C	30.8	C		30.9	C		31.1	C		31.1	C	
			PM	106.2	**F**	178.2	**F**	**Yes**	178.4	**F**	**Yes**	174.8	**F**	**Yes**	183.9	**F**	**Yes**
22	La Jolla Village Dr & La Jolla Scenic Dr	Signal	AM	23.1	C	49.1	D		46.8	D		53.1	D		54.3	D	
			MID	11.3	B	15.3	B		15.2	B		16.2	B		16.2	B	
			PM	21.4	C	54.3	D		54.1	D		44.0	D		43.4	D	
23a	La Jolla Village Dr WB & Gilman Dr	Signal	AM	14.8	B	15.7	B		15.5	B		17.2	B		17.1	B	
			MID	11.6	B	10.7	B		10.6	B		12.0	B		12.0	B	
			PM	20.0	C	16.6	B		16.5	B		20.1	C		20.2	C	
23b	La Jolla Village Dr EB & Gilman Dr	SSSC	AM	13.0	B	16.5	C		16.6	C		17.4	C		17.8	C	
			MID	10.4	B	12.3	B		12.4	B		12.8	B		12.9	B	
			PM	24.5	C	141.8	**F**	**Yes**	145.0	**F**	**Yes**	204.5	**F**	**Yes**	170.9	**F**	**Yes**
24	La Jolla Village Dr & Villa La Jolla Dr	Signal	AM	55.4	**E**	123.0	**F**	**Yes**	123.9	**F**	**Yes**	132.2	**F**	**Yes**	127.0	**F**	**Yes**
			MID	140.4	**F**	378.5	**F**	**Yes**	379.0	**F**	**Yes**	373.4	**F**	**Yes**	374.4	**F**	**Yes**
			PM	202.2	**F**	328.4	**F**	**Yes**	328.6	**F**	**Yes**	328.0	**F**	**Yes**	330.0	**F**	**Yes**

Notes:

Bold values indicate intersections operating at LOS E or F.

ECL = Exceeds Calculable Limit. Reported when delay exceeds 180 seconds.

SSSC = Side Street Stop Control

(a) Delay refers to the average control delay for the entire intersection, measured in seconds per vehicle. At a two-way stop-controlled intersection, delay refers to the worst movement.

(b) LOS calculations are based on the methodology outlined in the *2010 Highway Capacity Manual* and performed using Synchro 9.0

Table 7-2 Future Year Intersection Analysis Summary (continued)

ID	Intersection	Control	Peak Hour	Existing		Future Alt A Regents Bridge 6-lane Genesee			Future Alt B Regents Bridge 4-lane Genesee			Future Alt C No Bridge 6-lane Genesee			Future Alt D No Bridge 4-lane Genesee		
				Delay (a)	LOS (b)	Delay (a)	LOS (b)	Impact?	Delay (a)	LOS (b)	Impact?	Delay (a)	LOS (b)	Impact?	Delay (a)	LOS (b)	Impact?
25	La Jolla Village Dr & I-5 SB Off-Ramps	Signal	AM	31.5	C	41.6	D		44.1	D		46.3	D		48.0	D	
			MID	29.7	C	52.7	D		53.8	D		61.7	**E**	**Yes**	61.0	**E**	**Yes**
			PM	52.8	D	52.2	D		54.8	D		66.3	**E**	**Yes**	68.6	**E**	**Yes**
26	La Jolla Village Dr & I-5 NB Off-Ramps	Signal	AM	38.3	D	41.2	D		40.9	D		32.2	C		42.8	D	
			MID	27.0	C	27.1	C		28.2	C		30.2	C		29.9	C	
			PM	32.9	C	31.5	C		31.2	C		34.3	C		33.8	C	
27	La Jolla Village Dr & Lebon Dr	Signal	AM	30.7	C	34.3	C		34.5	C		34.0	C		34.1	C	
			MID	18.2	B	29.6	C		30.1	C		30.4	C		30.5	C	
			PM	39.3	D	53.3	D		52.9	D		54.0	D		52.9	D	
28	La Jolla Village Dr & Regents Rd	Signal	AM	55.0	D	71.8	**E**	**Yes**	73.4	**E**	**Yes**	70.3	**E**	**Yes**	64.9	**E**	**Yes**
			MID	48.4	D	53.4	D		53.6	D		50.8	D		53.4	D	
			PM	132.4	**F**	203.4	**F**	**Yes**	205.9	**F**	**Yes**	193.9	**F**	**Yes**	202.1	**F**	**Yes**
29	La Jolla Village Dr & Executive Way	Signal	AM	19.0	B	83.0	**F**	**Yes**	80.2	**F**	**Yes**	76.0	**E**	**Yes**	75.8	**E**	**Yes**
			MID	35.6	D	689.6	**F**	**Yes**	732.1	**F**	**Yes**	847.8	**F**	**Yes**	874.7	**F**	**Yes**
			PM	61.8	**E**	233.6	**F**	**Yes**	239.5	**F**	**Yes**	266.3	**F**	**Yes**	266.6	**F**	**Yes**
30	La Jolla Village Dr & Towne Center Dr	Signal	AM	104.6	**F**	156.6	**F**	**Yes**	163.3	**F**	**Yes**	164.0	**F**	**Yes**	161.2	**F**	**Yes**
			MID	49.4	D	46.9	D		47.2	D		48.6	D		49.6	D	
			PM	129.3	**F**	167.8	**F**	**Yes**	170.2	**F**	**Yes**	166.3	**F**	**Yes**	171.5	**F**	**Yes**
31	La Jolla Village Dr & I-805 SB Ramps	Signal	AM	112.8	**F**	173.3	**F**	**Yes**	167.8	**F**	**Yes**	162.6	**F**	**Yes**	171.7	**F**	**Yes**
			PM	17.7	B	18.5	B		19.6	B		23.8	C		20.4	C	
32	La Jolla Village Dr & I-805 NB Ramps	Signal	AM	34.0	C	43.3	D		41.6	D		38.9	D		42.2	D	
			PM	41.4	D	39.1	D		37.1	D		39.6	D		43.7	D	
33	Miramar Rd & Nobel Dr	Signal	AM	16.6	B	20.4	C		21.0	C		21.8	C		21.3	C	
			MID	12.3	B	14.1	B		14.3	B		15.6	B		15.3	B	
			PM	35.3	D	53.2	D		31.2	C		42.5	D		38.6	D	
34	Miramar Rd & Eastgate Mall	Signal	AM	15.9	B	23.0	C		23.1	C		23.1	C		23.0	C	
			PM	74.9	**E**	104.0	**F**	**Yes**	105.5	**F**	**Yes**	104.2	**F**	**Yes**	104.2	**F**	**Yes**
35	Miramar Rd & Miramar Mall	Signal	AM	16.7	B	25.2	C		23.1	C		25.1	C		25.3	C	
			PM	13.1	B	21.7	C		19.3	B		21.3	C		21.5	C	
36	Miramar Rd & Miramar Place	Signal	AM	18.8	B	21.1	C		19.5	B		21.1	C		21.2	C	
			PM	7.3	A	11.9	B		10.7	B		12.1	B		12.2	B	

Notes:

Bold values indicate intersections operating at LOS E or F.

(a) Delay refers to the average control delay for the entire intersection, measured in seconds per vehicle. At a two-way stop-controlled intersection, delay refers to the worst movement.

(b) LOS calculations are based on the methodology outlined in the *2010 Highway Capacity Manual* and performed using Synchro 9.0

Table 7-2 Future Year Intersection Analysis Summary (continued)

ID	Intersection	Control	Peak Hour	Existing		Future Alt A Regents Bridge 6-lane Genesee			Future Alt B Regents Bridge 4-lane Genesee			Future Alt C No Bridge 6-lane Genesee			Future Alt D No Bridge 4-lane Genesee		
				Delay (a)	LOS (b)	Delay (a)	LOS (b)	Impact?	Delay (a)	LOS (b)	Impact?	Delay (a)	LOS (b)	Impact?	Delay (a)	LOS (b)	Impact?
37	Miramar Rd & Camino Santa Fe	Signal	AM	36.8	D	43.0	D		43.1	D		44.5	D		44.4	D	
			PM	81.4	**F**	141.9	**F**	**Yes**	142.7	**F**	**Yes**	124.9	**F**	**Yes**	124.8	**F**	**Yes**
38	Nobel Dr & Villa La Jolla Dr	Signal	AM	17.0	B	19.3	B		19.1	B		19.9	B		19.9	B	
			MID	18.5	B	20.3	C		20.1	C		21.7	C		21.6	C	
			PM	32.8	C	34.6	C		34.4	C		37.5	D		37.5	D	
39	Nobel Dr & La Jolla Village Square Dwy	Signal	AM	19.8	B	25.5	C		25.4	C		25.5	C		25.5	C	
			MID	33.7	C	224.5	**F**	**Yes**	222.2	**F**	**Yes**	202.3	**F**	**Yes**	209.9	**F**	**Yes**
			PM	45.4	D	167.8	**F**	**Yes**	165.8	**F**	**Yes**	145.6	**F**	**Yes**	150.6	**F**	**Yes**
40	Nobel Dr & I-5 SB On Ramp	Signal	AM	3.7	A	3.2	A		3.2	A		3.4	A		3.5	A	
			MID	17.1	B	29.9	C		28.4	C		31.5	C		21.7	C	
			PM	13.4	B	114.2	**F**	**Yes**	113.3	**F**	**Yes**	121.6	**F**	**Yes**	125.1	**F**	**Yes**
41	Nobel Dr & University Center Ln/I-5 NB Off-Ramp	Signal	AM	13.6	B	16.2	B		15.6	B		16.8	B		17.8	B	
			MID	19.4	B	21.1	C		21.2	C		22.4	C		23.3	C	
			PM	17.0	B	45.2	D		49.7	D		38.1	D		40.0	D	
42	Nobel Dr & Caminito Plaza Centro	Signal	AM	13.9	B	14.5	B		14.3	B		14.5	B		14.3	B	
			MID	11.4	B	15.6	B		15.2	B		15.8	B		15.5	B	
			PM	15.3	B	21.0	C		20.8	C		21.1	C		20.2	C	
43	Nobel Dr & Lebon Dr	Signal	AM	25.5	C	30.0	C		30.0	C		28.1	C		28.2	C	
			MID	19.9	B	22.4	C		22.4	C		21.4	C		21.6	C	
			PM	29.9	C	37.3	D		37.4	D		35.4	D		35.7	D	
44	Nobel Dr & Regents Rd	Signal	AM	48.4	D	37.9	D		38.3	D		35.5	D		34.7	C	
			MID	45.8	D	36.7	D		36.9	D		30.2	C		30.1	C	
			PM	53.6	D	69.8	**E**	**Yes**	71.6	**E**	**Yes**	86.6	**F**	**Yes**	89.9	**F**	**Yes**
45	Nobel Dr & Costa Verde Blvd/Cargill Ave	Signal	AM	45.9	D	34.9	C		34.9	C		36.6	D		37.1	D	
			MID	43.3	D	50.3	D		50.5	D		47.3	D		48.1	D	
			PM	52.1	D	45.7	D		46.2	D		42.5	D		43.0	D	
46	Nobel Dr & Lombard Place	Signal	AM	9.5	A	10.9	B		11.1	B		11.1	B		11.1	B	
			MID	16.0	B	24.7	C		24.7	C		24.9	C		25.2	C	
			PM	22.3	C	50.6	D		49.6	D		52.2	D		54.9	D	
47	Nobel Dr & Towne Center Dr	Signal	AM	22.9	C	28.5	C		28.5	C		28.6	C		28.7	C	
			MID	20.0	C	23.7	C		23.6	C		23.8	C		24.0	C	
			PM	30.5	C	44.6	D		54.8	D		45.2	D		46.0	D	
48	Nobel Dr & Shoreline Dr	Signal	AM	35.0	C	41.7	D		41.9	D		42.7	D		45.9	D	
			MID	13.9	B	19.4	B		19.5	B		21.3	C		21.2	C	
			PM	19.6	B	40.5	D		40.3	D		40.5	D		42.2	D	
49	Nobel Dr & Judicial Dr	Signal	AM	13.8	B	13.5	B		14.3	B		14.4	B		13.9	B	
			MID	11.7	B	13.1	B		13.7	B		13.8	B		13.9	B	
			PM	17.9	B	28.1	C		28.3	C		28.7	C		29.1	C	

Notes:

Bold values indicate intersections operating at LOS E or F.

ECL = Exceeds Calculable Limit. Reported when delay exceeds 180 seconds.

(a) Delay refers to the average control delay for the entire intersection, measured in seconds per vehicle. At a two-way stop-controlled intersection, delay refers to the worst movement.

(b) LOS calculations are based on the methodology outlined in the *2010 Highway Capacity Manual* and performed using Synchro 9.0

Table 7-2 Future Year Intersection Analysis Summary (continued)

ID	Intersection	Control	Peak Hour	Existing		Future Alt A Regents Bridge 6-lane Genesee			Future Alt B Regents Bridge 4-lane Genesee			Future Alt C No Bridge 6-lane Genesee			Future Alt D No Bridge 4-lane Genesee		
				Delay (a)	LOS (b)	Delay (a)	LOS (b)	Impact?	Delay (a)	LOS (b)	Impact?	Delay (a)	LOS (b)	Impact?	Delay (a)	LOS (b)	Impact?
50	Nobel Dr & I-805 SB On-Ramp	Signal	AM	3.2	A	1.1	A		1.1	A		1.4	A		1.0	A	
			MID	4.0	A	18.8	B		18.1	B		37.9	D		26.2	C	
			PM	3.7	A	6.6	A		6.7	A		8.3	A		5.9	A	
51	Nobel Dr & I-805 N Off-Ramp	Signal	AM	18.6	B	23.8	C		22.3	C		22.4	C		23.2	C	
			MID	14.5	B	19.2	B		18.5	B		18.6	B		19.0	B	
			PM	15.8	B	21.3	C		19.6	B		20.2	C		20.6	C	
52	Nobel Dr & Avenue of Flags	Signal	AM	3.0	A	3.1	A		3.0	A		3.0	A		3.0	A	
			MID	5.6	A	8.4	A		8.4	A		8.9	A		8.9	A	
			PM	3.0	A	3.6	A		3.5	A		3.5	A		3.6	A	
53	Regents Rd & County Day Ln/ Health Science Dr	Signal	AM	17.8	B	54.6	D		54.7	D		47.3	D		45.3	D	
			MID	11.6	B	11.9	B		11.9	B		11.7	B		11.9	B	
			PM	35.5	D	28.6	C		29.0	C		26.4	C		26.2	C	
54	Regents Rd & Eastgate Mall	Signal	AM	12.3	B	15.4	B		15.6	B		15.4	B		14.7	B	
			MID	5.6	A	6.5	A		6.5	A		6.4	A		6.4	A	
			PM	16.2	B	17.0	B		17.4	B		16.0	B		16.2	B	
55	Regents Rd & Executive Dr	Signal	AM	8.4	A	12.7	B		12.7	B		13.7	B		13.7	B	
			MID	9.7	A	9.7	A		9.8	A		9.9	A		9.9	A	
			PM	18.9	B	26.6	C		26.7	C		25.1	C		25.2	C	
56	Regents Rd & Regents Park Row	Signal	AM	21.2	C	22.9	C		23.4	C		23.3	C		23.1	C	
			MID	14.1	B	15.1	B		15.2	B		14.3	B		15.1	B	
			PM	29.4	C	48.4	D		50.5	D		35.6	D		48.4	D	
57	Regents Rd & Plaza De Palmas	Signal	AM	11.8	B	13.1	B		13.1	B		12.2	B		12.3	B	
			MID	8.2	A	9.9	A		10.0	B		8.8	A		8.9	A	
			PM	15.1	B	53.6	D		53.9	D		15.6	B		15.6	B	
58	Regents Rd & Berino Ct	Signal	AM	24.7	C	50.3	D		53.8	D		27.2	C		27.3	C	
			MID	5.7	A	6.6	A		6.6	A		5.8	A		5.8	A	
			PM	11.3	B	16.6	B		16.7	B		12.0	B		12.0	B	
59	Regents Rd & Arriba St	Signal	AM	27.6	C	68.6	**E**	**Yes**	68.5	**E**	**Yes**	29.0	C		29.0	C	
			MID	14.3	B	27.8	C		27.8	C		15.0	B		15.0	B	
			PM	25.2	C	72.0	**E**	**Yes**	89.2	**F**	**Yes**	25.4	C		25.4	C	
60	Regents Rd & Governor Dr	Signal	AM	24.0	C	95.5	**F**	**Yes**	106.3	**F**	**Yes**	33.4	C		37.1	D	
			MID	16.0	B	43.1	D		51.3	D		16.9	B		18.1	B	
			PM	21.9	C	88.7	**F**	**Yes**	95.3	**F**	**Yes**	32.0	C		33.1	C	
61	Regents Rd & SR-52 WB Ramps	Signal	AM	40.0	D	43.2	D		45.6	D		43.1	D		43.9	D	
			MID	25.3	C	25.4	C		26.0	C		29.4	C		29.7	C	
			PM	37.6	D	41.3	D		42.4	D		43.2	D		43.7	D	
62	Regents Rd & SR-52 EB Ramps	Signal	AM	99.1	**F**	50.2	D		50.7	D		43.9	D		48.3	D	
			MID	22.1	C	21.3	C		21.7	C		20.8	C		22.1	C	
			PM	57.0	**E**	45.4	D		44.7	D		44.7	D		45.9	D	

Bold values indicate intersections operating at LOS E or F.

ECL = Exceeds Calculable Limit. Reported when delay exceeds 180 seconds.

(a) Delay refers to the average control delay for the entire intersection, measured in seconds per vehicle. At a two-way stop-controlled intersection, delay refers to the worst movement.

(b) LOS calculations are based on the methodology outlined in the *2010 Highway Capacity Manual* and performed using Synchro 9.0

Table 7-2 Future Year Intersection Analysis Summary (continued)

ID	Intersection	Control	Peak Hour	Existing		Future Alt A Regents Bridge 6-lane Genesee			Future Alt B Regents Bridge 4-lane Genesee			Future Alt C No Bridge 6-lane Genesee			Future Alt D No Bridge 4-lane Genesee		
				Delay (a)	LOS (b)	Delay (a)	LOS (b)	Impact?	Delay (a)	LOS (b)	Impact?	Delay (a)	LOS (b)	Impact?	Delay (a)	LOS (b)	Impact?
63	Regents Rd & Luna Ave	Signal	AM	42.6	D	64.7	**E**	**Yes**	66.1	**E**	**Yes**	52.3	D		54.5	D	
			PM	61.6	**E**	95.2	**F**	**Yes**	96.9	**F**	**Yes**	65.5	**E**	**Yes**	66.6	**E**	**Yes**
64	N. Torrey Pines Rd & UCSD Northpoint	Signal	AM	23.6	C	23.8	C		23.9	C		23.5	C		23.8	C	
			PM	28.5	C	32.1	C		32.2	C		32.6	C		32.2	C	
65	N. Torrey Pines Rd & Pangea Dr	Signal	AM	9.2	A	10.0	A		10.0	A		10.0	A		10.0	A	
			PM	17.3	B	20.8	C		20.9	C		20.9	C		21.0	C	
66	N. Torrey Pines Rd & La Jolla Shores	Signal	AM	40.4	D	60.4	**E**	**Yes**	60.7	**E**	**Yes**	60.5	**E**	**Yes**	61.3	**E**	**Yes**
			PM	60.6	**E**	167.1	**F**	**Yes**	168.7	**F**	**Yes**	167.3	**F**	**Yes**	169.9	**F**	**Yes**
67	N. Torrey Pines Rd & Revelle College	Signal	AM	17.5	B	23.6	C		23.4	C		23.5	C		23.9	C	
			PM	30.1	C	51.2	D		47.2	D		51.2	D		51.6	D	
68	Gilman Dr & Villa La Jolla Dr	Signal	AM	15.7	B	25.7	C		25.6	C		24.9	C		24.6	C	
			PM	15.1	B	47.2	D		45.6	D		46.7	D		46.1	D	
69	Gilman Dr & I-5 SB Ramps	Signal	AM	9.7	A	9.4	A		9.4	A		10.3	B		10.5	B	
			PM	169.1	**F**	50.9	D		51.8	D		79.8	**E**		82.9	**F**	
70	Gilman Dr & I-5 NB Ramps	Signal	AM	16.8	B	19.4	B		19.6	B		21.7	C		21.2	C	
			PM	17.6	B	19.7	B		19.8	B		21.4	C		20.9	C	
71	Palmilla Dr & Lebon Dr	Signal	AM	7.4	A	6.9	A		6.9	A		7.4	A		7.4	A	
			PM	7.4	A	8.2	A		8.2	A		7.2	A		7.2	A	
72	Palmilla Dr & Ariba St	Signal	AM	7.0	A	11.4	B		11.3	B		7.1	A		7.1	A	
			PM	7.7	A	18.3	B		17.9	B		8.1	A		8.1	A	
73	Towne Center Dr & Eastgate Mall	Signal	AM	25.7	C	31.3	C		31.5	C		31.3	C		31.7	C	
			PM	39.9	D	65.9	**E**	**Yes**	66.6	**E**	**Yes**	68.3	**E**	**Yes**	69.8	**E**	**Yes**
74	Towne Center Dr & Executive Dr	Signal	AM	18.1	B	24.2	C		24.3	C		24.5	C		24.4	C	
			PM	38.1	D	50.3	D		50.9	D		51.4	D		51.0	D	
75	Towne Center Dr & Golden Haven Dr	Signal	AM	13.2	B	16.4	B		16.4	B		16.8	B		16.7	B	
			PM	11.4	B	15.5	B		14.4	B		16.3	B		15.2	B	
76	Executive Way & Executive Dr	Signal	AM	12.3	B	16.7	B		11.6	B		17.1	B		17.1	B	
			PM	13.4	B	362.0	**F**	**Yes**	98.0	**F**	**Yes**	350.8	**F**	**Yes**	355.9	**F**	**Yes**
77	Judicial Dr & Eastgate Mall	Signal	AM	23.0	C	37.8	D		37.6	D		33.6	C		33.6	C	
			PM	25.9	C	75.8	**E**	**Yes**	74.6	**E**	**Yes**	70.7	**E**	**Yes**	67.6	**E**	**Yes**
78	Governor Dr & I-805 SB Ramps	Future Signal	AM	14.7	B	12.5	B		12.6	B		12.7	B		13.4	B	
			PM	14.6	B	16.1	B		16.8	B		16.4	B		18.2	B	
79	Governor Dr & I-805 NB Ramps	SSSC	AM	ECL	**F**	ECL	**F**	**Yes**	ECL	**F**	**Yes**	ECL	**F**	**Yes**	ECL	**F**	**Yes**
			PM	ECL	**F**	722.4	**F**	**Yes**	936.3	**F**	**Yes**	742.0	**F**	**Yes**	ECL	**F**	**Yes**

Notes:

Bold values indicate intersections operating at LOS E or F.

ECL = Exceeds Calculable Limit. Reported when delay exceeds 180 seconds.

SSSC = Side Street Stop Control

(a) Delay refers to the average control delay for the entire intersection, measured in seconds per vehicle. At a two-way stop-controlled intersection, delay refers to the worst movement.

(b) LOS calculations are based on the methodology outlined in the *2010 Highway Capacity Manual* and performed using Synchro 9.0

Table 7-3 Future Year Volume-Based Roadway Segment Analysis Summary

ROADWAY SEGMENT	ROADWAY CLASSIFICATION (a)	LOS E CAPACITY	Existing			Future Alt A Regents Bridge 6-lane Genesee			Future Alt B Regents Bridge 4-lane Genesee			Future Alt C No Bridge 6-lane Genesee			Future Alt D No Bridge 4-lane Genesee		
			ADT (b)	V/C RATIO (c)	LOS	ADT (b)	V/C RATIO (c)	LOS	ADT (b)	V/C RATIO (c)	LOS	ADT (b)	V/C RATIO (c)	LOS	ADT (b)	V/C RATIO (c)	LOS
Eastgate Mall																	
Regents Rd to Genesee Ave	2 Lane Collector (continuous left-turn lane)	15,000	6,187	0.412	B	12,100	0.807	D	12,200	0.813	D	12,300	0.820	D	12,300	0.820	D
Genesee Ave to Easter Way	4 Lane Collector	30,000	14,767	0.492	C	25,000	0.833	**E**	25,100	0.837	**E**	24,900	0.830	D	25,400	0.847	**E**
Easter Way to Judicial Dr	4 Lane Major Arterial	40,000	11,115	0.278	A	14,100	0.353	A	14,300	0.358	A	14,000	0.350	A	14,300	0.358	A
Judicial Drive to Eastgate Dr (Freeway Overpass)	2 Lane Collector (no fronting property)	10,000	10,096	1.010	**F**	19,500	1.950	**F**	19,500	1.950	**F**	19,500	1.950	**F**	19,400	1.940	**F**
Eastgate Dr to Miramar Rd	2 Lane Collector (continuous left-turn lane)	15,000	14,668	0.978	**E**	28,800	1.920	**F**	28,700	1.913	**F**	29,000	1.933	**F**	29,200	1.947	**F**
Executive Drive																	
Regents Rd to Genesee Ave	4 Lane Collector (no center lane)	15,000	4,397	0.293	A	5,900	0.393	B	6,000	0.400	B	6,600	0.440	B	6,400	0.427	B
Genesee Ave to Judicial Dr	4 Lane Collector	30,000	5,914	0.197	A	8,900	0.297	A	8,700	0.290	A	9,300	0.310	A	9,300	0.310	A
Executive Way																	
Executive Dr to La Jolla Village Dr	4 Lane Collector	30,000	5,923	0.197	A	11,400	0.380	B	11,100	0.370	B	11,000	0.367	B	11,100	0.370	B
Genesee Avenue																	
N. Torrey Pines Rd to I-5 SB Ramps	6 Lane Prime Arterial	60,000	35,124	0.585	C	46,100	0.768	C	46,100	0.768	C	46,100	0.768	C	46,000	0.767	C
I-5 SB Ramps to I-5 NB Ramps	4 Lane Major Arterial	40,000	49,051	1.226	**F**												
	8 Lane Prime Arterial	80,000				62,100	0.776	C	62,200	0.778	C	62,300	0.779	C	62,100	0.776	C
I-5 NB Ramps to Regents Rd	6 Lane Prime Arterial	60,000	48,542	0.809	C	54,300	0.905	D	54,700	0.912	D	54,800	0.913	D	54,600	0.910	D
Regents Rd to La Jolla Village Dr	6 Lane Prime Arterial	60,000	29,457	0.589	C	40,600	0.812	D	40,300	0.806	D	40,700	0.814	D	40,800	0.816	D
La Jolla Village to Esplande Ct	4 Lane Major Arterial	40,000	28,054	0.701	C												
	6 Lane Major Arterial	50,000				41,800	0.836	D	41,900	0.838	D	46,500	0.930	**E**	46,400	0.928	**E**
Esplande Ct to Nobel Dr	6 Lane Major Arterial	50,000	23,744	0.475	B	27,300	0.546	B	27,400	0.548	B	30,300	0.606	C	29,700	0.594	C
Nobel Dr to Centurion Square	4 Lane Major Arterial	40,000	30,922	0.773	D				39,600	0.990	**E**				46,500	1.163	**F**
	6 Lane Major Arterial	50,000				39,600	0.792	C				49,400	0.988	**E**			
Centurion Square to Governor Dr	4 Lane Major Arterial	40,000	30,325	0.758	D				40,900	1.023	**F**				54,600	1.365	**F**
	6 Lane Major Arterial	50,000				43,900	0.878	D				58,200	1.164	**F**			
Governor Dr to SR-52 WB Ramps	4 Lane Major Arterial	40,000	30,325	0.758	D				44,300	1.108	**F**				43,500	1.088	**F**
	6 Lane Major Arterial	50,000				48,700	0.974	**E**				47,700	0.954	**E**			
SR-52 WB Ramps to SR-52 EB Ramps	4 Lane Major Arterial	40,000	31,170	0.779	D	37,300	0.933	**E**	36,500	0.913	**E**	39,000	0.975	**E**	38,000	0.950	**E**
SR-52 EB Ramps to Lehrer Dr	4 Lane Major Arterial	40,000	30,581	0.765	D	37,100	0.928	**E**	36,600	0.915	**E**	38,900	0.973	**E**	38,400	0.960	**E**
Gilman Drive																	
UCSD Campus to La Jolla Village Dr	4 Lane Collector	30,000	10,069	0.336	B	13,800	0.460	B	13,900	0.463	B	13,700	0.457	B	13,700	0.457	B
La Jolla Village Dr to Via Alicante	4 Lane Collector	30,000	15,095	0.503	C	21,800	0.727	D	21,800	0.727	D	21,000	0.700	D	20,700	0.690	D
Via Alicante to I-5 SB Ramps	4 Lane Major Arterial	40,000	17,138	0.428	B	24,300	0.608	C	24,500	0.613	C	24,000	0.600	C	23,400	0.585	C
I-5 SB Ramps to I-5 NB Ramps	4 Lane Major Arterial	40,000	11,873	0.297	A	14,900	0.373	A	15,000	0.375	B	16,800	0.420	B	16,500	0.413	B
Golden Haven Drive																	
Towne Center Dr to Judicial Dr	4 Lane Major Arterial	40,000	6,712	0.168	A	7,500	0.188	A	7,300	0.183	A	7,700	0.193	A	7,600	0.190	A

Notes:

Bold values indicate roadway segments operating at LOS E or F.

(a) Road classifications are based on _____

(b) Average Daily Traffic (ADT) volumes for the roadway segments were determined from SANDAG Modeling

(c) The v/c Ratio is calculated by dividing the ADT volume by each respective roadway segment's capacity.

Table 7-3 Future Year Volume-Based Roadway Segment Analysis Summary (continued)

ROADWAY SEGMENT	ROADWAY CLASSIFICATION (a)	LOS E CAPACITY	Existing			Future Alt A Regents Bridge 6-lane Genesee			Future Alt B Regents Bridge 4-lane Genesee			Future Alt C No Bridge 6-lane Genesee			Future Alt D No Bridge 4-lane Genesee		
			ADT (b)	V/C RATIO (c)	LOS	ADT (b)	V/C RATIO (c)	LOS	ADT (b)	V/C RATIO (c)	LOS	ADT (b)	V/C RATIO (c)	LOS	ADT (b)	V/C RATIO (c)	LOS
Governor Drive																	
Regents Road to Genesee Ave	4 Lane Major Arterial	40,000	16,796	0.420	B	11,400	0.285	A	10,700	0.268	A	23,200	0.580	C	23,000	0.575	C
Genesee Ave to I-805 SB Ramps	4 Lane Major Arterial	40,000	19,737	0.493	B	24,000	0.600	C	23,300	0.583	C	23,900	0.598	C	23,300	0.583	C
I-805 SB Ramps to I-805 NB Ramps	4 Lane Major Arterial	40,000	10,417	0.260	A	9,900	0.248	A	10,600	0.265	A	10,000	0.250	A	10,700	0.268	A
Judicial Drive																	
Eastgate Mall to La Jolla Village Dr	4 Lane Major Arterial	40,000	4,828	0.121	A	10,600	0.265	A	10,400	0.260	A	9,900	0.248	A	9,700	0.243	A
La Jolla Village Dr to Nobel Drive	4 Lane Major Arterial	40,000	6,574	0.164	A	9,300	0.233	A	9,300	0.233	A	9,500	0.238	A	9,400	0.235	A
La Jolla Scenic Drive																	
La Jolla Village Drive to South	4 Lane Major Arterial	40,000	7,928	0.198	A	12,900	0.323	A	12,900	0.323	A	14,100	0.353	A	14,100	0.353	A
La Jolla Village Drive																	
Revelle College Drive to Villa La Jolla	6 Lane Prime Arterial	60,000	44,520	0.742	C	54,300	0.905	D	54,100	0.902	D	55,100	0.918	**E**	55,000	0.917	**E**
Villa La Jolla Drive to I-5 SB Ramps	6 Lane Prime Arterial	60,000	62,258	1.038	**F**	76,400	1.273	**F**	76,400	1.273	**F**	76,600	1.277	**F**	76,800	1.280	**F**
I-5 SB Ramps to I-5 NB Ramps	6 Lane Major Arterial	50,000	51,391	1.028	**F**	59,400	1.188	**F**	60,100	1.202	**F**	61,200	1.224	**F**	60,900	1.218	**F**
I-5 NB Ramps to Lebon Dr	6 Lane Major Arterial	50,000	44,335	0.887	D	52,000	1.040	**F**	52,500	1.050	**F**	53,200	1.064	**F**	53,200	1.064	**F**
Lebon Dr to Regents Road	6 Lane Major Arterial	50,000	42,863	0.857	D	49,900	0.998	**E**	50,100	1.002	**F**	51,500	1.030	**F**	51,500	1.030	**F**
Regents Road to Genesee Ave	6 Lane Major Arterial	50,000	38,474	0.769	C	52,400	1.048	**F**	52,400	1.048	**F**	50,500	1.010	**F**	50,700	1.014	**F**
Genesee Ave to Executive Way	6 Lane Major Arterial	50,000	45,117	0.902	**E**	49,400	0.988	**E**	49,600	0.992	**E**	48,900	0.978	**E**	49,200	0.984	**E**
Executive Way to Towne Center Dr	6 Lane Major Arterial	50,000	45,117	0.902	**E**	67,600	1.352	**F**	68,700	1.374	**F**	69,300	1.386	**F**	69,500	1.390	**F**
Towne Center Dr to I-805 SB Ramps	8 Lane Prime Arterial	80,000	58,833	0.735	C	67,600	0.845	C	68,700	0.859	C	69,300	0.866	C	69,500	0.869	C
Lebon Drive																	
Palmilla Drive to Nobel Drive	4 Lane Major Arterial	40,000	11,192	0.280	A	16,100	0.403	B	16,000	0.400	B	12,300	0.308	A	12,400	0.310	A
Nobel Drive to La Jolla Village Drive	5 Lane Major Arterial	45,000	9,212	0.205	A	13,600	0.302	A	13,600	0.302	A	11,300	0.251	A	11,800	0.262	A
Miramar Road																	
I-805 SB Ramps to I-805 NB Ramps	6 Lane Prime Arterial	60,000	66,139	1.102	**F**	64,600	1.077	**F**	65,700	1.095	**F**	65,400	1.090	**F**	66,000	1.100	**F**
I-805 NB Ramps to Nobel Dr	8 Lane Prime Arterial	80,000	47,991	0.600	B	51,400	0.643	C	50,400	0.630	C	49,600	0.620	B	50,300	0.629	C
Nobel Dr to Eastgate Mall	8 Lane Prime Arterial	80,000	64,557	0.807	C	69,000	0.863	C	69,000	0.863	C	69,000	0.863	C	69,100	0.864	C
Eastgate Mall to Miramar Mall	6 Lane Prime Arterial	60,000	67,748	1.129	**F**												
	7 Lane Prime Arterial	70,000				72,200	1.031	**F**	72,300	1.033	**F**	72,200	1.031	**F**	72,200	1.031	**F**
Miramar Mall to Camino Santa Fe	6 Lane Prime Arterial	60,000	67,748	1.129	**F**	72,200	1.203	**F**	72,300	1.205	**F**	72,200	1.203	**F**	72,200	1.203	**F**

Notes:

Bold values indicate roadway segments operating at LOS E or F.

(a) Road classifications are based on _____

(b) Average Daily Traffic (ADT) volumes for the roadway segments were determined from SANDAG Modeling

(c) The v/c Ratio is calculated by dividing the ADT volume by each respective roadway segment's capacity.

Table 7-3 Future Year Volume-Based Roadway Segment Analysis Summary (continued)

ROADWAY SEGMENT	ROADWAY CLASSIFICATION (a)	LOS E CAPACITY	Existing			Future Alt A Regents Bridge 6-lane Genesee			Future Alt B Regents Bridge 4-lane Genesee			Future Alt C No Bridge 6-lane Genesee			Future Alt D No Bridge 4-lane Genesee		
			ADT (b)	V/C RATIO (c)	LOS	ADT (b)	V/C RATIO (c)	LOS	ADT (b)	V/C RATIO (c)	LOS	ADT (b)	V/C RATIO (c)	LOS	ADT (b)	V/C RATIO (c)	LOS
North Torrey Pines Road																	
Science Park Rd to Genesee Ave	6 Lane Prime Arterial	60,000	29,303	0.488	B	40,400	0.673	C	40,600	0.677	C	41,300	0.688	C	42,100	0.702	C
Genesee Ave to UCSD Northpoint Dwy	6 Lane Major Arterial	50,000				23,700	0.474	B	23,700	0.474	B	23,800	0.476	B	23,900	0.478	B
UCSD Northpoint Dwy to Revelle College Dr	4 Lane Major Arterial	40,000	21,760	0.544	C	23,700	0.593	C	23,700	0.593	C	23,800	0.595	C	23,900	0.598	C
Nobel Drive																	
Villa La Jolla Dr to I-5 SB On Ramp	4 Lane Major Arterial	40,000	26,284	0.657	C	47,500	1.188	**F**	47,200	1.180	**F**	47,200	1.180	**F**	47,600	1.190	**F**
I-5 SB On Ramp to I-5 NB Off Ramp/University Center Lane	4 Lane Major Arterial	40,000	27,642	0.691	C	40,800	1.020	**F**	40,600	1.015	**F**	40,700	1.018	**F**	41,700	1.043	**F**
I-5 NB Off Ramp/University Center Lane to Lebon Dr	6 Lane Major Arterial	50,000	21,546	0.431	B	31,300	0.626	C	31,600	0.632	C	30,400	0.608	C	31,100	0.622	C
Lebon Dr to Regents Rd	6 Lane Major Arterial	50,000	21,256	0.425	B	27,300	0.546	B	27,800	0.556	B	30,700	0.614	C	31,300	0.626	C
Regents Rd to Genesee Ave	6 Lane Major Arterial	50,000	19,772	0.395	A	32,800	0.656	C	33,100	0.662	C	32,200	0.644	C	32,700	0.654	C
Genesee Ave to Towne Center Dr	4 Lane Major Arterial	40,000	18,484	0.462	B	32,400	0.810	D	30,400	0.760	D	32,000	0.800	D	30,800	0.770	D
Towne Center Dr to Judicial Dr	6 Lane Prime Arterial	60,000	17,261	0.288	A	25,000	0.417	B	24,900	0.415	A	25,000	0.417	B	26,200	0.437	B
Judicial Dr to Avenue of Flags	5 Lane Major Arterial	45,000	24,125	0.536	B	31,400	0.698	C	31,300	0.696	C	31,700	0.704	C	32,900	0.731	C
Avenue of Flags to Miramar Rd	4 Lane Prime Arterial	50,000	20,648	0.413	B	33,900	0.678	C	34,900	0.698	C	35,600	0.712	C	35,000	0.700	C
Regents Road																	
Genesee Ave to Eastgate Mall	2 Lane Collector (continuous left-turn lane)	15,000	6,260	0.417	B												
	4 Lane Collector	30,000				9,700	0.243	A	9,900	0.248	A	8,700	0.218	A	8,600	0.215	A
Eastgate Mall to La Jolla Village Dr	4 Lane Collector	30,000	15,245	0.508	C	18,900	0.630	C	19,100	0.637	C	16,000	0.533	C	16,100	0.537	C
La Jolla Village Dr to Nobel Dr	5 Lane Major Arterial	45,000	16,525	0.367	A	24,500	0.544	C	24,700	0.549	C	18,700	0.416	B	18,600	0.413	B
Nobel Dr to Rose Canyon	4 Lane Major Arterial	40,000	10,688	0.267	A	27,000	0.675	C	27,100	0.678	C	11,600	0.290	A	11,600	0.290	A
Rose Canyon to Governor Dr	2 Lane Collector (no fronting property)	10,000	1,940	0.194	A							2,400	0.240	A	2,400	0.240	A
	4 Lane Major Arterial	40,000				30,000	0.750	D	29,900	0.748	C						
Governor Dr to SR-52 WB Ramps	4 Lane Major Arterial	40,000	16,181	0.405	B	30,300	0.758	D	30,900	0.773	D	17,800	0.445	B	17,800	0.445	B
SR-52 WB Ramps to SR-52 EB Ramps	4 Lane Major Arterial	40,000	19,957	0.499	B	35,300	0.883	**E**	35,500	0.888	**E**	23,400	0.585	C	23,500	0.588	C
SR-52 EB Ramps to Luna Ave	4 Lane Major Arterial	40,000	21,268	0.532	C	40,600	1.015	**F**	40,800	1.020	**F**	25,500	0.638	C	25,600	0.640	C
Torrey Pines Road																	
La Jolla Village Drive to South	4 Lane Major Arterial	40,000	26,620	0.666	C	35,600	0.890	**E**	35,700	0.893	**E**	36,600	0.915	**E**	36,800	0.920	**E**
Towne Center Drive																	
End to La Jolla Village Dr	4 Lane Major Arterial	40,000	20,121	0.503	B	21,400	0.535	C	21,600	0.540	C	21,600	0.540	C	21,500	0.538	C
La Jolla Village Dr to Nobel Dr	4 Lane Major Arterial	40,000	13,785	0.345	A	18,600	0.465	B	19,500	0.488	B	20,700	0.518	B	19,800	0.495	B
Villa La Jolla Drive																	
Gilman Dr (South) to Nobel Dr	4 Lane Major Arterial	40,000	6,896	0.172	A	12,300	0.308	A	12,300	0.308	A	12,300	0.308	A	12,200	0.305	A
Nobel Dr to La Jolla Village Dr	4 Lane Major Arterial	40,000	16,011	0.400	B	24,300	0.608	C	24,100	0.603	C	23,700	0.593	C	23,700	0.593	C
La Jolla Village Dr to VA Medical Center	4 Lane Major Arterial	40,000	19,865	0.497	B	33,400	0.835	D	33,300	0.833	D	33,600	0.840	D	33,500	0.838	D

Notes:

Bold values indicate roadway segments operating at LOS E or F.

(a) Road classifications are based on _____

(b) Average Daily Traffic (ADT) volumes for the roadway segments were determined from SANDAG Modeling

(c) The v/c Ratio is calculated by dividing the ADT volume by each respective roadway segment's capacity.

Table 7-4 Future Year Speed-Based Corridor Analysis Summary - Alternatives A and B

ARTERIAL SEGMENT	Urban Street Class	Typical Free-Flow Speed	PEAK HOUR	Future Alt A Regents Bridge 6-lane Genesee			Future Alt B Regents Bridge 4-lane Genesee		
				TIME (S)	SPEED (a)	LOS (b)	TIME (S)	SPEED (a)	LOS (b)
Genesee Ave									
Northbound: SR-52 EB Ramps to N. Torrey Pines Rd	I	50 mph	AM	1,081	14.88	**F**	1,205	13.35	**F**
			MID	779	20.60	**E**	782	20.53	**E**
			PM	811	19.74	**E**	857	18.69	**E**
Southbound: N. Torrey Pines Rd to SR-52 EB Ramps	I	50 mph	AM	828	20.26	**E**	833	20.13	**E**
			MID	716	23.33	D	705	23.64	D
			PM	964	17.69	**E**	1,192	14.41	**F**
La Jolla Village Dr / Miramar Rd									
Eastbound: Torrey Pines Rd to Camino Sante Fe	I	50 mph	AM	819	18.41	**E**	822	18.34	**E**
			MID (c)	482	16.57	**E**	484	16.52	**E**
			PM	1,737	8.68	**F**	1,758	8.58	**F**
Westbound: Camino Sante Fe to Torrey Pines Rd	I	50 mph	AM	1,568	9.62	**F**	1,596	9.45	**F**
			MID (c)	537	14.15	**F**	1,184	16.78	**E**
			PM	950	15.88	**F**	948	15.91	**F**
Nobel Dr									
Eastbound: Villa La Jolla Dr to Miramar Rd	II	40 mph	AM	707	30.36	B	704	30.50	B
			MID	691	31.13	B	684	31.41	B
			PM	1,123	19.17	D	1,130	19.05	D
Westbound: Miramar Rd to Villa La Jolla Dr	II	40 mph	AM	618	33.92	B	619	33.85	B
			MID	658	31.91	B	657	31.95	B
			PM	853	24.61	C	876	23.97	C
Regents Rd									
Northbound: Luna Ave to Genesee Ave	II	40 mph	AM	877	15.35	**E**	898	14.95	**E**
			MID	638	21.01	D	641	20.89	D
			PM	795	16.88	**E**	797	16.89	**E**
Southbound: Genesee Ave to Luna Ave	II	40 mph	AM	654	20.59	D	636	21.11	D
			MID	592	22.62	C	593	22.60	C
			PM	952	14.11	**E**	1,028	13.10	**E**

Notes:

(a) Speed is calculated as the roadway segment distance divided by the travel time in miles per hour (mph).

(b) The arterial LOS is based on average through-vehicle travel speed for the segment or for the entire street under consideration and is influenced both by the number of signals per mile and by the intersection control delay.

(c) Midday Peak La Jolla Village Dr arterial segment from Torrey Pines Rd to I-805 Southbound Ramps

Table 7-5 Future Year Speed-Based Corridor Analysis Summary - Alternatives C and D

ARTERIAL SEGMENT	Urban Street Class	Typical Free-Flow Speed	PEAK HOUR	Future Alt C No Bridge 6-lane Genesee			Future Alt D No Bridge 4-lane Genesee		
				TIME (S)	SPEED (a)	LOS (b)	TIME (S)	SPEED (a)	LOS (b)
Genesee Ave									
Northbound: SR-52 EB Ramps to N. Torrey Pines Rd	I	50 mph	AM	1,265	12.72	**F**	1,789	8.99	**F**
			MID	797	20.14	**E**	856	18.77	**E**
			PM	807	19.84	**E**	874	18.34	**E**
Southbound: N. Torrey Pines Rd to SR-52 EB Ramps	I	50 mph	AM	839	19.99	**E**	846	19.85	**E**
			MID	725	23.06	D	733	22.79	D
			PM	1,373	12.55	**F**	1,628	10.65	**F**
La Jolla Village Dr / Miramar Rd									
Eastbound: Torrey Pines Rd to Camino Sante Fe	I	50 mph	AM	865	17.45	**E**	818	18.43	**E**
			MID (c)	483	16.54	**E**	484	16.52	**E**
			PM	1,732	8.71	**F**	1,732	8.71	**F**
Westbound: Camino Sante Fe to Torrey Pines Rd	I	50 mph	AM	1,574	9.58	**F**	1,562	9.66	**F**
			MID (c)	536	13.36	**F**	535	13.40	**F**
			PM	909	16.59	**E**	909	16.59	**E**
Nobel Dr									
Eastbound: Villa La Jolla Dr to Miramar Rd	II	40 mph	AM	713	30.11	B	715	30.01	B
			MID	690	31.17	B	685	31.36	B
			PM	1,203	17.89	D	1,223	17.61	D
Westbound: Miramar Rd to Villa La Jolla Dr	II	40 mph	AM	613	34.16	B	617	33.96	B
			MID	647	32.44	B	658	31.91	B
			PM	833	25.19	C	846	24.81	C
Regents Rd (N)									
Northbound: Rose Canyon to Genesee Ave	II	40 mph	AM	404	13	F	403	13	F
			MID	357	14	E	357	14	E
			PM	378	13	E	383	13	E
Southbound: Genesee Ave to Rose Canyon	II	40 mph	AM	331	15	E	328	15	E
			MID	317	16	E	316	16	E
			PM	376	13	E	400	13	F
Regents Rd (S)									
Northbound: Luna Ave to Rose Canyon	II	40 mph	AM	219	25	C	224	24	C
			MID	178	31	B	181	30	B
			PM	206	26	C	224	24	C
Southbound: Rose Canyon to Luna Ave	II	40 mph	AM	204	27	C	200	27	C
			MID	139	27	C	140	27	C
			PM	247	22	D	286	19	D

Notes:

(a) Speed is calculated as the roadway segment distance divided by the travel time in miles per hour (mph).

(b) The arterial LOS is based on average through-vehicle travel speed for the segment or for the entire street under consideration and is influenced both by the number of signals per mile and by the intersection control delay.

(c) Midday Peak La Jolla Village Dr arterial segment from Torrey Pines Rd to I-805 Southbound Ramps

Table 7-6 Future Year Speed-Based Corridor Analysis Impact Summary By Peak Period

	Peak Period	Alternative A	Alternative B	Alternative C	Alternative D
Genesee Avenue	AM	X	X	X	X
	MID	X	X	X	X
	PM		X	X	X
La Jolla Village Drive / Miramar Road	AM	X	X	X	X
	MID	X	X	X	X
	PM	X	X	X	X
Nobel Drive	AM	X	X		X
	MID	X	X	X	X
	PM	X	X	X	X
Regents Road	AM	X	X		
	MID				
	PM	X	X		

8 FREEWAYS

This section includes the results of existing conditions analyses at the study area freeway segments and ramps.

SUMMARY OF PLANNED PROJECTS

The following changes to the freeway network were included in the model and reflected in the freeway analysis:

- I-5 HOV lanes, north of La Jolla Village Drive
- DARs at I-5 and Voigt Drive
- I-805 HOV lanes throughout study area
- New hook ramp from Governor to SB I-805
- Direct access ramps at I-805 and Nobel Drive
- DARS at I-805 and Carroll Canyon (outside of community influence)
- Carroll Canyon extension to Sorrento Valley Road (outside of community influence)
- Carroll Canyon to I-805 SB Ramp modification (outside of community influence)

FUTURE NETWORK ANALYSIS

FREEWAY SEGMENTS

Table 8-1 displays the LOS analysis results for the freeway segments adjacent to the community during the morning and afternoon peak hours using the future freeway configuration and the future peak-hour traffic volumes. Freeway volumes were obtained from the SANDAG model runs prepared for this CPA. The freeways were evaluated using procedures for a freeway mainline as outlined in the HCM. The findings are illustrated in **Appendices A - D.**

While the speed and density varies for each alternative, the number of locations that would operate at poor LOS (E or F) during at least one peak period and the number of locations that would be considered to have a significant impact when compared to existing conditions is the same for each alternative.

- I-5 has one location with poor operations and a significant impact.
- All of I-805 (four segments) has poor operations and significant impacts.
- All of SR-52 (three segments) has poor operations and significant impacts.

In general, the failing segments are those that move traffic towards the University community in the morning and away from the University community in the afternoon. **Appendix F** includes the “k” and “d” factors published by Caltrans that are included in the analysis.

FREEWAY ENTRANCE RAMPS

Freeway entrance ramps that currently have ramp meters installed and in operation were evaluated to determine the delay and queue associated with the ramp meters. No new ramp meter locations were assumed.

Caltrans provided a range of possible meter rates at each location, which is adjusted based on traffic flow on the freeway. **Appendix F** contains the ramp meter rates provided by Caltrans. The most restrictive rates were used for this analysis. Ramp volumes were obtained from the intersection turning movements estimated at each location for each alternative.

Calculations were made using the peak hour demand at the entrance ramp and the most restrictive meter rate to quantify the number and frequency of vehicles that are processed through the meter. The excess demand not being processed is then quantified along with its respective queue length. **Table 8-2** displays the results of the freeway ramp meters in the study area.

Similar to the freeway mainline analysis, the number of locations that would experience delays over 15 minutes and the number of locations that would be considered to have a significant impact when compared to existing conditions is the same for each alternative.

- Seven of the ramp meters for I-5 have poor operations and significant impacts.
- One ramp meter for I-805 has poor operations and a significant impact.

It is expected that delays over 15 minutes lead people to use an alternate route or choose to use the ramp during a different time period.

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Table 8-1 Future Year Freeway Segment Level of Service Summary

	Freeway Segment	Dir	Existing					Alternative A: Regents Bridge, 6-Lane Genesee					Alternative B: Regents Bridge, 4-Lane Genesee				
			Lanes (One Direction)	Speed (mph)		LOS (a)		Lanes (One Direction)	Speed (mph)		LOS (a)			Speed (mph)		LOS (a)		
				AM	PM	AM	PM		AM	PM	AM	PM	Impact? (b)	AM	PM	AM	PM	Impact? (b)
I-5	SR-52 to Gilman Dr	NB	4	45.6	59.6	**E**	D	4	30.4	59.9	**E**	D	**Yes**	29.6	59.6	**E**	D	**Yes**
		SB	4	60.0	43.9	D	**E**	4	66.2	27.6	C	**E**	**Yes**	66.0	26.7	C	**E**	**Yes**
	Gilman Dr to Nobel Dr	NB	4	60.0	59.1	D	D	4	64.4	57.1	D	D	--	64.2	56.8	D	D	--
		SB	4	58.8	60.0	D	D	4	56.1	62.8	D	D	--	55.8	62.6	D	D	--
	Nobel Dr to La Jolla Village Dr	NB	4	60.0	60.0	D	D	4	67.1	62.2	C	D	--	67.0	62.0	C	D	--
		SB	4	60.0	60.0	D	D	4	61.5	66.1	D	C	--	61.3	66.0	D	C	--
	La Jolla Village Dr to Genesee Ave	NB	4	60.0	59.5	D	D	4	64.2	56.8	D	D	--	64.2	56.8	D	D	--
		SB	4	59.3	60.0	D	D	5	65.2	68.2	D	C	--	65.2	68.2	D	C	--
	La Jolla Village Dr to Genesee Ave HOV	NB	Does not exist					1	69.5	69.5	B	B	--	69.5	69.5	B	B	--
		SB						1	69.5	69.5	B	B	--	69.5	69.5	B	B	--
I-805	SR-52 to Governor Dr	NB	4	47.6	59.7	**E**	D	4	20.1	55.4	**F**	D	**Yes**	19.2	55.1	**F**	D	**Yes**
		SB	4	60.0	34.5	D	**F**	4	70.0	5.0	B	**F**	**Yes**	70.0	5.0	B	**F**	**Yes**
	SR-52 to Governor Dr HOV	NB	Does not exist					2	69.8	69.5	C	B	--	69.8	69.5	C	B	--
		SB						2	69.5	68.7	B	C	--	69.5	68.7	B	C	--
	Governor Dr to Nobel Dr	NB	4	41.3	60.0	**E**	D	4	7.4	59.9	**F**	D	**Yes**	6.9	59.8	**F**	D	**Yes**
		SB	4	60.0	48.4	D	**E**	4	69.4	22.2	C	**F**	**Yes**	69.4	21.7	C	**F**	**Yes**
	Governor Dr to Nobel Dr HOV	NB	Does not exist					2	69.2	69.5	C	B	--	69.1	69.5	C	B	--
		SB						2	69.5	69.7	B	C	--	69.5	69.7	B	C	--
	Nobel Dr to La Jolla Village Dr	NB	4	49.6	60.0	**E**	D	4	32.1	65.5	**E**	C	**Yes**	32.2	65.5	**E**	C	**Yes**
		SB	4	60.0	54.3	D	**E**	4	70.0	41.8	B	**E**	**Yes**	70.0	41.9	B	**E**	**Yes**
	Nobel Dr to La Jolla Village Dr HOV	NB	Does not exist					2	69.9	69.5	C	B	--	69.8	69.5	C	B	--
		SB						2	69.5	70.0	B	B	--	69.5	70.0	B	B	--
	La Jolla Village Dr to Mira Mesa Blvd	NB	4	50.0	60.0	**E**	D	4	35.1	66.1	**E**	C	**Yes**	35.1	66.1	**E**	C	**Yes**
		SB	4	60.0	54.5	D	**E**	4	70.0	44.2	B	**E**	**Yes**	70.0	44.2	B	**E**	**Yes**
	La Jolla Village Dr to Mira Mesa Blvd HOV	NB	Does not exist					2	69.9	69.5	C	B	--	69.8	69.5	C	B	--
		SB						2	69.5	70.0	B	B	--	69.5	70.0	B	B	--
SR-52	I-5 to Regents Rd	EB	2	60.0	45.1	D	**E**	2	65.0	16.7	D	**F**	**Yes**	64.9	16.5	D	**F**	**Yes**
		WB	2	55.3	60.0	**E**	D	2	39.9	60.6	**E**	D	**Yes**	39.7	60.6	**E**	D	**Yes**
	Regents Rd to Genesee Ave	EB	2	59.3	47.7	D	**E**	2	53.3	21.8	D	**F**	**Yes**	53.0	21.1	D	**F**	**Yes**
		WB	2	57.1	59.9	D	D	2	44.8	58.2	**E**	D	**Yes**	44.4	57.9	**E**	D	**Yes**
	Genesee Ave to I-805	EB	2	57.6	39.9	D	**E**	2	45.2	5.0	**E**	**F**	**Yes**	46.2	5.8	**E**	**F**	**Yes**
		WB	2	53.7	59.2	**E**	D	2	33.9	51.9	**E**	D	**Yes**	35.2	52.6	**E**	D	**Yes**

Notes:

(a) The LOS for the respective freeway segments were based on the methodologies contained in Chapter 23 of the 2000 Highway Capacity Manual.

(b) A significant impact resulted in a decrease of speeds of more than 1.0 mph at LOS E and 0.5 mph and LOS F.

Table 8-1 Future Year Freeway Segment Level of Service Summary (continued)

	Freeway Segment	Dir	Existing					Alternative C No Bridge 6-Lane Genesee					Alternative D No Bridge 4-Lane Genesee				
			Lanes (One Direction)	Speed (mph)		LOS (a)		Lanes (One Direction)	Speed (mph)		LOS (a)			Speed (mph)		LOS (a)		
				AM	PM	AM	PM		AM	PM	AM	PM	Impact? (b)	AM	PM	AM	PM	Impact? (b)
I-5	SR-52 to Gilman Dr	NB	4	45.6	59.6	**E**	D	4	25.7	58.2	**E**	D	**Yes**	25.0	57.9	**F**	D	**Yes**
		SB	4	60.0	43.9	D	**E**	4	65.3	22.6	D	**F**	**Yes**	65.1	21.9	D	**F**	**Yes**
	Gilman Dr to Nobel Dr	NB	4	60.0	59.1	D	D	4	63.6	55.7	D	D	--	63.4	55.3	D	D	--
		SB	4	58.8	60.0	D	D	4	54.6	61.9	D	D	--	54.2	61.6	D	D	--
	Nobel Dr to La Jolla Village Dr	NB	4	60.0	60.0	D	D	4	66.8	61.5	C	D	--	66.8	61.5	C	D	--
		SB	4	60.0	60.0	D	D	4	60.7	65.6	D	C	--	60.8	65.7	D	C	--
	La Jolla Village Dr to Genesee Ave	NB	4	60.0	59.5	D	D	4	64.3	57.0	D	D	--	64.2	56.8	D	D	--
		SB	4	59.3	60.0	D	D	5	65.3	68.2	D	C	--	65.1	68.1	D	C	--
	La Jolla Village Dr to Genesee Ave HOV	NB	Does not exist					1	69.5	69.5	B	B	--	69.5	69.5	B	B	--
		SB						1	69.5	69.5	B	B	--	69.5	69.5	B	B	--
I-805	SR-52 to Governor Dr	NB	4	47.6	59.7	**E**	D	4	18.2	54.7	**F**	D	**Yes**	17.0	54.3	**F**	D	**Yes**
		SB	4	60.0	34.5	D	**F**	4	70.0	5.0	B	**F**	**Yes**	70.0	5.0	B	**F**	**Yes**
	SR-52 to Governor Dr HOV	NB	Does not exist					2	69.7	69.5	C	B	--	69.7	69.5	C	B	--
		SB						2	69.5	68.5	B	C	--	69.5	68.4	B	C	--
	Governor Dr to Nobel Dr	NB	4	41.3	60.0	**E**	D	4	5.0	59.2	**F**	D	**Yes**	5.0	59.0	**F**	D	**Yes**
		SB	4	60.0	48.4	D	**E**	4	69.3	20.1	C	**F**	**Yes**	69.3	19.3	C	**F**	**Yes**
	Governor Dr to Nobel Dr HOV	NB	Does not exist					2	69.0	69.5	C	B	--	68.9	69.5	C	B	--
		SB						2	69.5	69.6	B	C	--	69.5	69.6	B	C	--
	Nobel Dr to La Jolla Village Dr	NB	4	49.6	60.0	**E**	D	4	30.7	65.2	**E**	D	**Yes**	30.5	65.2	**E**	D	**Yes**
		SB	4	60.0	54.3	D	**E**	4	70.0	40.7	B	**E**	**Yes**	70.0	40.5	B	**E**	**Yes**
	Nobel Dr to La Jolla Village Dr HOV	NB	Does not exist					2	69.8	69.5	C	B	--	69.8	69.5	C	B	--
		SB						2	69.5	70.0	B	B	--	69.5	70.0	B	B	--
	La Jolla Village Dr to Mira Mesa Blvd	NB	4	50.0	60.0	**E**	D	4	34.6	66.0	**E**	C	**Yes**	35.0	66.1	**E**	C	**Yes**
		SB	4	60.0	54.5	D	**E**	4	70.0	43.8	B	**E**	**Yes**	70.0	44.1	B	**E**	**Yes**
	La Jolla Village Dr to Mira Mesa Blvd HOV	NB	Does not exist					2	69.8	69.5	C	B	--	69.8	69.5	C	B	--
		SB						2	69.5	70.0	B	B	--	69.5	70.0	B	B	--
SR-52	I-5 to Regents Rd	EB	2	60.0	45.1	D	**E**	2	64.1	11.6	D	**F**	**Yes**	63.9	10.8	D	**F**	**Yes**
		WB	2	55.3	60.0	**E**	D	2	36.6	59.3	**E**	D	**Yes**	36.1	59.1	**E**	D	**Yes**
	Regents Rd to Genesee Ave	EB	2	59.3	47.7	D	**E**	2	54.1	23.8	D	**F**	**Yes**	53.7	22.9	D	**F**	**Yes**
		WB	2	57.1	59.9	D	D	2	46.0	58.8	**E**	D	**Yes**	45.4	58.5	**E**	D	**Yes**
	Genesee Ave to I-805	EB	2	57.6	39.9	D	**E**	2	46.1	5.6	**E**	**F**	**Yes**	47.3	8.2	**E**	**F**	**Yes**
		WB	2	53.7	59.2	**E**	D	2	35.0	52.5	**E**	D	**Yes**	36.6	53.5	**E**	D	**Yes**

Notes:

(a) The LOS for the respective freeway segments were based on the methodologies contained in Chapter 23 of the 2000 Highway Capacity Manual.

(b) A significant impact resulted in a decrease of speeds of more than 1.0 mph at LOS E and 0.5 mph and LOS F.

Table 8-2 Future Year Freeway Ramp Metering Operations Summary

On-Ramp	Scenario	Total General Purpose Peak Hour Volume (veh/hr/ln)		Ramp Meter Rate (veh/hr/ln) (a)		Excess Demand (veh/hr)		Delay (min)		Queue Length (ft/ln)		Impact? (b)
		AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	
I-5 SB & Gilman Dr	Existing	294	646	n/a	635		22		2		275	
	Alt A (Regents Bridge, 6-Lane Genesee)	328	756	n/a	478		556		**70**		6950	Yes
	Alt B (Regents Bridge, 4-Lane Genesee)	329	760	n/a	478		564		**71**		7050	Yes
	Alt C (No Bridge, 6-Lane Genesee)	361	806	n/a	478		656		**82**		8200	Yes
	Alt D (No Bridge, 4-Lane Genesee)	363	806	n/a	478		656		**82**		8200	Yes
I-5 SB & Nobel Dr	Existing	163	465	n/a	528		0		0		0	
	Alt A (Regents Bridge, 6-Lane Genesee)	226	676	n/a	528		296		**34**		3700	Yes
	Alt B (Regents Bridge, 4-Lane Genesee)	227	679	n/a	528		302		**34**		3775	Yes
	Alt C (No Bridge, 6-Lane Genesee)	242	721	n/a	528		386		**44**		4825	Yes
	Alt D (No Bridge, 4-Lane Genesee)	251	746	n/a	528		436		**50**		5450	Yes
I-5 NB & La Jolla Village Dr (WB to NB)	Existing	390	435	n/a	555		0		0		0	
	Alt A (Regents Bridge, 6-Lane Genesee)	723	807	n/a	555		252		**27**		6300	Yes
	Alt B (Regents Bridge, 4-Lane Genesee)	712	795	n/a	555		240		**26**		6000	Yes
	Alt C (No Bridge, 6-Lane Genesee)	644	1191	n/a	555		636		**69**		15900	Yes
	Alt D (No Bridge, 4-Lane Genesee)	669	747	n/a	555		192		**21**		4800	Yes
I-5 NB & La Jolla Village Dr (EB to NB)	Existing	675	998	Ramp meter was not turned on								
	Alt A (Regents Bridge, 6-Lane Genesee)	766	1135	n/a	643		492		**46**		12300	Yes
	Alt B (Regents Bridge, 4-Lane Genesee)	770	1141	n/a	643		498		**46**		12450	Yes
	Alt C (No Bridge, 6-Lane Genesee)	788	1167	n/a	643		524		**49**		13100	Yes
	Alt D (No Bridge, 4-Lane Genesee)	782	1160	n/a	643		517		**48**		12925	Yes
I-5 SB & La Jolla Village Dr (WB to SB)	Existing	251	876	n/a	865		11		1		275	
	Alt A (Regents Bridge, 6-Lane Genesee)	255	889	n/a	643		246		**23**		6150	Yes
	Alt B (Regents Bridge, 4-Lane Genesee)	263	913	n/a	643		270		**25**		6750	Yes
	Alt C (No Bridge, 6-Lane Genesee)	278	953	n/a	643		310		**29**		7750	Yes
	Alt D (No Bridge, 4-Lane Genesee)	272	936	n/a	643		293		**27**		7325	Yes
I-5 SB & La Jolla Village Dr (EB to SB)	Existing	177	656	n/a	570		86		9		2150	
	Alt A (Regents Bridge, 6-Lane Genesee)	291	1079	n/a	343		736		**129**		18400	Yes
	Alt B (Regents Bridge, 4-Lane Genesee)	295	1089	n/a	343		746		**130**		18650	Yes
	Alt C (No Bridge, 6-Lane Genesee)	310	1137	n/a	343		794		**139**		19850	Yes
	Alt D (No Bridge, 4-Lane Genesee)	318	1166	n/a	343		823		**144**		20575	Yes
I-5 NB & Genesee Ave	Existing	Ramp meter was not turned on due to construction at interchange										
	Alt A (Regents Bridge, 6-Lane Genesee)	251	791	n/a	500		582		**70**		7275	Yes
	Alt B (Regents Bridge, 4-Lane Genesee)	250	791	n/a	500		582		**70**		7275	Yes
	Alt C (No Bridge, 6-Lane Genesee)	251	789	n/a	500		578		**69**		7225	Yes
	Alt D (No Bridge, 4-Lane Genesee)	250	787	n/a	500		574		**69**		7175	Yes
I-5 SB & Genesee Ave	Existing	Ramp meter was not turned on due to construction at interchange										
	Alt A (Regents Bridge, 6-Lane Genesee)	116	437	n/a	500		0		0		0	--
	Alt B (Regents Bridge, 4-Lane Genesee)	117	439	n/a	500		0		0		0	--
	Alt C (No Bridge, 6-Lane Genesee)	118	444	n/a	500		0		0		0	--
	Alt D (No Bridge, 4-Lane Genesee)	120	449	n/a	500		0		0		0	--

Notes:

(a) The ramp meter rate are based on the most restrictive rate obtained from Caltrans and assumed to be the same under the Future Year scenarios.

(b) A significant impact resulted in an increase in delay of more than 2 min with ramp delays less than 15 minutes or more than 1 min with ramp delays greater than 15 minutes.

Table 8-2 Future Year Freeway Ramp Metering Operations Summary (continued)

On-Ramp	Scenario	Total General Purpose Peak Hour Volume (veh/hr/ln)		Ramp Meter Rate (veh/hr/ln) (a)		Excess Demand (veh/hr)		Delay (min)		Queue Length (ft/ln)		Impact? (b)
		AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	
I-805 NB & La Jolla Village Dr (WB to NB)	Existing	385	357	804	n/a	0		0		0		
	Alt A (Regents Bridge, 6-Lane Genesee)	392	363	804	n/a	0		0		0		--
	Alt B (Regents Bridge, 4-Lane Genesee)	391	363	804	n/a	0		0		0		--
	Alt C (No Bridge, 6-Lane Genesee)	392	365	804	n/a	0		0		0		--
	Alt D (No Bridge, 4-Lane Genesee)	394	364	804	n/a	0		0		0		--
I-805 NB & La Jolla Village Dr (EB to NB)	Existing	642	1097	746	n/a	0		0		0		
	Alt A (Regents Bridge, 6-Lane Genesee)	637	1090	746	n/a	0		0		0		--
	Alt B (Regents Bridge, 4-Lane Genesee)	630	1079	746	n/a	0		0		0		--
	Alt C (No Bridge, 6-Lane Genesee)	661	1131	746	n/a	0		0		0		--
	Alt D (No Bridge, 4-Lane Genesee)	681	1162	746	n/a	0		0		0		--
I-805 SB & La Jolla Village Dr (WB to SB)	Existing	398	512	n/a	704		0		0		0	
	Alt A (Regents Bridge, 6-Lane Genesee)	402	526	n/a	704		0		0		0	--
	Alt B (Regents Bridge, 4-Lane Genesee)	401	526	n/a	704		0		0		0	--
	Alt C (No Bridge, 6-Lane Genesee)	402	526	n/a	704		0		0		0	--
	Alt D (No Bridge, 4-Lane Genesee)	408	535	n/a	704		0		0		0	--
I-805 SB & La Jolla Village Dr (EB to SB)	Existing	177	407	n/a	593		0		0		0	
	Alt A (Regents Bridge, 6-Lane Genesee)	209	491	n/a	593		0		0		0	--
	Alt B (Regents Bridge, 4-Lane Genesee)	209	492	n/a	593		0		0		0	--
	Alt C (No Bridge, 6-Lane Genesee)	221	518	n/a	593		0		0		0	--
	Alt D (No Bridge, 4-Lane Genesee)	218	511	n/a	593		0		0		0	--
I-805 SB & Nobel Dr	Existing	272	269	n/a	229		80		**21**		1000	
	Alt A (Regents Bridge, 6-Lane Genesee)	278	273	n/a	229		88		**23**		1100	**Yes**
	Alt B (Regents Bridge, 4-Lane Genesee)	277	272	n/a	229		86		**23**		1075	**Yes**
	Alt C (No Bridge, 6-Lane Genesee)	304	299	n/a	229		140		**37**		1750	**Yes**
	Alt D (No Bridge, 4-Lane Genesee)	299	294	n/a	229		130		**34**		1625	**Yes**
I-805 NB Governor Dr	Existing	316	270	385	n/a	0		0		0		--
	Alt A (Regents Bridge, 6-Lane Genesee)	303	260	385	n/a	0		0		0		--
	Alt B (Regents Bridge, 4-Lane Genesee)	310	266	385	n/a	0		0		0		--
	Alt C (No Bridge, 6-Lane Genesee)	310	264	385	n/a	0		0		0		--
	Alt D (No Bridge, 4-Lane Genesee)	320	274	385	n/a	0		0		0		--
I-805 SB & Governor Dr	Existing	387	812	n/a	768		44		3		1100	
	Alt A (Regents Bridge, 6-Lane Genesee)	219	459	n/a	768		0		0		0	--
	Alt B (Regents Bridge, 4-Lane Genesee)	220	464	n/a	768		0		0		0	--
	Alt C (No Bridge, 6-Lane Genesee)	222	464	n/a	768		0		0		0	--
	Alt D (No Bridge, 4-Lane Genesee)	255	534	n/a	768		0		0		0	--

Notes:

(a) The ramp meter rate are based on the most restrictive rate obtained from Caltrans and assumed to be the same under the Future Year scenarios.

(b) A significant impact resulted in an increase in delay of more than 2 min with ramp delays less than 15 minutes or more than 1 min with ramp delays greater than 15 minutes.

9 PUBLIC TRANSIT

There are several types of transit currently serving the University community, a trolley line currently under construction, and more planned changes to transit service in the area. **Figure 9-1** shows an overview of the current and planned transit system within the community.

EXISTING NETWORK

Data regarding the existing setting was collected in 2015 and is documented in more detail in the University Community Existing Conditions Report. The following is a quick summary of available transit in the community.

BUS ROUTES

Bus routes within the University community include:

- MTS Route 30: Downtown – UTC/VA Medical Center
- MTS Routes 31 and 921: UTC – Mira Mesa
- MTS Route 41: Fashion Valley – UCSD/VA Medical Center
- MTS Route 50: Downtown – UTC Express
- MTS Route 150: Downtown – UTC/ VA Hospital Express
- MTS Route 60: Euclid Transit Center – UTC
- NCTD Route 101: Oceanside – VA/UCSD
- MTS Route 105: Old Town – UTC
- MTS SuperLoop 201/202: UTC Transit Center – UCSD
- MTS SuperLoop 204: UTC East Loop
- MTS Rapid Route 237: Rancho Bernardo – UCSD
- MTS Coaster Connection Route 978: Torrey Pines
- MTS Coaster Connection Route 979: North University City

A description and map of each of the bus routes within the community is provided in **Appendix L**.

SHUTTLE SERVICES

The UCSD Transportation Services provides eight shuttle routes that serve the University community. The shuttle routes specifically serve the campus, medical centers, and other key points off campus. Students, faculty, and staff can ride the shuttles for free. All shuttles operate during academic quarters with some shuttles operating year-round. A description and map of the shuttle routes is provided in **Appendix L.**

RAIL SERVICES

There are two rail lines that travel through the University community: the NCTD COASTER and the AMTRAK Pacific Surfliner.

- The COASTER is a commuter rail line operated by NCTD that runs north to south from Oceanside to downtown San Diego through the University community. The COASTER serves eight stations including Santa Fe Depot, Old Town, Sorrento Valley, Solana Beach, Encinitas, Carlsbad Poinsettia, Carlsbad Village, and Oceanside. It takes about an hour to travel the entire route from downtown San Diego (Santa Fe Depot) to the Oceanside Transit Center.

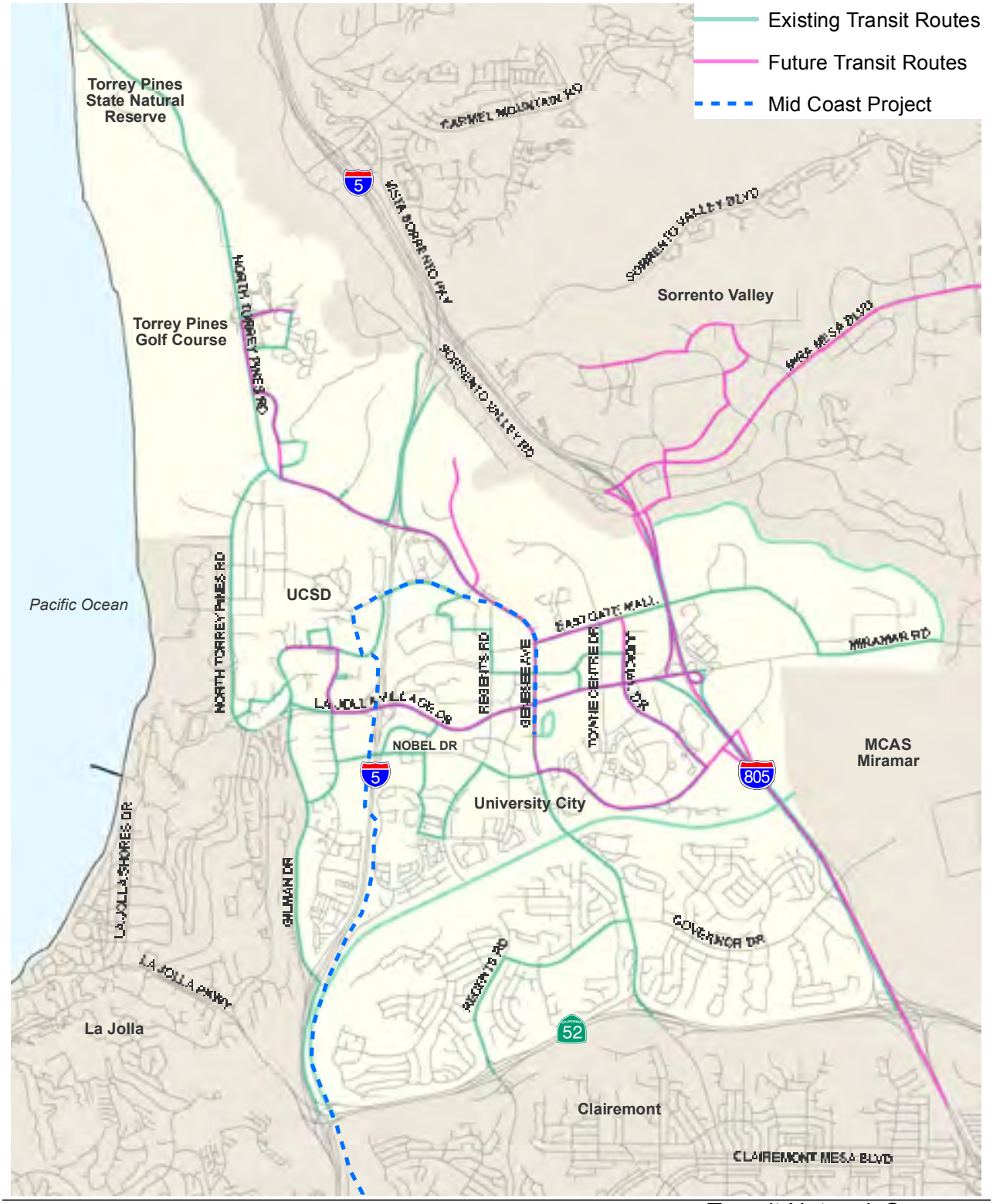
- The Pacific Surfliner is a passenger rail line operated by AMTRAK that runs north to south from San Luis Obispo to downtown San Diego through the University community. The Pacific Surfliner serves thirty stations including the eight COASTER stations stated above, as well as Anaheim, Santa Barbara, and Los Angeles.

FUTURE NETWORK CHANGES

A key focus of the Regional Transportation Plan prepared by the San Diego Association of Governments (SANDAG) is to develop an ambitious and far-reaching transit network that significantly expands the role that transit plays. This regional goal greatly applies to the transit network in the University community, as there have been significant investments made in the transit network that will be operational in the near future. As identified in the SANDAG 2050 Regional Transportation Plan (2050 RTP), these improvements include different transit options such as Light Rail Transit (LRT), Bus Rapid Transit (BRT), and High Frequency (Rapid) Local Bus. The Future Year conditions included transit projects identified in the 2050 RTP that are planned to be implemented by Year 2035. The following summarizes these planned improvements for the University community:

- **COASTER Improvements**. The COASTER commuter train is planned to be expanded to have double tracking and increased frequencies between Oceanside and downtown San Diego. It is planned to achieve 20 minute peak headways. The expected year for completion of this improvement is 2018.
- **Mid-Coast LRT Extension**. The Blue Line Trolley is planned to be extended from the Old Town Transit Center to the UTC Transit Center. Stops with in the University Community are planned to be located at Nobel Drive near I-5, the VA Medical Center, UCSD, Voigt Drive, Executive Drive, and the UTC Transit Center. The expected year for completion of this improvement is 2018.
- **Route 470** is a planned BRT service connecting Escondido to UTC/UCSD. The expected year for completion of this improvement is 2018.
- **Route 680** is a planned BRT service connecting Otay Mesa to Sorrento Mesa using I-805. There is a possible direct access ramp (DAR) connection to the University community near UTC. The expected year for completion of this improvement is 2018.
- **Route 688** is a planned BRT Express service between San Ysidro and Sorrento Mesa that would serve the University community. The expected year for completion of this improvement is 2018.
- **Route 689** is a planned BRT Express service between Millenia/Otay Ranch and UTC/Torrey Pines that would serve the University community and provide connections to the research and employment center along North Torrey Pines Road. The expected year for completion of this improvement is 2018.
- **UTC Area Super Loop** is planned to have increased Rapid bus frequency of routes 201 and 202 to provide 10 minute peak and 15 minute off-peak headways. The expected year for completion of this improvement is 2018. The off-peak headway is planned to be further reduced to 10 minute headways by 2035.
- **Route 870** is planned to provide BRT service between El Cajon and UTC/Campus point during peak hours and would extend the existing Route 870, serving the University community. The expected year for completion of this improvement is 2020.
- **Route 561** is a planned Trolley line or Urban Aerial Ropeway that would connect between UTC and Mira Mesa. This would serve as an extension to the Mid-Coast LRT line. The expected year for completion of this improvement is 2030.
- **Route 30** is a planned addition of Rapid Bus service to the existing route, providing 10-minute headways and connections between Old Town and Sorrento Mesa including the UTC area. The expected year for completion of this improvement is 2030.
- **Route 47** is a planned Rapid Bus service providing connections between Oceanside and UTC. The expected year for completion of this improvement is 2030.

FIGURE 9-1



Transit Network Summary

TRANSIT TRAVEL TIMES

Tables 9-1 through 9-5 compare the vehicle travel time along the key corridors in the University community. This comparison was made to assess the impact on overall travel time as a result of changes to the network.

The travel time along Genesee Avenue is greatly affected by the network alternative which include MTS Routes 41, 50, 105. Alternative A results in a significantly less travel time from one end of the community to the other when compared to other alternatives. Alternative D has the longest travel times along Genesee Avenue.

The travel times along La Jolla Village Drive and Nobel Drive vary slightly between the alternatives but are not heavily influenced by the network alternative.

The travel time along Regents Road is similar for Alternatives A and B, and similar for Alternatives C and D. There is not a good comparison between all alternatives as providing the bridge connection is a different travel pattern to evaluate and increases the overall distance traveled along Regents Road consecutively. No conclusions can be made from the Regents Road travel time analyses. Feedback received from MTS was that the Regents Road bridge would likely not be a candidate for many transit routes anyways, so travel time may not be an important consideration.

COMMUNITY RECOMMENDATIONS

As discussed in the existing conditions report, one of the key chokepoints identified that causes delays for buses in the community was the portion of Genesee Avenue between Nobel Drive and Governor Drive. Delays occur frequently during peak periods and there is no alternative route to cross Rose Canyon. Future travel time through this corridor would vary depending on the selected alternative. With Alternatives A and C, this portion of the corridor would have increased capacity. Alternative B may also have some increased capacity at select locations along this corridor. Alternative D would not provide increased capacity for vehicle travel along Genesee Avenue between Nobel Drive and SR-52 and travel time duration and consistency would remain a concern for buses traveling this route. For Alternatives C and D, the roadway cross-section should be evaluated to consider the implementation of transit bypass lanes at congested areas and intersections.

Table 9-1 Genesee Avenue Travel Time by Alternative Summary

Peak Period	Dir	Existing	Future Year			
			Alt A Regents Bridge 6-lane Genesee	Alt B Regents Bridge 4-lane Genesee	Alt C No Bridge 6-lane Genesee	Alt D No Bridge 4-lane Genesee
Genesee Ave: SR-52 to Torrey Pines Road (seconds)						
AM Peak	*NB*	*845.3*	*1,081.4*	*1,205.1*	*1,265.3*	*1,789.1*
	SB	*676.5*	827.5	*833.1*	*839.3*	*845.8*
Midday Peak	*NB*	*705.2*	*779.4*	*781.9*	*797.1*	*855.5*
	SB	*629.5*	*716.4*	*704.7*	*724.7*	*732.6*
PM Peak	*NB*	*799.6*	*811.4*	*857.2*	*807.4*	*873.7*
	SB	*874.5*	*964.3*	*1,192.2*	*1,373.0*	*1,627.7*

Table 9-2 La Jolla Village Drive / Miramar Road Travel Time by Alternative Summary

Peak Period	Dir	Existing	Future Year			
			Alt A Regents Bridge 6-lane Genesee	Alt B Regents Bridge 4-lane Genesee	Alt C No Bridge 6-lane Genesee	Alt D No Bridge 4-lane Genesee
La Jolla Village Dr: Torrey Pines to Camino Santa Fe (seconds)						
AM Peak	*EB*	*725.3*	*819.2*	*822.3*	*864.6*	*818.3*
	WB	*1,074.4*	*1,568.3*	*1,595.9*	*1,573.9*	*1,562.0*
Midday Peak	*EB*	*435.0*	*482.4*	*483.9*	*483.2*	*483.9*
	WB	*377.3*	*537.0*	*1,184.0*	*536.1*	*534.6*
PM Peak	*EB*	*1,312.5*	*1,737.0*	*1,758.3*	*1,731.6*	*1,731.6*
	WB	*896.5*	*949.7*	*948.2*	*909.3*	*909.3*

Table 9-3 Nobel Drive Travel Time by Alternative Summary

Peak Period	Dir	Existing	Future Year			
			Alt A Regents Bridge 6-lane Genesee	Alt B Regents Bridge 4-lane Genesee	Alt C No Bridge 6-lane Genesee	Alt D No Bridge 4-lane Genesee
Nobel Dr: Villa La Jolla Dr to Miramar Rd (seconds)						
AM Peak	*EB*	*671.7*	*706.8*	*703.5*	*712.6*	*715.0*
	WB	*606.5*	*617.6*	*619.0*	*613.4*	*617.0*
Midday Peak	*EB*	*614.6*	*690.5*	*684.2*	*689.5*	*685.4*
	WB	*575.4*	*657.8*	*656.9*	*647.0*	*657.8*
PM Peak	*EB*	*730.9*	*1,122.9*	*1,130.1*	*1,203.2*	*1,222.8*
	WB	*704.1*	*852.9*	*875.6*	*833.2*	*845.8*

Table 9-4 Regents Road Travel Time by Alternative Summary – Alternatives A and B

Peak Period	Dir	Future Year	
		Alt A Regents Bridge 6-lane Genesee	Alt B Regents Bridge 4-lane Genesee
Regents Rd: Luna Ave to Genesee Ave (seconds)			
AM Peak	*NB*	*877.1*	*898.4*
	SB	*653.9*	*636.0*
Mid-Day Peak	*NB*	*637.5*	*641.1*
	SB	*592.1*	*592.5*
PM Peak	*NB*	*795.4*	*797.3*
	SB	*951.6*	*1,027.9*

Table 9-5 Regents Road Travel Time by Alternative Summary – Alternatives C and D

Peak Period	Dir	Existing	Future Year	
			Alt C No Bridge 6-lane Genesee	Alt D No Bridge 4-lane Genesee
Regents Rd (N): Arriba St to Genesee Ave (seconds)				
AM Peak	*NB*	*406.9*	*404.3*	*402.6*
	SB	*342.5*	*331.0*	*328.3*
Mid-Day Peak	*NB*	*349.9*	*356.5*	*356.6*
	SB	*316.0*	*316.7*	*315.9*
PM Peak	*NB*	*349.0*	*378.1*	*382.5*
	SB	*389.7*	*376.3*	*400.3*
Regents Rd (S): Luna Ave to Governor Dr (seconds)				
AM Peak	*NB*	*373.3*	*218.9*	*224.4*
	SB	*255.8*	*204.4*	*200.4*
Mid-Day Peak	*NB*	*659.2*	*177.9*	*181.0*
	SB	*207.5*	*138.8*	*139.6*
PM Peak	*NB*	*253.4*	*206.3*	*224.1*
	SB	*307.7*	*246.6*	*285.9*

10 SIGNIFICANCE OF IMPACTS AND MITIGATION MEASURES

This chapter addresses the project impacts for each of the future alternatives based on a comparison between the Future Year conditions and the Existing conditions. Per the City's significance thresholds and the analysis methodology presented in this report, the following cumulative impacts were determined:

SIGNIFICANCE OF IMPACTS

INTERSECTIONS

- Genesee Avenue & John Hopkins Drive
- Genesee Avenue & Scripps Hospital
- Genesee Avenue & La Jolla Village Drive
- Genesee Avenue & Esplanade Court
- Genesee Avenue & Nobel Drive
- Genesee Avenue & Decoro Street
- Genesee Avenue & Centurion Square
- Genesee Avenue & Governor Drive
- Genesee Avenue & SR-52 Westbound Ramps
- Genesee Avenue & SR-52 Eastbound Ramps
- Genesee Avenue & Appleton Street/Lehrer Drive
- Genesee Avenue & Torrey Pines Road
- La Jolla Village Drive Eastbound & Gillman Drive
- La Jolla Village Drive & Villa La Jolla Drive
- La Jolla Village Drive & I-5 Southbound Off-Ramps
- La Jolla Village Drive & Regents Road
- La Jolla Village Drive & Executive Way
- La Jolla Village Drive & Towne Centre Drive
- La Jolla Village Drive & I-805 Southbound Ramps
- Miramar Road & Eastgate Mall
- Miramar Road & Camino Santa Fe
- Nobel Drive & La Jolla Village Square Driveway
- Nobel Drive & I-5 Southbound On-Ramp
- Nobel Drive & Regents Road
- Nobel Drive & Arriba Street
- Nobel Drive & Governor Drive
- Nobel Drive & Luna Avenue
- N. Torrey Pines Road & La Jolla Shores Drive
- Towne Centre Drive & Eastgate Mall
- Executive Way & Executive Drive
- Judicial Drive & Eastgate Mall
- Governor Drive & I-805 Northbound Ramps
- Gilman Drive & I-5 Southbound Ramps

SEGMENTS

- Eastgate Mall from Genesee to Easter Way
- Eastgate Mall from Judicial Drive to Eastgate Drive (Freeway Overpass)
- Eastgate Mall from Eastgate Drive to Miramar Road
- Genesee Avenue from La Jolla Village Drive to Esplanade Court
- Genesee Avenue from Nobel Drive to Centurion Square
- Genesee Avenue from Centurion Square to Governor Drive
- Genesee Avenue from Governor Drive to SR-52 Westbound Ramps
- Genesee Avenue from SR-52 Westbound Ramps to SR-52 Eastbound Ramps
- Genesee Avenue from SR-52 Eastbound Ramps to Lehrer Drive
- La Jolla Village Drive from Revelle College Drive to Villa La Jolla
- La Jolla Village Drive from Villa La Jolla Drive to I-5 Southbound Ramps
- La Jolla Village Drive from I-5 Southbound Ramps to I-5 Northbound Ramps
- La Jolla Village Drive from I-5 Northbound Ramps to Lebon Drive
- La Jolla Village Drive from Lebon Drive to Regents Road
- La Jolla Village Drive from Regents Road to Genesee Avenue
- La Jolla Village Drive from Executive Way to Towne Centre Drive
- La Jolla Village Drive from Towne Centre Drive to I-805 Southbound Ramps
- Miramar Road from Miramar Mall to Camino Santa Fe
- Nobel Drive from Villa La Jolla Drive to I-5 Southbound On-Ramp
- Nobel Drive from I-5 Southbound On-Ramp to I-5 Northbound Off-Ramp/University Center Lane
- Nobel Drive from Avenue of Flags to Miramar Road
- Regents Road from SR-52 Westbound Ramps to SR-52 Eastbound Ramps
- Regents Road from SR-52 Eastbound Ramps to Luna Avenue
- Torrey Pines Road from La Jolla Village Drive to South

CORRIDORS

- Genesee Avenue, between SR-52 and North Torrey Pines Road
- La Jolla Village Drive, between Torrey Pines Road and I-805
- Nobel Drive, between La Jolla Village Square and Miramar Road
- Regents Road, between Luna Avenue and Genesee Avenue

FREEWAY SEGMENTS

- Interstate 5 between:
    - SR-52 and Gilman Drive
- Interstate 805 between:
    - SR-52 and Governor Drive
    - Governor Drive and Nobel Drive
    - Nobel Drive and La Jolla Village Drive
    - La Jolla Village Drive and Mira Mesa Boulevard
- State Route 52 between:
    - Interstate 5 and Regents Road
    - Regents Road and Genesee Avenue
    - Genesee Avenue and Interstate 805

FREEWAY RAMPS

- Interstate 5 Southbound at Gilman Drive
- Interstate 5 Southbound at Nobel Drive
- Interstate 5 Northbound at Westbound La Jolla Village Drive
- Interstate 5 Northbound at Eastbound La Jolla Village Drive
- Interstate 5 Southbound at Westbound La Jolla Village Drive
- Interstate 5 Southbound at Eastbound La Jolla Village Drive
- Interstate 5 Northbound at Genesee Avenue
- Interstate 805 Southbound at Nobel Drive

MITIGATION MEASURES

INTERSECTIONS

This section identifies required mitigation measures for roadway and intersections that would be significantly impacted under Alternatives A, B, C and D when compared to Existing Conditions (Plan to Ground). For comparison purposes between alternatives, Appendix N was created to show differences for each alternative when compared to the current plan recommendations evaluated as Alternative A.

Genesee Avenue & John Hopkins Drive (Intersection 2):

- Alternatives A, B, C and D when compared to Existing Conditions: Repurpose one of the five westbound through lanes on Genesee Avenue to become a second right turn lane. The significant traffic impact, associated with Alternatives A, B, C and D, to this roadway intersection would be fully mitigated with the implementation of this measure.

- Alternatives A, B, C, and D Recommended Improvements: Repurposing one of the five westbound through lanes on Genesee Avenue to become a second right turn lane is recommended under these alternatives. Accommodating the high volume right-turn to John Hopkins Drive reduces queues for through traffic on Genesee Avenue. A third through lane on Genesee Avenue is not anticipated to be needed from this intersection and on to the west/north through the intersections along North Torrey Pines Road, providing flexibility in the use of the roadway to accommodate bicycle facilities. This improvement project is not identified in the NUC PFFP. The project would be added to the NUC PFFP for each of these alternatives.

Genesee Avenue & Scripps Hospital (Intersection 6):

- Alternatives A, B, C and D when compared to Existing Conditions: Add a second left turn lane from Genesee Avenue to Scripps Hospital and install an overlap phase for the right-turn from Scripps Hospital to Genesee Avenue. The significant traffic impact, associated with Alternatives A, B, C and D, to this roadway intersection would be fully mitigated with the implementation of this measure.

- Alternatives A, B, C, and D Recommended Improvements: Adding a second left turn lane from Genesee Avenue to Scripps Hospital and installing an overlap phase for the right-turn from Scripps Hospital to Genesee Avenue is not recommended under these alternatives.

There is not adequate room to add a second westbound left-turn lane without eliminating a bicycle facility, which would result in impacts to non-vehicular modes of travel, or widening the roadway, which would result in reduced width for pedestrian facilities or involve the expansion of current right-of-way through additional property acquisition. Increased intensity of the land uses south of this intersection should rely on the new LRT and supporting transit investments being made to get people to and from this area. This improvement project is not identified in the NUC PFFP and would not be added for any of these alternatives.

Genesee Avenue & La Jolla Village Drive (Intersection 12):

- Alternatives A, B, C and D when compared to Existing Conditions: Construct a fourth westbound through lane and a third eastbound left-turn lane on La Jolla Village Drive. The significant traffic impact, associated with Alternatives A, B, C and D, to this roadway intersection would be fully mitigated with the implementation of this measure.

- Alternatives A, B, C, and D Recommended Improvements: Constructing a fourth westbound through lane and a third eastbound left-turn lane on La Jolla Village Drive is not recommended under these alternatives. Roadway widening would involve the expansion of current right-of-way through additional property acquisition. Property acquisitions, however, are considered environmentally, financially, and socially infeasible. This improvement project is not identified in the NUC PFFP and would not be added for any of these alternatives.

Genesee Avenue & Esplanade Court (Intersection 13):

- Alternatives A, B, C and D when compared to Existing Conditions: Modify the westbound approach of Esplanade Court to include two left turn lanes, one through lane, and two right-turn lanes. The significant traffic impact, associated with Alternatives A, C and D, to this roadway intersection would be fully mitigated with the implementation of this measure. The significant traffic impact, associated with Alternative B, to this roadway intersection would not be fully mitigated with the implementation of this measure and no additional mitigation was considered feasible.

- Alternatives A, B, C, and D Recommended Improvements: Modifying the westbound approach of Esplanade Court to include two left turn lanes, one through lane, and two right-turn lanes is not recommended under these alternatives. Increased intensity of the land uses east of this intersection should rely on the new LRT and supporting transit investments being made to get people to and from this area instead of widening roadways to accommodate additional personal vehicles. Further, widening of the westbound approach increases pedestrian crossing distances. This improvement project is not identified in the NUC PFFP and would not be added for any of these alternatives.

Genesee Avenue & Nobel Drive (Intersection 14):

- Alternatives A, B, C, and D when compared to Existing Conditions: Construct a third westbound through-lane along Nobel Drive and install an eastbound right-turn overlap phase (for Alternatives A, B, C, and D) and install a third northbound through lane on Genesee Avenue (for Alternatives B and D). The significant traffic impact, associated with Alternatives A and B, to this roadway intersection would be fully mitigated with the

implementation of these measures. The significant traffic impact, associated with Alternatives C and D, to this roadway intersection would not be fully mitigated with the implementation of these measures and no additional mitigation was considered feasible.

- Alternatives A and C Recommended Improvements: Constructing a third westbound through-lane along Nobel Drive is not recommended under these alternatives. Addition of a third westbound through-lane would require widening of Nobel Drive that would negatively affect the bicycle and pedestrian environment at the intersection. Nobel Drive is planned to be a key bicycle facility connection in the community and adding additional travel lanes increases the level of stress for bicyclists. The widening would also increase the pedestrian crossing distance. This improvement project is not identified in the NUC PFFP and would not be added for any of these alternatives.

- Alternative B Recommended Improvements: Constructing a third westbound through-lane along Nobel Drive is not recommended; however, the installation of an eastbound right-turn overlap phase, and addition of a third northbound through lane on Genesee Avenue (NUC-A) is recommended under these alternatives. Addition of a third westbound through-lane would require widening of Nobel Drive that would negatively affect the bicycle and pedestrian environment at the intersection. Nobel Drive is planned to be a key bicycle facility connection in the community and adding additional travel lanes increases the level of stress for bicyclists. The widening would also increase the pedestrian crossing distance. Addition of a third northbound through lane is included in the University PFFP and would be implemented under this alternative. As a result, the significant traffic impacts to this intersection would be partially mitigated with the implementation of these measures and; therefore, impact to this intersection would remain significant and unmitigated.

- Alternative D Recommended Improvements: Constructing a third westbound through-lane along Nobel Drive and addition of a third northbound through lane on Genesee Avenue is not recommended under this alternative. Addition of a third westbound through-lane would require widening of Nobel Drive that would negatively affect the bicycle and pedestrian environment at the intersection. Nobel Drive is planned to be a key bicycle facility connection in the community and adding additional travel lanes increases the level of stress for bicyclists. The widening would also increase the pedestrian crossing distance. Addition of a third northbound through lane is included in the NUC PFFP; however, Alternative D analyzes the network without that project in place. As a result, under Alternative D the significant traffic impact to this intersection would remain significant and unmitigated.

Genesee Avenue & Decoro Street (Intersection 15):

- Alternatives B, C and D when compared to Existing Conditions: Construct a third northbound and southbound lane on Genesee Avenue (for Alternative B) and stripe eastbound and westbound right-turn lanes on Decoro Street (for Alternatives B, C, and D). The significant traffic impact, associated with Alternatives B and C, to this roadway intersection would be fully mitigated with the implementation of these measures. The significant traffic impact, associated with Alternative D, to this roadway intersection would not be fully mitigated with the implementation of these measures and no additional mitigation was considered feasible.

- Alternative B Recommended Improvements: Striping eastbound and westbound right-turn lanes on Decoro Street is recommended as part of the University Community Plan Amendment under this alternative. There is adequate width to add the lane without street width modifications and bicycle and pedestrians would not be impacted by the change. Vehicles currently can stack two wide as if there was a right-turn lane, but only if vehicles are not utilizing the curb parking. On-street parking would need to be removed to add the right-turn pockets. Addition of a third northbound and southbound through lane is included in the University PFFP and FBA under NUC-A, which would be modified to include the additional through lanes with a repurposing of the current roadway under this alternative. As a result, the significant traffic impacts to this intersection would be fully mitigated.

- Alternative C Recommended Improvements: Striping eastbound and westbound right-turn lanes on Decoro Street is recommended as part of the University Community Plan Amendment under this alternative. There is adequate width to add the lane without street width modifications and bicycle and pedestrians would not be impacted by the change. Vehicles currently can stack two wide as if there was a right-turn lane, but only if vehicles are not utilizing the curb parking. On-street parking would need to be removed to add the right-turn pockets. Addition of a third northbound and southbound through lane is included in the University PFFP and FBA under NUC-A. As a result, the significant traffic impacts to this intersection would be fully mitigated.

- Alternative D Recommended Improvements: Striping eastbound and westbound right-turn lanes on Decoro Street is recommended as part of the University Community Plan Amendment under this alternative. There is adequate width to add the lane without street width modifications and bicycle and pedestrians would not be impacted by the change. Vehicles currently can stack two wide as if there was a right-turn lane, but only if vehicles are not utilizing the curb parking. On-street parking would need to be removed to add the right-turn pockets. Addition of a third northbound and southbound through lane is included in the University PFFP and Alternative D analyzes the network without that project in place. As a result, the significant traffic impacts to this intersection would be partially mitigated with the implementation of these measures and; therefore, impact to this segment would remain significant and unmitigated.

Genesee Avenue & Centurion Square (Intersection 16):

- Alternative D when compared to Existing Conditions: Construct a third northbound and southbound lane on Genesee Avenue. The significant traffic impact, associated with Alternative D, to this roadway intersection would be fully mitigated with the implementation of this measure.

- Alternative D Recommended Improvements: Addition of a third northbound and southbound through lane is included in the University PFFP and Alternative D analyzes the network without that project in place. As a result, the significant traffic impacts to this intersection would remain significant and unmitigated.

Genesee Avenue & Governor Drive (Intersection 17):

- Alternatives A, B, C and D when compared to Existing Conditions: Construct a grade separated intersection (removing northbound and southbound through-movements), with two northbound and southbound through-lanes in the undercrossing. The significant traffic impact, associated with Alternatives A, B, C and D, to this roadway intersection would be fully mitigated with the implementation of this measure.

- Alternatives A Recommended Improvements: Constructing a grade separated intersection (removing northbound and southbound through-movements), with two northbound and southbound through-lanes in the undercrossing is not recommended as part of the University Community Plan Amendment under this alternative. Instead, surface-level improvements at the existing intersection are recommended. These improvements would be the addition of a northbound right-turn lane. This requires some modification to the existing curb to accommodate the right-turn pocket. The significant traffic impact, associated with Alternatives A, to this roadway intersection would be fully mitigated with the implementation of this measure. This improvement project is identified in the University PFFP under NUC-A and would be modified for this alternative.

- Alternatives B Recommended Improvements: Construct a grade separated intersection (removing northbound and southbound through-movements), with two northbound and southbound through-lanes in the undercrossing is not recommended as part of the University Community Plan Amendment under this alternative. Instead, surface-level improvements at the existing intersection are recommended. These improvements would be the addition of a northbound and southbound through lane, maintaining exclusive right-turn lanes in each direction. This requires some modifications to the existing curb to accommodate the right-turn pockets. The significant traffic impact, associated with Alternative B, to this roadway intersection would be fully mitigated with the implementation of this measure. This improvement project is identified in the University PFFP under NUC-A and would be modified for this alternative.

- Alternatives C and D Recommended Improvements: Constructing a grade separated intersection (removing northbound and southbound through-movements), with two northbound and southbound through-lanes in the undercrossing is recommended as part of the University Community Plan Amendment under each of these alternatives. The topography of Genesee Avenue approaching this intersection allows for the intersection to remain at its current elevation and an undercrossing to be constructed beneath it. Separating the through traffic on Genesee Avenue will significantly increase flow between the north and south areas of the University community. Businesses at the intersection would still have access and provide services to the adjacent community, but would experience less traffic on their adjacent roads. The significant traffic impact, associated with Alternatives C and D, to this roadway intersection would be fully mitigated with the implementation of this measure. This improvement project is not identified in the University PFFP and would be added under these alternatives.

Genesee Avenue & SR-52 Westbound Ramps (Intersection 18):

- Alternatives A, B, C and D when compared to Existing Conditions: Signalize the intersection and square up ramps, adding a protected phase for northbound left-turns from Genesee Avenue to the SR-52 ramp, and add a second right-turn lane on the exit ramp. The significant traffic impact, associated with Alternatives A, B, C and D, to this roadway intersection would be fully mitigated with the implementation of this measure.

- Alternatives A, B, C and D Recommended Improvements: Signalizing the intersection, squaring up ramps, adding a protected phase for northbound left-turns from Genesee Avenue to the SR-52 ramp, and adding a second right-turn lane on the exit ramp is recommended as part of the University Community Plan Amendment under these alternatives. The project not only improves vehicle operations, but improves safety for bicyclists, pedestrians, and vehicles by removing free movements and controlling movements at the signal. The significant traffic impact, associated with Alternatives A, B, C and D, to this roadway intersection would be fully mitigated with the implementation of this measure. This improvement project is not identified in the University PFFP and would not be added under these alternatives since it's a State facility under Caltrans District 11 jurisdiction.

Genesee Avenue & SR-52 Eastbound Ramps (Intersection 19):

- Alternatives C and D when compared to Existing Conditions: Add a second southbound left-turn lane from Genesee Avenue to the eastbound SR-52 entrance ramp. The significant traffic impact, associated with Alternatives C and D, to this roadway intersection would be fully mitigated with the implementation of this measure.

- Alternatives C and D Recommended Improvements: Adding a second southbound left-turn lane from Genesee Avenue to the eastbound SR-52 entrance ramp is not recommended under these alternatives. There is not adequate room to add a second southbound left-turn lane without eliminating a bicycle facility, which would result in impacts to non-vehicular modes of travel, or widening the bridge, which would result in significant costs and environmental impacts. As a result, the significant traffic impacts to this intersection would remain significant and unmitigated. This improvement project is not identified in the University PFFP and would not be added for any of these alternatives.

Genesee Avenue & Appleton Street/Lehrer Drive (Intersection 20):

- Alternatives A, B, C and D when compared to Existing Conditions: Modify Appleton Street to have two eastbound left-turn lanes and a shared through-right lane, modify Lehrer Street to have one westbound left-turn lane, a shared through-right lane, and an exclusive right turn lane, and change the eastbound and westbound phasing to provide protected left turns. The significant traffic impact, associated with Alternatives A, B, C and D, to this roadway intersection would be fully mitigated with the implementation of this measure.

- Alternatives A, B, C and D Recommended Improvements: Modifying Appleton Street to have two eastbound left-turn lanes and a shared through-right lane, modifying Lehrer Street to have one westbound left-turn lane, a shared through-right lane, and an exclusive right turn lane, and changing the eastbound and westbound phasing to provide protected

left turns is not recommended under these alternatives because it is outside of the community boundary. As a result, the significant traffic impacts to this intersection would remain significant and unmitigated.

La Jolla Village Drive & Torrey Pines Road (Intersection 21):

- Alternatives A, B, C and D when compared to Existing Conditions: Relocate the pedestrian crossing from the east leg to the west leg of the intersection and implement signal phasing modification to improve operation. The significant traffic impact, associated with Alternatives A, B, C and D, to this roadway intersection would be fully mitigated with the implementation of this measure.

- Alternatives A, B, C and D Recommended Improvements: Relocating the pedestrian crossing from the east leg to the west leg of the intersection and implementing signal phasing modification to improve operation is recommend as part of the University Community Plan Amendment under these alternatives. The crosswalk on the east leg of the intersection conflicted with the heaviest movements at the intersection: dual northbound right-turns and dual westbound left-turns. Moving the crosswalk to the other side of the intersection decreases the amount of vehicles that the pedestrians would have a potential conflict with, improving the safety for pedestrians. The significant traffic impact, associated with Alternatives A, B, C and D, to this roadway intersection would be fully mitigated with the implementation of this measure. This improvement project is not identified in the University PFFP and would be added for any of these alternatives.

La Jolla Village Drive Eastbound Ramps & Gilman Drive (Intersection 23b):

- Alternatives A, B, C and D when compared to Existing Conditions: Signalize the intersection and install a protected southbound left turn phase, re-stripe eastbound ramp approach to have a shared left-right lane, and an exclusive right-turn lane. The significant traffic impact, associated with Alternatives A, B, C and D, to this roadway intersection would be fully mitigated with the implementation of this measure.

- Alternatives A, B, C and D Recommended Improvements: Signalizing the intersection, installing a protected southbound left turn phase, and re-striping eastbound ramp approach to have a shared left-right lane and an exclusive right-turn lane is recommended as part of the University Community Plan Amendment under these alternatives. Signalizing the intersection improves the operations of the intersection, and also improves the safety for bicyclists, pedestrians, and vehicles. The signal provides control of conflicting movements to avoid potential conflicts between all users. This improvement should be completed concurrent with installation of a protected bikeway on Gilman Drive. The significant traffic impact, associated with Alternatives A, B, C and D, to this roadway intersection would be fully mitigated with the implementation of this measure. This improvement project is not identified in the University PFFP and would be added for any of these alternatives.

La Jolla Village Drive & Villa La Jolla Drive (Intersection 24):

- Alternatives A, B, C and D when compared to Existing Conditions: Construct a second westbound right-turn lane from La Jolla Village Drive to Villa La Jolla Drive and add a third

southbound left turn lane from Villa La Jolla Drive to La Jolla Village Drive. The significant traffic impact, associated with Alternatives A, B, C and D, to this roadway intersection would not be fully mitigated with the implementation of this measure and no additional improvements are considered feasible.

- Alternatives A, B, C and D Recommended Improvements: Constructing a second westbound right-turn lane from La Jolla Village Drive to Villa La Jolla Drive is recommended under these alternatives. Providing additional queue space and processing time for the right-turn movement reduces the potential of right-turning traffic blocking through traffic on La Jolla Village Drive. There is not a pedestrian crossing on the east leg of the intersection, so the widening would not increase pedestrian crossing distance. Adding a third southbound left turn lane from Villa La Jolla Drive to La Jolla Village Drive is not recommended under these alternatives. Triple left-turn movements can be a safety concern and typically are used only in special circumstances. Increased intensity of the land uses north of this intersection should rely on the new LRT and supporting transit investments being made to get people to and from this area. The additional right-turn lane would improve the function of the intersection, but not completely restore it to acceptable levels. As a result, the significant traffic impacts to this intersection would be partially mitigated, but remain significant and unmitigated. This improvement project is not identified in the University PFFP and would be added for any of these alternatives.

La Jolla Village Drive & I-5 Southbound Off-Ramps (Intersection 25):

- Alternatives C and D when compared to Existing Conditions: Modify one of the westbound through lanes to be a shared through-right lane, creating dual right-turns. The significant traffic impact, associated with Alternatives C and D, to this roadway intersection would be fully mitigated with the implementation of this measure.

- Alternatives C and D Recommended Improvements: Modifying one of the westbound through lanes to be a shared through-right lane, creating dual right-turns is not recommended as part of the University Community Plan Amendment under these alternatives. This improvement would require eliminating the HOV lane on the freeway entrance ramp or widening the ramp. Eliminating the HOV lane would discourage carpooling and transit use. Widening of the ramp is infeasible without complete reconfiguration of the interchange due to the lack of available vacant space between the entrance and exit ramps. As a result, the significant traffic impacts to this intersection would remain significant and unmitigated. This improvement project is not identified in the University PFFP and would not be added for any of these alternatives.

La Jolla Village Drive & Regents Road (Intersection 28):

- Alternatives A, B, C, and D when compared to Existing Conditions: Construct a fourth eastbound and westbound through lane along La Jolla Village Drive and add a second southbound left turn lane from Regents Road to La Jolla Village Drive. The significant traffic impact, associated with Alternatives A, B, C, and D, to this roadway intersection would not be fully mitigated with the implementation of this measure and no additional improvements are considered feasible.

- Alternatives A, B, C, and D Recommended Improvements: Constructing a fourth eastbound and westbound through lane along La Jolla Village Drive is not recommended under these alternatives. Roadway widening would involve the expansion of current right-of-way through additional property acquisition. Property acquisitions, however, are considered environmentally, financially, and socially infeasible. Widening of Regents Road would be required to add the additional left-turn lane, and this location is constrained on both sides such that property acquisition would be required. Therefore, the addition of a second southbound left-turn lane is not recommended. The significant traffic impact, associated with Alternatives A, B, C, and D, to this roadway intersection would remain significant and unmitigated. This improvement project is not identified in the University PFFP and would not be added for any of these alternatives.

La Jolla Village Drive & Executive Way (Intersection 29):

- Alternatives A, B, C and D when compared to Existing Conditions: Construct a fourth eastbound and westbound through lane along La Jolla Village Drive, and modify the northbound and southbound approach of Executive Way to have two left-turn lanes, one through lane, and one right-turn lane with an overlap phase. The significant traffic impact, associated with Alternatives A, B, C and D, to this roadway intersection would be fully mitigated with the implementation of this measure.

- Alternatives A, B, C, and D Recommended Improvements: Constructing a fourth eastbound and westbound through lane along La Jolla Village Drive is not recommended under these alternatives. Roadway widening would involve the expansion of current right-of-way through additional property acquisition. Property acquisitions, however, are considered environmentally, financially, and socially infeasible. Widening of Executive Way would be required to add the needed lanes, and this location is constrained on both sides such that property acquisition would be required. Therefore, the additional lanes on Executive Way is not recommended. The significant traffic impact, associated with Alternatives A, B, C, and D, to this roadway intersection would remain significant and unmitigated. This improvement project is not identified in the University PFFP and would not be added for any of these alternatives.

La Jolla Village Drive & Towne Centre Drive (Intersection 30):

- Alternatives A, B, C and D when compared to Existing Conditions: Construct a fourth eastbound through lane on La Jolla Village Drive (maintaining the exclusive right turn lane), convert westbound right-turn lane to a shared through-right lane, add an exclusive southbound right-turn lane, and remove the pedestrian crossing on the east leg. The significant traffic impact, associated with Alternatives A, B, C and D, to this roadway intersection would be fully mitigated with the implementation of this measure.

- Alternatives A, B, C and D Recommended Improvements: Constructing a fourth eastbound through lane on La Jolla Village Drive (maintaining the exclusive right turn lane), converting westbound right-turn lane to a shared through-right lane, adding an exclusive southbound right-turn, and removing the pedestrian crossing on the east leg lane are not recommended under these alternatives. This intersection serves all traffic from I-805 that access the north University area and will continue to have high vehicle volumes despite community efforts

for other modes of travel. The southbound left-turn and eastbound right-turn lane would require widening and would increase pedestrian crossing distance, but is needed for maximizing vehicle efficiency for this location. Roadway widening would involve the expansion of current right-of-way through additional property acquisition. Property acquisitions, however, are considered environmentally, financially, and socially infeasible. Removing the pedestrian crossing on the east leg limits pedestrian access options, but also limits potential conflict points between pedestrians and vehicles at this high volume intersection. The significant traffic impact, associated with Alternatives A, B, C, and D, to this roadway intersection would remain significant and unmitigated. This improvement project is not identified in the University PFFP and would not be added for any of these alternatives.

La Jolla Village Drive & I-805 Southbound Ramps (Intersection 31):

- Alternatives A, B, C and D when compared to Existing Conditions: Construct a fourth westbound through-lane and modify the ramp to provide a third southbound right-turn lane. The significant traffic impact, associated with Alternatives A, B, C and D, to this roadway intersection would be fully mitigated with the implementation of this measure.

- Alternatives A, B, C and D Recommended Improvements: Constructing a fourth eastbound and westbound through lane along La Jolla Village Drive is not recommended under these alternatives. Roadway widening would involve the expansion of current right-of-way through additional property acquisition. Property acquisitions, however, are considered environmentally, financially, and socially infeasible. Modify the ramp to provide a third southbound right-turn lane is not recommended under these alternatives. Triple right-turn movements can be a safety concern and typically are used only in special circumstances. As a result, the significant traffic impacts to this intersection would remain significant and unmitigated. This improvement project is not identified in the University PFFP and would not be added for any of these alternatives.

Miramar Road & Eastgate Mall (Intersection 34):

- Alternatives A, B, C and D when compared to Existing Conditions: Modify the southbound Eastgate Mall approach to have two left-turn lanes and one right-turn lane. The significant traffic impact, associated with Alternatives A, B, C and D, to this roadway intersection would be fully mitigated with the implementation of this measure.

- Alternatives A, B, C and D Recommended Improvements: Modifying the southbound Eastgate Mall approach to have two left-turn lanes and one right-turn lane is recommended under these alternatives. Planned protected bicycle lanes would need to be included on Eastgate Mall. Additional roadway width to accommodate the bicycle facilities and turn lanes would require property acquisition from an adjacent vacant land. The significant traffic impact, associated with Alternatives A, B, C and D, to this roadway intersection would be fully mitigated with the implementation of this measure. This improvement project is not identified in the University PFFP and would be added under each of these alternatives.

Miramar Road & Camino Santa Fe (Intersection 37):

- Alternatives A, B, C and D when compared to Existing Conditions: Construct a fourth eastbound and westbound through lane along Miramar Road, re-stripe the southbound leg to have a left-turn lane, shared left-through-right, and two exclusive rights, and maintain a right-turn overlap. The significant traffic impact, associated with Alternatives A, B, C and D, to this roadway intersection would be fully mitigated with the implementation of this measure.

- Alternatives A, B, C and D Recommended Improvements: Constructing a fourth eastbound and westbound through lane along Miramar Road is not recommended under these alternatives. This would require removing existing Class II bicycle lanes, which would result in impacts to non-vehicular modes of travel. Re-stripe the southbound leg to have a left-turn lane, shared left-through-right, and two exclusive rights, and maintain a right-turn overlap is not recommended. Triple right-turn movements can be a safety concern and typically are used only in special circumstances. As a result, the significant traffic impacts to this intersection would remain significant and unmitigated. This improvement project is not identified in the University PFFP and would not be added for any of these alternatives.

Nobel Drive & La Jolla Village Square Driveway (Intersection 39):

- Alternatives A, B, C and D when compared to Existing Conditions: Construct a second northbound right-turn lane from La Jolla Village Square to Nobel Drive and a third westbound left-turn lane from Nobel Drive to La Jolla Village Square. The significant traffic impact, associated with Alternatives A, B, C and D, to this roadway intersection would be fully mitigated with the implementation of this measure.

- Alternatives A, B, C and D Recommended Improvements: Constructing a second northbound right-turn lane from La Jolla Village Square to Nobel Drive and a third westbound left-turn lane from Nobel Drive to La Jolla Village Square is not recommended under these alternatives. Increased intensity of the land uses south of this intersection should rely on the new transit center and supporting transit investments being made to get people to and from this area instead of widening roadways to accommodate additional personal vehicles. Further, widening of the northbound approach increases pedestrian crossing distances, which would result in impacts to non-vehicular modes of travel. As a result, the significant traffic impacts to this intersection would remain significant and unmitigated. If the shopping center redevelops, improvements could be made to this intersection at that time. This improvement project is not identified in the University PFFP and would not be added for any of these alternatives.

Nobel Drive & I-5 Southbound On-Ramp (Intersection 40):

- Alternatives A, B, C and D when compared to Existing Conditions: Construct an exclusive eastbound right-turn lane on Nobel Drive. The significant traffic impact, associated with Alternatives A, B, C and D, to this roadway intersection would be fully mitigated with the implementation of this measure.

- Alternatives A, B, C and D Recommended Improvements: Constructing an exclusive eastbound right-turn lane on Nobel Drive is not recommended under these alternatives.

The addition of the right-turn lane would require property acquisition and would affect the parking and circulation of the adjacent private retail use. Property acquisition, however, is considered environmentally, financially, and socially infeasible. As a result, the significant traffic impact, associated with Alternatives A, B, C and D, to this roadway intersection would remain significant and unmitigated. This improvement project is not identified in the University PFFP and would not be added for any of these alternatives.

Nobel Drive & Regents Road (Intersection 44):

- Alternatives A, B, C and D when compared to Existing Conditions: Restripe to add a third westbound through lane on Nobel Drive, add an eastbound right-turn lane on Nobel Drive, and remove the pedestrian crossing on the east leg. The significant traffic impact, associated with Alternatives A, B, C and D, to this roadway intersection would be fully mitigated with the implementation of this measure.

- Alternatives A, B, C and D Recommended Improvements: Restriping to add a third westbound through lane on Nobel Drive is not recommended under these alternatives, as it precludes implementation of planned bicycle lanes on Nobel Drive. This would result in impacts to non-vehicular modes of travel. Addition of an eastbound right-turn lane on Nobel Drive is not recommended under these alternatives as the widening to add the lane would impact the pedestrian facilities. There is not adequate width available to widen for the right-turn lane and maintain the existing sidewalk width. Remove the pedestrian crossing on the east leg is not recommended under these alternatives as it would remove pedestrian connectivity options. As a result, the significant traffic impacts to this intersection would remain significant and unmitigated. This improvement project is not identified in the University PFFP and would not be added for any of these alternatives.

Regents Road & Arriba Street (Intersection 59):

- Alternatives A and B when compared to Existing Conditions: Construct a second northbound left-turn lane on Regents Road. The significant traffic impact, associated with Alternatives A and B, to this roadway intersection would be fully mitigated with the implementation of this measure.

- Alternatives A and B Recommended Improvements: Constructing a second northbound left-turn lane on Regents Road is recommended under these alternatives. There is adequate width to add a second left-turn lane without widening the curb-to-curb width of the roadway by re-striping and/or modify the median on Regents Road. The significant traffic impact, associated with Alternatives A and B, to this roadway intersection would be fully mitigated with the implementation of this measure. This improvement project is not identified in the University PFFP and would be added under both of these alternatives.

Regents Road & Governor Drive (Intersection 60):

- Alternatives A and B when compared to Existing Conditions: Construct a second southbound left-turn lane on Regents Road and add a second westbound left-turn lane on Governor Drive. The significant traffic impact, associated with Alternatives A and B, to this roadway intersection would be fully mitigated with the implementation of this measure.

- Alternatives A and B Recommended Improvements: Constructing a second southbound left-turn lane on Regents Road and adding a second westbound left-turn lane on Governor Drive is recommended under these alternatives. The additional turn lanes would require widening of Regents Road and Governor Drive to accommodate the new lanes and maintain existing and planned bicycle facilities. This improvement is necessary to maintain acceptable operations at the first intersection south of the newly constructed Regents Road Bridge under these alternatives. The significant traffic impact, associated with Alternatives A and B, to this roadway intersection would be fully mitigated with the implementation of this measure. This improvement project is not identified in the University PFFP and would be added under both of these alternatives.

Regents Road & Luna Avenue (Intersection 63):

- Alternatives A, B, C and D when compared to Existing Conditions: Construct a third northbound and southbound through lane on Regents Road / Clairemont Mesa Boulevard. The significant traffic impact, associated with Alternatives A, B, C and D, to this roadway intersection would be fully mitigated with the implementation of this measure.

- Alternatives A, B, C and D Recommended Improvements: Constructing a third northbound and southbound through lane on Regents Road / Clairemont Mesa Boulevard is not recommended under these alternatives because it is outside of the community boundary. As a result, the significant traffic impacts to this intersection would remain significant and unmitigated. This intersection is outside of the University community and no project would be included in the University PFFP for any of these alternatives.

North Torrey Pines Road & La Jolla Shores Drive (Intersection 66):

- Alternatives A, B, C and D when compared to Existing Conditions: Restripe to add a third southbound through lane on North Torrey Pines Road, modify eastbound and westbound La Jolla Shores Drive approaches to utilize "protected left-turn" phasing instead of "split phasing" in the traffic signal, and remove the pedestrian crossing on the north leg. The significant traffic impact, associated with Alternatives A, B, C and D, to this roadway intersection would be fully mitigated with the implementation of this measure.

- Alternatives A, B, C and D Recommended Improvements: Restriping to add a third southbound through lane on North Torrey Pines Road is not recommended under these alternatives because it would remove existing bicycle lane on North Torrey Pines Road. Modifying eastbound and westbound La Jolla Shores Drive approaches to utilize "protected left-turn" phasing instead of "split phasing" in the traffic signal, and removing the pedestrian crossing on the north leg is not recommended as part of the University Community Plan Amendment because it impacts the pedestrian connectivity. As a result, the significant traffic impacts to this intersection would remain significant and unmitigated. This improvement project is not identified in the University PFFP and would not be added for any of these alternatives.

Gilman Drive & I-5 Southbound Ramps (Intersection 69):

- Alternatives A, B, C and D when compared to Existing Conditions: There are no significant impacts at this intersection when compared to existing conditions.

- Alternatives C and D Recommended Improvements: To improve operations to acceptable conditions during all peak periods, converting one westbound through lane to a left-turn lane, creating dual left-turns at this intersection. This improvement project is not identified in the University PFFP and would be added for either of these alternatives.

Towne Center Drive & Eastgate Mall (Intersection 73):

- Alternatives A, B, C and D when compared to Existing Conditions: Construct a second westbound left-turn lane from Eastgate Mall to Towne Centre Drive. The significant traffic impact, associated with Alternatives A, B, C and D, to this roadway intersection would be fully mitigated with the implementation of this measure.

- Alternatives A, B, C and D Recommended Improvements: Constructing a second westbound left-turn lane from Eastgate Mall to Towne Centre Drive is recommended under these alternatives. There is adequate width to add a second left-turn lane without widening the curb-to-curb width of the roadway by re-striping and/or modify the median on Eastgate Mall. The significant traffic impact, associated with Alternatives A, B, C and D, to this roadway intersection would be fully mitigated with the implementation of this measure. This improvement project is not identified in the University PFFP and would be added under each of these alternatives.

Executive Way & Executive Drive (Intersection 76):

- Alternatives A, B, C and D when compared to Existing Conditions: Traffic signal modification for eastbound and westbound left-turns to be "protected-permissive" instead of "permissive". The significant traffic impact, associated with Alternatives A, B, C and D, to this roadway intersection would be fully mitigated with the implementation of this measure.

- Alternatives A, B, C and D Recommended Improvements: Traffic signal modification for eastbound and westbound left-turns to be "protected-permissive" instead of "permissive" is recommended under these alternatives. The significant traffic impact, associated with Alternatives A, B, C and D, to this roadway intersection would be fully mitigated with the implementation of this measure. This traffic signal improvement project is not identified in the University PFFP and would be added under each of these alternatives.

Judicial Drive & Eastgate Mall (Intersection 77):

- Alternatives A, B, C and D when compared to Existing Conditions: Traffic signal modification for northbound and southbound approach of Judicial Drive to be "split-phased" in the traffic signal, and re-stripe the northbound approach to have a left-turn lane, shared left-through-right lane, and right-turn lane. The significant traffic impact, associated with Alternatives A, B, C and D, to this roadway intersection would be fully mitigated with the implementation of this measure.

- Alternatives A, B, C and D Recommended Improvements: Traffic signal modification for northbound and southbound approach of Judicial Drive to be "split-phased" in the traffic signal, and re-striping the northbound approach to have a left-turn lane, shared left-through-right lane, and right-turn lane is recommended under these alternatives. The

significant traffic impact, associated with Alternatives A, B, C and D, to this roadway intersection would be fully mitigated with the implementation of this measure. This traffic signal improvement project is not identified in the University PFFP and would be added under each of these alternatives.

Governor Drive and I-805 Northbound Ramps (Intersection 79):

- Alternatives A, B, C and D when compared to Existing Conditions: Install roundabout control at this roadway intersection. The significant traffic impact, associated with Alternatives A, B, C and D, to this roadway intersection would be fully mitigated with the implementation of this measure.

- Alternatives A, B, C and D Recommended Improvements: Installing roundabout control at this roadway intersection is recommended under these alternatives. A roundabout would fit within the intersection width and provide efficient flow based on the volumes and traffic patterns at this location. Caltrans continues to support alternatives besides signalizing intersections. The significant traffic impact, associated with Alternatives A, B, C and D, to this roadway intersection would be fully mitigated with the implementation of this measure. Install roundabout control at this roadway intersection is not identified in the University PFFP and would not be added under these alternatives since it's a State facility under Caltrans District 11 jurisdiction.

SEGMENTS

This section identifies required mitigation measures for roadway facilities that would be significantly impacted under Alternatives A, B, C and D when compared to Existing Conditions (Plan to Ground). For comparison purposes between alternatives, Appendix N was created to show differences for each alternative when compared to the current plan recommendations evaluated as Alternative A.

Eastgate Mall from Genesee Avenue to Easter Way:

- Alternatives A, B, and D when compared to Existing Conditions: Widen the roadway to a 4-lane Major. The significant traffic impact, associated with Alternatives A, B and D, to this roadway segment would be fully mitigated with the implementation of this measure.

- Alternatives A, B, and D Recommended Improvements: Widening the roadway to a 4-lane Major is not recommended as part of the University Community Plan Amendment under these alternatives. Removal of the continuous two way left turn lane to provide a raised center median for the purpose of bringing this roadway to four lane major street standards would impact ingress and egress of several existing driveways on both sides of the street. Nevertheless, the intersection of Eastgate Mall with Genesee Avenue operates at an acceptable LOS. Furthermore, with the improvements recommended at the intersection of Eastgate Mall and Towne Centre Drive that entail adding a second westbound left-turn lane from Eastgate Mall to Towne Centre Drive, this intersection will also operate at acceptable LOS. Therefore, the impact at this location is determined to be less than significant and no mitigation is required. This improvement project is not identified in the University PFFP and would not be added for any of these alternatives.

Eastgate Mall from Judicial Drive to Eastgate Drive (Freeway Overpass):

- Alternatives A, B, C and D when compared to Existing Conditions: Widen the roadway to a 4-lane Collector with a continuous left-turn lane. The significant traffic impact, associated with Alternatives A, B, C and D, to this roadway segment would be fully mitigated with the implementation of this measure.

- Alternatives A, B, C and D Recommended Improvements: Widening the roadway to a 4-lane Collector with a continuous left-turn lane, excluding widening the bridge over Interstate 805 (I-805), and additional right-of way to accommodate bicycle facilities is recommended under these alternatives. With the recommended improvements, the significant traffic impact, associated with Alternatives A, B, C and D, would be fully mitigated with the implementation of this measure. This improvement project is identified in the University FBA (NUC-34) and would remain in the University FBA.

Eastgate Mall from Eastgate Drive to Miramar Road:

- Alternatives A, B, C and D when compared to Existing Conditions: Widen the roadway to a 4-lane Collector with a continuous left-turn lane. The significant traffic impact, associated with Alternatives A, B, C and D, to this roadway segment would be fully mitigated with the implementation of this measure.

- Alternatives A, B, C and D Recommended Improvements: Widening the roadway to a 4-lane Collector with a continuous left-turn lane and additional right-of way to accommodate protected bicycle facilities is recommended under these alternatives. With the recommended improvements, the significant traffic impact, associated with Alternatives A, B, C and D, to this roadway segment would be fully mitigated with the implementation of this measure. This improvement project is identified in the University FBA (NUC-34) and would be updated to extend to Miramar Road.

Genesee Avenue from La Jolla Village Drive to Esplanade Court:

- Alternatives C and D when compared to Existing Conditions: Repurpose the right-of-way to provide for a 6-lane Prime arterial with Class II bike facility with buffers. The significant traffic impact, associated with Alternatives C and D, to this roadway segment would be fully mitigated with the implementation of this measure.

- Alternatives C and D Recommended Improvements: Repurposing the right-of-way to provide for a 6-lane Prime arterial with Class II bike facility with buffers is recommended as part of the University Community Plan Amendment under these alternatives. With the recommended improvements, the significant traffic impact, associated with Alternatives C and D, to this roadway segment would be fully mitigated with the implementation of this measure.

Genesee Avenue from Nobel Drive to Centurion Square (4-Lane Major Arterial):

- Alternative B and D when compared to Existing Conditions: Repurpose the right-of way to provide a modified 6 lane major between Nobel Drive and Decoro Street and modified 6 lane prime between Decoro Street and Centurion Square with bicycle facilities that include a shared pedestrian-bicycle facility accommodated on widened sidewalks or Class II bicycle

facility as right-of-way permits. The significant traffic impact, associated with this Alternative, to this roadway segment would be fully mitigated with the implementation of this measure.

- Alternative B and D Recommended Improvements: Repurposing the right-of way to provide a modified 6 lane major between Nobel Drive and Decoro Street and modified 6 lane prime between Decoro Street and Centurion Square with bicycle facilities that include a shared pedestrian-bicycle facility accommodated on widened sidewalks or Class II bicycle facility as right-of-way permits is recommended under this alternative. The modified design along this segment includes maintaining existing curb to curb width, reducing median width, restriping and widening sidewalks where right-of way permits to accommodate shared bike and pedestrian facility. As a result, significant traffic impact to Genesee Avenue from Nobel Drive to Centurion Square would be fully mitigated. The existing University FBA (NUC-A) project would be modified.

Genesee Avenue from Nobel Drive to Centurion Square (6-Lane Major Arterial):

- Alternative C when compared to Existing Conditions: Widen to an 8-lane Prime arterial. The significant traffic impact, associated with Alternative C, to this roadway segment would be fully mitigated with the implementation of this measure. Another option is to repurpose the existing right-of-way for the segment between Decoro Street and Centurion Square to provide a modified 6 lane prime and widening the segment from Nobel Drive and Decoro Street to provide 8 lane prime.

  Alternative C Recommended Improvements: Widening to an 8-lane Prime arterial or repurposing to a 6-lane Prime is not recommended under this alternative. There is not sufficient width to accommodate driveway acceleration and deceleration lanes when converting to a 6-lane Prime arterial facility or to widen the roadway to provide an 8-lane Prime arterial facility without several property acquisitions. Roadway widening would involve the expansion of current right-of-way through additional property acquisition. Property acquisitions, however, are considered environmentally, financially, and socially infeasible. As a result, the significant traffic impacts to this roadway segment would remain significant and unmitigated. The existing University FBA (NUC-A) project would be modified to repurpose the existing right-of-way to provide a modified 6 lane major between Nobel Drive and Centurion Square with bike facilities that include a shared pedestrian bicycle facility accommodated on widened sidewalks or Class II bicycle facility as right-of-way permits.

Genesee Avenue from Centurion Square to Governor Drive (4-Lane Major Arterial):

- Alternative B and D when compared to Existing Conditions: Repurpose the right-of way to provide a modified 6 lane major with bicycle facilities that include a shared pedestrian-bicycle facility accommodated on widened sidewalks or Class II bicycle facility as right-of-way permits. The significant traffic impact, associated with Alternative B, would be fully mitigated with the implementation of these measures.

- Alternative B and D Recommended Improvements: Repurposing the right-of way to provide a modified 6 lane major with bike facilities that include a shared pedestrian bicycle facility

accommodated on widened sidewalks or Class II bicycle facility as right-of-way permits is recommended under this alternative. The modified design along this segment includes maintaining existing curb to curb width, reducing median width, restriping and widening sidewalks where Right-of way permits to accommodate shared bike and pedestrian facility. The significant traffic impact, associated with Alternative B, to this roadway segment would be fully mitigated with the implementation of this measure. The existing University FBA (NUC-A) project would be modified.

Genesee Avenue from Centurion Square to Governor Drive (6-Lane Major Arterial):

- Alternative C when compared to Existing Conditions: Widen to an 8-lane Prime arterial. The significant traffic impact, associated with Alternative C, to this roadway segment would be fully mitigated with the implementation of this measure.

- Alternative C Recommended Improvements: Widening to an 8-lane Prime arterial is not recommended under these alternatives. There is not sufficient width to provide an 8-lane Prime arterial facility without several property acquisitions. Roadway widening would involve the expansion of current right-of-way through additional property acquisition. Property acquisitions, however, are considered environmentally, financially, and socially infeasible. As a result, the significant traffic impacts to this intersection would remain significant and unmitigated. Implementing NUC-A project currently included in University FBA is recommended and included as a baseline condition for this alternative; therefore, would still be included in the University FBA.

Genesee Avenue from Governor Drive to SR-52 Westbound Ramps (4-Lane Major Arterial):

- Alternative B and D when compared to Existing Conditions: Repurpose the right-of way to provide a modified 6 lane major with bike facilities that include a shared pedestrian bicycle facility accommodated on widened sidewalks or Class II bicycle facility as right-of-way permits. The significant traffic impact, associated with Alternative B, would be partially mitigated with the implementation of these measures.

- Alternative B and D Recommended Improvements: Repurposing the right-of way to provide a modified 6 lane major with bike facilities that include a shared pedestrian bicycle facility accommodated on widened sidewalks or Class II bicycle facility as right-of-way permits is recommended under this alternative. The modified design along this segment includes maintaining existing curb to curb width, reducing median width, restriping and widening sidewalks where Right-of way permits to accommodate shared bike and pedestrian facility. The significant traffic impact, associated with Alternative B, to this roadway segment would be partially mitigated with the implementation of this measure. The existing University FBA (NUC-A) project would be modified.

Genesee Avenue from Governor Drive to SR-52 Westbound Ramps (6-Lane Major Arterial):

- Alternative A and C when compared to Existing Conditions: Repurpose the right-of-way to a 6-lane Prime arterial. The significant traffic impact, associated with Alternative A, to this roadway segment would be fully mitigated with the implementation of this measure.

- Alternative A and C Recommended Improvements: Repurpose the right-of-way to a 6-lane Prime arterial is not recommended under these alternatives. There is not adequate width to accommodate driveway acceleration and deceleration lanes along this segment when converting to a 6-lane Prime arterial facility without several property acquisitions. Roadway widening would involve the expansion of current right-of-way through additional property acquisition. Property acquisitions, however, are considered environmentally, financially, and socially infeasible. As a result, the significant traffic impacts to this intersection would remain significant and unmitigated. Implementing NUC-A project currently included in University FBA is recommended and included as a baseline condition for this alternative; therefore, would still be included in the University FBA.

Genesee Avenue from SR-52 Westbound Ramps to SR-52 Eastbound Ramps:

- Alternatives A, B, C and D when compared to Existing Conditions: Repurpose the right-of way to provide a modified 6 lane major with bike facilities that include a shared pedestrian bicycle facility accommodated on widened sidewalks or Class II bicycle facility as right-of-way permits. The significant traffic impact, associated with these Alternatives, would be fully mitigated with the implementation of these measures.

- Alternatives A, B, C and D Recommended Improvements: Repurposing the right-of way to provide a modified 6 lane major with bike facilities that include a shared pedestrian bicycle facility accommodated on widened sidewalks or Class II bicycle facility as right-of-way permits is not recommended under this alternative because it is outside of the community boundary. As a result, the significant traffic impacts to this intersection would remain significant and unmitigated. This roadway segment is outside of the University Community Planning Area and no project would be included in the University PFFP for any of these alternatives.

Genesee Avenue from SR-52 Eastbound Ramps to Lehrer Drive:

- Alternatives A, B, C and D when compared to Existing Conditions: Widen and repurpose the roadway to a 6-lane Major. The significant traffic impact, associated with Alternatives A, B, C and D, to this roadway intersection would be fully mitigated with the implementation of this measure.

- Alternatives A, B, C and D Recommended Improvements: Widen and repurpose the roadway to a modified 6-lane Major is not recommended under this alternative because it is outside of the community boundary. As a result, the significant traffic impacts to this intersection would remain significant and unmitigated. This roadway segment is outside of the University Community Planning Area and no project would be included in the University PFFP for any of these alternatives.

La Jolla Village Drive from Revelle College Drive to Villa La Jolla Drive:

- Alternatives C and D when compared to Existing Conditions: Widen to an 8-lane Prime Arterial. The significant traffic impact, associated with Alternatives C and D, to this roadway segment would be fully mitigated with the implementation of this measure.

- Alternatives C and D Recommended Improvements: Widen to an 8-lane Prime Arterial is not recommended as part of the University Community Plan Amendment under these alternatives. To provide an 8-lane Prime arterial facility would require widening of La Jolla Village Drive between Revelle College Drive and Villa La Jolla Drive, including modifying the La Jolla Village Drive urban interchange with Gilman Drive and the pedestrian bridge just west of Villa La Jolla Drive. Roadway widening would involve the expansion of current right-of-way through additional property acquisition. Property acquisitions, however, are considered environmentally, financially, and socially infeasible. Property acquisitions would require demolition of existing buildings which would generate additional environmental impacts associated with air quality, noise, GHGs, solid waste, and traffic as well as continuing to promote vehicular usage. Additionally widening of the roadway would require reconstruction of the pedestrian bridge located 250 feet west of the intersection of La Jolla Village Drive with Villa La Jolla Drive and increase the pedestrian crossing distance at intersections. As a result, the significant traffic impacts to this intersection would remain significant and unmitigated. Widening the roadway to an 8-lane Prime arterial is not identified in the University PFFP and would not be added for any of these alternatives.

La Jolla Village Drive from Villa La Jolla Drive to I-5 Northbound Ramps:

- Alternatives A, B, C and D when compared to Existing Conditions: Widen to an 8-lane Prime. The significant traffic impact, associated with all studied alternatives, to this roadway segment would be fully mitigated with the implementation of this measure.

- Alternatives A, B, C and D Recommended Improvements: Widen to an 8-lane Prime Arterial is not recommended as part of the University Community Plan Amendment under these alternatives. Roadway widening would involve the expansion of current right-of-way through additional property acquisition. Property acquisitions, however, are considered environmentally, financially, and socially infeasible. This would also require widening of the overpass and reconfiguration of the interchange to add an additional westbound lane. As a result, the significant traffic impacts to this intersection would remain significant and unmitigated. Widening the roadway to an 8-lane Prime arterial is not identified in the University PFFP and would not be added for any of these alternatives.

La Jolla Village Drive from I-5 Northbound Ramps to Towne Centre Drive:

- Alternatives A, B, C and D when compared to Existing Conditions: Repurpose to a 6-lane Prime. The significant traffic impact, associated with all studied alternatives, to this roadway segment would be fully mitigated with the implementation of this measure.

- Alternatives A, B, C and D Recommended Improvements: Repurposing to a 6-lane Prime is recommended as part of the University Community Plan Amendment under these alternatives. Repurposing entails removal of on street parking and providing acceleration and deceleration lanes at existing driveways. The significant traffic impact, associated with all studied alternatives, to this roadway segment would be fully mitigated with the implementation of this measure. Repurposing to a 6-lane Prime arterial is not identified in the University PFFP and would be added under these alternatives.

Miramar Road from Miramar Mall to Camino Santa Fe:

- Alternatives A, B, C and D when compared to Existing Conditions: Widen to an 8-lane Prime. The significant traffic impact, associated with all studied alternatives, to this roadway segment would be fully mitigated with the implementation of this measure.

- Alternatives A, B, C and D Recommended Improvements: Widen to an 8-lane Prime is not recommended as part of the University Community Plan Amendment under these alternatives. Roadway widening would involve the expansion of current right-of-way through additional property acquisition. Property acquisitions, however, are considered environmentally, financially, and socially infeasible. Another option is removal of existing Class II bicycle lanes, which would result in impacts to non-vehicular modes of travel. As a result, the significant traffic impacts to this intersection would remain significant and unmitigated. This improvement project is not identified in the University PFFP and would not be added for any of these alternatives.

Nobel Drive from Villa La Jolla Drive to I-5 Southbound On-Ramp:

- Alternatives A, B, C and D when compared to Existing Conditions: Widen to a 6-lane Prime. The significant traffic impact, associated with all studied alternatives, to this roadway segment would be fully mitigated with the implementation of this measure.

- Alternatives A, B, C and D Recommended Improvements: Widen to a 6-lane Prime is not recommended under these alternatives. To provide a 6-lane Prime arterial facility would require property acquisition from the adjacent private retail center and would have an impact to existing bicycle lanes and pedestrian crossing distances. Roadway widening would involve the expansion of current right-of-way through additional property acquisition. Property acquisitions, however, are considered environmentally, financially, and socially infeasible. As a result, the significant traffic impacts to this roadway segment would remain significant and unmitigated. This improvement project is not identified in the University PFFP and would not be added for any of these alternatives.

Nobel Drive from I-5 Southbound On-Ramp to I-5 Northbound Off-Ramp/University Center Lane:

- Alternatives A, B, C, and D when compared to Existing Conditions: Widen to a 6-lane Major. The significant traffic impact, associated with all studied alternatives, to this roadway segment would be fully mitigated with the implementation of this measure.

- Alternatives A, B, C, and D Recommended Improvements: Widening to a 6-lane Major is not recommended as part of the University Community Plan Amendment under these alternatives. This improvement would require widening of the Nobel Drive which would impact the layout of the Mid-Coast station at southwest corner of the intersection of Nobel Drive with the I-5 Southbound on-ramp. Additionally, widening of the roadway would increase pedestrian crossing distance to the proposed Mid-Coast station just west of the I-5 freeway. As a result, the significant traffic impacts to this intersection would remain significant and unmitigated. This improvement project is not identified in the University PFFP and would not be added for any of these alternatives.

Regents Road from SR-52 Westbound Ramps to SR-52 Eastbound Ramps:

- Alternatives A and B when compared to Existing Conditions: Widen to a 6-lane Major. The significant traffic impact, associated with Alternatives A and B, to this roadway segment would be fully mitigated with the implementation of this measure.

- Alternatives A and B Recommended Improvements: Widen to a 6-lane Major is not recommended under these alternatives. Widening this section would require modifications to two overpasses of SR-52. The roadway is currently built to its ultimate classification and intersections on either end operate at acceptable conditions. The impact at this location is determined to be less than significant and no mitigation is required. This improvement project is not identified in the University PFFP and would not be added for any of these alternatives.

Regents Road from SR-52 Eastbound Ramps to Luna Avenue:

- Alternatives A and B when compared to Existing Conditions: Widen to a 6-lane Major. The significant traffic impact, associated with Alternatives A and B, to this roadway segment would be fully mitigated with the implementation of this measure.

- Alternatives A and B Recommended Improvements: Widen to a 6-lane Major is not recommended as part of the University Community Plan Amendment under this alternative. This roadway is located outside of the University community boundary and is currently built to its ultimate classification per the Clairemont Mesa Community Plan. As a result, the significant traffic impacts to this intersection would remain significant and unmitigated. This roadway segment is outside of the University community and no project would be included in the University PFFP for any of these alternatives.

Torrey Pines Road from La Jolla Village Drive to Community Boundary:

- Alternatives A, B, C and D when compared to Existing Conditions: Widen to a 6-lane Major. The significant traffic impact, associated with all studied alternatives, to this roadway segment would be fully mitigated with the implementation of this measure.

- Alternatives A, B, C and D Recommended Improvements: Widen to a 6-lane Major is not recommended under these alternatives. There is not sufficient width to provide a 6-lane Major facility without several property acquisitions. Roadway widening would involve the expansion of current right-of-way through additional property acquisition. Property acquisitions, however, are considered environmentally, financially, and socially infeasible. As a result, the significant traffic impacts to this intersection would remain significant and unmitigated. Widening to a 6-lane Major arterial is not identified in the University PFFP and would not be added for any of these alternatives.

CORRIDORS

Genesee Avenue between SR-52 and North Torrey Pines Road

- Alternatives A, B, C and D when compared to Existing Conditions: Improve intersection delay at key intersections along the corridor by implementing additional lanes and adaptive

traffic control and transit signal priority measures. The significant traffic impact, associated with all studied alternatives, to this corridor would be fully mitigated with the implementation of this measure.

- Alternatives A, B, C and D Recommended Improvements: Improvements at key intersections along the corridor by implementing additional lanes and adaptive traffic control and transit signal priority measures are recommended under these alternatives. These measures would improve the quality of traffic flow based on demand; thereby, reducing traffic delays. Further, intersection mitigations at select locations along Genesee Avenue identified under the intersection analysis would provide mitigation. The significant traffic impact, associated with all studied alternatives, to this corridor would be mitigated with the implementation of these measures. No specific improvement project is identified for corridor improvements in the University PFFP. Implementation of adaptive traffic control and transit signal priority measures would be added for these alternatives.

La Jolla Village Drive between Torrey Pines Road and Interstate 805

- Alternatives A, B, C and D when compared to Existing Conditions: Improve intersection delay at key intersections along the corridor by implementing additional lanes and adaptive traffic control and transit signal priority measures. The significant traffic impact, associated with all studied alternatives, to this corridor would be fully mitigated with the implementation of this measure.

- Alternatives A, B, C and D Recommended Improvements: Improvements at key intersections along the corridor by implementing additional lanes and adaptive traffic control and transit signal priority measures are recommended under these alternatives. These measures would improve the quality of traffic flow based on demand; thereby, reducing traffic delays. Further, intersection mitigations at select locations along La Jolla Village Drive identified under the intersection analysis would provide mitigation. The significant traffic impact, associated with all studied alternatives, to this corridor would be mitigated with the implementation of these measures. No specific improvement project is identified for corridor improvements in the University PFFP. Implementation of adaptive traffic control and transit signal priority measures would be added for these alternatives.

Nobel Drive between La Jolla Village Square and Miramar Road

- Alternatives A, B, C and D when compared to Existing Conditions: Improve intersection delay at key intersections along the corridor by implementing additional lanes and adaptive traffic control and transit signal priority measures. The significant traffic impact, associated with all studied alternatives, to this corridor would be fully mitigated with the implementation of this measure.

- Alternatives A, B, C and D Recommended Improvements: Improvements at key intersections along the corridor by implementing additional lanes and adaptive traffic control and transit signal priority measures are recommended under these alternatives. These measures would improve the quality of traffic flow based on demand; thereby, reducing traffic delays. Further, intersection mitigations at select locations along Nobel Drive identified under the intersection analysis would provide mitigation. The significant

traffic impact, associated with all studied alternatives, to this corridor would be mitigated with the implementation of these measures. No specific improvement project is identified for corridor improvements in the University PFFP. Implementation of adaptive traffic control and transit signal priority measures would be added for these alternatives.

Regents Road between Luna Avenue and Genesee Avenue

- Alternatives A and B when compared to Existing Conditions: Improve intersection operation at key intersections along the corridor by implementing adaptive traffic control and transit signal priority measures. The significant traffic impact, associated with all studied alternatives, to this corridor would be fully mitigated with the implementation of this measure.

- Alternatives A and B Recommended Improvements: Improvements at key intersections along the corridor by implementing adaptive traffic control and transit signal priority measures are recommended under these alternatives. These measures would improve the quality of traffic flow based on demand; thereby, reducing traffic delays. Further, intersection mitigations at select locations along Regents Road identified under the intersection analysis would provide mitigation. The significant traffic impact, associated with all studied alternatives, to this corridor would be mitigated with the implementation of these measures. No specific improvement project is identified for corridor improvements in the University PFFP. Implementation of adaptive traffic control and transit signal priority measures would be added for these alternatives.

FREEWAY

Interstate 5, between SR-52 and Gilman Drive

- Alternatives A, B, C, and D when compared to Existing Conditions: Widen Interstate 5 to have five lanes in each direction. The significant traffic impact, associated with these alternatives, to this freeway segment would be fully mitigated with the implementation of this measure.

- Alternatives A, B, C, and D Recommended Improvements: SANDAG's 2050 Revenue Constrained RTP includes addition of managed lanes on Interstate 5 between Interstate 8 and La Jolla Village Drive. This measure provides partial mitigation since it improves freeway operation in the vicinity of the project. As a result, the significant traffic impacts to this freeway segment would remain significant and unmitigated. This improvement is an improvement identified in the SANDAG RTP and would not be included in the University PFFP.

Interstate 805, between SR-52 and Mira Mesa Boulevard

- Alternatives A, B, C, and D when compared to Existing Conditions: Widen Interstate 805 to have five lanes in each direction. The significant traffic impact, associated with these alternatives, to this freeway segment would be fully mitigated with the implementation of this measure.

- Alternatives A, B, C, and D Recommended Improvements: SANDAG's 2050 Unconstrained Network RTP includes addition of managed lanes on Interstate 805 between State Route 905 and Carrol Canyon Road. This measure provides partial mitigation since it improves freeway operation in the vicinity of the project. As a result, the significant traffic impacts to this freeway segment would remain significant and unmitigated. This improvement is an improvement identified in the SANDAG RTP and would not be included in the University PFFP.

State Route 52, between I-5 and I-805

- Alternatives A, B, C, and D when compared to Existing Conditions: Widen State Route 52 to have three lanes in each direction. The significant traffic impact, associated with these alternatives, to this freeway segment would be fully mitigated with the implementation of this measure.

- Alternatives A, B, C, and D Recommended Improvements: SANDAG's 2050 Revenue Constrained RTP includes addition of a third lane in each direction along SR-52 between I-5 and I-805. The significant traffic impact, associated with these alternatives, to this freeway segment would be fully mitigated with the implementation of this measure. However, there is no funding in place to guarantee the improvement would be completed. As a result, the significant traffic impacts to this freeway segment would remain significant and unmitigated. This improvement is an improvement identified in the SANDAG RTP and would not be included in the University PFFP.

Interstate 5 Southbound Entrance Ramp from Gilman Drive

- Alternatives A, B, C, and D when compared to Existing Conditions: Adjust ramp meter rate to process more vehicles. The significant traffic impact, associated with these alternatives, to this freeway ramp would be fully mitigated with the implementation of this measure.

- Alternatives A, B, C, and D Recommended Improvements: Caltrans continually monitors and adjusts freeway entrance ramp meter rates. Ramp meter rates are generally only increased to process more vehicles when freeways have the capacity to handle increased demand from the entrance ramps. SANDAG's 2050 Revenue Constrained RTP includes addition of managed lanes on Interstate 5 between Interstate 8 and La Jolla Village Drive. This measure provides partial mitigation since it improves freeway operation in the vicinity of the project. As a result, the significant traffic impacts to this freeway segment would remain significant and unmitigated. This improvement is an operational improvement made by Caltrans and would not be included in the University PFFP.

Interstate 5 Southbound Entrance Ramp from Nobel Drive

- Alternatives A, B, C, and D when compared to Existing Conditions: Adjust ramp meter rate to process more vehicles. The significant traffic impact, associated with these alternatives, to this freeway ramp would be fully mitigated with the implementation of this measure.

- Alternatives A, B, C, and D Recommended Improvements: Caltrans continually monitors and adjusts freeway entrance ramp meter rates. Ramp meter rates are generally only increased to process more vehicles when freeways have the capacity to handle increased

demand from the entrance ramps. SANDAG's 2050 Revenue Constrained RTP includes addition of managed lanes on Interstate 5 between Interstate 8 and La Jolla Village Drive. This measure provides partial mitigation since it improves freeway operation in the vicinity of the project. As a result, the significant traffic impacts to this freeway segment would remain significant and unmitigated. This improvement is an operational improvement made by Caltrans and would not be included in the University PFFP.

Interstate 5 Northbound Entrance Ramp from Westbound La Jolla Village Drive

- Alternatives A, B, C, and D when compared to Existing Conditions: Adjust ramp meter rate to process more vehicles. The significant traffic impact, associated with these alternatives, to this freeway ramp would be fully mitigated with the implementation of this measure.

- Alternatives A, B, C, and D Recommended Improvements: Caltrans continually monitors and adjusts freeway entrance ramp meter rates. Ramp meter rates are generally only increased to process more vehicles when freeways have the capacity to handle increased demand from the entrance ramps. SANDAG's 2050 Revenue Constrained RTP includes addition of managed lanes on Interstate 5 between Interstate 8 and La Jolla Village Drive. This measure provides partial mitigation since it improves freeway operation in the vicinity of the project. As a result, the significant traffic impacts to this freeway segment would remain significant and unmitigated. This improvement is an operational improvement made by Caltrans and would not be included in the University PFFP.

Interstate 5 Northbound Entrance Ramp from Eastbound La Jolla Village Drive

- Alternatives A, B, C, and D when compared to Existing Conditions: Adjust ramp meter rate to process more vehicles. The significant traffic impact, associated with these alternatives, to this freeway ramp would be fully mitigated with the implementation of this measure.

- Alternatives A, B, C, and D Recommended Improvements: Caltrans continually monitors and adjusts freeway entrance ramp meter rates. Ramp meter rates are generally only increased to process more vehicles when freeways have the capacity to handle increased demand from the entrance ramps. SANDAG's 2050 Revenue Constrained RTP includes addition of managed lanes on Interstate 5 between Interstate 8 and La Jolla Village Drive. This measure provides partial mitigation since it improves freeway operation in the vicinity of the project. As a result, the significant traffic impacts to this freeway segment would remain significant and unmitigated. This improvement is an operational improvement made by Caltrans and would not be included in the University PFFP.

Interstate 5 Southbound Entrance Ramp from Westbound La Jolla Village Drive

- Alternatives A, B, C, and D when compared to Existing Conditions: Adjust ramp meter rate to process more vehicles. The significant traffic impact, associated with these alternatives, to this freeway ramp would be fully mitigated with the implementation of this measure.

- Alternatives A, B, C, and D Recommended Improvements: Caltrans continually monitors and adjusts freeway entrance ramp meter rates. Ramp meter rates are generally only increased to process more vehicles when freeways have the capacity to handle increased

demand from the entrance ramps. SANDAG's 2050 Revenue Constrained RTP includes addition of managed lanes on Interstate 5 between Interstate 8 and La Jolla Village Drive. This measure provides partial mitigation since it improves freeway operation in the vicinity of the project. As a result, the significant traffic impacts to this freeway segment would remain significant and unmitigated. This improvement is an operational improvement made by Caltrans and would not be included in the University PFFP.

Interstate 5 Southbound Entrance Ramp from Eastbound La Jolla Village Drive

- Alternatives A, B, C, and D when compared to Existing Conditions: Adjust ramp meter rate to process more vehicles. The significant traffic impact, associated with these alternatives, to this freeway ramp would be fully mitigated with the implementation of this measure.

- Alternatives A, B, C, and D Recommended Improvements: Caltrans continually monitors and adjusts freeway entrance ramp meter rates. Ramp meter rates are generally only increased to process more vehicles when freeways have the capacity to handle increased demand from the entrance ramps. SANDAG's 2050 Revenue Constrained RTP includes addition of managed lanes on Interstate 5 between Interstate 8 and La Jolla Village Drive. This measure provides partial mitigation since it improves freeway operation in the vicinity of the project. As a result, the significant traffic impacts to this freeway segment would remain significant and unmitigated. This improvement is an operational improvement made by Caltrans and would not be included in the University PFFP.

Interstate 5 Northbound Entrance Ramp from Genesee Avenue

- Alternatives A, B, C, and D when compared to Existing Conditions: Adjust ramp meter rate to process more vehicles. The significant traffic impact, associated with these alternatives, to this freeway ramp would be fully mitigated with the implementation of this measure.

- Alternatives A, B, C, and D Recommended Improvements: Caltrans continually monitors and adjusts freeway entrance ramp meter rates. Ramp meter rates are generally only increased to process more vehicles when freeways have the capacity to handle increased demand from the entrance ramps. SANDAG's 2050 Revenue Constrained RTP includes addition of managed lanes on Interstate 5 between Interstate 8 and La Jolla Village Drive. This measure provides partial mitigation since it improves freeway operation in the vicinity of the project. As a result, the significant traffic impacts to this freeway segment would remain significant and unmitigated. This improvement is an operational improvement made by Caltrans and would not be included in the University PFFP.

Interstate 805 Southbound Entrance Ramp from Nobel Drive

- Alternatives A, B, C, and D when compared to Existing Conditions: Adjust ramp meter rate to process more vehicles. The significant traffic impact, associated with these alternatives, to this freeway ramp would be fully mitigated with the implementation of this measure.

- Alternatives A, B, C, and D Recommended Improvements: Caltrans continually monitors and adjusts freeway entrance ramp meter rates. Ramp meter rates are generally only increased to process more vehicles when freeways have the capacity to handle increased

demand from the entrance ramps. SANDAG's 2050 Unconstrained Network RTP includes addition of managed lanes on Interstate 805 between State Route 905 and Carrol Canyon Road. This measure provides partial mitigation since it improves freeway operation in the vicinity of the project. As a result, the significant traffic impacts to this freeway segment would remain significant and unmitigated. This improvement is an operational improvement made by Caltrans and would not be included in the University PFFP.

Table 10-1 Intersections Recommended for Mitigation Measures

ID	Intersection	Alt A (Regents Bridge & 6-lane Genesee)	Alt B (Regents Bridge & 4-lane Genesee)	Alt C (No Regents Bridge & 6-lane Genesee)	Alt D (No Regents Bridge & 4-lane Genesee)
2	Genesee Ave & John Hopkins Dr (S)	X	X	X	X
14	Genesee Ave & Nobel Dr		X		
15	Genesee Ave & Decoro St	X	X	X	X
17	Genesee Ave & Governor Dr	X	X	X	X
18	Genesee Ave & SR-52 WB Ramps	X	X	X	X
21	La Jolla Village Dr & Torrey Pines Rd	X	X	X	X
23b	La Jolla Village Dr EB & Gilman Dr	X	X	X	X
24	La Jolla Village Dr & Villa La Jolla Dr	X	X	X	X
34	Miramar Rd & Eastgate Mall	X	X	X	X
59	Regents Rd & Arriba St	X	X		
60	Regents Rd & Governor Dr	X	X		
69	Gilman Dr & I-5 SB Ramps			X	X
73	Towne Centre Dr & Eastgate Mall	X	X	X	X
76	Executive Way & Executive Dr	X	X	X	X
77	Judicial Dr & Eastgate Mall	X	X	X	X
79	Governor Dr & I-805 NB Ramps	X	X	X	X

Table 10-2 Roadway Segments Recommended for Mitigation Measures

Roadway Segment	Alt A (Regents Bridge& 6-lane Genesee)	Alt B (Regents Bridge& 4-lane Genesee)	Alt C (No Regents Bridge& 6-lane Genesee)	Alt D (No Regents Bridge& 4-lane Genesee)
Eastgate Mall, Judicial Drive to Eastgate Drive	X	X	X	X
Eastgate Mall, Eastgate Drive to Miramar Road	X	X	X	X
Genesee Avenue, La Jolla Village Drive to Esplanade Court			X	X
Genesee Avenue, Nobel Drive to Centurion Square		X		X
Genesee Avenue, Centurion Square to Governor Drive		X		X
Genesee Avenue, Governor Drive to SR-52 WB Ramps		X		X
La Jolla Village Drive, I-5 SB Ramps to Towne Centre Drive	X	X	X	X

Table 10-3 Corridors Recommended for Mitigation Measures

Corridor	Alt A (Regents Bridge& 6-lane Genesee)	Alt B (Regents Bridge& 4-lne Genesee)	Alt C (No Regents Bridge& 6-lane Genesee)	Alt D (No Regents Bridge& 4-lane Genesee)
Genesee Avenue	X	X	X	X
La Jolla Village Drive	X	X	X	X
Nobel Drive	X	X	X	X
Regents Rod	X	X		

11 POST-MITIGATION ANALYSIS

This section provides a description of the future community buildout conditions with the implementation of the traffic mitigation measures described in Chapter 10.

ROADWAY NETWORK

The final recommended roadway networks for each Alternative are provided in **Appendices A – D**.

INTERSECTIONS

Tables 11-1 through 11-4 display the LOS analysis results for the study intersections within the study area after the implementation of the mitigation measures described in Chapter 10. A separate table is prepared for each alternative. The number of intersections continuing to operate at unacceptable LOS during one or more peak periods after the implementation of the recommended mitigation measures is as follows:

Alternative A: 16 locations

Alternative B: 16 locations

Alternative C: 21 locations

Alternative D: 20 locations

Appendices G - J contain the peak-hour intersections LOS calculation worksheets.

ROADWAY SEGMENT VOLUME-BASED

Table 11-5 displays the LOS analysis results for the study roadway segments within the study area after the implementation of the mitigation measures described in Chapter 10. The number of locations continuing to operate at unacceptable LOS after the implementation of the recommended mitigation measures is as follows:

Alternative A: 16 locations

Alternative B: 15 locations

Alternative C: 16 locations

Alternative D: 18 locations

ROADWAY SEGMENT SPEED-BASED

Table 11-6 displays the LOS analysis results for the speed-based roadway segments evaluation for Alternatives A and B, which include the Regents Road Bridge, before and after the implementation of the mitigation measures described in Chapter 10. **Table 11-7** displays the LOS analysis results for the speed-based roadway segments evaluation for Alternatives C and D, which does not include the Regents Road Bridge, before and after the implementation of the mitigation measures described in Chapter 10. As shown in the tables, the speeds generally are increased along the corridors with the capacity improvements identified as mitigation to intersections and roadway segments. **Table 11-8** provides a summary showing which corridors operate at LOS E or F in at least one direction for each peak period by alternative.

Appendices G - J contain tables and graphs that summarize the travel time details along each corridor.

Table 11-1 Intersection Analysis for Alternative A Recommended Network

ID	Intersection	Peak Hour	Future Alt A - *Before Improvement*			Future Alt A - *After Recommended Improvement*			Description
			Control	Delay (a)	LOS (b)	Control	Delay (a)	LOS (b)	
1	Genesee Ave & N. Torrey Pines Rd	AM	Signal	22.2	C				
		MID		22.2	C				
		PM		36.2	D				
2	Genesee Ave & John Hopkins Dr (S)	AM	Signal	132.3	**F**	Signal	22.6	C	*Convert 1 of the westbound through lanes on Genesee Avenue to a right turn lane*
		MID		47.7	D		43.7	D	
		PM		44.2	D		44.4	D	
3	Genesee Ave & Science Center Dr	AM	Signal	17.4	B				
		MID		8.3	A				
		PM		15.9	B				
4	Genesee Ave & I-5 SB Ramps	AM	Signal	39.3	D				
		MID		30.0	C				
		PM		35.2	D				
5	Genesee Ave & I-5 NB Ramps	AM	Signal	48.8	D				
		MID		35.2	D				
		PM		29.0	C				
6	Genesee Ave & Scripps Hospital	AM	Signal	60.7	**E**				*Improvement not recommended*
		MID		63.3	**E**				
		PM		74.8	**E**				
7	Genesee Ave & Campus Point Dr	AM	Signal	39.0	D				
		MID		31.9	C				
		PM		48.4	D				
8	Genesee Ave & Regents Road	AM	Signal	28.3	C				
		MID		14.0	B				
		PM		27.9	C				
9	Genesee Ave & Eastgate Mall	AM	Signal	50.5	D				
		MID		35.9	D				
		PM		36.5	D				
10	Genesee Ave & Executive Dr	AM	Signal	22.9	C				
		MID		19.4	B				
		PM		37.2	D				
11	Genesee Ave & Executive Square	AM	Signal	13.3	B				
		MID		33.5	C				
		PM		50.7	D				
12	Genesee Ave & La Jolla Village Dr	AM	Signal	121.5	**F**				*Improvement not recommended*
		MID		48.5	D				
		PM		48.8	D				

Notes:

Bold values indicate intersections operating at LOS E or F.

(a) Delay refers to the average control delay for the entire intersection, measured in seconds per vehicle. At a two-way stop-controlled intersection, delay refers to the worst movement.

(b) LOS calculations are based on the methodology outlined in the *2010 Highway Capacity Manual* and performed using Synchro 9.0

Table 11-1 Intersection Analysis for Alternative A Recommended Network (continued)

ID	Intersection	Peak Hour	Future Alt A - Before Improvement			Future Alt A - After Recommended Improvement			Description
			Control	Delay (a)	LOS (b)	Control	Delay (a)	LOS (b)	
13	Genesee Ave and Esplanade Ct	AM	Signal	36.8	D				*Improvement not recommended*
		MID		79.2	**E**				
		PM		86.4	**F**				
14	Genesee Ave & Nobel Dr	AM	Signal	36.1	D				*Improvement not recommended*
		MID		39.6	D				
		PM		60.6	**E**				
15	Genesee Ave & Decoro St	AM	Signal	24.0	C	Signal	19.4	B	*Stripe eastbound and westbound right-turn lanes on Decoro Street.*
		MID		22.9	C		21.9	C	
		PM		69.0	**E**		51.3	D	
16	Genesee Ave & Centurion Square	AM	Signal	30.3	C				
		MID		20.2	C				
		PM		9.2	A				
17	Genesee Ave & Governor Dr	AM	Signal	102.0	**F**	Signal	61.7	**E**	*Add Northbound Right-Turn lane*
		MID		31.9	C		28.3	C	
		PM		51.4	D		48.1	D	
18	Genesee Ave & SR-52 WB Ramps	AM	SSSC	27.7	D	Signal	15.7	B	*Signalize intersection and square up ramps, adding a protected phase for northbound left-turns from Genesee Avenue to SR-52 Ramp. Add second right-turn lane exiting Ramp.*
		MID		15.4	C		8.6	A	
		PM		783.3	**F**		34.9	C	
19	Genesee Ave & SR-52 EB Ramps	AM	Signal	53.2	D				
		MID		42.1	D				
		PM		50.0	D				
20	Genesee Ave & Appleton St/Lehrer Dr	AM	Signal	166.2	**F**				*Improvement not recommended*
		MID		32.5	C				
		PM		60.9	**E**				
21	La Jolla Village Dr & Torrey Pines Rd	AM	Signal	49.1	D	Signal	26.5	C	*Move the pedestrian crossing from the east leg to the west leg of the intersection and modify the signal phasing.*
		MID		30.8	C		31.4	C	
		PM		178.2	**F**		48.3	D	
22	La Jolla Village Dr & La Jolla Scenic Dr	AM	Signal	49.1	D				
		MID		15.3	B				
		PM		54.3	D				
23a	La Jolla Village Dr WB & Gillman Dr	AM	Signal	15.7	B				
		MID		10.7	B				
		PM		16.6	B				
23b	La Jolla Village Dr EB & Gillman Dr	AM	SSSC	16.5	C	Signal	14.2	B	*Signalize intersection and install a protected southbound left turn phase. Re-stripe eastbound ramp approach to have a shared left-right and an exclusive right lane*
		MID		12.3	B		10.0	A	
		PM		141.8	**F**		23.5	C	
24	La Jolla Village Dr & Villa La Jolla Dr	AM	Signal	123.0	**F**	Signal	88.4	**F**	*Add a second westbound right turn lane from La Jolla Village Drive to Villa La Jolla Drive.*
		MID		378.5	**F**		231.7	**F**	
		PM		328.4	**F**		310.6	**F**	

Notes:

Bold values indicate intersections operating at LOS E or F.

ECL = Exceeds Calculable Limit. Reported when delay exceeds 180 seconds. SSSC = Side Street Stop Control.

SSSC = Side Street Stop Control

(a) Delay refers to the average control delay for the entire intersection, measured in seconds per vehicle. At a two-way stop-controlled intersection, delay refers to the worst movement.

(b) LOS calculations are based on the methodology outlined in the *2010 Highway Capacity Manual* and performed using Synchro 9.0

Table 11-1 Intersection Analysis for Alternative A Recommended Network (continued)

ID	Intersection	Peak Hour	Future Alt A - Before Improvement			Future Alt A - After Recommended Improvement			Description
			Control	Delay (a)	LOS (b)	Control	Delay (a)	LOS (b)	
25	La Jolla Village Dr & I-5 SB Off-Ramps	AM	Signal	41.6	D				
		MID		52.7	D				
		PM		52.2	D				
26	La Jolla Village Dr & I-5 NB Off-Ramps	AM	Signal	41.2	D				
		MID		27.1	C				
		PM		31.5	C				
27	La Jolla Village Dr & Lebon Dr	AM	Signal	34.3	C				
		MID		29.6	C				
		PM		53.3	D				
28	La Jolla Village Dr & Regents Rd	AM	Signal	71.8	**E**				*Improvement not recommended*
		MID		53.4	D				
		PM		203.4	**F**				
29	La Jolla Village Dr & Executive Way	AM	Signal	83.0	**F**				*Improvement not recommended*
		MID		689.6	**F**				
		PM		233.6	**F**				
30	La Jolla Village Dr & Towne Center Dr	AM	Signal	156.6	**F**				*Improvement not recommended*
		MID		46.9	D				
		PM		167.8	**F**				
31	La Jolla Village Dr & I-805 SB Ramps	AM	Signal	173.3	**F**				*Improvement not recommended*
		PM		18.5	B				
32	La Jolla Village Dr & I-805 NB Ramps	AM	Signal	43.3	D				
		PM		39.1	D				
33	Miramar Rd & Nobel Dr	AM	Signal	20.4	C				
		MID		14.1	B				
		PM		53.2	D				
34	Miramar Rd & Eastgate Mall	AM	Signal	23.0	C	Signal	21.6	C	*Modify the southbound Eastgate Mall approach to have two left-turn lanes and one right-turn lane*
		PM		104.0	**F**		47.9	D	
35	Miramar Rd & Miramar Mall	AM	Signal	25.2	C				
		PM		21.7	C				
36	Miramar Rd & Miramar Place	AM	Signal	21.1	C				
		PM		11.9	B				

Notes:

Bold values indicate intersections operating at LOS E or F.

(a) Delay refers to the average control delay for the entire intersection, measured in seconds per vehicle. At a two-way stop-controlled intersection, delay refers to the worst movement.

(b) LOS calculations are based on the methodology outlined in the *2010 Highway Capacity Manual* and performed using Synchro 9.0

Table 11-1 Intersection Analysis for Alternative A Recommended Network (continued)

ID	Intersection	Peak Hour	Future Alt A - Before Improvement			Future Alt A - After Recommended Improvement			Description
			Control	Delay (a)	LOS (b)	Control	Delay (a)	LOS (b)	
37	Miramar Rd & Camino Santa Fe	AM	Signal	43.0	D				*Improvement not recommended*
		PM		141.9	**F**				
38	Nobel Dr & Villa La Jolla Dr	AM	Signal	19.3	B				
		MID		20.3	C				
		PM		34.6	C				
39	Nobel Dr & La Jolla Village Square Dwy	AM	Signal	25.5	C				*Improvement not recommended*
		MID		224.5	**F**				
		PM		167.8	**F**				
40	Nobel Dr & I-5 SB On Ramp	AM	Signal	3.2	A				*Improvement not recommended*
		MID		29.9	C				
		PM		114.2	**F**				
41	Nobel Dr & University Center Ln/I-5 NB Off-Ramp	AM	Signal	16.2	B				
		MID		21.1	C				
		PM		45.2	D				
42	Nobel Dr & Caminito Plaza Centro	AM	Signal	14.5	B				
		MID		15.6	B				
		PM		21.0	C				
43	Nobel Dr & Lebon Dr	AM	Signal	30.0	C				
		MID		22.4	C				
		PM		37.3	D				
44	Nobel Dr & Regents Rd	AM	Signal	37.9	D				*Improvement not recommended*
		MID		36.7	D				
		PM		69.8	**E**				
45	Nobel Dr & Costa Verde Blvd/Cargill Ave	AM	Signal	34.9	C				
		MID		50.3	D				
		PM		45.7	D				
46	Nobel Dr & Lombard Place	AM	Signal	10.9	B				
		MID		24.7	C				
		PM		50.6	D				
47	Nobel Dr & Towne Center Dr	AM	Signal	28.5	C				
		MID		23.7	C				
		PM		44.6	D				
48	Nobel Dr & Shoreline Dr	AM	Signal	41.7	D				
		MID		19.4	B				
		PM		40.5	D				
49	Nobel Dr & Judicial Dr	AM	Signal	13.5	B				
		MID		13.1	B				
		PM		28.1	C				

Notes:

Bold values indicate intersections operating at LOS E or F.

ECL = Exceeds Calculable Limit. Reported when delay exceeds 180 seconds.

(a) Delay refers to the average control delay for the entire intersection, measured in seconds per vehicle. At a two-way stop-controlled intersection, delay refers to the worst movement.

(b) LOS calculations are based on the methodology outlined in the *2010 Highway Capacity Manual* and performed using Synchro 9.0

Table 11-1 Intersection Analysis for Alternative A Recommended Network (continued)

ID	Intersection	Peak Hour	Future Alt A - Before Improvement			Future Alt A - After Recommended Improvement			Description
			Control	Delay (a)	LOS (b)	Control	Delay (a)	LOS (b)	
50	Nobel Dr & I-805 SB On-Ramp	AM	Signal	1.1	A				
		MID		18.8	B				
		PM		6.6	A				
51	Nobel Dr & I-805 N Off-Ramp	AM	Signal	23.8	C				
		MID		19.2	B				
		PM		21.3	C				
52	Nobel Dr & Avenue of Flags	AM	Signal	3.1	A				
		MID		8.4	A				
		PM		3.6	A				
53	Regents Rd & County Day Ln/ Health Science Dr	AM	Signal	54.6	D				
		MID		11.9	B				
		PM		28.6	C				
54	Regents Rd & Eastgate Mall	AM	Signal	15.4	B				
		MID		6.5	A				
		PM		17.0	B				
55	Regents Rd & Executive Dr	AM	Signal	12.7	B				
		MID		9.7	A				
		PM		26.6	C				
56	Regents Rd & Regents Park Row	AM	Signal	22.9	C				
		MID		15.1	B				
		PM		48.4	D				
57	Regents Rd & Plaza De Palmas	AM	Signal	13.1	B				
		MID		9.9	A				
		PM		53.6	D				
58	Regents Rd & Berino Ct	AM	Signal	50.3	D				
		MID		6.6	A				
		PM		16.6	B				
59	Regents Rd & Arriba St	AM	Signal	68.6	**E**	Signal	49.6	D	*Add a second northbound left-turn lane on Regents Road*
		MID		27.8	C		24.8	C	
		PM		72.0	**E**		47.7	D	
60	Regents Rd & Governor Dr	AM	Signal	95.5	**F**	Signal	51.3	D	*Add a second southbound left-turn lane on Regents Road. Add a second westbound left-turn lane on Governor Drive*
		MID		43.1	D		26.2	C	
		PM		88.7	**F**		54.9	D	
61	Regents Rd & SR-52 WB Ramps	AM	Signal	43.2	D				
		MID		25.4	C				
		PM		41.3	D				
62	Regents Rd & SR-52 EB Ramps	AM	Signal	50.2	D				
		MID		21.3	C				
		PM		45.4	D				

Bold values indicate intersections operating at LOS E or F.

ECL = Exceeds Calculable Limit. Reported when delay exceeds 180 seconds.

(b) LOS calculations are based on the methodology outlined in the *2010 Highway Capacity Manual* and performed using Synchro 9.0

Table 11-1 Intersection Analysis for Alternative A Recommended Network (continued)

ID	Intersection	Peak Hour	Future Alt A - Before Improvement			Future Alt A - After Recommended Improvement			Description
			Control	Delay (a)	LOS (b)	Control	Delay (a)	LOS (b)	
63	Regents Rd & Luna Ave	AM	Signal	64.7	**E**				*Improvement not recommended*
		PM		95.2	**F**				
64	N. Torrey Pines Rd & UCSD Northpoint Dwy	AM	Signal	23.8	C				
		PM		32.1	C				
65	N. Torrey Pines Rd & Pangea Dr	AM	Signal	10.0	A				
		PM		20.8	C				
66	N. Torrey Pines Rd & La Jolla Shores Dr	AM	Signal	60.4	**E**				*Improvement not recommended*
		PM		167.1	**F**				
67	N. Torrey Pines Rd & Revelle College Dr	AM	Signal	23.6	C				
		PM		51.2	D				
68	Gilman Dr & Villa La Jolla Dr	AM	Signal	25.7	C				
		PM		47.2	D				
69	Gillman Dr & I-5 SB Ramps	AM	Signal	9.4	A				
		PM		50.9	D				
70	Gillman Dr & I-5 NB Ramps	AM	Signal	19.4	B				
		PM		19.7	B				
71	Palmilla Dr & Lebon Dr	AM	Signal	6.9	A				
		PM		8.2	A				
72	Palmilla Dr & Ariba St	AM	Signal	11.4	B				
		PM		18.3	B				
73	Towne Center Dr & Eastgate Mall	AM	Signal	31.3	C	Signal	31.0	C	*Add second westbound left-turn lane from Eastgate Mall to Towne Centre Drive*
		PM		65.9	**E**		50.0	D	
74	Towne Center Dr & Executive Dr	AM	Signal	24.2	C	Signal	24.2	C	
		PM		50.3	D		50.3	D	
75	Towne Center Dr & Golden Haven Dr	AM	Signal	16.4	B	Signal	16.4	B	
		PM		15.5	B		15.5	B	
76	Executive Way & Executive Dr	AM	Signal	16.7	B	Signal	21.6	C	*Modify eastbound and westbound left-turns to be protected-permissive instead of permissive*
		PM		362.0	**F**		52.0	D	
77	Judicial Dr & Eastgate Mall	AM	Signal	37.8	D	Signal	43.5	D	*Modify northbound and southbound approach of Judicial Drive to be split-phased and re-stripe northbound approach to have a left-turn lane, shared left-through-right lane, and right-turn lane*
		PM		75.8	**E**		48.3	D	
78	Governor Dr & I-805 SB Ramps	AM	SSSC	12.5	B				
		PM		16.1	B				
79	Governor Dr & I-805 NB Ramps	AM	SSSC	ECL	**F**	Roundabout		B	*Install roundabout*
		PM		722.4	**F**			B	

Notes:

Bold values indicate intersections operating at LOS E or F.

ECL = Exceeds Calculable Limit. Reported when delay exceeds 180 seconds.

SSSC = Side Street Stop Control

(a) Delay refers to the average control delay for the entire intersection, measured in seconds per vehicle. At a two-way stop-controlled intersection, delay refers to the worst movement.

(b) LOS calculations are based on the methodology outlined in the *2010 Highway Capacity Manual* and performed using Synchro 9.0

Table 11-2 Intersection Analysis for Alternative B Recommended Network

ID	Intersection	Peak Hour	Future Alt B - *Before Improvement*			Future Alt B - *After Recommended Improvement*			Description
			Control	Delay (a)	LOS (b)	Control	Delay (a)	LOS (b)	
1	Genesee Ave & N. Torrey Pines Rd	AM	Signal	22.2	C				
		MID		22.2	C				
		PM		36.5	D				
2	Genesee Ave & John Hopkins Dr (S)	AM	Signal	128.9	**F**	Signal	22.1	C	*Convert 1 of the westbound through lanes on Genesee Avenue to a right turn lane*
		MID		46.9	D		43.1	D	
		PM		43.4	D		43.5	D	
3	Genesee Ave & Science Center Dr	AM	Signal	17.5	B				
		MID		8.4	A				
		PM		15.9	B				
4	Genesee Ave & I-5 SB Ramps	AM	Signal	39.4	D				
		MID		30.3	C				
		PM		35.2	D				
5	Genesee Ave & I-5 NB Ramps	AM	Signal	48.5	D				
		MID		34.5	C				
		PM		28.7	C				
6	Genesee Ave & Scripps Hospital	AM	Signal	60.2	**E**				*Improvement not recommended*
		MID		62.2	**E**				
		PM		72.3	**E**				
7	Genesee Ave & Campus Point Dr	AM	Signal	39.0	D				
		MID		32.0	C				
		PM		47.7	D				
8	Genesee Ave & Regents Road	AM	Signal	29.1	C				
		MID		14.1	B				
		PM		28.1	C				
9	Genesee Ave & Eastgate Mall	AM	Signal	49.9	D				
		MID		36.5	D				
		PM		36.8	D				
10	Genesee Ave & Executive Dr	AM	Signal	22.6	C				
		MID		19.5	B				
		PM		37.1	D				
11	Genesee Ave & Executive Square	AM	Signal	13.6	B				
		MID		33.4	C				
		PM		48.4	D				
12	Genesee Ave & La Jolla Village Dr	AM	Signal	120.0	**F**				*Improvement not recommended*
		MID		48.4	D				
		PM		48.5	D				

Notes:

Bold values indicate intersections operating at LOS E or F.

(a) Delay refers to the average control delay for the entire intersection, measured in seconds per vehicle. At a two-way stop-controlled intersection, delay refers to the worst movement.

(b) LOS calculations are based on the methodology outlined in the *2010 Highway Capacity Manual* and performed using Synchro 9.0

Table 11-2 Intersection Analysis for Alternative B Recommended Network (continued)

ID	Intersection	Peak Hour	Future Alt B - Before Improvement			Future Alt B - After Recommended Improvement			Description
			Control	Delay (a)	LOS (b)	Control	Delay (a)	LOS (b)	
13	Genesee Ave and Esplanade Ct	AM	Signal	40.9	D				*Improvement not recommended*
		MID		84.5	**F**				
		PM		93.8	**F**				
14	Genesee Ave & Nobel Dr	AM	Signal	65.1	**E**	Signal	37.7	D	*Install a northbound and eastbound right-turn overlap phase and add a third northbound through lane on Genesee Avenue*
		MID		40.0	D		38.6	D	
		PM		59.5	**E**		61.0	**E**	
15	Genesee Ave & Decoro St	AM	Signal	38.0	D	Signal	19.2	B	*Stripe eastbound and westbound right-turn lanes on Decoro Street. Add a third northbound and southbound through lane on Genesee Avenue*
		MID		21.3	C		17.6	B	
		PM		161.2	**F**		46.2	D	
16	Genesee Ave & Centurion Square	AM	Signal	42.0	D				
		MID		11.6	B				
		PM		16.5	B				
17	Genesee Ave & Governor Dr	AM	Signal	93.7	**F**	Signal	57.8	**E**	*Add a third northbound and soutbound through lane, maintaining exclusive northbound and southbound right-turn lanes*
		MID		29.7	C		26.8	C	
		PM		86.1	**F**		34.8	C	
18	Genesee Ave & SR-52 WB Ramps	AM	SSSC	36.9	**E**	Signal	18.3	B	*Signalize intersection and square up ramps, adding a protected phase for northbound left-turns from Genesee Avenue to SR-52 Ramp. Add second right-turn lane exiting Ramp.*
		MID		14.7	B		9.8	A	
		PM		640.3	**F**		36.3	D	
19	Genesee Ave & SR-52 EB Ramps	AM	Signal	49.9	D				
		MID		40.2	D				
		PM		48.3	D				
20	Genesee Ave & Appleton St/Lehrer Dr	AM	Signal	161.5	**F**				*Improvement not recommended*
		MID		32.8	C				
		PM		59.5	**E**				
21	La Jolla Village Dr & Torrey Pines Rd	AM	Signal	49.3	D	Signal	23.2	C	*Move the pedestrian crossing from the east leg to the west leg of the intersection and modify the signal phasing.*
		MID		30.9	C		31.5	C	
		PM		178.4	**F**		48.3	D	
22	La Jolla Village Dr & La Jolla Scenic Dr	AM	Signal	46.8	D				
		MID		15.2	B				
		PM		54.1	D				
23a	La Jolla Village Dr WB & Gillman Dr	AM	Signal	15.5	B				
		MID		10.6	B				
		PM		16.5	B				
23b	La Jolla Village Dr EB & Gillman Dr	AM	SSSC	16.6	C	Signal	14.5	B	*Signalize intersection and install a protected southbound left turn phase. Re-stripe eastbound ramp approach to have a shared left-right and an exclusive right lane*
		MID		12.4	B		10.1	B	
		PM		145.0	**F**		23.7	C	
24	La Jolla Village Dr & Villa La Jolla Dr	AM	Signal	123.9	**F**	Signal	86.1	**F**	*Add a second westbound right turn lane from La Jolla Village Drive to Villa La Jolla Drive.*
		MID		379.0	**F**		231.4	**F**	
		PM		328.6	**F**		310.1	**F**	

Notes:

Bold values indicate intersections operating at LOS E or F.

SSSC = Side Street Stop Control

(a) Delay refers to the average control delay for the entire intersection, measured in seconds per vehicle. At a two-way stop-controlled intersection, delay refers to the worst movement.

(b) LOS calculations are based on the methodology outlined in the *2010 Highway Capacity Manual* and performed using Synchro 9.0

Table 11-2 Intersection Analysis for Alternative B Recommended Network (continued)

ID	Intersection	Peak Hour	Future Alt B - Before Improvement			Future Alt B - After Recommended Improvement			Description
			Control	Delay (a)	LOS (b)	Control	Delay (a)	LOS (b)	
25	La Jolla Village Dr & I-5 SB Off-Ramps	AM	Signal	44.1	D				
		MID		53.8	D				
		PM		54.8	D				
26	La Jolla Village Dr & I-5 NB Off-Ramps	AM	Signal	40.9	D				
		MID		28.2	C				
		PM		31.2	C				
27	La Jolla Village Dr & Lebon Dr	AM	Signal	34.5	C				
		MID		30.1	C				
		PM		52.9	D				
28	La Jolla Village Dr & Regents Rd	AM	Signal	73.4	**E**				*Improvement not recommended*
		MID		53.6	D				
		PM		205.9	**F**				
29	La Jolla Village Dr & Executive Way	AM	Signal	80.2	**F**				*Improvement not recommended*
		MID		732.1	**F**				
		PM		239.5	**F**				
30	La Jolla Village Dr & Towne Center Dr	AM	Signal	163.3	**F**				*Improvement not recommended*
		MID		47.2	D				
		PM		170.2	**F**				
31	La Jolla Village Dr & I-805 SB Ramps	AM	Signal	167.8	**F**				*Improvement not recommended*
		PM		19.6	B				
32	La Jolla Village Dr & I-805 NB Ramps	AM	Signal	41.6	D				
		PM		37.1	D				
33	Miramar Rd & Nobel Dr	AM	Signal	21.0	C				
		MID		14.3	B				
		PM		31.2	C				
34	Miramar Rd & Eastgate Mall	AM	Signal	23.1	C	Signal	21.9	C	*Modify the southbound Eastgate Mall approach to have two left-turn lanes and one right-turn lane*
		PM		105.5	**F**		50.8	D	
35	Miramar Rd & Miramar Mall	AM	Signal	23.1	C				
		PM		19.3	B				
36	Miramar Rd & Miramar Place	AM	Signal	19.5	B				
		PM		10.7	B				

Notes:

Bold values indicate intersections operating at LOS E or F.

(a) Delay refers to the average control delay for the entire intersection, measured in seconds per vehicle. At a two-way stop-controlled intersection, delay refers to the worst movement.

(b) LOS calculations are based on the methodology outlined in the *2010 Highway Capacity Manual* and performed using Synchro 9.0

Table 11-2 Intersection Analysis for Alternative B Recommended Network (continued)

ID	Intersection	Peak Hour	Future Alt B - Before Improvement			Future Alt B - After Recommended Improvement			Description
			Control	Delay (a)	LOS (b)	Control	Delay (a)	LOS (b)	
37	Miramar Rd & Camino Santa Fe	AM	Signal	43.1	D				*Improvement not recommended*
		PM		142.7	**F**				
38	Nobel Dr & Villa La Jolla Dr	AM	Signal	19.1	B				
		MID		20.1	C				
		PM		34.4	C				
39	Nobel Dr & La Jolla Village Square Dwy	AM	Signal	25.4	C				*Improvement not recommended*
		MID		222.2	**F**				
		PM		165.8	**F**				
40	Nobel Dr & I-5 SB On Ramp	AM	Signal	3.2	A				*Improvement not recommended*
		MID		28.4	C				
		PM		113.3	**F**				
41	Nobel Dr & University Center Ln/I-5 NB Off-Ramp	AM	Signal	15.6	B				
		MID		21.2	C				
		PM		47.4	D				
42	Nobel Dr & Caminito Plaza Centro	AM	Signal	14.3	B				
		MID		15.2	B				
		PM		20.4	C				
43	Nobel Dr & Lebon Dr	AM	Signal	30.0	C				
		MID		22.4	C				
		PM		37.4	D				
44	Nobel Dr & Regents Rd	AM	Signal	38.3	D				*Improvement not recommended*
		MID		36.9	D				
		PM		71.6	**E**				
45	Nobel Dr & Costa Verde Blvd/Cargill Ave	AM	Signal	34.9	C				
		MID		50.5	D				
		PM		46.2	D				
46	Nobel Dr & Lombard Place	AM	Signal	11.1	B				
		MID		24.7	C				
		PM		49.6	D				
47	Nobel Dr & Towne Center Dr	AM	Signal	28.5	C				
		MID		23.6	C				
		PM		54.8	D				
48	Nobel Dr & Shoreline Dr	AM	Signal	41.9	D				
		MID		19.5	B				
		PM		40.3	D				
49	Nobel Dr & Judicial Dr	AM	Signal	14.3	B				
		MID		13.7	B				
		PM		28.3	C				

Notes:

Bold values indicate intersections operating at LOS E or F.

(a) Delay refers to the average control delay for the entire intersection, measured in seconds per vehicle. At a two-way stop-controlled intersection, delay refers to the worst movement.

(b) LOS calculations are based on the methodology outlined in the *2010 Highway Capacity Manual* and performed using Synchro 9.0

Table 11-2 Intersection Analysis for Alternative B Recommended Network (continued)

ID	Intersection	Peak Hour	Future Alt B - Before Improvement			Future Alt B - After Recommended Improvement			Description
			Control	Delay (a)	LOS (b)	Control	Delay (a)	LOS (b)	
50	Nobel Dr & I-805 SB On-Ramp	AM	Signal	1.1	A				
		MID		18.1	B				
		PM		6.7	A				
51	Nobel Dr & I-805 N Off-Ramp	AM	Signal	22.3	C				
		MID		18.5	B				
		PM		19.6	B				
52	Nobel Dr & Avenue of Flags	AM	Signal	3.0	A				
		MID		8.4	A				
		PM		3.5	A				
53	Regents Rd & County Day Ln/ Health Science Dr	AM	Signal	54.7	D				
		MID		11.9	B				
		PM		29.0	C				
54	Regents Rd & Eastgate Mall	AM	Signal	15.6	B				
		MID		6.5	A				
		PM		17.4	B				
55	Regents Rd & Executive Dr	AM	Signal	12.7	B				
		MID		9.8	A				
		PM		26.7	C				
56	Regents Rd & Regents Park Row	AM	Signal	23.4	C				
		MID		15.2	B				
		PM		50.5	D				
57	Regents Rd & Plaza De Palmas	AM	Signal	13.1	B				
		MID		10.0	A				
		PM		53.9	D				
58	Regents Rd & Berino Ct	AM	Signal	53.8	D				
		MID		6.6	A				
		PM		16.7	B				
59	Regents Rd & Arriba St	AM	Signal	68.5	**E**	Signal	49.7	D	*Add a second northbound left-turn lane on Regents Road*
		MID		27.8	C		24.8	C	
		PM		89.2	**F**		50.9	D	
60	Regents Rd & Governor Dr	AM	Signal	106.3	**F**	Signal	53.7	D	*Add a second southbound left-turn lane on Regents Road. Add a second westbound left-turn lane on Governor Drive*
		MID		51.3	D		26.8	C	
		PM		95.3	**F**		54.9	D	
61	Regents Rd & SR-52 WB Ramps	AM	Signal	45.6	D				
		MID		26.0	C				
		PM		42.4	D				
62	Regents Rd & SR-52 EB Ramps	AM	Signal	50.7	D				
		MID		21.7	C				
		PM		44.7	D				

Notes:

Bold values indicate intersections operating at LOS E or F.

(a) Delay refers to the average control delay for the entire intersection, measured in seconds per vehicle. At a two-way stop-controlled intersection, delay refers to the worst movement.

(b) LOS calculations are based on the methodology outlined in the *2010 Highway Capacity Manual* and performed using Synchro 9.0

Table 11-2 Intersection Analysis for Alternative B Recommended Network (continued)

ID	Intersection	Peak Hour	Future Alt B - Before Improvement			Future Alt B - After Recommended Improvement			Description
			Control	Delay (a)	LOS (b)	Control	Delay (a)	LOS (b)	
63	Regents Rd & Luna Ave	AM	Signal	66.1	**E**				*Improvement not recommended*
		PM		96.9	**F**				
64	N. Torrey Pines Rd & UCSD Northpoint Dwy	AM	Signal	23.9	C				
		PM		32.2	C				
65	N. Torrey Pines Rd & Pangea Dr	AM	Signal	10.0	A				
		PM		20.9	C				
66	N. Torrey Pines Rd & La Jolla Shores Dr	AM	Signal	60.7	**E**				*Improvement not recommended*
		PM		168.7	**F**				
67	N. Torrey Pines Rd & Revelle College Dr	AM	Signal	23.4	C				
		PM		47.2	D				
68	Gilman Dr & Villa La Jolla Dr	AM	Signal	25.6	C				
		PM		45.6	D				
69	Gillman Dr & I-5 SB Ramps	AM	Signal	9.4	A				
		PM		51.8	D				
70	Gillman Dr & I-5 NB Ramps	AM	Signal	19.6	B				
		PM		19.8	B				
71	Palmilla Dr & Lebon Dr	AM	Signal	6.9	A				
		PM		8.2	A				
72	Palmilla Dr & Ariba St	AM	Signal	11.3	B				
		PM		17.9	B				
73	Towne Center Dr & Eastgate Mall	AM	Signal	31.5	C	Signal	31.1	C	*Add second westbound left-turn lane from Eastgate Mall to Towne Centre Drive*
		PM		66.6	**E**		50.4	D	
74	Towne Center Dr & Executive Dr	AM	Signal	24.3	C				
		PM		50.9	D				
75	Towne Center Dr & Golden Haven Dr	AM	Signal	16.4	B				
		PM		14.4	B				
76	Executive Way & Executive Dr	AM	Signal	11.6	B	Signal	15.6	B	*Modify eastbound and westbound left-turns to be protected-permissive instead of permissive*
		PM		98.0	**F**		37.2	D	
77	Judicial Dr & Eastgate Mall	AM	Signal	37.6	D	Signal	42.8	D	*Modify northbound and southbound approach of Judicial Drive to be split-phased and re-stripe northbound approach to have a left-turn lane, shared left-through-right lane, and right-turn lane*
		PM		74.6	**E**		48.5	D	
78	Governor Dr & I-805 SB Ramps	AM	SSSC	12.6	B				
		PM		16.8	B				
79	Governor Dr & I-805 NB Ramps	AM	SSSC	ECL	**F**	Roundabout		B	*Install roundabout*
		PM		936.3	**F**			B	

Notes:

Bold values indicate intersections operating at LOS E or F.

SSSC = Side Street Stop Control

(a) Delay refers to the average control delay for the entire intersection, measured in seconds per vehicle. At a two-way stop-controlled intersection, delay refers to the worst movement.

(b) LOS calculations are based on the methodology outlined in the *2010 Highway Capacity Manual* and performed using Synchro 9.0

Table 11-3 Intersection Analysis for Alternative C Recommended Network

ID	Intersection	Peak Hour	Future Alt C - *Before Improvement*			Future Alt C - *After Recommended Improvement*			Description
			Control	Delay (a)	LOS (b)	Control	Delay (a)	LOS (b)	
1	Genesee Ave & N. Torrey Pines Rd	AM	Signal	22.5	C				
		MID		21.8	C				
		PM		49.2	D				
2	Genesee Ave & John Hopkins Dr (S)	AM	Signal	115.9	**F**	Signal	20.7	C	*Convert 1 of the westbound through lanes on Genesee Avenue to a right turn lane*
		MID		43.8	D		40.8	D	
		PM		39.4	D		39.5	D	
3	Genesee Ave & Science Center Dr	AM	Signal	17.4	B				
		MID		8.4	A				
		PM		15.7	B				
4	Genesee Ave & I-5 SB Ramps	AM	Signal	39.8	D				
		MID		30.4	C				
		PM		35.3	D				
5	Genesee Ave & I-5 NB Ramps	AM	Signal	49.7	D				
		MID		35.2	D				
		PM		29.2	C				
6	Genesee Ave & Scripps Hospital	AM	Signal	61.3	**E**				*Improvement not recommended*
		MID		62.2	**E**				
		PM		72.6	**E**				
7	Genesee Ave & Campus Point Dr	AM	Signal	40.2	D				
		MID		31.7	C				
		PM		43.6	D				
8	Genesee Ave & Regents Road	AM	Signal	24.4	C				
		MID		12.3	B				
		PM		26.0	C				
9	Genesee Ave & Eastgate Mall	AM	Signal	51.3	D				
		MID		37.6	D				
		PM		37.4	D				
10	Genesee Ave & Executive Dr	AM	Signal	23.6	C				
		MID		20.4	C				
		PM		39.1	D				
11	Genesee Ave & Executive Square	AM	Signal	14.9	B				
		MID		32.5	C				
		PM		43.1	D				
12	Genesee Ave & La Jolla Village Dr	AM	Signal	119.7	**F**				*Improvement not recommended*
		MID		51.4	D				
		PM		59.0	**E**				

Notes:

Bold values indicate intersections operating at LOS E or F.

(a) Delay refers to the average control delay for the entire intersection, measured in seconds per vehicle. At a two-way stop-controlled intersection, delay refers to the worst movement.

(b) LOS calculations are based on the methodology outlined in the *2010 Highway Capacity Manual* and performed using Synchro 9.0

Table 11-3 Intersection Analysis for Alternative C Recommended Network (continued)

ID	Intersection	Peak Hour	Future Alt C - Before Improvement			Future Alt C - After Recommended Improvement			Description
			Control	Delay (a)	LOS (b)	Control	Delay (a)	LOS (b)	
13	Genesee Ave and Esplanade Ct	AM	Signal	40.6	D				*Improvement not recommended*
		MID		87.6	**F**				
		PM		102.4	**F**				
14	Genesee Ave & Nobel Dr	AM	Signal	36.2	D				*Improvement not recommended*
		MID		39.7	D				
		PM		110.9	**F**				
15	Genesee Ave & Decoro St	AM	Signal	28.7	C	Signal	21.9	C	*Stripe eastbound and westbound right-turn lanes on Decoro Street.*
		MID		16.9	B		15.7	B	
		PM		184.1	**F**		118.6	**F**	
16	Genesee Ave & Centurion Square	AM	Signal	65.6	**E**				*Improvement not recommended*
		MID		9.3	A				
		PM		20.5	C				
17	Genesee Ave & Governor Dr	AM	Signal	145.8	**F**	Signal	52.7	D	*Construct a grade separated intersection, removing northbound and southbound through movements. Two northbound and southbound through lanes would be required in the undercrossing.*
		MID		40.0	D		29.7	C	
		PM		142.9	**F**		54.0	D	
18	Genesee Ave & SR-52 WB Ramps	AM	SSSC	40.5	**E**	Signal	17.1	B	*Signalize intersection and square up ramps, adding a protected phase for northbound left-turns from Genesee Avenue to SR-52 Ramp. Add second right-turn lane exiting Ramp.*
		MID		15.1	C		9.4	A	
		PM		719.4	**F**		38.1	D	
19	Genesee Ave & SR-52 EB Ramps	AM	Signal	62.2	**E**				*Improvement not recommended*
		MID		45.3	D				
		PM		52.8	D				
20	Genesee Ave & Appleton St/Lehrer Dr	AM	Signal	185.0	**F**				*Improvement not recommended*
		MID		34.9	C				
		PM		67.0	**E**				
21	La Jolla Village Dr & Torrey Pines Rd	AM	Signal	52.9	D	Signal	23.0	C	*Move the pedestrian crossing from the east leg to the west leg of the intersection and modify the signal phasing.*
		MID		31.1	C		31.7	C	
		PM		174.8	**F**		52.0	D	
22	La Jolla Village Dr & La Jolla Scenic Dr	AM	Signal	53.1	D				
		MID		16.2	B				
		PM		44.0	D				
23a	La Jolla Village Dr WB & Gillman Dr	AM	Signal	17.2	B				
		MID		12.0	B				
		PM		20.1	C				
23b	La Jolla Village Dr EB & Gillman Dr	AM	SSSC	17.4	C	Signal	18.6	B	*Signalize intersection and install a protected southbound left turn phase. Re-stripe eastbound ramp approach to have a shared left-right and an exclusive right lane*
		MID		12.8	B		10.5	B	
		PM		284.5	**F**		24.8	C	
24	La Jolla Village Dr & Villa La Jolla Dr	AM	Signal	132.2	**F**	Signal	84.4	**F**	*Add a second westbound right turn lane from La Jolla Village Drive to Villa La Jolla Drive.*
		MID		373.4	**F**		231.5	**F**	
		PM		328.0	**F**		313.2	**F**	

Notes:

Bold values indicate intersections operating at LOS E or F.

SSSC = Side Street Stop Control

(a) Delay refers to the average control delay for the entire intersection, measured in seconds per vehicle. At a two-way stop-controlled intersection, delay refers to the worst movement.

(b) LOS calculations are based on the methodology outlined in the *2010 Highway Capacity Manual* and performed using Synchro 9.0

Table 11-3 Intersection Analysis for Alternative C Recommended Network (continued)

ID	Intersection	Peak Hour	Future Alt C - Before Improvement			Future Alt C - After Recommended Improvement			Description
			Control	Delay (a)	LOS (b)	Control	Delay (a)	LOS (b)	
25	La Jolla Village Dr & I-5 SB Off-Ramps	AM	Signal	46.3	D				*Improvement not recommended*
		MID		61.7	**E**				
		PM		66.3	**E**				
26	La Jolla Village Dr & I-5 NB Off-Ramps	AM	Signal	32.2	C				
		MID		30.2	C				
		PM		34.3	C				
27	La Jolla Village Dr & Lebon Dr	AM	Signal	34.0	C				
		MID		30.4	C				
		PM		54.0	D				
28	La Jolla Village Dr & Regents Rd	AM	Signal	70.3	**E**				*Improvement not recommended*
		MID		50.8	D				
		PM		193.9	**F**				
29	La Jolla Village Dr & Executive Way	AM	Signal	76.0	**E**				*Improvement not recommended*
		MID		847.8	**F**				
		PM		266.3	**F**				
30	La Jolla Village Dr & Towne Center Dr	AM	Signal	164.0	**F**				*Improvement not recommended*
		MID		48.6	D				
		PM		166.3	**F**				
31	La Jolla Village Dr & I-805 SB Ramps	AM	Signal	162.6	**F**				*Improvement not recommended*
		PM		23.8	C				
32	La Jolla Village Dr & I-805 NB Ramps	AM	Signal	38.9	D				
		PM		39.6	D				
33	Miramar Rd & Nobel Dr	AM	Signal	21.8	C				
		MID		15.6	B				
		PM		42.5	D				
34	Miramar Rd & Eastgate Mall	AM	Signal	23.1	C	Signal	21.6	C	*Modify the southbound Eastgate Mall approach to have two left-turn lanes and one right-turn lane*
		PM		104.2	**F**		47.9	D	
35	Miramar Rd & Miramar Mall	AM	Signal	25.1	C				
		PM		21.3	C				
36	Miramar Rd & Miramar Place	AM	Signal	21.1	C				
		PM		12.1	B				

Notes:

Bold values indicate intersections operating at LOS E or F.

(a) Delay refers to the average control delay for the entire intersection, measured in seconds per vehicle. At a two-way stop-controlled intersection, delay refers to the worst movement.

(b) LOS calculations are based on the methodology outlined in the *2010 Highway Capacity Manual* and performed using Synchro 9.0

Table 11-3 Intersection Analysis for Alternative C Recommended Network (continued)

ID	Intersection	Peak Hour	Future Alt C - Before Improvement			Future Alt C - After Recommended Improvement			Description
			Control	Delay (a)	LOS (b)	Control	Delay (a)	LOS (b)	
37	Miramar Rd & Camino Santa Fe	AM	Signal	44.5	D				*Improvement not recommended*
		PM		124.9	**F**				
38	Nobel Dr & Villa La Jolla Dr	AM	Signal	19.9	B				
		MID		21.7	C				
		PM		37.5	D				
39	Nobel Dr & La Jolla Village Square Dwy	AM	Signal	25.5	C				*Improvement not recommended*
		MID		202.3	**F**				
		PM		145.6	**F**				
40	Nobel Dr & I-5 SB On Ramp	AM	Signal	3.4	A				*Improvement not recommended*
		MID		31.5	C				
		PM		121.6	**F**				
41	Nobel Dr & University Center Ln/I-5 NB Off-Ramp	AM	Signal	16.8	B				
		MID		22.4	C				
		PM		38.1	D				
42	Nobel Dr & Caminito Plaza Centro	AM	Signal	14.5	B				
		MID		15.8	B				
		PM		21.1	C				
43	Nobel Dr & Lebon Dr	AM	Signal	28.1	C				
		MID		21.4	C				
		PM		35.4	D				
44	Nobel Dr & Regents Rd	AM	Signal	35.5	D				*Improvement not recommended*
		MID		30.2	C				
		PM		86.6	**F**				
45	Nobel Dr & Costa Verde Blvd/Cargill Ave	AM	Signal	36.6	D				
		MID		47.3	D				
		PM		42.5	D				
46	Nobel Dr & Lombard Place	AM	Signal	11.1	B				
		MID		24.9	C				
		PM		52.2	D				
47	Nobel Dr & Towne Center Dr	AM	Signal	28.6	C				
		MID		23.8	C				
		PM		45.2	D				
48	Nobel Dr & Shoreline Dr	AM	Signal	42.7	D				
		MID		21.3	C				
		PM		40.5	D				
49	Nobel Dr & Judicial Dr	AM	Signal	14.4	B				
		MID		13.8	B				
		PM		28.7	C				

Notes:

Bold values indicate intersections operating at LOS E or F.

(a) Delay refers to the average control delay for the entire intersection, measured in seconds per vehicle. At a two-way stop-controlled intersection, delay refers to the worst movement.

(b) LOS calculations are based on the methodology outlined in the *2010 Highway Capacity Manual* and performed using Synchro 9.0

Table 11-3 Intersection Analysis for Alternative C Recommended Network (continued)

ID	Intersection	Peak Hour	Future Alt C - Before Improvement			Future Alt C - After Recommended Improvement			Description
			Control	Delay (a)	LOS (b)	Control	Delay (a)	LOS (b)	
50	Nobel Dr & I-805 SB On-Ramp	AM	Signal	1.4	A				
		MID		37.9	D				
		PM		8.3	A				
51	Nobel Dr & I-805 N Off-Ramp	AM	Signal	22.4	C				
		MID		18.6	B				
		PM		20.2	C				
52	Nobel Dr & Avenue of Flags	AM	Signal	3.0	A				
		MID		8.9	A				
		PM		3.5	A				
53	Regents Rd & County Day Ln/ Health Science Dr	AM	Signal	47.3	D				
		MID		11.7	B				
		PM		26.4	C				
54	Regents Rd & Eastgate Mall	AM	Signal	15.4	B				
		MID		6.4	A				
		PM		16.0	B				
55	Regents Rd & Executive Dr	AM	Signal	13.7	B				
		MID		9.9	A				
		PM		25.1	C				
56	Regents Rd & Regents Park Row	AM	Signal	23.3	C				
		MID		14.3	B				
		PM		35.6	D				
57	Regents Rd & Plaza De Palmas	AM	Signal	12.2	B				
		MID		8.8	A				
		PM		15.6	B				
58	Regents Rd & Berino Ct	AM	Signal	27.2	C				
		MID		5.8	A				
		PM		12.0	B				
59	Regents Rd & Arriba St	AM	Signal	29.0	C				
		MID		15.0	B				
		PM		25.4	C				
60	Regents Rd & Governor Dr	AM	Signal	33.4	C				
		MID		16.9	B				
		PM		32.0	C				
61	Regents Rd & SR-52 WB Ramps	AM	Signal	43.1	D				
		MID		29.4	C				
		PM		43.2	D				
62	Regents Rd & SR-52 EB Ramps	AM	Signal	43.9	D				*Improvement not recommended*
		MID		20.8	C				
		PM		44.7	D				

Bold values indicate intersections operating at LOS E or F.

(a) Delay refers to the average control delay for the entire intersection, measured in seconds per vehicle. At a two-way stop-controlled intersection, delay refers to the worst movement.

(b) LOS calculations are based on the methodology outlined in the *2010 Highway Capacity Manual* and performed using Synchro 9.0

Table 11-3 Intersection Analysis for Alternative C Recommended Network (continued)

ID	Intersection	Peak Hour	Future Alt C - Before Improvement			Future Alt C - After Recommended Improvement			Description
			Control	Delay (a)	LOS (b)	Control	Delay (a)	LOS (b)	
63	Regents Rd & Luna Ave	AM	Signal	52.3	D				*Improvement not recommended*
		PM		65.5	**E**				
64	N. Torrey Pines Rd & UCSD Northpoint Dwy	AM	Signal	23.5	C				
		PM		32.6	C				
65	N. Torrey Pines Rd & Pangea Dr	AM	Signal	10.0	A				
		PM		20.9	C				
66	N. Torrey Pines Rd & La Jolla Shores Dr	AM	Signal	60.5	**E**				*Improvement not recommended*
		PM		167.3	**F**				
67	N. Torrey Pines Rd & Revelle College Dr	AM	Signal	23.5	C				
		PM		51.2	D				
68	Gilman Dr & Villa La Jolla Dr	AM	Signal	24.9	C				
		PM		46.7	D				
69	Gillman Dr & I-5 SB Ramps	AM	Signal	10.3	B	Signal	11.7	B	*Convert one of the westbound through lanes to a second left-turn lane*
		PM		79.8	**E**		32.9	C	
70	Gillman Dr & I-5 NB Ramps	AM	Signal	21.7	C				
		PM		21.4	C				
71	Palmilla Dr & Lebon Dr	AM	Signal	7.4	A				
		PM		7.2	A				
72	Palmilla Dr & Ariba St	AM	Signal	7.1	A				
		PM		8.1	A				
73	Towne Center Dr & Eastgate Mall	AM	Signal	31.3	C	Signal	30.9	C	*Add second westbound left-turn lane from Eastgate Mall to Towne Centre Drive*
		PM		68.3	**E**		51.3	D	
74	Towne Center Dr & Executive Dr	AM	Signal	24.5	C				
		PM		51.4	D				
75	Towne Center Dr & Golden Haven Dr	AM	Signal	16.8	B				
		PM		16.3	B				
76	Executive Way & Executive Dr	AM	Signal	17.1	B	Signal	21.8	C	*Modify eastbound and westbound left-turns to be protected-permissive instead of permissive*
		PM		350.8	**F**		50.8	D	
77	Judicial Dr & Eastgate Mall	AM	Signal	33.6	C	Signal	41.7	D	*Modify northbound and southbound approach of Judicial Drive to be split-phased and re-stripe northbound approach to have a left-turn lane, shared left-through-right lane, and right-turn lane*
		PM		70.7	**E**		46.1	D	
78	Governor Dr & I-805 SB Ramps	AM	SSSC	12.7	B				
		PM		16.4	B				
79	Governor Dr & I-805 NB Ramps	AM	SSSC	ECL	**F**	Roundabout		B	*Install roundabout*
		PM		742.0	**F**			B	

Notes:

Bold values indicate intersections operating at LOS E or F.

SSSC = Side Street Stop Control

(a) Delay refers to the average control delay for the entire intersection, measured in seconds per vehicle. At a two-way stop-controlled intersection, delay refers to the worst movement.

(b) LOS calculations are based on the methodology outlined in the *2010 Highway Capacity Manual* and performed using Synchro 9.0

Table 11-4 Intersection Analysis for Alternative D Recommended Network

ID	Intersection	Peak Hour	Future Alt D - *Before Improvement*			Future Alt D - *After Recommended Improvement*			Description
			Control	Delay (a)	LOS (b)	Control	Delay (a)	LOS (b)	
1	Genesee Ave & N. Torrey Pines Rd	AM	Signal	22.3	C				
		MID		22.2	C				
		PM		38.5	D				
2	Genesee Ave & John Hopkins Dr (S)	AM	Signal	98.5	**F**	Signal	19.3	B	*Convert 1 of the westbound through lanes on Genesee Avenue to a right turn lane*
		MID		40.2	D		38.2	D	
		PM		35.4	D		35.5	D	
3	Genesee Ave & Science Center Dr	AM	Signal	17.3	B				
		MID		8.3	A				
		PM		15.4	B				
4	Genesee Ave & I-5 SB Ramps	AM	Signal	40.9	D				
		MID		31.7	C				
		PM		35.4	D				
5	Genesee Ave & I-5 NB Ramps	AM	Signal	49.3	D				
		MID		35.3	D				
		PM		29.5	C				
6	Genesee Ave & Scripps Hospital	AM	Signal	61.3	**E**				*Improvement not recommended*
		MID		61.5	**E**				
		PM		71.5	**E**				
7	Genesee Ave & Campus Point Dr	AM	Signal	40.2	D				
		MID		31.8	C				
		PM		43.8	D				
8	Genesee Ave & Regents Road	AM	Signal	24.3	C				
		MID		12.4	B				
		PM		25.8	C				
9	Genesee Ave & Eastgate Mall	AM	Signal	53.0	D				
		MID		37.0	D				
		PM		38.2	D				
10	Genesee Ave & Executive Dr	AM	Signal	23.3	C				
		MID		20.7	C				
		PM		39.4	D				
11	Genesee Ave & Executive Square	AM	Signal	14.8	B				
		MID		32.9	C				
		PM		44.3	D				
12	Genesee Ave & La Jolla Village Dr	AM	Signal	121.4	**F**				*Improvement not recommended*
		MID		51.2	D				
		PM		59.5	**E**				

Notes:

Bold values indicate intersections operating at LOS E or F.

(a) Delay refers to the average control delay for the entire intersection, measured in seconds per vehicle. At a two-way stop-controlled intersection, delay refers to the worst movement.

(b) LOS calculations are based on the methodology outlined in the *2010 Highway Capacity Manual* and performed using Synchro 9.0

Table 11-4 Intersection Analysis for Alternative D Recommended Network (continued)

ID	Intersection	Peak Hour	Future Alt D - Before Improvement			Future Alt D - After Recommended Improvement			Description
			Control	Delay (a)	LOS (b)	Control	Delay (a)	LOS (b)	
13	Genesee Ave and Esplanade Ct	AM	Signal	54.5	D				*Improvement not recommended*
		MID		90.6	**F**				
		PM		97.9	**F**				
14	Genesee Ave & Nobel Dr	AM	Signal	97.9	**F**				*Improvement not recommended*
		MID		40.0	D				
		PM		91.2	**F**				
15	Genesee Ave & Decoro St	AM	Signal	112.1	**F**	Signal	75.7	**E**	*Stripe eastbound and westbound right-turn lanes on Decoro Street.*
		MID		20.0	B		19.0	B	
		PM		314.4	**F**		265.7	**F**	
16	Genesee Ave & Centurion Square	AM	Signal	154.1	**F**				*Improvement not recommended*
		MID		11.3	B				
		PM		95.2	**F**				
17	Genesee Ave & Governor Dr	AM	Signal	163.7	**F**	Signal	48.7	D	*Construct a grade separated intersection, removing northbound and southbound through movements. Two northbound and southbound through lanes would be required in the undercrossing.*
		MID		38.3	D		27.2	C	
		PM		110.3	**F**		52.6	D	
18	Genesee Ave & SR-52 WB Ramps	AM	SSSC	45.9	**E**	Signal	19.3	B	*Signalize intersection and square up ramps, adding a protected phase for northbound left-turns from Genesee Avenue to SR-52 Ramp. Add second right-turn lane exiting Ramp.*
		MID		14.6	B		10.1	B	
		PM		603.8	**F**		38.4	D	
19	Genesee Ave & SR-52 EB Ramps	AM	Signal	69.6	**E**				
		MID		54.0	D				
		PM		62.7	**E**				
20	Genesee Ave & Appleton St/Lehrer Dr	AM	Signal	184.1	**F**				*Improvement not recommended*
		MID		35.1	D				
		PM		66.4	**E**				
21	La Jolla Village Dr & Torrey Pines Rd	AM	Signal	53.1	D	Signal	23.4	C	*Move the pedestrian crossing from the east leg to the west leg of the intersection and modify the signal phasing.*
		MID		31.1	C		31.8	C	
		PM		183.9	**F**		51.9	D	
22	La Jolla Village Dr & La Jolla Scenic Dr	AM	Signal	54.3	D				
		MID		16.2	B				
		PM		43.4	D				
23a	La Jolla Village Dr WB & Gillman Dr	AM	Signal	17.1	B				
		MID		12.0	B				
		PM		20.2	C				
23b	La Jolla Village Dr EB & Gillman Dr	AM	SSSC	17.8	C	Signal	19.9	B	*Signalize intersection and install a protected southbound left turn phase. Re-stripe eastbound ramp approach to have a shared left-right and an exclusive right lane*
		MID		12.9	B		11.3	B	
		PM		170.9	**F**		25.8	C	
24	La Jolla Village Dr & Villa La Jolla Dr	AM	Signal	127.0	**F**	Signal	88.6	**F**	*Add a second westbound right turn lane from La Jolla Village Drive to Villa La Jolla Drive.*
		MID		374.4	**F**		232.0	**F**	
		PM		330.0	**F**		312.9	**F**	

Notes:

Bold values indicate intersections operating at LOS E or F.

SSSC = Side Street Stop Control

(a) Delay refers to the average control delay for the entire intersection, measured in seconds per vehicle. At a two-way stop-controlled intersection, delay refers to the worst movement.

(b) LOS calculations are based on the methodology outlined in the *2010 Highway Capacity Manual* and performed using Synchro 9.0

Table 11-4 Intersection Analysis for Alternative D Recommended Network (continued)

ID	Intersection	Peak Hour	Future Alt D - Before Improvement			Future Alt D - After Recommended Improvement			Description
			Control	Delay (a)	LOS (b)	Control	Delay (a)	LOS (b)	
25	La Jolla Village Dr & I-5 SB Off-Ramps	AM	Signal	48.0	D				*Improvement not recommended*
		MID		61.0	**E**				
		PM		68.6	**E**				
26	La Jolla Village Dr & I-5 NB Off-Ramps	AM	Signal	42.8	D				
		MID		29.9	C				
		PM		33.8	C				
27	La Jolla Village Dr & Lebon Dr	AM	Signal	34.1	C				
		MID		30.5	C				
		PM		52.9	D				
28	La Jolla Village Dr & Regents Rd	AM	Signal	64.9	**E**				*Improvement not recommended*
		MID		53.4	D				
		PM		202.1	**F**				
29	La Jolla Village Dr & Executive Way	AM	Signal	75.8	**E**				*Improvement not recommended*
		MID		874.7	**F**				
		PM		266.6	**F**				
30	La Jolla Village Dr & Towne Center Dr	AM	Signal	161.2	**F**				*Improvement not recommended*
		MID		49.6	D				
		PM		171.5	**F**				
31	La Jolla Village Dr & I-805 SB Ramps	AM	Signal	171.7	**F**				*Improvement not recommended*
		PM		20.4	C				
32	La Jolla Village Dr & I-805 NB Ramps	AM	Signal	42.2	D				
		PM		43.7	D				
33	Miramar Rd & Nobel Dr	AM	Signal	21.3	C				
		MID		15.3	B				
		PM		38.6	D				
34	Miramar Rd & Eastgate Mall	AM	Signal	23.0	C	Signal	21.6	C	*Modify the southbound Eastgate Mall approach to have two left-turn lanes and one right-turn lane*
		PM		104.2	**F**		48.0	D	
35	Miramar Rd & Miramar Mall	AM	Signal	25.3	C				
		PM		21.5	C				
36	Miramar Rd & Miramar Place	AM	Signal	21.2	C				
		PM		12.2	B				

Notes:

Bold values indicate intersections operating at LOS E or F.

(a) Delay refers to the average control delay for the entire intersection, measured in seconds per vehicle. At a two-way stop-controlled intersection, delay refers to the worst movement.

(b) LOS calculations are based on the methodology outlined in the *2010 Highway Capacity Manual* and performed using Synchro 9.0

Table 11-4 Intersection Analysis for Alternative D Recommended Network (continued)

ID	Intersection	Peak Hour	Future Alt D - Before Improvement			Future Alt D - After Recommended Improvement			Description
			Control	Delay (a)	LOS (b)	Control	Delay (a)	LOS (b)	
37	Miramar Rd & Camino Santa Fe	AM	Signal	44.4	D				*Improvement not recommended*
		PM		124.8	**F**				
38	Nobel Dr & Villa La Jolla Dr	AM	Signal	19.9	B				
		MID		21.6	C				
		PM		37.5	D				
39	Nobel Dr & La Jolla Village Square Dwy	AM	Signal	25.5	C				*Improvement not recommended*
		MID		209.9	**F**				
		PM		150.6	**F**				
40	Nobel Dr & I-5 SB On Ramp	AM	Signal	3.5	A				*Improvement not recommended*
		MID		21.7	C				
		PM		125.1	**F**				
41	Nobel Dr & University Center Ln/I-5 NB Off-Ramp	AM	Signal	17.8	B				
		MID		23.3	C				
		PM		40.0	D				
42	Nobel Dr & Caminito Plaza Centro	AM	Signal	14.3	B				
		MID		15.5	B				
		PM		20.2	C				
43	Nobel Dr & Lebon Dr	AM	Signal	28.2	C				
		MID		21.6	C				
		PM		35.7	D				
44	Nobel Dr & Regents Rd	AM	Signal	34.7	C				*Improvement not recommended*
		MID		30.1	C				
		PM		89.9	**F**				
45	Nobel Dr & Costa Verde Blvd/Cargill Ave	AM	Signal	37.1	D				
		MID		48.1	D				
		PM		43.0	D				
46	Nobel Dr & Lombard Place	AM	Signal	11.1	B				
		MID		25.2	C				
		PM		54.9	D				
47	Nobel Dr & Towne Center Dr	AM	Signal	28.7	C				
		MID		24.0	C				
		PM		46.0	D				
48	Nobel Dr & Shoreline Dr	AM	Signal	45.9	D				
		MID		21.2	C				
		PM		42.2	D				
49	Nobel Dr & Judicial Dr	AM	Signal	13.9	B				
		MID		13.9	B				
		PM		29.1	C				

Notes:

Bold values indicate intersections operating at LOS E or F.

(a) Delay refers to the average control delay for the entire intersection, measured in seconds per vehicle. At a two-way stop-controlled intersection, delay refers to the worst movement.

(b) LOS calculations are based on the methodology outlined in the *2010 Highway Capacity Manual* and performed using Synchro 9.0

Table 11-4 Intersection Analysis for Alternative D Recommended Network (continued)

ID	Intersection	Peak Hour	Future Alt D - Before Improvement			Future Alt D - After Recommended Improvement			Description
			Control	Delay (a)	LOS (b)	Control	Delay (a)	LOS (b)	
50	Nobel Dr & I-805 SB On-Ramp	AM	Signal	1.0	A				
		MID		26.2	C				
		PM		5.9	A				
51	Nobel Dr & I-805 N Off-Ramp	AM	Signal	23.2	C				
		MID		19.0	B				
		PM		20.6	C				
52	Nobel Dr & Avenue of Flags	AM	Signal	3.0	A				
		MID		8.9	A				
		PM		3.6	A				
53	Regents Rd & County Day Ln/ Health Science Dr	AM	Signal	45.3	D				
		MID		11.9	B				
		PM		26.2	C				
54	Regents Rd & Eastgate Mall	AM	Signal	14.7	B				
		MID		6.4	A				
		PM		16.2	B				
55	Regents Rd & Executive Dr	AM	Signal	13.7	B				
		MID		9.9	A				
		PM		25.2	C				
56	Regents Rd & Regents Park Row	AM	Signal	23.1	C				
		MID		15.1	B				
		PM		48.4	D				
57	Regents Rd & Plaza De Palmas	AM	Signal	12.3	B				
		MID		8.9	A				
		PM		15.6	B				
58	Regents Rd & Berino Ct	AM	Signal	27.3	C				
		MID		5.8	A				
		PM		12.0	B				
59	Regents Rd & Arriba St	AM	Signal	29.0	C				
		MID		15.0	B				
		PM		25.4	C				
60	Regents Rd & Governor Dr	AM	Signal	37.1	D				
		MID		18.1	B				
		PM		33.1	C				
61	Regents Rd & SR-52 WB Ramps	AM	Signal	43.9	D				
		MID		29.7	C				
		PM		43.7	D				
62	Regents Rd & SR-52 EB Ramps	AM	Signal	48.3	D				
		MID		22.1	C				
		PM		45.9	D				

Notes:

Bold values indicate intersections operating at LOS E or F.

(a) Delay refers to the average control delay for the entire intersection, measured in seconds per vehicle. At a two-way stop-controlled intersection, delay refers to the worst movement.

(b) LOS calculations are based on the methodology outlined in the *2010 Highway Capacity Manual* and performed using Synchro 9.0

Table 11-4 Intersection Analysis for Alternative D Recommended Network (continued)

ID	Intersection	Peak Hour	Future Alt D - Before Improvement			Future Alt D - After Recommended Improvement			Description
			Control	Delay (a)	LOS (b)	Control	Delay (a)	LOS (b)	
63	Regents Rd & Luna Ave	AM	Signal	54.5	D				*Improvement not recommended*
		PM		66.6	**E**				
64	N. Torrey Pines Rd & UCSD Northpoint Dwy	AM	Signal	23.8	C				
		PM		32.2	C				
65	N. Torrey Pines Rd & Pangea Dr	AM	Signal	10.0	A				
		PM		21.0	C				
66	N. Torrey Pines Rd & La Jolla Shores Dr	AM	Signal	61.3	**E**				*Improvement not recommended*
		PM		169.9	**F**				
67	N. Torrey Pines Rd & Revelle College Dr	AM	Signal	23.9	C				
		PM		51.6	D				
68	Gilman Dr & Villa La Jolla Dr	AM	Signal	24.6	C				
		PM		46.1	D				
69	Gillman Dr & I-5 SB Ramps	AM	Signal	10.5	B	Signal	11.7	B	*Convert one of the westbound through lanes to a second left-turn lane*
		PM		82.9	**F**		82.9	**F**	
70	Gillman Dr & I-5 NB Ramps	AM	Signal	21.2	C				
		PM		20.9	C				
71	Palmilla Dr & Lebon Dr	AM	Signal	7.4	A				
		PM		7.2	A				
72	Palmilla Dr & Ariba St	AM	Signal	7.1	A				
		PM		8.1	A				
73	Towne Center Dr & Eastgate Mall	AM	Signal	31.7	C	Signal	31.3	C	*Add second westbound left-turn lane from Eastgate Mall to Towne Centre Drive*
		PM		69.8	**E**		52.5	D	
74	Towne Center Dr & Executive Dr	AM	Signal	24.4	C				
		PM		51.0	D				
75	Towne Center Dr & Golden Haven Dr	AM	Signal	16.7	B				
		PM		15.2	B				
76	Executive Way & Executive Dr	AM	Signal	17.1	B	Signal	21.8	C	*Modify eastbound and westbound left-turns to be protected-permissive instead of permissive*
		PM		355.9	**F**		50.9	D	
77	Judicial Dr & Eastgate Mall	AM	Signal	33.6	C	Signal	40.8	D	*Modify northbound and southbound approach of Judicial Drive to be split-phased and re-stripe northbound approach to have a left-turn lane, shared left-through-right lane, and right-turn lane*
		PM		67.6	**E**		54.1	D	
78	Governor Dr & I-805 SB Ramps	AM	SSSC	13.4	B				
		PM		18.2	B				
79	Governor Dr & I-805 NB Ramps	AM	SSSC	ECL	**F**	Roundabout	0.0	C	*Install roundabout*
		PM		ECL	**F**		0.0	B	

Notes:

Bold values indicate intersections operating at LOS E or F.

ECL = Exceeds Calculable Limit. Reported when delay exceeds 180 seconds.

SSSC = Side Street Stop Control

(a) Delay refers to the average control delay for the entire intersection, measured in seconds per vehicle. At a two-way stop-controlled intersection, delay refers to the worst movement.

(b) LOS calculations are based on the methodology outlined in the *2010 Highway Capacity Manual* and performed using Synchro 9.0

Table 11-5 Volume-Based Roadway Segment Analysis for All Alternatives Recommended Network

ROADWAY SEGMENT	Conditions	ROADWAY CLASSIFICATION (a)	LOS E CAPACITY	Future Alt A Regents Bridge 6-lane Genesee			Future Alt B Regents Bridge 4-lane Genesee			Future Alt C No Bridge 6-lane Genesee			Future Alt D No Bridge 4-lane Genesee		
				ADT (b)	V/C RATIO (c)	LOS	ADT (b)	V/C RATIO (c)	LOS	ADT (b)	V/C RATIO (c)	LOS	ADT (b)	V/C RATIO (c)	LOS
Eastgate Mall															
Regents Rd to Genesee Ave		3 Lane Collector (continuous left-turn lane)	22,500	12,100	0.807	D	12,200	0.813	D	12,300	0.820	D	12,300	0.820	D
Genesee Ave to Easter Way		4 Lane Collector	30,000	25,000	0.833	**E**	25,100	0.837	**E**	24,900	0.830	D	25,400	0.847	**E**
Easter Way to Judicial Dr		4 Lane Major Arterial	40,000	14,100	0.353	A	14,300	0.358	A	14,000	0.350	A	14,300	0.358	A
Judicial Drive to Eastgate Dr (Freeway Overpass)	Baseline	2 Lane Collector (no fronting property)	10,000	19,500	1.950	**F**	19,500	1.950	**F**	19,500	1.950	**F**	19,400	1.940	**F**
	Mitigated	4 Lane Collector	30,000		0.650	C		0.650	C		0.650	C		0.647	C
Eastgate Dr to Miramar Rd	Baseline	2 Lane Collector (continuous left-turn lane)	15,000	28,800	1.920	**F**	28,700	1.913	**F**	29,000	1.933	**F**	29,200	1.947	**F**
	Mitigated	4 Lane Collector	30,000		0.960	**E**		0.957	**E**		0.967	**E**		0.973	**E**
Executive Drive															
Regents Rd to Genesee Ave		4 Lane Collector (no center lane)	15,000	5,900	0.393	B	6,000	0.400	B	6,600	0.440	B	6,400	0.427	B
Genesee Ave to Judicial Dr		4 Lane Collector	30,000	8,900	0.297	A	8,700	0.290	A	9,300	0.310	A	9,300	0.310	A
Executive Way															
Executive Dr to La Jolla Village Dr		4 Lane Collector	30,000	11,400	0.380	B	11,100	0.370	B	11,000	0.367	B	11,100	0.370	B
Genesee Avenue															
N. Torrey Pines Rd to I-5 SB Ramps		6 Lane Prime Arterial	60,000	46,100	0.768	C	46,100	0.768	C	46,100	0.768	C	46,000	0.767	C
I-5 SB Ramps to I-5 NB Ramps		8 Lane Prime Arterial	80,000	62,100	0.776	C	62,200	0.778	C	62,300	0.779	C	62,100	0.776	C
I-5 NB Ramps to Regents Rd		6 Lane Prime Arterial	60,000	54,300	0.905	D	54,700	0.912	D	54,800	0.913	D	54,600	0.910	D
Regents Rd to La Jolla Village Dr		6 Lane Prime Arterial	60,000	40,600	0.812	D	40,300	0.806	D	40,700	0.814	D	40,800	0.816	D
La Jolla Village to Esplande Ct	Baseline	6 Lane Major Arterial	50,000	41,800	0.836	D	41,900	0.838	D	46,500	0.930	**E**	46,400	0.928	**E**
	Mitigated	6 Lane Prime Arterial	60,000								0.775	C		0.773	C
Esplande Ct to Nobel Dr		6 Lane Major Arterial	50,000	27,300	0.546	B	27,400	0.548	B	30,300	0.606	C	29,700	0.594	C
Nobel Dr to Centurion Square	Baseline	4 Lane Major Arterial	40,000				39,600	0.990	**E**				46,500	1.163	**F**
	Baseline	6 Lane Major Arterial	50,000	39,600	0.792	C				49,400	0.988	**E**			
	Mitigated	6 Lane Major Arterial	50,000				0	0.792	C						
Centurion Square to Governor Dr	Baseline	4 Lane Major Arterial	40,000				40,900	1.023	**F**				54,600	1.365	**F**
	Baseline	6 Lane Major Arterial	50,000	43,900	0.878	D				58,200	1.164	**F**			
	Mitigated	6 Lane Major Arterial	50,000				40,900	0.818	D						
Governor Dr to SR-52 WB Ramps	Baseline	4 Lane Major Arterial	40,000				44,300	1.108	**F**				43,500	1.088	**F**
	Baseline	6 Lane Major Arterial	50,000	48,700	0.974	**E**				47,700	0.954	**E**			
	Mitigated	6 Lane Major Arterial	50,000				44,300	0.886	D						
SR-52 WB Ramps to SR-52 EB Ramps		4 Lane Major Arterial	40,000	37,300	0.933	**E**	36,500	0.913	**E**	39,000	0.975	**E**	38,000	0.950	**E**
SR-52 EB Ramps to Lehrer Dr		4 Lane Major Arterial	40,000	37,100	0.928	**E**	36,600	0.915	**E**	38,900	0.973	**E**	38,400	0.960	**E**
Gilman Drive															
UCSD Campus to La Jolla Village Dr		4 Lane Collector	30,000	13,800	0.460	B	13,900	0.463	B	13,700	0.457	B	13,700	0.457	B
La Jolla Village Dr to Via Alicante		4 Lane Collector	30,000	21,800	0.727	D	21,800	0.727	D	21,000	0.700	D	20,700	0.690	D
Via Alicante to I-5 SB Ramps		4 Lane Major Arterial	40,000	24,300	0.608	C	24,500	0.613	C	24,000	0.600	C	23,400	0.585	C
I-5 SB Ramps to I-5 NB Ramps		4 Lane Major Arterial	40,000	14,900	0.373	A	15,000	0.375	B	16,800	0.420	B	16,500	0.413	B
Golden Haven Drive															
Towne Center Dr to Judicial Dr		4 Lane Major Arterial	40,000	7,500	0.188	A	7,300	0.183	A	7,700	0.193	A	7,600	0.190	A

Notes:

Bold values indicate roadway segments operating at LOS E or F.

(a) Road classifications are based on _____

(b) Average Daily Traffic (ADT) volumes for the roadway segments were determined from SANDAG Modeling

(c) The v/c Ratio is calculated by dividing the ADT volume by each respective roadway segment's capacity.

Table 11-5 Volume-Based Roadway Segment Analysis for All Alternatives Recommended Network (contniued)

ROADWAY SEGMENT	Conditions	ROADWAY CLASSIFICATION (a)	LOS E CAPACITY	Future Alt A Regents Bridge 6-lane Genesee			Future Alt B Regents Bridge 4-lane Genesee			Future Alt C No Bridge 6-lane Genesee			Future Alt D No Bridge 4-lane Genesee		
				ADT (b)	V/C RATIO (c)	LOS	ADT (b)	V/C RATIO (c)	LOS	ADT (b)	V/C RATIO (c)	LOS	ADT (b)	V/C RATIO (c)	LOS
Governor Drive															
Regents Road to Genesee Ave		4 Lane Major Arterial	40,000	11,400	0.285	A	10,700	0.268	A	23,200	0.580	C	23,000	0.575	C
Genesee Ave to I-805 SB Ramps		4 Lane Major Arterial	40,000	24,000	0.600	C	23,300	0.583	C	23,900	0.598	C	23,300	0.583	C
I-805 SB Ramps to I-805 NB Ramps		4 Lane Major Arterial	40,000	9,900	0.248	A	10,600	0.265	A	10,000	0.250	A	10,700	0.268	A
Judicial Drive															
Eastgate Mall to La Jolla Village Dr		4 Lane Major Arterial	40,000	10,600	0.265	A	10,400	0.260	A	9,900	0.248	A	9,700	0.243	A
La Jolla Village Dr to Nobel Drive		4 Lane Major Arterial	40,000	9,300	0.233	A	9,300	0.233	A	9,500	0.238	A	9,400	0.235	A
La Jolla Scenic Drive															
La Jolla Village Drive to South		4 Lane Major Arterial	40,000	12,900	0.323	A	12,900	0.323	A	14,100	0.353	A	14,100	0.353	A
La Jolla Village Drive															
Revelle College Drive to Villa La Jolla		6 Lane Prime Arterial	60,000	54,300	0.905	D	54,100	0.902	D	55,100	0.918	**E**	55,000	0.917	**E**
Villa La Jolla Drive to I-5 SB Ramps		6 Lane Prime Arterial	60,000	76,400	1.273	**F**	76,400	1.273	**F**	76,600	1.277	**F**	76,800	1.280	**F**
I-5 SB Ramps to I-5 NB Ramps	Baseline	6 Lane Major Arterial	50,000	59,400	1.188	**F**	60,100	1.202	**F**	61,200	1.224	**F**	60,900	1.218	**F**
	Mitigated	6 Lane Prime Arterial	60,000		0.990	**E**		1.002	**F**		1.020	**F**		1.015	**F**
I-5 NB Ramps to Lebon Dr	Baseline	6 Lane Major Arterial	50,000	52,000	1.040	**F**	52,500	1.050	**F**	53,200	1.064	**F**	53,200	1.064	**F**
	Mitigated	6 Lane Prime Arterial	60,000		0.867	D		0.875	D		0.887	D		0.887	D
Lebon Dr to Regents Road	Baseline	6 Lane Major Arterial	50,000	49,900	0.998	**E**	50,100	1.002	**F**	51,500	1.030	**F**	51,500	1.030	**F**
	Mitigated	6 Lane Prime Arterial	60,000		0.832	C		0.835	D		0.858	D		0.858	D
Regents Road to Genesee Ave	Baseline	6 Lane Major Arterial	50,000	52,400	1.048	**F**	52,400	1.048	**F**	50,500	1.010	**F**	50,700	1.014	**F**
	Mitigated	6 Lane Prime Arterial	60,000		0.873	D		0.873	D		0.842	D		0.845	D
Genesee Ave to Executive Way	Baseline	6 Lane Major Arterial	50,000	49,400	0.988	**E**	49,600	0.992	**E**	48,900	0.978	**E**	49,200	0.984	**E**
	Mitigated	6 Lane Prime Arterial	60,000		0.823	C		0.827	C		0.815	C		0.820	C
Executive Way to Towne Center Dr	Baseline	6 Lane Major Arterial	50,000	67,600	1.352	**F**	68,700	1.374	**F**	69,300	1.386	**F**	69,500	1.390	**F**
	Mitigated	6 Lane Prime Arterial	60,000		1.127	**F**		1.145	**F**		1.155	**F**		1.158	**F**
Towne Center Dr to I-805 SB Ramps		8 Lane Prime Arterial	80,000	67,600	0.845	C	68,700	0.859	C	69,300	0.866	C	69,500	0.869	C
Lebon Drive															
Palmilla Drive to Nobel Drive		4 Lane Major Arterial	40,000	16,100	0.403	B	16,000	0.400	B	12,300	0.308	A	12,400	0.310	A
Nobel Drive to La Jolla Village Drive		5 Lane Major Arterial	45,000	13,600	0.302	A	13,600	0.302	A	11,300	0.251	A	11,800	0.262	A
Miramar Road															
I-805 SB Ramps to I-805 NB Ramps		6 Lane Major Arterial	50,000	64,600	1.077	**F**	65,700	1.095	**F**	65,400	1.090	**F**	66,000	1.100	**F**
I-805 NB Ramps to Nobel Dr		8 Lane Prime Arterial	80,000	51,400	0.643	C	50,400	0.630	C	49,600	0.620	B	50,300	0.629	C
Nobel Dr to Eastgate Mall		8 Lane Prime Arterial	80,000	69,000	0.863	C	69,000	0.863	C	69,000	0.863	C	69,100	0.864	C
Eastgate Mall to Miramar Mall		7 Lane Prime Arterial	70,000	72,200	1.031	**F**	72,300	1.033	**F**	72,200	1.031	**F**	72,200	1.031	**F**
Miramar Mall to Camino Santa Fe		6 Lane Prime Arterial	60,000	72,200	1.203	**F**	72,300	1.205	**F**	72,200	1.203	**F**	72,200	1.203	**F**

Notes:

Bold values indicate roadway segments operating at LOS E or F.

(a) Road classifications are based on _____

(b) Average Daily Traffic (ADT) volumes for the roadway segments were determined from SANDAG Modeling

(c) The v/c Ratio is calculated by dividing the ADT volume by each respective roadway segment's capacity.

Table 11-5 Volume-Based Roadway Segment Analysis for All Alternatives Recommended Network (contniued)

ROADWAY SEGMENT	Conditions	ROADWAY CLASSIFICATION (a)	LOS E CAPACITY	Future Alt A Regents Bridge 6-lane Genesee			Future Alt B Regents Bridge 4-lane Genesee			Future Alt C No Bridge 6-lane Genesee			Future Alt D No Bridge 4-lane Genesee		
				ADT (b)	V/C RATIO (c)	LOS	ADT (b)	V/C RATIO (c)	LOS	ADT (b)	V/C RATIO (c)	LOS	ADT (b)	V/C RATIO (c)	LOS
North Torrey Pines Road															
Science Park Rd to Genesee Ave		6 Lane Prime Arterial	60,000	40,400	0.673	C	40,600	0.677	C	41,300	0.688	C	42,100	0.702	C
Genesee Ave to UCSD Northpoint Dwy		6 Lane Major Arterial	50,000	23,700	0.474	B	23,700	0.474	B	23,800	0.476	B	23,900	0.478	B
UCSD Northpoint Dwy to Revelle College Dr		4 Lane Major Arterial	40,000	23,700	0.593	C	23,700	0.593	C	23,800	0.595	C	23,900	0.598	C
Nobel Drive															
Villa La Jolla Dr to I-5 SB On Ramp		4 Lane Major Arterial	40,000	47,500	1.188	**F**	47,200	1.180	**F**	47,200	1.180	**F**	47,600	1.190	**F**
I-5 SB On Ramp to I-5 NB Off Ramp/University Center Lane		4 Lane Major Arterial	40,000	40,800	1.020	**F**	40,600	1.015	**F**	40,700	1.018	**F**	41,700	1.043	**F**
I-5 NB Off Ramp/University Center Lane to Lebon Dr		6 Lane Major Arterial	50,000	31,300	0.626	C	31,600	0.632	C	30,400	0.608	C	31,100	0.622	C
Lebon Dr to Regents Rd		6 Lane Major Arterial	50,000	27,300	0.546	B	27,800	0.556	B	30,700	0.614	C	31,300	0.626	C
Regents Rd to Genesee Ave		6 Lane Major Arterial	50,000	32,800	0.656	C	33,100	0.662	C	32,200	0.644	C	32,700	0.654	C
Genesee Ave to Towne Center Dr		4 Lane Major Arterial	40,000	32,400	0.810	D	30,400	0.760	D	32,000	0.800	D	30,800	0.770	D
Towne Center Dr to Judicial Dr		6 Lane Prime Arterial	60,000	25,000	0.417	B	24,900	0.415	A	25,000	0.417	B	26,200	0.437	B
Judicial Dr to Avenue of Flags		5 Lane Major Arterial	45,000	31,400	0.698	C	31,300	0.696	C	31,700	0.704	C	32,900	0.731	C
Avenue of Flags to Miramar Rd		4 Lane Prime Arterial	50,000	33,900	0.678	C	34,900	0.698	C	35,600	0.712	C	35,000	0.700	C
Regents Road															
Genesee Ave to Eastgate Mall		2 Lane Collector (continuous left-turn lane)	15,000												
		4 Lane Collector	30,000	9,700	0.243	A	9,900	0.248	A	8,700	0.218	A	8,600	0.215	A
Eastgate Mall to La Jolla Village Dr		4 Lane Collector	30,000	18,900	0.630	C	19,100	0.637	C	16,000	0.533	C	16,100	0.537	C
La Jolla Village Dr to Nobel Dr		5 Lane Major Arterial	45,000	24,500	0.544	C	24,700	0.549	C	18,700	0.416	B	18,600	0.413	B
Nobel Dr to Rose Canyon		4 Lane Major Arterial	40,000	27,000	0.675	C	27,100	0.678	C	11,600	0.290	A	11,600	0.290	A
Rose Canyon to Governor Dr		2 Lane Collector (no fronting property)	10,000							2,400	0.240	A	2,400	0.240	A
		4 Lane Major Arterial	40,000	30,000	0.750	D	29,900	0.748	C						
Governor Dr to SR-52 WB Ramps		4 Lane Major Arterial	40,000	30,300	0.758	D	30,900	0.773	D	17,800	0.445	B	17,800	0.445	B
SR-52 WB Ramps to SR-52 EB Ramps		4 Lane Major Arterial	40,000	35,300	0.883	**E**	35,500	0.888	**E**	23,400	0.585	C	23,500	0.588	C
SR-52 EB Ramps to Luna Ave		4 Lane Major Arterial	40,000	40,600	1.015	**F**	40,800	1.020	**F**	25,500	0.638	C	25,600	0.640	C
Torrey Pines Road															
La Jolla Village Drive to South		4 Lane Major Arterial	40,000	35,600	0.890	**E**	35,700	0.893	**E**	36,600	0.915	**E**	36,800	0.920	**E**
Towne Center Drive															
End to La Jolla Village Dr		4 Lane Major Arterial	40,000	21,400	0.535	C	21,600	0.540	C	21,600	0.540	C	21,500	0.538	C
La Jolla Village Dr to Nobel Dr		4 Lane Major Arterial	40,000	18,600	0.465	B	19,500	0.488	B	20,700	0.518	B	19,800	0.495	B
Villa La Jolla Drive															
Gilman Dr (South) to Nobel Dr		4 Lane Major Arterial	40,000	12,300	0.308	A	12,300	0.308	A	12,300	0.308	A	12,200	0.305	A
Nobel Dr to La Jolla Village Dr		4 Lane Major Arterial	40,000	24,300	0.608	C	24,100	0.603	C	23,700	0.593	C	23,700	0.593	C
La Jolla Village Dr to VA Medical Center		4 Lane Major Arterial	40,000	33,400	0.835	D	33,300	0.833	D	33,600	0.840	D	33,500	0.838	D

Notes:

Bold values indicate roadway segments operating at LOS E or F.

(a) Road classifications are based on _____

(b) Average Daily Traffic (ADT) volumes for the roadway segments were determined from SANDAG Modeling

(c) The v/c Ratio is calculated by dividing the ADT volume by each respective roadway segment's capacity.

Table 11-6 Speed-Based Corridor Analysis Summary - Alternatives A and B Recommended Network

ARTERIAL SEGMENT	Urban Street Class	Typical Free-Flow Speed	PEAK HOUR	Alt A Before Improvements			Alt A After Recommended Improvements			Alt B Before Improvements			Alt B After Recommended Improvements		
				TIME (S)	SPEED (a)	LOS (b)	TIME (S)	SPEED (a)	LOS (b)	TIME (S)	SPEED (a)	LOS (b)	TIME (S)	SPEED (a)	LOS (b)
Genesee Ave															
Northbound: SR-52 EB Ramps to N. Torrey Pines Rd	I	50 mph	AM	1,081	14.88	**F**	950	16.93	**E**	1,205	13.35	**F**	1,028	15.65	**F**
			MID	779	20.60	**E**	793	20.26	**E**	782	20.53	**E**	789	20.35	**E**
			PM	811	19.74	**E**	832	25.51	D	857	18.69	**E**	858	25.51	D
Southbound: N. Torrey Pines Rd to SR-52 EB Ramps	I	50 mph	AM	828	19.45	**E**	824	19.53	**E**	833	19.32	**E**	861	18.69	**E**
			MID	716	22.41	D	739	21.73	D	705	22.78	D	722	22.24	D
			PM	964	16.61	**E**	1,102	25.99	D	1,192	13.44	**F**	982	26.15	D
La Jolla Village Dr / Miramar Rd															
Eastbound: Torrey Pines Rd to Camino Sante Fe	I	50 mph	AM	819	18.41	**E**	827	18.24	**E**	822	18.34	**E**	804	18.77	**E**
			MID (c)	482	16.57	**E**	635	12.59	**F**	484	16.52	**E**	660	12.81	**F**
			PM	1,737	8.68	**F**	1,585	9.52	**F**	1,758	8.58	**F**	1,606	9.39	**F**
Westbound: Camino Sante Fe to Torrey Pines Rd	I	50 mph	AM	1,568	9.62	**F**	1,482	10.18	**F**	1,596	9.45	**F**	1,514	9.96	**F**
			MID (c)	537	14.15	**F**	573	12.51	**F**	1,184	16.78	**E**	562	13.52	**F**
			PM	950	15.88	**F**	960	15.71	**F**	948	15.91	**F**	958	15.74	**F**
Nobel Dr															
Eastbound: Villa La Jolla Dr to Miramar Rd	II	40 mph	AM	707	30.36	B	707	16.10	**E**	704	30.50	B	704	30.46	B
			MID	691	31.13	B	636	16.54	**E**	684	31.41	B	682	31.49	B
			PM	1,123	19.17	D	1,123	10.79	**F**	1,130	19.05	D	1,127	19.10	D
Westbound: Miramar Rd to Villa La Jolla Dr	II	40 mph	AM	618	33.92	B	618	16.91	**E**	619	33.85	B	619	33.83	B
			MID	658	31.91	B	626	15.98	**E**	657	31.95	B	656	32.01	B
			PM	853	24.61	C	857	12.09	**F**	876	23.97	C	881	23.82	C
Regents Rd															
Northbound: Luna Ave to Genesee Ave	II	40 mph	AM	877	15.35	**E**	785	17.15	D	898	14.95	**E**	798	16.83	**E**
			MID	638	21.01	D	643	20.88	D	641	20.89	D	669	20.06	D
			PM	795	16.88	**E**	751	17.88	D	797	16.89	**E**	729	18.37	D
Southbound: Genesee Ave to Luna Ave	II	40 mph	AM	654	20.59	D	607	22.17	C	636	21.11	D	635	21.16	D
			MID	592	22.62	C	567	23.69	C	593	22.60	C	597	22.50	C
			PM	952	14.11	**E**	895	15.01	**E**	1,028	13.10	**E**	927	14.45	**E**

Notes: (a) Speed is calculated as the roadway segment distance divided by the travel time in miles per hour (mph).
by the number of signals per mile and by the intersection control delay.
(c) Midday Peak La Jolla Village Dr arterial segment from Torrey Pines Rd to I-805 Southbound Ramps

Table 11-7 Speed-Based Corridor Analysis Summary - Alternatives C and D Recommended Network

ARTERIAL SEGMENT	Urban Street Dlass	Typical Free-Flow Speed	PEAK HOUR	Alt C Before Improvements			Alt C After Recommended Improvements			Alt D Before Improvements			Alt D After Recommended Improvements		
				TIME (S)	SPEED (a)	LOS (b)	TIME (S)	SPEED (a)	LOS (b)	TIME (S)	SPEED (a)	LOS (b)	TIME (S)	SPEED (a)	LOS (b)
Genesee Ave															
Northbound: SR-52 EB Ramps to N. Torrey Pines Rd	I	50 mph	AM	1,265	12.72	**F**	1,171	13.74	**F**	1,789	8.99	**F**	1,567	10.27	**F**
			MID	797	20.14	**E**	788	20.38	**E**	856	18.77	**E**	839	19.14	**E**
			PM	807	19.84	**E**	858	25.51	D	874	18.34	**E**	925	26.13	D
Southbound: N. Torrey Pines Rd to SR-52 EB Ramps	I	50 mph	AM	839	19.17	**E**	897	17.93	**E**	846	19.03	**E**	904	17.79	**E**
			MID	725	22.16	D	743	21.62	D	733	21.92	D	751	21.38	D
			PM	1,373	11.67	**F**	1,185	25.34	D	1,628	9.84	**F**	1,504	25.99	D
La Jolla Village Dr / Miramar Rd															
Eastbound: Torrey Pines Rd to Camino Sante Fe	I	50 mph	AM	865	17.45	**E**	798	18.91	**E**	818	18.43	**E**	805	18.74	**E**
			MID (c)	483	16.54	**E**	641	12.46	**E**	484	16.52	**E**	643	12.43	**F**
			PM	1,732	8.71	**F**	1,585	9.52	**F**	1,732	8.71	**F**	1,585	9.52	**F**
Westbound: Camino Sante Fe to Torrey Pines Rd	I	50 mph	AM	1,574	9.58	**F**	1,495	10.09	**F**	1,562	9.66	**F**	1,478	10.21	**F**
			MID (c)	536	13.36	**F**	570	13.32	**F**	535	13.40	**F**	569	13.35	**F**
			PM	909	16.59	**E**	914	16.50	**E**	909	16.59	**E**	914	16.50	**E**
Nobel Dr															
Eastbound: Villa La Jolla Dr to Miramar Rd	II	40 mph	AM	713	30.11	B	713	30.11	B	715	30.01	B	715	30.01	B
			MID	690	31.17	B	690	31.17	B	685	31.36	B	685	31.36	B
			PM	1,203	17.89	D	1,203	17.89	D	1,223	17.61	D	1,223	17.61	D
Westbound: Miramar Rd to Villa La Jolla Dr	II	40 mph	AM	613	34.16	B	613	34.16	B	617	33.96	B	617	33.96	B
			MID	647	32.44	B	647	32.44	B	658	31.91	B	658	31.91	B
			PM	833	25.19	C	833	25.19	C	846	24.81	C	846	24.81	C
Regents Rd (N)															
Northbound: Rose Canyon to Genesee Ave	II	40 mph	AM	404	13	F	404	13	F	403	13	F	403	13	F
			MID	357	14	E	357	14	E	357	14	E	357	14	E
			PM	378	13	E	378	13	E	383	13	E	383	13	E
Southbound: Genesee Ave to Rose Canyon	II	40 mph	AM	331	15	E	331	15	E	328	15	E	328	15	E
			MID	317	16	E	317	16	E	316	16	E	316	16	E
			PM	376	13	E	376	13	E	400	13	F	400	13	F
Regents Rd (S)															
Northbound: Luna Ave to Rose Canyon	II	40 mph	AM	219	25	C	200	27	C	224	24	C	206	26	C
			MID	178	31	B	159	34	B	181	30	B	162	33	B
			PM	206	26	C	189	29	B	224	24	C	221	24	C
Southbound: Rose Canyon to Luna Ave	II	40 mph	AM	204	27	C	194	28	B	200	27	C	184	29	B
			MID	139	27	C	147	27	C	140	27	C	154	26	C
			PM	247	22	D	268	20	D	286	19	D	276	20	D

Notes: (a) Speed is calculated as the roadway segment distance divided by the travel time in miles per hour (mph).
by the number of signals per mile and by the intersection control delay.
(c) Midday Peak La Jolla Village Dr arterial segment from Torrey Pines Rd to I-805 Southbound Ramps

Table 11-8 Speed-Based Corridor Analysis Impact Summary By Peak Period for Recommended Networks

	Peak Period	Alternative A	Alternative B	Alternative C	Alternative D
Genesee Avenue	AM	X	X	X	X
	MID	X	X	X	X
	PM				
La Jolla Village Drive / Miramar Road	AM	X	X	X	X
	MID	X	X	X	X
	PM	X	X	X	X
Nobel Drive	AM	X	X	X	X
	MID	X	X	X	X
	PM	X	X	X	X
Regents Road	AM		X	X (north of Rose Canyon)	X (north of Rose Canyon)
	MID			X (north of Rose Canyon)	X (north of Rose Canyon)
	PM	X	X	X (north of Rose Canyon)	X (north of Rose Canyon)

12 INTELLIGENT TRANSPORTATION SYSTEMS

Use of Intelligent Transportation Systems (ITS) can provide many benefits to a mobility network, including improving travel time, providing transit bypass methods, helping relay valuable traffic-related information to vehicular and non-vehicular users, and providing guidance to key destinations.

Coordinated traffic signals is an example of an ITS strategy that helps improve roadway operations, and can be found in the University community. Traffic signals have coordinated timing plans and information is relayed between traffic signals in real-time. The traffic signals typically communicate using underground copper or fiber optic wires. Having traffic signals coordinated helps to maximize the efficiency of the traffic signal system on that roadway. The following roadways within the study area currently have coordinated traffic signal timing plans that will need to be revisited on occasion to verify they continue to meet the traffic pattern demand:

- Genesee Avenue
- La Jolla Village Drive
- Miramar Road
- North Torrey Pines Road

In order to accommodate current and project traffic in the University community, Genesee Avenue and La Jolla Village Drive corridors should be considered for the application of adaptive traffic signal operations. An adaptive system along this corridor would be conducive to the fluctuations in traffic that occur throughout the day. Implementation of adaptive signal systems must be according to the City of San Diego requirements and will require communications upgrades between the traffic signals as well as implementation of the system at the controller cabinets.

For each of the four alternatives, coordinated traffic signals should be considered on Nobel Drive. With Alternatives A and B, it is recommended to coordinate signal timing along Regents Road once the bridge is constructed.

Transit signal priority is an ITS strategy that allows a public transit vehicle, such as an MTS bus, to send information to an upcoming traffic signal to activate advanced transitioning to a green signal for its approach. As part of the Superloop rapid bus route, a total of 40 intersection have transit signal priority. There are no other transit signal priority intersections currently within the University community and with the current transit system, no additional intersections are recommended to have TSP installed. The Superloop TSP should be maintained and the City should work with MTS to monitor if additional intersections would benefit as transit routes change.

As the transit network expands within the community, transit users would benefit from integrating real-time transit schedule updates at the transit stops. This allows the user to be informed of when the next vehicle will be coming to the stop so that they can manage their time accordingly. There are also opportunities to develop internet-based applications that can provide this information remotely.

13 TRANSPORTATION DEMAND MANAGEMENT

The goal of the City's Transportation Demand Management (TDM) program is to improve mobility, reduce congestion and air pollution, and provide options for employees and residents to commute to and from work. Typical TDM strategies include promoting teleworking, alternative work schedules, walking, bicycling, carpooling, vanpooling, transit, carsharing, mixed-use development, and other transportation options. TDM measures improve the efficiency of our transportation system by helping to reduce vehicle trips during peak periods of demand.

The City of San Diego's Municipal Code requires new development to provide sufficient bicycle parking stalls, carpool parking and motorcycle facilities to encourage the use of alternative modes of transportation. As new developments enter the community, TDM measures should be required. Examples of recent TDM measures requested for development in the community include:

- Partially (or fully) subsidize transit passes
- Provide bicycle lockers
- Provide on-site shower facilities
- Provide reserved parking spaces for carpool/vanpool/low emission vehicles
- Provide transit/carpool/vanpool information kiosks

The University community draws a lot of visitors from outside of the community for both work and retail destinations. The addition of the new light-rail transit system will improve connections with other communities in San Diego and help reduce the vehicle demand. Further, the planned managed lanes included in the 2050 RTP along Interstate 805 and Interstate 5 adjacent to the community will be available for carpools, vanpools, buses, and for single occupant drivers who pay a toll. The amount of carpooling activity is expected to increase as the system of high occupancy lanes and managed lanes increase in the region. Providing bicycle connections within the community and to the adjacent communities will also be important for reducing the vehicle demand within the community.

The combination of new development requirements that encourage TDM measures and providing realistic options for people to utilize alternative modes of travel will lead to successfully managing the vehicle demand in the University community.

14 EMERGENCY RESPONSE

The City of San Diego Fire Department provided information on existing response times specific to the area south of Rose Canyon, east of Interstate 5, west of Genesee Avenue, and north of State Route 52. Emergency vehicle access across Rose Canyon influences the potential response time to emergencies in this area. There are currently three fire stations in the vicinity that primarily serve this area:

- Station 35 is located at 4285 Eastgate Mall, near the intersection of Genesee Avenue and Eastgate Mall, within the community and north of Rose Canyon.

- Station 27 is located at 5064 Clairemont Drive, near the intersection of Clairemont Mesa Boulevard and Clairemont Drive, south of the community, south of State Route 52.

- Station 9 is located at 7870 Ardath Lane, near the intersection of La Jolla Parkway and Torrey Pines Road, west of the community, west of Interstate 5.

The Fire Department uses the 90th Percentile response time to measure their effectiveness of responding to emergencies. The goal is to achieve a response time to emergencies of 7.5 minutes, 90% of the time. This 7.5 minute goal includes a 1-minute dispatch time, 1.5-minute company turn-out time and 5–minute travel time. The current 90th percentile response time to this area is 9 minutes and 38 seconds. It does not meet the City's goal. As part of a City-wide evaluation of the emergency response times, a new fire station in this area was identified as a priority.

An analysis of future year response time differences between alternatives was performed as part of this report. When estimating future year travel times, an average travel time is identified but it is not possible to quantify a 90th percentile. Therefore, the evaluation compares existing average travel time with future average travel time.

Model outputs and existing response time information is provided in **Appendix M**.

Table 14-1 provides a summary of the average response times based on existing data and projected future travel times using the forecast models for each alternative. Each traffic analysis zone was evaluated separately for morning peak (3 hours), afternoon peak (3 hours), and off-peak (18 hours), and then a weighted average was calculated for the area. A default dispatch and turn-out time of 2.5 minutes was added to the future year travel time estimates to compare equally with the information provided for existing conditions, which included dispatch, turn-out, and travel time.

As shown in the table, the average response time increases regardless of the alternative selected. There is not a major difference between the alternatives when it comes to average response time. Since the Fire Department does not use average travel time as a quantifier when determining response time effectiveness, the comparison provides a measure of how travel times are anticipated to change between existing and future conditions but does not provide the detailed information to determine if response times would be met in accordance with the City's goals. However, based on the finding that average response times are expected to increase and existing response times are not currently meeting the City's goal response times, it can be concluded that regardless of the alternative selected, a new fire station would be beneficial to improve emergency response times in this area of the community.

Table 14-1 Emergency Response Time Evaluation Summary

TAZ	Station	Year 2014 and 2015 Actual Response Times, TOTAL TURN-OUT AND DRIVE TIME (minutes)	Year 2035 Modeled Response, DRIVE TIME + 2.5 TURNOUT (minutes)											
			2035 Alt A Regents Bridge 6-lane Genesee			2035 Alt B Regents Bridge 4-lane Genesee			2035 Alt C No Bridge 6-lane Genesee			2035 Alt D No Bridge 4-lane Genesee		
		Average	AM	Off-Peak	PM	AM	Off-Peak	PM	AM	Off-Peak	PM	AM	Off-Peak	PM
2170	35	8.03	8.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5
	27	6.93	9.5	8.5	8.5	9.5	8.5	8.5	9.5	8.5	8.5	9.5	8.5	8.5
	9	8.32	12.5	12.5	14.5	13.5	12.5	14.5	12.5	12.5	14.5	12.5	12.5	14.5
2181	35	4.69	6.5	7.5	7.5	6.5	7.5	7.5	6.5	7.5	7.5	6.5	7.5	7.5
	27	5.57	8.5	8.5	8.5	9.5	8.5	8.5	8.5	8.5	8.5	9.5	8.5	8.5
	9	4.56	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5
2190	35	6.77	8.5	8.5	8.5	8.5	8.5	8.5	8.5	9.5	9.5	8.5	9.5	9.5
	27	5.56	8.5	8.5	8.5	9.5	8.5	8.5	8.5	8.5	8.5	9.5	8.5	8.5
	9	6.94	11.5	9.5	12.5	11.5	10.5	12.5	11.5	9.5	12.5	10.5	10.5	12.5
2200	35	6.97	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5
	27	5.59	8.5	7.5	7.5	8.5	7.5	8.5	8.5	7.5	7.5	8.5	7.5	8.5
	9	7.08	11.5	11.5	13.5	12.5	11.5	13.5	11.5	11.5	13.5	12.5	11.5	13.5
2214	35	7.09	8.5	8.5	9.5	8.5	8.5	9.5	10.5	10.5	11.5	10.5	10.5	11.5
	27	6.99	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5
	9	6.54	10.5	9.5	12.5	11.5	10.5	12.5	10.5	9.5	12.5	10.5	10.5	12.5
2215	35	7.75	10.5	9.5	10.5	10.5	9.5	10.5	10.5	9.5	11.5	10.5	9.5	11.5
	27	6.38	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5
	9	7.81	14.5	12.5	14.5	13.5	12.5	14.5	14.5	12.5	14.5	14.5	12.5	14.5
2230	35	6.37	7.5	8.5	8.5	7.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5
	27	5.91	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5
	9	6.05	10.5	9.5	14.5	10.5	10.5	14.5	10.5	9.5	14.5	10.5	10.5	14.5
2231	35	7.30	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5
	27	6.30	9.5	8.5	8.5	9.5	8.5	8.5	9.5	9.5	8.5	9.5	8.5	9.5
	9	7.04	12.5	12.5	14.5	13.5	12.5	14.5	12.5	12.5	14.5	13.5	12.5	14.5
2237	35	7.72	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5
	27	6.79	10.5	9.5	9.5	10.5	9.5	9.5	10.5	9.5	9.5	10.5	9.5	10.5
	9	7.67	13.5	13.5	14.5	14.5	13.5	14.5	13.5	13.5	14.5	14.5	13.5	14.5
2256	35	6.47	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	10.5	9.5	9.5	10.5
	27	6.60	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5
	9	5.45	11.5	9.5	12.5	11.5	10.5	12.5	11.5	9.5	12.5	11.5	10.5	12.5
2266	35	7.85	9.5	9.5	9.5	9.5	9.5	9.5	11.5	11.5	11.5	11.5	11.5	11.5
	27	7.48	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5
	9	7.67	10.5	8.5	11.5	10.5	9.5	11.5	10.5	8.5	11.5	10.5	9.5	11.5
4692	35	6.07	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5
	27	6.47	8.5	7.5	7.5	8.5	7.5	8.5	8.5	7.5	7.5	8.5	7.5	8.5
	9	5.96	11.5	11.5	14.5	11.5	9.5	14.5	11.5	11.5	14.5	12.5	11.5	14.5
4693	35	7.40	8.5	8.5	8.5	8.5	8.5	8.5	9.5	9.5	9.5	9.5	9.5	10.5
	27	6.28	9.5	8.5	8.5	9.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5
	9	0.00	10.5	8.5	11.5	12.5	11.5	11.5	10.5	8.5	11.5	10.5	9.5	10.5
Average of all TAZs	35	6.96	8.88			8.89			9.38			9.38		
	27	6.56	8.71			8.75			8.76			8.76		
	9	7.85	11.38			11.79			11.38			11.75		

Notes: Existing reponse times provided by the San Diego Fire Department

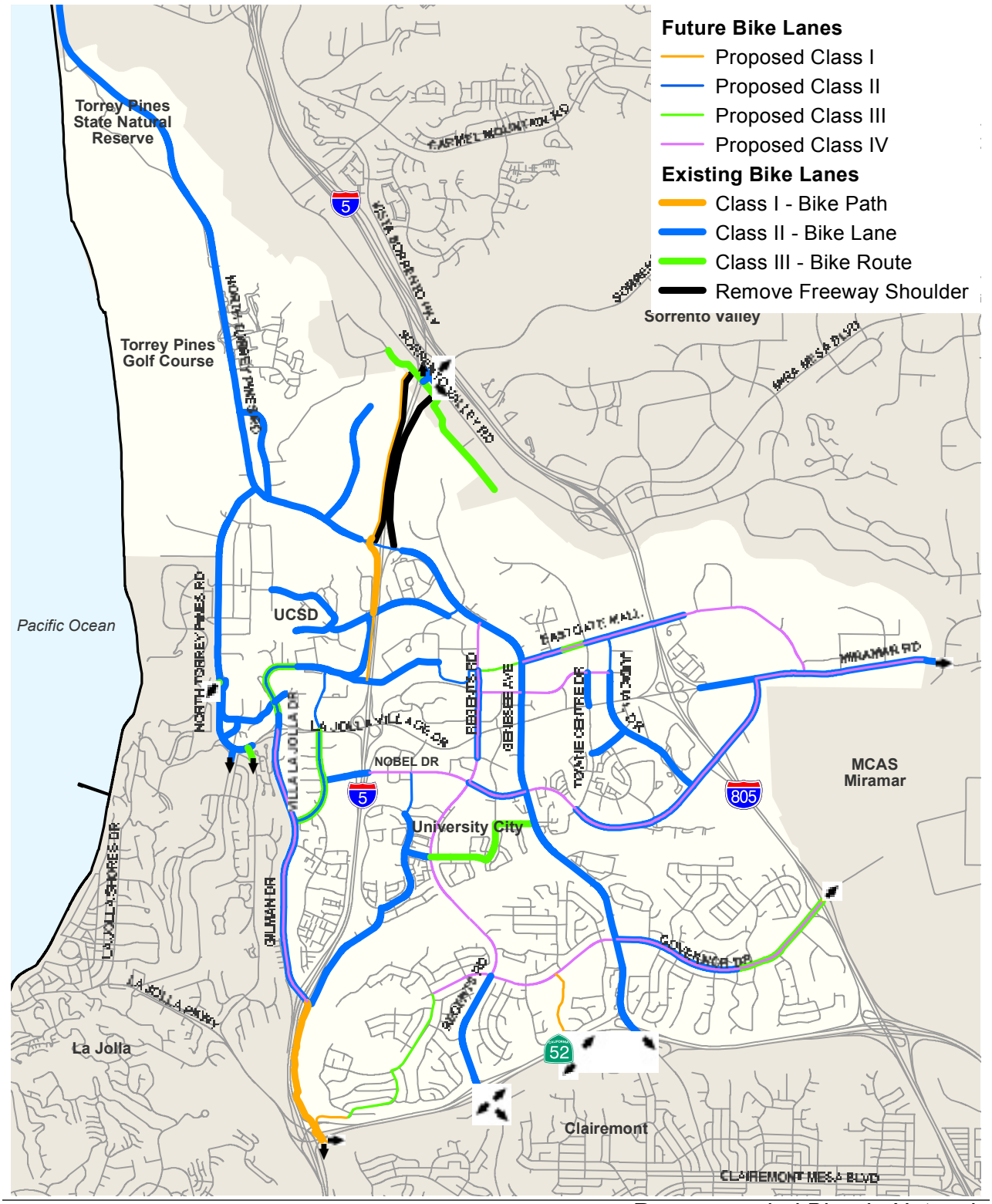
The goal is to achieve a response time to emergencies of 7.5 minutes, 90% of the time. This 7.5 minute goal includes 1 minute dispatch time, 1.5 minute company turn-out time and 5 minutes of drive time.

APPENDIX A

ALTERNATIVE A ANALYSIS AND NETWORK SUMMARY

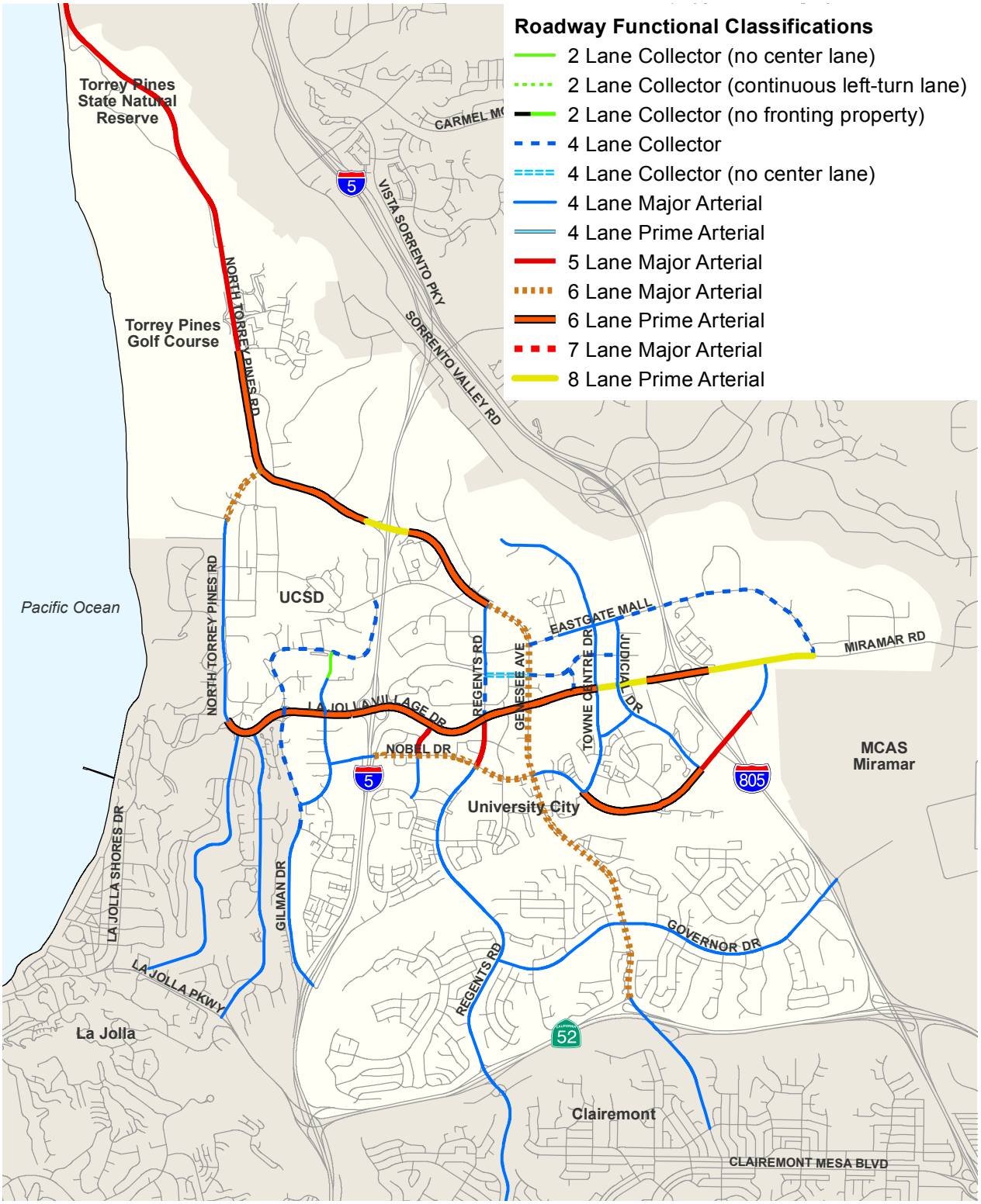
- Recommended Bicycle Network
- Recommended Roadway Classification Network
- Recommended Intersection Geometry Changes
- Future Intersection Analysis Results Summary (AM, Midday, PM)
- Future Roadway Volume-Based Analysis Results Summary
- Future Corridor Speed-Based Analysis Results Summary (AM, Midday, PM)
- Future Freeway Analysis Results Summary (AM, PM)

FIGURE A-1



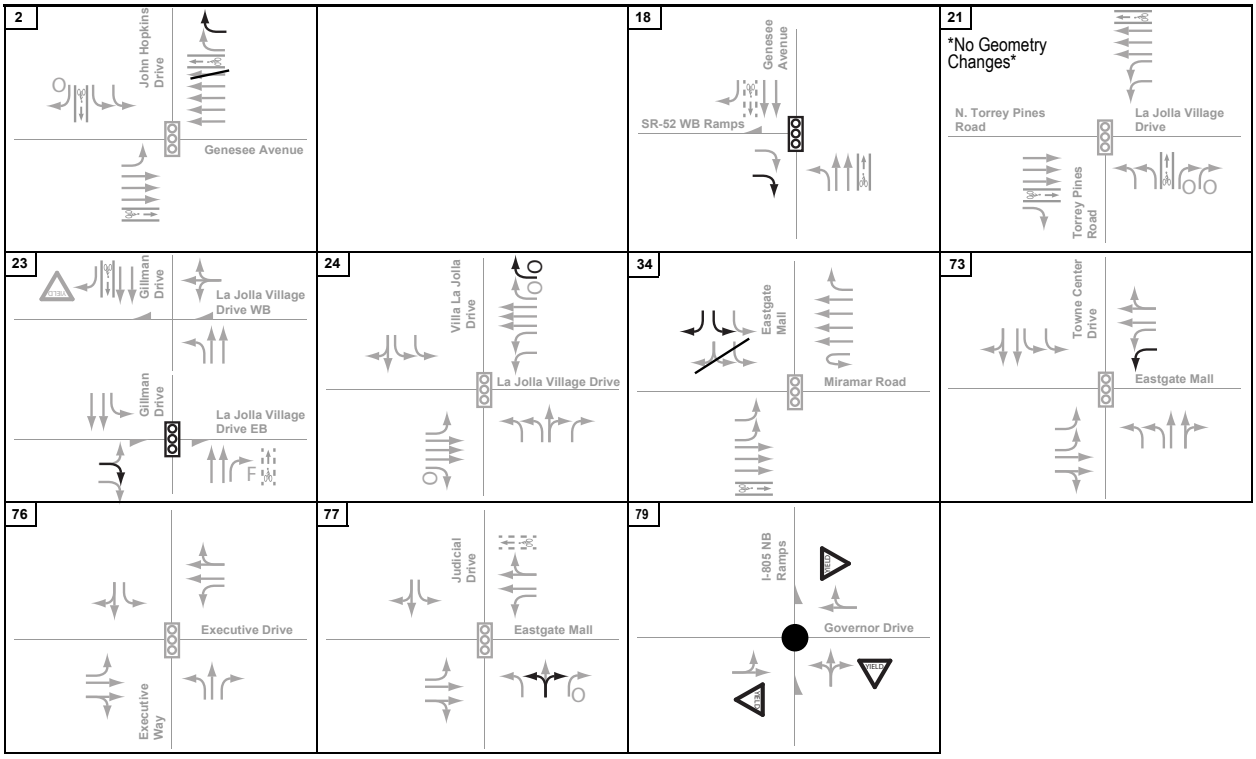
Recommended Bicycle Network: Alternative A

FIGURE A-2

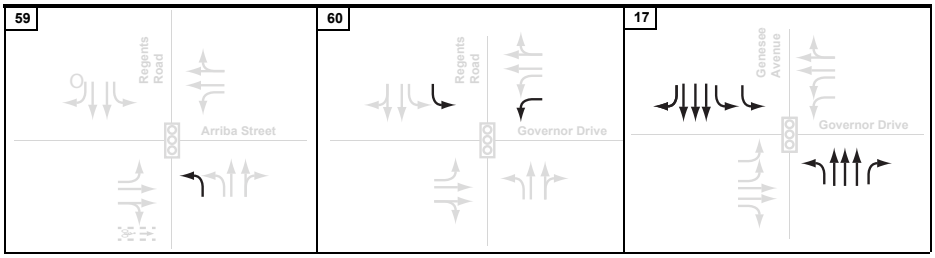


Recommended Roadway Classification Network: Alternative A

FIGURE A-3



Recommended Improvements for Alternative A



LEGEND

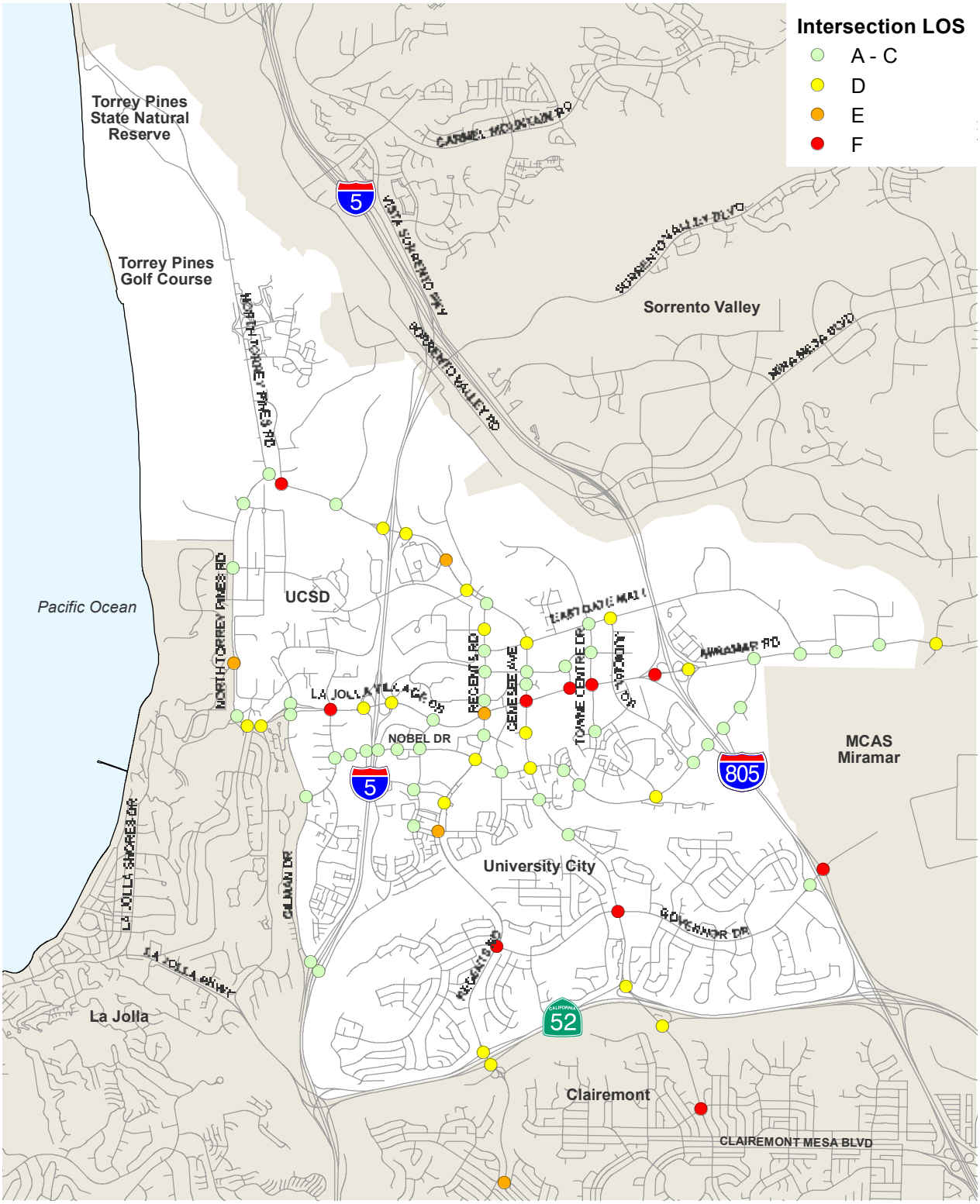
Intersection Control

- Signalized Intersection
- Roundabout Intersection
- Yield Controlled Movement
- F Free Right-Turn
- O Right-Turn Overlap

Bicycle Facilities

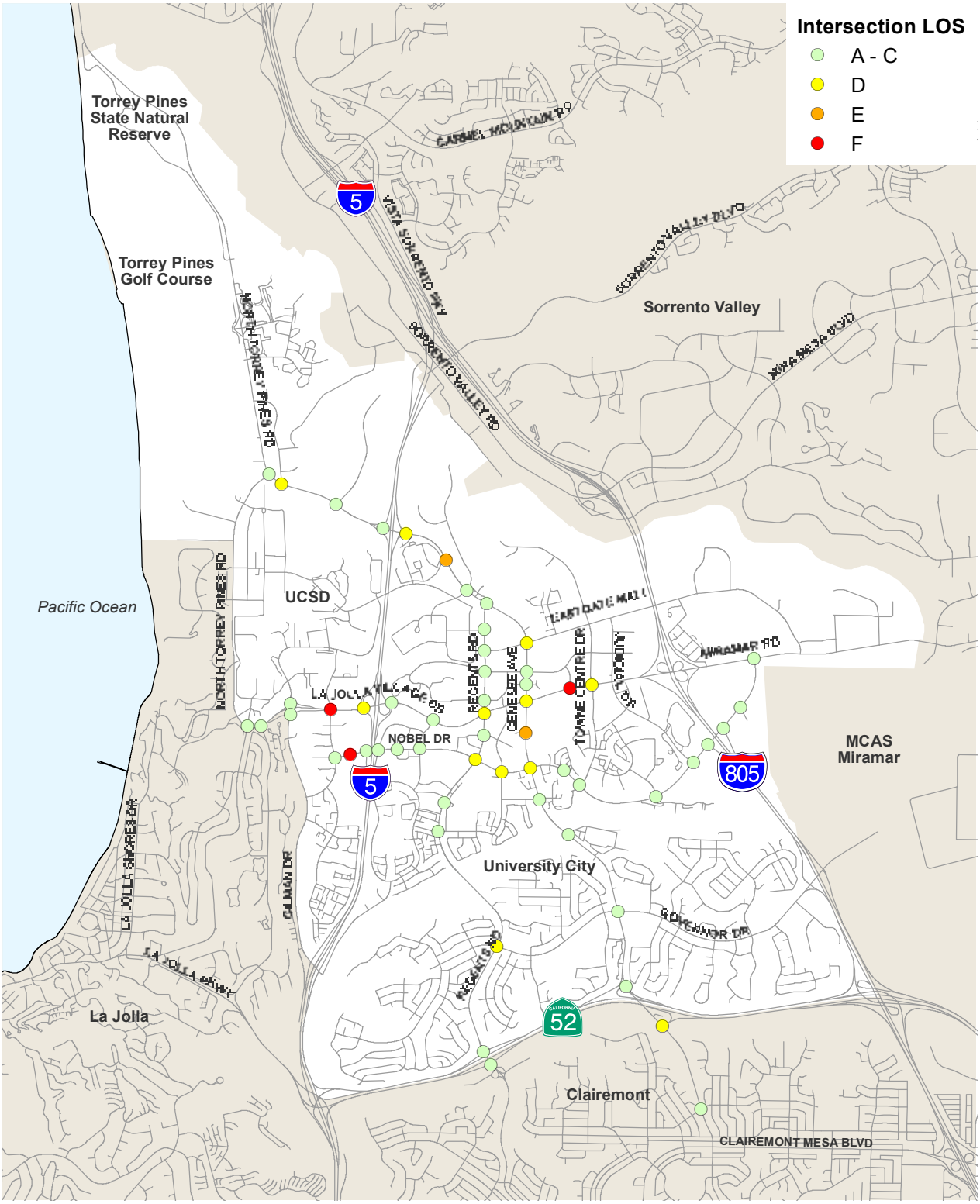
- Through Buffered Bicycle Lane ('Bicycle Pocket')
- Through Bicycle Lane ('Bicycle Pocket')
- Striped Bicycle Lane Merge
- Shared Lane Marking ('Sharrow')

FIGURE A-4



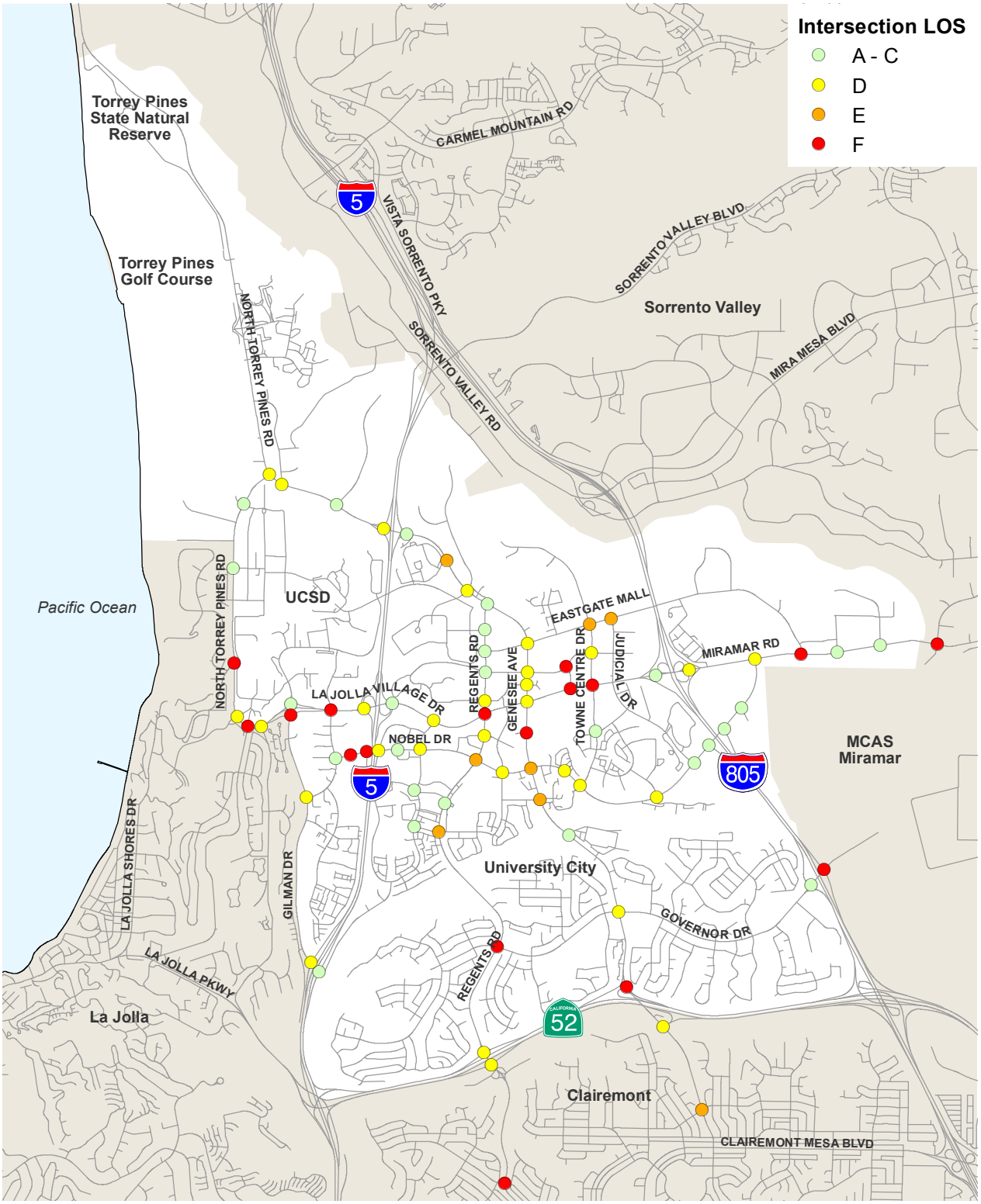
Future Intersection AM Level of Service Summary: Alternative A

FIGURE A-5



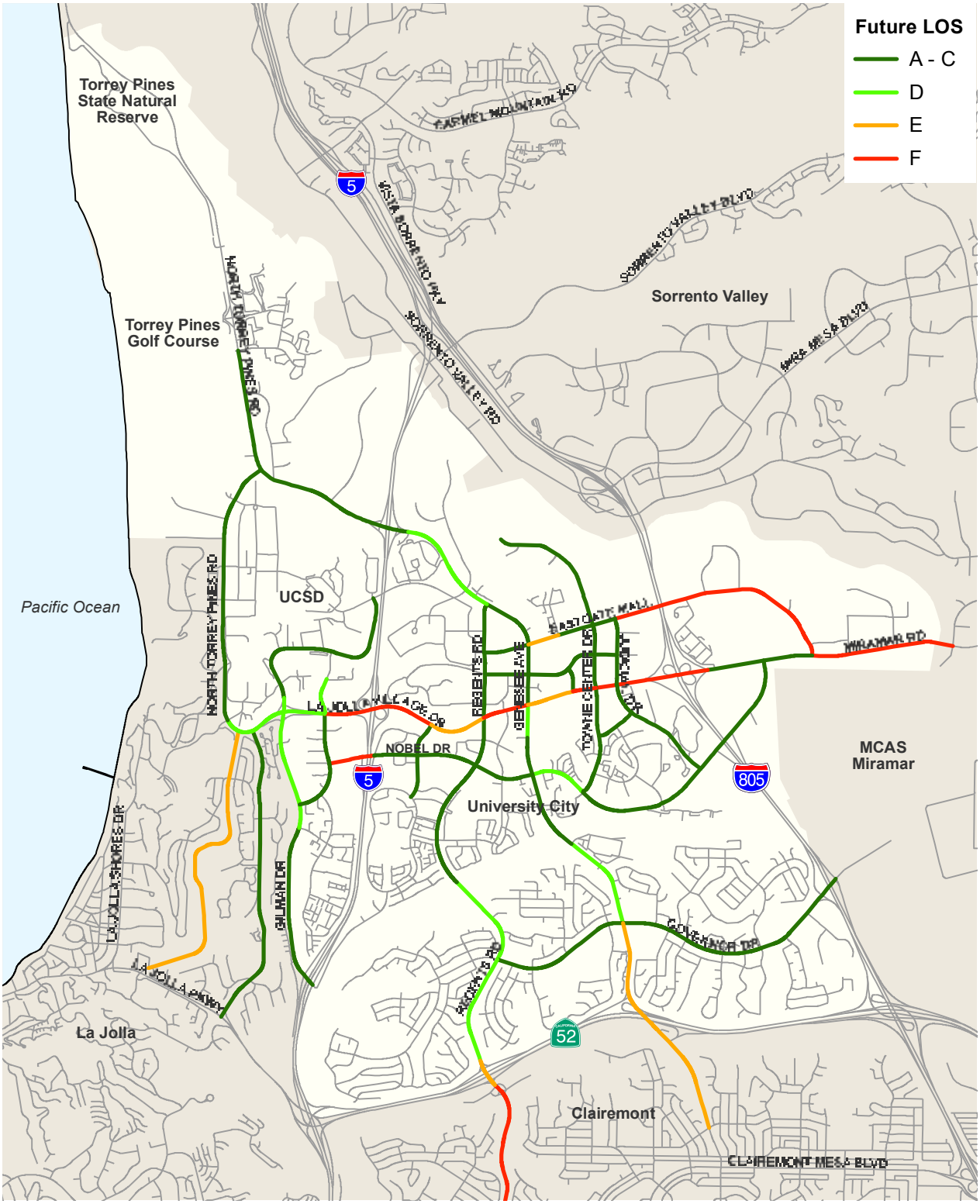
Future Intersection Midday Level of Service Summary: Alternative A

FIGURE A-6



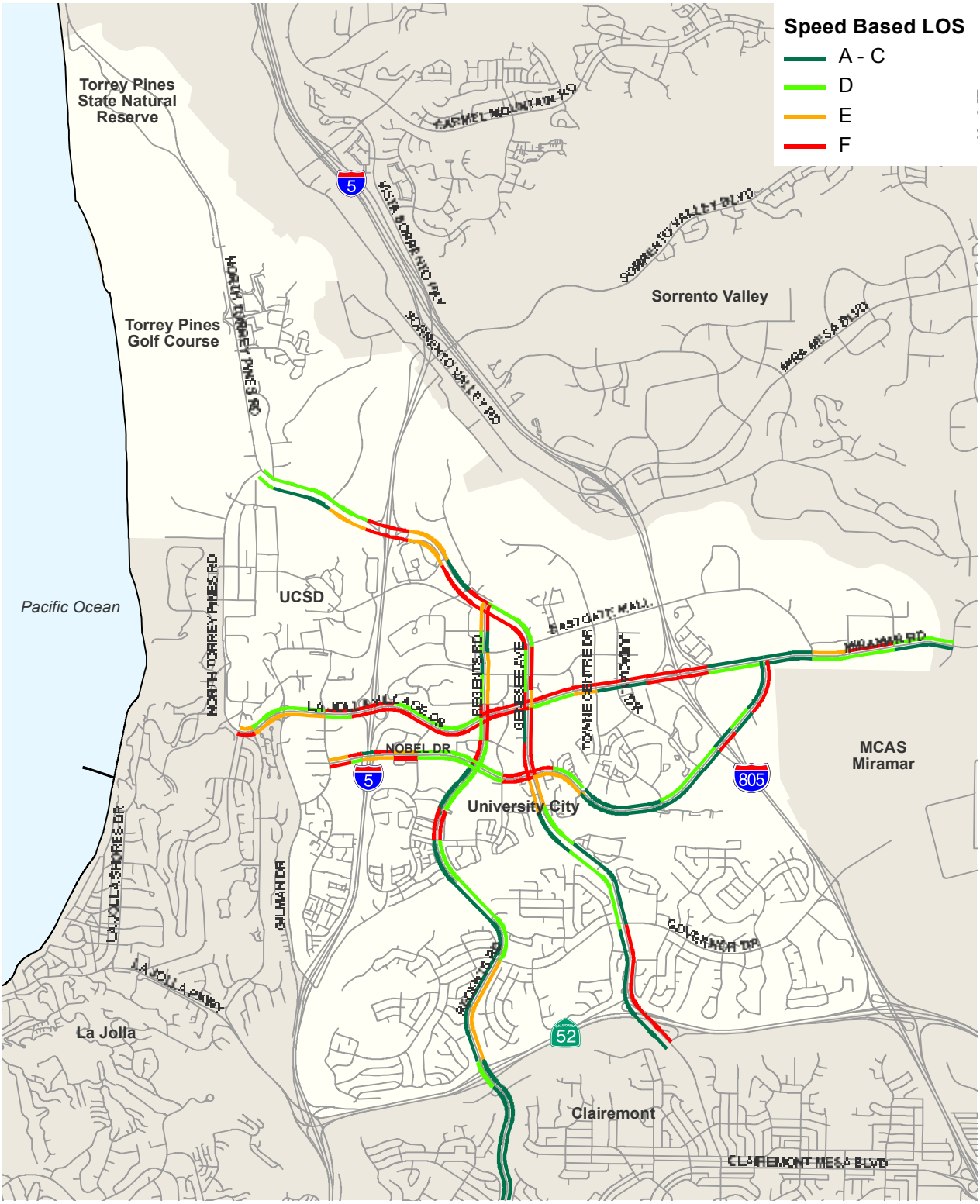
Future Intersection PM Level of Service Summary: Alternative A

FIGURE A-7



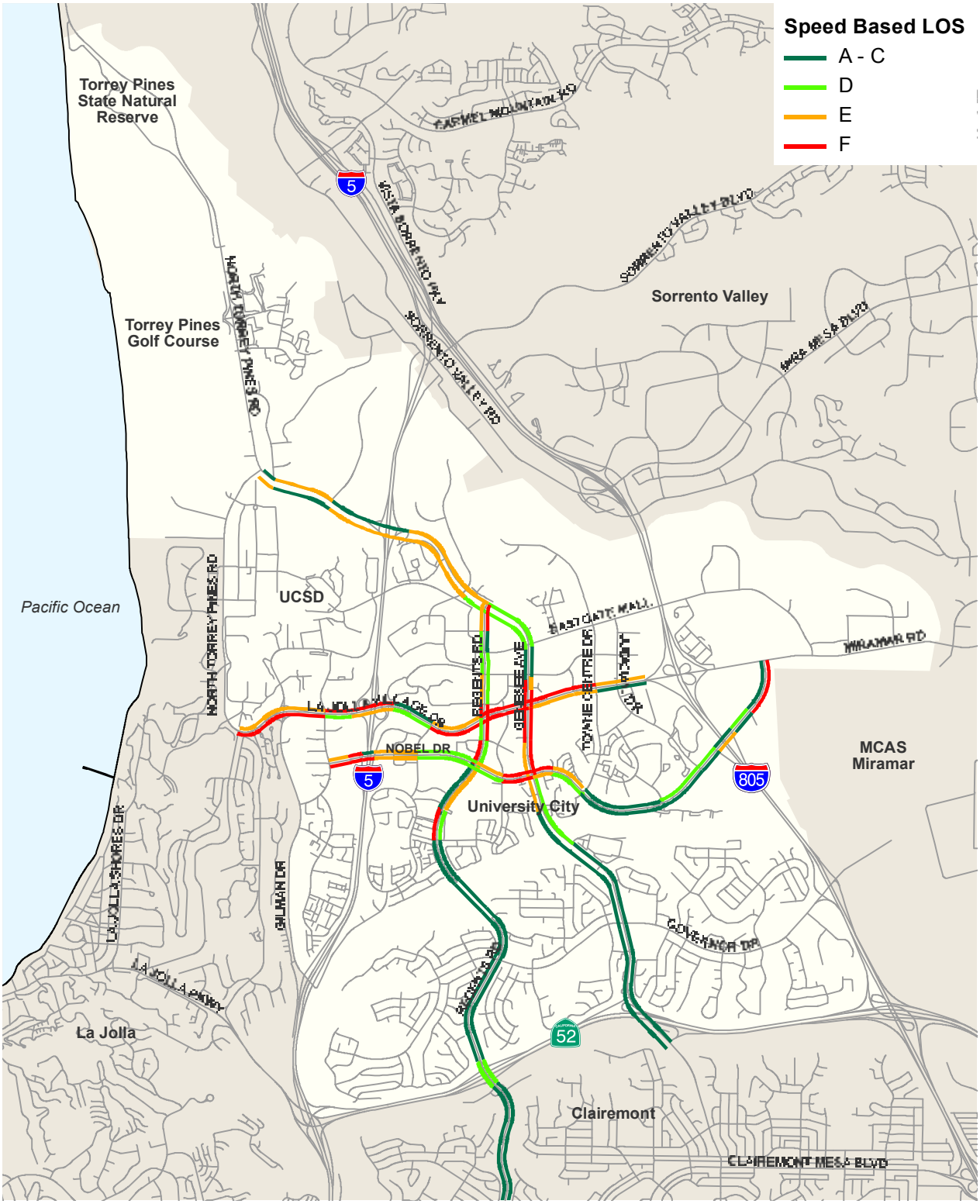
Future Roadway Segment Volume-Based Level of Service Summary: Alternative A

FIGURE A-8



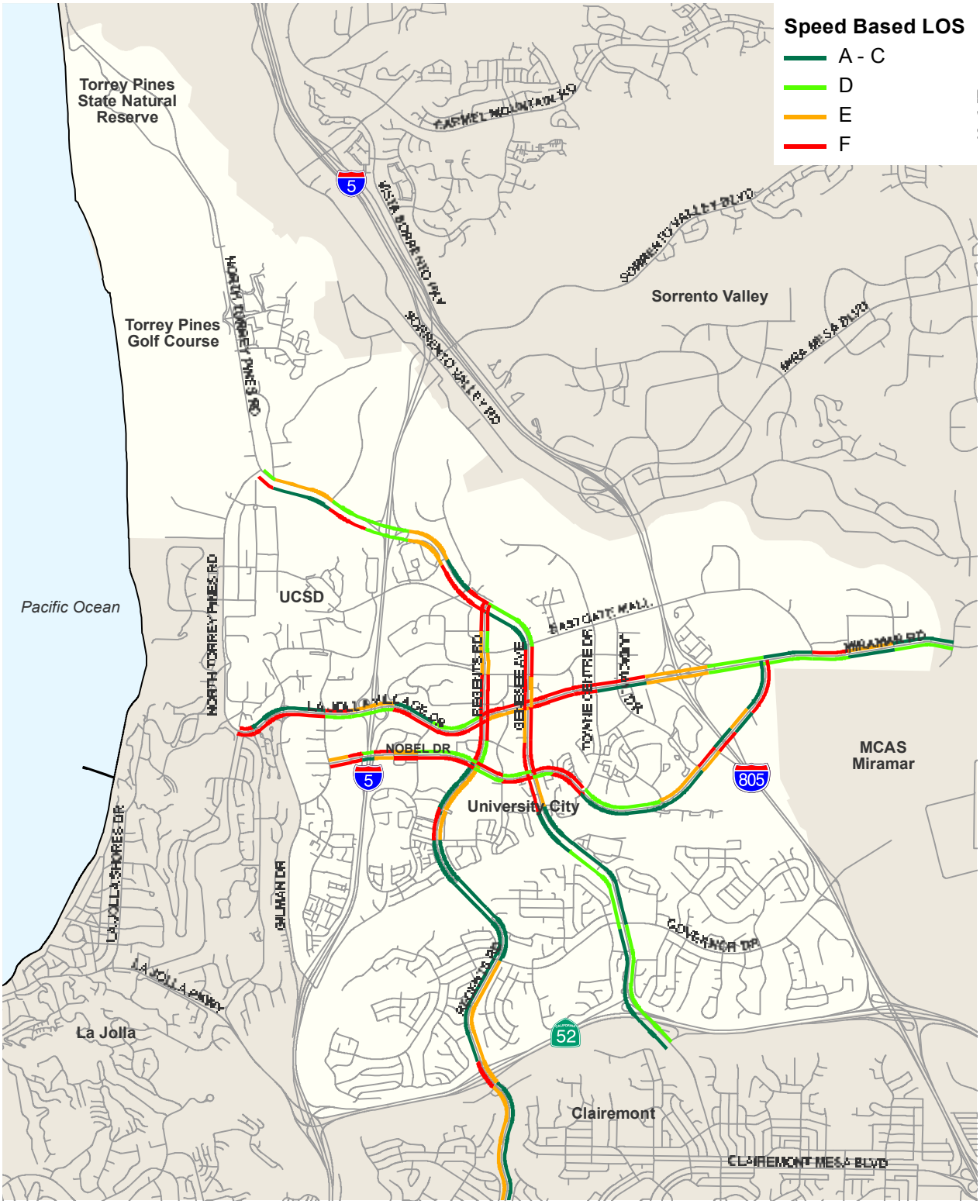
Future AM Roadway Segment Speed Based Level of Service Summary: Alternative A

FIGURE A-9



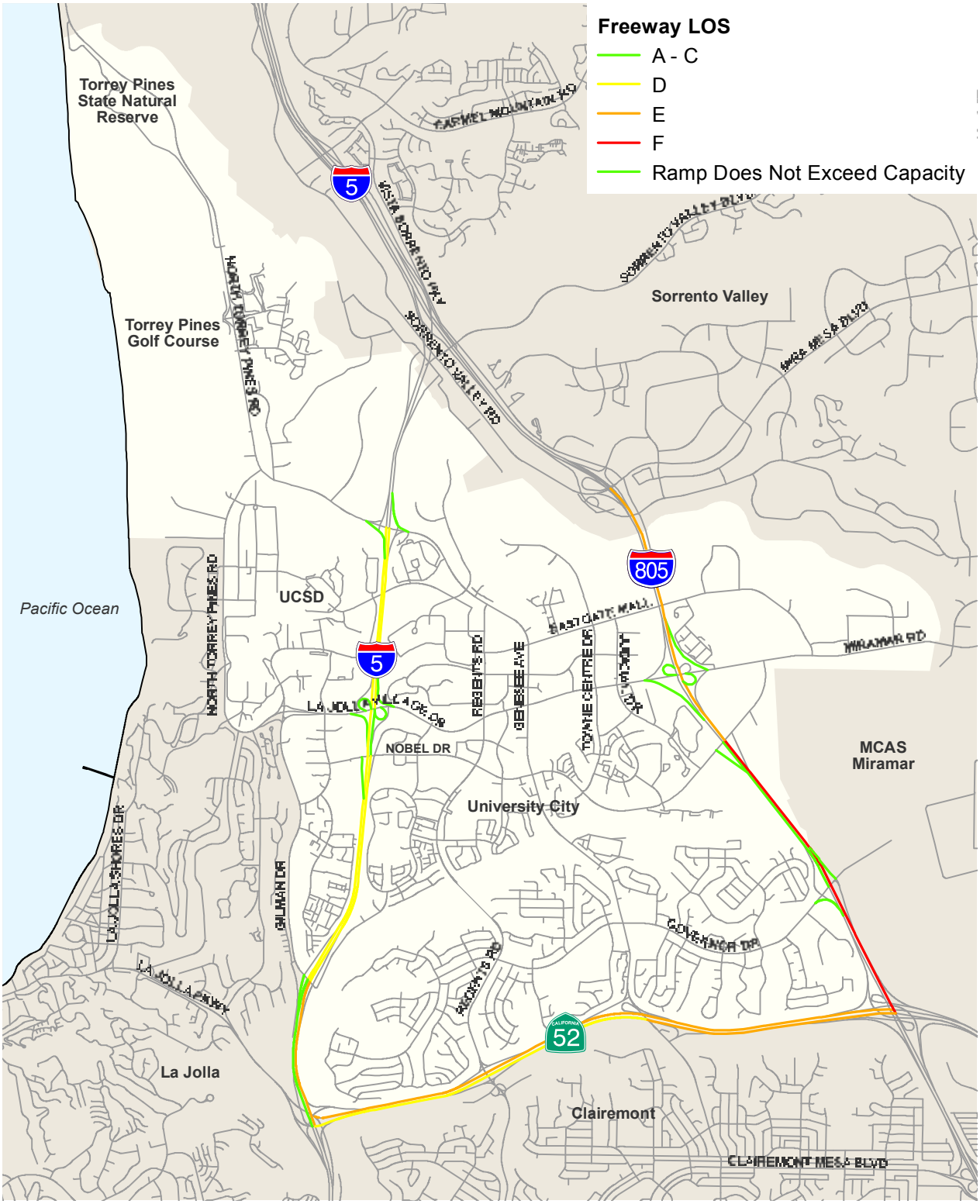
Future Midday Roadway Segment Speed Based Level of Service Summary: Alternative A

FIGURE A-10



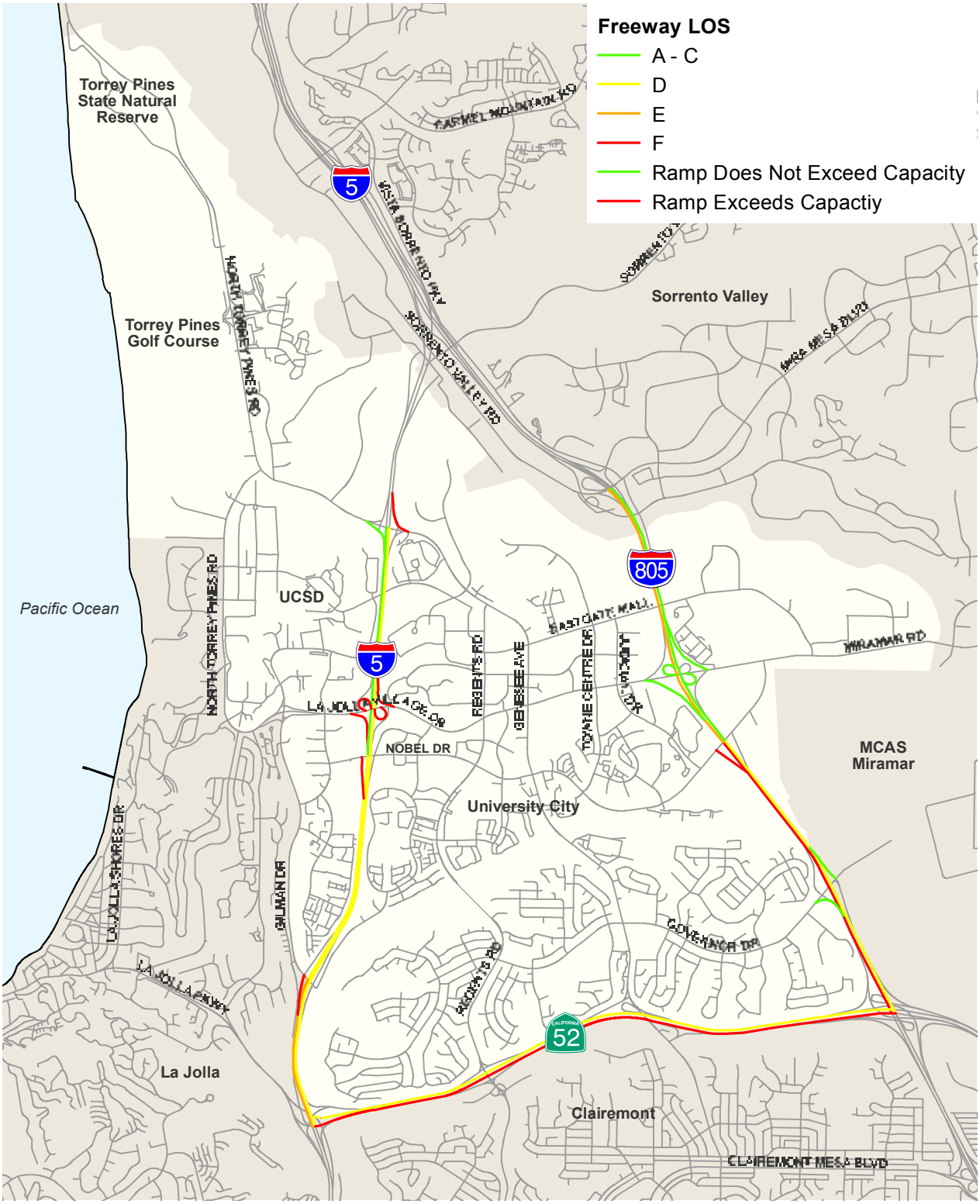
Future PM Roadway Segment Speed Based Level of Service Summary: Alternative A

FIGURE A-11



Future AM Freeway Operations: Alternative A

FIGURE A-12



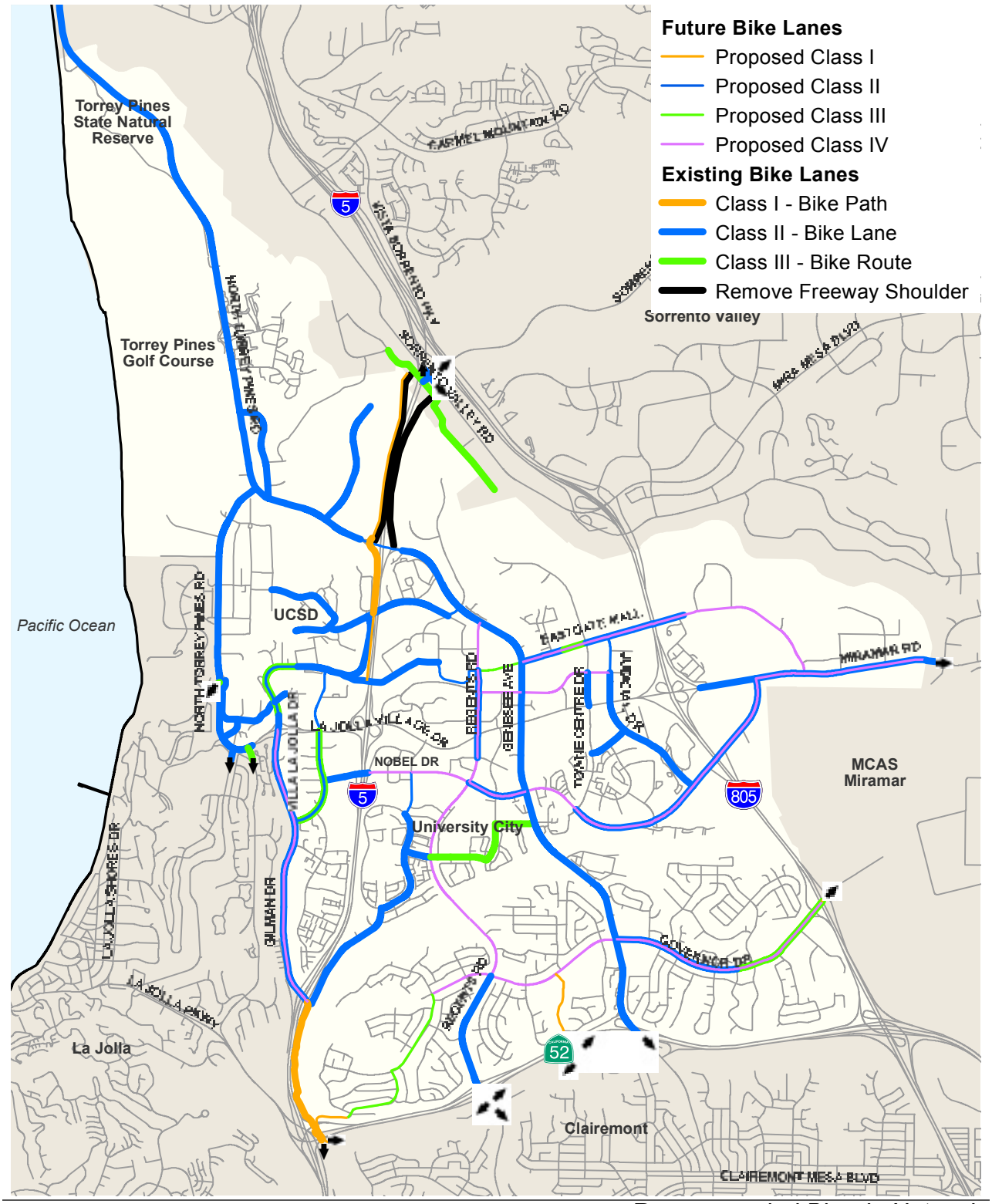
Future PM Freeway Operations: Alternative A

APPENDIX B

ALTERNATIVE B ANALYSIS AND NETWORK SUMMARY

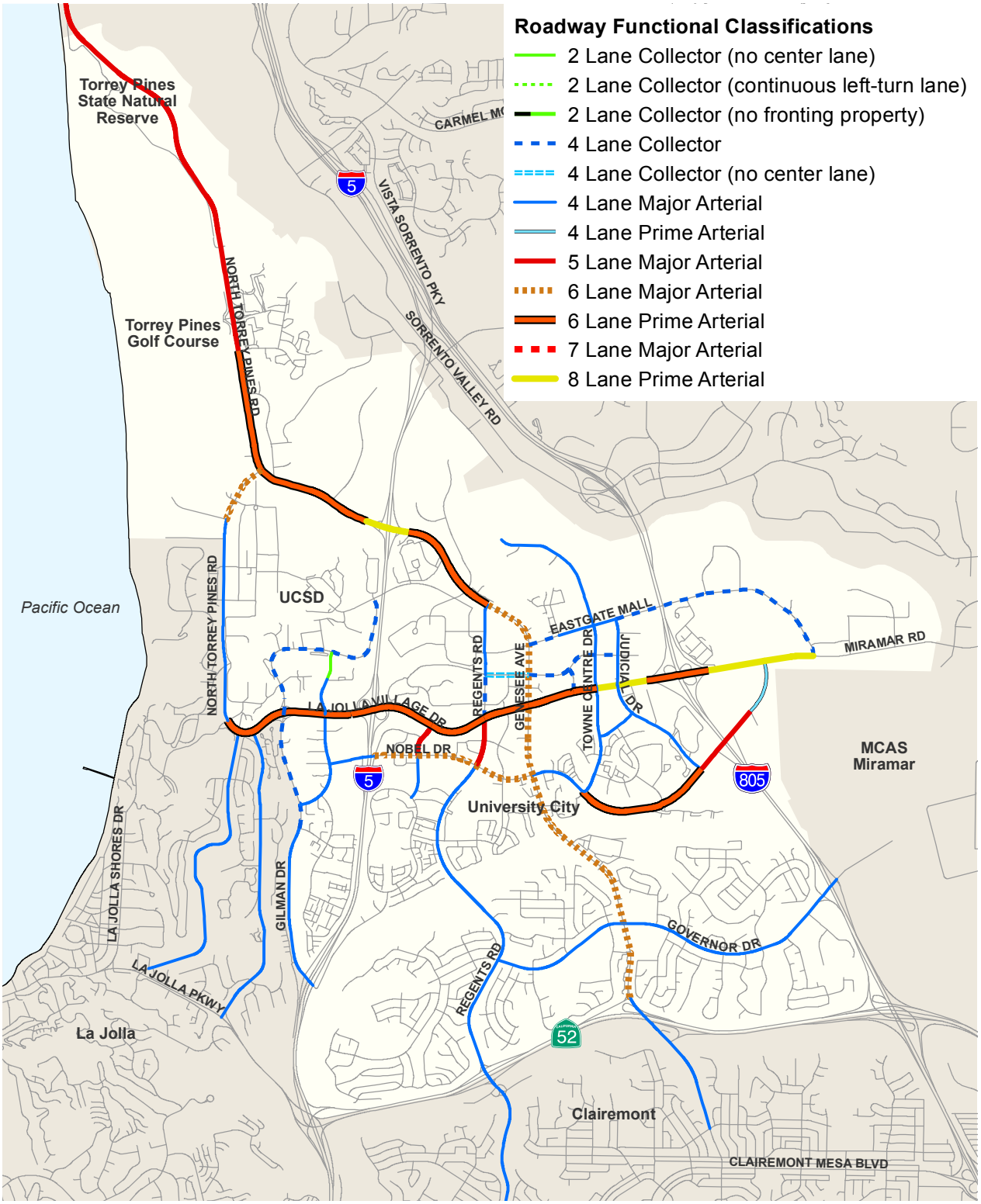
- Recommended Bicycle Network
- Recommended Roadway Classification Network
- Recommended Intersection Geometry Changes
- Future Intersection Analysis Results Summary (AM, Midday, PM)
- Future Roadway Volume-Based Analysis Results Summary
- Future Corridor Speed-Based Analysis Results Summary (AM, Midday, PM)
- Future Freeway Analysis Results Summary (AM, PM)

FIGURE B-1



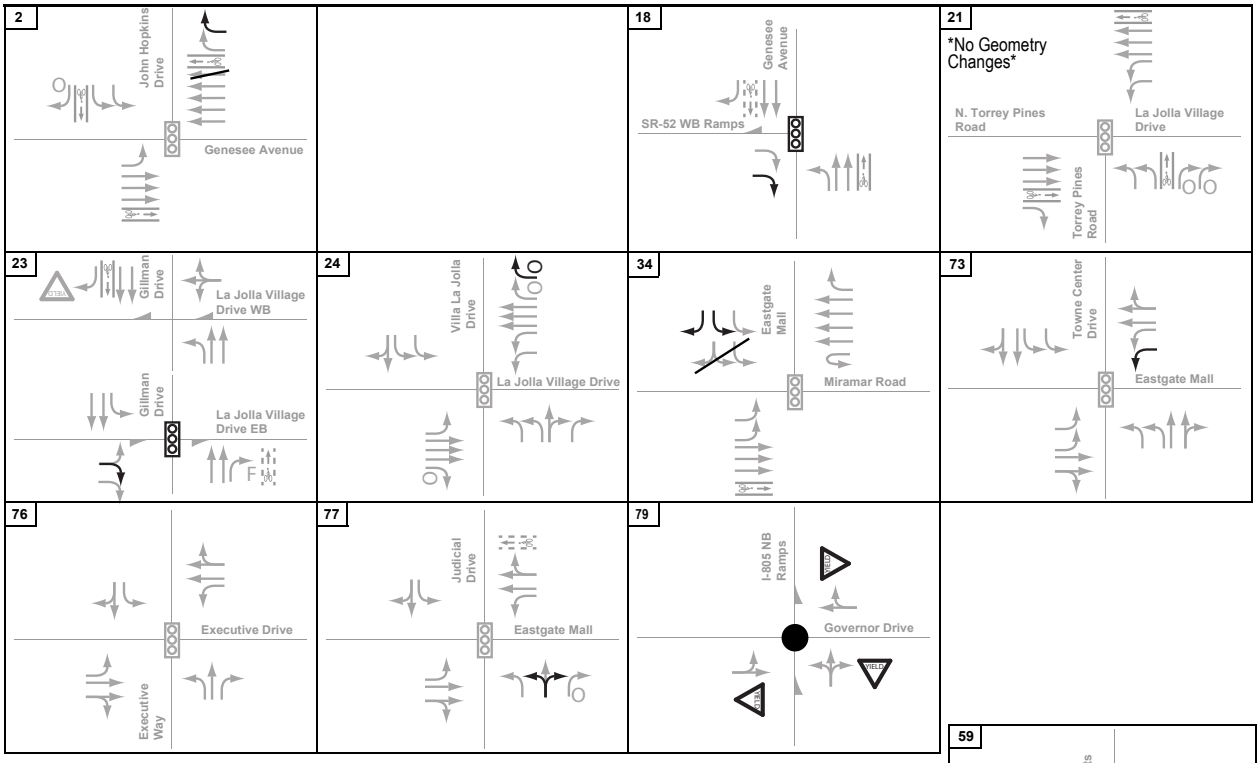
Recommended Bicycle Network: Alternative B

FIGURE B-2

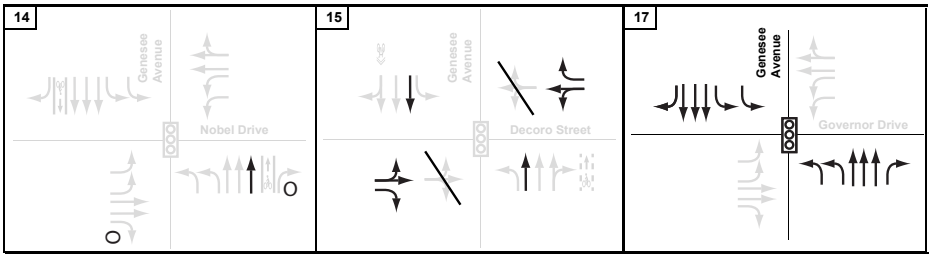


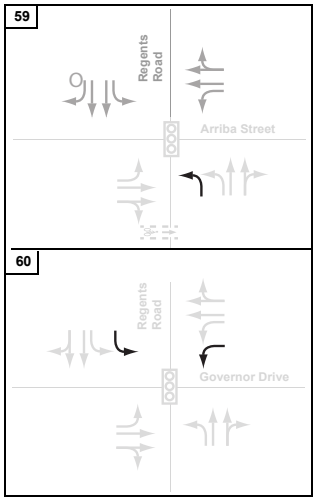
Recommended Roadway Classification Network: Alternative B

FIGURE B-3



Recommended Improvements for Alternative B





LEGEND

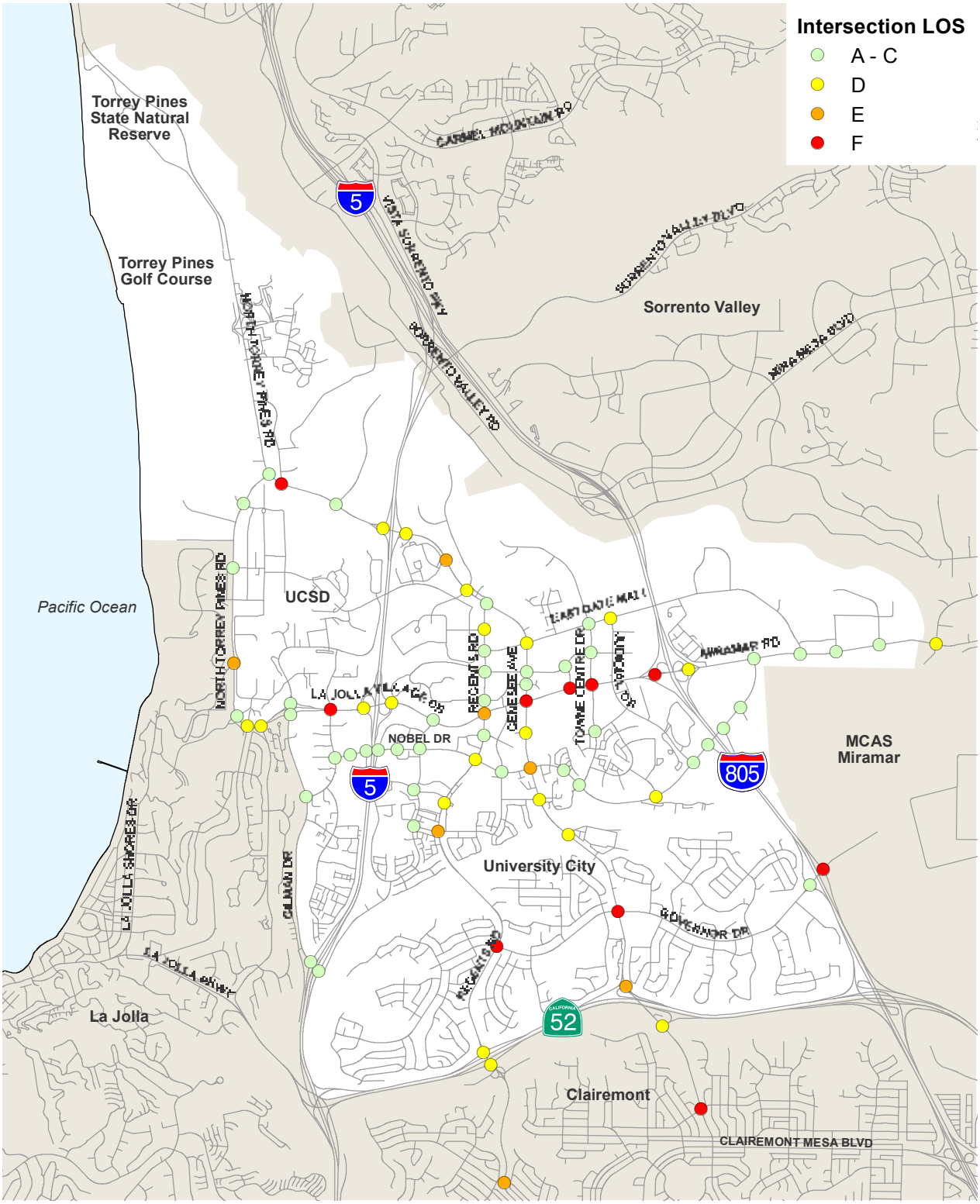
Intersection Control

- Signalized Intersection
- Roundabout Intersection
- Yield Controlled Movement
- F Free Right-Turn
- O Right-Turn Overlap

Bicycle Facilities

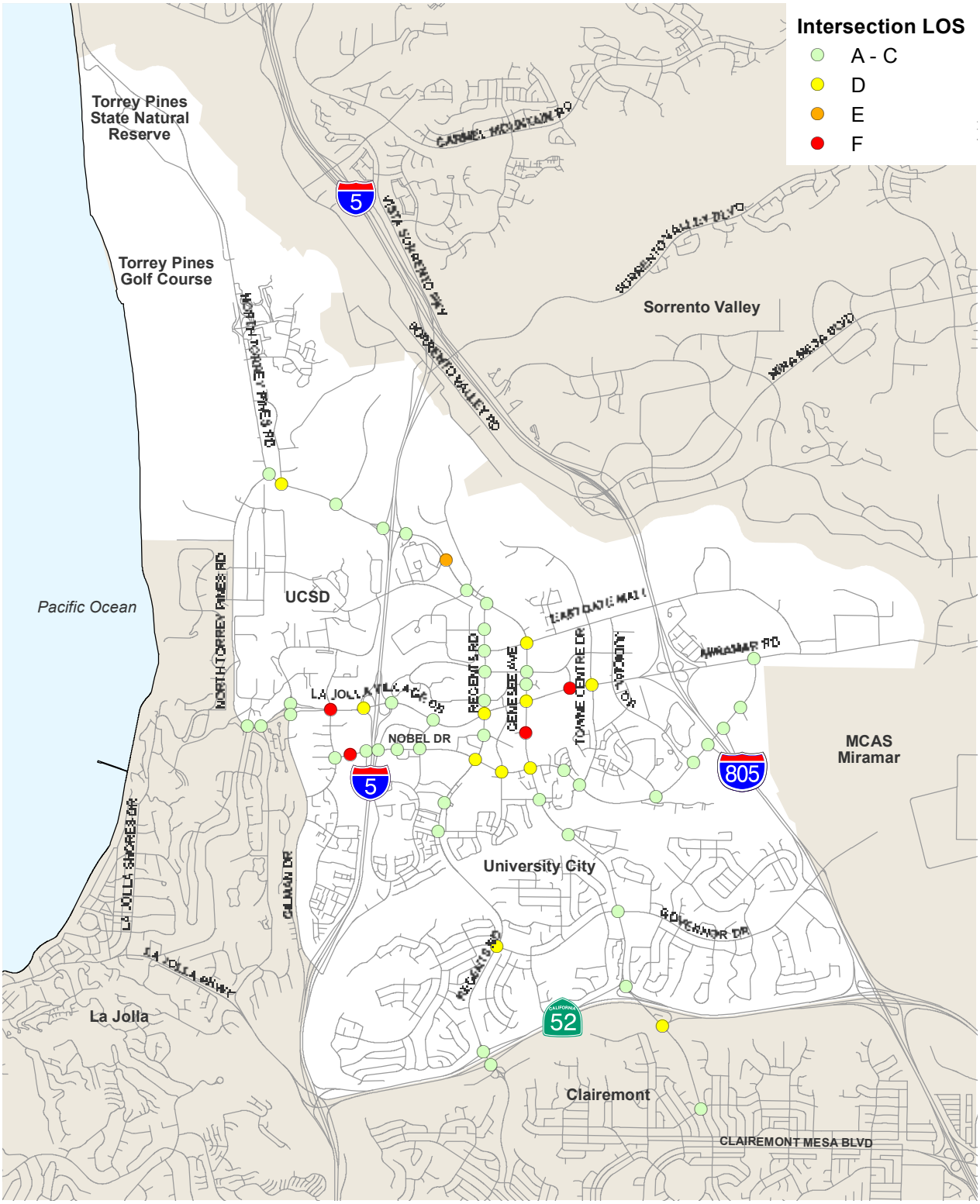
- Through Buffered Bicycle Lane ('Bicycle Pocket')
- Through Bicycle Lane ('Bicycle Pocket')
- Striped Bicycle Lane Merge
- Shared Lane Marking ('Sharrow')

FIGURE B-4



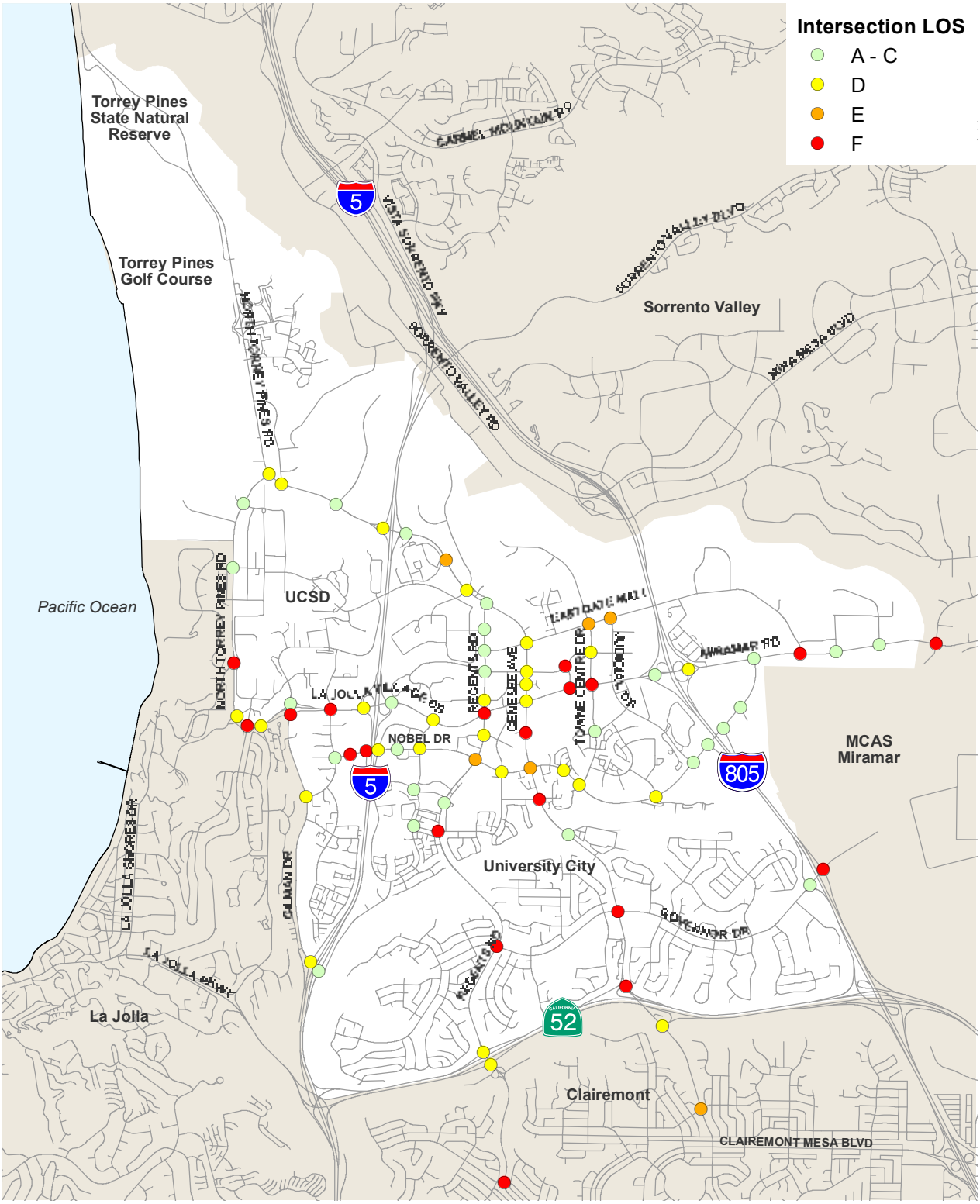
Future Intersection AM Level of Service Summary: Alternative B

FIGURE B-5



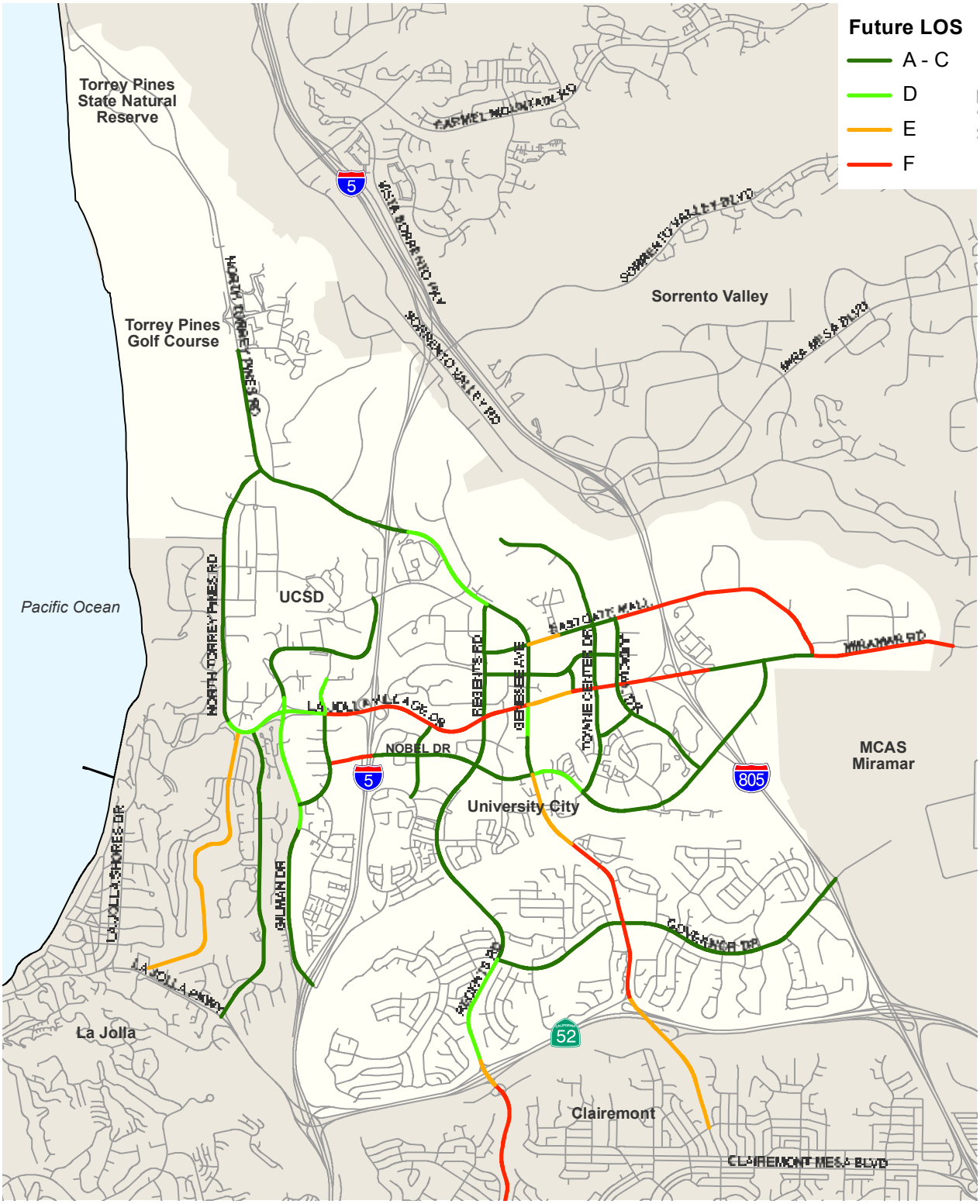
Future Intersection Midday Level of Service Summary: Alternative B

FIGURE B-6



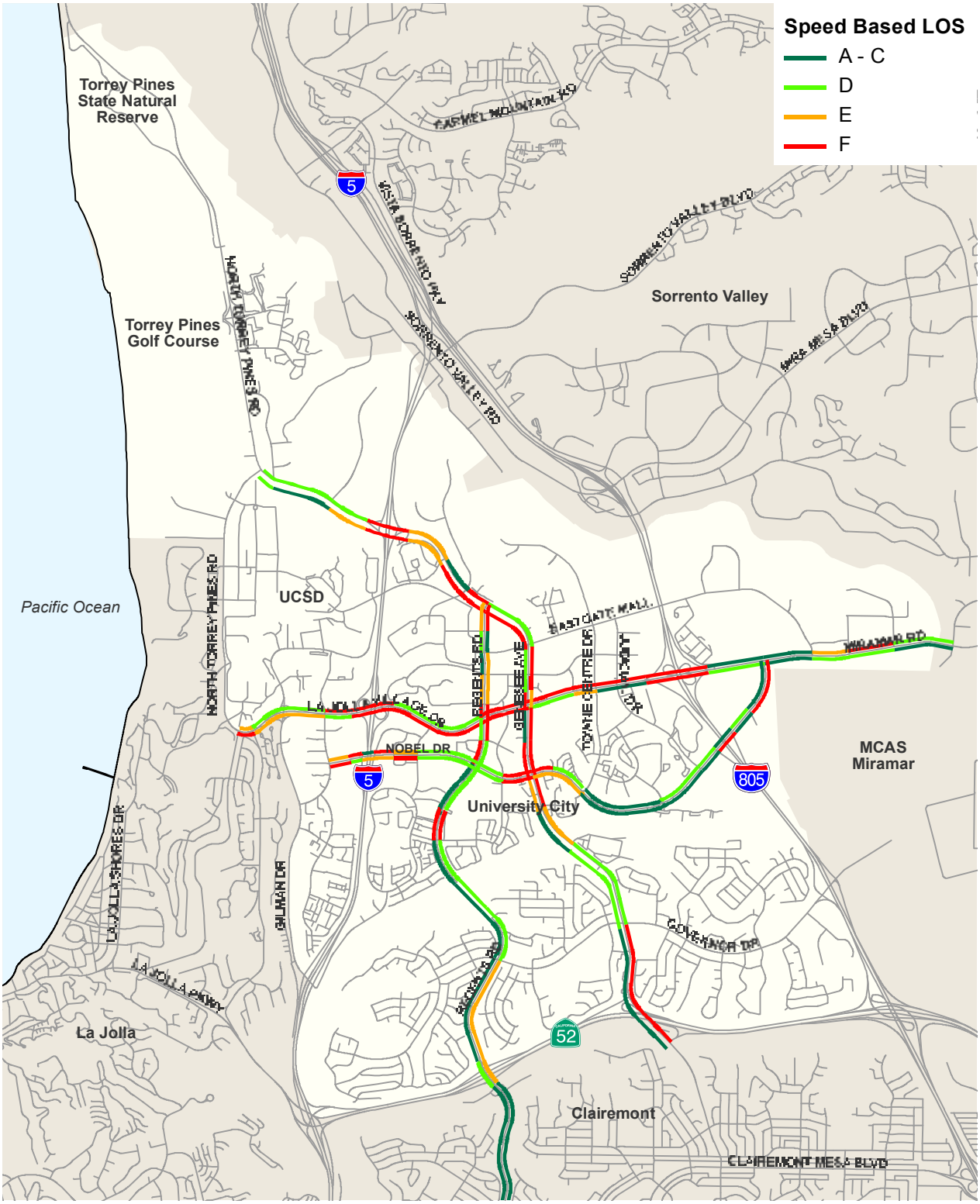
Future Intersection PM Level of Service Summary: Alternative B

FIGURE B-7



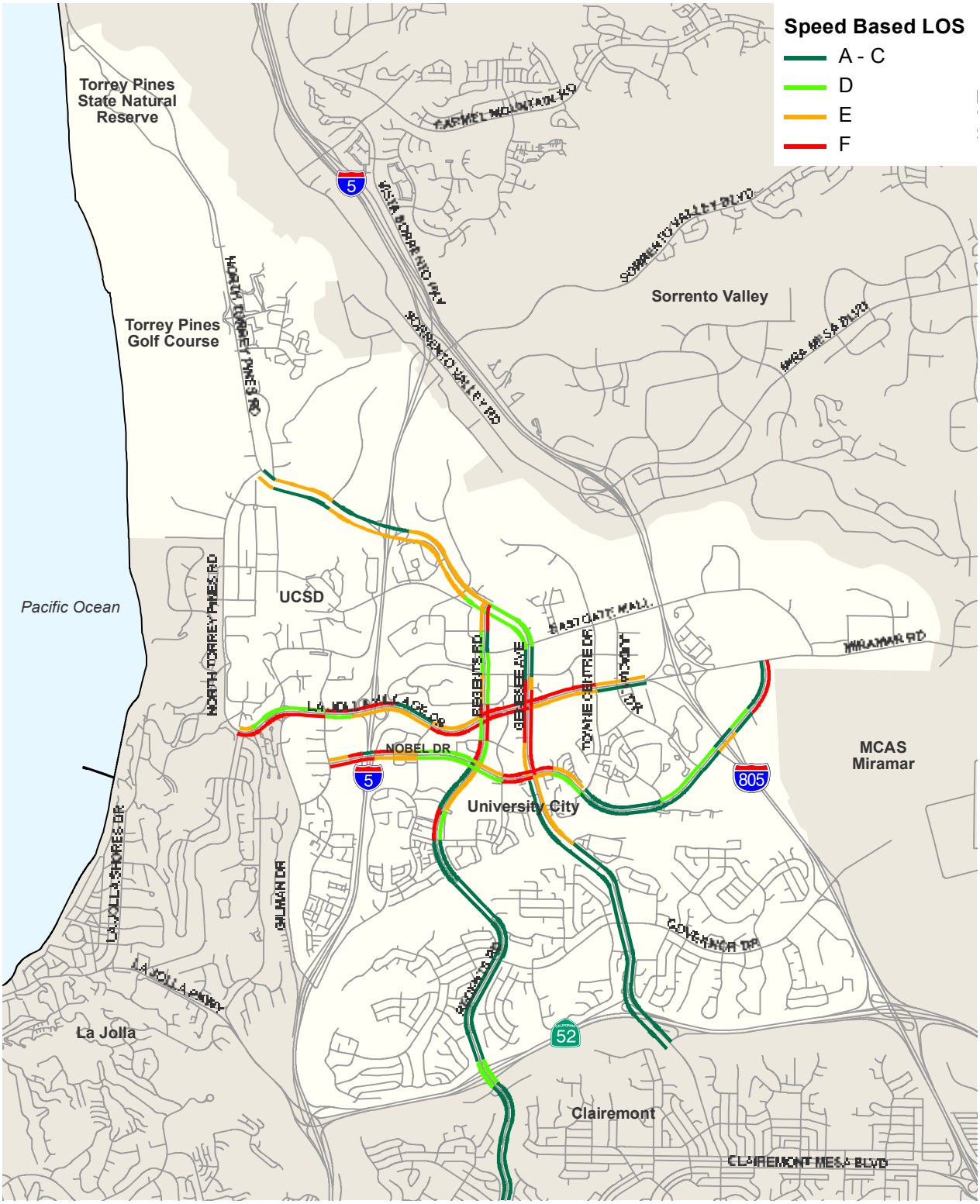
Future Roadway Segment Volume-Based Level of Service Summary: Alternative B

FIGURE B-8



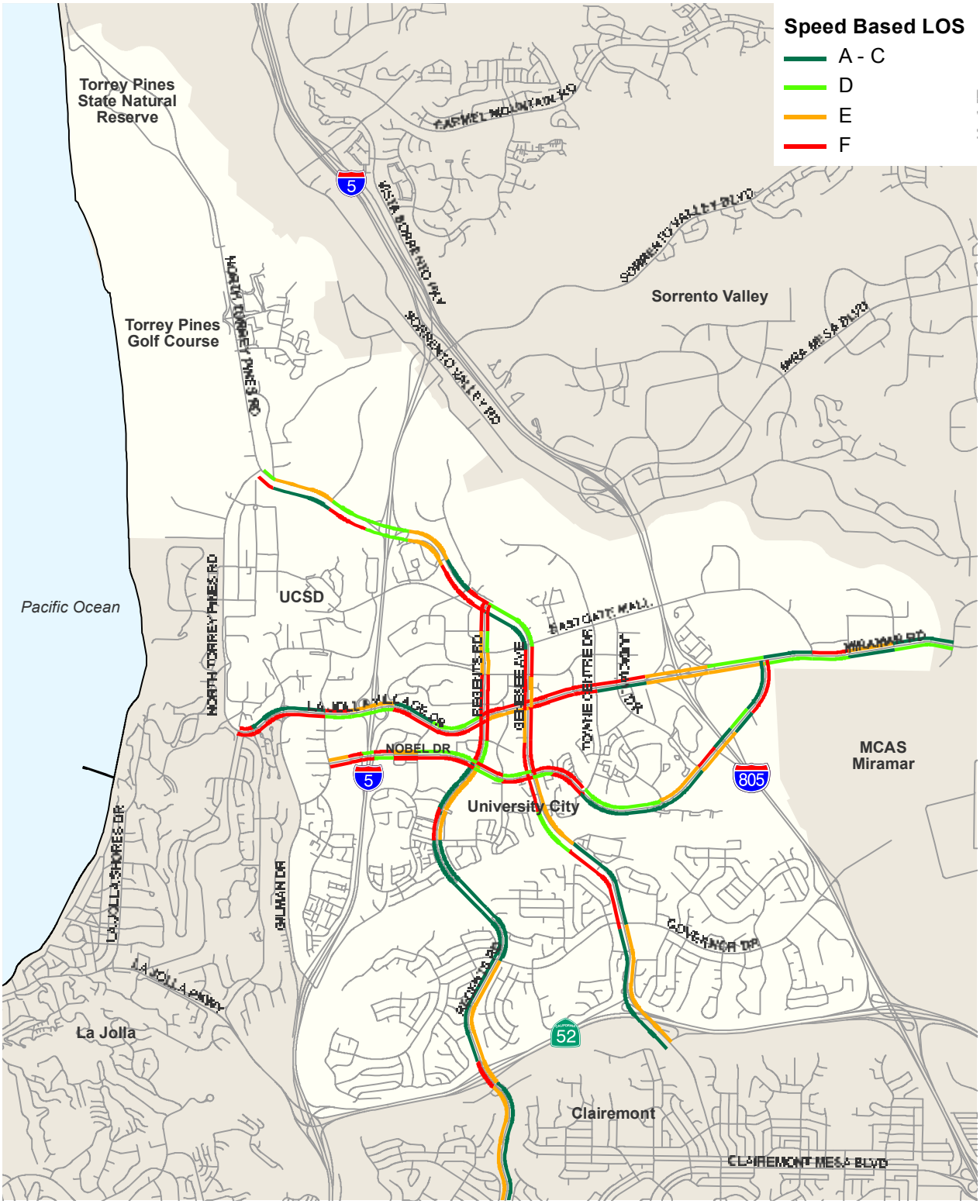
Future AM Roadway Segment Speed-Based Level of Service Summary: Alternative B

FIGURE B-9



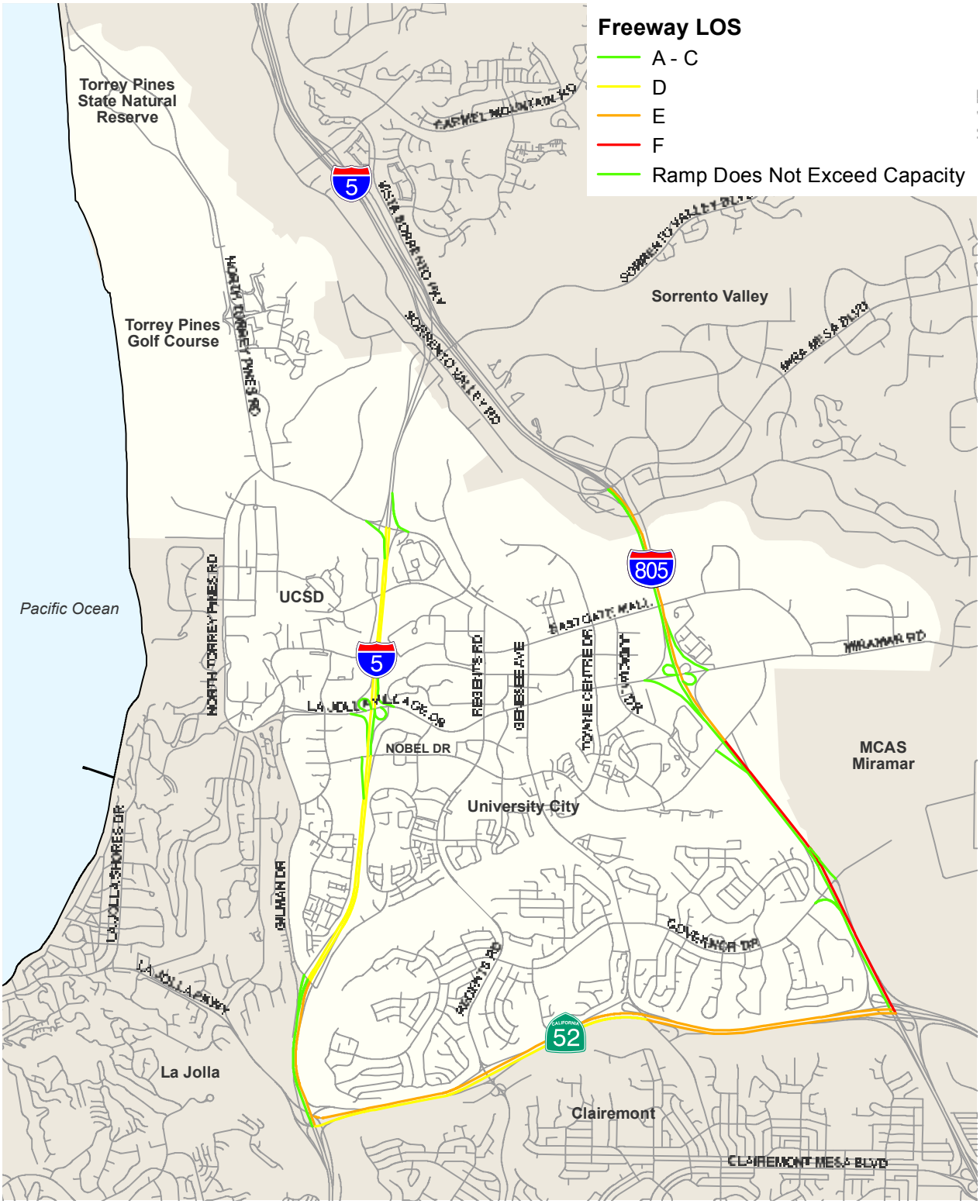
Future Midday Roadway Segment Speed-Based Level of Service Summary: Alternative B

FIGURE B-10



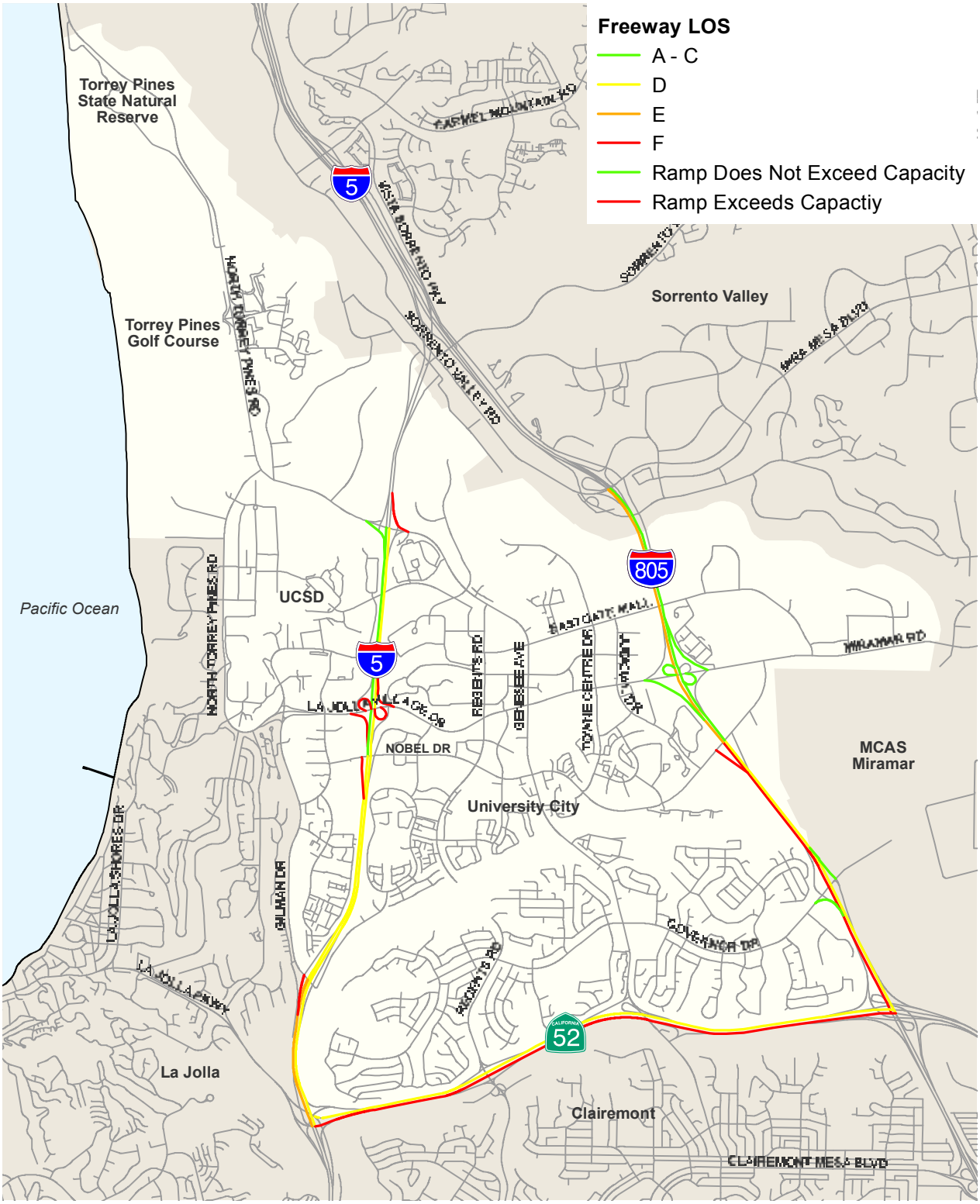
Future PM Roadway Segment Speed-Based Level of Service Summary: Alternative B

FIGURE B-11



Future AM Freeway Operations: Alternative B

FIGURE B-12



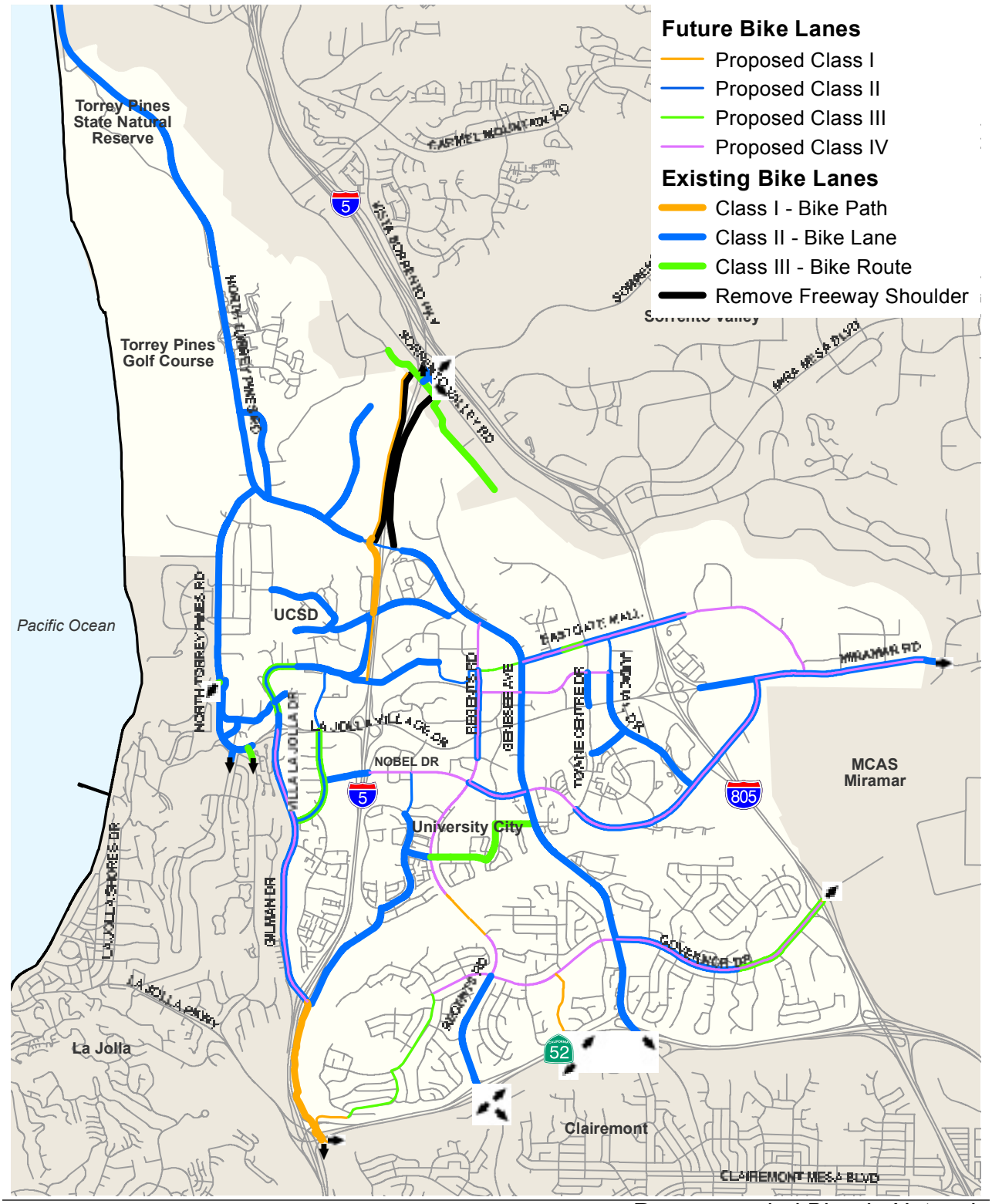
Future PM Freeway Operations: Alternative B

APPENDIX C

ALTERNATIVE C ANALYSIS AND NETWORK SUMMARY

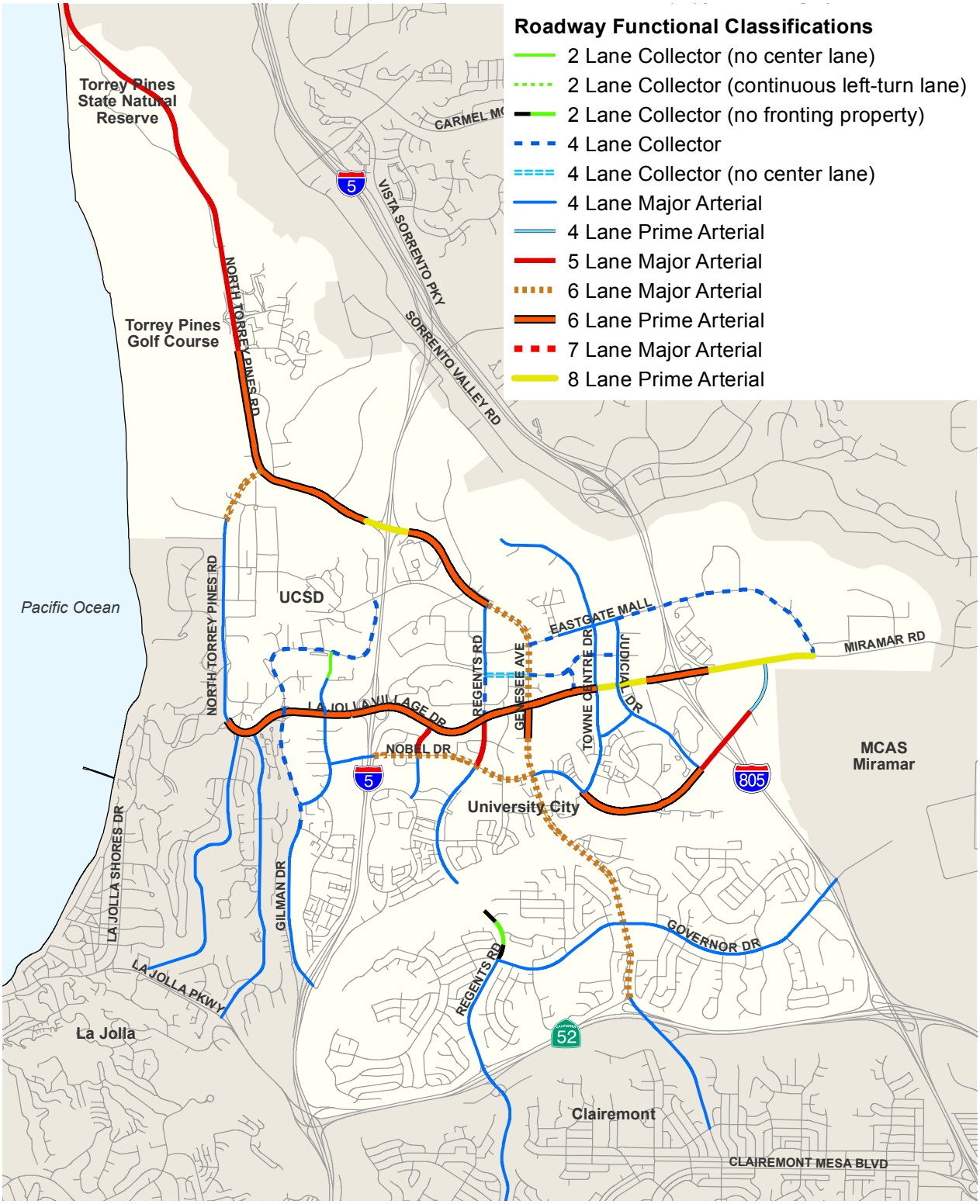
- Recommended Bicycle Network
- Recommended Roadway Classification Network
- Recommended Intersection Geometry Changes
- Future Intersection Analysis Results Summary (AM, Midday, PM)
- Future Roadway Volume-Based Analysis Results Summary
- Future Corridor Speed-Based Analysis Results Summary (AM, Midday, PM)
- Future Freeway Analysis Results Summary (AM, PM)

FIGURE C-1



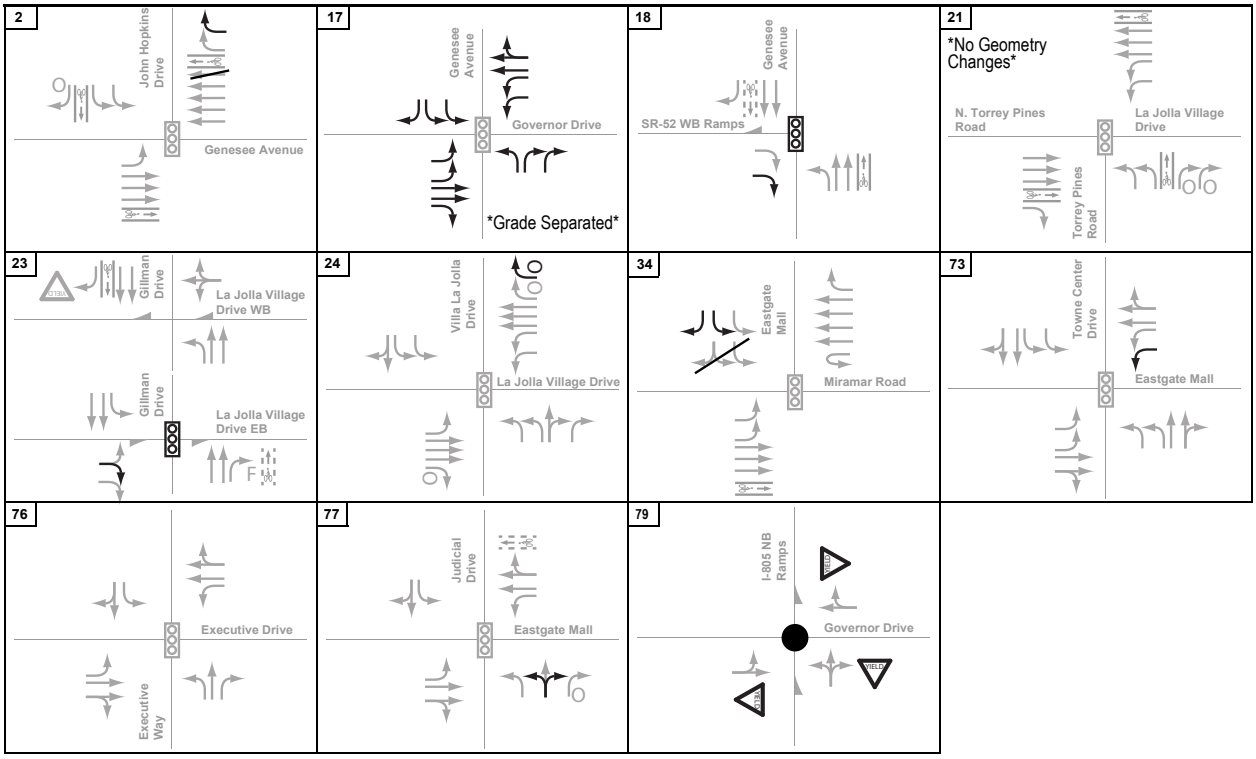
Recommended Bicycle Network: Alternatives C

FIGURE C-2

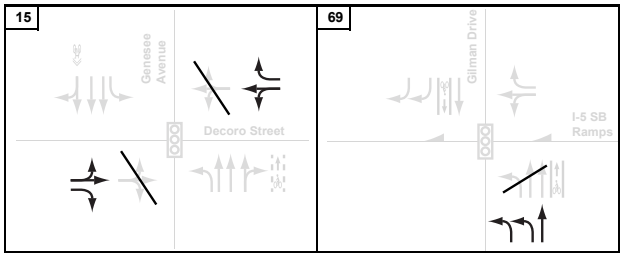


Recommended Roadway Classification Network: Alternative C

FIGURE C-3



Recommended Improvements for Alternative C



LEGEND

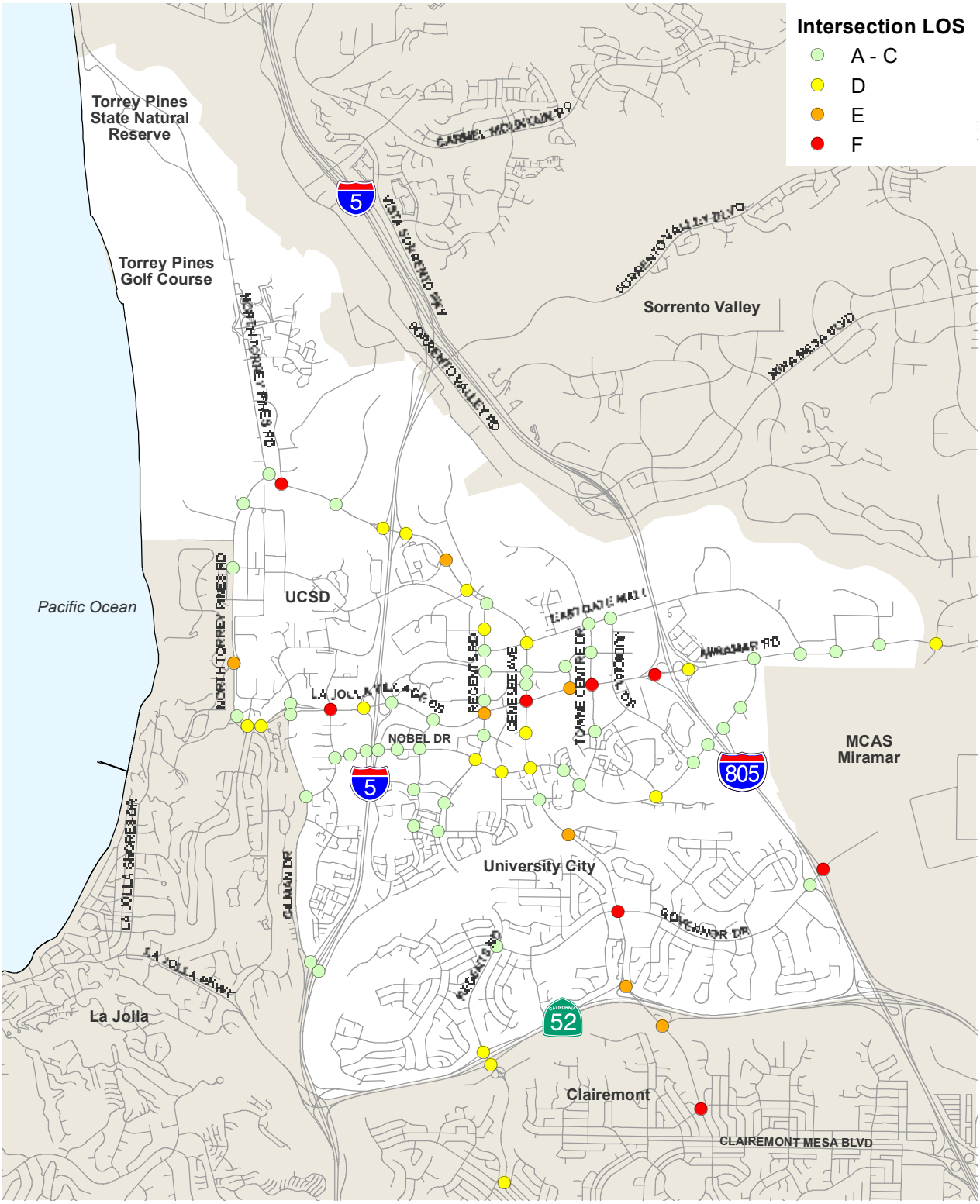
Intersection Control

- Signalized Intersection
- Roundabout Intersection
- Yield Controlled Movement
- F Free Right-Turn
- O Right-Turn Overlap

Bicycle Facilities

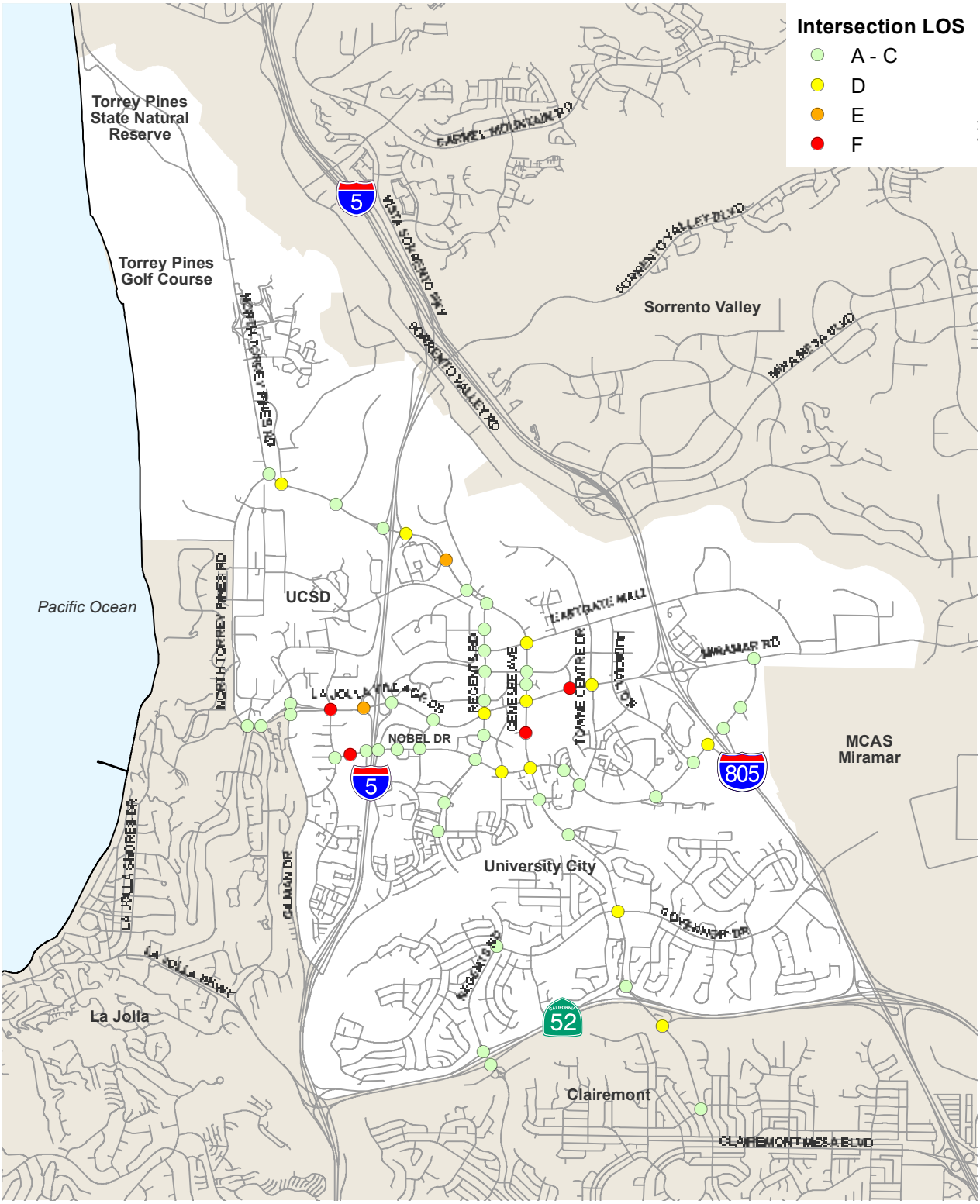
- Through Buffered Bicycle Lane ('Bicycle Pocket')
- Through Bicycle Lane ('Bicycle Pocket')
- Striped Bicycle Lane Merge
- Shared Lane Marking ('Sharrow')

FIGURE C-4



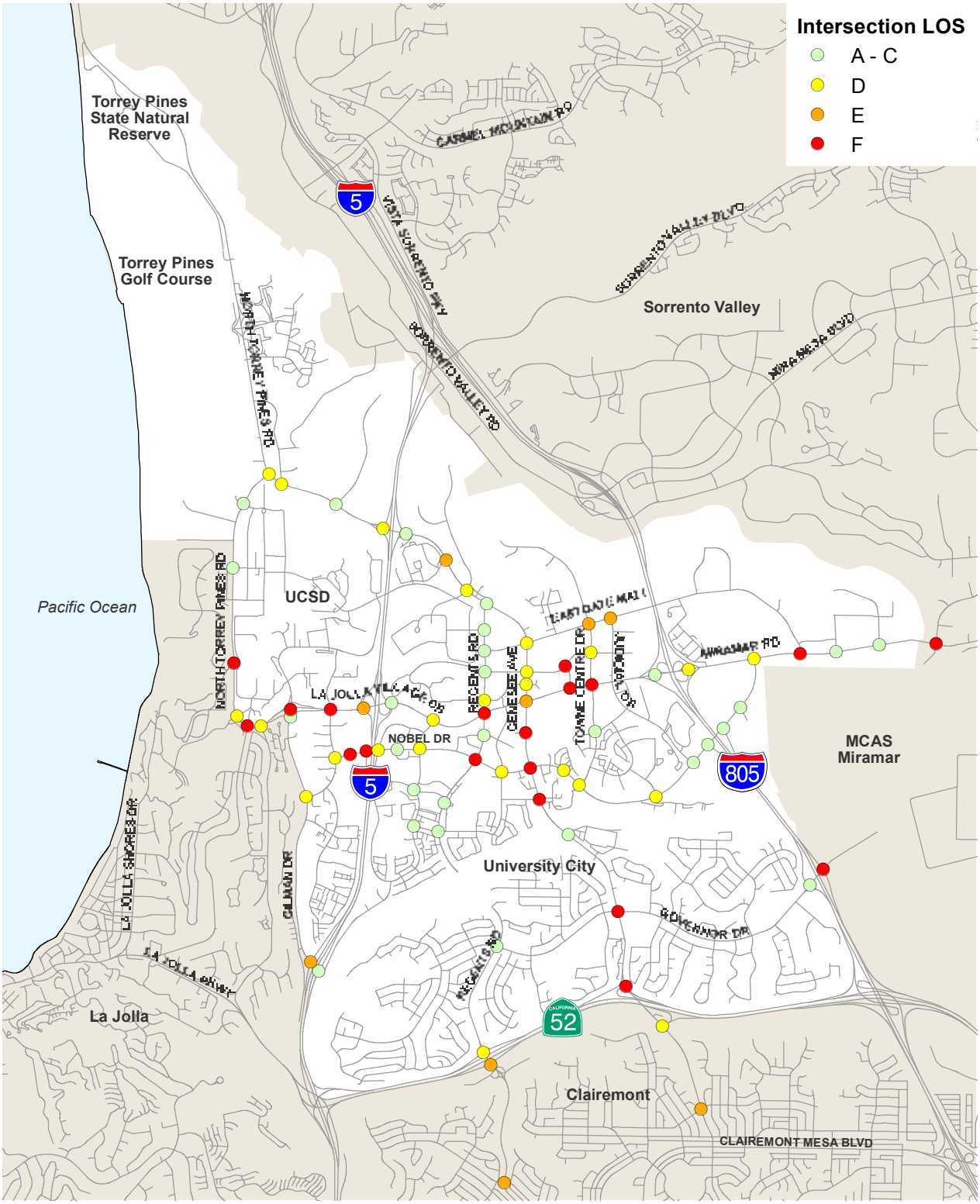
Future Intersection AM Level of Service Summary: Alternative C

FIGURE C-5



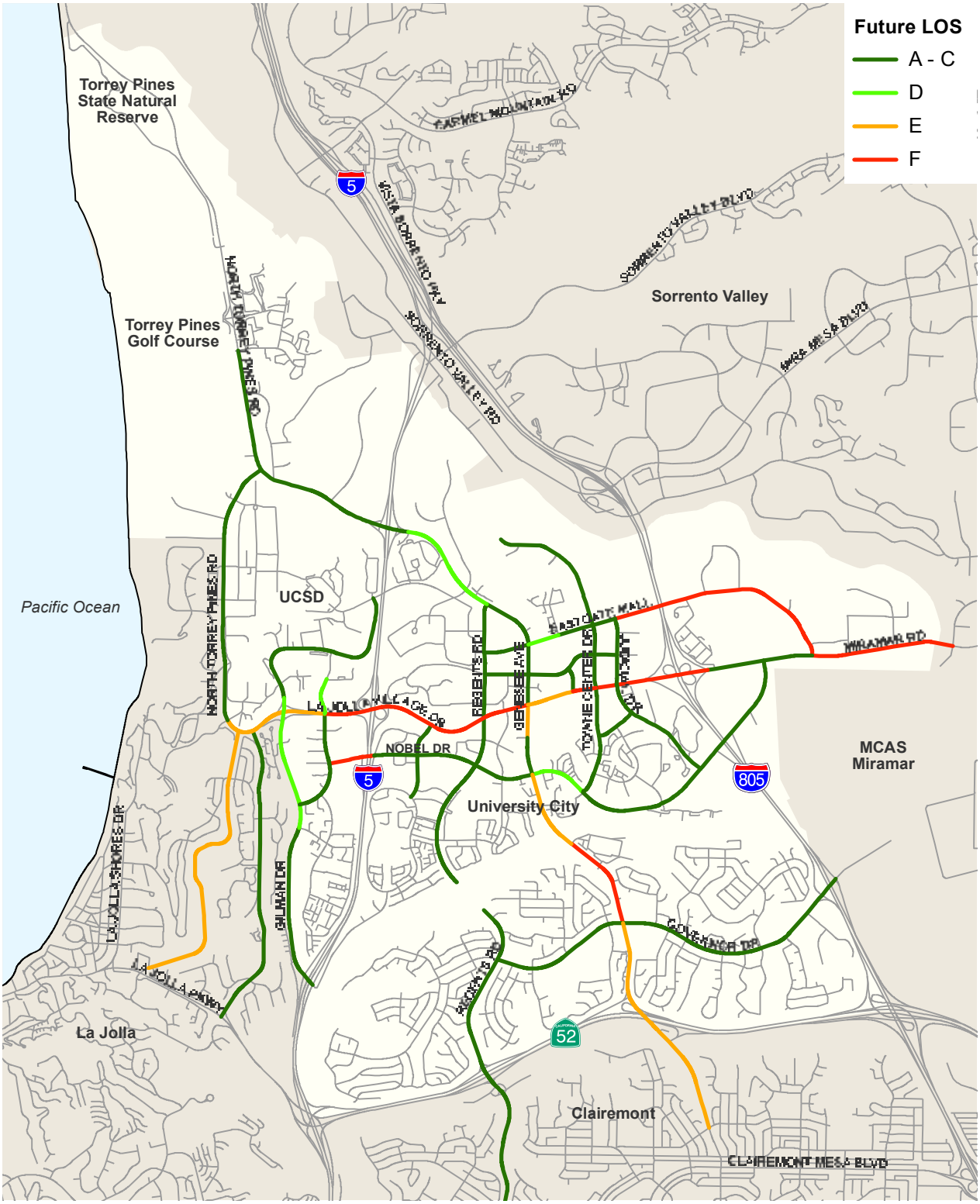
Future Intersection Midday Level of Service Summary: Alternative C

FIGURE C-6



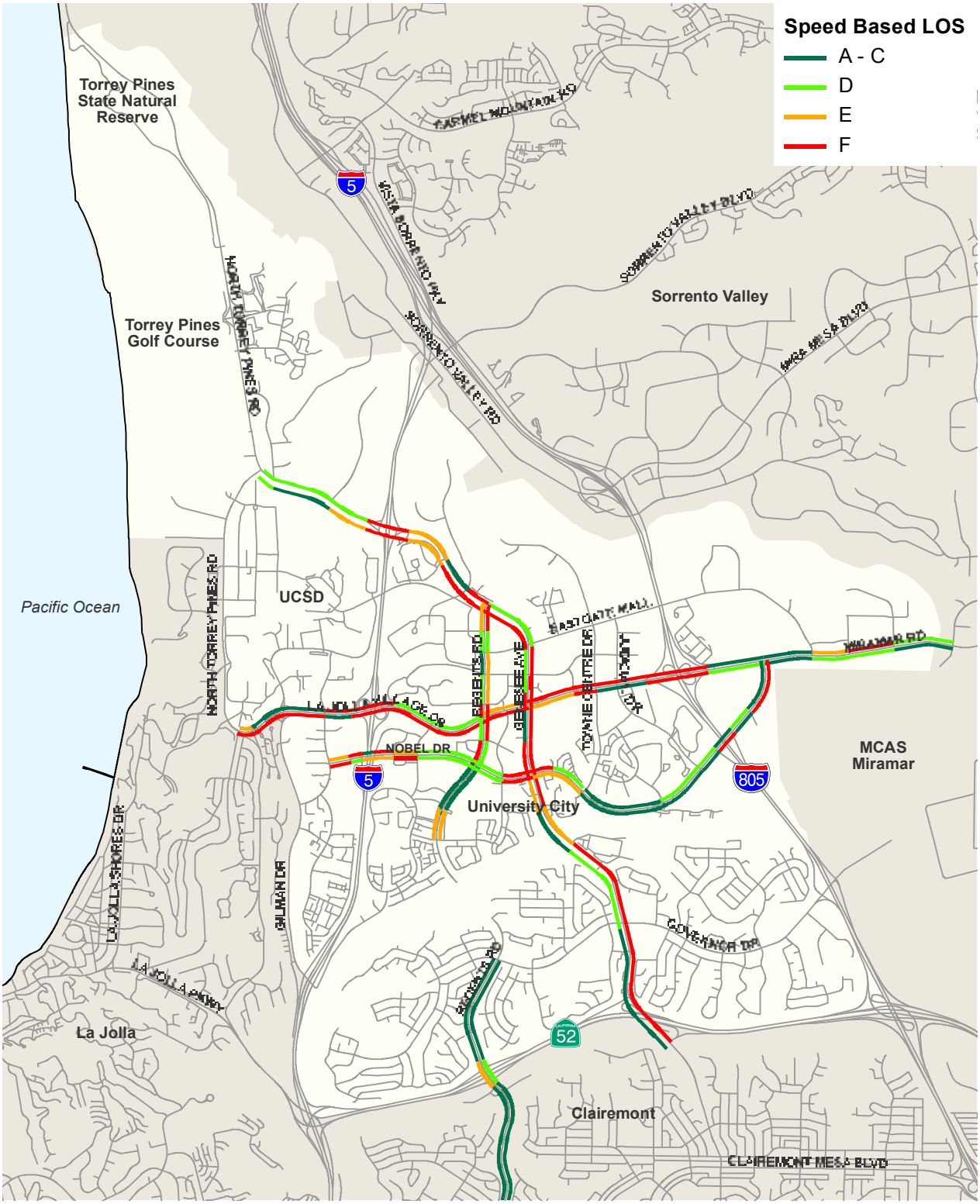
Future Intersection PM Level of Service Summary: Alternative C

FIGURE C-7



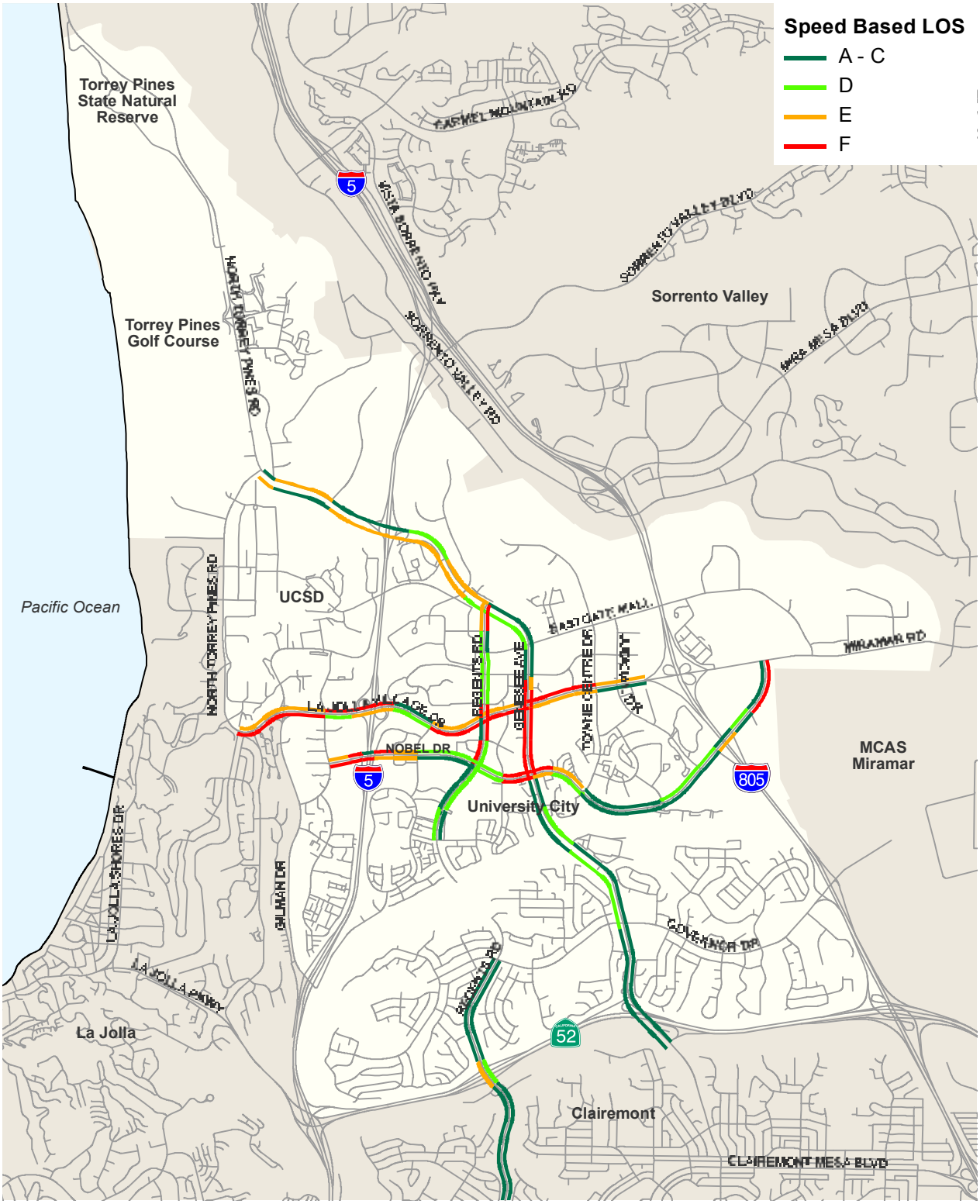
Future Roadway Segment Volume-Based Level of Service Summary: Alternative C

FIGURE C-8



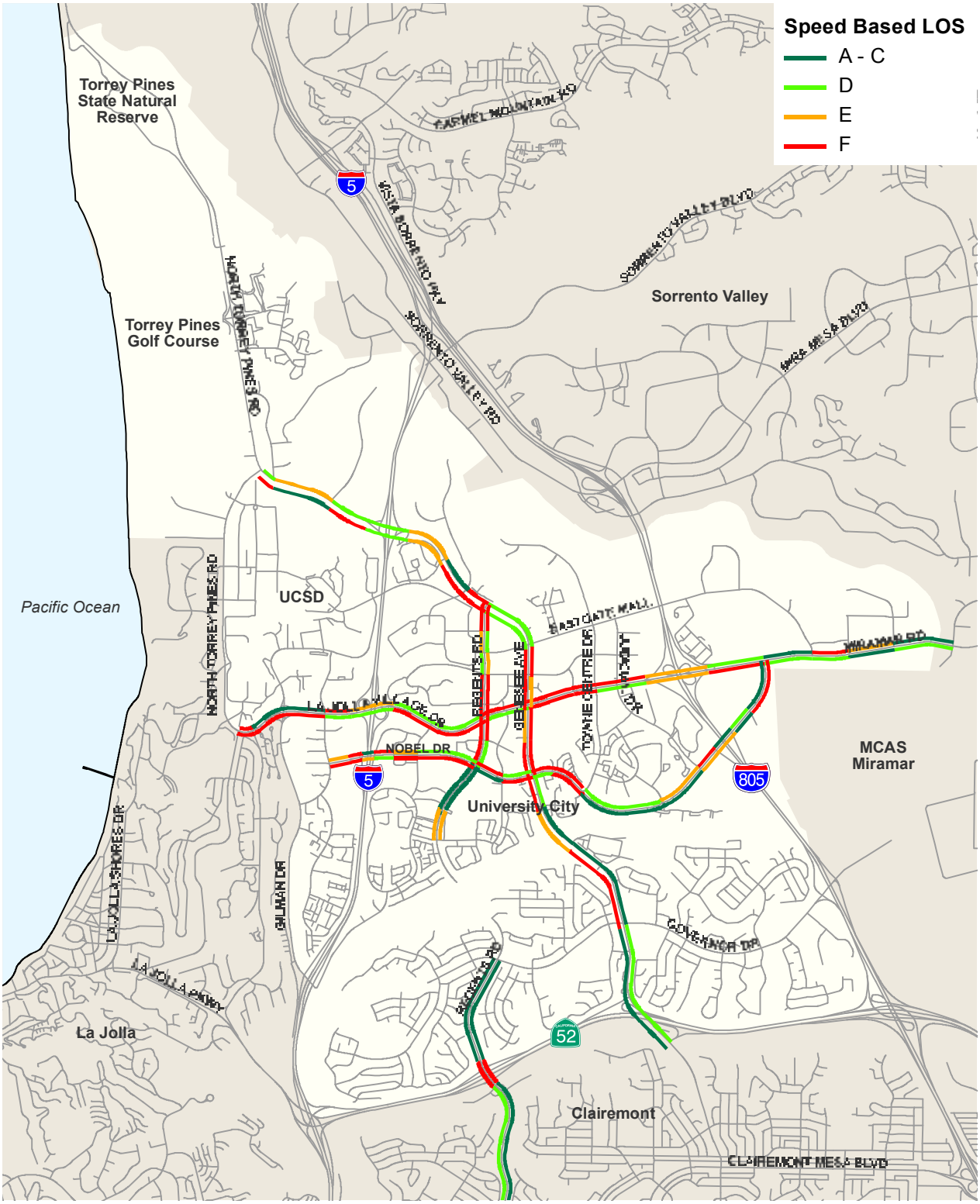
Future AM Roadway Segment Speed-Based Level of Service Summary: Alternative C

FIGURE C-9



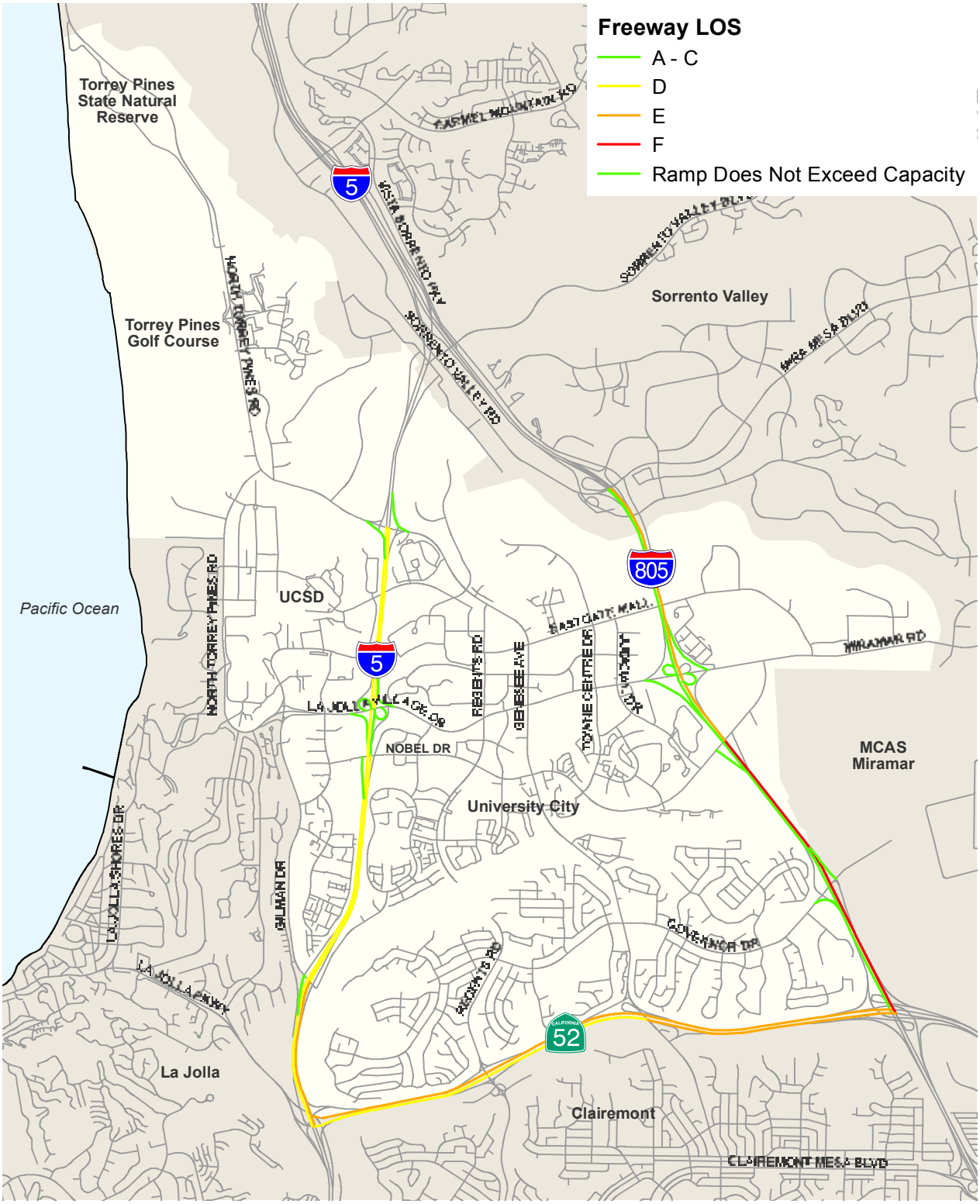
Future Midday Roadway Segment Speed-Based Level of Service Summary: Alternative C

FIGURE C-10



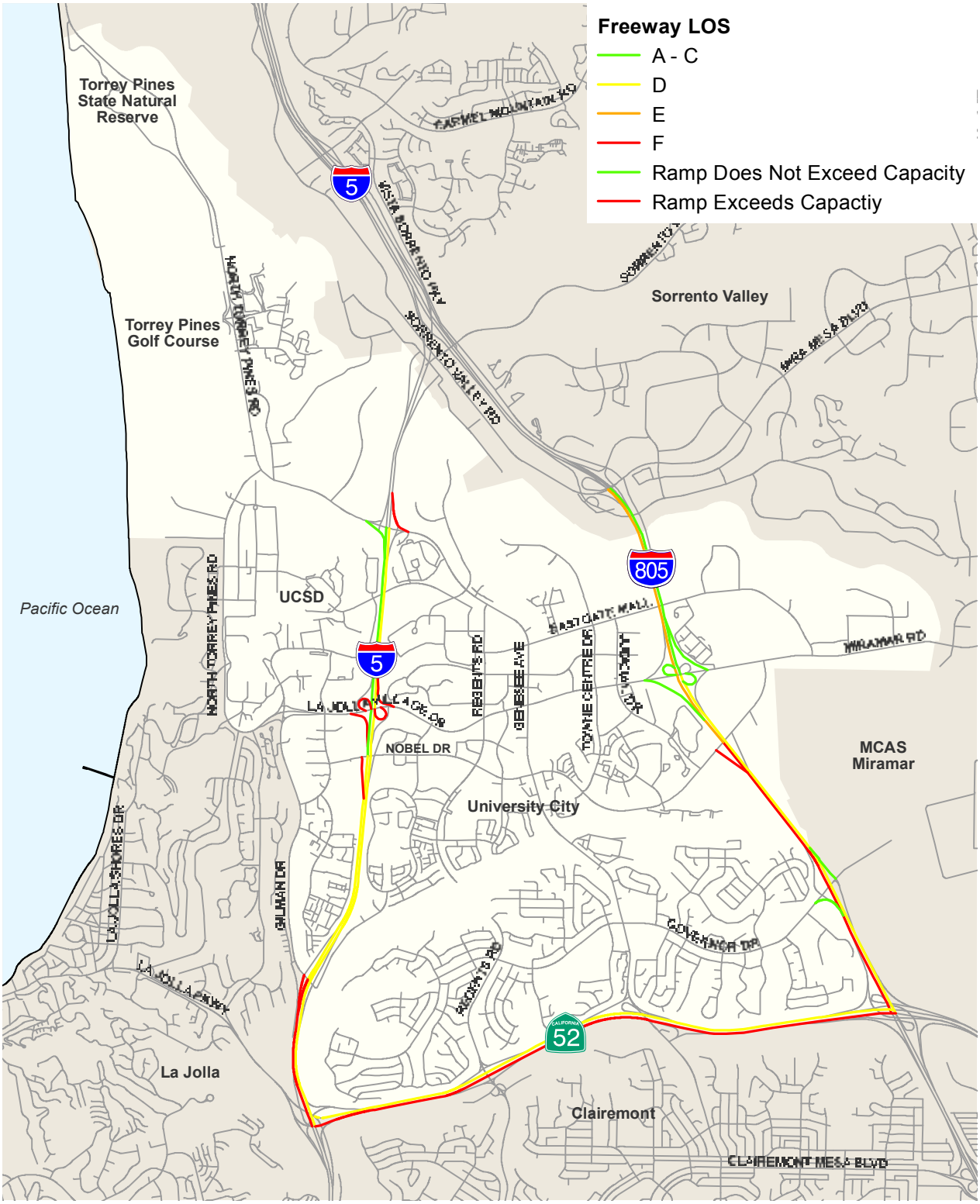
Future PM Roadway Segment Speed-Based Level of Service Summary: Alternative C

FIGURE C-11



Future AM Freeway Operations: Alternative C

FIGURE C-12



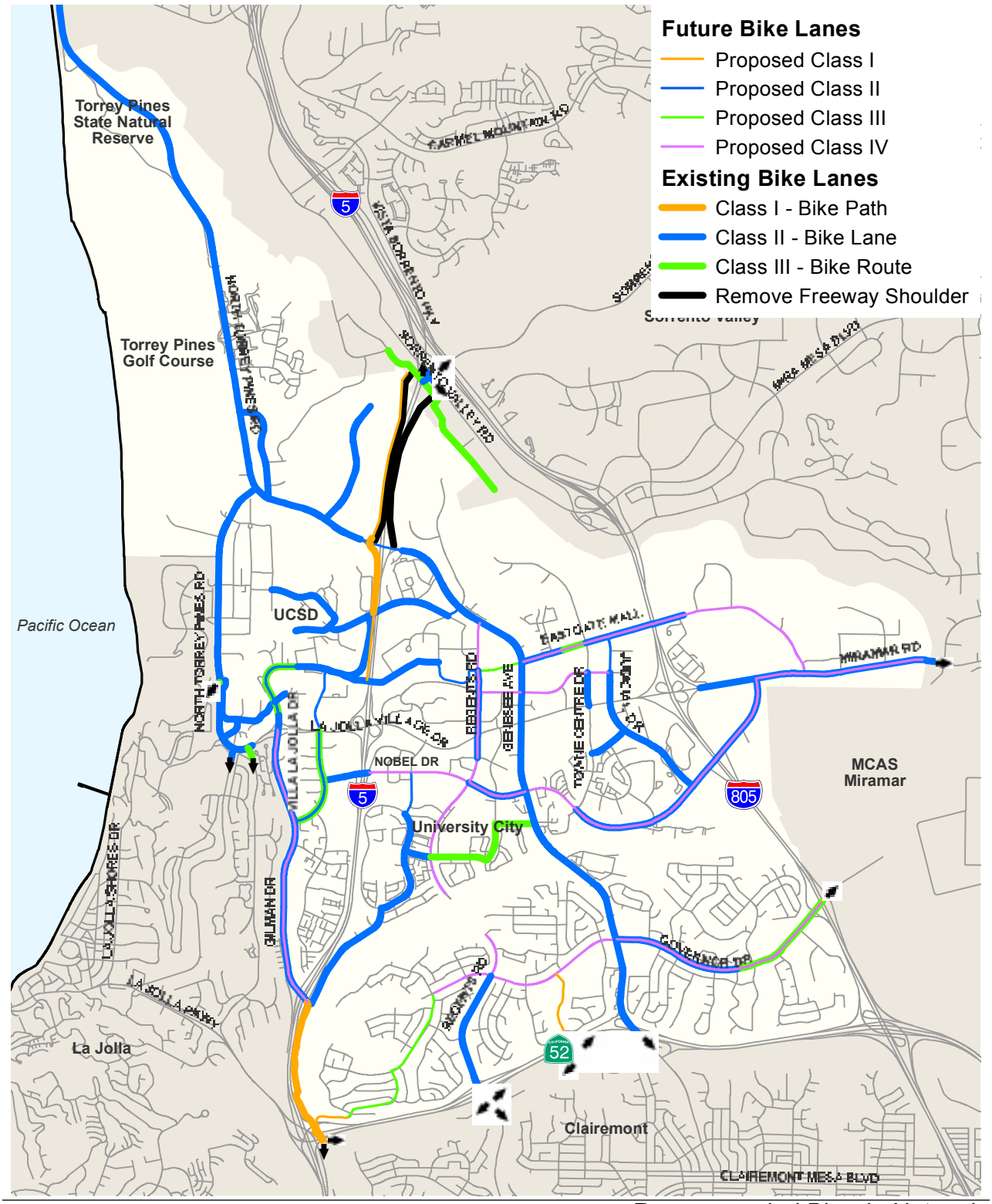
Future PM Freeway Operations: Alternative C

APPENDIX D

ALTERNATIVE D ANALYSIS AND NETWORK SUMMARY

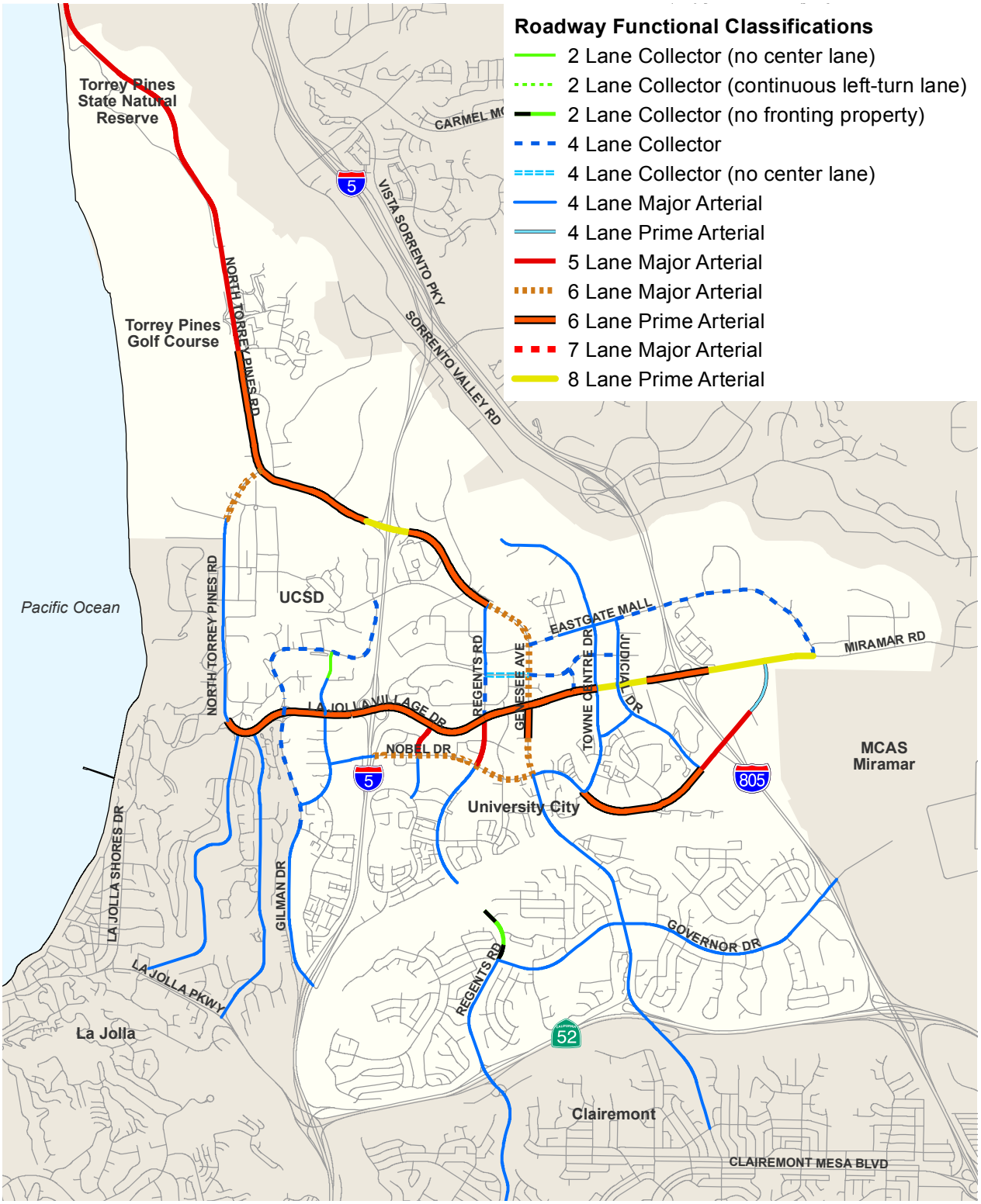
- Recommended Bicycle Network
- Recommended Roadway Classification Network
- Recommended Intersection Geometry Changes
- Future Intersection Analysis Results Summary (AM, Midday, PM)
- Future Roadway Volume-Based Analysis Results Summary
- Future Corridor Speed-Based Analysis Results Summary (AM, Midday, PM)
- Future Freeway Analysis Results Summary (AM, PM)

FIGURE D-1



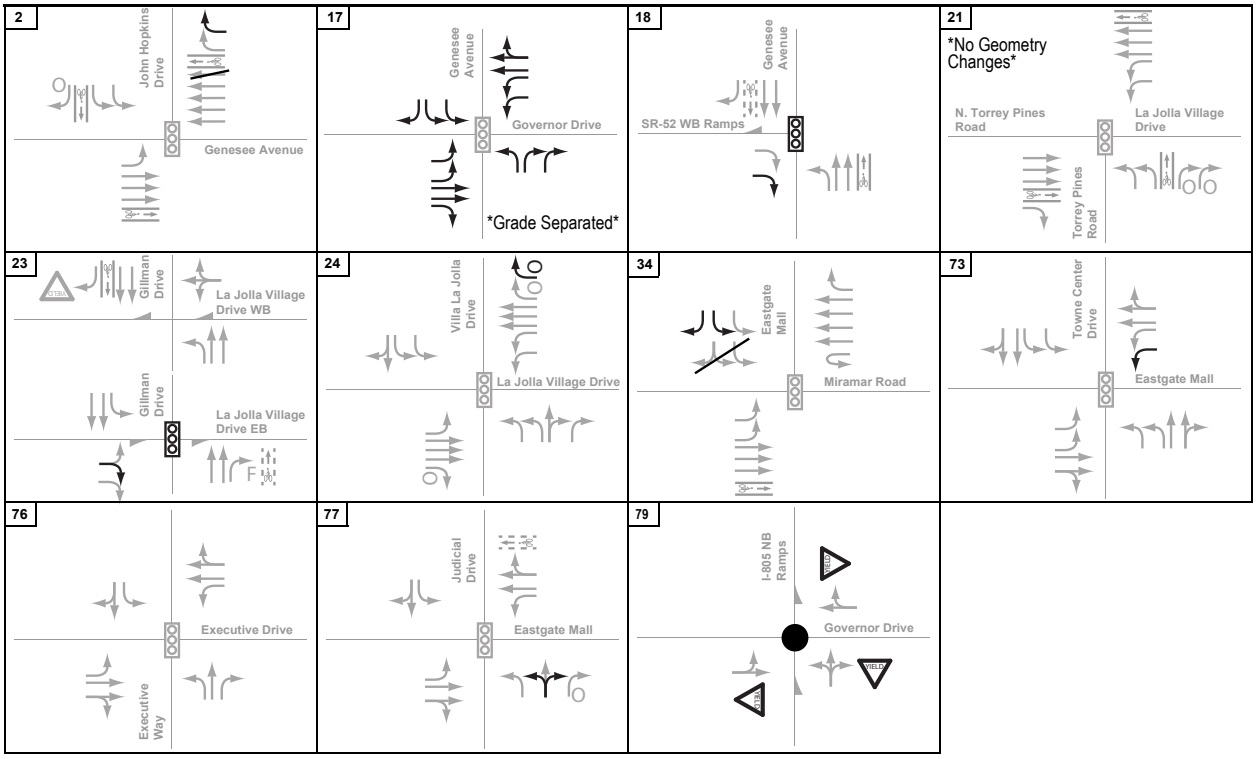
Recommended Bicycle Network: Alternative D

FIGURE D-2

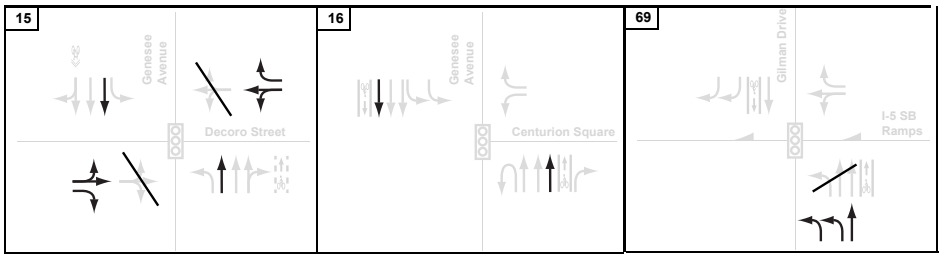


Recommended Roadway Classification: Alternative D

FIGURE D-3



Recommended Improvements for Alternative D



LEGEND

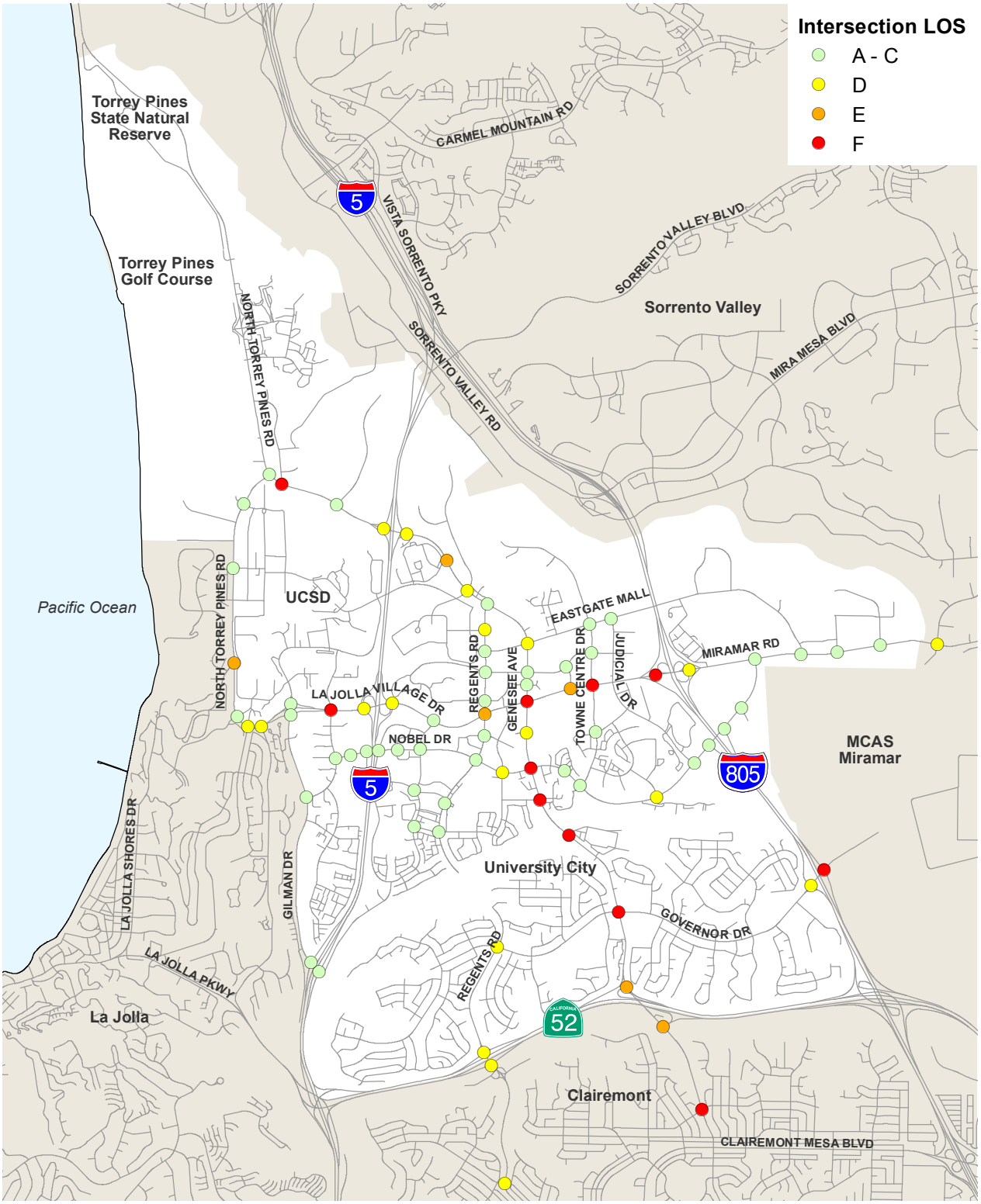
Intersection Control

- Signalized Intersection
- Roundabout Intersection
- Yield Controlled Movement
- F Free Right-Turn
- O Right-Turn Overlap

Bicycle Facilities

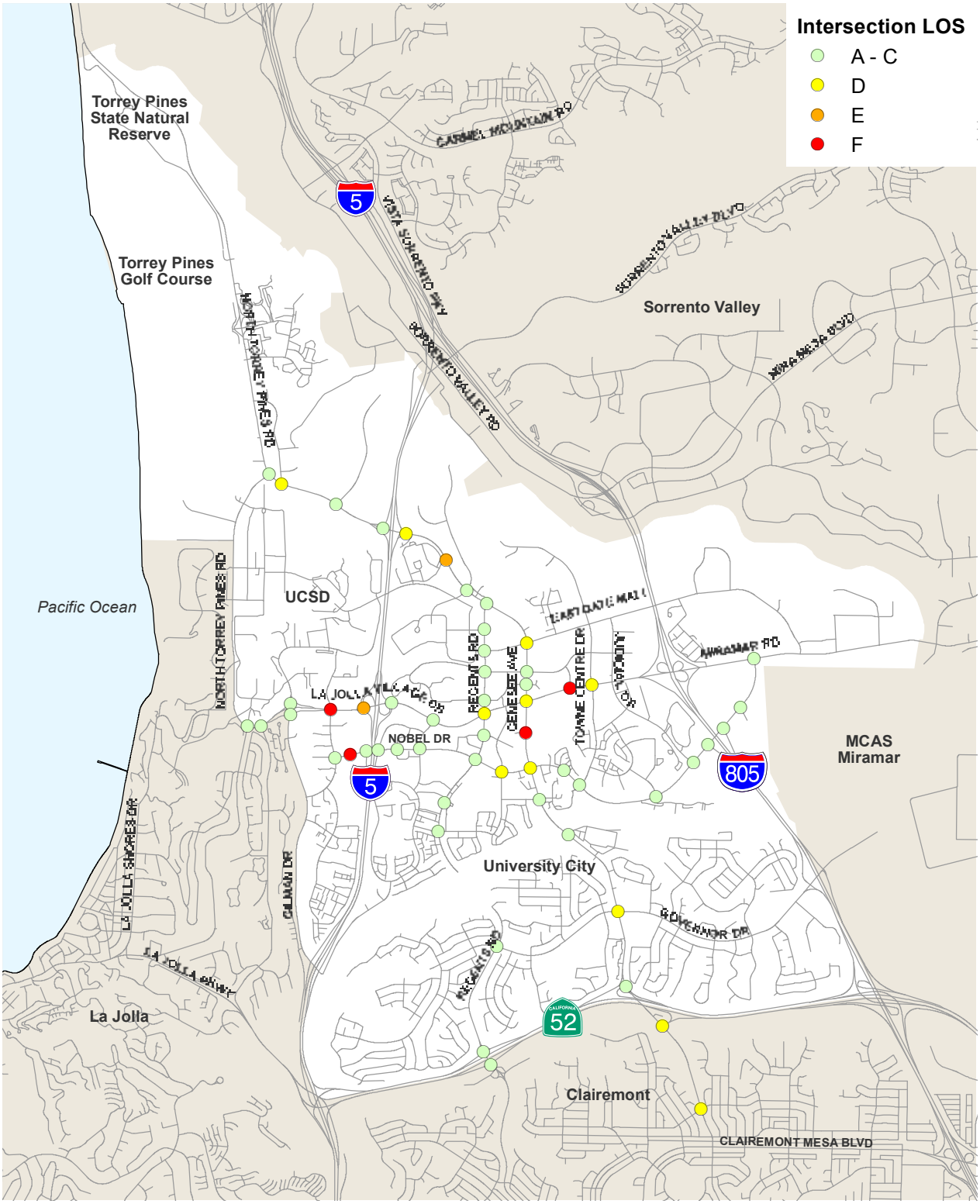
- Through Buffered Bicycle Lane ('Bicycle Pocket')
- Through Bicycle Lane ('Bicycle Pocket')
- Striped Bicycle Lane Merge
- Shared Lane Marking ('Sharrow')

FIGURE D-4



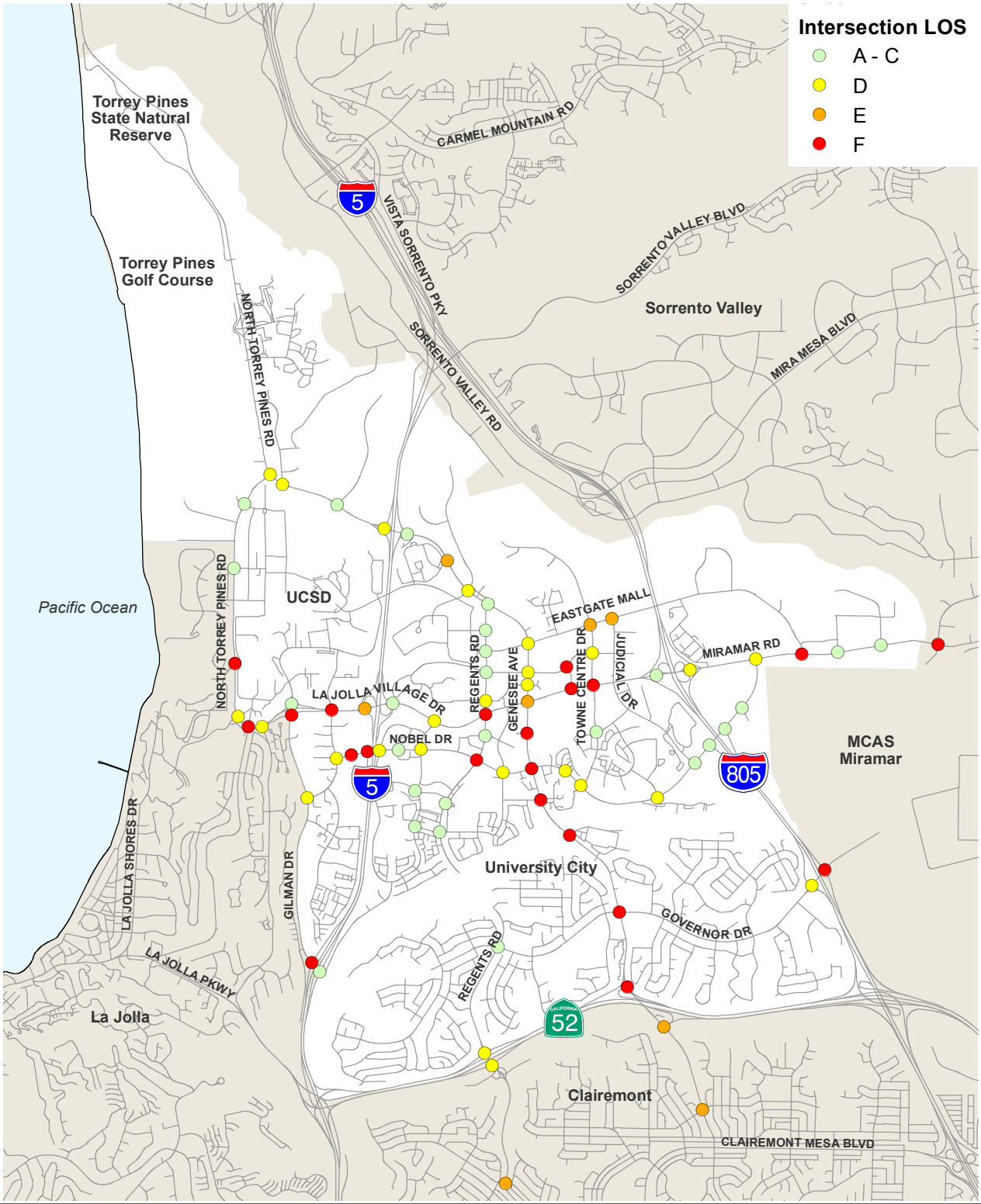
Future Intersection AM Level of Service Summary: Alternative D

FIGURE D-5



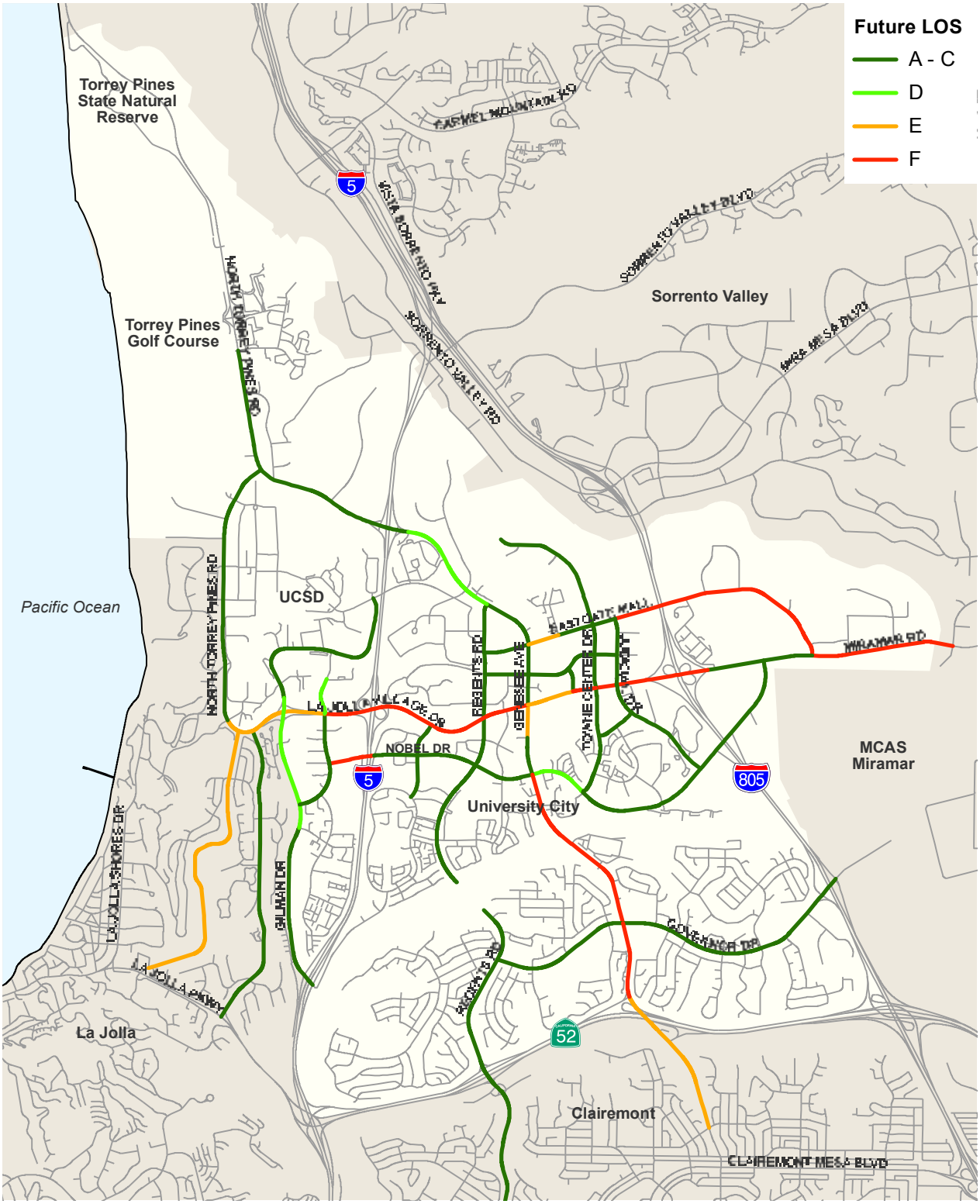
Future Intersection Midday Level of Service Summary: Alternative D

FIGURE D-6



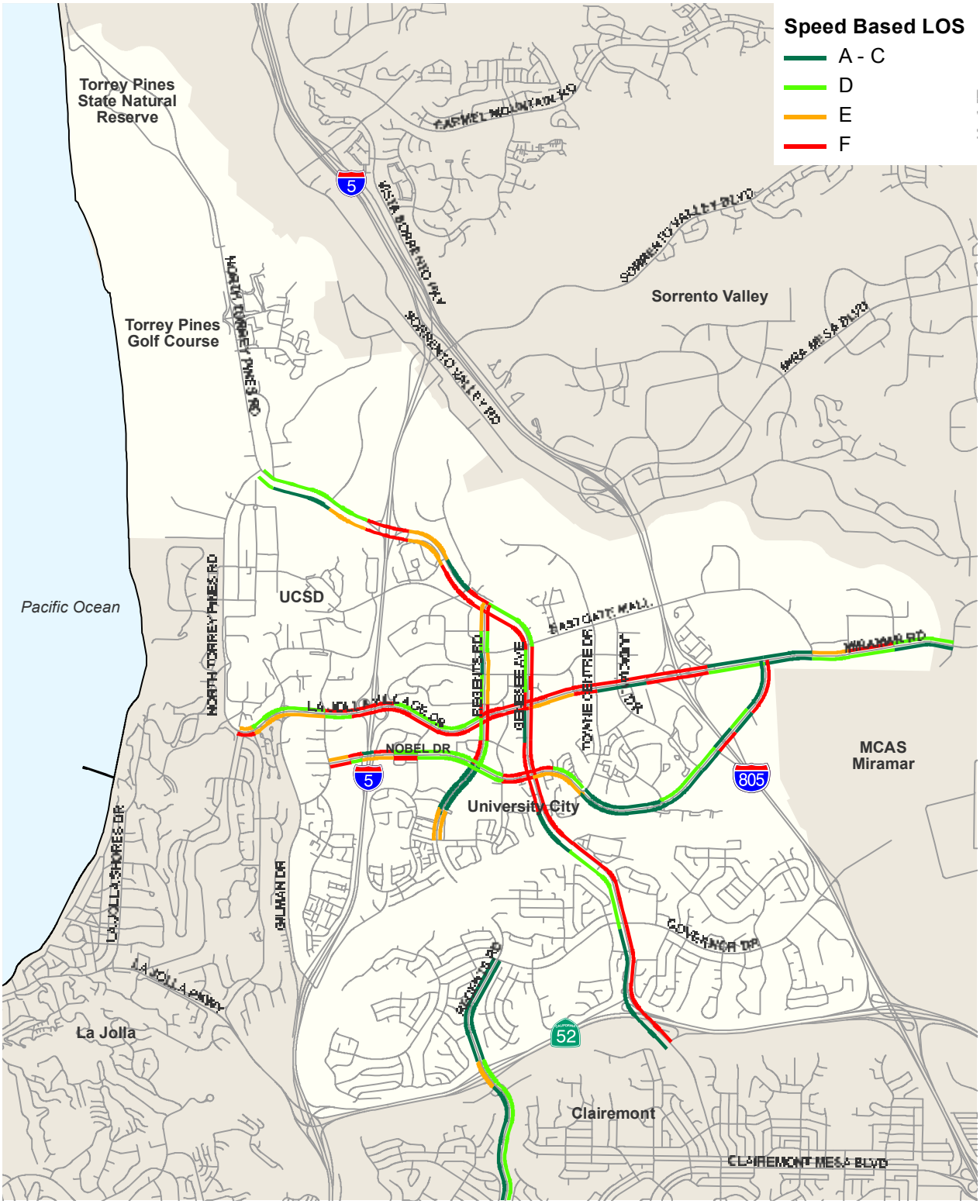
Future Intersection PM Level of Service Summary: Alternative D

FIGURE D-7



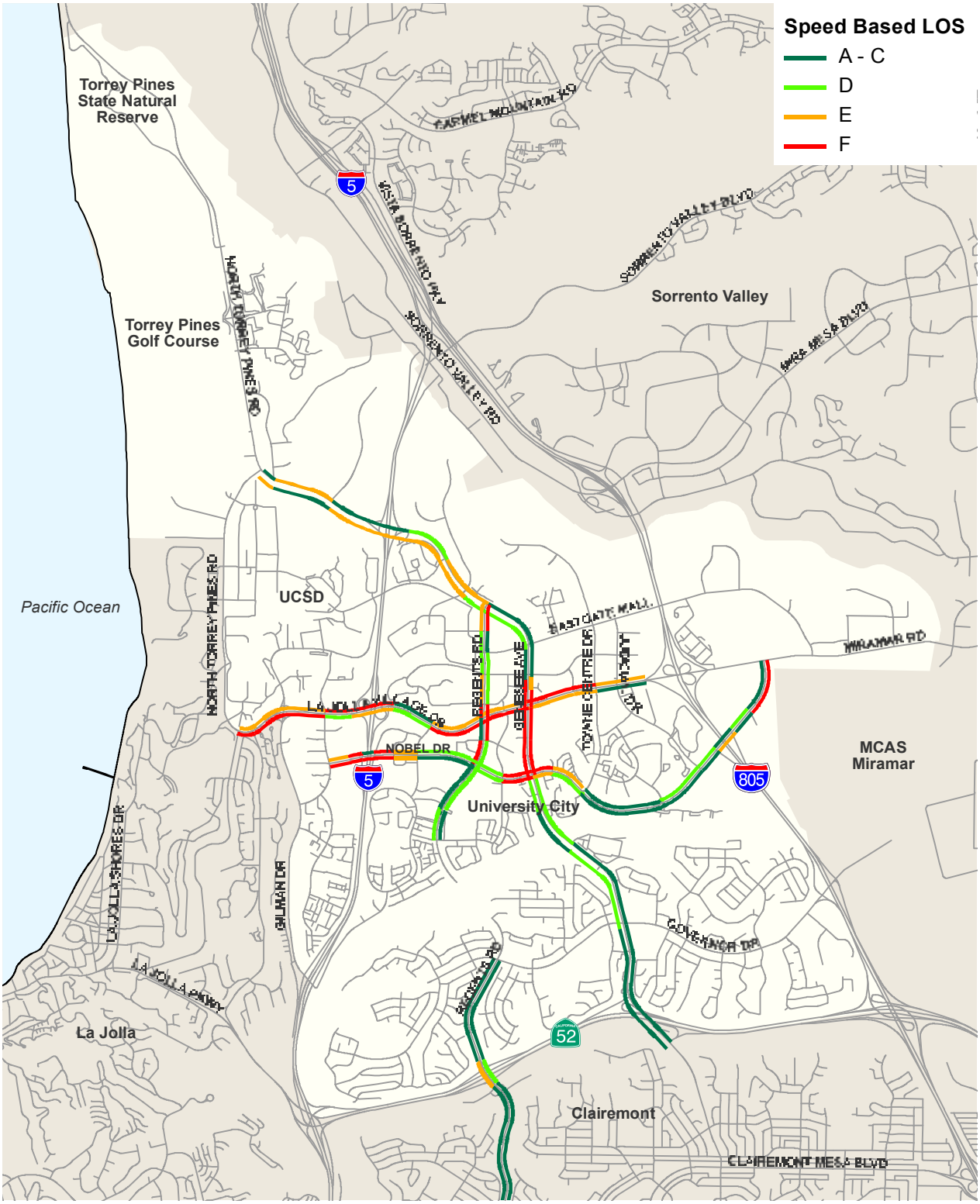
Future Roadway Segment Volume-Based Level of Service Summary: Alternative D

FIGURE D-8



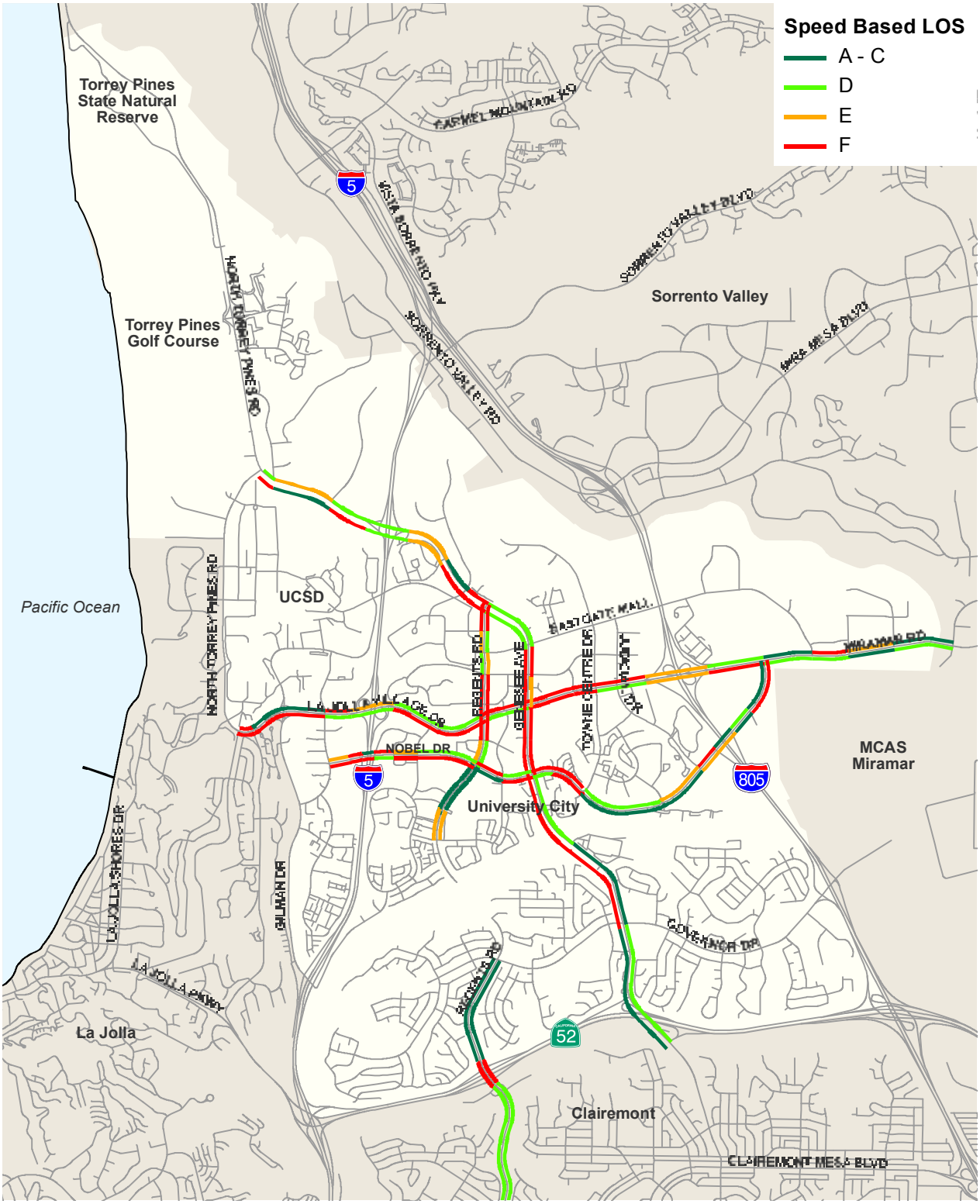
Future AM Roadway Segment Speed-Based Level of Service Summary: Alternative D

FIGURE D-9



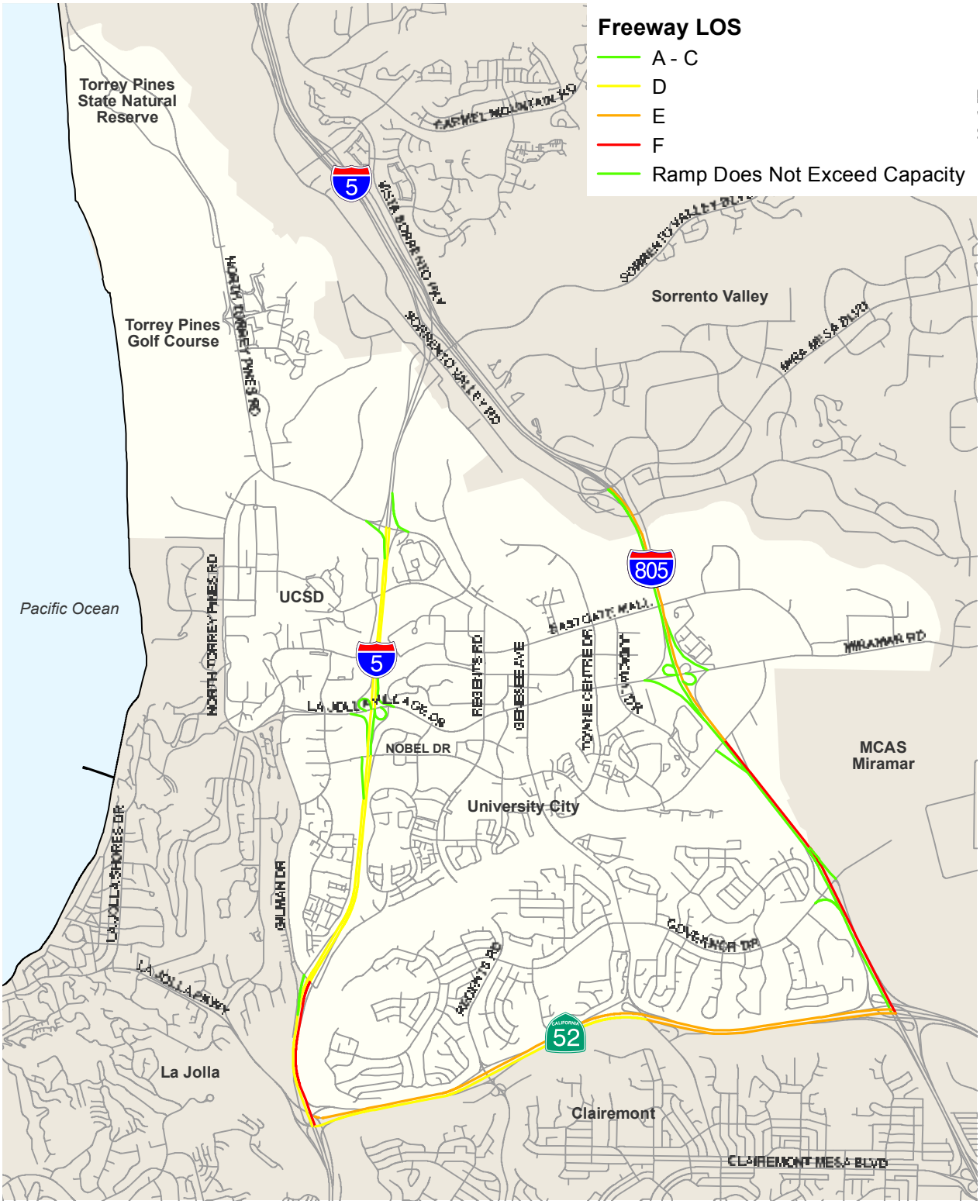
Future Midday Roadway Segment Speed-Based Level of Service Summary: Alternative D

FIGURE D-10



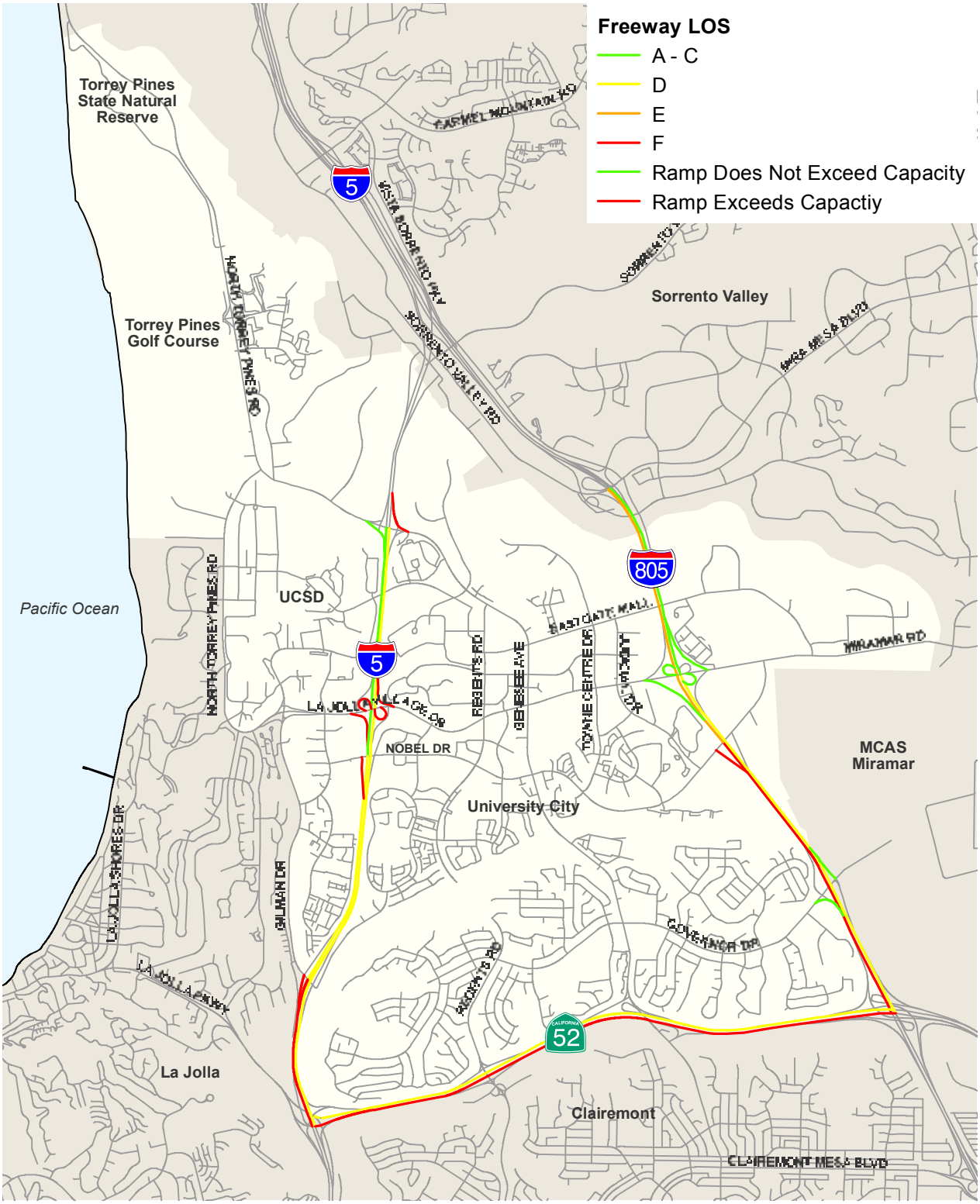
Future PM Roadway Segment Speed-Based Level of Service Summary: Alternative D

FIGURE D-11



Future AM Freeway Operations: Alternative D

FIGURE D-12

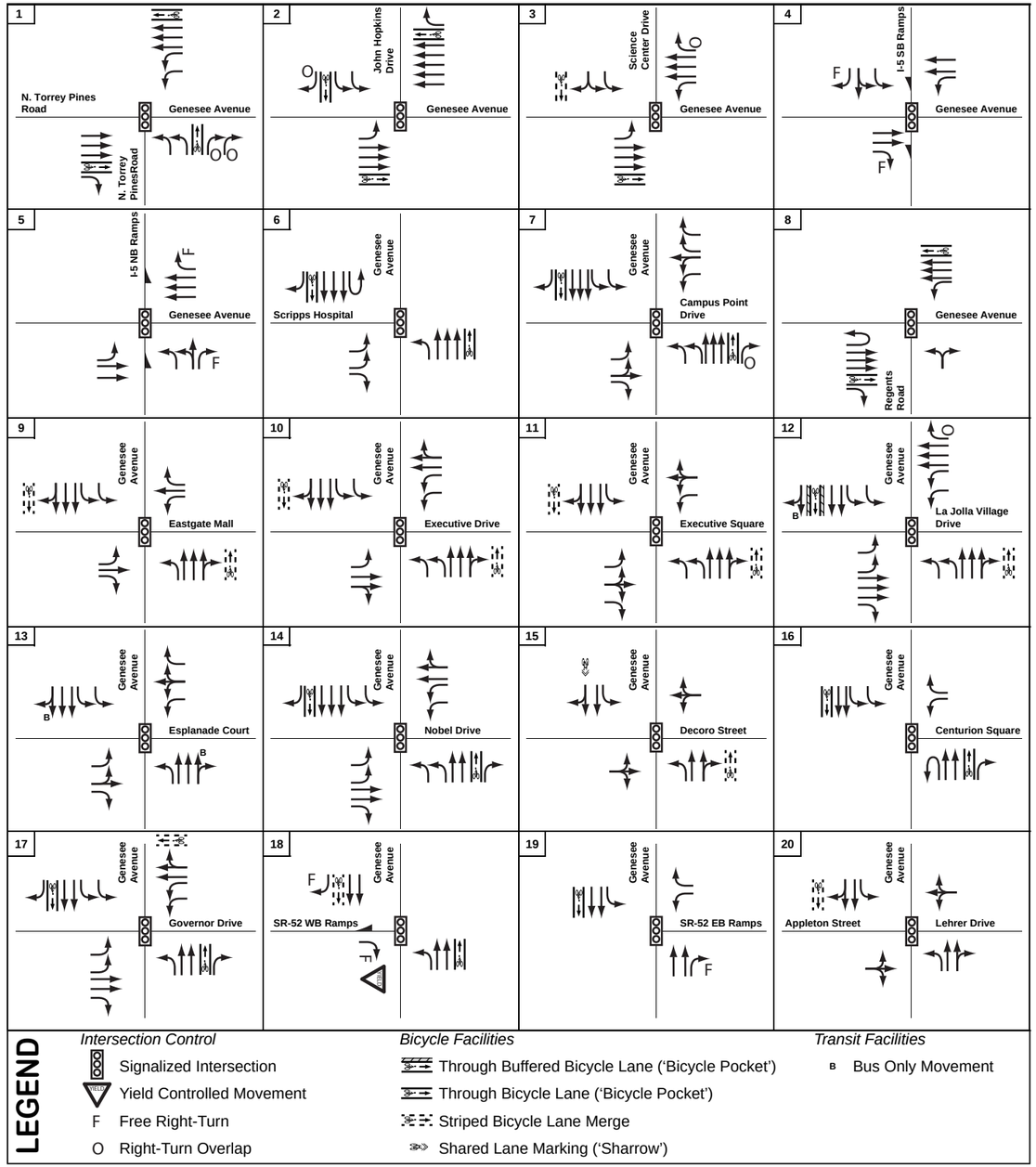


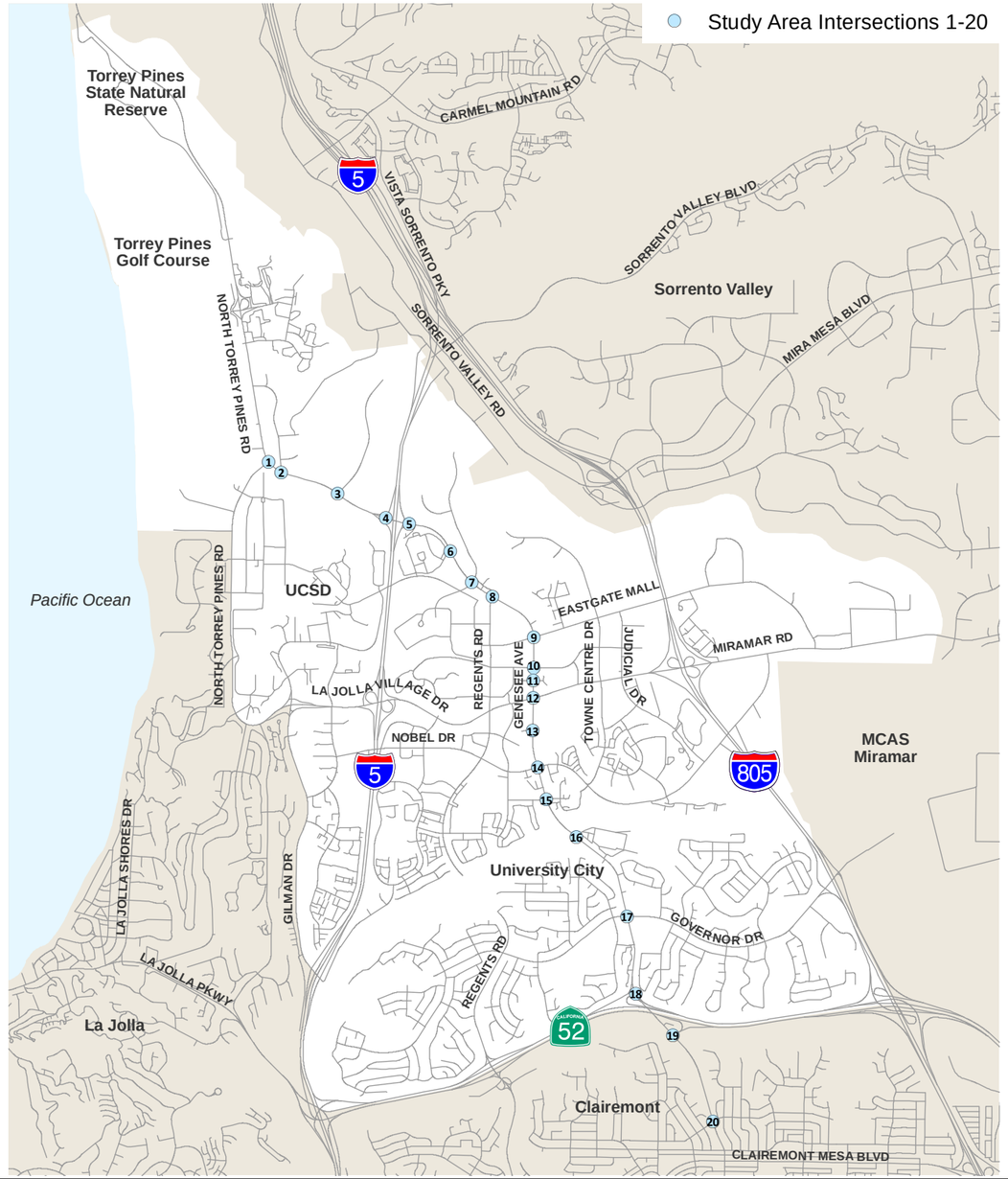
Future PM Freeway Operations: Alternative D

APPENDIX E

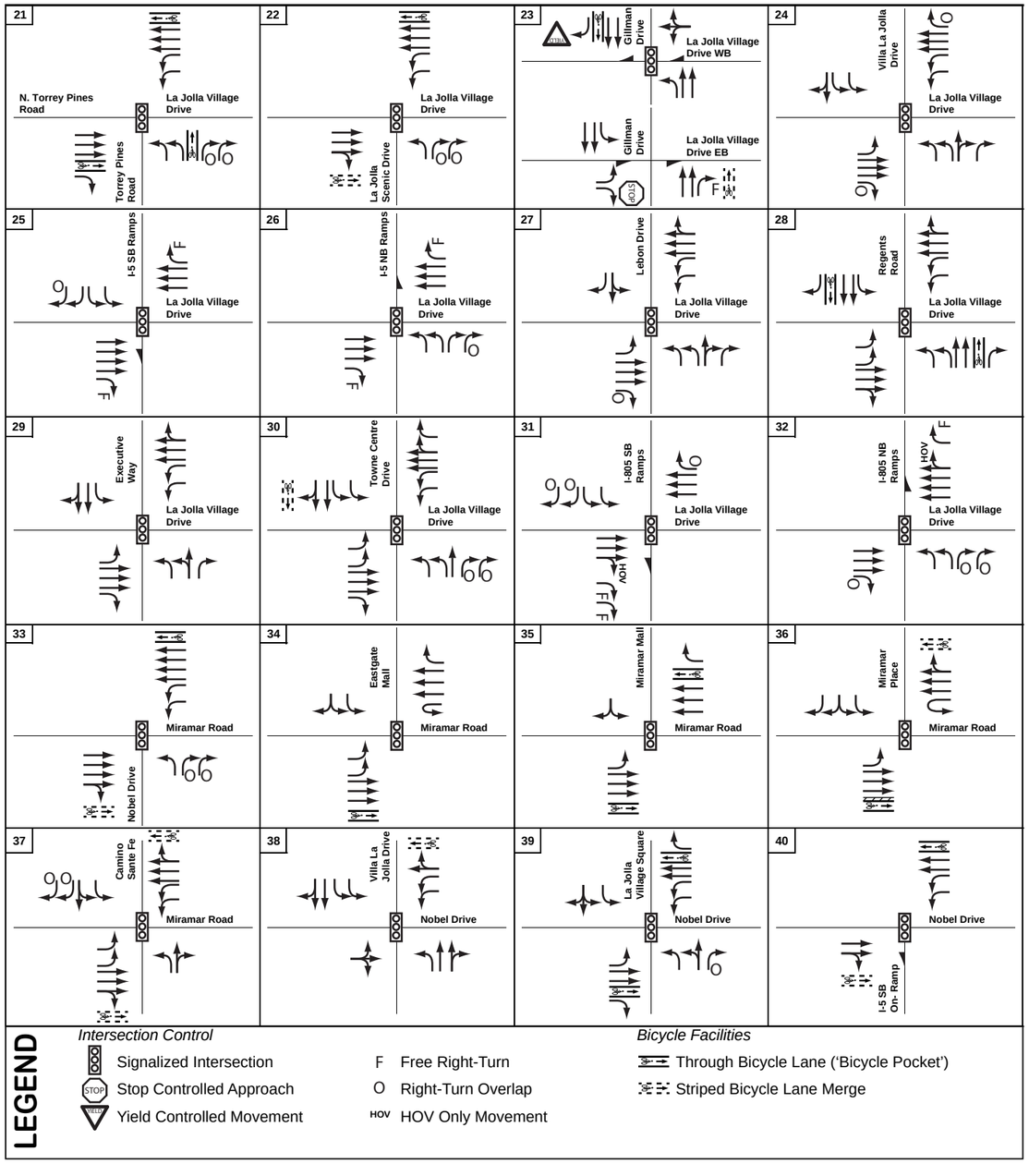
EXISTING INFORMATION

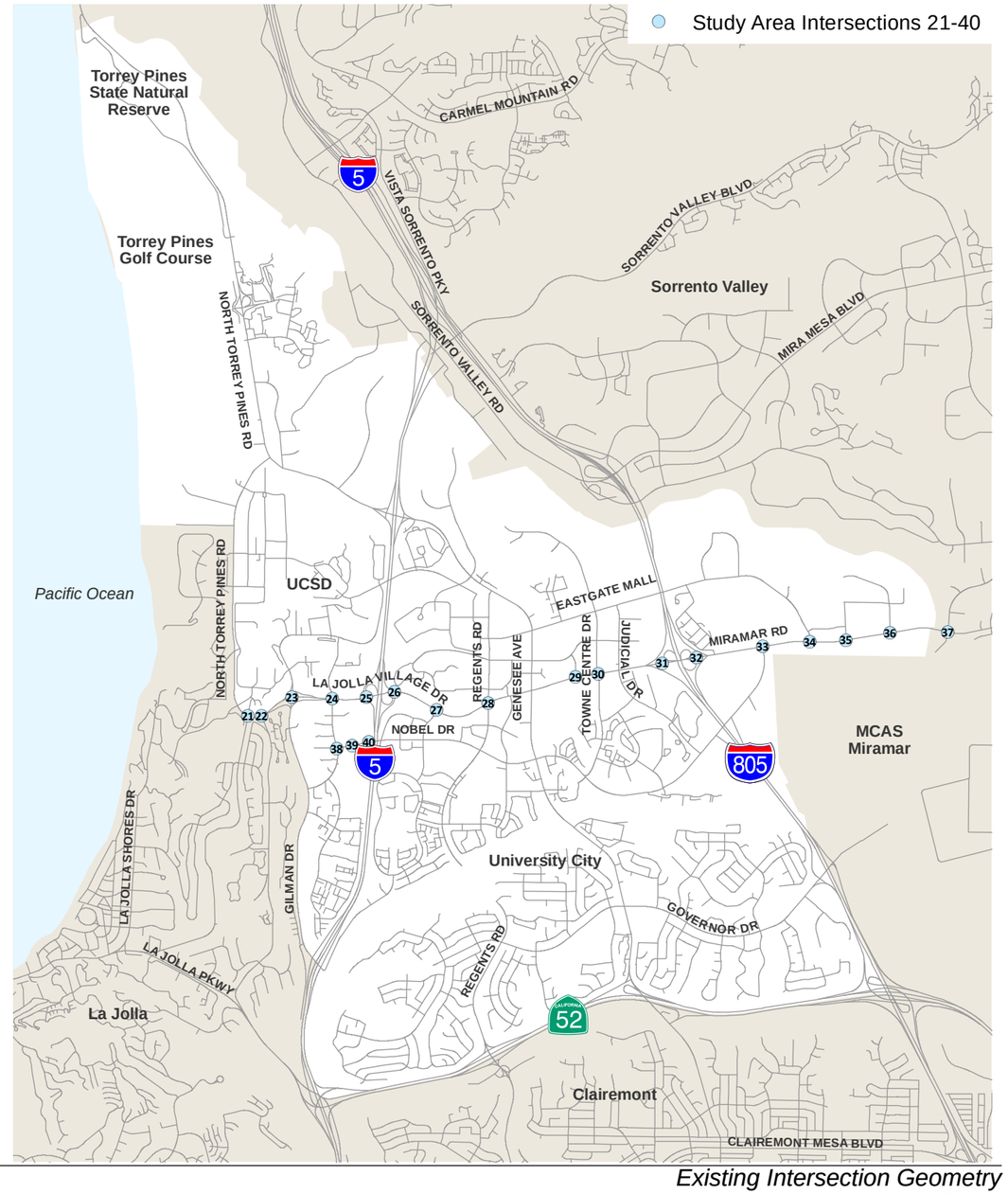
- Intersection geometrics
- Volume Summary
- Traffic Count Data



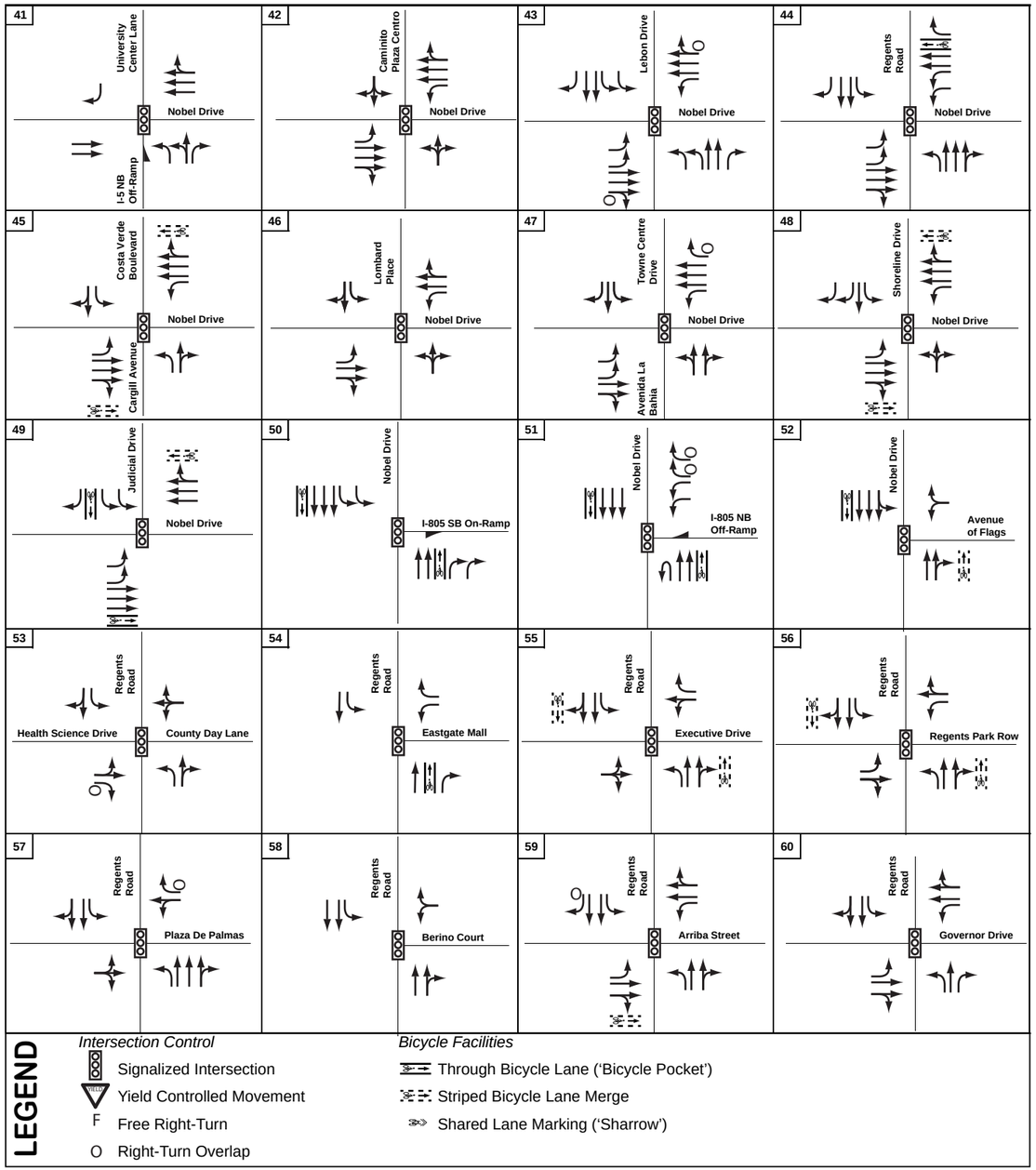


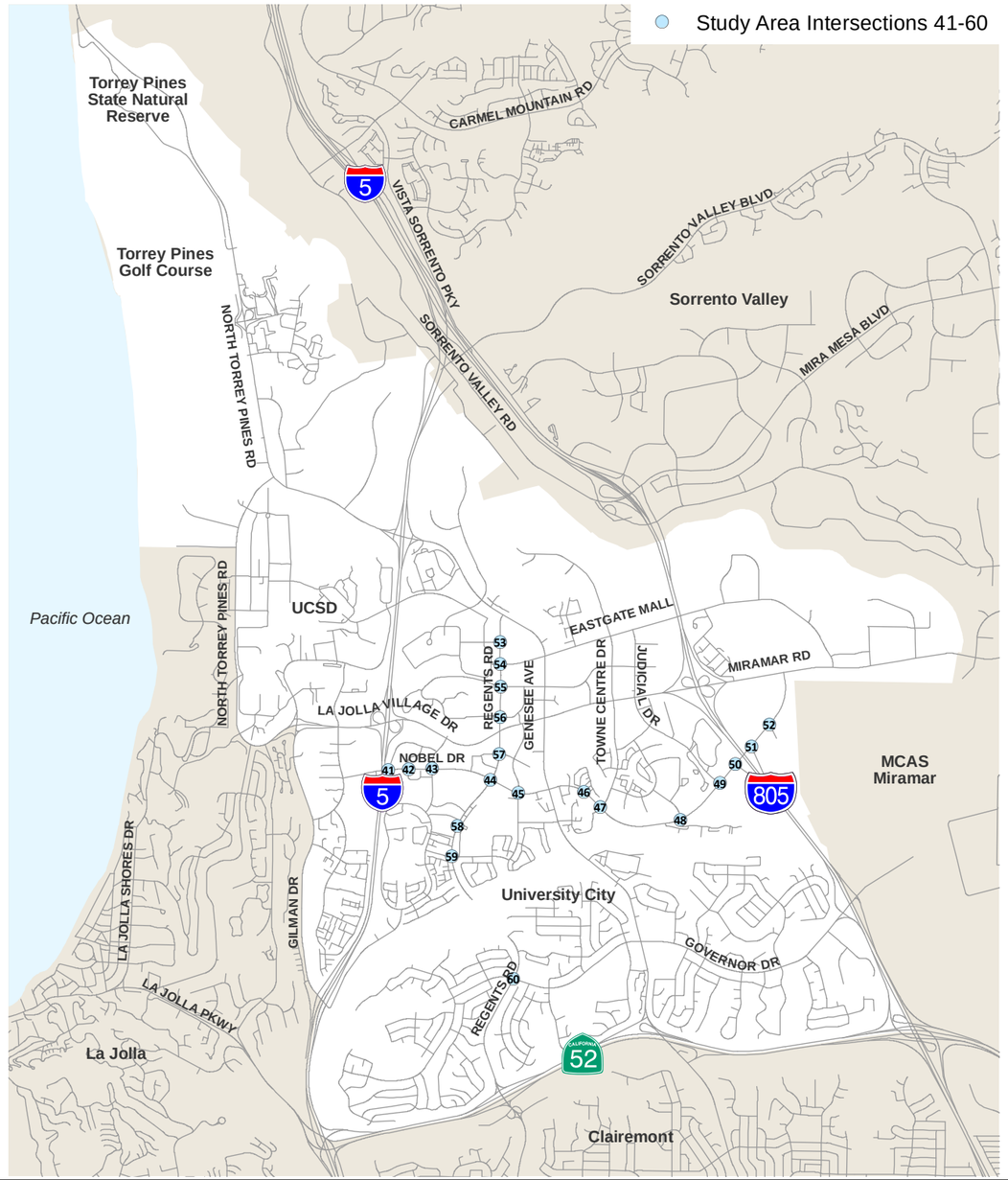
Existing Intersection Geometry
Intersections 1-20



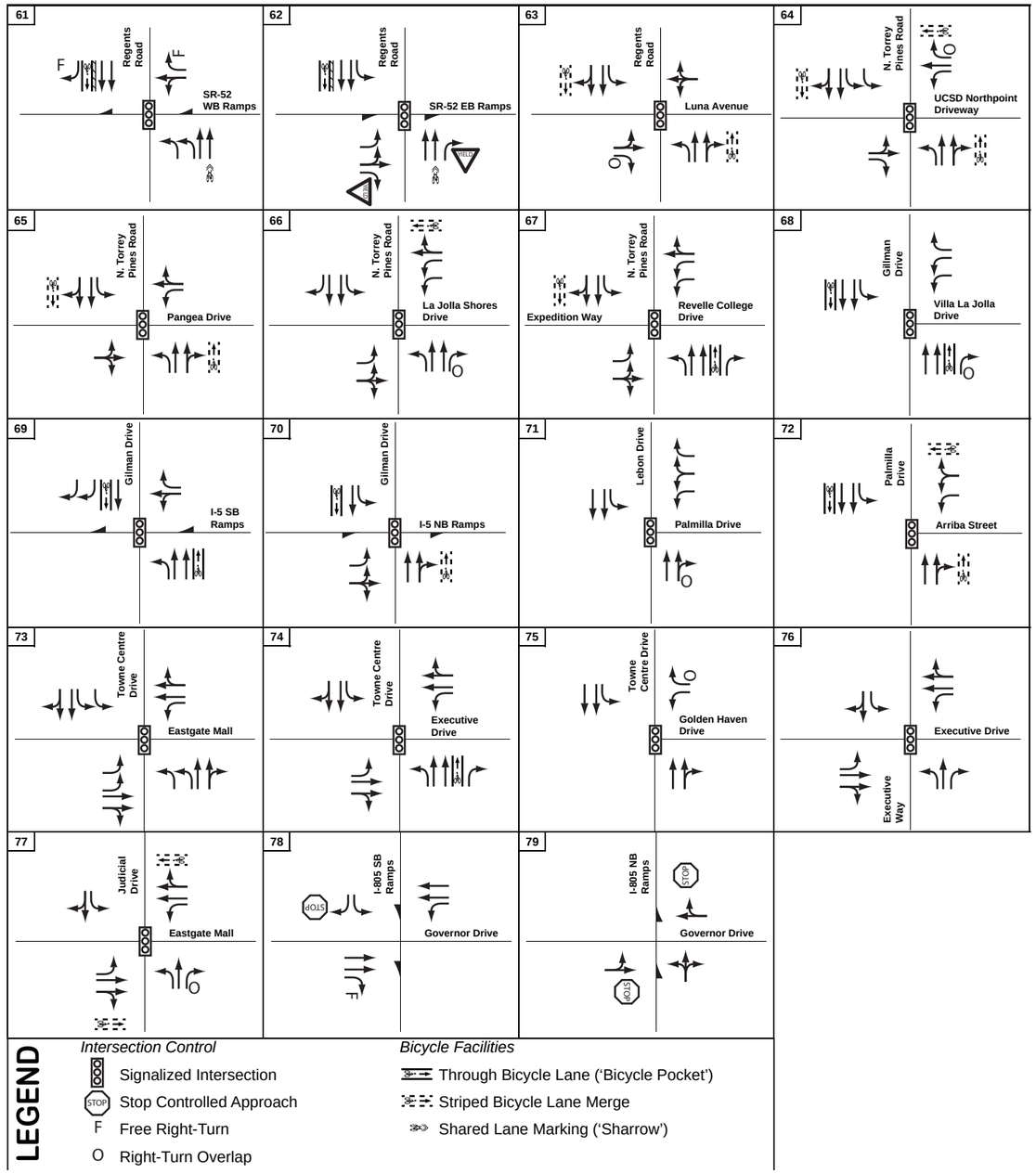


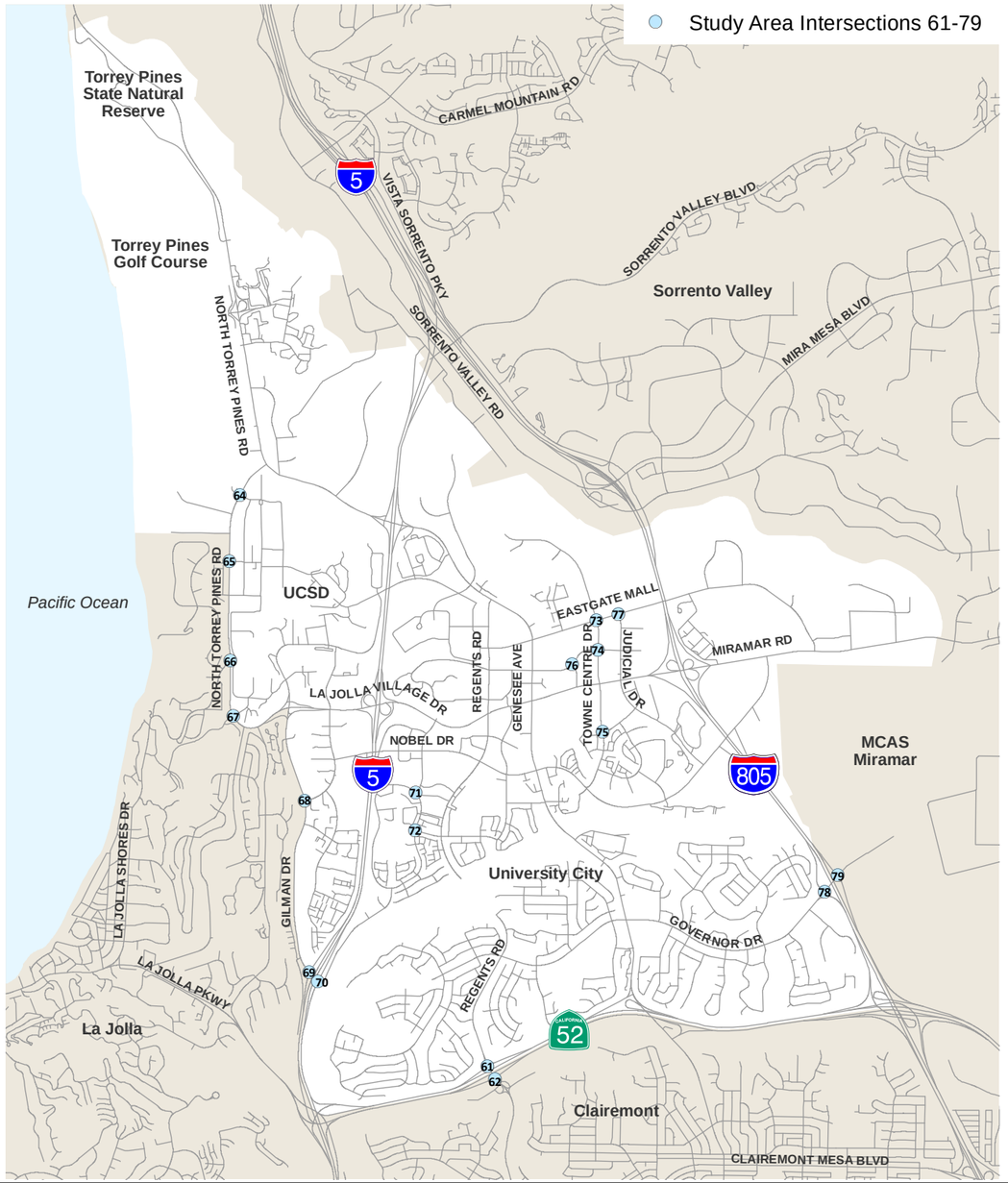
Existing Intersection Geometry
Intersections 21-40





Existing Intersection Geometry
Intersections 41-60





Existing Intersection Geometry
Intersections 61-79

1

		949 / 240
		443 / 494
		Genesee Avenue
401 / 825	N. Torrey Pines Road	
321 / 824		
471 / 561		293 / 388

2

18 / 117	82 / 541	821 / 103
	John Hopkins Drive (S)	1371 / 616
		1 / 0
		Genesee Avenue
87 / 37		
607 / 1176		

3

15 / 70	27 / 281	275 / 300
	Science Center Drive	2177 / 629
		3 / 11
		Genesee Avenue
75 / 80		
616 / 1637		

4

712 / 338		1617 / 548
0 / 3	I-5 SB Ramps	85 / 312
971 / 850		Genesee Avenue
419 / 1281		
184 / 671		

5

	I-5 NB Ramps	405 / 969
		482 / 541
		Genesee Avenue
188 / 854		
1241 / 1277		
1193 /319	8 /4	566 /99

6

490 /99	5 /7	
1458 /1496	Genesee Avenue	
Scripps Hospital		
60 / 444		208 /85
116 / 242		824 /1059

7

469 /139		52 / 283
700 /1551	Genesee Avenue	12 / 25
325 /59		19 / 381
		Campus Point Drive
152 / 323		
13 / 9		
96 / 339		
380 /183	921 /536	371 /41

8

		1277 / 638
		94 / 36
		Genesee Avenue
89 / 44	Regents Road	
643 / 1574		
99 / 649		
190 /103		77 /59

9

96 /60		411 / 194
371 /889	Genesee Avenue	285 / 239
206 /482		64 / 206
		Eastgate Mall
56 / 48		
190 / 177		
55 / 63		
180 /27	1110 /423	249 /101

10

23 /45		84 / 90
346 /1261	Genesee Avenue	69 / 213
56 /103		31 / 117
		Executive Drive
21 / 21		
113 / 105		
22 / 66		
61 /72	1170 /335	275 /65

11

18 /13		9 / 15
376 /1435	Genesee Avenue	4 / 10
12 /6		9 / 127
		Executive Square
13 / 29		
3 / 2		
36 / 172		
281 /37	1483 /425	208 /12

12

52 /253		365 / 110
165 /877	Genesee Avenue	1550 / 1342
180 /512		112 / 344
		La Jolla Village Drive
368 / 114		
1491 / 1122		
79 / 197		
170 /233	1017 /241	104 /71

13

78 / 157		108 / 243
224 / 1031	Genesee Avenue	14 / 39
96 / 288		57 / 181
		Esplanade Court
98 / 148		
8 / 31		
30 / 74		
50 / 73	1464 / 487	100 / 170

14

42 / 121		45 / 65
228 /1230	Genesee Avenue	263 / 554
55 / 113		79 / 277
		Nobel Drive
106 / 202		
466 / 323		
86 / 204		
156 / 191	1424 / 453	163 / 118

15

41 / 49		22 / 15
521 / 1851	Genesee Avenue	24 / 38
8 / 16		55 / 245
		Decoro Street
24 / 21		
28 / 25		
173 / 208		
149 / 179	1702 / 724	121 / 29

16

578 / 2266		212 / 22
169 / 41	Genesee Avenue	300 / 85
		Centurion Square
		U
		0 / 1
		1752 / 901
		278 / 46

17

256 / 464		249 / 114
499 / 1376	Genesee Avenue	236 / 334
181 / 402		247 / 314
		Governor Drive
455 / 195		
306 / 279		
142 / 118		
71 / 189	1349 / 511	223 / 250

18

113 / 338		
887 / 1558	Genesee Avenue	852 / 351
SR-52 WB Ramps		
131 / 422		420 / 331
		942 / 455

19

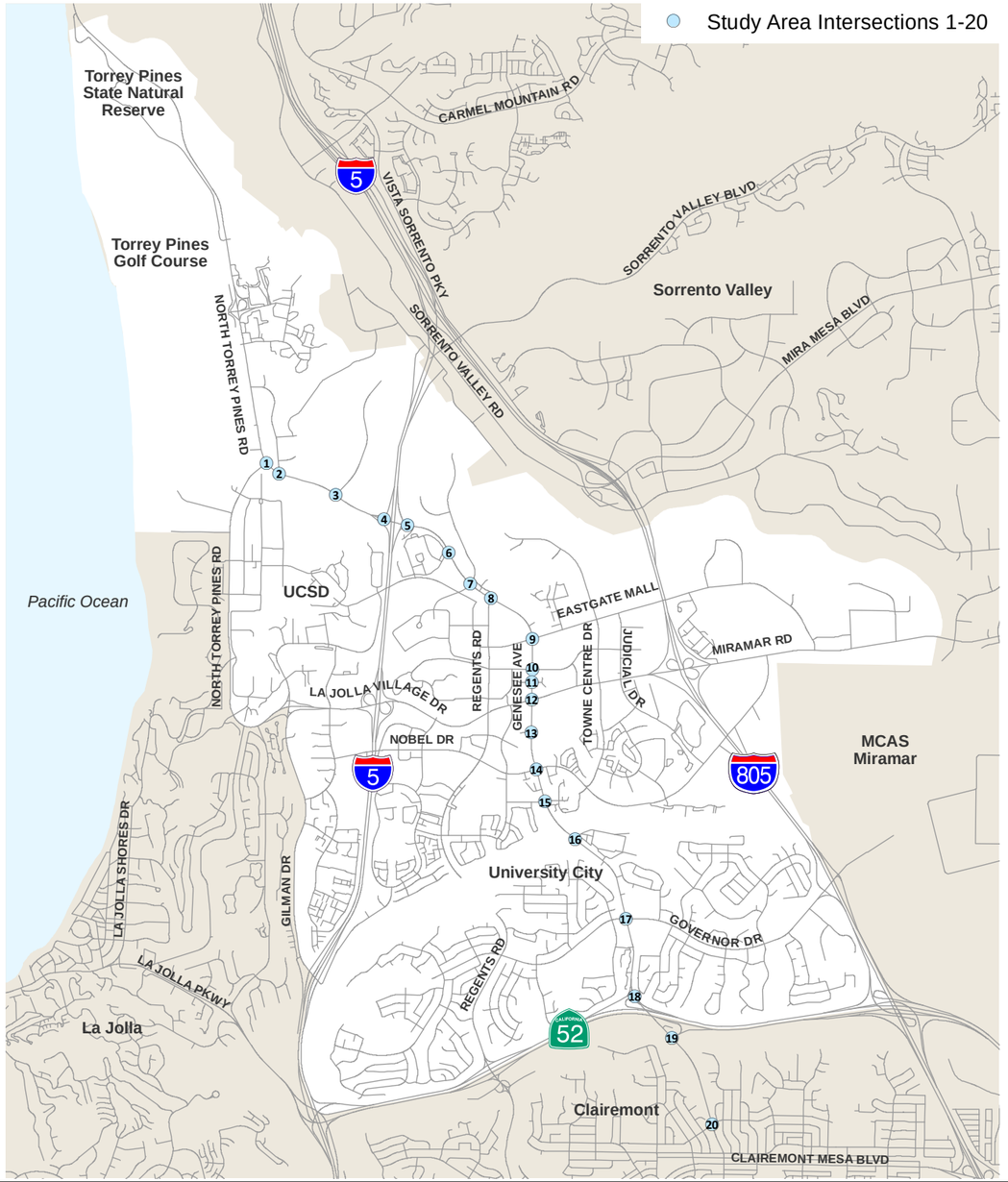
581 / 1220		170 / 225
437 / 760	Genesee Avenue	132 / 352
		SR-52 EB Ramps
		1187 / 561
		721 / 300

20

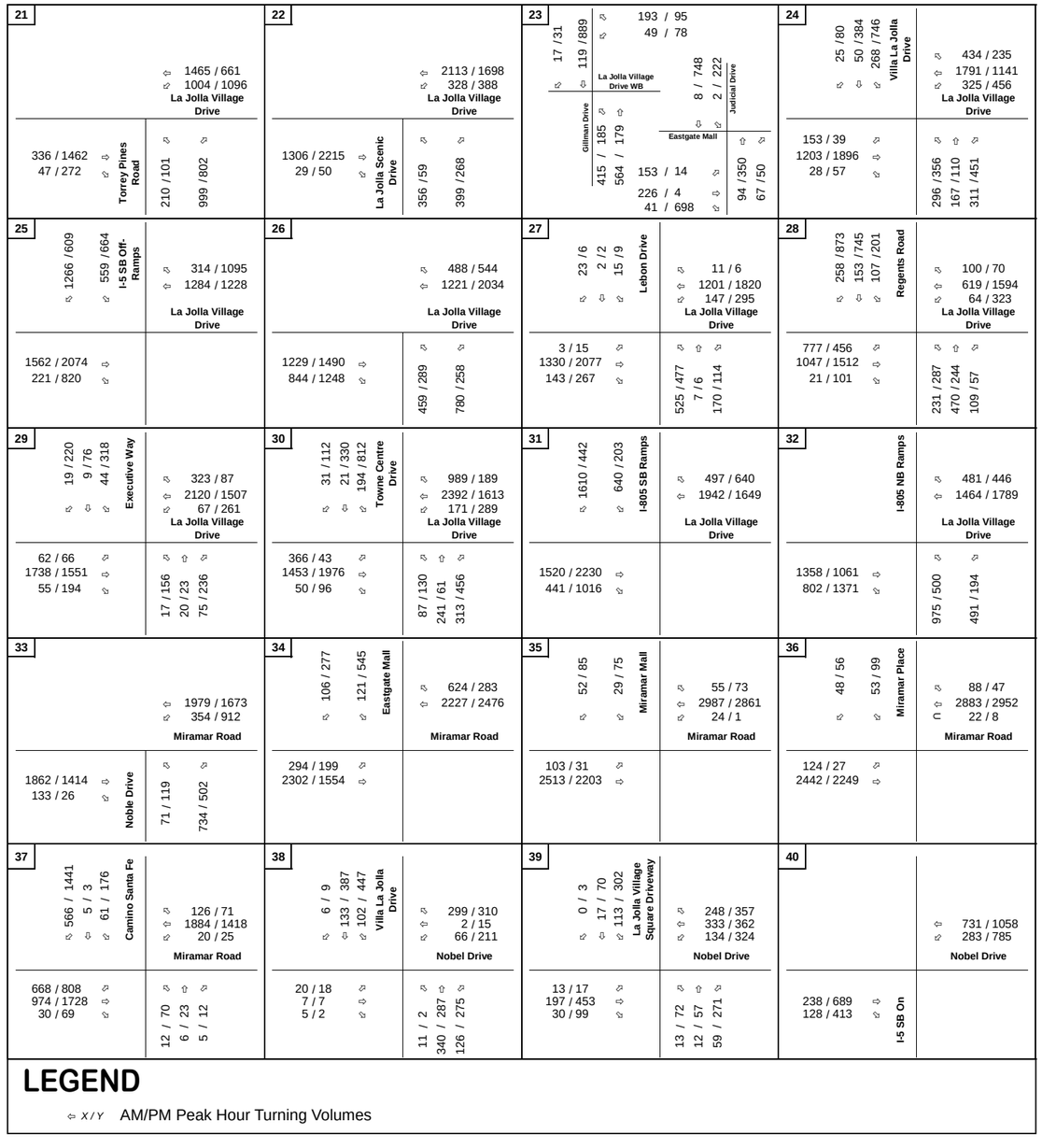
75 / 247		276 / 63
592 / 1180	Genesee Avenue	37 / 37
46 / 144		33 / 26
		Appleton Street
390 / 180	Lehrer Drive	
18 / 85		
45 / 44		
12 / 52	1242 / 614	8 / 17

LEGEND

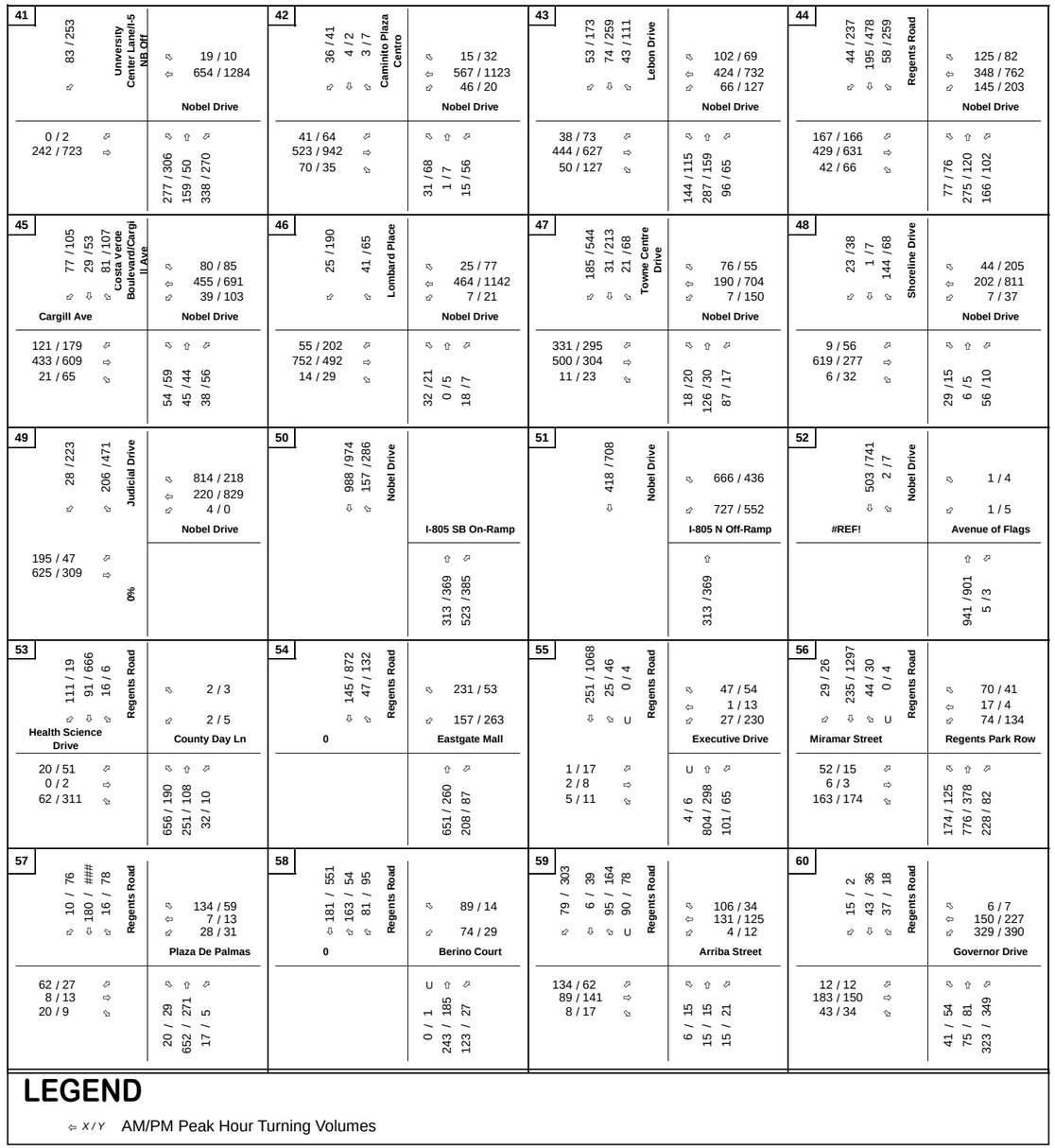
⇦ X / Y AM/PM Peak Hour Turning Volumes

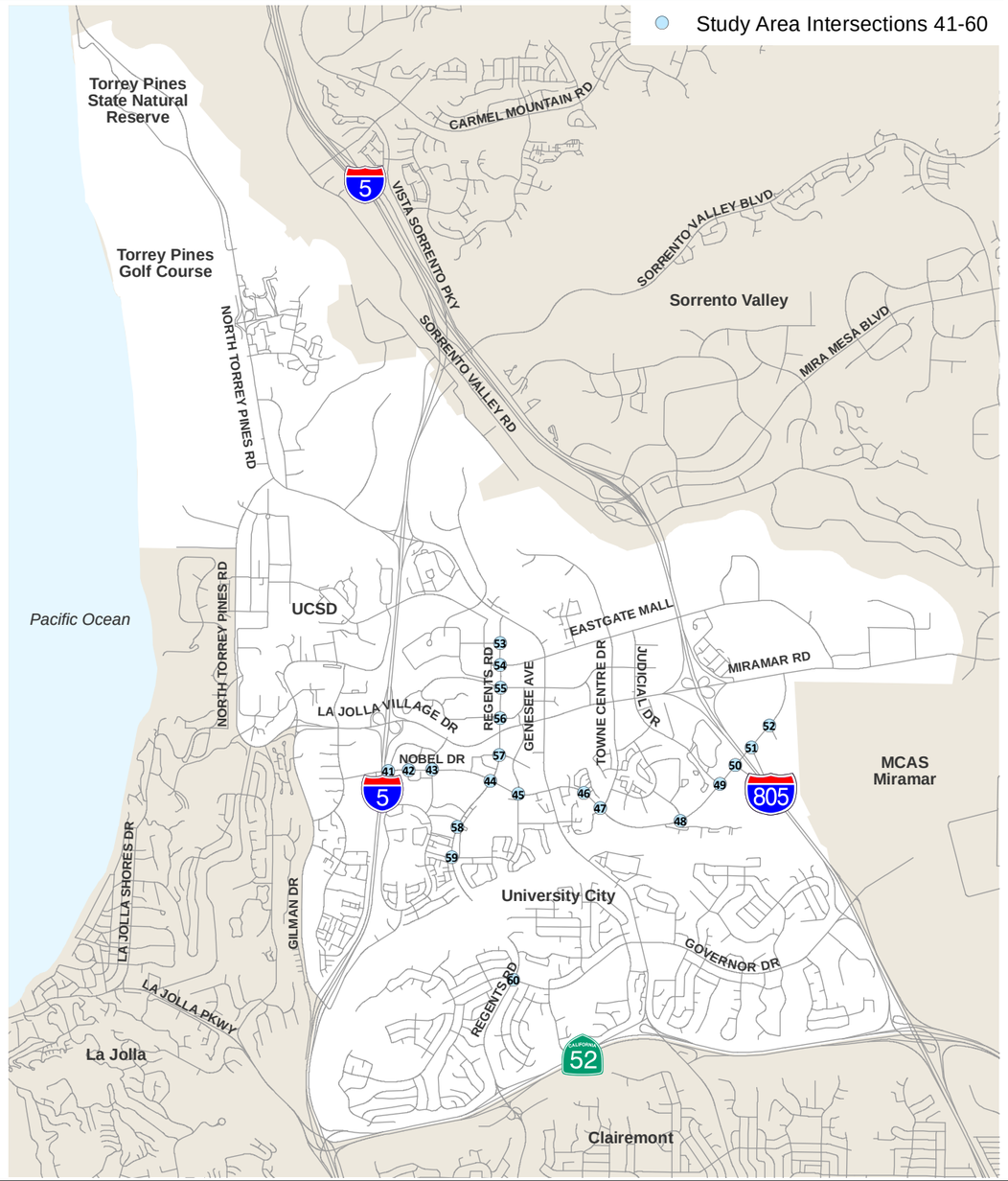


Existing AM and PM Peak-Hour Intersection Turning Movement Volumes Intersections 1-20

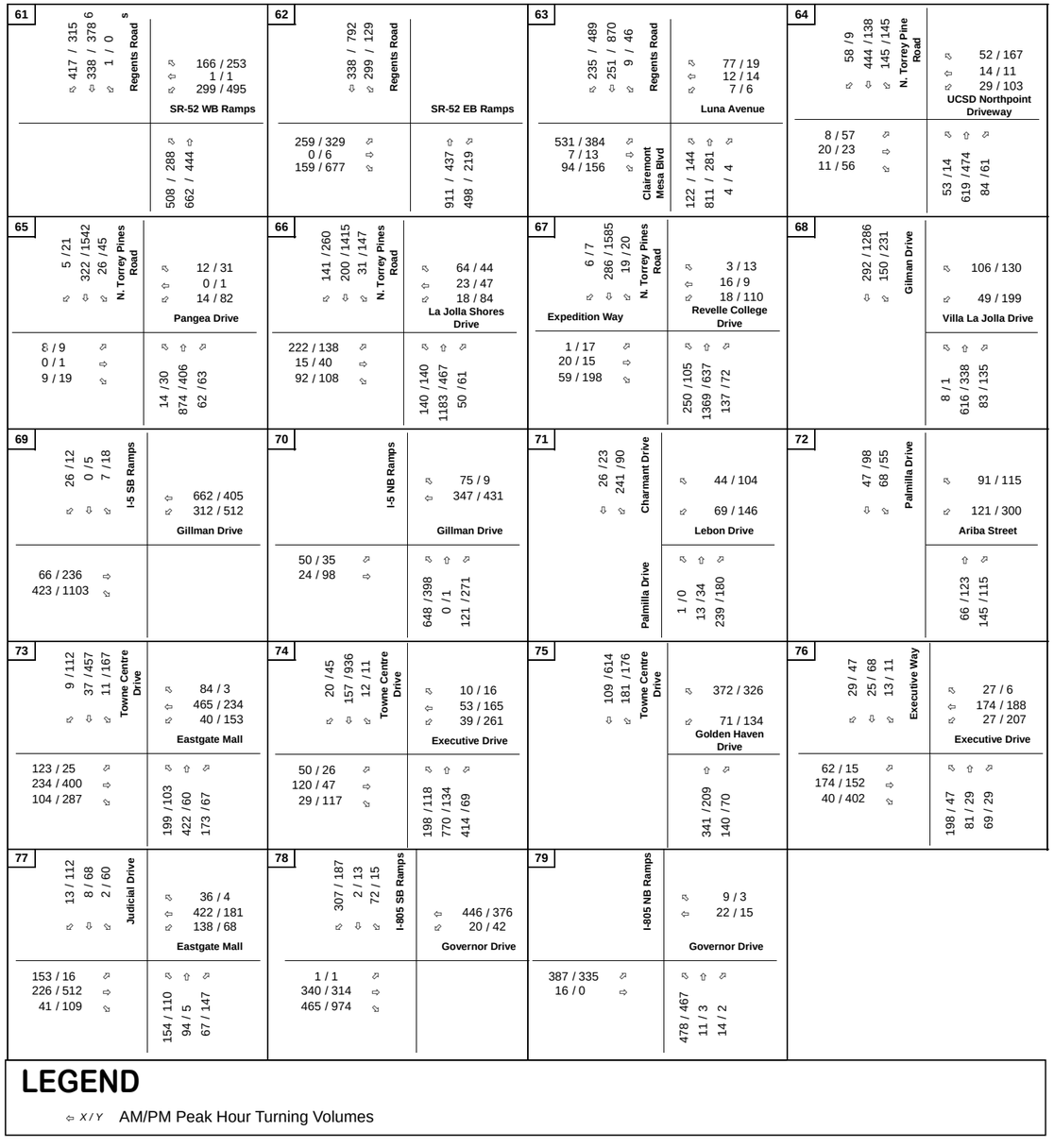


Existing AM and PM Peak-Hour Intersection Turning Movement Volumes Intersections 21-40



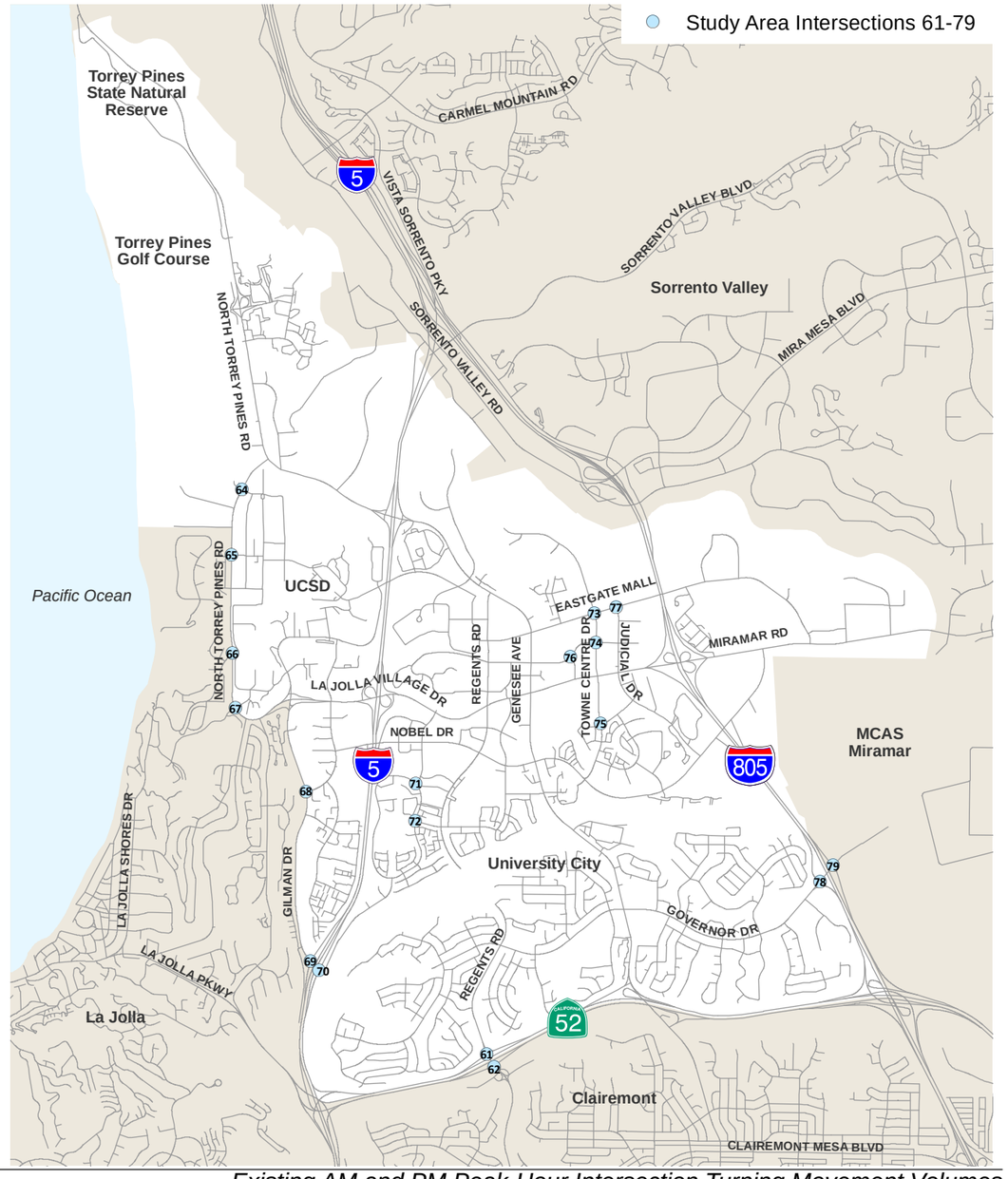


Existing AM and PM Peak-Hour Intersection Turning Movement Volumes Intersections 41-60



LEGEND

⇦ X / Y AM/PM Peak Hour Turning Volumes



Existing AM and PM Peak-Hour Intersection Turning Movement Volumes
Intersections 61-79

1

	⇧ 1100 ⇦ 386 **Genesee Avenue**	
130 ⇩ 285 ⇙ **N. Torrey Pines Road**		235 ⇘ 267 ⇘

2

39 ⇦ 286 ⇗ **John Hopkins Drive (S)**		⇗ 240 ⇧ 1408 **Genesee Avenue**
108 ⇦ 354 ⇩		

3

13 ⇦ 31 ⇗ **Science Center Drive**		⇗ 255 ⇧ 1657 ∩ 7 **Genesee Avenue**
50 ⇦ 574 ⇩		

4

522 ⇦ 698 ⇗ **I-5 SB Ramps**		⇧ 1174 ⇦ 145 **Genesee Avenue**
436 ⇩ 249 ⇙		

5

	I-5 NB Ramps	⇗ 887 ⇧ 1052 **Genesee Avenue**
800 ⇦ 231 ⇩		418 ⇘ 286 ⇘

6

302 ⇦ 912 ⇦ 28 ⊂ **Genesee Avenue**		
Scripps Hospital		
434 ⇦ 217 ⇗		114 ⇗ 867 ⇨

7

322 ⇦ 669 ⇦ 112 ⇗ **Genesee Avenue**		⇗ 126 ⇧ 20 ⇦ 115 **Campus Point Drive**
283 ⇦ 10 ⇩ 211 ⇗		254 ⇗ 665 ⇨ 162 ⇘

8

		⇧ 1226 ⇦ 50 **Genesee Avenue**
37 ∪ 878 ⇩ 96 ⇗	**Regents Road**	154 ⇗ 26 ⇘

9

123 ⇦ 691 ⇦ 40 ⇗ **Genesee Avenue**		⇗ 27 ⇧ 106 ⇦ 18 **Eastgate Mall**
112 ⇦ 103 ⇩ 215 ⇗		224 ⇗ 668 ⇨ 13 ⇘

10

30 ⇦ 734 ⇦ 79 ⇗ **Genesee Avenue**		⇗ 99 ⇧ 89 ⇦ 118 **Executive Drive**
26 ⇦ 76 ⇩ 48 ⇗		37 ⇗ 770 ⇨ 126 ⇘

11

19 ⇦ 882 ⇦ 14 ⇗ **Genesee Avenue**		⇗ 16 ⇧ 3 ⇦ 223 **Executive Square**
17 ⇦ 3 ⇩ 98 ⇗		77 ⇗ 914 ⇨ 117 ⇘

12

198 ⇦ 462 ⇦ 546 ⇗ **Genesee Avenue**		⇗ 315 ⇧ 618 ⇦ 336 **La Jolla Village Drive**
218 ⇦ 382 ⇩ 191 ⇗		195 ⇗ 564 ⇨ 212 ⇘

13

146 ⇦ 426 ⇦ 251 ⇗ **Genesee Avenue**		⇗ 200 ⇧ 30 ⇦ 133 **Esplanade Court**
179 ⇦ 21 ⇩ 67 ⇗		51 ⇗ 525 ⇨ 147 ⇘

14

112 ⇦ 698 ⇦ 137 ⇗ **Genesee Avenue**		⇗ 66 ⇧ 435 ⇦ 118 **Nobel Drive**
206 ⇦ 362 ⇩ 138 ⇗		211 ⇗ 488 ⇨ 120 ⇘

15

16 ⇦ 884 ⇦ 95 ⇗ **Genesee Avenue**		⇗ 122 ⇧ 5 ⇦ 17 **Decoro Street**
15 ⇦ 6 ⇩ 8 ⇗		21 ⇗ 708 ⇨ 44 ⇘

16

820 ⇦ 63 ⇗ **Genesee Avenue**		⇗ 26 ⇦ 85 **Centurion Square**
		721 ⇨ 63 ⇘

17

117 ⇦ 438 ⇦ 234 ⇗ **Genesee Avenue**		⇗ 141 ⇧ 219 ⇦ 224 **Governor Drive**
152 ⇦ 250 ⇩ 96 ⇗		117 ⇗ 427 ⇨ 170 ⇘

18

181 ⇦ 556 ⇦ **Genesee Avenue**		⇗ 220
SR-52 WB Ramps		
209 ⇗		178 ⇗ 591 ⇨

19

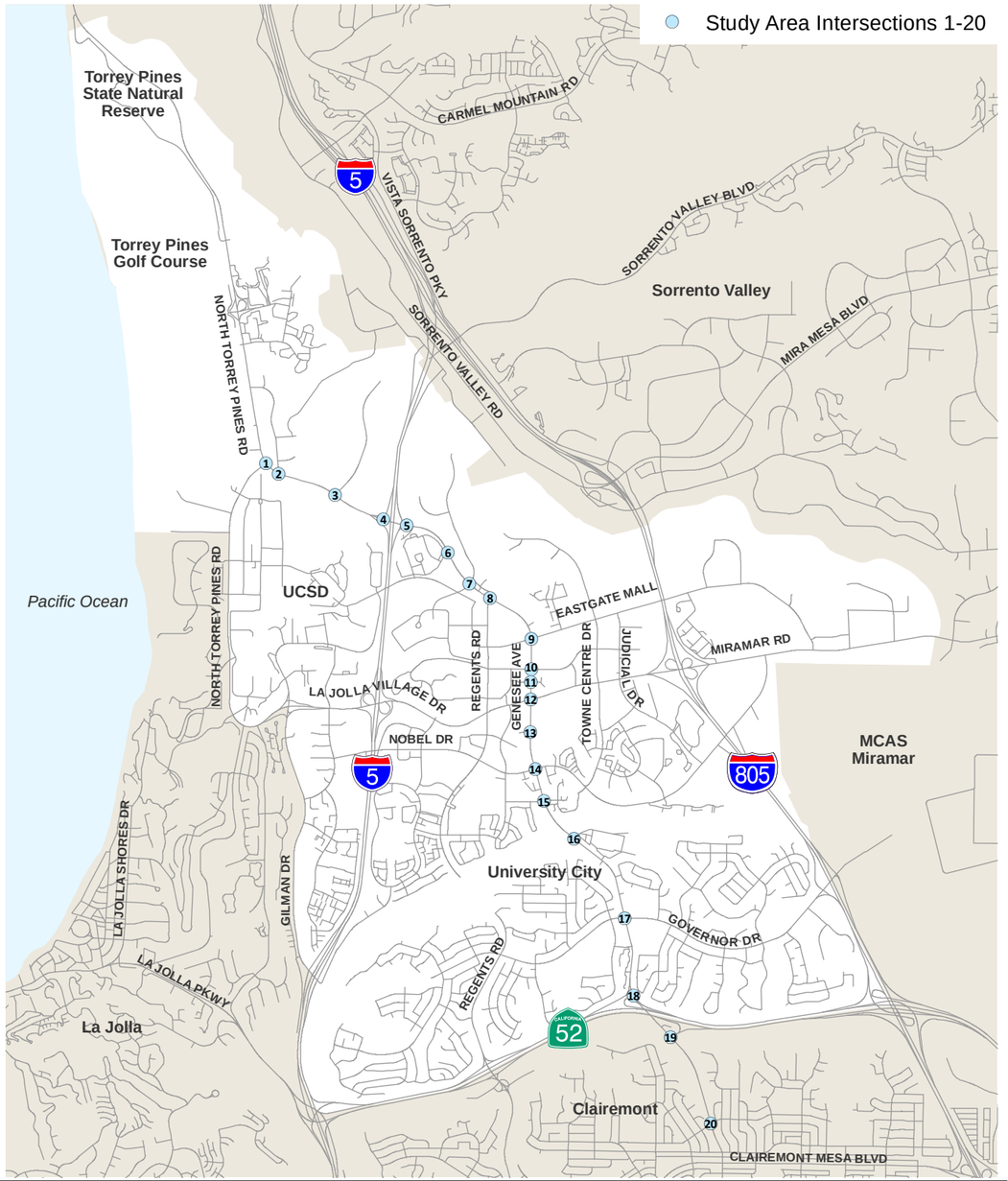
226 ⇦ 539 ⇗ **Genesee Avenue**		⇗ 169 ⇦ 186 **SR-52 EB Ramps**
		600 ⇨ 309 ⇘

20

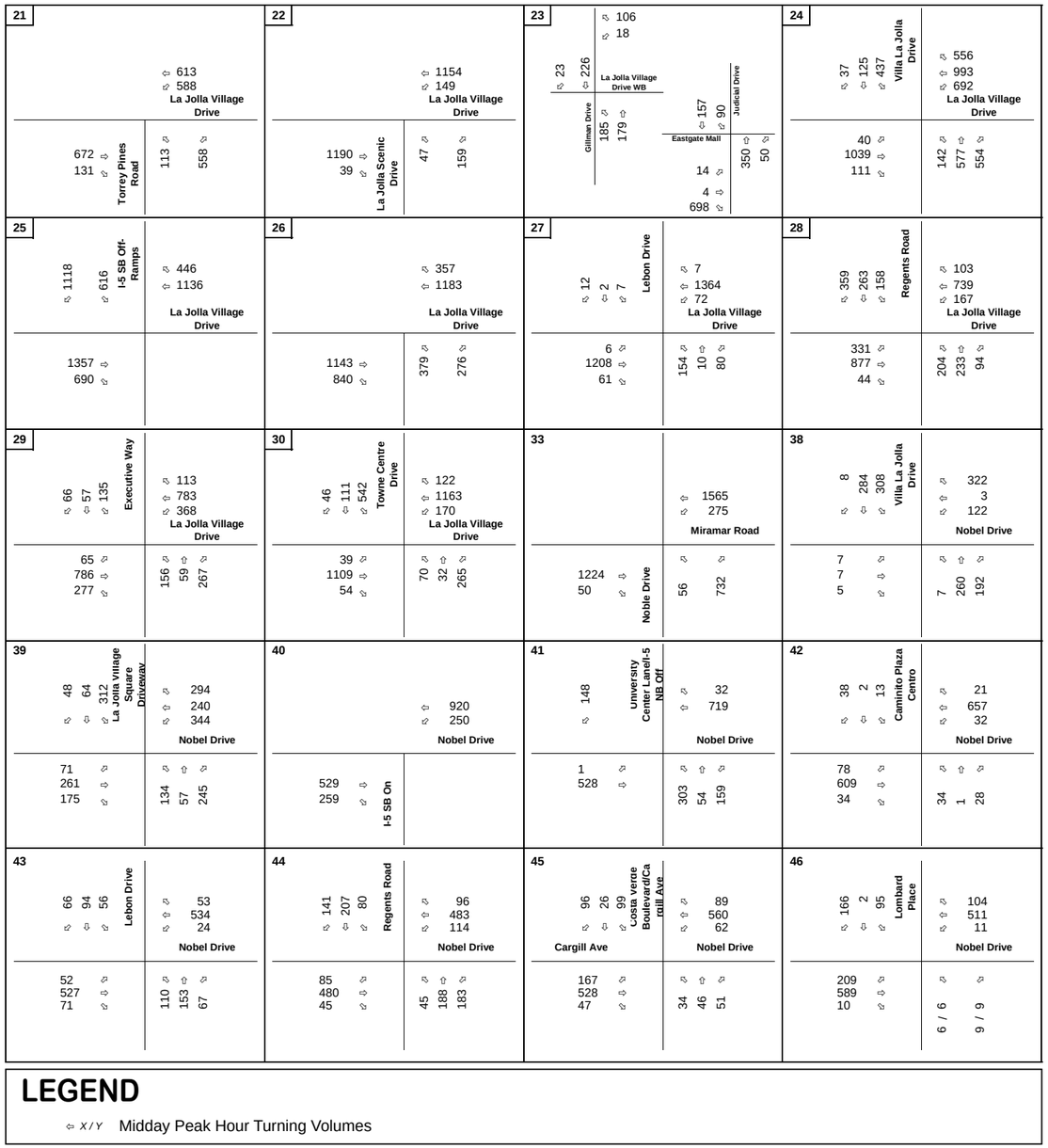
95 ⇦ 583 ⇦ 49 ⇗ **Genesee Avenue**		⇗ 100 ⇧ 26 ⇦ 18 **Appleton Street**
Lehrer Drive		
206 ⇦ 37 ⇩ 34 ⇗		21 ⇗ 603 ⇨ 15 ⇘

LEGEND

⇦ X / Y Midday Peak Hour Turning Volumes

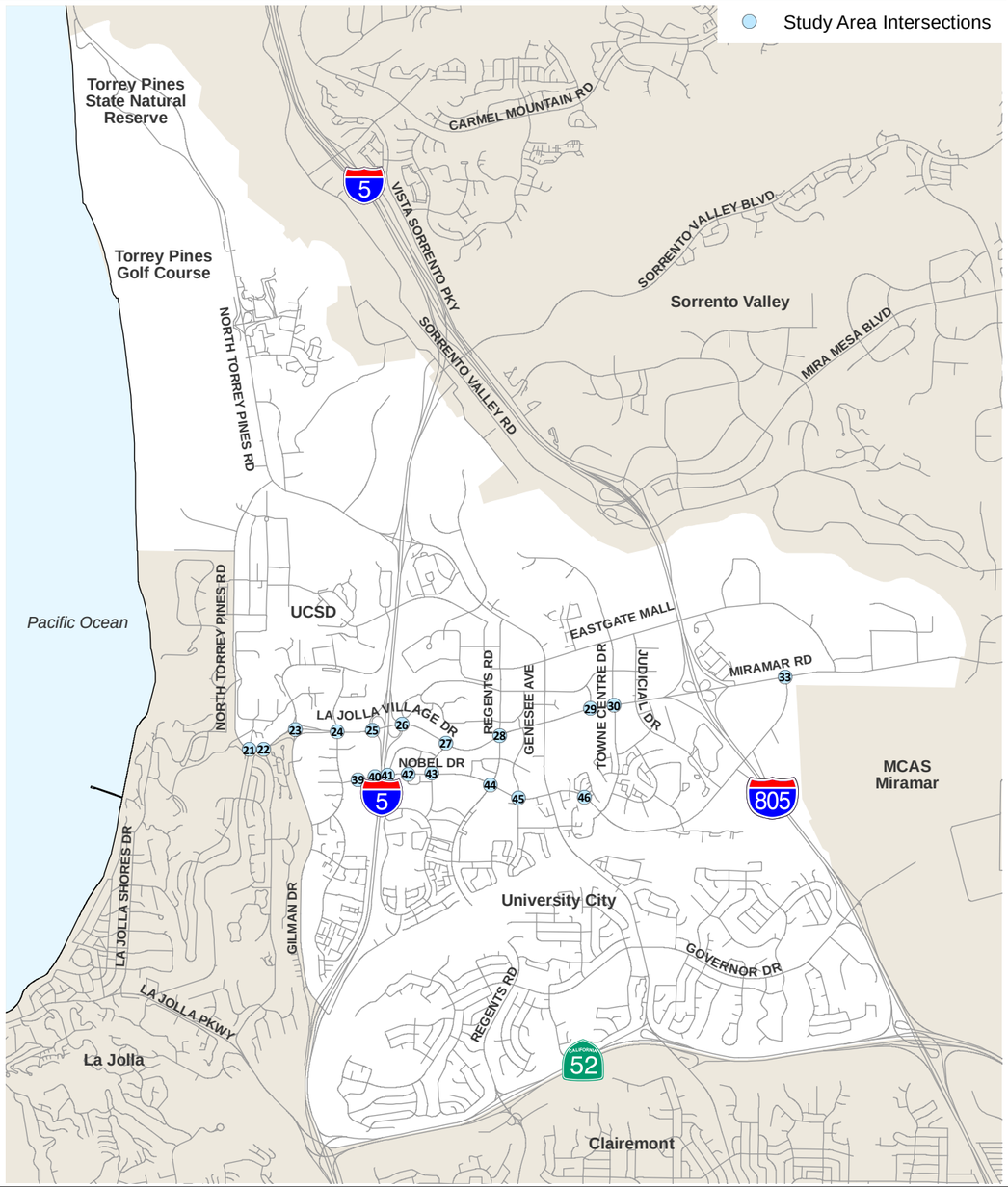


Existing Midday Peak-Hour Intersection Turning Movement Volumes Intersections 1-20



LEGEND

⇦ X / Y Midday Peak Hour Turning Volumes



Existing Midday Peak-Hour Intersection Turning Movement Volumes
Intersections 21-46

47

Towne Centre Drive: 319 ⇦ 57 ⇩ 52 ⇙
Nobel Drive: 111 ⇗ 323 ⇧ 13 ⇖
303 ⇨ 331 ⇩ 17 ⇙
12 ⇗ 41 ⇧ 28 ⇖

48

Shoreline Drive: 25 ⇦ 2 ⇩ 85 ⇙
Nobel Drive: 78 ⇗ 410 ⇧ 12 ⇖
25 ⇨ 373 ⇩ 13 ⇙
12 ⇗ 4 ⇧ 16 ⇖

49

Judicial Drive: 66 ⇖ 229 ⇘
Nobel Drive: 240 ⇗ 382 ⇧
93 ⇨ 426 ⇩

50

Nobel Drive: 616 ⇩ 174 ⇙
I-805 SB On-Ramp: 208 ⇧ 464 ⇖

51

Nobel Drive: 342 ⇩
I-805 N Off-Ramp: 614 ⇗ 458 ⇖
198 ⇧

52

Nobel Drive: 321 ⇩ 19 ⇙
Avenue of Flags: 15 ⇗ 21 ⇖
776 ⇧ 36 ⇖

54

Regents Road: 340 ⇩ 63 ⇙
Eastgate Mall: 65 ⇗ 83 ⇖
320 ⇧ 79 ⇖

55

Regents Road: 12 ⇦ 350 ⇩ 37 ⇙
Executive Drive: 36 ⇗ 8 ⇧ 93 ⇖
4 ⇨ 8 ⇩ 11 ⇙
13 ⇗ 345 ⇧ 83 ⇖

56

Regents Road: 33 ⇦ 406 ⇩ 67 ⇙
Miramar Street: 86 ⇗ 7 ⇧ 143 ⇖
Regents Park Row
24 ⇨ 5 ⇩ 73 ⇙
61 ⇗ 387 ⇧ 126 ⇖

57

Regents Road: 25 ⇦ 377 ⇩ 54 ⇙
Plaza De Palmas: 119 ⇗ 19 ⇧ 32 ⇖
26 ⇨ 5 ⇩ 6 ⇙
13 ⇗ 343 ⇧ 33 ⇖

58

Regents Road: 261 ⇩ 77 ⇙
Berino Court: 2 ⇗ 11 ⇖
147 ⇧ 5 ⇖

59

Regents Road: 68 ⇦ 24 ⇩ 127 ⇙
Arriba Street: 26 ⇗ 80 ⇧ 2 ⇖
55 ⇨ 82 ⇩ 12 ⇙
5 ⇗ 7 ⇧ 9 ⇖

60

Regents Road: 7 ⇦ 25 ⇩ 21 ⇙
Governor Drive: 11 ⇗ 136 ⇧ 250 ⇖
9 / 9 ⇨ 99 / 99 ⇩ 32 / 32 ⇙
32 ⇗ 79 ⇧ 193 ⇖

61

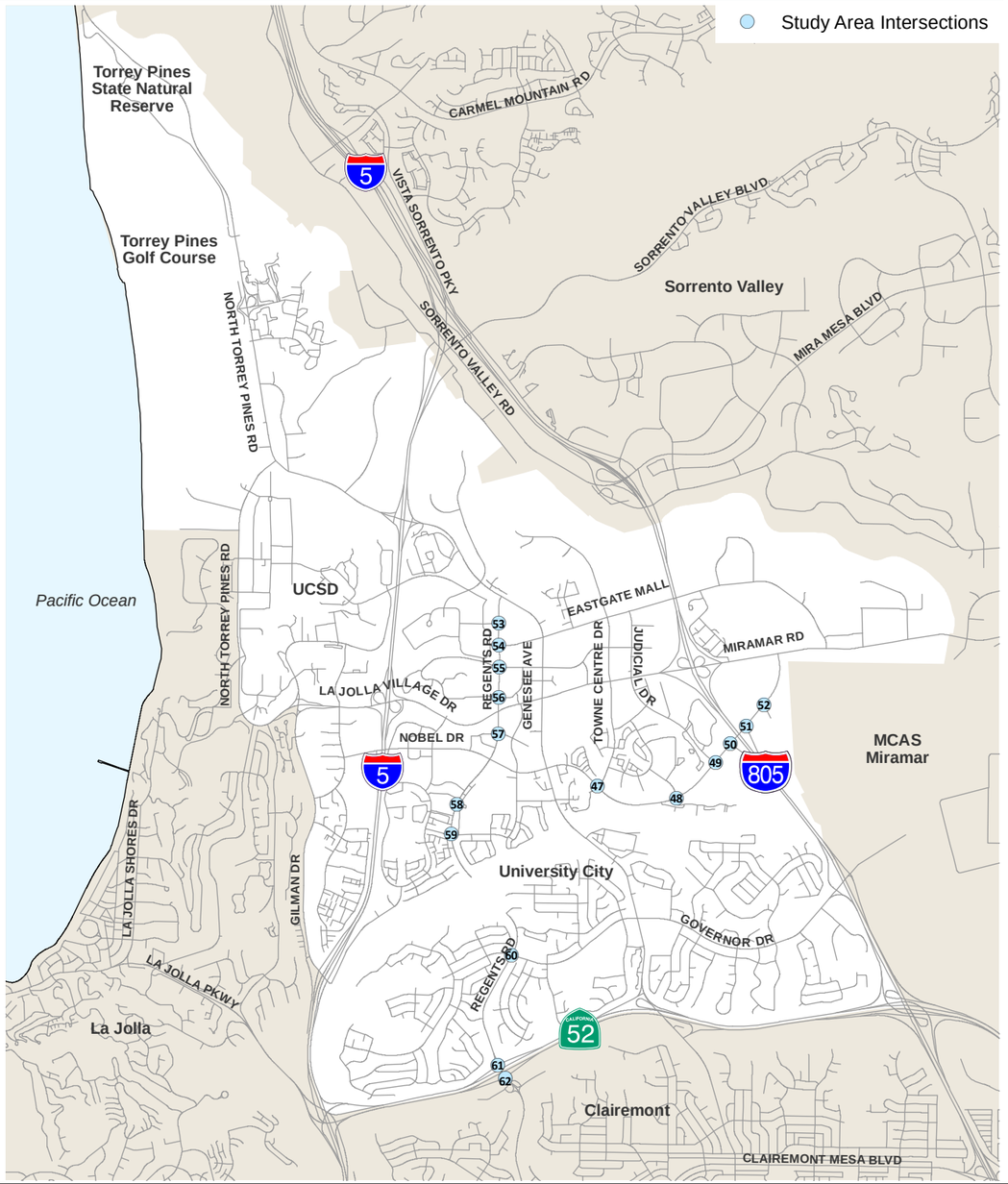
Regents Road: 204 ⇩ 302 ⇙
SR-52 WB Ramps: 147 ⇗ 2 ⇧ 290 ⇖
303 ⇧ 362 ⇖

62

Regents Road: 452 ⇩ 140 ⇙
SR-52 EB Ramps: 430 ⇧ 363 ⇖
235 ⇨ 3 ⇩ 297 ⇙

LEGEND

⇦ X / Y Midday Peak Hour Turning Volumes



Existing Midday Peak-Hour Intersection Turning Movement Volumes
Intersections 47-62

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Genesee Avenue @ N. Torrey Pines Road

Date of Count: *Tuesday, May 12, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Genesee Avenue @ N. Torrey Pines Road

AM Period (7:00 AM - 9:00 AM)								
		Westbound		Northbound		Eastbound		
		Thru	Left	Right	Left	Right	Thru	TOTAL
7:00 AM		208	107	55	43	50	87	550
7:15 AM		153	130	47	69	65	106	570
7:30 AM		186	148	78	113	48	82	655
7:45 AM		221	95	47	117	87	103	670
8:00 AM		277	103	77	102	66	78	703
8:15 AM		177	113	61	99	78	135	663
8:30 AM		285	99	75	124	80	80	743
8:45 AM		210	128	80	146	97	108	769
Total		1,717	923	520	813	571	779	5,323

AM Intersection Peak Hour : **8:00 AM - 9:00 AM** Intersection PHF : **0.94**

		Westbound		Northbound		Eastbound		TOTAL
		Thru	Left	Right	Left	Right	Thru	
Volume		949	443	293	471	321	401	2,878
PHF		0.83	0.87	0.92	0.81	0.83	0.74	0.94
Movement PHF		0.91		0.85			0.85	0.94

PM Period (4:00 PM - 6:00 PM)								
		Westbound		Northbound		Eastbound		
		Thru	Left	Right	Left	Right	Thru	TOTAL
4:00 PM		88	127	93	120	173	175	776
4:15 PM		37	87	92	120	175	239	750
4:30 PM		100	120	113	151	222	161	867
4:45 PM		40	100	99	142	190	226	797
5:00 PM		63	187	84	148	237	199	918
5:15 PM		18	145	72	99	186	109	629
5:30 PM		22	189	97	115	214	169	806
5:45 PM		24	211	75	74	164	198	746
Total		392	1,166	725	969	1,561	1,476	6,289

PM Intersection Peak Hour : **4:15 PM - 5:15 PM** Intersection PHF : **0.91**

		Westbound		Northbound		Eastbound		TOTAL
		Thru	Left	Right	Left	Right	Thru	
Volume		240	494	388	561	824	825	3332
PHF		0.6	0.66	0.858	0.929	0.869	0.863	0.91
Movement PHF		0.73		0.90			0.95	0.91

U-Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-1536

Location: Genesee Avenue @ N. Torrey Pines Road

AM Period (7:00 AM - 9:00 AM)					
		Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
7:00 AM		0	0	0	0
7:15 AM		0	0	0	0
7:30 AM		0	0	0	0
7:45 AM		0	0	0	0
8:00 AM		0	0	0	0
8:15 AM		0	0	0	0
8:30 AM		0	0	0	0
8:45 AM		0	0	0	0
Total		0	0	0	0

AM Intersection Peak Hour : **8:00 AM - 9:00 AM** Intersection PHF : **#DIV/0!**

		East Leg U-Turn	South Leg U-Turn	West Leg U-Turn	TOTAL
Volume		0	0	0	0
PHF		#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Movement PHF		#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

PM Period (4:00 PM - 6:00 PM)					
		Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
4:00 PM		0	0	0	0
4:15 PM		0	0	0	0
4:30 PM		0	0	0	0
4:45 PM		0	0	0	0
5:00 PM		0	0	0	0
5:15 PM		0	0	0	0
5:30 PM		0	0	0	0
5:45 PM		0	0	0	0
Total		0	0	0	0

PM Intersection Peak Hour : **4:15 PM - 5:15 PM** Intersection PHF : **#DIV/0!**

		East Leg U-Turn	South Leg U-Turn	West Leg U-Turn	TOTAL
Volume		0	0	0	0
PHF		#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Movement PHF		#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

Bike Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Genesee Avenue @ N. Torrey Pines Road

Date of Count: *Tuesday, May 12, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Bike Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Genesee Avenue @ N. Torrey Pines Road

AM Period (7:00 AM - 9:00 AM)								
		Westbound		Northbound		Eastbound		
		Thru	Left	Right	Left	Right	Thru	TOTAL
7:00 AM		0	2	0	5	4	2	13
7:15 AM		1	0	0	2	1	4	8
7:30 AM		2	0	1	4	1	1	9
7:45 AM		0	0	3	9	1	0	13
8:00 AM		0	0	2	11	1	2	16
8:15 AM		2	0	2	6	6	3	19
8:30 AM		3	0	0	13	2	1	19
8:45 AM		0	2	0	10	4	1	17
Total		8	4	8	60	20	14	114

AM Intersection Peak Hour : **8:00 AM - 9:00 AM** Intersection PHF : **0.93**

		Westbound		Northbound		Eastbound		TOTAL
		Thru	Left	Right	Left	Right	Thru	
Volume		5	2	4	40	13	7	71
PHF		0.42	0.25	0.50	0.77	0.54	0.58	0.93
Movement PHF		0.58		0.85			0.56	0.93

PM Period (4:00 PM - 6:00 PM)								
		Westbound		Northbound		Eastbound		
		Thru	Left	Right	Left	Right	Thru	TOTAL
4:00 PM		0	3	0	5	2	8	18
4:15 PM		0	1	0	7	1	3	12
4:30 PM		1	1	0	6	2	4	14
4:45 PM		0	0	1	5	4	10	20
5:00 PM		5	1	1	5	0	3	15
5:15 PM		3	0	0	2	3	6	14
5:30 PM		0	2	0	6	1	5	14
5:45 PM		5	3	1	3	0	2	14
Total		14	11	3	39	13	41	121

PM Intersection Peak Hour : **4:00 PM - 5:00 PM** Intersection PHF : **0.80**

		Westbound		Northbound		Eastbound		TOTAL
		Thru	Left	Right	Left	Right	Thru	
Volume		1	5	1	23	9	25	64
PHF		0.25	0.417	0.25	0.821	0.563	0.625	0.80
Movement PHF		0.50		0.86			0.61	0.80

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Genesee Avenue @ N. Torrey Pines Road

Date of Count: *Tuesday, May 12, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Kimley»Horn

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Genesee Avenue @ N. Torrey Pines Road

PM Period (2:00 PM - 4:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
2:00 PM	0	0	0	0	139	82	137	0	58	49	142	0	607
2:15 PM	0	0	0	0	260	110	100	0	68	61	134	0	733
2:30 PM	0	0	0	0	145	115	122	0	86	79	140	0	687
2:45 PM	0	0	0	0	51	142	78	0	80	97	117	0	565
3:00 PM	0	0	0	0	82	88	108	0	92	106	230	0	706
3:15 PM	0	0	0	0	137	125	120	0	80	116	167	0	745
3:30 PM	0	0	0	0	105	122	93	0	126	126	194	0	766
3:45 PM	0	0	0	0	3	158	77	0	102	139	284	0	763
Total	0	0	0	0	922	942	835	0	692	773	1,408	0	5,572

PM Intersection Peak Hour : **3:00 PM - 4:00 PM**

Intersection PHF : **0.97**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	0	0	0	327	493	398	0	400	487	875	0	2980
PHF	#####	#####	#####	#####	0.597	0.78	0.829	#####	0.794	0.876	0.77	#####	0.97
Movement PHF	#DIV/0!			0.78			0.91			0.80			0.97

Kimley»Horn

U-Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-1536

Location: Genesee Avenue @ N. Torrey Pines Road

PM Period (2:00 PM - 4:00 PM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
2:00 PM	0	0	0	0	0
2:15 PM	0	0	0	0	0
2:30 PM	0	0	0	0	0
2:45 PM	0	0	0	0	0
3:00 PM	0	0	0	0	0
3:15 PM	0	0	0	0	0
3:30 PM	0	0	0	0	0
3:45 PM	0	0	0	0	0
Total	0	0	0	0	0

PM Intersection Peak Hour : **3:00 PM - 4:00 PM** Intersection PHF : **#DIV/0!**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	0	0	0	0	0
PHF	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Movement PHF	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

Bike Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Genesee Avenue @ N. Torrey Pines Road

Date of Count: *Tuesday, May 12, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Kimley»Horn

Bike Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Genesee Avenue @ N. Torrey Pines Road

PM Period (2:00 PM - 4:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
2:00 PM	0	0	0	0	2	0	0	0	1	3	0	0	6
2:15 PM	0	0	0	0	1	0	0	0	2	2	1	0	6
2:30 PM	0	0	0	0	1	0	0	0	2	0	2	0	5
2:45 PM	0	0	0	0	1	0	0	0	3	0	1	0	5
3:00 PM	0	0	0	0	5	0	1	0	0	0	0	0	6
3:15 PM	0	0	0	0	1	0	0	0	5	4	1	0	11
3:30 PM	0	0	0	0	2	0	0	0	3	1	1	0	7
3:45 PM	0	0	0	0	1	1	1	0	3	1	0	0	7
Total	0	0	0	0	14	1	2	0	19	11	6	0	53

PM Intersection Peak Hour : **3:00 PM - 4:00 PM**

Intersection PHF : **0.70**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	0	0	0	9	1	2	0	11	6	2	0	31
PHF	#####	#####	#####	#####	0.45	0.25	0.5	#####	0.55	0.375	0.5	#####	0.70
Movement PHF	#DIV/0!			0.50			0.65			0.40			0.70

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Genesee Avenue @ John Hopkins Drive (South)

Date of Count: *Tuesday, May 12, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Genesee Avenue @ John Hopkins Drive (South)

AM Period (7:00 AM - 9:00 AM)							
	Southbound		Westbound			Eastbound	
	Right	Left	Right	Thru		Thru	Left	TOTAL
7:00 AM	6	15	164	306		120	19	630
7:15 AM	4	9	216	278		144	8	659
7:30 AM	7	13	174	326		149	10	679
7:45 AM	7	19	202	308		138	11	685
8:00 AM	3	20	169	376		140	14	722
8:15 AM	9	17	203	279		173	21	702
8:30 AM	4	12	204	380		130	25	755
8:45 AM	2	32	245	336		164	24	803
Total	42	137	1,577	2,589		1,158	132	5,635

AM Intersection Peak Hour : **8:00 AM - 9:00 AM** Intersection PHF : **0.93**

	Southbound		Westbound			Eastbound		TOTAL
	Right	Left	Right	Thru		Thru	Left	
Volume	18	81	821	1,371		607	84	2,982
PHF	0.50	0.63	0.84	0.90		0.88	0.84	0.93
Movement PHF	0.73			0.94		0.89		0.93

PM Period (4:00 PM - 6:00 PM)							
	Southbound		Westbound			Eastbound	
	Right	Left	Right	Thru		Thru	Left	TOTAL
4:00 PM	18	135	30	197		261	7	648
4:15 PM	23	125	37	101		320	11	617
4:30 PM	27	123	36	193		268	6	653
4:45 PM	19	124	15	120		318	6	602
5:00 PM	48	169	15	202		270	13	717
5:15 PM	34	133	23	129		169	12	500
5:30 PM	29	139	28	182		257	9	644
5:45 PM	40	124	38	195		264	9	670
Total	238	1072	222	1,319		2,127	73	5,051

PM Intersection Peak Hour : **4:15 PM - 5:15 PM** Intersection PHF : **0.90**

	Southbound		Westbound			Eastbound		TOTAL
	Right	Left	Right	Thru		Thru	Left	
Volume	117	541	103	616		1176	36	2589
PHF	0.61	0.8	0.696	0.762		0.919	0.692	0.90
Movement PHF	0.76			0.78		0.92		0.90

U-Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-1536

Location: Genesee Avenue @ John Hopkins Drive (South)

AM Period (7:00 AM - 9:00 AM)					
	Southbound U-Turn	Westbound U-Turn		Eastbound U-Turn	TOTAL
7:00 AM	0	2		3	5
7:15 AM	0	1		1	2
7:30 AM	0	0		1	1
7:45 AM	0	1		1	2
8:00 AM	0	1		1	2
8:15 AM	1	0		2	3
8:30 AM	0	0		0	0
8:45 AM	0	0		0	0
Total	1	5		9	15

AM Intersection Peak Hour : **8:00 AM - 9:00 AM** Intersection PHF : **0.42**

	North Leg U-Turn	East Leg U-Turn		West Leg U-Turn	TOTAL
Volume	1	1		3	5
PHF	0.25	0.25		0.38	0.42
Movement PHF	0.25	0.25		0.38	0.42

PM Period (4:00 PM - 6:00 PM)					
	Southbound U-Turn	Westbound U-Turn		Eastbound U-Turn	TOTAL
4:00 PM	0	1		0	1
4:15 PM	0	0		0	0
4:30 PM	0	0		0	0
4:45 PM	0	0		1	1
5:00 PM	0	0		0	0
5:15 PM	0	0		0	0
5:30 PM	0	0		0	0
5:45 PM	0	0		0	0
Total	0	1		1	2

PM Intersection Peak Hour : **4:15 PM - 5:15 PM** Intersection PHF : **0.25**

	North Leg U-Turn	East Leg U-Turn		West Leg U-Turn	TOTAL
Volume	0	0		1	1
PHF	#DIV/0!	#DIV/0!		0.25	0.25
Movement PHF	#DIV/0!	#DIV/0!		0.25	0.25

Bike Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Genesee Avenue @ John Hopkins Drive (South)

Date of Count: *Tuesday, May 12, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Bike Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Genesee Avenue @ John Hopkins Drive (South)

AM Period (7:00 AM - 9:00 AM)							
	Southbound		Westbound			Eastbound	
	Right	Left	Right	Thru		Thru	Left	TOTAL
7:00 AM	0	0	0	0		2	0	2
7:15 AM	0	0	0	1		4	0	5
7:30 AM	0	0	0	2		2	0	4
7:45 AM	0	0	0	0		3	0	3
8:00 AM	0	0	0	0		4	0	4
8:15 AM	0	0	0	2		5	0	7
8:30 AM	0	1	0	3		1	0	5
8:45 AM	0	0	0	1		1	0	2
Total	0	1	0	9		22	0	32

AM Intersection Peak Hour : **7:45 AM - 8:45 AM** Intersection PHF : **0.68**

	Southbound		Westbound			Eastbound		TOTAL
	Right	Left	Right	Thru		Thru	Left	
Volume	0	1	0	5		13	0	19
PHF	#####	0.25	#####	0.42		0.65	#####	0.68
Movement PHF	0.25		0.42			0.65		0.68

PM Period (4:00 PM - 6:00 PM)							
	Southbound		Westbound			Eastbound	
	Right	Left	Right	Thru		Thru	Left	TOTAL
4:00 PM	0	0	0	3		8	0	11
4:15 PM	0	3	0	1		3	0	7
4:30 PM	0	0	0	2		4	0	6
4:45 PM	0	0	0	0		10	1	11
5:00 PM	0	3	0	6		4	0	13
5:15 PM	0	0	0	3		6	0	9
5:30 PM	0	0	2	0		5	0	7
5:45 PM	0	0	0	8		3	0	11
Total	0	6	2	23		43	1	75

PM Intersection Peak Hour : **4:45 PM - 5:45 PM** Intersection PHF : **0.77**

	Southbound		Westbound			Eastbound		TOTAL
	Right	Left	Right	Thru		Thru	Left	
Volume	0	3	2	9		25	1	40
PHF	#####	0.25	0.25	0.375		0.625	0.25	0.77
Movement PHF	0.25		0.46			0.59		0.77

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

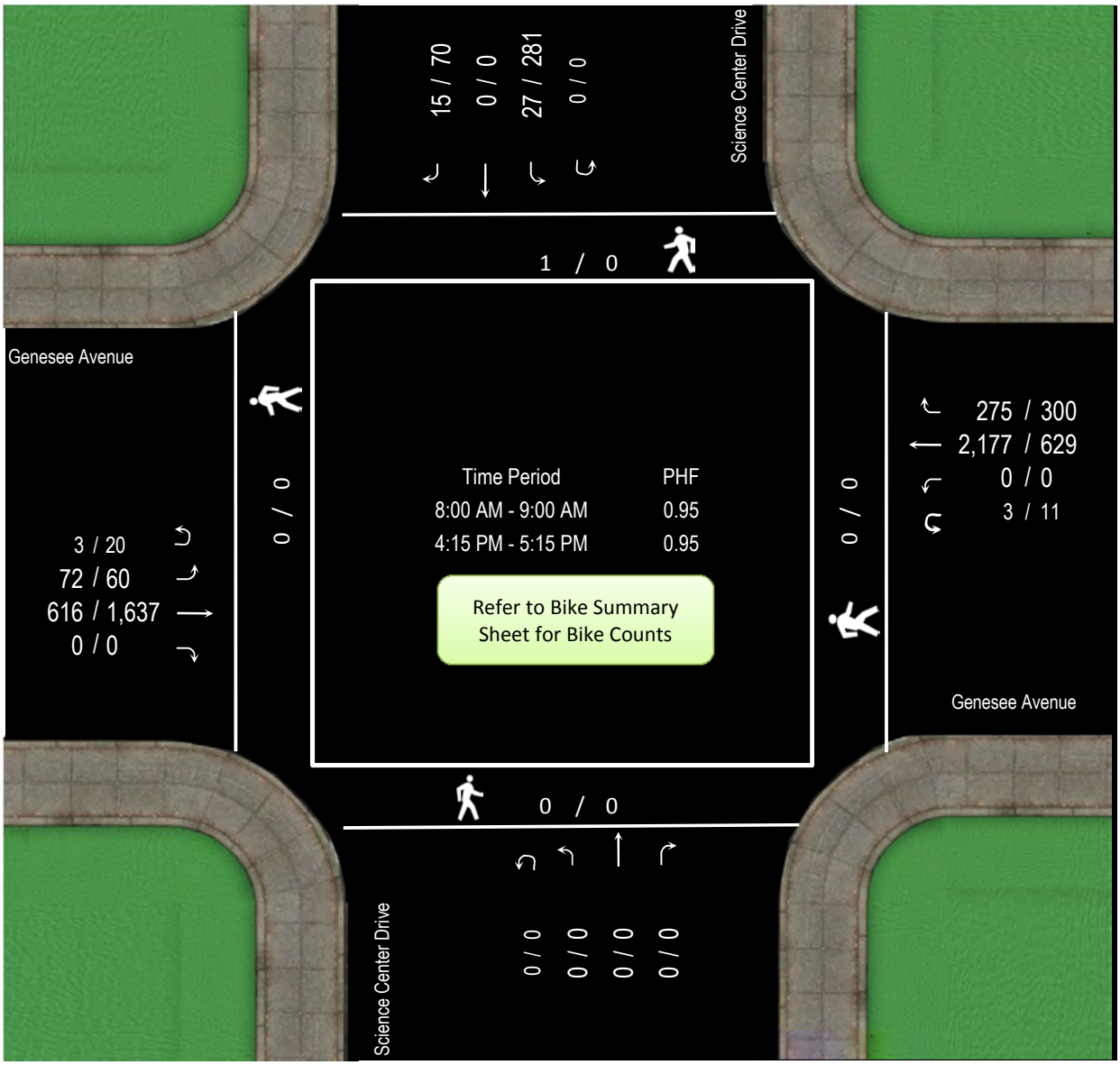
Location: Genesee Avenue @ Science Center Drive

Date of Count: *Tuesday, May 12, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*



Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Kimley»Horn

Location: Genesee Avenue @ Science Center Drive

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	2	0	4	91	468	0	0	0	0	0	122	13	700
7:15 AM	6	0	8	80	489	0	0	0	0	0	142	12	737
7:30 AM	4	0	7	72	496	0	0	0	0	0	145	17	741
7:45 AM	2	0	8	64	508	0	0	0	0	0	138	19	739
8:00 AM	4	0	7	74	542	0	0	0	0	0	144	17	788
8:15 AM	6	0	9	76	476	0	0	0	0	0	174	16	757
8:30 AM	2	0	7	66	581	0	0	0	0	0	127	14	797
8:45 AM	3	0	4	59	578	0	0	0	0	0	171	25	840
Total	29	0	54	582	4,138	0	0	0	0	0	1,163	133	6,099

AM Intersection Peak Hour : **8:00 AM - 9:00 AM** Intersection PHF : **0.95**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	15	0	27	275	2,177	0	0	0	0	0	616	72	3,182
PHF	0.63	#####	0.75	0.90	0.94	#####	#####	#####	#####	#####	0.89	0.72	0.95
Movement PHF		0.70			0.95			#DIV/0!			0.88		0.95

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	12	0	116	6	215	0	0	0	0	0	389	7	745
4:15 PM	11	0	83	81	121	0	0	0	0	0	426	13	735
4:30 PM	24	0	73	80	200	0	0	0	0	0	374	12	763
4:45 PM	17	0	64	61	113	0	0	0	0	0	418	19	692
5:00 PM	18	0	61	78	195	0	0	0	0	0	419	16	787
5:15 PM	4	0	28	91	143	0	0	0	0	0	284	13	563
5:30 PM	10	0	18	63	198	0	0	0	0	0	374	20	683
5:45 PM	17	0	59	6	215	0	0	0	0	0	385	2	684
Total	113	0	502	466	1,400	0	0	0	0	0	3,069	102	5,652

PM Intersection Peak Hour : **4:15 PM - 5:15 PM** Intersection PHF : **0.95**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	70	0	281	300	629	0	0	0	0	0	1637	60	2977
PHF	0.73	#####	0.846	0.926	0.786	#####	#####	#####	#####	#####	0.961	0.789	0.95
Movement PHF		0.90			0.83			#DIV/0!			0.97		0.95

U-Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-1536

Location: Genesee Avenue @ Science Center Drive

AM Period (7:00 AM - 9:00 AM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
7:00 AM	0	0	0	2	2
7:15 AM	0	1	0	0	1
7:30 AM	0	1	0	0	1
7:45 AM	0	1	0	1	2
8:00 AM	0	1	0	0	1
8:15 AM	0	2	0	0	2
8:30 AM	0	2	0	1	3
8:45 AM	0	0	0	0	0
Total	0	8	0	4	12

AM Intersection Peak Hour : **8:00 AM - 9:00 AM** Intersection PHF : **0.50**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	0	3	0	3	6
PHF	#DIV/0!	0.63	#DIV/0!	0.25	0.50
Movement PHF	#DIV/0!	0.63	#DIV/0!	0.25	0.50

PM Period (4:00 PM - 6:00 PM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
4:00 PM	0	2	0	1	3
4:15 PM	0	4	0	6	10
4:30 PM	0	1	0	5	6
4:45 PM	0	2	0	5	7
5:00 PM	0	4	0	4	8
5:15 PM	0	0	0	5	5
5:30 PM	0	1	0	2	3
5:45 PM	0	0	0	1	1
Total	0	14	0	29	43

PM Intersection Peak Hour : **4:15 PM - 5:15 PM** Intersection PHF : **0.78**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	0	11	0	20	31
PHF	#DIV/0!	0.6875	#DIV/0!	0.833333333	0.78
Movement PHF	#DIV/0!	0.69	#DIV/0!	0.83	0.78

Bike Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

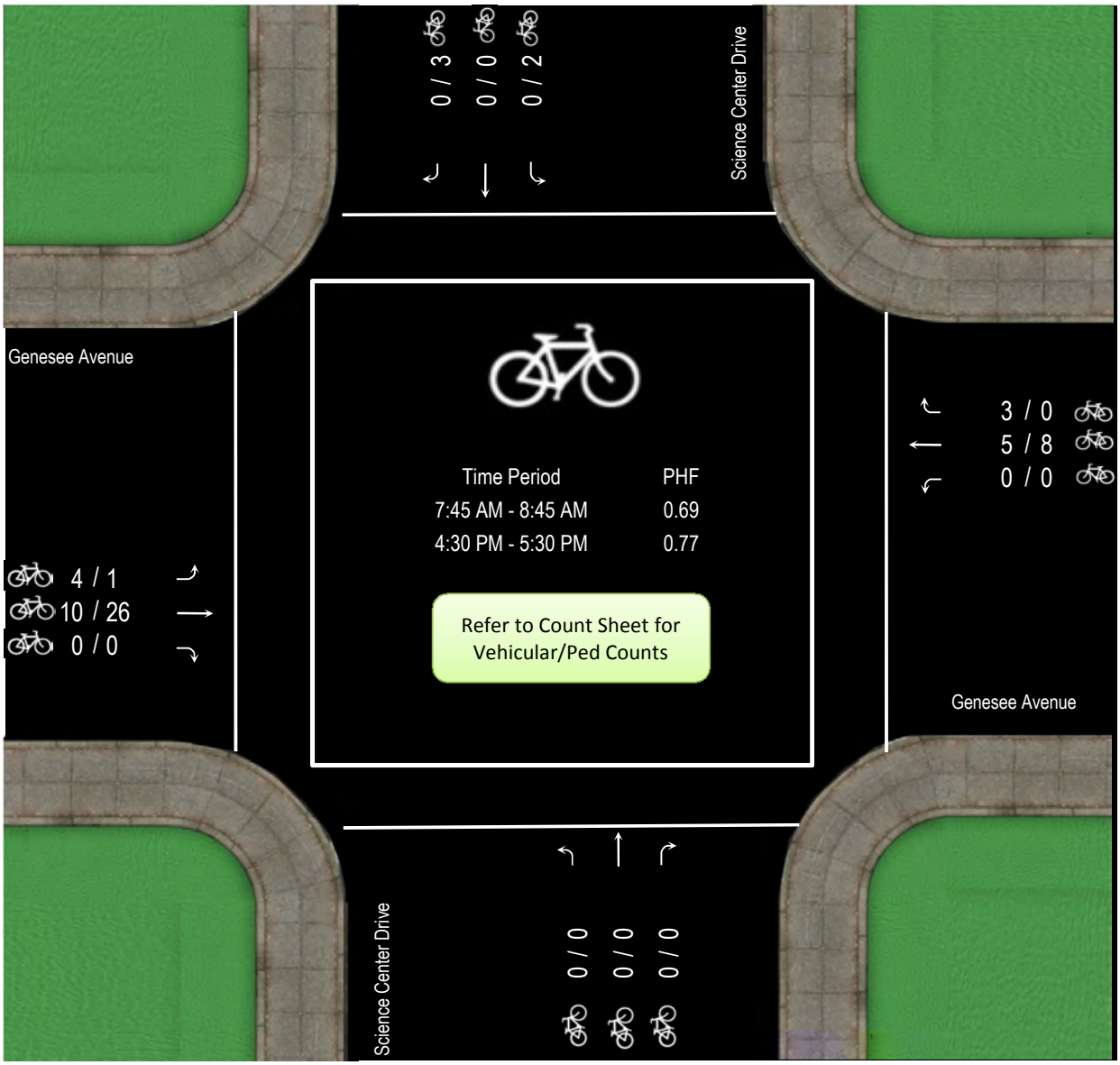
Location: Genesee Avenue @ Science Center Drive

Date of Count: *Tuesday, May 12, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*



Bike Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Genesee Avenue @ Science Center Drive

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	0	0	1	0	0	0	0	0	0	1	1	3
7:15 AM	0	0	0	0	1	0	0	0	0	0	4	0	5
7:30 AM	0	0	0	0	2	0	0	0	0	0	1	1	4
7:45 AM	0	0	0	1	0	0	0	0	0	0	2	1	4
8:00 AM	0	0	0	1	0	0	0	0	0	0	4	0	5
8:15 AM	0	0	0	1	2	0	0	0	0	0	2	3	8
8:30 AM	0	0	0	0	3	0	0	0	0	0	2	0	5
8:45 AM	0	0	0	0	1	0	0	0	0	0	1	0	2
Total	0	0	0	4	9	0	0	0	0	0	17	6	36

AM Intersection Peak Hour : **7:45 AM - 8:45 AM** Intersection PHF : **0.69**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	0	0	3	5	0	0	0	0	0	10	4	22
PHF	#####	#####	#####	0.75	0.42	#####	#####	#####	#####	#####	0.63	0.33	0.69
Movement PHF	#DIV/0!			0.67			#DIV/0!			0.70			0.69

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	1	0	0	0	2	0	0	0	0	0	8	0	11
4:15 PM	1	0	0	0	0	0	0	0	0	0	6	0	7
4:30 PM	1	0	1	0	1	0	0	0	0	0	4	0	7
4:45 PM	0	0	0	0	0	0	0	0	0	0	9	1	10
5:00 PM	1	0	0	0	5	0	0	0	0	0	7	0	13
5:15 PM	1	0	1	0	2	0	0	0	0	0	6	0	10
5:30 PM	0	0	0	0	1	0	0	0	0	0	5	0	6
5:45 PM	0	0	0	0	0	0	0	0	0	0	3	0	3
Total	5	0	2	0	11	0	0	0	0	0	48	1	67

PM Intersection Peak Hour : **4:30 PM - 5:30 PM** Intersection PHF : **0.77**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	3	0	2	0	8	0	0	0	0	0	26	1	40
PHF	0.75	#####	0.5	#####	0.4	#####	#####	#####	#####	#####	0.722	0.25	0.77
Movement PHF	0.63			0.40			#DIV/0!			0.68			0.77

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Genesee Avenue @ I-5 SB Ramps

Date of Count: *Tuesday, May 12, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Genesee Avenue @ I-5 SB Ramps

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	152	0	171	0	407	24	0	0	0	42	84	0	880
7:15 AM	178	0	252	0	392	15	0	0	0	43	108	0	988
7:30 AM	179	0	316	0	390	28	0	0	0	54	99	0	1,066
7:45 AM	181	0	296	0	392	27	0	0	0	44	103	0	1,043
8:00 AM	174	0	107	0	443	15	0	0	0	43	109	0	891
8:15 AM	143	0	136	0	411	40	0	0	0	57	128	0	915
8:30 AM	174	0	116	0	475	27	0	0	0	41	95	0	928
8:45 AM	125	0	120	0	512	40	0	0	0	52	123	0	972
Total	1,306	0	1,514	0	3,422	216	0	0	0	376	849	0	7,683

AM Intersection Peak Hour : **7:15 AM - 8:15 AM** Intersection PHF : **0.94**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	712	0	971	0	1,617	85	0	0	0	184	419	0	3,988
PHF	0.98	#####	0.77	#####	0.91	0.76	#####	#####	#####	0.85	0.96	#####	0.94
Movement PHF		0.85			0.93			#DIV/0!			0.99		0.94

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	82	0	193	0	141	84	0	0	0	184	323	0	1,007
4:15 PM	79	0	211	0	127	84	0	0	0	182	331	0	1,014
4:30 PM	99	3	193	0	182	60	0	0	0	128	320	0	985
4:45 PM	78	0	253	0	98	84	0	0	0	177	307	0	997
5:00 PM	96	3	65	0	181	58	0	0	0	135	349	0	887
5:15 PM	134	0	284	0	100	81	0	0	0	138	174	0	911
5:30 PM	110	0	278	0	152	69	0	0	0	140	253	0	1,002
5:45 PM	97	3	137	0	124	60	0	0	0	126	318	0	865
Total	775	9	1614	0	1,105	580	0	0	0	1,210	2,375	0	7,668

PM Intersection Peak Hour : **4:00 PM - 5:00 PM** Intersection PHF : **0.99**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	338	3	850	0	548	312	0	0	0	671	1281	0	4003
PHF	0.85	0.25	0.84	#####	0.753	0.929	#####	#####	#####	0.912	0.968	#####	0.99
Movement PHF		0.90			0.89			#DIV/0!			0.95		0.99

U-Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-1536

Location: Genesee Avenue @ I-5 SB Ramps

AM Period (7:00 AM - 9:00 AM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
Total	0	0	0	0	0

AM Intersection Peak Hour : **7:15 AM - 8:15 AM** Intersection PHF : **#DIV/0!**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	0	0	0	0	0
PHF	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Movement PHF	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

PM Period (4:00 PM - 6:00 PM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
Total	0	0	0	0	0

PM Intersection Peak Hour : **4:00 PM - 5:00 PM** Intersection PHF : **#DIV/0!**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	0	0	0	0	0
PHF	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Movement PHF	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

Bike Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Genesee Avenue @ I-5 SB Ramps

Date of Count: *Tuesday, May 12, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Bike Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Genesee Avenue @ I-5 SB Ramps

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	0	0	0	1	0	0	0	0	0	1	0	2
7:15 AM	0	0	0	0	1	0	0	0	0	0	4	0	5
7:30 AM	0	0	0	0	2	0	0	0	0	0	1	0	3
7:45 AM	0	0	0	0	1	0	0	0	0	0	2	0	3
8:00 AM	0	0	0	0	1	0	0	0	0	0	4	0	5
8:15 AM	0	0	0	0	3	0	0	0	0	0	2	0	5
8:30 AM	0	0	0	0	3	0	0	0	0	0	2	0	5
8:45 AM	0	0	0	0	1	0	0	0	0	0	1	0	2
Total	0	0	0	0	13	0	0	0	0	0	17	0	30

AM Intersection Peak Hour : **7:45 AM - 8:45 AM** Intersection PHF : **0.90**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	0	0	0	8	0	0	0	0	0	10	0	18
PHF	#####	#####	#####	#####	0.67	#####	#####	#####	#####	#####	0.63	#####	0.90
Movement PHF	#DIV/0!			0.67			#DIV/0!			0.63			0.90

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	0	0	0	0	2	0	0	0	0	0	8	0	10
4:15 PM	0	0	0	0	0	0	0	0	0	0	6	0	6
4:30 PM	0	0	0	0	1	0	0	0	0	0	5	0	6
4:45 PM	0	0	0	0	0	0	0	0	0	0	9	0	9
5:00 PM	0	0	0	0	5	0	0	0	0	0	7	0	12
5:15 PM	0	0	0	0	2	0	0	0	0	0	7	0	9
5:30 PM	0	0	0	0	1	0	0	0	0	0	5	0	6
5:45 PM	0	0	0	0	0	0	0	0	0	0	3	0	3
Total	0	0	0	0	11	0	0	0	0	0	50	0	61

PM Intersection Peak Hour : **4:30 PM - 5:30 PM** Intersection PHF : **0.75**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	0	0	0	8	0	0	0	0	0	28	0	36
PHF	#####	#####	#####	#####	0.4	#####	#####	#####	#####	#####	0.778	#####	0.75
Movement PHF	#DIV/0!			0.40			#DIV/0!			0.78			0.75

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Genesee Avenue @ I-5 NB Ramps

Date of Count: *Tuesday, May 12, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Kimley»Horn

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Genesee Avenue @ I-5 NB Ramps

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	0	0	66	101	0	167	4	330	0	207	48	923
7:15 AM	0	0	0	66	119	0	128	0	288	0	319	41	961
7:30 AM	0	0	0	123	128	0	133	1	290	0	357	58	1,090
7:45 AM	0	0	0	150	134	0	138	3	285	0	358	41	1,109
8:00 AM	0	0	0	16	153	0	166	1	305	0	167	49	857
8:15 AM	0	0	0	102	154	0	129	2	297	0	197	67	948
8:30 AM	0	0	0	75	193	0	136	2	309	0	140	71	926
8:45 AM	0	0	0	80	183	0	122	5	369	0	178	65	1,002
Total	0	0	0	678	1,165	0	1,119	18	2,473	0	1,923	440	7,816

AM Intersection Peak Hour : **7:00 AM - 8:00 AM** Intersection PHF : **0.92**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	0	0	405	482	0	566	8	1,193	0	1,241	188	4,083
PHF	#####	#####	#####	0.68	0.90	#####	0.85	0.50	0.90	#####	0.87	0.81	0.92
Movement PHF	#DIV/0!			0.78			0.88			0.86			0.92

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	0	0	0	270	148	0	26	4	77	0	333	183	1,041
4:15 PM	0	0	0	248	131	0	27	0	80	0	331	211	1,028
4:30 PM	0	0	0	227	149	0	23	0	93	0	296	217	1,005
4:45 PM	0	0	0	224	113	0	23	0	69	0	317	243	989
5:00 PM	0	0	0	258	155	0	17	0	84	0	189	225	928
5:15 PM	0	0	0	240	106	0	26	2	75	0	257	201	907
5:30 PM	0	0	0	197	122	0	43	0	99	0	325	206	992
5:45 PM	0	0	0	175	93	0	35	0	91	0	259	196	849
Total	0	0	0	1,839	1,017	0	220	6	668	0	2,307	1,682	7,739

PM Intersection Peak Hour : **4:00 PM - 5:00 PM** Intersection PHF : **0.98**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	0	0	969	541	0	99	4	319	0	1277	854	4063
PHF	#####	#####	#####	0.897	0.908	#####	0.917	0.25	0.858	#####	0.959	0.879	0.98
Movement PHF	#DIV/0!			0.90			0.91			0.95			0.98

U-Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-1536

Location: Genesee Avenue @ I-5 NB Ramps

AM Period (7:00 AM - 9:00 AM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	1	0	0	1
Total	0	1	0	0	1

AM Intersection Peak Hour : **7:00 AM - 8:00 AM** Intersection PHF : **#DIV/0!**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	0	0	0	0	0
PHF	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Movement PHF	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

PM Period (4:00 PM - 6:00 PM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
Total	0	0	0	0	0

PM Intersection Peak Hour : **4:00 PM - 5:00 PM** Intersection PHF : **#DIV/0!**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	0	0	0	0	0
PHF	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Movement PHF	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

Bike Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

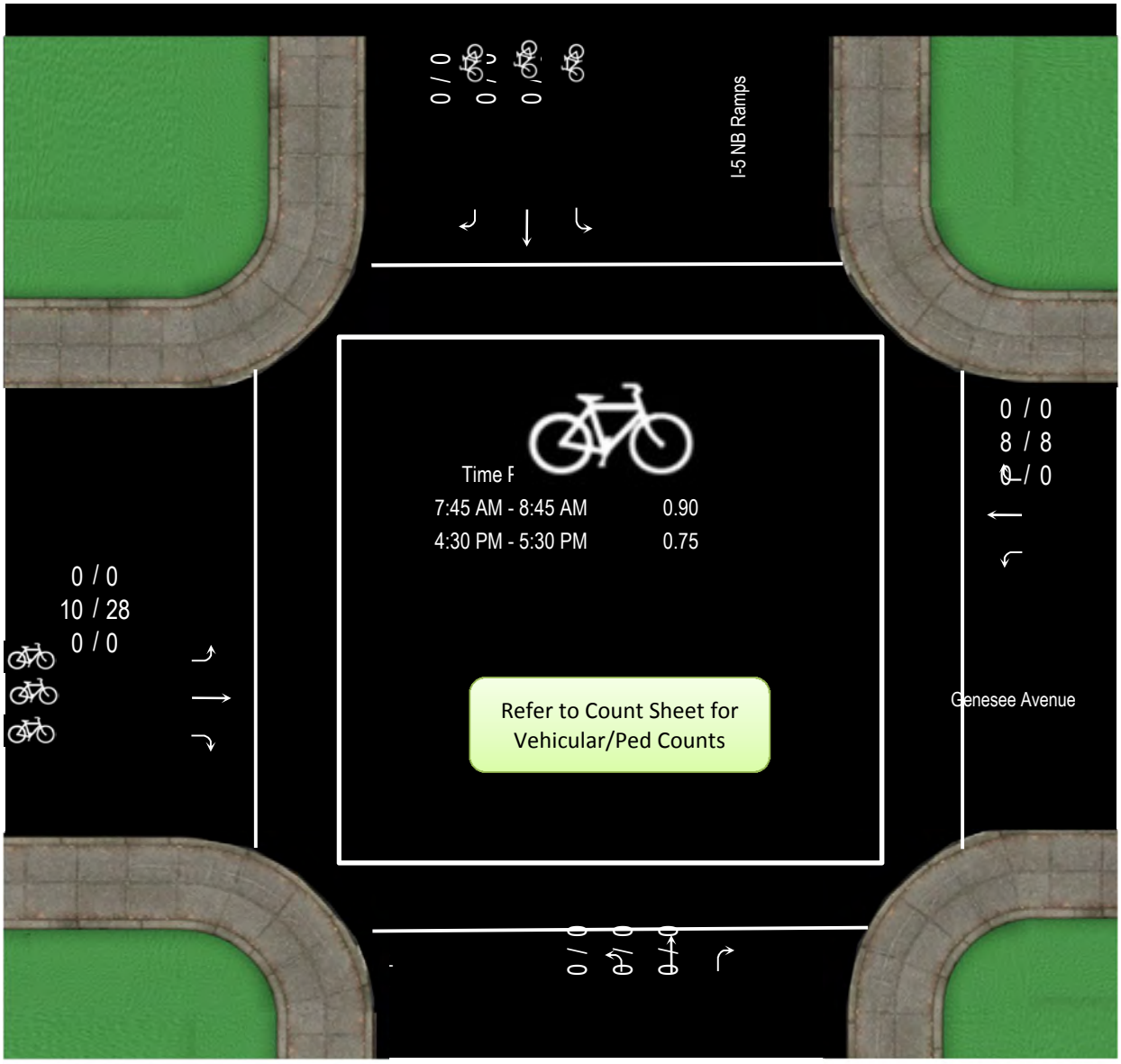
Location: Genesee Avenue @ I-5 NB Ramps

Date of Count: *Tuesday, May 12, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*



Bike Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Genesee Avenue @ I-5 NB Ramps

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	0	0	0	1	0	0	0	0	0	1	0	2
7:15 AM	0	0	0	0	1	0	0	0	0	0	4	0	5
7:30 AM	0	0	0	0	2	0	0	0	0	0	1	0	3
7:45 AM	0	0	0	0	1	0	0	0	0	0	2	0	3
8:00 AM	0	0	0	0	1	0	0	0	0	0	4	0	5
8:15 AM	0	0	0	0	3	0	0	0	0	0	2	0	5
8:30 AM	0	0	0	0	3	0	0	0	0	0	2	0	5
8:45 AM	0	0	0	0	1	0	0	0	0	0	1	0	2
Total	0	0	0	0	13	0	0	0	0	0	17	0	30

AM Intersection Peak Hour : **7:45 AM - 8:45 AM** Intersection PHF : **0.90**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	0	0	0	8	0	0	0	0	0	10	0	18
PHF	#####	#####	#####	#####	0.67	#####	#####	#####	#####	#####	0.63	#####	0.90
Movement PHF	#DIV/0!			0.67			#DIV/0!			0.63			0.90

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	0	0	0	0	2	0	0	0	0	0	8	0	10
4:15 PM	0	0	0	0	0	0	0	0	0	0	6	0	6
4:30 PM	0	0	0	0	1	0	0	0	0	0	5	0	6
4:45 PM	0	0	0	0	0	0	0	0	0	0	9	0	9
5:00 PM	0	0	0	0	5	0	0	0	0	0	7	0	12
5:15 PM	0	0	0	0	2	0	0	0	0	0	7	0	9
5:30 PM	0	0	0	0	1	0	0	0	0	0	5	0	6
5:45 PM	0	0	0	0	0	0	0	0	0	0	3	0	3
Total	0	0	0	0	11	0	0	0	0	0	50	0	61

PM Intersection Peak Hour : **4:30 PM - 5:30 PM** Intersection PHF : **0.75**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	0	0	0	8	0	0	0	0	0	28	0	36
PHF	#####	#####	#####	#####	0.4	#####	#####	#####	#####	#####	0.778	#####	0.75
Movement PHF	#DIV/0!			0.40			#DIV/0!			0.78			0.75

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Scripps Hospital @ Genesee Avenue

Date of Count: *Tuesday, May 12, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Scripps Hospital @ Genesee Avenue

AM Period (7:00 AM - 9:00 AM)								
	Southbound			Northbound		Eastbound		
	Right	Thru		Thru	Left	Right	Left	TOTAL
7:00 AM	119	286		141	38	13	25	622
7:15 AM	122	367		153	38	16	31	727
7:30 AM	149	394		222	55	37	29	886
7:45 AM	110	435		280	48	32	0	905
8:00 AM	109	262		169	64	31	0	635
8:15 AM	96	271		221	52	29	35	704
8:30 AM	78	246		224	58	18	44	668
8:45 AM	94	249		227	53	19	37	679
Total	877	2,510		1,637	406	195	201	5,826

AM Intersection Peak Hour : **7:15 AM - 8:15 AM** Intersection PHF : **0.87**

	Southbound			Northbound		Eastbound		TOTAL
	Right	Thru		Thru	Left	Right	Left	
Volume	490	1,458		824	205	116	60	3,153
PHF	0.82	0.84		0.74	0.80	0.78	0.48	0.87
Movement PHF		0.89		0.78		0.67		0.87

PM Period (4:00 PM - 6:00 PM)								
	Southbound			Northbound		Eastbound		
	Right	Thru		Thru	Left	Right	Left	TOTAL
4:00 PM	30	417		309	22	53	107	938
4:15 PM	28	372		251	12	69	125	857
4:30 PM	19	343		257	21	68	117	825
4:45 PM	22	364		242	19	52	95	794
5:00 PM	16	149		285	16	74	127	667
5:15 PM	20	267		249	12	69	96	713
5:30 PM	19	309		249	14	54	70	715
5:45 PM	21	321		218	31	28	49	668
Total	175	2542		2,060	147	467	786	6,177

PM Intersection Peak Hour : **4:00 PM - 5:00 PM** Intersection PHF : **0.91**

	Southbound			Northbound		Eastbound		TOTAL
	Right	Thru		Thru	Left	Right	Left	
Volume	99	1496		1059	74	242	444	3414
PHF	0.83	0.897		0.857	0.841	0.877	0.888	0.91
Movement PHF		0.89		0.86		0.88		0.91

U-Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-1536

Location: Scripps Hospital @ Genesee Avenue

AM Period (7:00 AM - 9:00 AM)					
	Southbound U-Turn		Northbound U-Turn	Eastbound U-Turn	TOTAL
7:00 AM	1		2	0	3
7:15 AM	1		1	0	2
7:30 AM	0		1	0	1
7:45 AM	4		0	0	4
8:00 AM	0		1	0	1
8:15 AM	0		1	0	1
8:30 AM	0		0	0	0
8:45 AM	0		0	0	0
Total	6		6	0	12

AM Intersection Peak Hour : **7:15 AM - 8:15 AM** Intersection PHF : **0.50**

	North Leg U-Turn		South Leg U-Turn	West Leg U-Turn	TOTAL
Volume	5		3	0	8
PHF	0.31		0.75	#DIV/0!	0.50
Movement PHF	0.31		0.75	#DIV/0!	0.50

PM Period (4:00 PM - 6:00 PM)					
	Southbound U-Turn		Northbound U-Turn	Eastbound U-Turn	TOTAL
4:00 PM	2		0	0	2
4:15 PM	3		4	0	7
4:30 PM	2		4	0	6
4:45 PM	0		3	0	3
5:00 PM	1		1	0	2
5:15 PM	1		1	0	2
5:30 PM	0		2	0	2
5:45 PM	1		0	1	2
Total	10		15	1	26

PM Intersection Peak Hour : **4:00 PM - 5:00 PM** Intersection PHF : **0.64**

	North Leg U-Turn		South Leg U-Turn	West Leg U-Turn	TOTAL
Volume	7		11	0	18
PHF	0.58		0.6875	#DIV/0!	0.64
Movement PHF	0.58		0.69	#DIV/0!	0.64

Bike Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Scripps Hospital @ Genesee Avenue

Date of Count: *Tuesday, May 12, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Bike Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Scripps Hospital @ Genesee Avenue

AM Period (7:00 AM - 9:00 AM)								
	Southbound			Northbound		Eastbound		
	Right	Thru		Thru	Left	Right	Left	TOTAL
7:00 AM	0	1		1	0	0	0	2
7:15 AM	0	4		0	0	0	1	5
7:30 AM	0	1		1	1	1	1	5
7:45 AM	1	1		1	0	0	0	3
8:00 AM	0	4		0	1	0	1	6
8:15 AM	0	2		2	0	0	1	5
8:30 AM	0	2		2	0	0	1	5
8:45 AM	0	1		0	0	0	1	2
Total	1	16		7	2	1	6	33

AM Intersection Peak Hour : **7:15 AM - 8:15 AM** Intersection PHF : **0.79**

	Southbound			Northbound		Eastbound		TOTAL
	Right	Thru		Thru	Left	Right	Left	
Volume	1	10		2	2	1	3	19
PHF	0.25	0.63		0.50	0.50	0.25	0.75	0.79
Movement PHF		0.69		0.50		0.50		0.79

PM Period (4:00 PM - 6:00 PM)								
	Southbound			Northbound		Eastbound		
	Right	Thru		Thru	Left	Right	Left	TOTAL
4:00 PM	0	8		1	1	0	1	11
4:15 PM	0	6		0	0	0	0	6
4:30 PM	2	3		0	0	0	1	6
4:45 PM	2	7		0	0	0	0	9
5:00 PM	2	5		2	0	0	3	12
5:15 PM	0	7		0	0	0	2	9
5:30 PM	0	5		0	0	0	1	6
5:45 PM	0	3		0	0	0	0	3
Total	6	44		3	1	0	8	62

PM Intersection Peak Hour : **4:30 PM - 5:30 PM** Intersection PHF : **0.75**

	Southbound			Northbound		Eastbound		TOTAL
	Right	Thru		Thru	Left	Right	Left	
Volume	6	22		2	0	0	6	36
PHF	0.75	0.786		0.25	#####	#####	0.5	0.75
Movement PHF		0.78		0.25		0.50		0.75

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Campus Point Drive @ Genesee Avenue

Date of Count: *Tuesday, May 12, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Kimley»Horn

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Campus Point Drive @ Genesee Avenue

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	129	91	80	9	0	3	70	147	57	11	2	24	623
7:15 AM	131	135	116	12	3	2	88	161	82	10	10	17	767
7:30 AM	138	207	84	9	3	4	86	229	90	26	5	37	918
7:45 AM	118	277	72	9	4	4	81	285	105	24	3	34	1,016
8:00 AM	106	113	73	19	2	3	117	180	79	28	3	33	756
8:15 AM	107	103	90	15	3	5	87	227	87	18	2	31	775
8:30 AM	96	122	46	11	6	9	74	239	81	0	7	32	723
8:45 AM	95	131	42	10	1	11	73	228	123	0	5	42	761
Total	920	1,179	603	94	22	41	676	1,696	704	117	37	250	6,339

AM Intersection Peak Hour : **7:30 AM - 8:30 AM** Intersection PHF : **0.85**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	469	700	319	52	12	16	371	921	361	96	13	135	3,465
PHF	0.85	0.63	0.89	0.68	0.75	0.80	0.79	0.81	0.86	0.86	0.65	0.91	0.85
Movement PHF		0.80			0.83			0.88			0.90		0.85

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	46	405	15	94	5	95	16	137	32	81	1	96	1,023
4:15 PM	32	400	13	60	10	82	6	143	40	75	0	64	925
4:30 PM	32	373	10	66	3	104	11	131	61	97	3	85	976
4:45 PM	29	373	17	63	7	85	8	125	39	86	5	76	913
5:00 PM	29	191	4	83	4	130	7	128	31	102	1	91	801
5:15 PM	41	288	7	62	9	90	3	118	26	122	2	81	849
5:30 PM	38	320	6	46	7	58	12	157	36	81	4	61	826
5:45 PM	29	308	7	54	8	43	8	135	49	60	0	55	756
Total	276	2658	79	528	53	687	71	1,074	314	704	16	609	7,069

PM Intersection Peak Hour : **4:00 PM - 5:00 PM** Intersection PHF : **0.94**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	139	1551	55	283	25	366	41	536	172	339	9	321	3837
PHF	0.76	0.957	0.809	0.753	0.625	0.88	0.641	0.937	0.705	0.874	0.45	0.836	0.94
Movement PHF		0.94			0.87			0.92			0.90		0.94

U-Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-1536

Location: Campus Point Drive @ Genesee Avenue

AM Period (7:00 AM - 9:00 AM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
7:00 AM	1	0	6	0	7
7:15 AM	2	0	2	1	5
7:30 AM	3	2	4	3	12
7:45 AM	0	0	12	7	19
8:00 AM	2	0	2	3	7
8:15 AM	1	1	1	4	7
8:30 AM	0	0	1	0	1
8:45 AM	0	0	2	0	2
Total	9	3	30	18	60

AM Intersection Peak Hour : **7:30 AM - 8:30 AM** Intersection PHF : **0.59**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	6	3	19	17	45
PHF	0.50	0.38	0.40	0.61	0.59
Movement PHF	0.50	0.38	0.40	0.61	0.59

PM Period (4:00 PM - 6:00 PM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
4:00 PM	4	6	5	1	16
4:15 PM	0	2	1	0	3
4:30 PM	0	6	0	0	6
4:45 PM	0	1	5	1	7
5:00 PM	0	4	2	4	10
5:15 PM	1	2	2	3	8
5:30 PM	1	2	6	1	10
5:45 PM	5	1	5	2	13
Total	11	24	26	12	73

PM Intersection Peak Hour : **4:00 PM - 5:00 PM** Intersection PHF : **0.50**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	4	15	11	2	32
PHF	0.25	0.625	0.55	0.5	0.50
Movement PHF	0.25	0.63	0.55	0.50	0.50

Bike Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

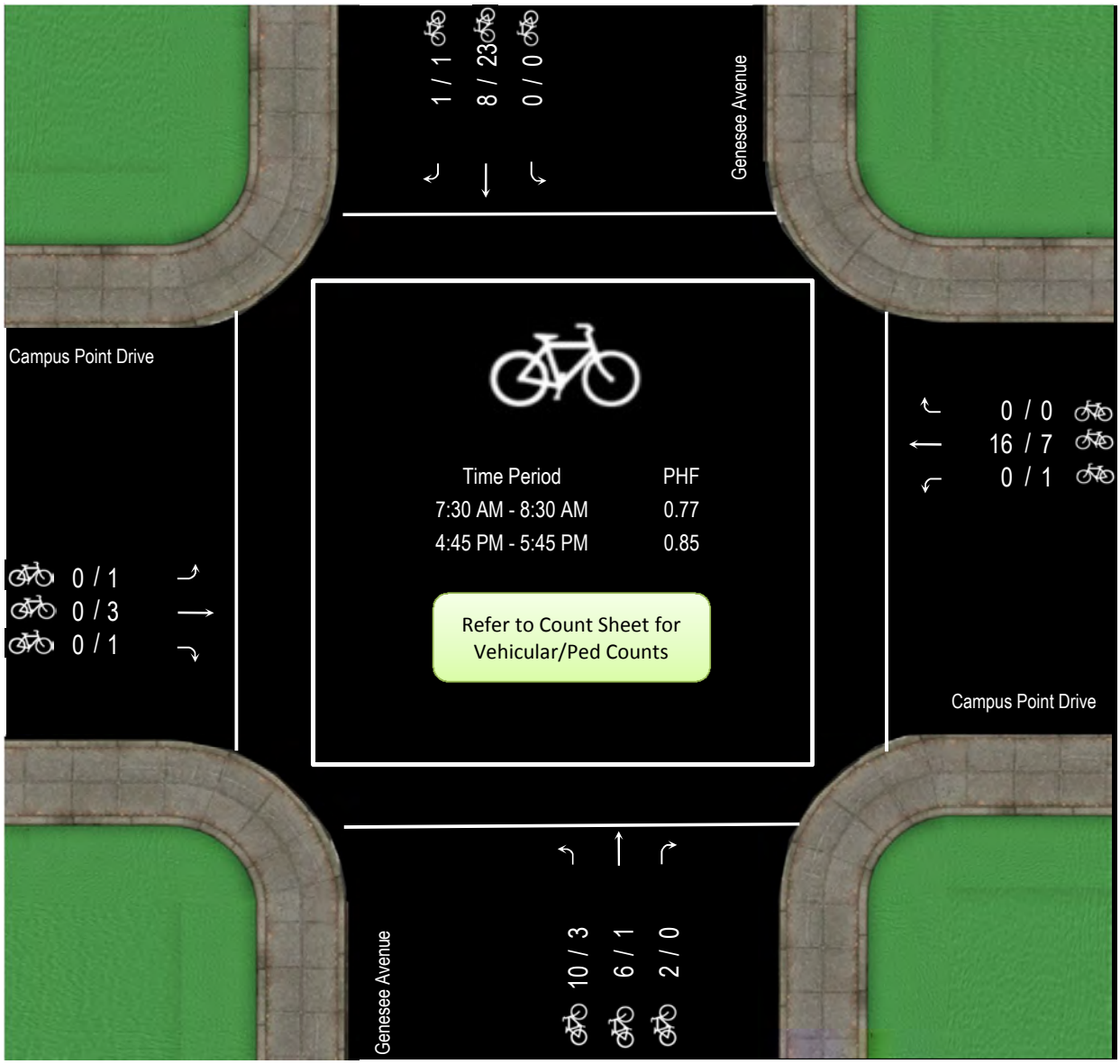
Location: Campus Point Drive @ Genesee Avenue

Date of Count: *Tuesday, May 12, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*



Bike Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Campus Point Drive @ Genesee Avenue

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	1	0	0	0	0	2	1	1	0	0	0	5
7:15 AM	0	3	1	0	1	0	0	0	1	0	0	0	6
7:30 AM	0	2	0	0	4	0	0	2	1	0	0	0	9
7:45 AM	0	1	0	0	5	0	2	1	5	0	0	0	14
8:00 AM	1	3	0	0	2	0	0	1	2	0	0	0	9
8:15 AM	0	2	0	0	5	0	0	2	2	0	0	0	11
8:30 AM	0	2	0	0	2	0	0	2	2	0	0	0	8
8:45 AM	0	1	0	0	4	0	0	0	1	0	0	0	6
Total	1	15	1	0	23	0	4	9	15	0	0	0	68

AM Intersection Peak Hour : **7:30 AM - 8:30 AM** Intersection PHF : **0.77**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	1	8	0	0	16	0	2	6	10	0	0	0	43
PHF	0.25	0.67	#####	#####	0.80	#####	0.25	0.75	0.50	#####	#####	#####	0.77
Movement PHF		0.56			0.80			0.56			#DIV/0!		0.77

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	0	8	0	0	0	0	0	1	1	0	0	1	11
4:15 PM	0	5	1	0	0	0	0	0	0	1	1	0	8
4:30 PM	0	3	0	0	0	0	0	0	0	0	2	0	5
4:45 PM	1	6	0	0	1	0	0	0	2	0	0	0	10
5:00 PM	0	5	0	0	3	0	0	1	0	0	2	1	12
5:15 PM	0	7	0	0	0	1	0	0	1	0	0	0	9
5:30 PM	0	5	0	0	3	0	0	0	0	1	1	0	10
5:45 PM	1	2	0	0	1	1	1	0	0	0	0	0	6
Total	2	41	1	0	8	2	1	2	4	2	6	2	71

PM Intersection Peak Hour : **4:45 PM - 5:45 PM** Intersection PHF : **0.85**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	1	23	0	0	7	1	0	1	3	1	3	1	41
PHF	0.25	0.821	#####	#####	0.583	0.25	#####	0.25	0.375	0.25	0.375	0.25	0.85
Movement PHF		0.86			0.67			0.50			0.42		0.85

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Regents Road @ Genesee Avenue

Date of Count: *Tuesday, May 12, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Regents Road @ Genesee Avenue

AM Period (7:00 AM - 9:00 AM)								
	Southbound			Northbound		Eastbound		
	Right	Thru		Thru	Left	Right	Left	TOTAL
7:00 AM	16	83		189	11	10	28	337
7:15 AM	15	117		258	13	14	49	466
7:30 AM	29	182		264	33	28	67	603
7:45 AM	42	235		335	29	30	40	711
8:00 AM	20	119		311	14	14	8	486
8:15 AM	8	107		367	14	5	54	555
8:30 AM	1	125		344	16	8	38	532
8:45 AM	4	136		342	14	7	19	522
Total	135	1,104		2,410	144	116	303	4,212

AM Intersection Peak Hour : **7:30 AM - 8:30 AM** Intersection PHF : **0.83**

	Southbound			Northbound		Eastbound		TOTAL
	Right	Thru		Thru	Left	Right	Left	
Volume	99	643		1,277	90	77	169	2,355
PHF	0.59	0.68		0.87	0.68	0.64	0.63	0.83
Movement PHF		0.67		0.90		0.65		0.83

PM Period (4:00 PM - 6:00 PM)								
	Southbound			Northbound		Eastbound		
	Right	Thru		Thru	Left	Right	Left	TOTAL
4:00 PM	188	391		155	3	18	21	776
4:15 PM	129	421		154	4	18	12	738
4:30 PM	191	364		165	11	15	19	765
4:45 PM	141	398		164	6	8	33	750
5:00 PM	110	310		127	6	14	34	601
5:15 PM	122	365		154	14	41	13	709
5:30 PM	115	343		190	13	34	25	720
5:45 PM	99	310		161	18	22	14	624
Total	1095	2902		1,270	75	170	171	5,683

PM Intersection Peak Hour : **4:00 PM - 5:00 PM** Intersection PHF : **0.98**

	Southbound			Northbound		Eastbound		TOTAL
	Right	Thru		Thru	Left	Right	Left	
Volume	649	1574		638	24	59	85	3029
PHF	0.85	0.935		0.967	0.545	0.819	0.644	0.98
Movement PHF		0.96		0.94		0.88		0.98

U-Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-1536

Location: Regents Road @ Genesee Avenue

AM Period (7:00 AM - 9:00 AM)					
	Southbound U-Turn		Northbound U-Turn	Eastbound U-Turn	TOTAL
7:00 AM	12		1	4	17
7:15 AM	17		0	6	23
7:30 AM	30		1	6	37
7:45 AM	40		0	5	45
8:00 AM	7		1	6	14
8:15 AM	12		2	4	18
8:30 AM	6		2	6	14
8:45 AM	4		1	12	17
Total	128		8	49	185

AM Intersection Peak Hour : **7:30 AM - 8:30 AM** Intersection PHF : **0.63**

	North Leg U-Turn		South Leg U-Turn	West Leg U-Turn	TOTAL
Volume	89		4	21	114
PHF	0.56		0.50	0.88	0.63
Movement PHF	0.56		0.50	0.88	0.63

PM Period (4:00 PM - 6:00 PM)					
	Southbound U-Turn		Northbound U-Turn	Eastbound U-Turn	TOTAL
4:00 PM	7		4	5	16
4:15 PM	8		4	2	14
4:30 PM	19		4	9	32
4:45 PM	10		0	2	12
5:00 PM	5		2	0	7
5:15 PM	15		1	4	20
5:30 PM	7		0	4	11
5:45 PM	7		4	2	13
Total	78		19	28	125

PM Intersection Peak Hour : **4:00 PM - 5:00 PM** Intersection PHF : **0.58**

	North Leg U-Turn		South Leg U-Turn	West Leg U-Turn	TOTAL
Volume	44		12	18	74
PHF	0.58		0.75	0.5	0.58
Movement PHF	0.58		0.75	0.50	0.58

Bike Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Regents Road @ Genesee Avenue

Date of Count: *Tuesday, May 12, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Bike Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Regents Road @ Genesee Avenue

AM Period (7:00 AM - 9:00 AM)								
	Southbound			Northbound		Eastbound		
	Right	Thru		Thru	Left	Right	Left	TOTAL
7:00 AM	1	0		4	0	0	3	8
7:15 AM	0	3		3	1	0	2	9
7:30 AM	0	2		4	1	0	4	11
7:45 AM	0	1		5	2	0	3	11
8:00 AM	0	3		6	1	0	2	12
8:15 AM	0	2		6	0	0	3	11
8:30 AM	0	2		7	1	0	2	12
8:45 AM	1	0		3	0	0	2	6
Total	2	13		38	6	0	21	80

AM Intersection Peak Hour : **7:45 AM - 8:45 AM** Intersection PHF : **0.96**

	Southbound			Northbound		Eastbound		TOTAL
	Right	Thru		Thru	Left	Right	Left	
Volume	0	8		24	4	0	10	46
PHF	#####	0.67		0.86	0.50	#####	0.83	0.96
Movement PHF		0.67		0.88		0.83		0.96

PM Period (4:00 PM - 6:00 PM)								
	Southbound			Northbound		Eastbound		
	Right	Thru		Thru	Left	Right	Left	TOTAL
4:00 PM	0	8		2	0	0	0	10
4:15 PM	0	6		1	0	0	0	7
4:30 PM	0	3		1	0	0	0	4
4:45 PM	0	6		4	0	1	2	13
5:00 PM	0	5		2	0	1	0	8
5:15 PM	0	8		3	0	1	0	12
5:30 PM	0	6		3	0	0	0	9
5:45 PM	0	3		4	2	0	0	9
Total	0	45		20	2	3	2	72

PM Intersection Peak Hour : **4:45 PM - 5:45 PM** Intersection PHF : **0.81**

	Southbound			Northbound		Eastbound		TOTAL
	Right	Thru		Thru	Left	Right	Left	
Volume	0	25		12	0	3	2	42
PHF	#####	0.781		0.75	#####	0.75	0.25	0.81
Movement PHF		0.78		0.75		0.42		0.81

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

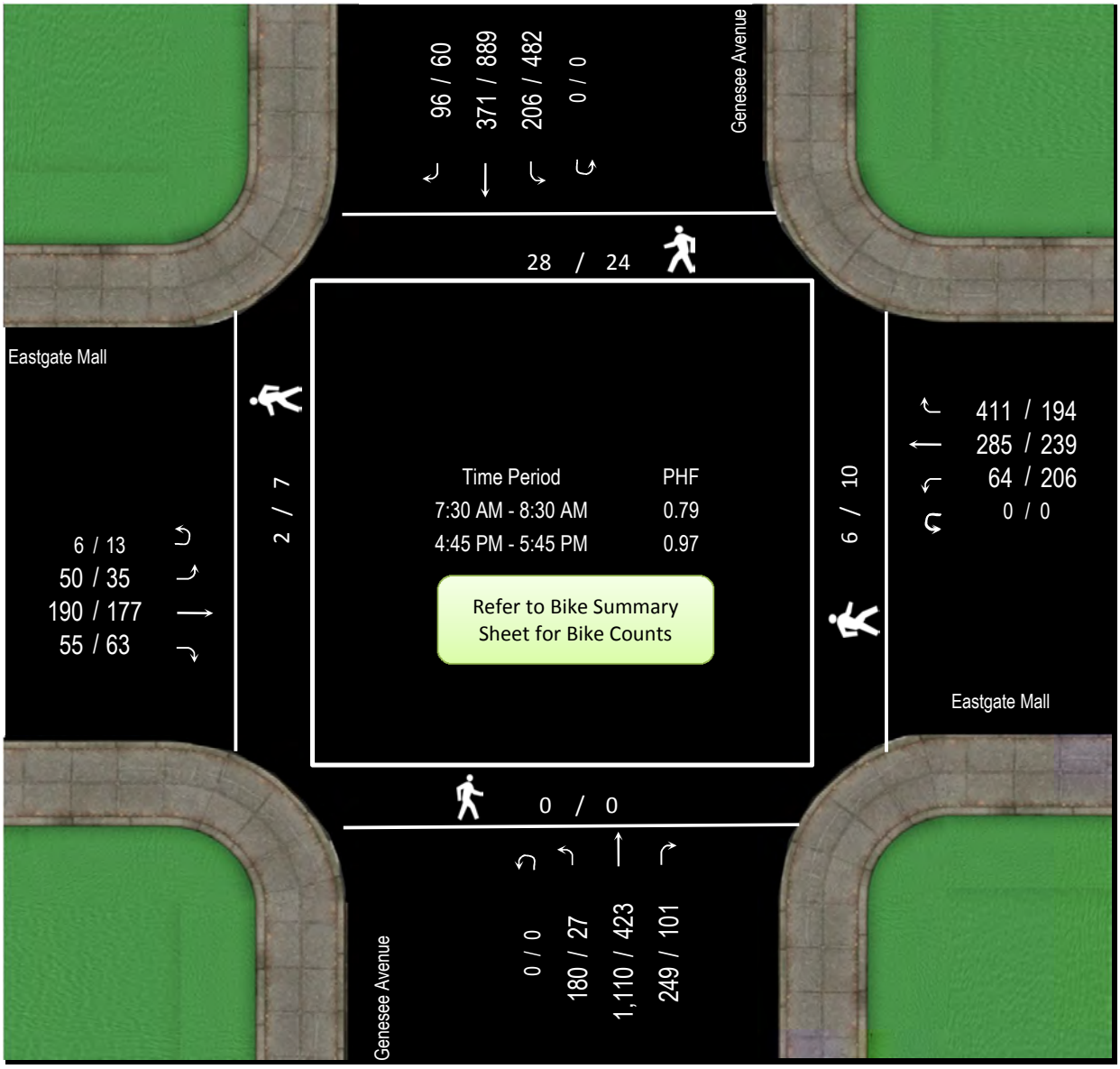
Location: Eastgate Mall @ Genesee Avenue

Date of Count: *Tuesday, May 12, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*



Kimley»Horn

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Eastgate Mall @ Genesee Avenue

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	4	53	21	60	16	10	40	146	10	1	23	4	388
7:15 AM	7	68	20	76	46	12	45	180	36	1	28	3	522
7:30 AM	35	90	40	95	81	10	42	252	37	14	19	3	718
7:45 AM	50	119	72	96	112	23	74	279	94	28	62	26	1,035
8:00 AM	7	88	50	108	47	16	74	257	32	9	51	18	757
8:15 AM	4	74	44	112	45	15	59	322	17	4	58	3	757
8:30 AM	2	79	62	124	32	20	58	241	21	8	40	3	690
8:45 AM	5	89	47	121	45	21	77	279	28	7	57	3	779
Total	114	660	356	792	424	127	469	1,956	275	72	338	63	5,646

AM Intersection Peak Hour : **7:30 AM - 8:30 AM** Intersection PHF : **0.79**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	96	371	206	411	285	64	249	1,110	180	55	190	50	3,267
PHF	0.48	0.78	0.72	0.92	0.64	0.70	0.84	0.86	0.48	0.49	0.77	0.48	0.79
Movement PHF		0.70			0.82			0.86			0.64		0.79

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	13	249	93	53	32	28	20	137	7	13	39	6	690
4:15 PM	12	211	100	41	50	33	29	107	5	6	50	15	659
4:30 PM	13	221	120	36	54	45	28	96	11	13	44	12	693
4:45 PM	6	257	107	40	63	47	24	107	6	18	41	11	727
5:00 PM	15	215	101	50	75	70	27	106	8	17	41	6	731
5:15 PM	23	185	145	46	48	49	19	100	11	11	41	14	692
5:30 PM	16	232	129	58	53	40	31	110	2	17	54	4	746
5:45 PM	6	206	73	62	60	40	24	124	2	19	44	7	667
Total	104	1776	868	386	435	352	202	887	52	114	354	75	5,605

PM Intersection Peak Hour : **4:45 PM - 5:45 PM** Intersection PHF : **0.97**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	60	889	482	194	239	206	101	423	27	63	177	35	2896
PHF	0.65	0.865	0.831	0.836	0.797	0.736	0.815	0.961	0.614	0.875	0.819	0.625	0.97
Movement PHF		0.95			0.82			0.96			0.92		0.97

U-Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-1536

Location: Eastgate Mall @ Genesee Avenue

AM Period (7:00 AM - 9:00 AM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
7:00 AM	0	0	0	4	4
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	1	1
7:45 AM	0	0	0	2	2
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	3	3
8:30 AM	0	0	0	2	2
8:45 AM	0	0	0	2	2
Total	0	0	0	14	14

AM Intersection Peak Hour : **7:30 AM - 8:30 AM** Intersection PHF : **0.50**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	0	0	0	6	6
PHF	#DIV/0!	#DIV/0!	#DIV/0!	0.50	0.50
Movement PHF	#DIV/0!	#DIV/0!	#DIV/0!	0.50	0.50

PM Period (4:00 PM - 6:00 PM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
4:00 PM	0	0	0	2	2
4:15 PM	0	0	0	4	4
4:30 PM	0	0	0	5	5
4:45 PM	0	0	0	1	1
5:00 PM	0	0	0	5	5
5:15 PM	0	0	0	3	3
5:30 PM	0	0	0	4	4
5:45 PM	0	0	0	6	6
Total	0	0	0	30	30

PM Intersection Peak Hour : **4:45 PM - 5:45 PM** Intersection PHF : **0.65**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	0	0	0	13	13
PHF	#DIV/0!	#DIV/0!	#DIV/0!	0.65	0.65
Movement PHF	#DIV/0!	#DIV/0!	#DIV/0!	0.65	0.65

Bike Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Eastgate Mall @ Genesee Avenue

Date of Count: *Tuesday, May 12, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Kimley»Horn

Bike Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Eastgate Mall @ Genesee Avenue

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	0	1	0	0	0	0	2	0	0	2	0	5
7:15 AM	0	2	0	0	0	0	0	5	0	0	1	0	8
7:30 AM	0	2	0	0	0	0	3	5	0	0	2	0	12
7:45 AM	0	1	2	0	3	0	0	9	0	0	1	0	16
8:00 AM	0	0	2	0	2	1	0	4	0	0	0	0	9
8:15 AM	0	1	0	2	1	0	1	5	0	0	0	0	10
8:30 AM	0	0	2	1	1	1	1	4	0	0	5	0	15
8:45 AM	0	0	0	0	2	0	1	2	0	0	2	0	7
Total	0	6	7	3	9	2	6	36	0	0	13	0	82

AM Intersection Peak Hour : **7:45 AM - 8:45 AM** Intersection PHF : **0.78**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	2	6	3	7	2	2	22	0	0	6	0	50
PHF	#####	0.50	0.75	0.38	0.58	0.50	0.50	0.61	#####	#####	0.30	#####	0.78
Movement PHF		0.67			1.00			0.67			0.30		0.78

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	0	2	0	0	0	0	0	0	0	0	0	0	2
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	4	0	0	0	0	0	1	0	0	0	0	5
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	1	2	0	0	0	0	0	0	0	0	0	0	3
5:30 PM	0	0	0	0	0	0	0	2	0	0	0	0	2
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	8	0	0	0	0	0	3	0	0	0	0	12

PM Intersection Peak Hour : **4:45 PM - 5:45 PM** Intersection PHF : **0.50**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	1	6	0	0	0	0	0	3	0	0	0	0	10
PHF	0.25	0.375	#####	#####	#####	#####	#####	0.375	#####	#####	#####	#####	0.50
Movement PHF		0.44			#DIV/0!			0.38			#DIV/0!		0.50

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Executive Drive @ Genesee Avenue

Date of Count: *Tuesday, May 12, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Kimley»Horn

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Executive Drive @ Genesee Avenue

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	4	51	5	12	5	4	42	217	8	4	7	4	363
7:15 AM	7	60	14	14	7	6	62	230	7	4	16	7	434
7:30 AM	7	102	12	14	7	3	68	296	7	5	20	9	550
7:45 AM	6	121	16	20	9	5	72	330	11	5	26	5	626
8:00 AM	6	79	15	19	17	4	68	289	6	7	24	6	540
8:15 AM	5	58	15	24	17	9	70	276	18	5	28	7	532
8:30 AM	6	88	10	21	26	13	65	275	19	5	35	2	565
8:45 AM	5	75	11	25	25	14	59	256	34	7	36	9	556
Total	46	634	98	149	113	58	506	2,169	110	42	192	49	4,166

AM Intersection Peak Hour : **7:45 AM - 8:45 AM** Intersection PHF : **0.90**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	23	346	56	84	69	31	275	1,170	54	22	113	20	2,263
PHF	0.96	0.71	0.88	0.88	0.66	0.60	0.95	0.89	0.71	0.79	0.81	0.71	0.90
Movement PHF		0.74			0.77			0.91			0.92		0.90

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	6	341	15	19	42	29	18	86	13	20	20	4	613
4:15 PM	5	280	42	21	37	28	19	101	8	11	21	11	584
4:30 PM	5	365	20	26	56	20	17	97	12	14	13	7	652
4:45 PM	17	309	25	20	35	36	15	89	11	12	23	3	595
5:00 PM	11	262	28	20	65	29	19	72	20	26	44	10	606
5:15 PM	12	325	30	24	57	32	14	77	18	14	25	1	629
5:30 PM	21	269	18	32	44	33	15	71	12	10	14	8	547
5:45 PM	16	265	23	25	33	26	17	96	10	18	12	9	550
Total	93	2416	201	187	369	233	134	689	104	125	172	53	4,776

PM Intersection Peak Hour : **4:30 PM - 5:30 PM** Intersection PHF : **0.95**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	45	1261	103	90	213	117	65	335	61	66	105	21	2482
PHF	0.66	0.864	0.858	0.865	0.819	0.813	0.855	0.863	0.763	0.635	0.597	0.525	0.95
Movement PHF		0.90			0.92			0.91			0.60		0.95

U-Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-1536

Location: Executive Drive @ Genesee Avenue

AM Period (7:00 AM - 9:00 AM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
7:00 AM	1	0	1	0	2
7:15 AM	0	0	2	0	2
7:30 AM	0	0	1	0	1
7:45 AM	0	0	1	0	1
8:00 AM	0	0	0	1	1
8:15 AM	0	0	1	0	1
8:30 AM	0	0	5	0	5
8:45 AM	0	0	3	0	3
Total	1	0	14	1	16

AM Intersection Peak Hour : **7:45 AM - 8:45 AM** Intersection PHF : **0.40**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	0	0	7	1	8
PHF	#DIV/0!	#DIV/0!	0.35	0.25	0.40
Movement PHF	#DIV/0!	#DIV/0!	0.35	0.25	0.40

PM Period (4:00 PM - 6:00 PM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
4:00 PM	0	0	2	0	2
4:15 PM	0	0	1	0	1
4:30 PM	0	0	1	0	1
4:45 PM	0	0	2	0	2
5:00 PM	0	0	7	0	7
5:15 PM	0	0	1	0	1
5:30 PM	1	0	2	0	3
5:45 PM	0	0	1	0	1
Total	1	0	17	0	18

PM Intersection Peak Hour : **4:30 PM - 5:30 PM** Intersection PHF : **0.39**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	0	0	11	0	11
PHF	#DIV/0!	#DIV/0!	0.392857143	#DIV/0!	0.39
Movement PHF	#DIV/0!	#DIV/0!	0.39	#DIV/0!	0.39

Bike Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

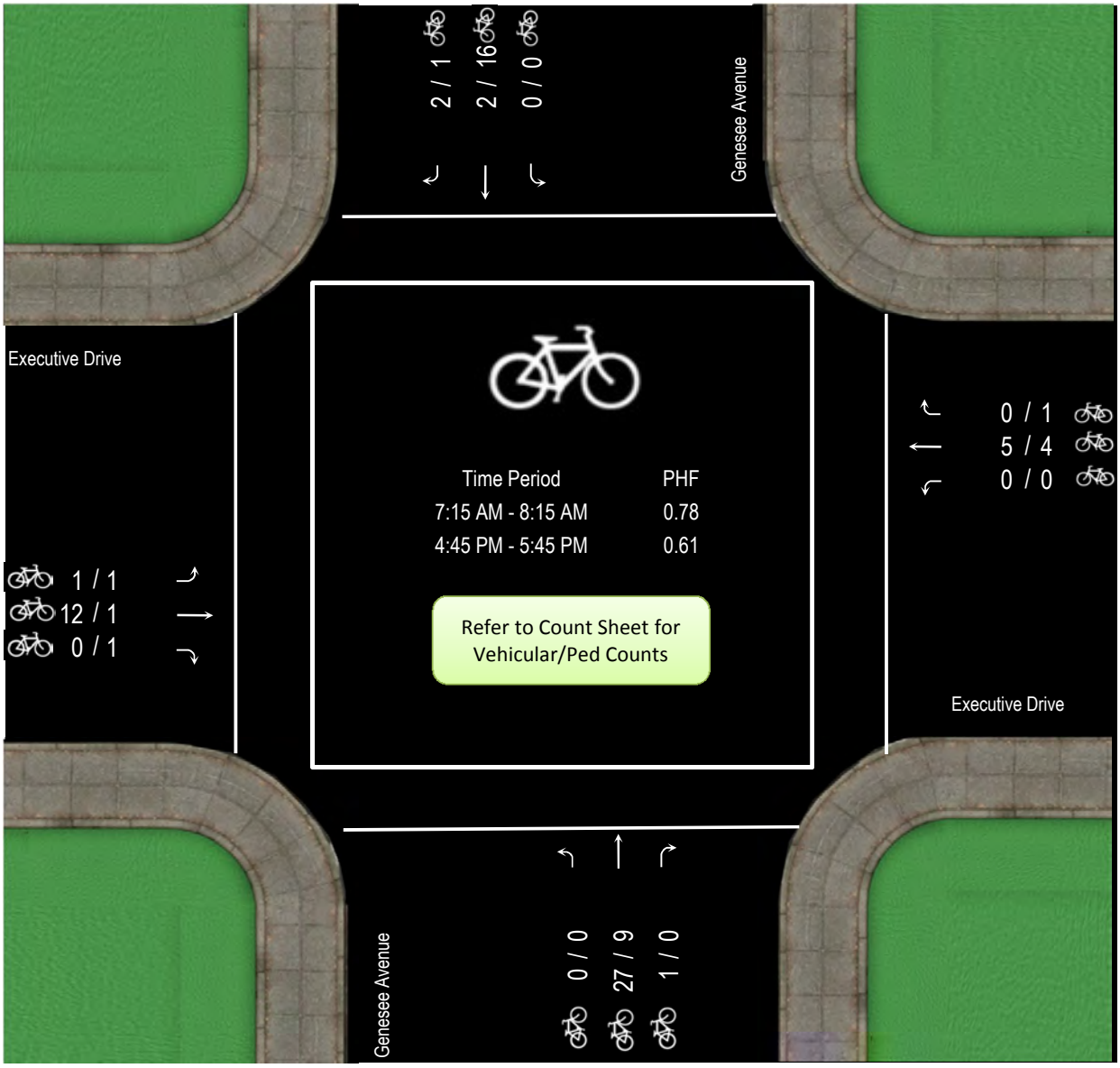
Location: Executive Drive @ Genesee Avenue

Date of Count: *Tuesday, May 12, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*



Kimley»Horn

Bike Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Executive Drive @ Genesee Avenue

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	2	0	0	0	0	0	0	1	0	0	1	4
7:15 AM	1	0	0	0	2	0	0	8	0	0	3	0	14
7:30 AM	0	0	0	0	2	0	0	9	0	0	4	1	16
7:45 AM	1	0	0	0	0	0	0	7	0	0	0	0	8
8:00 AM	0	2	0	0	1	0	1	3	0	0	5	0	12
8:15 AM	1	0	0	1	1	0	2	3	0	0	0	0	8
8:30 AM	0	0	0	0	0	0	0	2	0	0	0	0	2
8:45 AM	0	1	0	0	1	0	0	0	0	0	0	0	2
Total	3	5	0	1	7	0	3	32	1	0	12	2	66

AM Intersection Peak Hour : **7:15 AM - 8:15 AM** Intersection PHF : **0.78**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	2	2	0	0	5	0	1	27	0	0	12	1	50
PHF	0.50	0.25	#####	#####	0.63	#####	0.25	0.75	#####	#####	0.60	0.25	0.78
Movement PHF		0.50			0.63			0.78			0.65		0.78

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	0	6	0	0	0	0	0	1	0	0	1	0	8
4:15 PM	0	1	0	0	2	0	1	1	0	0	0	0	5
4:30 PM	0	2	0	0	0	0	0	0	0	0	0	0	2
4:45 PM	0	7	0	1	2	0	0	2	0	1	0	1	14
5:00 PM	0	3	0	0	0	0	0	2	0	0	0	0	5
5:15 PM	1	2	0	0	2	0	0	0	0	0	1	0	6
5:30 PM	0	4	0	0	0	0	0	5	0	0	0	0	9
5:45 PM	0	2	0	0	0	0	0	0	0	1	0	0	3
Total	1	27	0	1	6	0	1	11	0	2	2	1	52

PM Intersection Peak Hour : **4:45 PM - 5:45 PM** Intersection PHF : **0.61**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	1	16	0	1	4	0	0	9	0	1	1	1	34
PHF	0.25	0.571	#####	0.25	0.5	#####	#####	0.45	#####	0.25	0.25	0.25	0.61
Movement PHF		0.61			0.42			0.45			0.38		0.61

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Executive Square @ Genesee Avenue

Date of Count: *Tuesday, May 12, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Kimley»Horn

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Executive Square @ Genesee Avenue

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	5	55	0	2	1	2	36	264	29	10	0	2	406
7:15 AM	5	65	2	2	0	3	30	295	33	8	4	4	451
7:30 AM	3	107	1	0	0	1	31	370	48	7	0	2	570
7:45 AM	6	122	4	4	1	4	36	404	73	5	1	6	666
8:00 AM	4	82	4	0	2	2	49	360	47	11	1	3	565
8:15 AM	3	70	0	2	0	0	61	362	78	10	0	1	587
8:30 AM	5	102	3	3	1	3	62	357	82	10	1	3	632
8:45 AM	5	92	2	4	2	3	43	344	52	10	1	4	562
Total	36	695	16	17	7	18	348	2,756	442	71	8	25	4,439

AM Intersection Peak Hour : **7:45 AM - 8:45 AM** Intersection PHF : **0.92**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	18	376	11	9	4	9	208	1,483	280	36	3	13	2,450
PHF	0.75	0.77	0.69	0.56	0.50	0.56	0.84	0.92	0.85	0.82	0.75	0.54	0.92
Movement PHF		0.77			0.61			0.96			0.87		0.92

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	6	384	1	3	3	30	6	105	5	29	3	10	585
4:15 PM	0	318	2	7	1	20	0	118	9	26	1	4	506
4:30 PM	4	396	0	3	0	23	1	120	9	39	0	4	599
4:45 PM	4	354	0	6	4	22	3	102	13	40	1	8	557
5:00 PM	0	322	1	1	2	40	4	106	8	57	0	10	551
5:15 PM	5	363	3	5	4	42	4	97	5	36	1	7	572
5:30 PM	2	309	3	5	5	31	5	85	10	34	1	10	500
5:45 PM	4	306	0	4	2	19	2	118	19	41	0	2	517
Total	25	2752	10	34	21	227	25	851	78	302	7	55	4,387

PM Intersection Peak Hour : **4:30 PM - 5:30 PM** Intersection PHF : **0.95**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	13	1435	4	15	10	127	12	425	35	172	2	29	2279
PHF	0.65	0.906	0.333	0.625	0.625	0.756	0.75	0.885	0.673	0.754	0.5	0.725	0.95
Movement PHF		0.91			0.75			0.91			0.76		0.95

U-Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-1536

Location: Executive Square @ Genesee Avenue

AM Period (7:00 AM - 9:00 AM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	1	0	1	0	2
8:45 AM	0	0	3	0	3
Total	1	0	4	0	5

AM Intersection Peak Hour : **7:45 AM - 8:45 AM** Intersection PHF : **0.25**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	1	0	1	0	2
PHF	0.25	#DIV/0!	0.25	#DIV/0!	0.25
Movement PHF	0.25	#DIV/0!	0.25	#DIV/0!	0.25

PM Period (4:00 PM - 6:00 PM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
4:00 PM	1	0	1	0	2
4:15 PM	0	0	1	0	1
4:30 PM	0	0	0	0	0
4:45 PM	1	0	0	0	1
5:00 PM	1	0	0	0	1
5:15 PM	1	0	0	1	2
5:30 PM	0	0	1	0	1
5:45 PM	0	0	0	0	0
Total	4	0	3	1	8

PM Intersection Peak Hour : **4:30 PM - 5:30 PM** Intersection PHF : **0.50**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	2	0	2	0	4
PHF	0.75	#DIV/0!	#DIV/0!	0.25	0.50
Movement PHF	0.75	#DIV/0!	#DIV/0!	0.25	0.50

Bike Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Executive Square @ Genesee Avenue

Date of Count: *Tuesday, May 12, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Bike Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Executive Square @ Genesee Avenue

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	2	0	0	0	0	0	1	0	0	0	0	3
7:15 AM	0	2	0	0	0	0	0	8	0	0	0	0	10
7:30 AM	0	0	0	0	0	0	0	9	0	0	0	0	9
7:45 AM	0	0	0	0	0	0	0	7	0	0	0	0	7
8:00 AM	0	2	0	0	0	0	0	4	0	0	0	0	6
8:15 AM	0	2	0	0	0	0	0	5	1	0	0	0	8
8:30 AM	0	0	0	0	0	0	0	2	0	0	0	0	2
8:45 AM	0	1	0	0	0	0	0	1	0	0	0	0	2
Total	0	9	0	0	0	0	0	37	1	0	0	0	47

AM Intersection Peak Hour : **7:15 AM - 8:15 AM** Intersection PHF : **0.80**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	4	0	0	0	0	0	28	0	0	0	0	32
PHF	#####	0.50	#####	#####	#####	#####	#####	0.78	#####	#####	#####	#####	0.80
Movement PHF		0.50			#DIV/0!			0.78			#DIV/0!		0.80

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	0	6	0	0	0	0	0	1	0	0	0	0	7
4:15 PM	0	1	0	0	0	0	0	2	0	0	0	0	3
4:30 PM	0	2	0	0	0	0	0	0	0	0	0	0	2
4:45 PM	0	8	0	0	0	0	0	2	0	0	0	0	10
5:00 PM	0	3	0	0	0	0	0	2	0	0	0	0	5
5:15 PM	0	2	0	0	0	0	0	0	0	0	0	0	2
5:30 PM	0	4	0	0	0	0	0	5	0	0	0	0	9
5:45 PM	0	3	0	0	0	0	0	0	0	0	0	0	3
Total	0	29	0	0	0	0	0	12	0	0	0	0	41

PM Intersection Peak Hour : **4:45 PM - 5:45 PM** Intersection PHF : **0.65**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	17	0	0	0	0	0	9	0	0	0	0	26
PHF	#####	0.531	#####	#####	#####	#####	#####	0.45	#####	#####	#####	#####	0.65
Movement PHF		0.53			#DIV/0!			0.45			#DIV/0!		0.65

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: La Jolla Village Drive @ Genesee Avenue

Date of Count: *Wednesday, May 13, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Kimley»Horn

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: La Jolla Village Drive @ Genesee Avenue

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	9	21	25	85	206	15	28	164	33	19	184	98	887
7:15 AM	7	29	29	86	493	40	27	207	51	18	301	80	1,368
7:30 AM	19	33	44	95	333	28	21	260	34	18	390	83	1,358
7:45 AM	13	61	56	103	433	23	27	285	51	23	427	108	1,610
8:00 AM	13	42	51	81	291	14	29	265	34	20	373	96	1,309
8:15 AM	14	39	21	115	176	33	28	241	36	23	313	129	1,168
8:30 AM	20	50	37	110	323	27	23	287	45	21	304	102	1,349
8:45 AM	25	43	57	135	267	31	27	187	35	35	348	135	1,325
Total	120	318	320	810	2,522	211	210	1,896	319	177	2,640	831	10,374

AM Intersection Peak Hour : **7:15 AM - 8:15 AM** Intersection PHF : **0.88**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	52	165	180	365	1,550	105	104	1,017	170	79	1,491	367	5,645
PHF	0.68	0.68	0.80	0.89	0.79	0.66	0.90	0.89	0.83	0.86	0.87	0.85	0.88
Movement PHF		0.76			0.82			0.89			0.87		0.88

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	61	246	130	23	427	81	25	73	69	40	179	32	1,386
4:15 PM	72	170	151	30	334	86	18	82	50	51	193	33	1,270
4:30 PM	50	246	145	33	220	85	16	54	62	50	367	36	1,364
4:45 PM	51	239	100	26	274	87	19	52	53	47	236	25	1,209
5:00 PM	80	222	115	21	514	84	18	53	68	49	326	20	1,570
5:15 PM	72	249	102	36	165	82	20	71	67	54	259	21	1,198
5:30 PM	51	214	123	35	294	99	23	47	86	46	343	17	1,378
5:45 PM	56	200	111	31	283	99	23	84	85	50	166	14	1,202
Total	493	1786	977	235	2,511	703	162	516	540	387	2,069	198	10,577

PM Intersection Peak Hour : **4:15 PM - 5:15 PM** Intersection PHF : **0.86**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	253	877	511	110	1342	342	71	241	233	197	1122	114	5413
PHF	0.79	0.891	0.846	0.833	0.653	0.983	0.934	0.735	0.857	0.966	0.764	0.792	0.86
Movement PHF		0.93			0.72			0.91			0.79		0.86

U-Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-1536

Location: La Jolla Village Drive @ Genesee Avenue

AM Period (7:00 AM - 9:00 AM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
7:00 AM	0	3	1	1	5
7:15 AM	0	2	0	0	2
7:30 AM	0	2	0	0	2
7:45 AM	0	1	0	0	1
8:00 AM	0	2	0	1	3
8:15 AM	0	0	0	0	0
8:30 AM	0	2	0	0	2
8:45 AM	0	2	0	0	2
Total	0	14	1	2	17

AM Intersection Peak Hour : **7:15 AM - 8:15 AM** Intersection PHF : **0.67**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	0	7	0	1	8
PHF	#DIV/0!	0.88	#DIV/0!	0.25	0.67
Movement PHF	#DIV/0!	0.88	#DIV/0!	0.25	0.67

PM Period (4:00 PM - 6:00 PM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	1	2	0	0	3
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	4	0	0	4
Total	1	6	0	0	7

PM Intersection Peak Hour : **4:15 PM - 5:15 PM** Intersection PHF : **0.25**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	1	2	0	0	3
PHF	0.25	0.25	#DIV/0!	#DIV/0!	0.25
Movement PHF	0.25	0.25	#DIV/0!	#DIV/0!	0.25

Bike Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

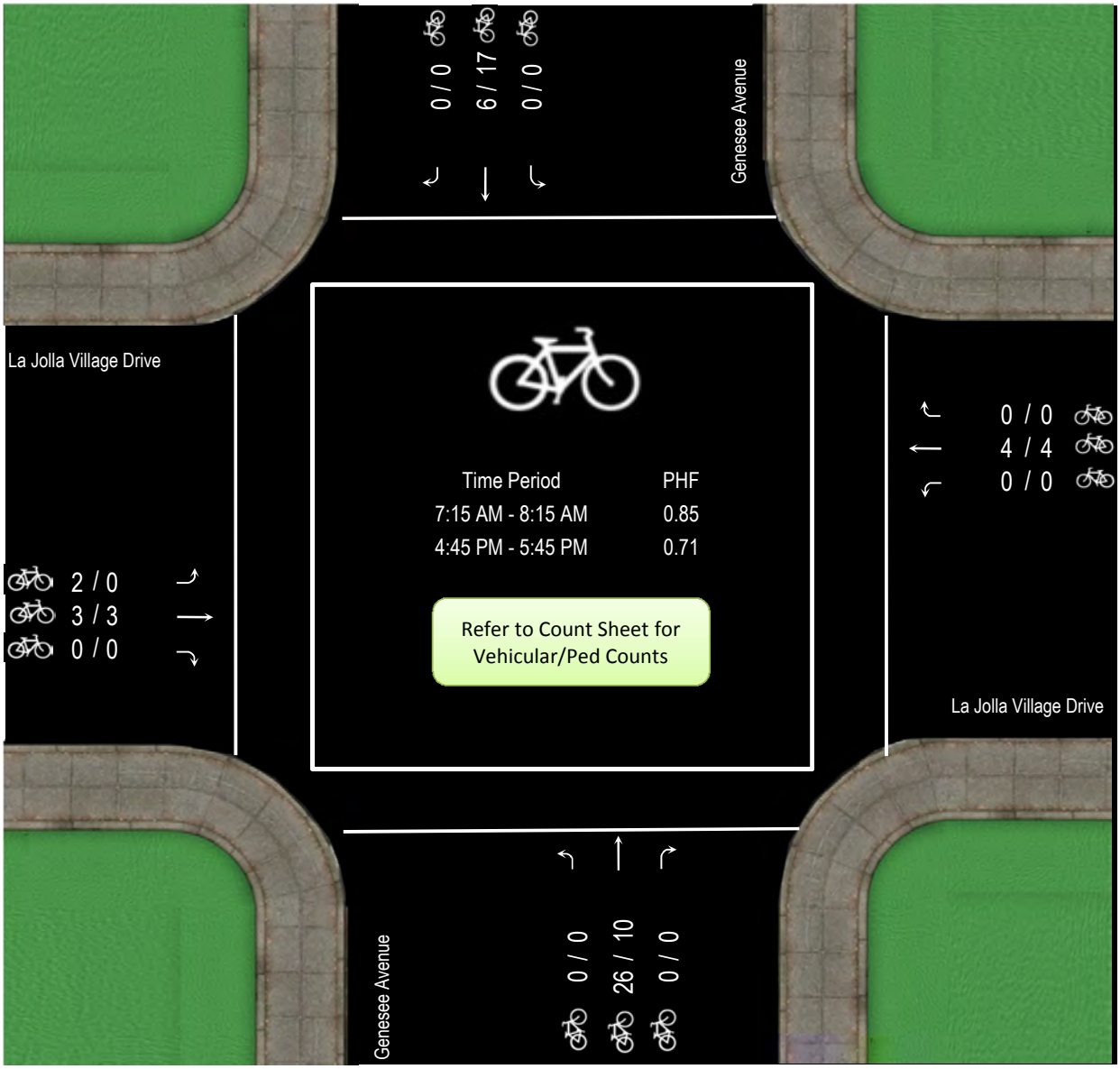
Location: La Jolla Village Drive @ Genesee Avenue

Date of Count: *Wednesday, May 13, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*



Kimley»Horn

Bike Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: La Jolla Village Drive @ Genesee Avenue

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	2	0	0	1	0	0	1	1	0	0	0	5
7:15 AM	0	2	0	0	2	0	0	8	0	0	0	0	12
7:30 AM	0	2	0	0	0	0	0	8	0	0	1	1	12
7:45 AM	0	0	0	0	1	0	0	6	0	0	1	1	9
8:00 AM	0	2	0	0	1	0	0	4	0	0	1	0	8
8:15 AM	0	2	0	0	0	0	0	6	0	0	1	0	9
8:30 AM	0	0	0	0	0	0	0	2	0	0	2	0	4
8:45 AM	0	1	0	0	0	0	0	1	0	0	2	0	4
Total	0	11	0	0	5	0	0	36	1	0	8	2	63

AM Intersection Peak Hour : **7:15 AM - 8:15 AM** Intersection PHF : **0.85**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	6	0	0	4	0	0	26	0	0	3	2	41
PHF	#####	0.75	#####	#####	0.50	#####	#####	0.81	#####	#####	0.75	0.50	0.85
Movement PHF		0.75			0.50			0.81			0.63		0.85

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	0	6	0	0	0	1	0	1	0	0	1	0	9
4:15 PM	0	1	0	0	1	0	0	2	0	0	1	0	5
4:30 PM	0	2	0	0	1	0	0	1	0	0	0	0	4
4:45 PM	0	8	0	0	1	0	0	2	0	0	1	0	12
5:00 PM	0	3	0	0	1	0	0	2	0	0	1	0	7
5:15 PM	0	2	0	0	1	0	0	1	0	0	0	0	4
5:30 PM	0	4	0	0	1	0	0	5	0	0	1	0	11
5:45 PM	0	3	0	0	1	0	0	0	0	0	1	0	5
Total	0	29	0	0	7	1	0	14	0	0	6	0	57

PM Intersection Peak Hour : **4:45 PM - 5:45 PM** Intersection PHF : **0.71**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	17	0	0	4	0	0	10	0	0	3	0	34
PHF	#####	0.531	#####	#####	1	#####	#####	0.5	#####	#####	0.75	#####	0.71
Movement PHF		0.53			1.00			0.50			0.75		0.71

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Esplanade Court @ Genesee Avenue

Date of Count: *Tuesday, May 12, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Esplanade Court @ Genesee Avenue

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	7	41	16	28	1	15	18	459	13	5	1	19	623
7:15 AM	14	49	19	15	2	17	25	249	9	5	3	25	432
7:30 AM	7	50	16	27	1	15	17	378	13	4	1	19	548
7:45 AM	18	46	19	22	4	13	23	387	7	9	5	24	577
8:00 AM	23	43	27	16	3	6	21	331	7	6	2	20	505
8:15 AM	13	60	18	32	1	15	26	352	13	6	1	21	558
8:30 AM	16	62	21	35	7	24	23	385	18	5	1	24	621
8:45 AM	26	59	30	25	3	12	30	396	11	13	4	28	637
Total	124	410	166	200	22	117	183	2,937	91	53	18	180	4,501

AM Intersection Peak Hour : **8:00 AM - 9:00 AM** Intersection PHF : **0.91**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	78	224	96	108	14	57	100	1,464	49	30	8	93	2,321
PHF	0.75	0.90	0.80	0.77	0.50	0.59	0.83	0.92	0.68	0.58	0.50	0.83	0.91
Movement PHF		0.87			0.68			0.92			0.73		0.91

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	20	258	65	54	10	44	39	125	17	14	9	28	683
4:15 PM	49	203	73	59	8	35	42	124	15	16	3	45	672
4:30 PM	22	213	36	26	4	21	39	112	11	11	4	39	538
4:45 PM	28	185	48	72	7	42	37	162	11	24	9	48	673
5:00 PM	37	226	55	85	12	42	38	119	15	29	7	49	714
5:15 PM	39	210	92	49	8	39	44	179	16	17	8	39	740
5:30 PM	17	266	65	60	12	50	40	59	19	9	5	24	626
5:45 PM	64	329	68	49	7	50	48	130	21	19	11	35	831
Total	276	1890	502	454	68	323	327	1,010	125	139	56	307	5,477

PM Intersection Peak Hour : **5:00 PM - 6:00 PM** Intersection PHF : **0.88**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	157	1031	280	243	39	181	170	487	71	74	31	147	2911
PHF	0.61	0.783	0.761	0.715	0.813	0.905	0.885	0.68	0.845	0.638	0.705	0.75	0.88
Movement PHF		0.80			0.83			0.76			0.74		0.88

U-Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-1536

Location: Esplanade Court @ Genesee Avenue

AM Period (7:00 AM - 9:00 AM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
7:00 AM	0	0	0	1	1
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	1	1
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	1	1
8:30 AM	0	0	1	4	5
8:45 AM	0	0	0	0	0
Total	0	0	1	7	8

AM Intersection Peak Hour : **8:00 AM - 9:00 AM** Intersection PHF : **0.30**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	0	0	1	5	6
PHF	#DIV/0!	#DIV/0!	0.25	0.31	0.30
Movement PHF	#DIV/0!	#DIV/0!	0.25	0.31	0.30

PM Period (4:00 PM - 6:00 PM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	1	0	0	0	1
5:00 PM	0	0	0	0	0
5:15 PM	4	0	0	0	4
5:30 PM	3	0	2	1	6
5:45 PM	1	0	0	0	1
Total	9	0	2	1	12

PM Intersection Peak Hour : **5:00 PM - 6:00 PM** Intersection PHF : **0.46**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	8	0	2	1	11
PHF	0.50	#DIV/0!	0.25	0.25	0.46
Movement PHF	0.50	#DIV/0!	0.25	0.25	0.46

Bike Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

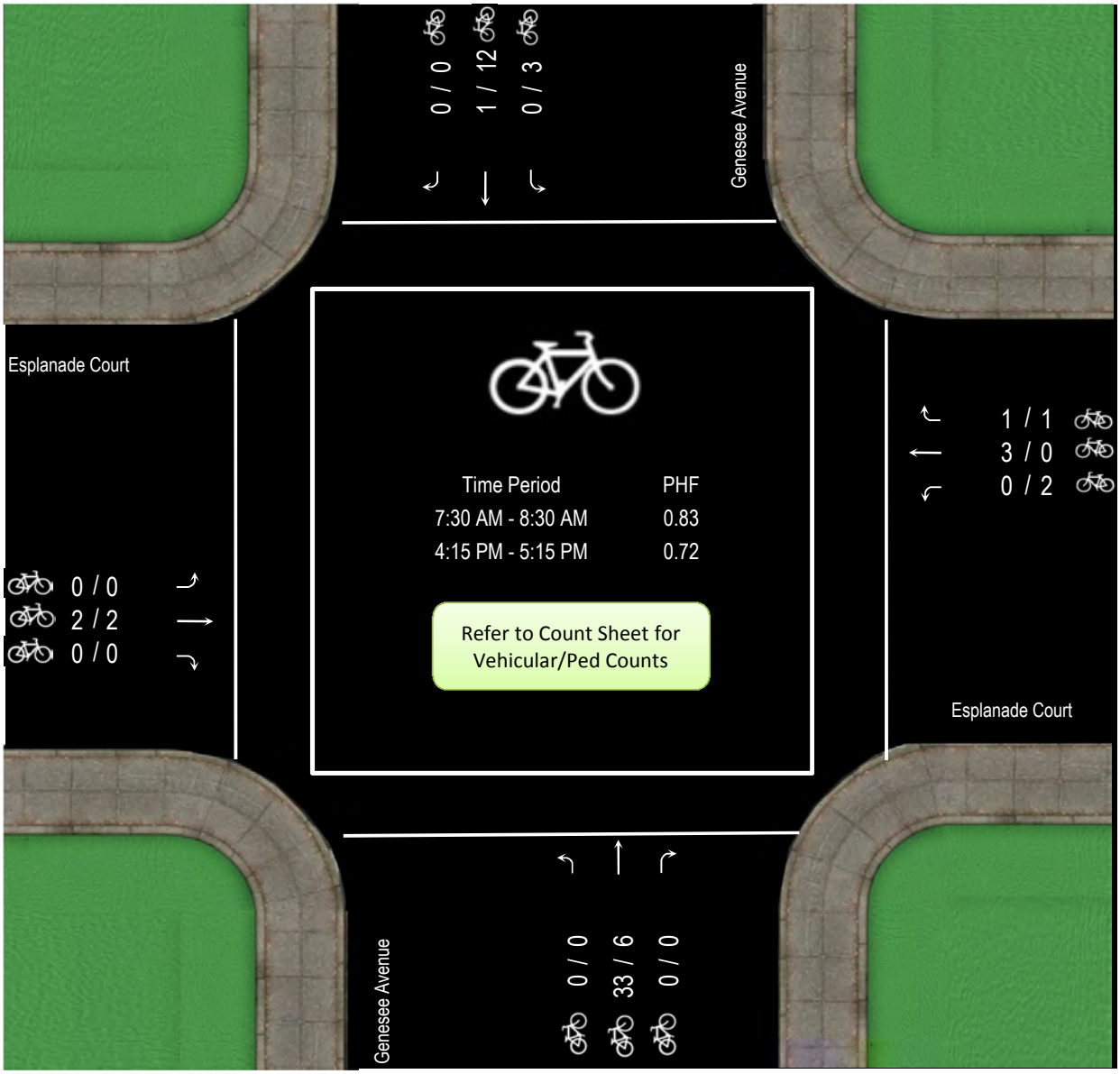
Location: Esplanade Court @ Genesee Avenue

Date of Count: *Tuesday, May 12, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*



Bike Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Esplanade Court @ Genesee Avenue

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	0	0	0	0	0	0	5	0	0	0	0	5
7:15 AM	0	1	1	0	0	0	0	6	0	0	0	0	8
7:30 AM	0	0	0	1	0	0	0	10	0	0	1	0	12
7:45 AM	0	0	0	0	1	0	0	6	0	0	0	0	7
8:00 AM	0	0	0	0	2	0	0	10	0	0	0	0	12
8:15 AM	0	1	0	0	0	0	0	7	0	0	1	0	9
8:30 AM	0	0	0	0	0	0	0	8	0	0	0	0	8
8:45 AM	0	0	0	1	0	0	0	8	0	0	0	0	9
Total	0	2	1	2	3	0	0	60	0	0	2	0	70

AM Intersection Peak Hour : **7:30 AM - 8:30 AM** Intersection PHF : **0.83**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	1	0	1	3	0	0	33	0	0	2	0	40
PHF	#####	0.25	#####	0.25	0.38	#####	#####	0.83	#####	#####	0.50	#####	0.83
Movement PHF		0.25			0.50			0.83			0.50		0.83

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	0	1	0	0	0	1	0	0	0	0	0	0	2
4:15 PM	0	5	1	1	0	0	0	2	0	0	0	0	9
4:30 PM	0	0	1	0	0	0	0	2	0	0	1	0	4
4:45 PM	0	5	0	0	0	1	0	2	0	0	1	0	9
5:00 PM	0	2	1	0	0	1	0	0	0	0	0	0	4
5:15 PM	0	1	0	0	0	0	0	2	0	0	0	0	3
5:30 PM	0	4	0	0	0	0	0	1	0	0	0	0	5
5:45 PM	0	1	0	0	0	0	0	3	0	0	1	0	5
Total	0	19	3	1	0	3	0	12	0	0	3	0	41

PM Intersection Peak Hour : **4:15 PM - 5:15 PM** Intersection PHF : **0.72**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	12	3	1	0	2	0	6	0	0	2	0	26
PHF	#####	0.6	0.75	0.25	#####	0.5	#####	0.75	#####	#####	0.5	#####	0.72
Movement PHF		0.63			0.75			0.75			0.50		0.72

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Nobel Drive @ Genesee Avenue

Date of Count: *Tuesday, May 12, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Kimley»Horn

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Nobel Drive @ Genesee Avenue

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	10	43	10	10	32	11	14	465	22	28	38	15	698
7:15 AM	5	65	11	5	101	22	43	258	49	14	98	20	691
7:30 AM	9	92	11	9	75	20	33	375	27	26	105	24	806
7:45 AM	17	41	8	15	68	20	50	376	37	21	150	26	829
8:00 AM	9	49	12	8	54	10	34	331	43	19	95	20	684
8:15 AM	7	46	24	13	66	20	46	342	45	20	116	36	781
8:30 AM	13	49	15	11	45	18	53	391	44	22	83	25	769
8:45 AM	12	38	13	11	46	21	40	389	51	17	94	34	766
Total	82	423	104	82	487	142	313	2,927	318	167	779	200	6,024

AM Intersection Peak Hour : **7:30 AM - 8:30 AM** Intersection PHF : **0.93**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	42	228	55	45	263	70	163	1,424	152	86	466	106	3,100
PHF	0.62	0.62	0.57	0.75	0.88	0.88	0.82	0.95	0.84	0.83	0.78	0.74	0.93
Movement PHF		0.73			0.91			0.94			0.84		0.93

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	19	280	29	12	127	115	27	102	29	55	86	67	948
4:15 PM	34	263	26	19	156	103	34	84	50	52	113	76	1,010
4:30 PM	21	251	20	15	113	65	27	77	47	54	80	69	839
4:45 PM	30	221	30	14	154	93	37	113	47	52	106	81	978
5:00 PM	30	289	25	11	70	66	37	115	27	45	50	46	811
5:15 PM	30	252	20	21	174	73	27	150	39	49	84	62	981
5:30 PM	20	333	21	11	165	65	32	64	57	53	104	43	968
5:45 PM	41	356	37	22	145	73	22	124	59	57	85	51	1,072
Total	225	2245	208	125	1,104	653	243	829	355	417	708	495	7,607

PM Intersection Peak Hour : **5:00 PM - 6:00 PM** Intersection PHF : **0.89**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	121	1230	103	65	554	277	118	453	182	204	323	202	3832
PHF	0.74	0.864	0.696	0.739	0.796	0.949	0.797	0.755	0.771	0.895	0.776	0.815	0.89
Movement PHF		0.84			0.84			0.87			0.91		0.89

U-Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-1536

Location: Nobel Drive @ Genesee Avenue

AM Period (7:00 AM - 9:00 AM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
7:00 AM	0	0	0	1	1
7:15 AM	0	0	0	0	0
7:30 AM	0	1	0	0	1
7:45 AM	0	2	1	0	3
8:00 AM	0	4	0	0	4
8:15 AM	0	2	3	0	5
8:30 AM	0	0	7	0	7
8:45 AM	3	3	1	1	8
Total	3	12	12	2	29

AM Intersection Peak Hour : **7:30 AM - 8:30 AM** Intersection PHF : **0.65**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	0	9	4	0	13
PHF	#DIV/0!	0.56	0.33	#DIV/0!	0.65
Movement PHF	#DIV/0!	0.56	0.33	#DIV/0!	0.65

PM Period (4:00 PM - 6:00 PM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
4:00 PM	0	0	2	0	2
4:15 PM	2	0	0	0	2
4:30 PM	1	0	4	0	5
4:45 PM	2	0	2	0	4
5:00 PM	0	0	4	0	4
5:15 PM	6	0	5	0	11
5:30 PM	2	0	0	0	2
5:45 PM	2	0	0	0	2
Total	15	0	17	0	32

PM Intersection Peak Hour : **5:00 PM - 6:00 PM** Intersection PHF : **0.43**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	10	0	9	0	19
PHF	0.42	#DIV/0!	0.45	#DIV/0!	0.43
Movement PHF	0.42	#DIV/0!	0.45	#DIV/0!	0.43

Bike Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Nobel Drive @ Genesee Avenue

Date of Count: *Tuesday, May 12, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Kimley»Horn

Bike Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Nobel Drive @ Genesee Avenue

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	1	0	0	1	0	0	4	1	0	0	1	8
7:15 AM	0	0	0	0	1	0	0	5	0	0	0	1	7
7:30 AM	0	1	0	1	3	1	0	9	0	0	1	0	16
7:45 AM	0	1	0	1	3	0	0	5	0	0	0	0	10
8:00 AM	0	0	0	0	0	0	0	10	0	0	1	0	11
8:15 AM	0	0	0	0	1	0	0	7	0	0	0	0	8
8:30 AM	0	2	0	0	0	0	0	7	2	0	0	1	12
8:45 AM	0	0	0	0	7	0	0	8	0	0	0	0	15
Total	0	5	0	2	16	1	0	55	3	0	2	3	87

AM Intersection Peak Hour : **8:00 AM - 9:00 AM** Intersection PHF : **0.77**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	2	0	0	8	0	0	32	2	0	1	1	46
PHF	#####	0.25	#####	#####	0.29	#####	#####	0.80	0.25	#####	0.25	0.25	0.77
Movement PHF		0.25			0.29			0.85			0.50		0.77

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	0	2	0	0	1	0	0	0	0	0	1	0	4
4:15 PM	0	2	0	0	0	0	0	2	0	0	0	0	4
4:30 PM	0	1	0	0	0	0	0	2	0	0	0	0	3
4:45 PM	0	9	0	0	1	0	0	2	0	0	0	0	12
5:00 PM	0	2	0	0	3	0	0	0	0	0	0	0	5
5:15 PM	0	4	0	0	1	0	0	2	0	1	0	0	8
5:30 PM	1	2	1	0	0	0	0	1	0	0	0	0	5
5:45 PM	0	3	0	0	0	0	0	3	0	0	1	0	7
Total	1	25	1	0	6	0	0	12	0	1	2	0	48

PM Intersection Peak Hour : **4:45 PM - 5:45 PM** Intersection PHF : **0.63**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	1	17	1	0	5	0	0	5	0	1	0	0	30
PHF	0.25	0.472	0.25	#####	0.417	#####	#####	0.625	#####	0.25	#####	#####	0.63
Movement PHF		0.53			0.42			0.63			0.25		0.63

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Decoro Street @ Genesee Avenue

Date of Count: *Tuesday, May 12, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Kimley»Horn

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Decoro Street @ Genesee Avenue

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	4	98	0	3	3	14	10	495	25	35	7	2	696
7:15 AM	12	135	0	5	10	12	31	338	54	40	2	6	645
7:30 AM	19	166	3	5	9	15	34	422	31	48	12	7	771
7:45 AM	6	122	2	9	2	12	46	447	39	50	7	8	750
8:00 AM	4	100	4	5	3	10	52	396	49	36	5	6	670
8:15 AM	8	103	1	11	2	5	30	413	20	32	5	11	641
8:30 AM	6	103	2	10	7	10	26	473	37	32	14	11	731
8:45 AM	6	109	3	8	1	3	24	462	19	28	7	10	680
Total	65	936	15	56	37	81	253	3,446	274	301	59	61	5,584

AM Intersection Peak Hour : **7:00 AM - 8:00 AM** Intersection PHF : **0.93**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	41	521	5	22	24	53	121	1,702	149	173	28	23	2,862
PHF	0.54	0.78	0.42	0.61	0.60	0.88	0.66	0.86	0.69	0.87	0.58	0.72	0.93
Movement PHF		0.75			0.85			0.93			0.84		0.93

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	19	380	6	1	3	39	12	154	21	49	3	5	692
4:15 PM	13	417	5	4	5	65	10	157	43	45	5	6	775
4:30 PM	10	371	7	2	6	70	8	151	29	40	5	2	701
4:45 PM	14	397	5	3	4	44	10	188	25	54	10	8	762
5:00 PM	15	439	2	1	4	60	2	175	37	62	8	5	810
5:15 PM	12	414	2	1	8	85	6	212	49	49	3	8	849
5:30 PM	9	488	4	10	17	65	12	140	46	56	10	3	860
5:45 PM	13	510	6	3	9	35	9	197	47	41	4	5	879
Total	105	3416	37	25	56	463	69	1,374	297	396	48	42	6,328

PM Intersection Peak Hour : **5:00 PM - 6:00 PM** Intersection PHF : **0.97**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	49	1851	14	15	38	245	29	724	179	208	25	21	3398
PHF	0.82	0.907	0.583	0.375	0.559	0.721	0.604	0.854	0.913	0.839	0.625	0.656	0.97
Movement PHF		0.90			0.79			0.87			0.85		0.97

U-Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-1536

Location: Decoro Street @ Genesee Avenue

AM Period (7:00 AM - 9:00 AM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
7:00 AM	1	1	0	0	2
7:15 AM	1	0	0	1	2
7:30 AM	1	1	0	0	2
7:45 AM	0	0	0	0	0
8:00 AM	1	1	0	0	2
8:15 AM	1	0	1	0	2
8:30 AM	1	0	0	1	2
8:45 AM	1	0	0	0	1
Total	7	3	1	2	13

AM Intersection Peak Hour : **7:00 AM - 8:00 AM** Intersection PHF : **0.75**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	3	2	0	1	6
PHF	0.75	0.50	#DIV/0!	0.25	0.75
Movement PHF	0.75	0.50	#DIV/0!	0.25	0.75

PM Period (4:00 PM - 6:00 PM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
4:00 PM	0	0	0	0	0
4:15 PM	1	0	0	0	1
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	2	0	0	0	2
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
Total	3	0	0	0	3

PM Intersection Peak Hour : **5:00 PM - 6:00 PM** Intersection PHF : **0.25**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	2	0	0	0	2
PHF	0.25	#DIV/0!	#DIV/0!	#DIV/0!	0.25
Movement PHF	0.25	#DIV/0!	#DIV/0!	#DIV/0!	0.25

Bike Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Decoro Street @ Genesee Avenue

Date of Count: *Tuesday, May 12, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Bike Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Decoro Street @ Genesee Avenue

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	1	0	0	1	0	0	0	4	0	2	2	0	10
7:15 AM	0	2	0	1	0	0	0	3	0	0	1	1	8
7:30 AM	0	0	0	0	0	0	0	8	0	1	1	1	11
7:45 AM	0	0	0	0	1	0	1	5	0	0	0	0	7
8:00 AM	1	0	0	2	0	0	0	8	1	1	1	0	14
8:15 AM	1	1	0	1	0	0	0	6	0	1	1	0	11
8:30 AM	0	0	0	1	2	0	0	8	0	0	1	0	12
8:45 AM	0	0	0	1	0	0	0	7	0	0	1	0	9
Total	3	3	0	7	3	0	1	49	1	5	8	2	82

AM Intersection Peak Hour : **8:00 AM - 9:00 AM** Intersection PHF : **0.82**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	2	1	0	5	2	0	0	29	1	2	4	0	46
PHF	0.50	0.25	#####	0.63	0.25	#####	#####	0.91	0.25	0.50	1.00	#####	0.82
Movement PHF		0.38			0.58			0.83			0.75		0.82

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	0	1	0	0	0	0	1	0	0	1	0	0	3
4:15 PM	0	5	0	0	0	0	0	2	0	3	2	0	12
4:30 PM	0	2	0	0	0	1	0	2	1	0	3	0	9
4:45 PM	0	8	1	0	0	0	0	2	2	1	1	0	15
5:00 PM	2	2	1	0	1	0	0	0	0	1	6	0	13
5:15 PM	1	7	0	0	0	0	0	2	0	2	0	0	12
5:30 PM	0	5	0	0	0	0	0	1	0	0	0	0	6
5:45 PM	0	4	0	0	0	0	0	2	0	1	1	1	9
Total	3	34	2	0	1	1	1	11	3	9	13	1	79

PM Intersection Peak Hour : **4:15 PM - 5:15 PM** Intersection PHF : **0.82**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	2	17	2	0	1	1	0	6	3	5	12	0	49
PHF	0.25	0.531	0.5	#####	0.25	0.25	#####	0.75	0.375	0.417	0.5	#####	0.82
Movement PHF		0.58			0.50			0.56			0.61		0.82

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Centurion Square @ Genesee Avenue

Date of Count: *Tuesday, May 12, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Centurion Square @ Genesee Avenue

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	74	70	89	0	108	108	438	0	0	0	0	887
7:15 AM	0	107	75	96	0	165	130	322	0	0	0	0	895
7:30 AM	0	216	13	22	0	15	27	465	0	0	0	0	758
7:45 AM	0	181	3	5	0	12	13	527	0	0	0	0	741
8:00 AM	0	139	7	2	0	5	15	495	0	0	0	0	663
8:15 AM	0	129	12	4	0	7	17	460	0	0	0	0	629
8:30 AM	0	141	3	2	0	10	9	533	0	0	0	0	698
8:45 AM	0	139	1	2	0	5	7	503	0	0	0	0	657
Total	0	1,126	184	222	0	327	326	3,743	0	0	0	0	5,928

AM Intersection Peak Hour : **7:00 AM - 8:00 AM** Intersection PHF : **0.92**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	578	161	212	0	300	278	1,752	0	0	0	0	3,281
PHF	#####	0.67	0.54	0.55	#####	0.45	0.53	0.83	#####	#####	#####	#####	0.92
Movement PHF		0.81			0.49			0.93			#DIV/0!		0.92

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	0	460	8	9	0	19	26	178	0	0	0	0	700
4:15 PM	0	516	8	4	0	18	16	203	0	0	0	0	765
4:30 PM	0	468	7	12	0	29	23	170	0	0	0	0	709
4:45 PM	0	480	12	6	0	26	16	214	0	0	0	0	754
5:00 PM	0	553	5	4	0	19	14	207	0	0	0	0	802
5:15 PM	0	539	7	9	0	13	11	256	0	0	0	0	835
5:30 PM	0	602	7	3	0	24	9	195	0	0	0	0	840
5:45 PM	0	572	10	6	0	27	12	243	0	0	0	0	870
Total	0	4190	64	53	0	175	127	1,666	0	0	0	0	6,275

PM Intersection Peak Hour : **5:00 PM - 6:00 PM** Intersection PHF : **0.96**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	2266	29	22	0	83	46	901	0	0	0	0	3347
PHF	#####	0.941	0.725	0.611	#####	0.769	0.821	0.88	#####	#####	#####	#####	0.96
Movement PHF		0.94			0.80			0.89			#DIV/0!		0.96

U-Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-1536

Location: Centurion Square @ Genesee Avenue

AM Period (7:00 AM - 9:00 AM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
7:00 AM	3	0	0	0	3
7:15 AM	5	0	0	0	5
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	1	0	0	0	1
8:45 AM	0	0	1	0	1
Total	9	0	1	0	10

AM Intersection Peak Hour : **7:00 AM - 8:00 AM** Intersection PHF : **0.40**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	8	0	0	0	8
PHF	0.40	#DIV/0!	#DIV/0!	#DIV/0!	0.40
Movement PHF	0.40	#DIV/0!	#DIV/0!	#DIV/0!	0.40

PM Period (4:00 PM - 6:00 PM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
4:00 PM	0	2	1	0	3
4:15 PM	3	0	0	0	3
4:30 PM	6	0	0	0	6
4:45 PM	3	0	0	0	3
5:00 PM	3	0	3	0	6
5:15 PM	2	0	0	0	2
5:30 PM	0	0	2	0	2
5:45 PM	4	0	1	0	5
Total	21	2	7	0	30

PM Intersection Peak Hour : **5:00 PM - 6:00 PM** Intersection PHF : **0.63**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	12	2	1	0	15
PHF	0.56	#DIV/0!	0.5	#DIV/0!	0.63
Movement PHF	0.56	#DIV/0!	0.50	#DIV/0!	0.63

Bike Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

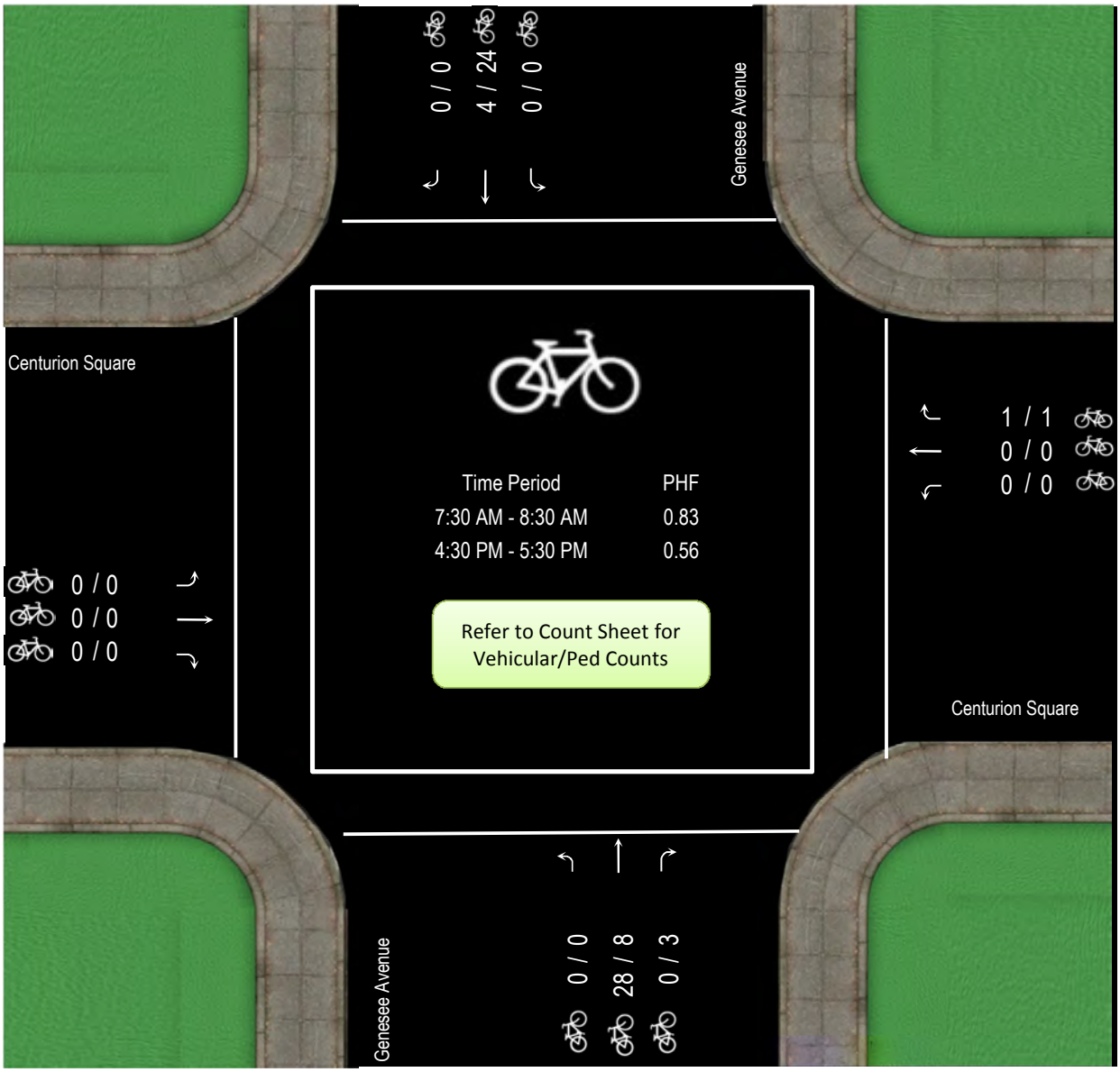
Location: Centurion Square @ Genesee Avenue

Date of Count: *Tuesday, May 12, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*



Bike Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Centurion Square @ Genesee Avenue

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	1	1	0	0	0	0	4	0	0	0	0	6
7:15 AM	0	1	1	0	0	0	0	3	0	0	0	0	5
7:30 AM	0	1	0	1	0	0	0	7	0	0	0	0	9
7:45 AM	0	0	0	0	0	0	0	6	0	0	0	0	6
8:00 AM	0	1	0	0	0	0	0	9	0	0	0	0	10
8:15 AM	0	2	0	0	0	0	0	6	0	0	0	0	8
8:30 AM	0	0	0	0	0	0	0	8	0	0	0	0	8
8:45 AM	0	0	0	0	0	0	0	7	0	0	0	0	7
Total	0	6	2	1	0	0	0	50	0	0	0	0	59

AM Intersection Peak Hour : **7:30 AM - 8:30 AM** Intersection PHF : **0.83**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	4	0	1	0	0	0	28	0	0	0	0	33
PHF	#####	0.50	#####	0.25	#####	#####	#####	0.78	#####	#####	#####	#####	0.83
Movement PHF		0.50			0.25			0.78			#DIV/0!		0.83

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	0	1	1	0	0	0	0	0	0	0	0	0	2
4:15 PM	0	8	0	0	0	0	0	2	0	0	0	0	10
4:30 PM	0	3	0	1	0	0	0	2	0	0	0	0	6
4:45 PM	0	9	0	0	0	0	3	4	0	0	0	0	16
5:00 PM	0	3	0	0	0	0	0	0	0	0	0	0	3
5:15 PM	0	9	0	0	0	0	0	2	0	0	0	0	11
5:30 PM	0	4	1	0	0	0	0	1	0	0	0	0	6
5:45 PM	0	4	1	0	0	0	0	2	0	0	0	0	7
Total	0	41	3	1	0	0	3	13	0	0	0	0	61

PM Intersection Peak Hour : **4:30 PM - 5:30 PM** Intersection PHF : **0.56**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	24	0	1	0	0	3	8	0	0	0	0	36
PHF	#####	0.667	#####	0.25	#####	#####	0.25	0.5	#####	#####	#####	#####	0.56
Movement PHF		0.67			0.25			0.39			#DIV/0!		0.56

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

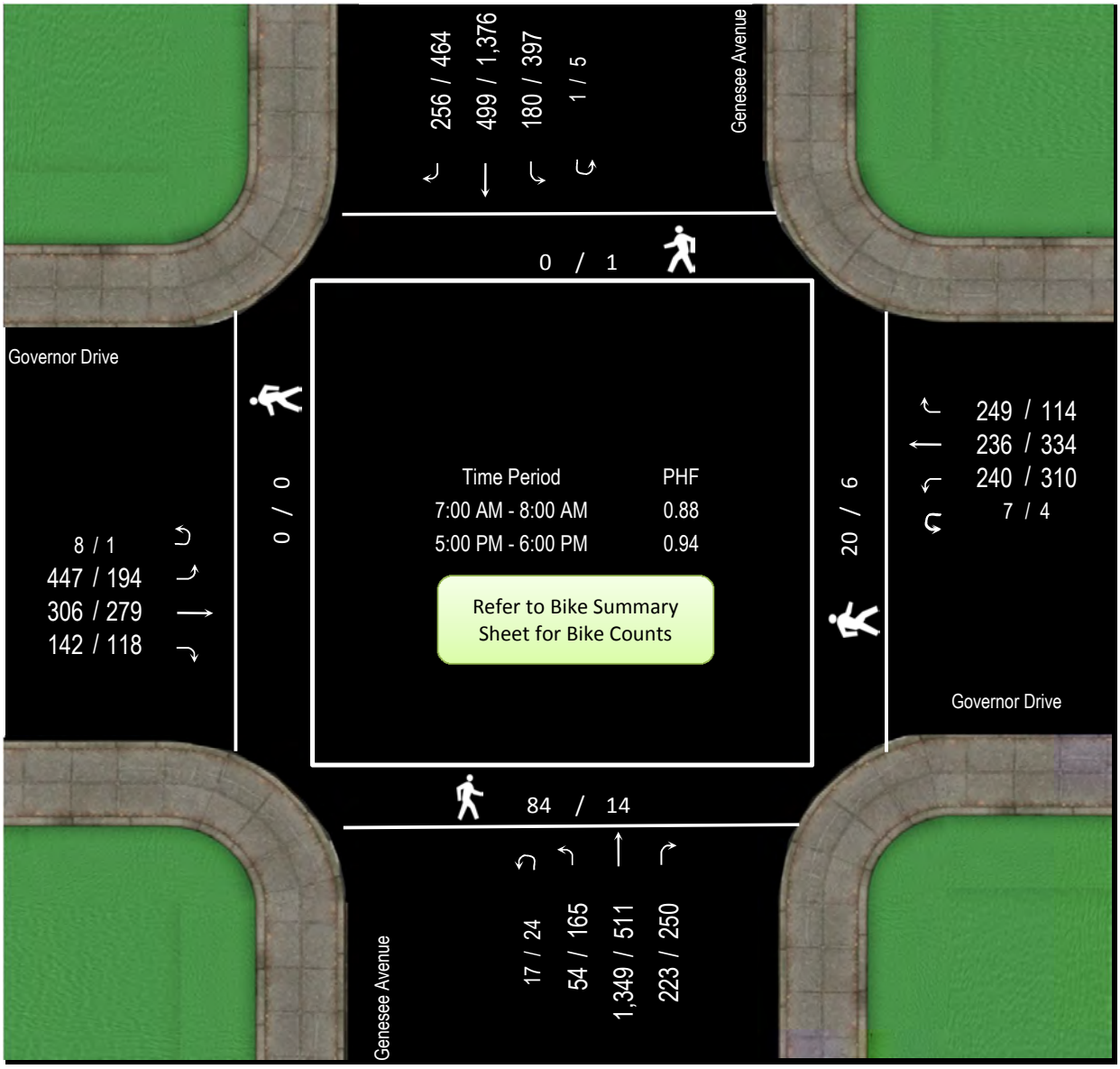
Location: Governor Drive @ Genesee Avenue

Date of Count: *Tuesday, May 12, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*



Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Governor Drive @ Genesee Avenue

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	38	147	35	78	42	48	24	356	12	16	66	139	1,001
7:15 AM	84	132	59	70	42	52	43	306	8	22	63	118	999
7:30 AM	63	115	51	48	67	41	99	317	10	41	76	68	996
7:45 AM	71	105	35	53	85	99	57	370	24	63	101	122	1,185
8:00 AM	31	97	26	35	45	57	68	349	22	73	88	95	986
8:15 AM	28	130	34	62	49	63	65	320	12	22	48	73	906
8:30 AM	43	89	38	53	37	44	96	346	30	25	68	72	941
8:45 AM	43	94	36	33	40	50	68	381	19	30	57	80	931
Total	401	909	314	432	407	454	520	2,745	137	292	567	767	7,945

AM Intersection Peak Hour : **7:00 AM - 8:00 AM** Intersection PHF : **0.88**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	256	499	180	249	236	240	223	1,349	54	142	306	447	4,181
PHF	0.76	0.85	0.76	0.80	0.69	0.61	0.56	0.91	0.56	0.56	0.76	0.80	0.88
Movement PHF		0.85			0.76			0.90			0.78		0.88

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	79	330	52	14	54	51	43	110	24	22	82	56	917
4:15 PM	72	360	84	40	67	76	48	117	42	32	53	49	1,040
4:30 PM	83	283	76	45	97	68	64	84	43	34	92	56	1,025
4:45 PM	64	333	102	35	81	69	58	127	34	16	60	42	1,021
5:00 PM	110	357	97	22	67	84	49	135	36	31	66	49	1,103
5:15 PM	95	301	86	37	102	79	73	133	45	24	72	57	1,104
5:30 PM	123	399	104	29	77	82	60	132	54	39	63	35	1,197
5:45 PM	136	319	110	26	88	65	68	111	30	24	78	53	1,108
Total	762	2682	711	248	633	574	463	949	308	222	566	397	8,515

PM Intersection Peak Hour : **5:00 PM - 6:00 PM** Intersection PHF : **0.94**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	464	1376	397	114	334	310	250	511	165	118	279	194	4512
PHF	0.85	0.862	0.902	0.77	0.819	0.923	0.856	0.946	0.764	0.756	0.894	0.851	0.94
Movement PHF		0.89			0.87			0.92			0.95		0.94

U-Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-1536

Location: Governor Drive @ Genesee Avenue

AM Period (7:00 AM - 9:00 AM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
7:00 AM	0	0	5	2	7
7:15 AM	1	2	4	0	7
7:30 AM	0	3	4	3	10
7:45 AM	0	2	4	3	9
8:00 AM	3	2	0	0	5
8:15 AM	1	1	0	0	2
8:30 AM	0	1	1	0	2
8:45 AM	0	1	1	0	2
Total	5	12	19	8	44

AM Intersection Peak Hour : **7:00 AM - 8:00 AM** Intersection PHF : **0.83**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	1	7	17	8	33
PHF	0.25	0.58	0.85	0.67	0.83
Movement PHF	0.25	0.58	0.85	0.67	0.83

PM Period (4:00 PM - 6:00 PM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
4:00 PM	1	0	0	0	1
4:15 PM	2	0	1	0	3
4:30 PM	1	1	1	0	3
4:45 PM	3	2	7	0	12
5:00 PM	5	0	8	1	14
5:15 PM	0	4	8	0	12
5:30 PM	0	0	5	0	5
5:45 PM	0	0	3	0	3
Total	12	7	33	1	53

PM Intersection Peak Hour : **5:00 PM - 6:00 PM** Intersection PHF : **0.61**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	5	4	24	1	34
PHF	0.25	0.25	0.75	0.25	0.61
Movement PHF	0.25	0.25	0.75	0.25	0.61

Bike Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Governor Drive @ Genesee Avenue

Date of Count: *Tuesday, May 12, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Bike Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Governor Drive @ Genesee Avenue

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	1	0	1	0	0	0	3	0	0	0	0	5
7:15 AM	0	0	0	1	2	0	0	2	0	0	1	0	6
7:30 AM	0	0	1	1	0	0	0	5	0	0	0	0	7
7:45 AM	0	0	0	2	1	0	0	0	0	0	1	1	5
8:00 AM	1	0	0	2	0	0	0	3	0	0	0	0	6
8:15 AM	0	0	1	1	1	1	0	3	0	0	0	1	8
8:30 AM	0	0	1	0	0	0	0	3	0	0	0	0	4
8:45 AM	1	0	1	0	0	0	0	1	0	0	0	5	8
Total	2	1	4	8	4	1	0	20	0	0	2	7	49

AM Intersection Peak Hour : **7:30 AM - 8:30 AM** Intersection PHF : **0.81**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	1	0	2	6	2	1	0	11	0	0	1	2	26
PHF	0.25	#####	0.50	0.75	0.50	0.25	#####	0.55	#####	#####	0.25	0.50	0.81
Movement PHF		0.75			0.75			0.55			0.38		0.81

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	0	0	1	0	0	0	0	0	0	0	1	1	3
4:15 PM	2	3	0	0	0	0	2	0	0	0	6	0	13
4:30 PM	2	0	1	0	0	0	0	0	0	0	2	0	5
4:45 PM	0	1	2	0	1	0	0	2	0	0	1	0	7
5:00 PM	0	3	0	0	0	1	0	2	0	0	0	0	6
5:15 PM	0	4	1	0	1	0	0	1	0	0	3	0	10
5:30 PM	0	1	1	1	3	0	0	0	0	0	1	0	7
5:45 PM	1	2	0	1	1	0	1	1	0	0	1	0	8
Total	5	14	6	2	6	1	3	6	0	0	15	1	59

PM Intersection Peak Hour : **4:15 PM - 5:15 PM** Intersection PHF : **0.60**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	4	7	3	0	1	1	2	4	0	0	9	0	31
PHF	0.50	0.583	0.375	#####	0.25	0.25	0.25	0.5	#####	#####	0.375	#####	0.60
Movement PHF		0.70			0.50			0.75			0.38		0.60

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: SR-52 WB Ramps @ Genesee Avenue

Date of Count: *Tuesday, May 12, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: SR-52 WB Ramps @ Genesee Avenue

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	22	153	0	149	0	0	0	319	84	25	0	0	752
7:15 AM	31	185	0	140	0	0	0	206	116	34	0	0	712
7:30 AM	29	225	0	219	0	0	0	264	100	35	0	0	872
7:45 AM	29	272	0	238	0	0	0	291	120	29	0	0	979
8:00 AM	21	228	0	202	0	0	0	153	119	26	0	0	749
8:15 AM	34	162	0	193	0	0	0	234	81	41	0	0	745
8:30 AM	26	138	0	172	0	0	0	235	93	25	0	0	689
8:45 AM	32	173	0	194	0	0	0	341	73	34	0	0	847
Total	224	1,536	0	1,507	0	0	0	2,043	786	249	0	0	6,345

AM Intersection Peak Hour : **7:30 AM - 8:30 AM** Intersection PHF : **0.85**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	113	887	0	852	0	0	0	942	420	131	0	0	3,345
PHF	0.83	0.82	#####	0.89	#####	#####	#####	0.81	0.88	0.80	#####	#####	0.85
Movement PHF		0.83			0.89			0.83			0.80		0.85

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	75	404	0	88	0	0	0	143	54	70	0	0	834
4:15 PM	69	393	0	90	0	0	0	94	69	66	0	0	781
4:30 PM	71	338	0	71	0	0	0	105	69	85	0	0	739
4:45 PM	63	456	0	77	0	0	0	147	68	84	0	0	895
5:00 PM	74	412	0	97	0	0	0	130	74	84	0	0	871
5:15 PM	96	365	0	87	0	0	0	106	74	130	0	0	858
5:30 PM	105	325	0	90	0	0	0	72	115	124	0	0	831
5:45 PM	97	380	0	83	0	0	0	92	79	107	0	0	838
Total	650	3073	0	683	0	0	0	889	602	750	0	0	6,647

PM Intersection Peak Hour : **4:45 PM - 5:45 PM** Intersection PHF : **0.97**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	338	1558	0	351	0	0	0	455	331	422	0	0	3455
PHF	0.80	0.854	#####	0.905	#####	#####	#####	0.774	0.72	0.812	#####	#####	0.97
Movement PHF		0.91			0.90			0.91			0.81		0.97

U-Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-1536

Location: SR-52 WB Ramps @ Genesee Avenue

AM Period (7:00 AM - 9:00 AM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
Total	0	0	0	0	0

AM Intersection Peak Hour : **7:30 AM - 8:30 AM** Intersection PHF : **#DIV/0!**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	0	0	0	0	0
PHF	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Movement PHF	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

PM Period (4:00 PM - 6:00 PM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
Total	0	0	0	0	0

PM Intersection Peak Hour : **4:45 PM - 5:45 PM** Intersection PHF : **#DIV/0!**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	0	0	0	0	0
PHF	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Movement PHF	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

Bike Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

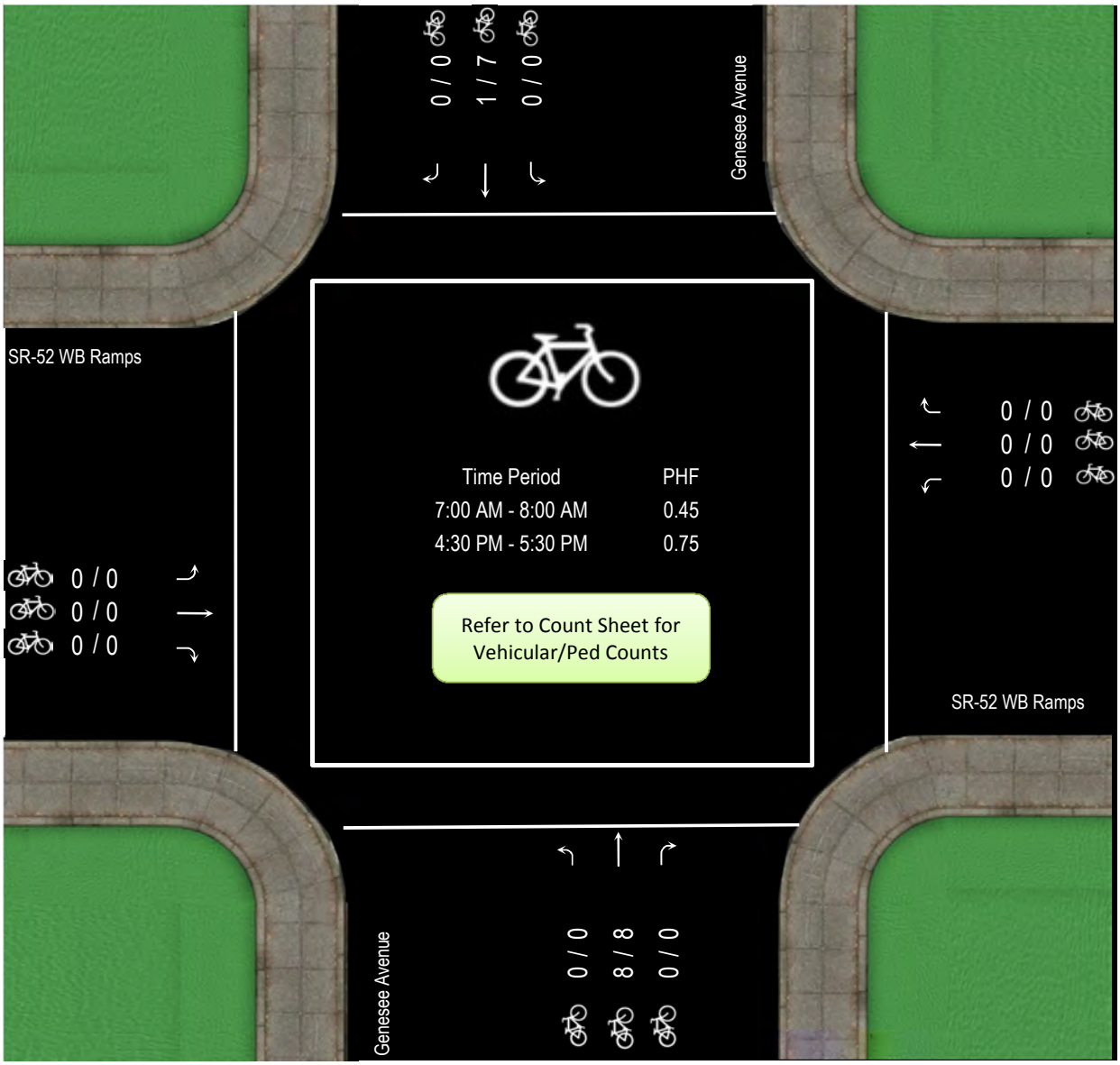
Location: SR-52 WB Ramps @ Genesee Avenue

Date of Count: *Tuesday, May 12, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*



Bike Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: SR-52 WB Ramps @ Genesee Avenue

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	2	0	0	0	0	2
7:30 AM	0	1	0	0	0	0	0	4	0	0	0	0	5
7:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
8:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	2	0	0	0	0	2
8:30 AM	0	1	0	0	0	0	0	2	0	0	0	0	3
8:45 AM	0	0	0	0	0	0	0	2	0	0	0	0	2
Total	0	2	0	0	0	0	0	15	0	0	0	0	17

AM Intersection Peak Hour : **7:00 AM - 8:00 AM** Intersection PHF : **0.45**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	1	0	0	0	0	0	8	0	0	0	0	9
PHF	#####	0.25	#####	#####	#####	#####	#####	0.50	#####	#####	#####	#####	0.45
Movement PHF		0.25			#DIV/0!			0.50			#DIV/0!		0.45

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	1	0	0	0	0	0	3	0	0	0	0	4
4:45 PM	0	2	0	0	0	0	0	3	0	0	0	0	5
5:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
5:15 PM	0	3	0	0	0	0	0	2	0	0	0	0	5
5:30 PM	0	3	0	0	0	0	0	1	0	0	0	0	4
5:45 PM	0	2	0	0	0	0	0	0	0	0	0	0	2
Total	0	12	0	0	0	0	0	10	0	0	0	0	22

PM Intersection Peak Hour : **4:30 PM - 5:30 PM** Intersection PHF : **0.75**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	7	0	0	0	0	0	8	0	0	0	0	15
PHF	#####	0.583	#####	#####	#####	#####	#####	0.667	#####	#####	#####	#####	0.75
Movement PHF		0.58			#DIV/0!			0.67			#DIV/0!		0.75

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: SR-52 EB On/Off Ramps @ Genesee Avenue

Date of Count: *Tuesday, May 12, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Kimley»Horn

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: SR-52 EB On/Off Ramps @ Genesee Avenue

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	91	84	78	0	17	136	322	0	0	0	0	728
7:15 AM	0	112	105	52	0	20	138	268	0	0	0	0	695
7:30 AM	0	126	132	38	0	30	193	324	0	0	0	0	843
7:45 AM	0	179	121	31	0	48	193	379	0	0	0	0	951
8:00 AM	0	143	110	41	0	23	172	230	0	0	0	0	719
8:15 AM	0	133	69	60	0	31	163	254	0	0	0	0	710
8:30 AM	0	88	75	57	0	28	124	271	0	0	0	0	643
8:45 AM	0	135	72	94	0	41	165	320	0	0	0	0	827
Total	0	1,007	768	451	0	238	1,284	2,368	0	0	0	0	6,116

AM Intersection Peak Hour : **7:30 AM - 8:30 AM** Intersection PHF : **0.85**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	581	432	170	0	132	721	1,187	0	0	0	0	3,223
PHF	#####	0.81	0.82	0.71	#####	0.69	0.93	0.78	#####	#####	#####	#####	0.85
Movement PHF		0.84			0.83			0.83			#DIV/0!		0.85

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	0	276	198	54	0	57	112	143	0	0	0	0	840
4:15 PM	0	286	173	35	0	76	92	128	0	0	0	0	790
4:30 PM	0	260	163	68	0	52	78	106	0	0	0	0	727
4:45 PM	0	301	239	67	0	100	89	148	0	0	0	0	944
5:00 PM	0	308	188	47	0	65	74	157	0	0	0	0	839
5:15 PM	0	311	184	52	0	111	79	128	0	0	0	0	865
5:30 PM	0	300	149	59	0	76	58	128	0	0	0	0	770
5:45 PM	0	327	160	58	0	75	57	113	0	0	0	0	790
Total	0	2369	1454	440	0	612	639	1,051	0	0	0	0	6,565

PM Intersection Peak Hour : **4:45 PM - 5:45 PM** Intersection PHF : **0.91**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	1220	760	225	0	352	300	561	0	0	0	0	3418
PHF	#####	0.981	0.795	0.84	#####	0.793	0.843	0.893	#####	#####	#####	#####	0.91
Movement PHF		0.92			0.86			0.91			#DIV/0!		0.91

U-Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-1536

Location: SR-52 EB On/Off Ramps @ Genesee Avenue

AM Period (7:00 AM - 9:00 AM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
7:00 AM	3	0	0	1	4
7:15 AM	2	0	0	0	2
7:30 AM	2	0	0	0	2
7:45 AM	1	0	0	0	1
8:00 AM	1	0	0	0	1
8:15 AM	1	0	0	0	1
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
Total	10	0	0	1	11

AM Intersection Peak Hour : **7:30 AM - 8:30 AM** Intersection PHF : **0.63**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	5	0	0	0	5
PHF	0.63	#DIV/0!	#DIV/0!	#DIV/0!	0.63
Movement PHF	0.63	#DIV/0!	#DIV/0!	#DIV/0!	0.63

PM Period (4:00 PM - 6:00 PM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
Total	0	0	0	0	0

PM Intersection Peak Hour : **4:45 PM - 5:45 PM** Intersection PHF : **#DIV/0!**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	0	0	0	0	0
PHF	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Movement PHF	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

Bike Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

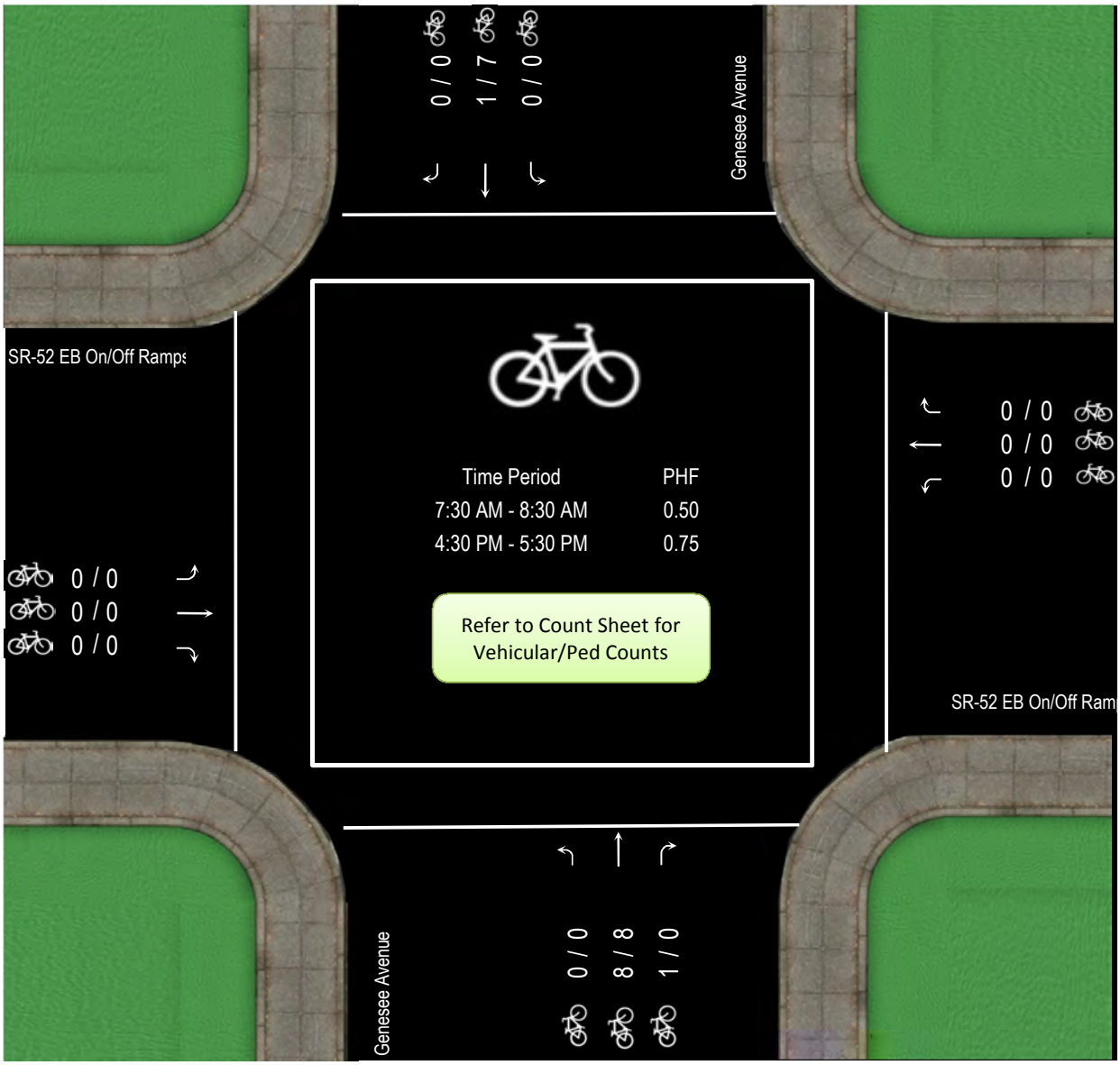
Location: SR-52 EB On/Off Ramps @ Genesee Avenue

Date of Count: *Tuesday, May 12, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*



Bike Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: SR-52 EB On/Off Ramps @ Genesee Avenue

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	2	0	0	0	0	2
7:30 AM	0	1	0	0	0	0	0	4	0	0	0	0	5
7:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
8:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
8:15 AM	0	0	0	0	0	0	1	2	0	0	0	0	3
8:30 AM	0	1	0	0	0	0	0	2	0	0	0	0	3
8:45 AM	0	0	0	0	0	0	0	2	0	0	0	0	2
Total	0	2	0	0	0	0	1	15	0	0	0	0	18

AM Intersection Peak Hour : **7:30 AM - 8:30 AM** Intersection PHF : **0.50**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	1	0	0	0	0	1	8	0	0	0	0	10
PHF	#####	0.25	#####	#####	#####	#####	0.25	0.50	#####	#####	#####	#####	0.50
Movement PHF		0.25			#DIV/0!			0.56			#DIV/0!		0.50

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	1	0	0	0	0	0	3	0	0	0	0	4
4:45 PM	0	2	0	0	0	0	0	3	0	0	0	0	5
5:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
5:15 PM	0	3	0	0	0	0	0	2	0	0	0	0	5
5:30 PM	0	3	0	0	0	0	0	1	0	0	0	0	4
5:45 PM	0	2	0	0	0	0	0	0	0	0	0	0	2
Total	0	12	0	0	0	0	0	10	0	0	0	0	22

PM Intersection Peak Hour : **4:30 PM - 5:30 PM** Intersection PHF : **0.75**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	7	0	0	0	0	0	8	0	0	0	0	15
PHF	#####	0.583	#####	#####	#####	#####	#####	0.667	#####	#####	#####	#####	0.75
Movement PHF		0.58			#DIV/0!			0.67			#DIV/0!		0.75

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Lehrer Drive @ Genesee Avenue

Date of Count: *Tuesday, May 12, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Kimley»Horn

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Lehrer Drive @ Genesee Avenue

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	20	79	9	66	4	6	3	281	1	11	9	111	600
7:15 AM	16	106	10	54	4	7	3	258	7	8	11	94	578
7:30 AM	17	123	16	74	14	9	1	355	4	13	1	88	715
7:45 AM	22	198	7	63	4	5	3	405	1	10	8	104	830
8:00 AM	19	137	10	72	4	6	3	215	2	13	8	115	604
8:15 AM	17	134	13	67	15	11	1	267	3	9	1	83	621
8:30 AM	16	90	10	51	4	6	3	259	7	7	11	85	549
8:45 AM	24	148	4	45	9	2	5	362	20	11	2	78	710
Total	151	1,015	79	492	58	52	22	2,402	45	82	51	758	5,207

AM Intersection Peak Hour : **7:30 AM - 8:30 AM** Intersection PHF : **0.83**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	75	592	46	276	37	31	8	1,242	10	45	18	390	2,770
PHF	0.85	0.75	0.72	0.93	0.62	0.70	0.67	0.77	0.63	0.87	0.56	0.85	0.83
Movement PHF		0.79			0.89			0.77			0.83		0.83

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	68	228	37	20	9	7	3	185	12	9	27	50	655
4:15 PM	53	270	39	15	11	3	7	168	15	11	15	37	644
4:30 PM	74	205	33	15	8	5	4	132	11	10	9	37	543
4:45 PM	51	311	39	13	10	3	7	187	15	14	15	37	702
5:00 PM	64	275	31	21	9	7	3	157	12	9	27	50	665
5:15 PM	62	327	33	16	7	5	5	139	14	13	25	52	698
5:30 PM	70	267	38	13	11	9	2	131	11	8	18	41	619
5:45 PM	94	265	43	14	4	9	3	128	8	12	8	28	616
Total	536	2148	293	127	69	48	34	1,227	98	86	144	332	5,142

PM Intersection Peak Hour : **4:45 PM - 5:45 PM** Intersection PHF : **0.96**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	247	1180	141	63	37	24	17	614	52	44	85	180	2684
PHF	0.88	0.902	0.904	0.75	0.841	0.667	0.607	0.821	0.867	0.786	0.787	0.865	0.96
Movement PHF		0.93			0.84			0.82			0.86		0.96

U-Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-1536

Location: Lehrer Drive @ Genesee Avenue

AM Period (7:00 AM - 9:00 AM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
7:00 AM	0	1	0	0	1
7:15 AM	0	2	1	0	3
7:30 AM	0	0	1	0	1
7:45 AM	0	0	0	0	0
8:00 AM	0	2	0	0	2
8:15 AM	0	0	1	0	1
8:30 AM	0	2	1	0	3
8:45 AM	0	0	2	0	2
Total	0	7	6	0	13

AM Intersection Peak Hour : **7:30 AM - 8:30 AM** Intersection PHF : **0.50**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	0	2	2	0	4
PHF	#DIV/0!	0.25	0.50	#DIV/0!	0.50
Movement PHF	#DIV/0!	0.25	0.50	#DIV/0!	0.50

PM Period (4:00 PM - 6:00 PM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
4:00 PM	0	1	2	0	3
4:15 PM	0	0	1	0	1
4:30 PM	0	2	0	0	2
4:45 PM	0	0	0	0	0
5:00 PM	3	0	0	0	3
5:15 PM	0	0	0	0	0
5:30 PM	1	1	0	0	2
5:45 PM	0	0	0	0	0
Total	4	4	3	0	11

PM Intersection Peak Hour : **4:45 PM - 5:45 PM** Intersection PHF : **0.42**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	3	2	0	0	5
PHF	0.33	0.25	#DIV/0!	#DIV/0!	0.42
Movement PHF	0.33	0.25	#DIV/0!	#DIV/0!	0.42

Bike Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Lehrer Drive @ Genesee Avenue

Date of Count: *Tuesday, May 12, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Bike Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Lehrer Drive @ Genesee Avenue

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	0	0	0	1	0	1	1	0	0	0	0	3
7:15 AM	0	0	0	0	1	0	0	2	0	0	0	0	3
7:30 AM	0	1	0	1	0	1	1	1	0	0	0	2	7
7:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
8:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	3	0	0	0	0	3
8:30 AM	0	1	0	0	0	0	0	2	0	0	0	0	3
8:45 AM	0	0	0	0	0	0	0	2	0	0	0	0	2
Total	0	2	0	1	2	1	2	13	0	0	0	2	23

AM Intersection Peak Hour : **7:00 AM - 8:00 AM** Intersection PHF : **0.50**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	1	0	1	2	1	2	5	0	0	0	2	14
PHF	#####	0.25	#####	0.25	0.50	0.25	0.50	0.63	#####	#####	#####	0.25	0.50
Movement PHF		0.25			0.50			0.88			0.25		0.50

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	1	0	0	0	0	0	3	0	0	0	0	4
4:45 PM	0	2	0	0	0	0	0	3	0	0	1	0	6
5:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
5:15 PM	0	3	0	0	0	0	0	2	0	0	0	0	5
5:30 PM	0	3	0	0	0	0	0	1	0	0	2	0	6
5:45 PM	0	2	0	0	0	0	0	0	0	0	0	0	2
Total	0	12	0	0	0	0	0	10	0	0	3	0	25

PM Intersection Peak Hour : **4:45 PM - 5:45 PM** Intersection PHF : **0.75**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	9	0	0	0	0	0	6	0	0	3	0	18
PHF	#####	0.75	#####	#####	#####	#####	#####	0.5	#####	#####	0.375	#####	0.75
Movement PHF		0.75			#DIV/0!			0.50			0.38		0.75

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: La Jolla Village Drive @ Torrey Pines Road

Date of Count: *Tuesday, May 12, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Kimley»Horn

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: La Jolla Village Drive @ Torrey Pines Road

AM Period (7:00 AM - 9:00 AM)								
		Westbound		Northbound		Eastbound		
		Thru	Left	Right	Left	Right	Thru	TOTAL
7:00 AM		116	253	131	25	0	39	564
7:15 AM		270	122	181	42	7	33	655
7:30 AM		310	130	252	38	8	42	780
7:45 AM		417	250	285	36	12	83	1,083
8:00 AM		343	239	199	48	11	72	912
8:15 AM		319	267	212	70	9	106	983
8:30 AM		386	248	303	55	15	75	1,082
8:45 AM		353	231	243	72	17	91	1,007
Total		2,514	1,740	1,806	386	79	541	7,066

AM Intersection Peak Hour : **7:45 AM - 8:45 AM** Intersection PHF : **0.94**

		Westbound		Northbound		Eastbound		TOTAL
		Thru	Left	Right	Left	Right	Thru	
Volume		1,465	1,004	999	209	47	336	4,060
PHF		0.88	0.94	0.82	0.75	0.78	0.79	0.94
Movement PHF		0.93		0.84			0.83	0.94

PM Period (4:00 PM - 6:00 PM)								
		Westbound		Northbound		Eastbound		
		Thru	Left	Right	Left	Right	Thru	TOTAL
4:00 PM		141	248	209	21	42	342	1,003
4:15 PM		127	197	176	16	58	357	931
4:30 PM		150	232	166	18	71	370	1,007
4:45 PM		231	264	220	28	61	393	1,197
5:00 PM		147	290	185	14	69	411	1,116
5:15 PM		139	252	182	29	78	357	1,037
5:30 PM		144	289	215	25	64	301	1,038
5:45 PM		197	278	212	20	41	308	1,056
Total		1,276	2,050	1,565	171	484	2,839	8,385

PM Intersection Peak Hour : **4:45 PM - 5:45 PM** Intersection PHF : **0.92**

		Westbound		Northbound		Eastbound		TOTAL
		Thru	Left	Right	Left	Right	Thru	
Volume		661	1095	802	96	272	1462	4388
PHF		0.715	0.944	0.911	0.828	0.872	0.889	0.92
Movement PHF		0.89		0.91			0.90	0.92

U-Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-1536

Location: La Jolla Village Drive @ Torrey Pines Road

AM Period (7:00 AM - 9:00 AM)					
		Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
7:00 AM		0	0	1	1
7:15 AM		10	0	0	10
7:30 AM		0	0	0	0
7:45 AM		0	0	0	0
8:00 AM		0	0	0	0
8:15 AM		0	1	0	1
8:30 AM		0	0	0	0
8:45 AM		0	0	0	0
Total		10	1	1	12

AM Intersection Peak Hour : **7:45 AM - 8:45 AM** Intersection PHF : **0.25**

		East Leg U-Turn	South Leg U-Turn	West Leg U-Turn	TOTAL
Volume		0	1	0	1
PHF		#DIV/0!	0.25	#DIV/0!	0.25
Movement PHF		#DIV/0!	0.25	#DIV/0!	0.25

PM Period (4:00 PM - 6:00 PM)					
		Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
4:00 PM		0	3	0	3
4:15 PM		0	3	0	3
4:30 PM		0	1	0	1
4:45 PM		0	3	0	3
5:00 PM		1	0	0	1
5:15 PM		0	0	0	0
5:30 PM		0	2	0	2
5:45 PM		0	0	0	0
Total		1	12	0	13

PM Intersection Peak Hour : **4:45 PM - 5:45 PM** Intersection PHF : **0.50**

		East Leg U-Turn	South Leg U-Turn	West Leg U-Turn	TOTAL
Volume		1	5	0	6
PHF		0.25	0.416666667	#DIV/0!	0.50
Movement PHF		0.25	0.42	#DIV/0!	0.50

Bike Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: La Jolla Village Drive @ Torrey Pines Road

Date of Count: *Tuesday, May 12, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Bike Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: La Jolla Village Drive @ Torrey Pines Road

AM Period (7:00 AM - 9:00 AM)								
		Westbound		Northbound		Eastbound		
		Thru	Left	Right	Left	Right	Thru	TOTAL
7:00 AM		1	0	0	0	0	0	1
7:15 AM		1	0	0	0	0	0	1
7:30 AM		1	0	2	1	0	2	6
7:45 AM		0	0	3	2	0	1	6
8:00 AM		0	0	1	0	0	1	2
8:15 AM		3	0	0	0	0	0	3
8:30 AM		1	0	0	2	0	0	3
8:45 AM		1	0	6	3	0	2	12
Total		8	0	12	8	0	6	34

AM Intersection Peak Hour : **8:00 AM - 9:00 AM** Intersection PHF : **0.42**

		Westbound		Northbound		Eastbound		TOTAL
		Thru	Left	Right	Left	Right	Thru	
Volume		5	0	7	5	0	3	20
PHF		0.42	#####	0.29	0.42	#####	0.38	0.42
Movement PHF		0.42		0.33			0.38	0.42

PM Period (4:00 PM - 6:00 PM)								
		Westbound		Northbound		Eastbound		
		Thru	Left	Right	Left	Right	Thru	TOTAL
4:00 PM		0	0	1	0	0	3	4
4:15 PM		1	0	0	1	1	1	4
4:30 PM		0	0	1	0	1	1	3
4:45 PM		0	0	1	0	1	1	3
5:00 PM		0	0	0	0	0	6	6
5:15 PM		0	0	0	1	3	4	8
5:30 PM		0	0	0	0	0	3	3
5:45 PM		0	0	0	0	1	4	5
Total		1	0	3	2	7	23	36

PM Intersection Peak Hour : **5:00 PM - 6:00 PM** Intersection PHF : **0.69**

		Westbound		Northbound		Eastbound		TOTAL
		Thru	Left	Right	Left	Right	Thru	
Volume		0	0	0	1	4	17	22
PHF		#####	#####	#####	0.25	0.333	0.708	0.69
Movement PHF		#DIV/0!		0.25			0.75	0.69

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: La Jolla Village Drive @ La Jolla Scenic Drive

Date of Count: *Tuesday, May 12, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: La Jolla Village Drive @ La Jolla Scenic Drive

AM Period (7:00 AM - 9:00 AM)								
		Westbound		Northbound		Eastbound		
		Thru	Left	Right	Left	Right	Thru	TOTAL
7:00 AM		327	23	49	42	2	168	611
7:15 AM		337	27	56	65	3	221	709
7:30 AM		351	33	65	89	3	291	832
7:45 AM		586	50	68	81	6	362	1,153
8:00 AM		475	109	77	107	7	264	1,039
8:15 AM		492	116	106	94	10	308	1,126
8:30 AM		560	53	148	74	6	372	1,213
8:45 AM		510	39	70	74	5	329	1,027
Total		3,638	450	639	626	42	2,315	7,710

AM Intersection Peak Hour : **7:45 AM - 8:45 AM** Intersection PHF : **0.93**

		Westbound		Northbound		Eastbound		TOTAL
		Thru	Left	Right	Left	Right	Thru	
Volume		2,113	328	399	356	29	1,306	4,531
PHF		0.90	0.71	0.67	0.83	0.73	0.88	0.93
Movement PHF		0.96		0.85			0.88	0.93

PM Period (4:00 PM - 6:00 PM)								
		Westbound		Northbound		Eastbound		
		Thru	Left	Right	Left	Right	Thru	TOTAL
4:00 PM		369	58	69	20	12	539	1,067
4:15 PM		318	68	43	6	18	515	968
4:30 PM		371	75	59	11	11	525	1,052
4:45 PM		480	88	60	15	8	605	1,256
5:00 PM		422	104	83	16	12	585	1,222
5:15 PM		380	96	56	11	14	525	1,082
5:30 PM		416	100	69	17	16	500	1,118
5:45 PM		464	81	68	11	8	512	1,144
Total		3,220	670	507	107	99	4,306	8,909

PM Intersection Peak Hour : **4:45 PM - 5:45 PM** Intersection PHF : **0.93**

		Westbound		Northbound		Eastbound		TOTAL
		Thru	Left	Right	Left	Right	Thru	
Volume		1698	388	268	59	50	2215	4678
PHF		0.884	0.933	0.807	0.868	0.781	0.915	0.93
Movement PHF		0.92		0.83			0.92	0.93

U-Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-1536

Location: La Jolla Village Drive @ La Jolla Scenic Drive

AM Period (7:00 AM - 9:00 AM)					
		Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
7:00 AM		0	1	0	1
7:15 AM		0	0	0	0
7:30 AM		0	0	0	0
7:45 AM		0	0	0	0
8:00 AM		0	0	0	0
8:15 AM		0	0	0	0
8:30 AM		0	0	0	0
8:45 AM		0	0	0	0
Total		0	1	0	1

AM Intersection Peak Hour : **7:45 AM - 8:45 AM** Intersection PHF : **#DIV/0!**

		East Leg U-Turn	South Leg U-Turn	West Leg U-Turn	TOTAL
Volume		0	0	0	0
PHF		#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Movement PHF		#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

PM Period (4:00 PM - 6:00 PM)					
		Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
4:00 PM		0	0	0	0
4:15 PM		0	0	0	0
4:30 PM		1	0	0	1
4:45 PM		0	0	0	0
5:00 PM		0	0	0	0
5:15 PM		0	0	0	0
5:30 PM		0	0	0	0
5:45 PM		0	0	0	0
Total		1	0	0	1

PM Intersection Peak Hour : **4:45 PM - 5:45 PM** Intersection PHF : **#DIV/0!**

		East Leg U-Turn	South Leg U-Turn	West Leg U-Turn	TOTAL
Volume		0	0	0	0
PHF		#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Movement PHF		#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

Bike Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

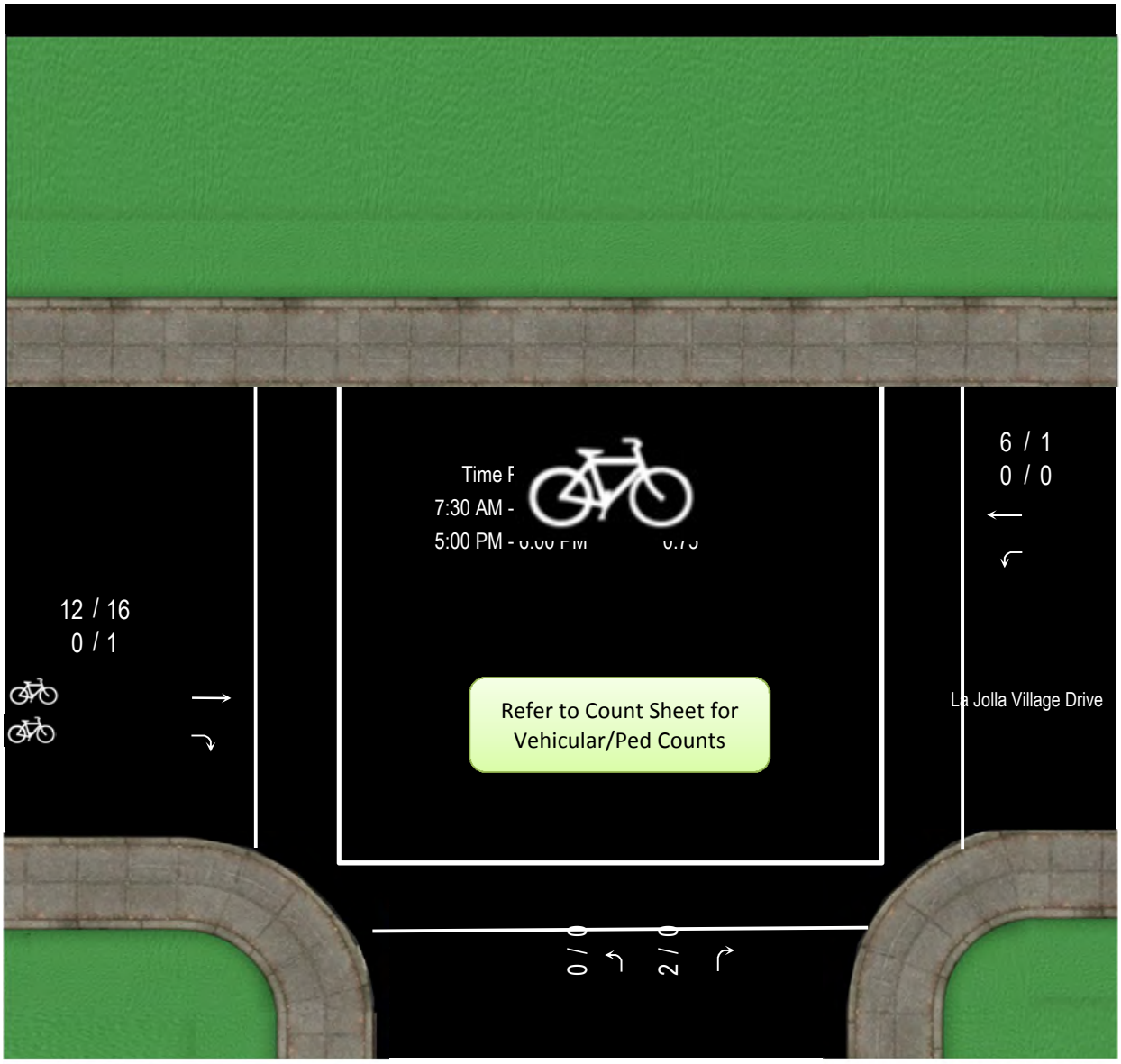
Location: La Jolla Village Drive @ La Jolla Scenic Drive

Date of Count: *Tuesday, May 12, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*



Bike Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: La Jolla Village Drive @ La Jolla Scenic Drive

AM Period (7:00 AM - 9:00 AM)								
		Westbound		Northbound		Eastbound		
		Thru	Left	Right	Left	Right	Thru	TOTAL
7:00 AM		1	0	0	0	0	0	1
7:15 AM		0	0	0	1	0	1	2
7:30 AM		1	0	2	0	0	4	7
7:45 AM		1	0	0	0	0	4	5
8:00 AM		1	0	0	0	0	2	3
8:15 AM		3	0	0	0	0	2	5
8:30 AM		1	0	0	0	0	2	3
8:45 AM		1	0	0	0	0	8	9
Total		9	0	2	1	0	23	35

AM Intersection Peak Hour : **7:30 AM - 8:30 AM** Intersection PHF : **0.71**

		Westbound		Northbound		Eastbound		TOTAL
		Thru	Left	Right	Left	Right	Thru	
Volume		6	0	2	0	0	12	20
PHF		0.50	#####	0.25	#####	#####	0.75	0.71
Movement PHF		0.50		0.25			0.75	0.71

PM Period (4:00 PM - 6:00 PM)								
		Westbound		Northbound		Eastbound		
		Thru	Left	Right	Left	Right	Thru	TOTAL
4:00 PM		0	0	0	0	0	4	4
4:15 PM		1	0	0	0	1	0	2
4:30 PM		1	0	0	0	0	2	3
4:45 PM		0	0	0	0	0	2	2
5:00 PM		0	0	0	0	1	5	6
5:15 PM		0	0	0	0	0	4	4
5:30 PM		1	0	0	0	0	3	4
5:45 PM		0	0	0	0	0	4	4
Total		3	0	0	0	2	24	29

PM Intersection Peak Hour : **5:00 PM - 6:00 PM** Intersection PHF : **0.75**

		Westbound		Northbound		Eastbound		TOTAL
		Thru	Left	Right	Left	Right	Thru	
Volume		1	0	0	0	1	16	18
PHF		0.25	#####	#####	#####	0.25	0.8	0.75
Movement PHF		0.25		#DIV/0!			0.71	0.75

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: La Jolla Village Drive EB Ramp @ Gilman Drive

Date of Count: *Tuesday, May 05, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Kimley»Horn

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: La Jolla Village Drive EB Ramp @ Gilman Drive

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	15	7	0	0	0	11	171	0	33	0	7	244
7:15 AM	0	20	13	0	0	0	19	157	0	34	0	7	250
7:30 AM	0	15	12	0	0	0	24	154	1	41	0	10	257
7:45 AM	0	29	16	0	0	0	25	257	0	51	0	14	392
8:00 AM	1	25	15	0	0	0	29	244	0	46	0	6	366
8:15 AM	0	41	7	0	0	0	22	234	0	75	0	9	388
8:30 AM	0	28	7	0	0	0	26	200	0	112	3	14	390
8:45 AM	0	37	8	0	0	0	31	191	0	58	0	15	340
Total	1	210	85	0	0	0	187	1,608	1	450	3	82	2,627

AM Intersection Peak Hour : **7:45 AM - 8:45 AM** Intersection PHF : **0.98**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	1	123	45	0	0	0	102	935	0	284	3	43	1,536
PHF	0.25	0.75	0.70	#####	#####	#####	0.88	0.91	#####	0.63	0.25	0.77	0.98
Movement PHF		0.88			#DIV/0!			0.92			0.64		0.98

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	0	181	40	0	0	0	7	58	0	152	0	4	442
4:15 PM	0	171	33	0	0	0	10	77	0	188	2	2	483
4:30 PM	0	184	52	0	0	0	14	106	0	181	0	4	541
4:45 PM	0	204	49	0	0	0	17	87	0	168	1	5	531
5:00 PM	0	184	54	0	0	0	10	82	0	179	0	2	511
5:15 PM	0	176	66	0	0	0	9	75	0	170	3	3	502
5:30 PM	0	156	34	0	0	0	19	83	0	163	0	5	460
5:45 PM	4	109	25	0	0	0	8	67	0	185	2	5	405
Total	4	1365	353	0	0	0	94	635	0	1,386	8	30	3,875

PM Intersection Peak Hour : **4:30 PM - 5:30 PM** Intersection PHF : **0.96**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	748	221	0	0	0	50	350	0	698	4	14	2085
PHF	#####	0.917	0.837	#####	#####	#####	0.735	0.825	#####	0.964	0.333	0.7	0.96
Movement PHF		0.96			#DIV/0!			0.83			0.97		0.96

U-Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-1536

Location: La Jolla Village Drive EB Ramp @ Gilman Drive

AM Period (7:00 AM - 9:00 AM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
Total	0	0	0	0	0

AM Intersection Peak Hour : **7:45 AM - 8:45 AM** Intersection PHF : **#DIV/0!**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	0	0	0	0	0
PHF	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Movement PHF	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

PM Period (4:00 PM - 6:00 PM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
4:00 PM	1	0	0	0	1
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	1	0	1
5:30 PM	0	0	1	0	1
5:45 PM	0	0	0	0	0
Total	1	0	2	0	3

PM Intersection Peak Hour : **4:30 PM - 5:30 PM** Intersection PHF : **0.25**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	1	0	0	0	1
PHF	#DIV/0!	#DIV/0!	0.25	#DIV/0!	0.25
Movement PHF	#DIV/0!	#DIV/0!	0.25	#DIV/0!	0.25

Bike Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: La Jolla Village Drive EB Ramp @ Gilman Drive

Date of Count: *Tuesday, May 05, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Bike Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: La Jolla Village Drive EB Ramp @ Gilman Drive

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	1	0	0	0	0	0	5	0	0	0	0	6
7:15 AM	0	0	0	0	0	0	0	8	0	0	0	0	8
7:30 AM	0	1	0	0	0	0	0	16	0	3	0	0	20
7:45 AM	0	0	0	0	0	0	0	8	0	0	0	0	8
8:00 AM	0	0	0	0	0	0	0	10	0	0	0	0	10
8:15 AM	0	1	0	0	0	0	0	17	0	0	0	0	18
8:30 AM	0	1	0	0	0	0	0	12	0	0	0	0	13
8:45 AM	0	0	1	0	0	0	0	18	0	1	0	0	20
Total	0	4	1	0	0	0	0	94	0	4	0	0	103

AM Intersection Peak Hour : **8:00 AM - 9:00 AM** Intersection PHF : **0.76**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	2	1	0	0	0	0	57	0	1	0	0	61
PHF	#####	0.50	0.25	#####	#####	#####	#####	0.79	#####	0.25	#####	#####	0.76
Movement PHF		0.75			#DIV/0!			0.79			0.25		0.76

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	0	5	0	0	0	0	0	4	0	5	1	0	15
4:15 PM	0	5	0	0	0	0	0	2	0	2	0	0	9
4:30 PM	0	7	0	0	0	0	0	5	0	1	0	0	13
4:45 PM	0	7	0	0	0	0	0	3	0	1	0	0	11
5:00 PM	0	6	0	0	0	0	0	3	0	2	0	0	11
5:15 PM	0	4	0	0	0	0	0	2	0	2	0	0	8
5:30 PM	0	19	0	0	0	0	0	2	0	2	0	0	23
5:45 PM	0	15	0	0	0	0	0	1	0	3	0	0	19
Total	0	68	0	0	0	0	0	22	0	18	1	0	109

PM Intersection Peak Hour : **5:00 PM - 6:00 PM** Intersection PHF : **0.66**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	44	0	0	0	0	0	8	0	9	0	0	61
PHF	#####	0.579	#####	#####	#####	#####	#####	0.667	#####	0.75	#####	#####	0.66
Movement PHF		0.58			#DIV/0!			0.67			0.75		0.66

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: La Jolla Village Drive WB Ramp @ Gilman Drive

Date of Count: *Tuesday, May 05, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: La Jolla Village Drive WB Ramp @ Gilman Drive

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	1	14	0	39	0	6	0	80	96	0	0	0	236
7:15 AM	5	21	0	36	0	11	0	96	67	0	0	0	236
7:30 AM	6	24	0	48	0	2	0	92	71	0	0	0	243
7:45 AM	6	35	0	55	0	10	0	178	93	0	0	0	377
8:00 AM	5	35	0	41	0	5	0	125	124	0	0	0	335
8:15 AM	3	27	0	46	0	21	0	122	121	0	0	0	340
8:30 AM	3	22	0	51	0	13	0	139	75	0	0	0	303
8:45 AM	2	40	0	52	0	2	0	137	66	0	0	0	299
Total	31	218	0	368	0	70	0	969	713	0	0	0	2,369

AM Intersection Peak Hour : **7:45 AM - 8:45 AM** Intersection PHF : **0.90**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	17	119	0	193	0	49	0	564	413	0	0	0	1,355
PHF	0.71	0.85	#####	0.88	#####	0.58	#####	0.79	0.83	#####	#####	#####	0.90
Movement PHF		0.83			0.90			0.90			#DIV/0!		0.90

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	10	215	0	22	0	7	0	34	29	0	0	0	317
4:15 PM	10	191	0	14	1	13	0	56	23	0	0	0	308
4:30 PM	5	215	0	20	0	20	0	55	54	0	0	0	369
4:45 PM	7	229	0	28	0	24	0	47	45	0	0	0	380
5:00 PM	12	221	0	28	0	17	0	41	43	0	0	0	362
5:15 PM	7	224	0	19	0	17	0	36	41	0	0	0	344
5:30 PM	9	165	0	20	0	23	0	42	44	0	0	0	303
5:45 PM	11	117	0	23	0	20	0	30	41	0	0	0	242
Total	71	1577	0	174	1	141	0	341	320	0	0	0	2,625

PM Intersection Peak Hour : **4:30 PM - 5:30 PM** Intersection PHF : **0.96**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	31	889	0	95	0	78	0	179	183	0	0	0	1455
PHF	0.65	0.971	#####	0.848	#####	0.813	#####	0.814	0.847	#####	#####	#####	0.96
Movement PHF		0.97			0.83			0.83			#DIV/0!		0.96

U-Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-1536

Location: La Jolla Village Drive WB Ramp @ Gilman Drive

AM Period (7:00 AM - 9:00 AM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
7:00 AM	0	0	2	0	2
7:15 AM	0	0	1	0	1
7:30 AM	0	0	1	0	1
7:45 AM	0	0	0	0	0
8:00 AM	0	0	1	0	1
8:15 AM	0	0	0	0	0
8:30 AM	1	0	0	0	1
8:45 AM	0	0	3	0	3
Total	1	0	8	0	9

AM Intersection Peak Hour : **7:45 AM - 8:45 AM** Intersection PHF : **0.50**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	0	0	2	0	2
PHF	0.25	#DIV/0!	0.25	#DIV/0!	0.50
Movement PHF	0.25	#DIV/0!	0.25	#DIV/0!	0.50

PM Period (4:00 PM - 6:00 PM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	1	0	1
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	1	0	1
5:30 PM	0	0	2	0	2
5:45 PM	0	0	1	0	1
Total	0	0	5	0	5

PM Intersection Peak Hour : **4:30 PM - 5:30 PM** Intersection PHF : **0.50**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	0	0	2	0	2
PHF	#DIV/0!	#DIV/0!	0.5	#DIV/0!	0.50
Movement PHF	#DIV/0!	#DIV/0!	0.50	#DIV/0!	0.50

Bike Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

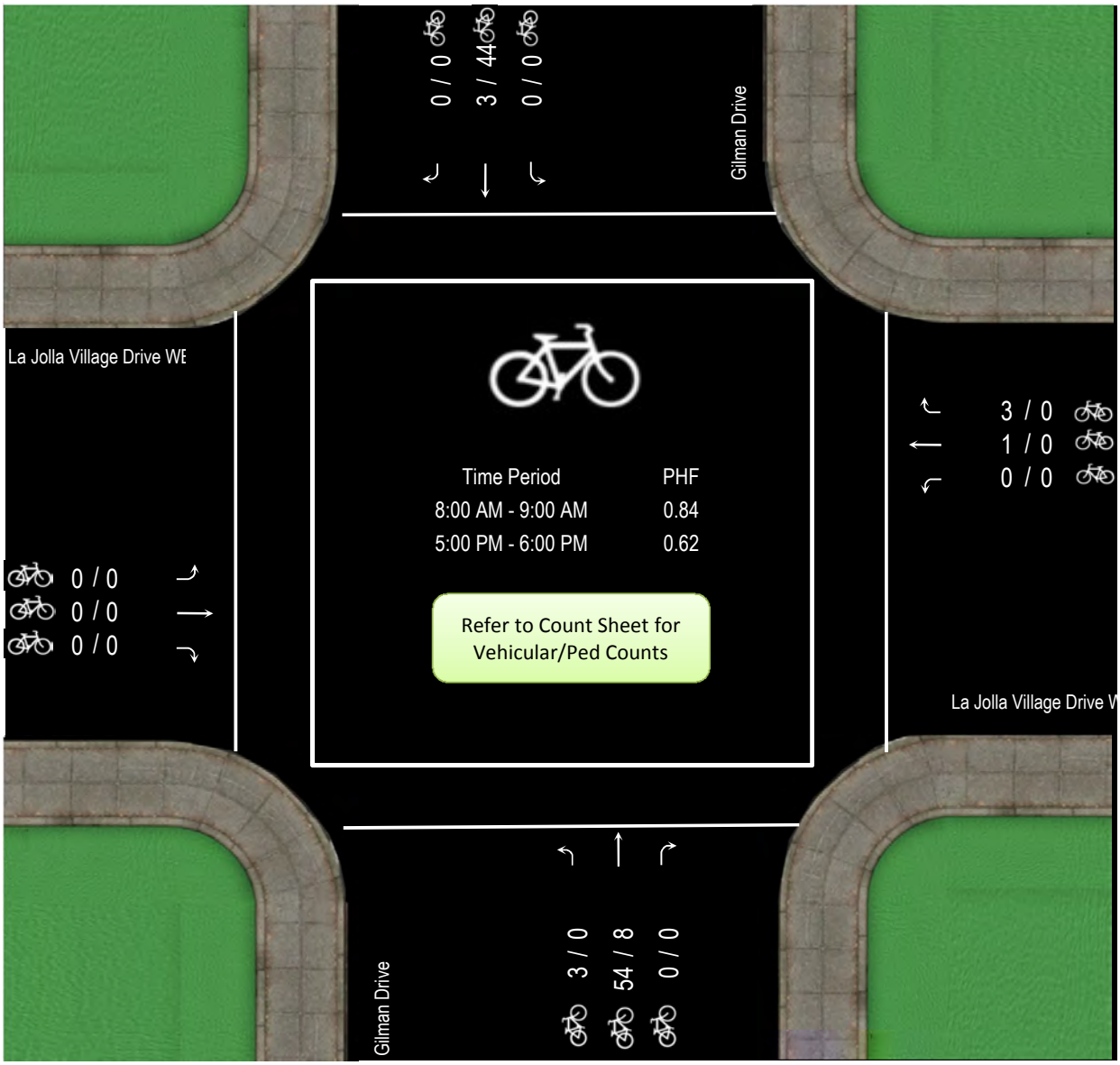
Location: La Jolla Village Drive WB Ramp @ Gilman Drive

Date of Count: *Tuesday, May 05, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*



Bike Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: La Jolla Village Drive WB Ramp @ Gilman Drive

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	1	0	2	0	0	0	4	1	0	0	0	8
7:15 AM	0	0	0	0	0	0	0	8	0	0	0	0	8
7:30 AM	0	1	0	0	0	0	0	15	1	0	0	1	18
7:45 AM	0	0	0	0	0	0	0	8	0	0	0	0	8
8:00 AM	0	0	0	2	0	0	0	9	1	0	0	0	12
8:15 AM	0	1	0	1	0	0	0	16	1	0	0	0	19
8:30 AM	0	1	0	0	1	0	0	12	0	0	0	0	14
8:45 AM	0	1	0	0	0	0	0	17	1	0	0	0	19
Total	0	5	0	5	1	0	0	89	5	0	0	1	106

AM Intersection Peak Hour : **8:00 AM - 9:00 AM** Intersection PHF : **0.84**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	3	0	3	1	0	0	54	3	0	0	0	64
PHF	#####	0.75	#####	0.38	0.25	#####	#####	0.79	0.75	#####	#####	#####	0.84
Movement PHF		0.75			0.50			0.79			#DIV/0!		0.84

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	0	5	0	0	0	0	0	4	0	0	0	0	9
4:15 PM	0	5	0	0	1	0	0	2	0	0	0	0	8
4:30 PM	0	7	0	0	0	0	0	4	1	0	0	0	12
4:45 PM	0	7	0	0	0	0	0	3	0	0	0	0	10
5:00 PM	0	6	0	0	0	0	0	3	0	0	0	0	9
5:15 PM	0	4	0	0	0	0	0	2	0	0	0	0	6
5:30 PM	0	19	0	0	0	0	0	2	0	0	0	0	21
5:45 PM	0	15	0	0	0	0	0	1	0	0	0	0	16
Total	0	68	0	0	1	0	0	21	1	0	0	0	91

PM Intersection Peak Hour : **5:00 PM - 6:00 PM** Intersection PHF : **0.62**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	44	0	0	0	0	0	8	0	0	0	0	52
PHF	#####	0.579	#####	#####	#####	#####	#####	0.667	#####	#####	#####	#####	0.62
Movement PHF		0.58			#DIV/0!			0.67			#DIV/0!		0.62

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: La Jolla Village Drive @ Villa La Jolla Drive

Date of Count: *Wednesday, May 06, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Kimley»Horn

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: La Jolla Village Drive @ Villa La Jolla Drive

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	6	3	44	131	299	48	14	50	35	5	184	17	836
7:15 AM	0	3	29	88	351	44	36	43	27	11	275	27	934
7:30 AM	3	5	32	53	422	40	30	43	31	8	352	28	1,047
7:45 AM	2	13	48	87	466	63	42	47	53	7	350	29	1,207
8:00 AM	1	26	64	95	380	78	52	50	69	6	351	33	1,205
8:15 AM	4	3	57	91	463	60	60	36	49	3	319	21	1,166
8:30 AM	7	9	63	128	464	108	126	47	81	14	282	32	1,361
8:45 AM	13	12	84	120	484	78	73	34	97	5	251	35	1,286
Total	36	74	421	793	3,329	519	433	350	442	59	2,364	222	9,042

AM Intersection Peak Hour : **8:00 AM - 9:00 AM** Intersection PHF : **0.92**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	25	50	268	434	1,791	324	311	167	296	28	1,203	121	5,018
PHF	0.48	0.48	0.80	0.85	0.93	0.75	0.62	0.84	0.76	0.50	0.86	0.86	0.92
Movement PHF		0.79			0.91			0.76			0.87		0.92

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	23	83	166	56	259	103	140	24	116	20	635	8	1,633
4:15 PM	17	109	242	43	270	135	88	17	66	20	385	10	1,402
4:30 PM	19	93	170	60	267	102	109	33	82	5	468	7	1,415
4:45 PM	21	99	168	76	345	116	114	36	92	12	408	14	1,501
5:00 PM	35	110	177	25	292	114	110	38	118	12	490	3	1,524
5:15 PM	29	103	172	37	273	130	83	22	73	9	425	23	1,379
5:30 PM	37	73	167	48	260	115	109	31	109	7	466	10	1,432
5:45 PM	16	46	104	55	294	145	87	32	69	10	451	7	1,316
Total	197	716	1366	400	2,260	960	840	233	725	95	3,728	82	11,602

PM Intersection Peak Hour : **4:00 PM - 5:00 PM** Intersection PHF : **0.91**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	80	384	746	235	1141	456	451	110	356	57	1896	39	5951
PHF	0.87	0.881	0.771	0.773	0.827	0.844	0.805	0.764	0.767	0.713	0.746	0.696	0.91
Movement PHF		0.82			0.85			0.82			0.75		0.91

U-Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-1536

Location: La Jolla Village Drive @ Villa La Jolla Drive

AM Period (7:00 AM - 9:00 AM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
7:00 AM	0	10	0	2	12
7:15 AM	0	0	0	6	6
7:30 AM	0	0	1	8	9
7:45 AM	0	1	0	6	7
8:00 AM	0	0	0	5	5
8:15 AM	0	0	0	2	2
8:30 AM	0	1	0	11	12
8:45 AM	0	0	0	14	14
Total	0	12	1	54	67

AM Intersection Peak Hour : **8:00 AM - 9:00 AM** Intersection PHF : **0.59**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	0	1	0	32	33
PHF	#DIV/0!	0.25	#DIV/0!	0.57	0.59
Movement PHF	#DIV/0!	0.25	#DIV/0!	0.57	0.59

PM Period (4:00 PM - 6:00 PM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
4:00 PM	0	0	0	7	7
4:15 PM	0	0	0	21	21
4:30 PM	0	0	0	13	13
4:45 PM	0	0	0	8	8
5:00 PM	0	0	0	17	17
5:15 PM	0	0	0	19	19
5:30 PM	0	0	0	11	11
5:45 PM	0	0	0	15	15
Total	0	0	0	111	111

PM Intersection Peak Hour : **4:00 PM - 5:00 PM** Intersection PHF : **0.58**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	0	0	0	49	49
PHF	#DIV/0!	#DIV/0!	#DIV/0!	0.583333333	0.58
Movement PHF	#DIV/0!	#DIV/0!	#DIV/0!	0.58	0.58

Bike Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

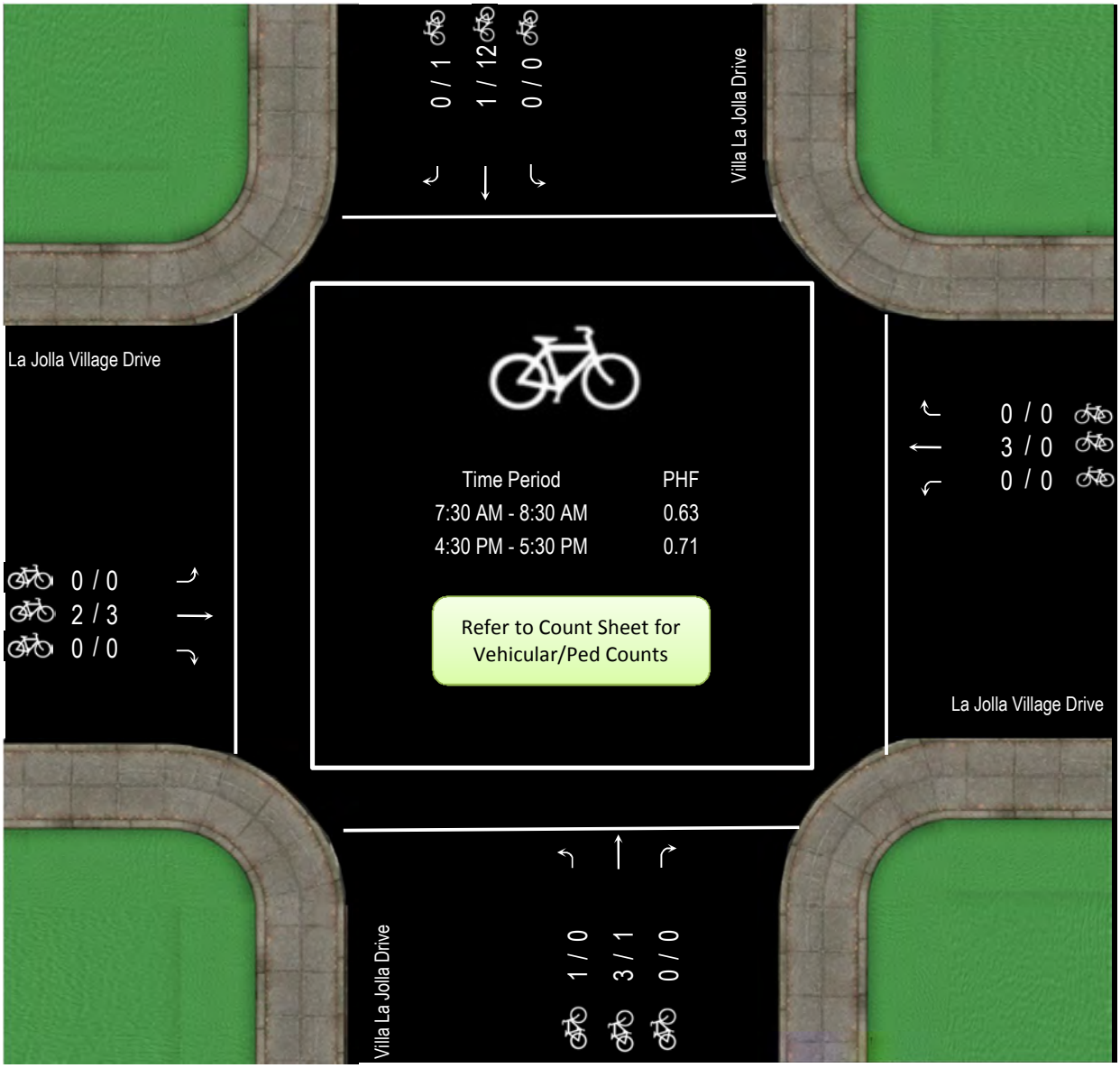
Location: La Jolla Village Drive @ Villa La Jolla Drive

Date of Count: *Wednesday, May 06, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*



Bike Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: La Jolla Village Drive @ Villa La Jolla Drive

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	0	0	0	1	0	0	1	0	0	0	0	2
7:15 AM	0	0	0	0	1	0	0	1	0	0	0	0	2
7:30 AM	0	0	0	0	1	0	0	1	1	0	1	0	4
7:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
8:00 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
8:15 AM	0	1	0	0	1	0	0	1	0	0	1	0	4
8:30 AM	0	1	0	0	0	0	0	0	1	0	0	0	2
8:45 AM	0	1	0	1	0	0	0	0	1	0	0	0	3
Total	0	3	0	1	5	0	0	5	3	0	2	0	19

AM Intersection Peak Hour : **7:30 AM - 8:30 AM** Intersection PHF : **0.63**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	1	0	0	3	0	0	3	1	0	2	0	10
PHF	#####	0.25	#####	#####	0.75	#####	#####	0.75	0.25	#####	0.50	#####	0.63
Movement PHF		0.25			0.75			0.50			0.50		0.63

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	0	2	0	0	0	0	0	2	0	0	0	0	4
4:15 PM	0	2	0	0	0	0	1	0	0	0	-1	0	2
4:30 PM	0	2	0	0	0	0	0	0	0	0	1	0	3
4:45 PM	0	3	0	0	0	0	0	1	0	0	1	0	5
5:00 PM	0	3	0	0	0	0	0	0	0	0	0	0	3
5:15 PM	1	4	0	0	0	0	0	0	0	0	1	0	6
5:30 PM	0	3	0	0	0	0	0	0	0	0	0	0	3
5:45 PM	0	2	0	0	0	0	0	2	0	0	0	0	4
Total	1	21	0	0	0	0	1	5	0	0	2	0	30

PM Intersection Peak Hour : **4:30 PM - 5:30 PM** Intersection PHF : **0.71**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	1	12	0	0	0	0	0	1	0	0	3	0	17
PHF	0.25	0.75	#####	#####	#####	#####	#####	0.25	#####	#####	0.75	#####	0.71
Movement PHF		0.65			#DIV/0!			0.25			0.75		0.71

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: La Jolla Village Drive @ I-5 SB Ramps

Date of Count: *Wednesday, May 06, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: La Jolla Village Drive @ I-5 SB Ramps

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	285	0	120	90	203	0	0	0	0	46	206	0	950
7:15 AM	273	1	178	101	210	0	0	0	0	42	298	0	1,103
7:30 AM	248	0	148	75	267	0	0	0	0	40	374	0	1,152
7:45 AM	310	0	96	172	307	0	0	0	0	52	389	0	1,326
8:00 AM	254	0	89	117	299	0	0	0	0	65	402	0	1,226
8:15 AM	316	0	146	105	298	0	0	0	0	54	382	0	1,301
8:30 AM	341	0	144	22	360	0	0	0	0	47	425	0	1,339
8:45 AM	355	0	180	70	327	0	0	0	0	55	353	0	1,340
Total	2,382	1	1,101	752	2,271	0	0	0	0	401	2,829	0	9,737

AM Intersection Peak Hour : **8:00 AM - 9:00 AM** Intersection PHF : **0.97**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	1,266	0	559	314	1,284	0	0	0	0	221	1,562	0	5,206
PHF	0.89	#####	0.78	0.67	0.89	#####	#####	#####	#####	0.85	0.92	#####	0.97
Movement PHF		0.85			0.96			#DIV/0!			0.94		0.97

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	180	0	118	234	238	0	0	0	0	350	591	0	1,711
4:15 PM	153	0	54	289	295	0	0	0	0	219	496	0	1,506
4:30 PM	142	0	177	297	287	0	0	0	0	224	523	0	1,650
4:45 PM	176	0	202	180	361	0	0	0	0	191	499	0	1,609
5:00 PM	129	0	130	279	302	0	0	0	0	213	564	0	1,617
5:15 PM	162	0	155	339	278	0	0	0	0	192	488	0	1,614
5:30 PM	174	0	79	306	249	0	0	0	0	231	511	0	1,550
5:45 PM	225	0	146	230	269	0	0	0	0	187	455	0	1,512
Total	1341	0	1061	2,154	2,279	0	0	0	0	1,807	4,127	0	12,769

PM Intersection Peak Hour : **4:30 PM - 5:30 PM** Intersection PHF : **0.98**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	609	0	664	1095	1228	0	0	0	0	820	2074	0	6490
PHF	0.87	#####	0.822	0.808	0.85	#####	#####	#####	#####	0.915	0.919	#####	0.98
Movement PHF		0.84			0.94			#DIV/0!			0.93		0.98

U-Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-1536

Location: La Jolla Village Drive @ I-5 SB Ramps

AM Period (7:00 AM - 9:00 AM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
Total	0	0	0	0	0

AM Intersection Peak Hour : **8:00 AM - 9:00 AM** Intersection PHF : **#DIV/0!**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	0	0	0	0	0
PHF	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Movement PHF	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

PM Period (4:00 PM - 6:00 PM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
Total	0	0	0	0	0

PM Intersection Peak Hour : **4:30 PM - 5:30 PM** Intersection PHF : **#DIV/0!**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	0	0	0	0	0
PHF	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Movement PHF	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

Bike Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: La Jolla Village Drive @ I-5 SB Ramps

Date of Count: *Wednesday, May 06, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Bike Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: La Jolla Village Drive @ I-5 SB Ramps

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
7:30 AM	0	0	0	0	1	0	0	0	0	0	1	0	2
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
8:15 AM	0	0	0	0	1	0	0	0	0	0	1	0	2
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	5	0	0	0	0	0	2	0	7

AM Intersection Peak Hour : **7:30 AM - 8:30 AM** Intersection PHF : **0.63**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	0	0	0	3	0	0	0	0	0	2	0	5
PHF	#####	#####	#####	#####	0.75	#####	#####	#####	#####	#####	0.50	#####	0.63
Movement PHF	#DIV/0!			0.75			#DIV/0!			0.50			0.63

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	3	0	3

PM Intersection Peak Hour : **4:30 PM - 5:30 PM** Intersection PHF : **0.75**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	0	0	0	0	0	0	0	0	0	3	0	3
PHF	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	0.75	#####	0.75
Movement PHF	#DIV/0!			#DIV/0!			#DIV/0!			0.75			0.75

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: La Jolla Village Drive @ I-5 NB Ramp

Date of Count: *Wednesday, May 06, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Kimley»Horn

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: La Jolla Village Drive @ I-5 NB Ramp

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	0	0	64	150	0	222	0	143	117	209	0	905
7:15 AM	0	0	0	79	193	0	210	0	118	170	306	0	1,076
7:30 AM	0	0	0	103	242	0	176	0	100	198	324	0	1,143
7:45 AM	0	0	0	113	357	0	200	0	122	173	312	0	1,277
8:00 AM	0	0	0	118	306	0	216	0	110	198	293	0	1,241
8:15 AM	0	0	0	124	298	0	185	0	105	234	294	0	1,240
8:30 AM	0	0	0	133	260	0	179	0	122	239	330	0	1,263
8:45 AM	0	0	0	126	276	0	209	0	121	198	335	0	1,265
Total	0	0	0	860	2,082	0	1,597	0	941	1,527	2,403	0	9,410

AM Intersection Peak Hour : **7:45 AM - 8:45 AM** Intersection PHF : **0.98**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	0	0	488	1,221	0	780	0	459	844	1,229	0	5,021
PHF	#####	#####	#####	0.92	0.86	#####	0.90	#####	0.94	0.88	0.93	#####	0.98
Movement PHF	#DIV/0!			0.91			0.95			0.91			0.98

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	0	0	0	183	401	0	46	0	71	373	336	0	1,410
4:15 PM	0	0	0	152	512	0	55	0	72	257	293	0	1,341
4:30 PM	0	0	0	122	523	0	62	0	61	357	343	0	1,468
4:45 PM	0	0	0	127	445	0	53	0	96	320	381	0	1,422
5:00 PM	0	0	0	152	512	0	69	0	69	311	383	0	1,496
5:15 PM	0	0	0	143	554	0	74	0	63	260	383	0	1,477
5:30 PM	0	0	0	133	489	0	93	0	66	260	330	0	1,371
5:45 PM	0	0	0	114	437	0	59	0	62	237	364	0	1,273
Total	0	0	0	1,126	3,873	0	511	0	560	2,375	2,813	0	11,258

PM Intersection Peak Hour : **4:30 PM - 5:30 PM** Intersection PHF : **0.98**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	0	0	544	2034	0	258	0	289	1248	1490	0	5863
PHF	#####	#####	#####	0.895	0.918	#####	0.872	#####	0.753	0.874	0.973	#####	0.98
Movement PHF	#DIV/0!			0.92			0.92			0.98			0.98

U-Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-1536

Location: La Jolla Village Drive @ I-5 NB Ramp

AM Period (7:00 AM - 9:00 AM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
7:00 AM	0	1	0	0	1
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
Total	0	1	0	0	1

AM Intersection Peak Hour : **7:45 AM - 8:45 AM** Intersection PHF : **#DIV/0!**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	0	0	0	0	0
PHF	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Movement PHF	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

PM Period (4:00 PM - 6:00 PM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
Total	0	0	0	0	0

PM Intersection Peak Hour : **4:30 PM - 5:30 PM** Intersection PHF : **#DIV/0!**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	0	0	0	0	0
PHF	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Movement PHF	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

Bike Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

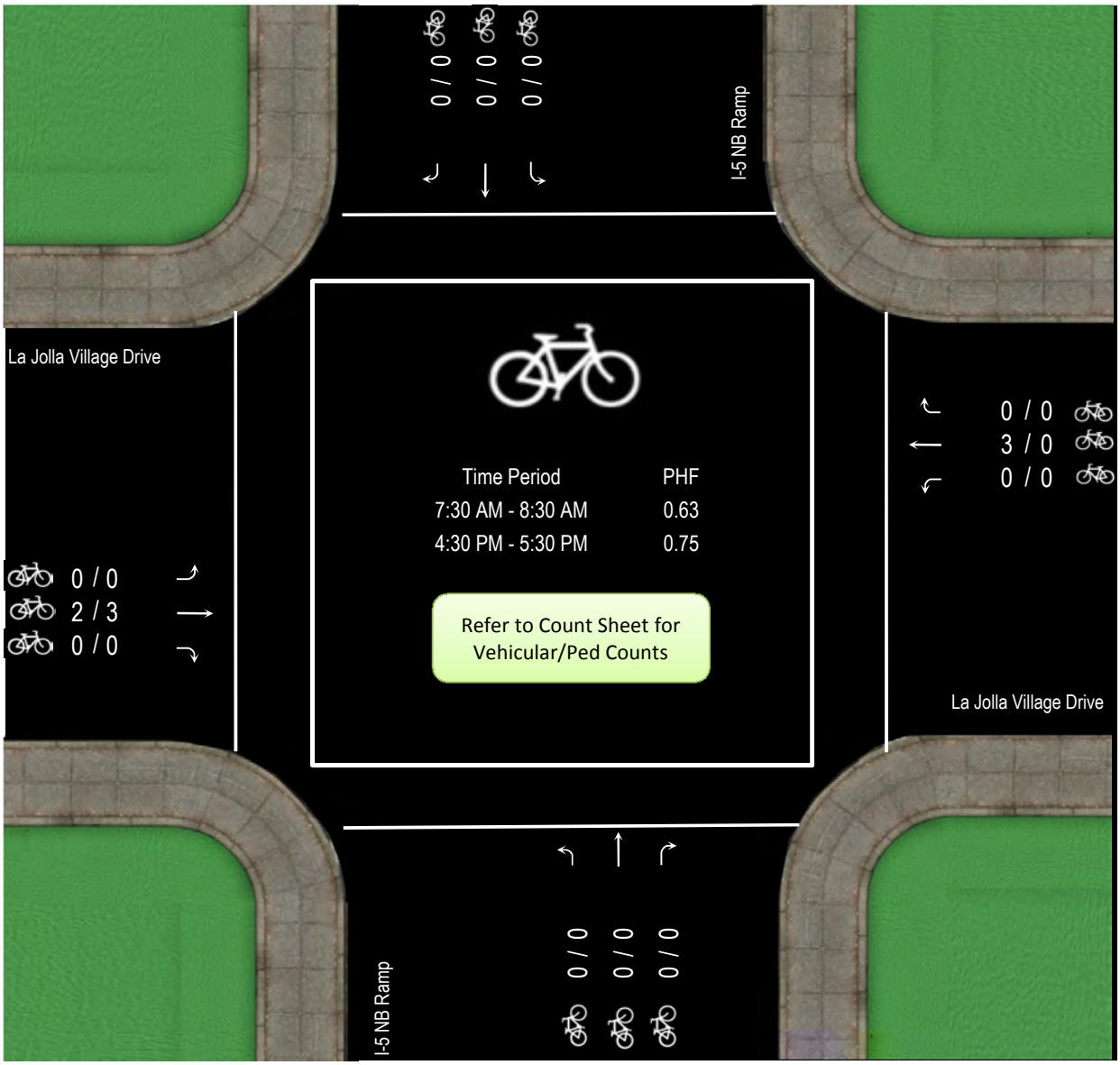
Location: La Jolla Village Drive @ I-5 NB Ramp

Date of Count: *Wednesday, May 06, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*



Bike Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: La Jolla Village Drive @ I-5 NB Ramp

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
7:30 AM	0	0	0	0	1	0	0	0	0	0	1	0	2
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
8:15 AM	0	0	0	0	1	0	0	0	0	0	1	0	2
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	5	0	0	0	0	0	2	0	7

AM Intersection Peak Hour : **7:30 AM - 8:30 AM** Intersection PHF : **0.63**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	0	0	0	3	0	0	0	0	0	2	0	5
PHF	#####	#####	#####	#####	0.75	#####	#####	#####	#####	#####	0.50	#####	0.63
Movement PHF	#DIV/0!			0.75			#DIV/0!			0.50			0.63

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	3	0	3

PM Intersection Peak Hour : **4:30 PM - 5:30 PM** Intersection PHF : **0.75**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	0	0	0	0	0	0	0	0	0	3	0	3
PHF	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	0.75	#####	0.75
Movement PHF	#DIV/0!			#DIV/0!			#DIV/0!			0.75			0.75

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: La Jolla Village Drive @ Lebon Drive

Date of Count: *Tuesday, May 05, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Kimley»Horn

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: La Jolla Village Drive @ Lebon Drive

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	3	0	4	2	188	19	39	0	73	22	405	0	755
7:15 AM	0	1	0	1	150	16	28	1	61	8	400	0	666
7:30 AM	1	0	0	0	154	14	31	0	69	15	507	0	791
7:45 AM	7	1	0	0	322	26	54	1	134	22	376	0	943
8:00 AM	5	1	2	0	291	21	53	2	98	34	206	1	714
8:15 AM	5	1	6	4	283	74	26	1	138	32	344	0	914
8:30 AM	6	0	2	2	306	30	40	1	135	40	348	0	910
8:45 AM	7	0	3	5	321	21	51	3	154	37	432	0	1,034
Total	34	4	17	14	2,015	221	322	9	862	210	3,018	1	6,727

AM Intersection Peak Hour : **8:00 AM - 9:00 AM** Intersection PHF : **0.86**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	23	2	13	11	1,201	146	170	7	525	143	1,330	1	3,572
PHF	0.82	0.50	0.54	0.55	0.94	0.49	0.80	0.58	0.85	0.89	0.77	0.25	0.86
Movement PHF		0.79			0.94			0.84			0.79		0.86

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	2	1	5	2	508	52	35	2	83	48	380	3	1,121
4:15 PM	0	0	0	2	500	64	29	1	102	43	458	2	1,201
4:30 PM	0	0	4	4	459	47	25	0	143	52	497	1	1,232
4:45 PM	4	1	3	2	519	106	30	0	150	75	509	3	1,402
5:00 PM	0	1	1	0	403	71	26	5	90	73	517	2	1,189
5:15 PM	2	0	0	0	439	70	33	1	94	67	554	2	1,262
5:30 PM	4	0	2	0	400	96	22	3	86	57	517	6	1,193
5:45 PM	1	0	0	1	246	45	12	0	44	43	526	5	923
Total	13	3	15	11	3,474	551	212	12	792	458	3,958	24	9,523

PM Intersection Peak Hour : **4:30 PM - 5:30 PM** Intersection PHF : **0.91**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	6	2	8	6	1820	294	114	6	477	267	2077	8	5085
PHF	0.38	0.5	0.5	0.375	0.877	0.693	0.864	0.3	0.795	0.89	0.937	0.667	0.91
Movement PHF		0.50			0.85			0.83			0.94		0.91

U-Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-1536

Location: La Jolla Village Drive @ Lebon Drive

AM Period (7:00 AM - 9:00 AM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
7:00 AM	0	1	0	2	3
7:15 AM	1	0	0	0	1
7:30 AM	0	0	0	0	0
7:45 AM	1	0	0	0	1
8:00 AM	1	1	0	0	2
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	3	0	0	0	3
Total	6	2	0	2	10

AM Intersection Peak Hour : **8:00 AM - 9:00 AM** Intersection PHF : **0.42**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	2	1	0	2	5
PHF	0.33	0.25	#DIV/0!	#DIV/0!	0.42
Movement PHF	0.33	0.25	#DIV/0!	#DIV/0!	0.42

PM Period (4:00 PM - 6:00 PM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
4:00 PM	0	0	0	2	2
4:15 PM	0	1	0	2	3
4:30 PM	0	0	0	1	1
4:45 PM	1	0	0	0	1
5:00 PM	0	1	0	2	3
5:15 PM	0	0	0	4	4
5:30 PM	2	0	0	1	3
5:45 PM	0	0	0	1	1
Total	3	2	0	13	18

PM Intersection Peak Hour : **4:30 PM - 5:30 PM** Intersection PHF : **0.56**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	1	1	0	7	9
PHF	0.25	0.25	#DIV/0!	0.4375	0.56
Movement PHF	0.25	0.25	#DIV/0!	0.44	0.56

Bike Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

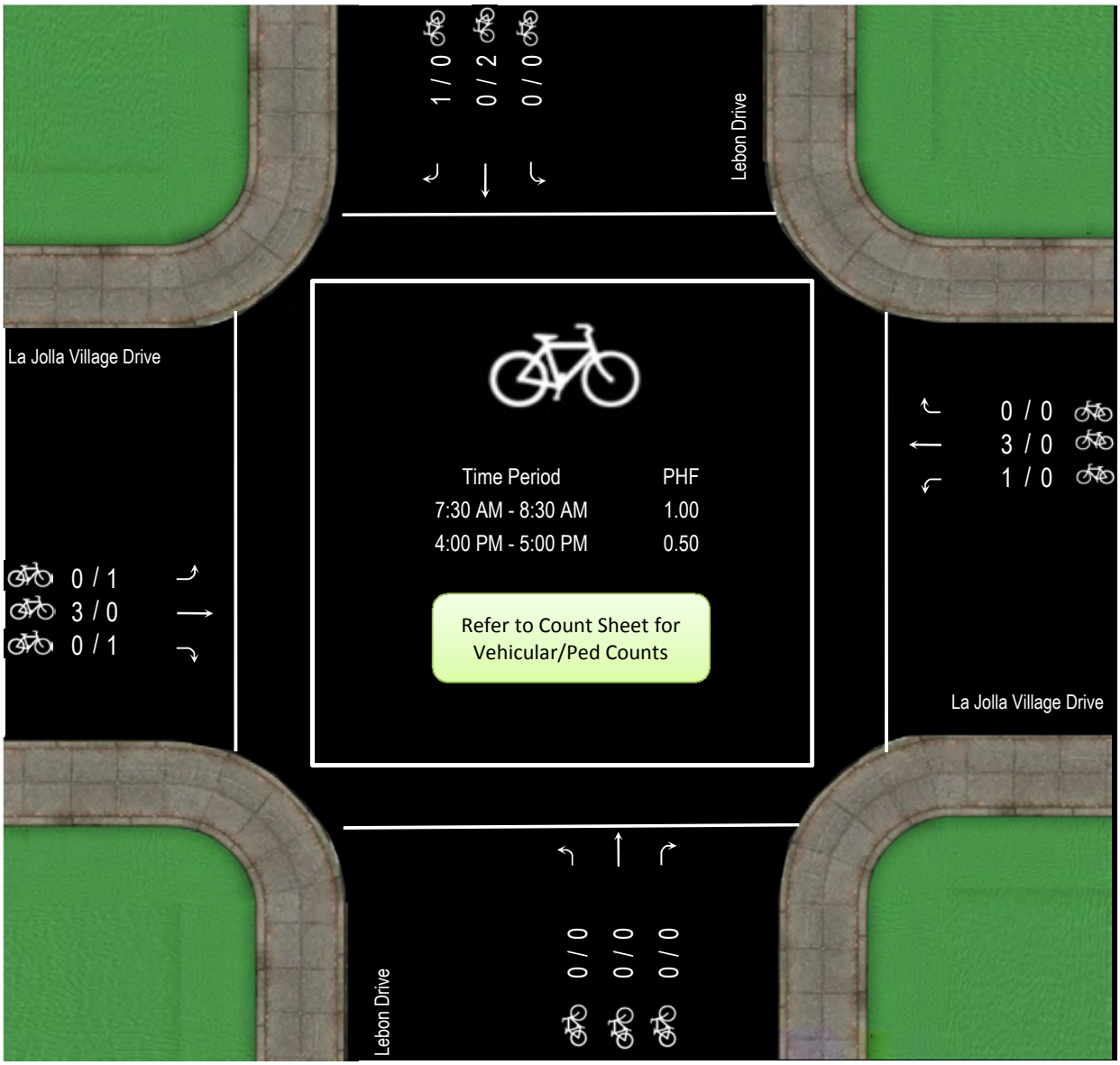
Location: La Jolla Village Drive @ Lebon Drive

Date of Count: *Tuesday, May 05, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*



Kimley»Horn

Bike Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: La Jolla Village Drive @ Lebon Drive

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	0	1	0	0	0	1
7:30 AM	1	0	0	0	0	0	0	0	0	0	1	0	2
7:45 AM	0	0	0	0	0	1	0	0	0	0	1	0	2
8:00 AM	0	0	0	0	2	0	0	0	0	0	0	0	2
8:15 AM	0	0	0	0	1	0	0	0	0	0	1	0	2
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	1	1	0	0	0	0	2
Total	1	0	0	0	4	1	1	1	1	0	3	0	12

AM Intersection Peak Hour : **7:30 AM - 8:30 AM** Intersection PHF : **1.00**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	1	0	0	0	3	1	0	0	0	0	3	0	8
PHF	0.25	#####	#####	#####	0.38	0.25	#####	#####	#####	#####	0.75	#####	1.00
Movement PHF		0.25			0.50			#DIV/0!			0.75		1.00

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	0	2	0	0	0	0	0	0	0	0	0	0	2
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	1	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	1	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
Total	0	3	0	0	0	0	0	0	0	1	0	1	5

PM Intersection Peak Hour : **4:00 PM - 5:00 PM** Intersection PHF : **0.50**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	2	0	0	0	0	0	0	0	1	0	1	4
PHF	#####	0.25	#####	#####	#####	#####	#####	#####	#####	0.25	#####	0.25	0.50
Movement PHF		0.25			#DIV/0!			#DIV/0!			0.50		0.50

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: La Jolla Village Drive @ Regents Road

Date of Count: *Tuesday, May 05, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Kimley»Horn

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: La Jolla Village Drive @ Regents Road

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	29	18	17	23	132	9	16	66	37	11	254	184	796
7:15 AM	41	48	29	24	138	20	14	98	46	2	244	182	886
7:30 AM	89	51	37	29	183	22	35	156	60	5	302	231	1,200
7:45 AM	99	36	24	24	166	13	44	150	88	3	247	180	1,074
8:00 AM	28	16	12	6	82	8	15	51	25	3	157	102	505
8:15 AM	67	18	27	23	145	18	32	98	57	11	221	141	858
8:30 AM	58	18	29	20	107	17	35	104	68	6	215	166	843
8:45 AM	60	25	23	35	151	16	28	90	64	15	291	174	972
Total	471	230	198	184	1,104	123	219	813	445	56	1,931	1,360	7,134

AM Intersection Peak Hour : **7:00 AM - 8:00 AM** Intersection PHF : **0.82**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	258	153	107	100	619	64	109	470	231	21	1,047	777	3,956
PHF	0.65	0.75	0.72	0.86	0.85	0.73	0.62	0.75	0.66	0.48	0.87	0.84	0.82
Movement PHF		0.73			0.84			0.72			0.86		0.82

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	194	184	50	24	346	57	12	49	63	15	300	98	1,392
4:15 PM	227	170	57	19	441	52	13	46	84	11	345	127	1,592
4:30 PM	226	158	34	22	445	82	14	89	76	10	391	114	1,661
4:45 PM	200	174	60	13	362	75	16	66	85	27	427	78	1,583
5:00 PM	220	243	48	16	346	113	14	43	42	53	349	137	1,624
5:15 PM	208	201	50	19	333	100	13	44	46	37	421	111	1,583
5:30 PM	173	175	43	22	344	86	9	58	61	23	400	105	1,499
5:45 PM	147	149	48	18	302	91	28	38	73	37	390	104	1,425
Total	1595	1454	390	153	2,919	656	119	433	530	213	3,023	874	12,359

PM Intersection Peak Hour : **4:15 PM - 5:15 PM** Intersection PHF : **0.97**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	873	745	199	70	1594	322	57	244	287	101	1512	456	6460
PHF	0.96	0.766	0.829	0.795	0.896	0.712	0.891	0.685	0.844	0.476	0.885	0.832	0.97
Movement PHF		0.89			0.90			0.82			0.96		0.97

U-Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-1536

Location: La Jolla Village Drive @ Regents Road

AM Period (7:00 AM - 9:00 AM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	1	3	4
8:30 AM	0	0	0	3	3
8:45 AM	0	0	0	6	6
Total	0	0	1	12	13

AM Intersection Peak Hour : **7:00 AM - 8:00 AM** Intersection PHF : **#DIV/0!**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	0	0	0	0	0
PHF	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Movement PHF	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

PM Period (4:00 PM - 6:00 PM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
4:00 PM	0	1	0	7	8
4:15 PM	1	0	0	5	6
4:30 PM	1	0	0	11	12
4:45 PM	0	1	0	10	11
5:00 PM	0	0	0	6	6
5:15 PM	0	1	0	18	19
5:30 PM	0	0	0	13	13
5:45 PM	0	0	1	7	8
Total	2	3	1	77	83

PM Intersection Peak Hour : **4:15 PM - 5:15 PM** Intersection PHF : **0.73**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	2	1	0	32	35
PHF	0.50	0.25	#DIV/0!	0.727272727	0.73
Movement PHF	0.50	0.25	#DIV/0!	0.73	0.73

Bike Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: La Jolla Village Drive @ Regents Road

Date of Count: *Tuesday, May 05, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Bike Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: La Jolla Village Drive @ Regents Road

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	4	0	0	1	0	0	1	0	0	0	0	6
7:15 AM	0	5	0	0	1	0	0	5	0	0	0	0	11
7:30 AM	0	1	0	0	0	0	0	4	0	0	1	0	6
7:45 AM	0	2	0	0	1	0	0	13	0	0	1	0	17
8:00 AM	0	1	0	0	1	0	0	12	0	0	0	0	14
8:15 AM	0	1	0	0	0	0	0	9	0	0	1	0	11
8:30 AM	0	1	0	0	0	0	0	9	0	0	0	0	10
8:45 AM	0	0	0	0	0	0	0	5	0	0	1	0	6
Total	0	15	0	0	4	0	0	58	0	0	4	0	81

AM Intersection Peak Hour : **7:45 AM - 8:45 AM** Intersection PHF : **0.76**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	5	0	0	2	0	0	43	0	0	2	0	52
PHF	#####	0.63	#####	#####	0.50	#####	#####	0.83	#####	#####	0.50	#####	0.76
Movement PHF		0.63			0.50			0.83			0.50		0.76

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	0	1	0	0	0	0	0	3	0	0	1	0	5
4:15 PM	0	7	0	0	0	0	0	4	0	0	1	0	12
4:30 PM	0	2	0	0	1	0	0	0	0	0	0	0	3
4:45 PM	0	6	0	0	0	0	0	2	0	0	1	0	9
5:00 PM	0	8	0	0	1	0	0	1	0	0	1	0	11
5:15 PM	0	9	0	0	0	0	0	1	0	0	0	0	10
5:30 PM	0	7	0	0	1	0	0	6	0	0	1	0	15
5:45 PM	0	11	0	0	1	0	0	1	0	0	1	0	14
Total	0	51	0	0	4	0	0	18	0	0	6	0	79

PM Intersection Peak Hour : **5:00 PM - 6:00 PM** Intersection PHF : **0.83**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	35	0	0	3	0	0	9	0	0	3	0	50
PHF	#####	0.795	#####	#####	0.75	#####	#####	0.375	#####	#####	0.75	#####	0.83
Movement PHF		0.80			0.75			0.38			0.75		0.83

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

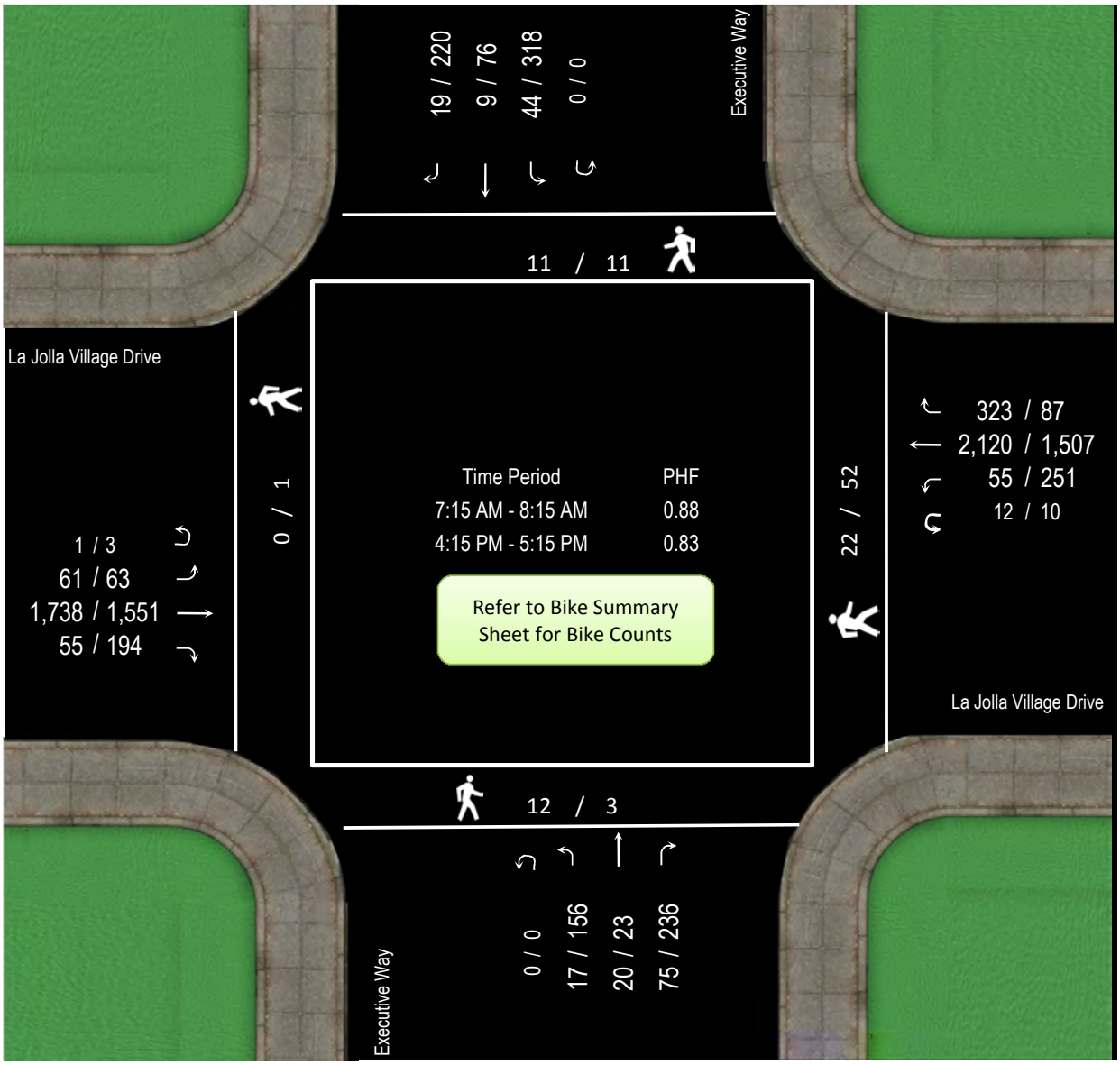
Location: La Jolla Village Drive @ Executive Way

Date of Count: *Tuesday, May 05, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*



Kimley»Horn

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: La Jolla Village Drive @ Executive Way

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	4	3	8	52	352	17	9	1	4	12	225	9	696
7:15 AM	3	2	5	56	613	8	15	3	3	10	379	10	1,107
7:30 AM	9	1	10	93	452	14	23	5	5	11	452	13	1,088
7:45 AM	4	4	19	80	626	13	20	6	4	15	465	28	1,284
8:00 AM	3	2	10	94	429	20	17	6	5	19	442	10	1,057
8:15 AM	7	2	14	92	381	20	14	9	7	19	329	23	917
8:30 AM	12	7	15	72	506	11	15	4	8	11	375	17	1,053
8:45 AM	9	7	14	59	461	28	17	7	8	25	384	13	1,032
Total	51	28	95	598	3,820	131	130	41	44	122	3,051	123	8,234

AM Intersection Peak Hour : **7:15 AM - 8:15 AM** Intersection PHF : **0.88**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	19	9	44	323	2,120	55	75	20	17	55	1,738	61	4,536
PHF	0.53	0.56	0.58	0.86	0.85	0.69	0.82	0.83	0.85	0.72	0.93	0.54	0.88
Movement PHF		0.67			0.87			0.85			0.91		0.88

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	54	24	111	22	473	42	65	3	32	44	295	25	1,190
4:15 PM	53	13	79	29	386	48	66	3	38	48	321	14	1,098
4:30 PM	49	18	79	20	236	68	63	8	46	45	478	21	1,131
4:45 PM	55	17	68	22	314	77	48	7	34	55	327	13	1,037
5:00 PM	63	28	92	16	571	58	59	5	38	46	425	15	1,416
5:15 PM	49	26	91	16	188	60	59	9	31	48	390	18	985
5:30 PM	43	19	80	16	316	82	56	9	39	51	423	11	1,145
5:45 PM	36	18	64	25	365	57	48	9	35	58	233	15	963
Total	402	163	664	166	2,849	492	464	53	293	395	2,892	132	8,965

PM Intersection Peak Hour : **4:15 PM - 5:15 PM** Intersection PHF : **0.83**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	220	76	318	87	1507	251	236	23	156	194	1551	63	4682
PHF	0.87	0.679	0.864	0.75	0.66	0.815	0.894	0.719	0.848	0.882	0.811	0.75	0.83
Movement PHF		0.84			0.72			0.89			0.83		0.83

U-Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-1536

Location: La Jolla Village Drive @ Executive Way

AM Period (7:00 AM - 9:00 AM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
7:00 AM	0	0	0	0	0
7:15 AM	0	4	0	0	4
7:30 AM	0	4	0	0	4
7:45 AM	0	1	0	0	1
8:00 AM	0	3	0	1	4
8:15 AM	0	8	0	0	8
8:30 AM	0	4	0	0	4
8:45 AM	0	4	0	2	6
Total	0	28	0	3	31

AM Intersection Peak Hour : **7:15 AM - 8:15 AM** Intersection PHF : **0.81**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	0	12	0	1	13
PHF	#DIV/0!	0.75	#DIV/0!	0.25	0.81
Movement PHF	#DIV/0!	0.75	#DIV/0!	0.25	0.81

PM Period (4:00 PM - 6:00 PM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
4:00 PM	0	4	0	1	5
4:15 PM	0	2	0	0	2
4:30 PM	0	7	0	1	8
4:45 PM	0	1	0	2	3
5:00 PM	0	0	0	0	0
5:15 PM	0	2	0	1	3
5:30 PM	0	0	0	1	1
5:45 PM	0	1	0	0	1
Total	0	17	0	6	23

PM Intersection Peak Hour : **4:15 PM - 5:15 PM** Intersection PHF : **0.41**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	0	10	0	3	13
PHF	#DIV/0!	0.357142857	#DIV/0!	0.375	0.41
Movement PHF	#DIV/0!	0.36	#DIV/0!	0.38	0.41

Bike Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: La Jolla Village Drive @ Executive Way

Date of Count: *Tuesday, May 05, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Kimley»Horn

Bike Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: La Jolla Village Drive @ Executive Way

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	0	0	0	1	0	0	1	0	0	0	0	2
7:15 AM	0	0	0	0	2	0	0	0	0	0	0	0	2
7:30 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
7:45 AM	0	0	0	0	1	0	0	0	0	0	3	0	4
8:00 AM	0	0	0	0	1	0	0	0	0	0	1	0	2
8:15 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
8:30 AM	0	0	0	1	0	0	0	1	0	0	2	0	4
8:45 AM	0	0	0	0	0	0	0	0	0	0	2	0	2
Total	0	0	0	1	5	0	0	2	0	0	10	0	18

AM Intersection Peak Hour : **7:45 AM - 8:45 AM** Intersection PHF : **0.69**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	0	0	1	2	0	0	1	0	0	7	0	11
PHF	#####	#####	#####	0.25	0.50	#####	#####	0.25	#####	#####	0.58	#####	0.69
Movement PHF	#DIV/0!			0.75			0.25			0.58			0.69

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	0	0	0	0	1	0	0	0	0	0	1	0	2
4:15 PM	0	0	0	0	1	0	0	0	0	0	1	0	2
4:30 PM	0	0	0	0	2	0	0	0	0	0	0	0	2
4:45 PM	0	0	0	0	1	0	0	0	0	0	1	0	2
5:00 PM	0	0	0	0	2	0	0	0	0	0	1	0	3
5:15 PM	0	1	0	0	2	0	0	0	0	0	0	0	3
5:30 PM	0	0	0	0	1	0	0	0	0	0	1	0	2
5:45 PM	0	0	0	0	2	0	0	1	0	0	1	0	4
Total	0	1	0	0	12	0	0	1	0	0	6	0	20

PM Intersection Peak Hour : **5:00 PM - 6:00 PM** Intersection PHF : **0.75**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	1	0	0	7	0	0	1	0	0	3	0	12
PHF	#####	0.25	#####	#####	0.875	#####	#####	0.25	#####	#####	0.75	#####	0.75
Movement PHF		0.25			0.88			0.25			0.75		0.75

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: La Jolla Village Drive @ Town Center Drive

Date of Count: *Tuesday, May 05, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Kimley»Horn

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: La Jolla Village Drive @ Town Center Drive

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	4	3	32	256	410	28	39	15	7	6	188	48	1,036
7:15 AM	7	6	43	190	660	28	59	27	14	10	345	48	1,437
7:30 AM	8	4	51	276	522	53	82	91	33	11	334	144	1,609
7:45 AM	9	2	56	253	702	34	97	84	9	18	359	128	1,751
8:00 AM	7	9	44	270	508	55	75	39	31	11	415	46	1,510
8:15 AM	9	6	44	303	472	35	34	59	20	10	307	48	1,347
8:30 AM	7	5	39	322	565	46	45	47	21	12	378	19	1,506
8:45 AM	7	10	69	297	511	59	40	57	34	11	328	80	1,503
Total	58	45	378	2,167	4,350	338	471	419	169	89	2,654	561	11,699

AM Intersection Peak Hour : **7:15 AM - 8:15 AM** Intersection PHF : **0.90**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	31	21	194	989	2,392	170	313	241	87	50	1,453	366	6,307
PHF	0.86	0.58	0.87	0.90	0.85	0.77	0.81	0.66	0.66	0.69	0.88	0.64	0.90
Movement PHF		0.92			0.90			0.78			0.93		0.90

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	24	74	200	55	493	59	129	11	24	12	455	8	1,544
4:15 PM	26	64	217	35	404	61	75	16	35	27	434	7	1,401
4:30 PM	29	57	169	51	271	87	111	17	31	20	591	16	1,450
4:45 PM	26	97	238	52	365	60	118	17	23	24	409	11	1,440
5:00 PM	31	112	188	51	573	79	152	11	41	25	542	9	1,814
5:15 PM	33	99	209	47	193	62	89	15	40	22	513	7	1,329
5:30 PM	25	85	199	69	357	67	80	14	32	30	526	3	1,487
5:45 PM	22	84	224	67	379	85	104	11	47	14	327	5	1,369
Total	216	672	1644	427	3,035	560	858	112	273	174	3,797	66	11,834

PM Intersection Peak Hour : **4:15 PM - 5:15 PM** Intersection PHF : **0.84**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	112	330	812	189	1613	287	456	61	130	96	1976	43	6105
PHF	0.90	0.737	0.853	0.909	0.704	0.825	0.75	0.897	0.793	0.889	0.836	0.672	0.84
Movement PHF		0.87			0.74			0.79			0.84		0.84

U-Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-1536

Location: La Jolla Village Drive @ Town Center Drive

AM Period (7:00 AM - 9:00 AM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
7:00 AM	0	0	0	0	0
7:15 AM	0	1	0	0	1
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
Total	0	1	0	0	1

AM Intersection Peak Hour : **7:15 AM - 8:15 AM** Intersection PHF : **0.25**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	0	1	0	0	1
PHF	#DIV/0!	0.25	#DIV/0!	#DIV/0!	0.25
Movement PHF	#DIV/0!	0.25	#DIV/0!	#DIV/0!	0.25

PM Period (4:00 PM - 6:00 PM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
4:00 PM	0	1	0	0	1
4:15 PM	0	1	0	0	1
4:30 PM	0	1	0	0	1
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
Total	0	3	0	0	3

PM Intersection Peak Hour : **4:15 PM - 5:15 PM** Intersection PHF : **0.50**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	0	2	0	0	2
PHF	#DIV/0!	0.5	#DIV/0!	#DIV/0!	0.50
Movement PHF	#DIV/0!	0.50	#DIV/0!	#DIV/0!	0.50

Bike Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: La Jolla Village Drive @ Town Center Drive

Date of Count: *Tuesday, May 05, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Bike Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: La Jolla Village Drive @ Town Center Drive

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	2	0	0	0	0	0	0	0	2
7:30 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
7:45 AM	0	0	0	0	1	0	0	0	0	0	3	0	4
8:00 AM	0	0	0	0	1	0	0	0	0	0	1	0	2
8:15 AM	0	0	0	0	0	0	0	1	0	0	1	0	2
8:30 AM	0	0	0	0	1	0	0	1	0	0	2	0	4
8:45 AM	0	0	0	0	0	0	0	0	0	0	2	0	2
Total	0	0	0	0	6	0	0	2	0	0	10	0	18

AM Intersection Peak Hour : **7:45 AM - 8:45 AM** Intersection PHF : **0.75**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	0	0	0	3	0	0	2	0	0	7	0	12
PHF	#####	#####	#####	#####	0.75	#####	#####	0.50	#####	#####	0.58	#####	0.75
Movement PHF		#DIV/0!			0.75			0.50			0.58		0.75

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	0	0	0	0	1	0	0	0	0	0	1	0	2
4:15 PM	0	0	0	0	1	0	0	0	0	0	1	0	2
4:30 PM	0	1	0	0	2	0	0	0	0	0	0	0	3
4:45 PM	0	0	0	0	1	0	0	0	0	0	1	0	2
5:00 PM	0	1	0	0	2	0	0	1	0	0	1	0	5
5:15 PM	1	2	0	0	1	0	0	0	0	0	0	0	4
5:30 PM	0	1	0	0	1	0	0	0	0	0	1	0	3
5:45 PM	0	2	0	0	2	0	0	1	0	0	1	0	6
Total	1	7	0	0	11	0	0	2	0	0	6	0	27

PM Intersection Peak Hour : **5:00 PM - 6:00 PM** Intersection PHF : **0.75**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	1	6	0	0	6	0	0	2	0	0	3	0	18
PHF	0.25	0.75	#####	#####	0.75	#####	#####	0.5	#####	#####	0.75	#####	0.75
Movement PHF		0.58			0.75			0.50			0.75		0.75

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Miramar Road @ I-805 SB Ramps

Date of Count: *Tuesday, May 05, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Miramar Road @ I-805 SB Ramps

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	299	0	143	92	395	0	0	0	0	64	195	0	1,188
7:15 AM	364	0	145	120	515	0	0	0	0	87	361	0	1,592
7:30 AM	360	0	140	110	491	0	0	0	0	128	339	0	1,568
7:45 AM	523	0	209	149	466	0	0	0	0	121	391	0	1,859
8:00 AM	363	0	146	118	470	0	0	0	0	105	429	0	1,631
8:15 AM	380	0	180	96	430	0	0	0	0	81	304	0	1,471
8:30 AM	455	0	160	132	478	0	0	0	0	89	373	0	1,687
8:45 AM	471	0	187	128	396	1	0	0	0	98	339	0	1,620
Total	3,215	0	1,310	945	3,641	1	0	0	0	773	2,731	0	12,616

AM Intersection Peak Hour : **7:15 AM - 8:15 AM** Intersection PHF : **0.89**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	1,610	0	640	497	1,942	0	0	0	0	441	1,520	0	6,650
PHF	0.77	#####	0.77	0.83	0.94	#####	#####	#####	#####	0.86	0.89	#####	0.89
Movement PHF		0.77			0.96			#DIV/0!			0.92		0.89

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	63	0	45	145	545	0	0	0	0	267	518	0	1,583
4:15 PM	89	0	53	151	412	0	0	0	0	232	495	0	1,432
4:30 PM	88	0	50	179	322	0	0	0	0	255	617	0	1,511
4:45 PM	122	0	67	184	355	0	0	0	0	253	512	0	1,493
5:00 PM	143	0	33	126	560	0	0	0	0	276	606	0	1,744
5:15 PM	134	0	43	178	168	0	0	0	0	257	554	0	1,334
5:30 PM	178	0	68	168	315	0	0	0	0	238	567	0	1,534
5:45 PM	138	0	54	178	393	0	0	0	0	226	429	0	1,418
Total	955	0	413	1,309	3,070	0	0	0	0	2,004	4,298	0	12,049

PM Intersection Peak Hour : **4:15 PM - 5:15 PM** Intersection PHF : **0.89**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	442	0	203	640	1649	0	0	0	0	1016	2230	0	6180
PHF	0.77	#####	0.757	0.87	0.736	#####	#####	#####	#####	0.92	0.904	#####	0.89
Movement PHF		0.85			0.83			#DIV/0!			0.92		0.89

U-Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-1536

Location: Miramar Road @ I-805 SB Ramps

AM Period (7:00 AM - 9:00 AM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	1	0	0	1
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
Total	0	1	0	0	1

AM Intersection Peak Hour : **7:15 AM - 8:15 AM** Intersection PHF : **#DIV/0!**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	0	0	0	0	0
PHF	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Movement PHF	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

PM Period (4:00 PM - 6:00 PM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
Total	0	0	0	0	0

PM Intersection Peak Hour : **4:15 PM - 5:15 PM** Intersection PHF : **#DIV/0!**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	0	0	0	0	0
PHF	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Movement PHF	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

Bike Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Miramar Road @ I-805 SB Ramps

Date of Count: *Tuesday, May 05, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Kimley»Horn

Bike Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Miramar Road @ I-805 SB Ramps

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	2	0	0	0	0	0	0	0	2
7:30 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
7:45 AM	0	0	0	0	1	0	0	0	0	0	3	0	4
8:00 AM	0	0	0	0	1	0	0	0	0	0	1	0	2
8:15 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
8:30 AM	0	0	0	0	1	0	0	0	0	0	2	0	3
8:45 AM	0	0	0	0	0	0	0	0	0	0	2	0	2
Total	0	0	0	0	6	0	0	0	0	0	10	0	16

AM Intersection Peak Hour : **7:45 AM - 8:45 AM** Intersection PHF : **0.63**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	0	0	0	3	0	0	0	0	0	7	0	10
PHF	#####	#####	#####	#####	0.75	#####	#####	#####	#####	#####	0.58	#####	0.63
Movement PHF	#DIV/0!			0.75			#DIV/0!			0.58			0.63

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	0	0	0	0	1	0	0	0	0	0	1	0	2
4:15 PM	0	0	0	0	1	0	0	0	0	0	1	0	2
4:30 PM	0	0	0	0	2	0	0	0	0	0	0	0	2
4:45 PM	0	0	0	0	1	0	0	0	0	0	1	0	2
5:00 PM	0	0	0	0	2	0	0	0	0	0	1	0	3
5:15 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
5:30 PM	0	0	0	0	1	0	0	0	0	0	1	0	2
5:45 PM	0	0	0	0	2	0	0	0	0	0	1	0	3
Total	0	0	0	0	11	0	0	0	0	0	6	0	17

PM Intersection Peak Hour : **4:15 PM - 5:15 PM** Intersection PHF : **0.75**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	0	0	0	6	0	0	0	0	0	3	0	9
PHF	#####	#####	#####	#####	0.75	#####	#####	#####	#####	#####	0.75	#####	0.75
Movement PHF	#DIV/0!			0.75			#DIV/0!			0.75			0.75

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Miramar Road @ I-805 NB Ramp

Date of Count: *Tuesday, May 05, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Miramar Road @ I-805 NB Ramp

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	0	0	90	274	0	118	0	213	108	230	0	1,033
7:15 AM	0	0	0	126	362	0	145	0	273	123	383	0	1,412
7:30 AM	0	0	0	122	344	0	112	0	257	173	306	0	1,314
7:45 AM	0	0	0	121	384	0	115	0	231	255	345	0	1,451
8:00 AM	0	0	0	112	374	0	119	0	214	251	324	0	1,394
8:15 AM	0	0	0	132	305	0	98	0	222	210	275	0	1,242
8:30 AM	0	0	0	136	395	0	87	0	215	241	292	0	1,366
8:45 AM	0	0	0	168	323	0	84	0	202	247	278	1	1,303
Total	0	0	0	1,007	2,761	0	878	0	1,827	1,608	2,433	1	10,515

AM Intersection Peak Hour : **7:15 AM - 8:15 AM** Intersection PHF : **0.96**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	0	0	481	1,464	0	491	0	975	802	1,358	0	5,571
PHF	#####	#####	#####	0.95	0.95	#####	0.85	#####	0.89	0.79	0.89	#####	0.96
Movement PHF	#DIV/0!			0.96			0.88			0.90			0.96

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	0	0	0	115	571	0	49	0	119	327	236	0	1,417
4:15 PM	0	0	0	90	475	0	36	0	88	324	224	0	1,237
4:30 PM	0	0	0	142	340	0	44	0	161	270	397	0	1,354
4:45 PM	0	0	0	119	409	0	50	0	130	366	213	0	1,287
5:00 PM	0	0	0	95	565	0	64	0	121	411	227	1	1,484
5:15 PM	0	0	0	101	231	0	39	0	115	258	339	0	1,083
5:30 PM	0	0	0	130	335	0	50	0	148	335	299	1	1,298
5:45 PM	0	0	0	110	412	0	34	0	159	287	196	0	1,198
Total	0	0	0	902	3,338	0	366	0	1,041	2,578	2,131	2	10,358

PM Intersection Peak Hour : **4:15 PM - 5:15 PM** Intersection PHF : **0.90**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	0	0	446	1789	0	194	0	500	1371	1061	1	5362
PHF	#####	#####	#####	0.785	0.792	#####	0.758	#####	0.776	0.834	0.668	0.25	0.90
Movement PHF	#DIV/0!			0.85			0.85			0.91			0.90

U-Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-1536

Location: Miramar Road @ I-805 NB Ramp

AM Period (7:00 AM - 9:00 AM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
Total	0	0	0	0	0

AM Intersection Peak Hour : **7:15 AM - 8:15 AM** Intersection PHF : **#DIV/0!**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	0	0	0	0	0
PHF	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Movement PHF	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

PM Period (4:00 PM - 6:00 PM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
Total	0	0	0	0	0

PM Intersection Peak Hour : **4:15 PM - 5:15 PM** Intersection PHF : **#DIV/0!**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	0	0	0	0	0
PHF	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Movement PHF	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

Bike Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Miramar Road @ I-805 NB Ramp

Date of Count: *Tuesday, May 05, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Kimley»Horn

Bike Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Miramar Road @ I-805 NB Ramp

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	2	0	0	0	0	0	0	0	2
7:30 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
7:45 AM	0	0	0	0	1	0	0	0	0	0	3	0	4
8:00 AM	0	0	0	0	1	0	0	0	0	0	1	0	2
8:15 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
8:30 AM	0	0	0	0	1	0	0	0	0	0	2	0	3
8:45 AM	0	0	0	0	0	0	0	0	0	0	2	0	2
Total	0	0	0	0	6	0	0	0	0	0	10	0	16

AM Intersection Peak Hour : **7:45 AM - 8:45 AM** Intersection PHF : **0.63**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	0	0	0	3	0	0	0	0	0	7	0	10
PHF	#####	#####	#####	#####	0.75	#####	#####	#####	#####	#####	0.58	#####	0.63
Movement PHF	#DIV/0!			0.75			#DIV/0!			0.58			0.63

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	0	0	0	0	1	0	0	0	0	0	1	0	2
4:15 PM	0	0	0	0	1	0	0	0	0	0	1	0	2
4:30 PM	0	0	0	0	2	0	0	0	0	0	0	0	2
4:45 PM	0	0	0	0	1	0	0	0	0	0	1	0	2
5:00 PM	0	0	0	0	2	0	0	0	0	0	1	0	3
5:15 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
5:30 PM	0	0	0	0	1	0	0	0	0	0	1	0	2
5:45 PM	0	0	0	0	2	0	0	0	0	0	1	0	3
Total	0	0	0	0	11	0	0	0	0	0	6	0	17

PM Intersection Peak Hour : **4:15 PM - 5:15 PM** Intersection PHF : **0.75**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	0	0	0	6	0	0	0	0	0	3	0	9
PHF	#####	#####	#####	#####	0.75	#####	#####	#####	#####	#####	0.75	#####	0.75
Movement PHF	#DIV/0!			0.75			#DIV/0!			0.75			0.75

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Miramar Road @ Noble Drive

Date of Count: *Wednesday, May 13, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Miramar Road @ Noble Drive

AM Period (7:00 AM - 9:00 AM)								
		Westbound		Northbound		Eastbound		
		Thru	Left	Right	Left	Right	Thru	TOTAL
7:00 AM		348	50	180	3	20	341	942
7:15 AM		525	78	192	13	24	557	1,389
7:30 AM		502	81	200	14	24	403	1,224
7:45 AM		534	105	166	21	46	465	1,337
8:00 AM		418	90	176	23	39	437	1,183
8:15 AM		415	90	164	21	43	379	1,112
8:30 AM		462	125	179	18	31	391	1,206
8:45 AM		415	126	174	32	68	295	1,110
Total		3,619	745	1,431	145	295	3,268	9,503

AM Intersection Peak Hour : **7:15 AM - 8:15 AM** Intersection PHF : **0.92**

		Westbound		Northbound		Eastbound		TOTAL
		Thru	Left	Right	Left	Right	Thru	
Volume		1,979	354	734	71	133	1,862	5,133
PHF		0.93	0.84	0.92	0.77	0.72	0.84	0.92
Movement PHF		0.91		0.94			0.86	0.92

PM Period (4:00 PM - 6:00 PM)								
		Westbound		Northbound		Eastbound		
		Thru	Left	Right	Left	Right	Thru	TOTAL
4:00 PM		643	132	146	21	6	231	1,179
4:15 PM		491	187	173	21	10	228	1,110
4:30 PM		408	153	114	16	10	483	1,184
4:45 PM		440	247	122	35	8	220	1,072
5:00 PM		588	239	128	22	3	285	1,265
5:15 PM		237	273	138	45	5	426	1,124
5:30 PM		372	278	180	40	6	170	1,046
5:45 PM		442	200	189	37	10	203	1,081
Total		3,621	1,709	1,190	237	58	2,246	9,061

PM Intersection Peak Hour : **4:30 PM - 5:30 PM** Intersection PHF : **0.92**

		Westbound		Northbound		Eastbound		TOTAL
		Thru	Left	Right	Left	Right	Thru	
Volume		1673	912	502	118	26	1414	4645
PHF		0.711	0.835	0.909	0.656	0.65	0.732	0.92
Movement PHF		0.78		0.85			0.73	0.92

U-Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-1536

Location: Miramar Road @ Noble Drive

AM Period (7:00 AM - 9:00 AM)					
		Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
7:00 AM		0	0	0	0
7:15 AM		0	0	0	0
7:30 AM		0	0	0	0
7:45 AM		0	0	0	0
8:00 AM		0	0	0	0
8:15 AM		0	0	0	0
8:30 AM		0	0	0	0
8:45 AM		0	0	0	0
Total		0	0	0	0

AM Intersection Peak Hour : **7:15 AM - 8:15 AM** Intersection PHF : **#DIV/0!**

		East Leg U-Turn	South Leg U-Turn	West Leg U-Turn	TOTAL
Volume		0	0	0	0
PHF		#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Movement PHF		#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

PM Period (4:00 PM - 6:00 PM)					
		Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
4:00 PM		0	0	0	0
4:15 PM		0	0	0	0
4:30 PM		0	0	0	0
4:45 PM		0	1	0	1
5:00 PM		0	0	0	0
5:15 PM		0	0	0	0
5:30 PM		1	0	0	1
5:45 PM		0	0	0	0
Total		1	1	0	2

PM Intersection Peak Hour : **4:30 PM - 5:30 PM** Intersection PHF : **0.25**

		East Leg U-Turn	South Leg U-Turn	West Leg U-Turn	TOTAL
Volume		0	1	0	1
PHF		#DIV/0!	0.25	#DIV/0!	0.25
Movement PHF		#DIV/0!	0.25	#DIV/0!	0.25

Bike Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Miramar Road @ Noble Drive

Date of Count: *Wednesday, May 13, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Bike Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Miramar Road @ Noble Drive

AM Period (7:00 AM - 9:00 AM)								
		Westbound		Northbound		Eastbound		
		Thru	Left	Right	Left	Right	Thru	TOTAL
7:00 AM		2	0	0	0	0	0	2
7:15 AM		2	0	0	0	0	0	2
7:30 AM		0	0	0	0	0	1	1
7:45 AM		1	0	0	0	1	2	4
8:00 AM		2	0	1	0	0	1	4
8:15 AM		0	1	0	0	0	1	2
8:30 AM		1	0	1	0	0	3	5
8:45 AM		0	0	1	0	0	3	4
Total		8	1	3	0	1	11	24

AM Intersection Peak Hour : **7:45 AM - 8:45 AM** Intersection PHF : **0.75**

		Westbound		Northbound		Eastbound		TOTAL
		Thru	Left	Right	Left	Right	Thru	
Volume		4	1	2	0	1	7	15
PHF		0.50	0.25	0.50	#####	0.25	0.58	0.75
Movement PHF		0.63		0.50		0.67		0.75

PM Period (4:00 PM - 6:00 PM)								
		Westbound		Northbound		Eastbound		
		Thru	Left	Right	Left	Right	Thru	TOTAL
4:00 PM		1	0	1	0	0	1	3
4:15 PM		0	1	0	0	1	0	2
4:30 PM		2	0	0	0	0	0	2
4:45 PM		1	0	0	0	0	1	2
5:00 PM		2	0	1	0	0	1	4
5:15 PM		0	0	0	0	0	0	0
5:30 PM		0	2	1	0	0	2	5
5:45 PM		0	1	1	0	0	1	3
Total		6	4	4	0	1	6	21

PM Intersection Peak Hour : **5:00 PM - 6:00 PM** Intersection PHF : **0.60**

		Westbound		Northbound		Eastbound		TOTAL
		Thru	Left	Right	Left	Right	Thru	
Volume		2	3	3	0	0	4	12
PHF		0.25	0.375	0.75	#####	#####	0.5	0.60
Movement PHF		0.63		0.75			0.50	0.60

Kimley»Horn

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

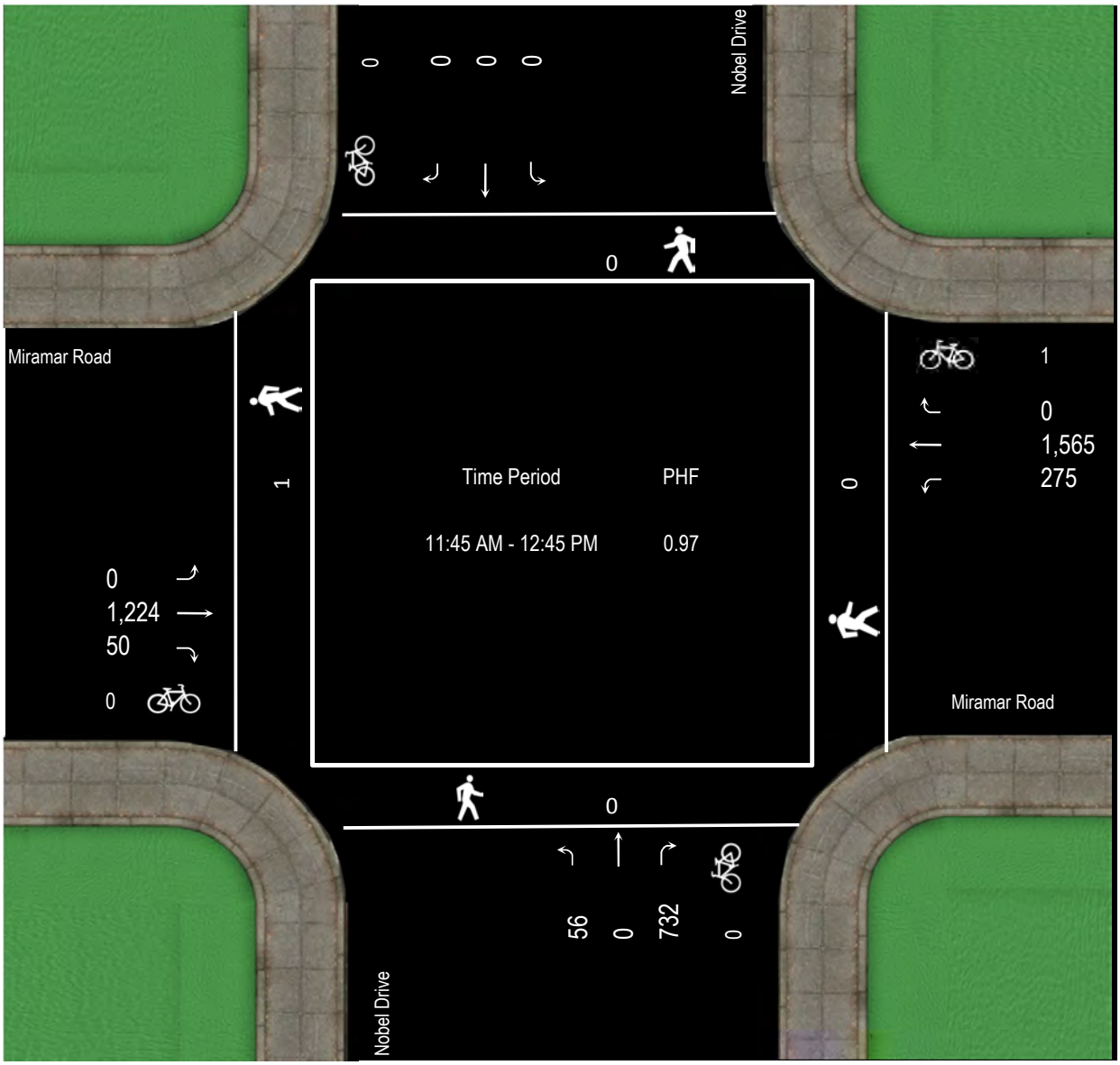
Location: Miramar Road @ Nobel Drive

Date of Count: *Tuesday, October 21, 2014*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0429*



Kimley»Horn

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Miramar Road @ Nobel Drive

Midday Period (11:00 AM - 1:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
11:00 AM	0	0	0	0	402	46	153	0	9	2	328	0	940
11:15 AM	0	0	0	0	396	58	163	0	17	7	299	0	940
11:30 AM	0	0	0	0	355	75	194	0	10	7	278	0	919
11:45 AM	0	0	0	0	412	75	179	0	19	8	292	0	985
12:00 PM	0	0	0	0	371	55	172	0	15	11	329	0	953
12:15 PM	0	0	0	0	378	70	187	0	11	20	295	0	961
12:30 PM	0	0	0	0	404	75	194	0	11	11	308	0	1,003
12:45 PM	0	0	0	0	336	89	205	0	17	11	306	0	964
Total	0	0	0	0	3,054	543	1,447	0	109	77	2,435	0	7,665

PM Intersection Peak Hour : **11:45 AM - 12:45 PM**

Intersection PHF : **0.97**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	0	0	0	1565	275	732	0	56	50	1224	0	3902
PHF	#####	#####	#####	#####	0.95	0.917	0.943	#####	0.737	0.625	0.93	#####	0.97
Movement PHF	#DIV/0!			0.94			0.96			0.94			0.97

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Miramar Road @ Eastgate Mall

Date of Count: *Wednesday, May 13, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Miramar Road @ Eastgate Mall

AM Period (7:00 AM - 9:00 AM)							
	Southbound		Westbound			Eastbound	
	Right	Left	Right	Thru		Thru	Left	TOTAL
7:00 AM	22	18	157	376		448	73	1,094
7:15 AM	23	32	153	580		682	67	1,537
7:30 AM	23	22	152	560		515	88	1,360
7:45 AM	34	39	166	605		558	73	1,475
8:00 AM	26	28	153	482		547	66	1,302
8:15 AM	22	22	182	483		471	72	1,252
8:30 AM	28	26	176	559		494	76	1,359
8:45 AM	37	34	196	504		415	54	1,240
Total	215	221	1,335	4,149		4,130	569	10,619

AM Intersection Peak Hour : **7:15 AM - 8:15 AM** Intersection PHF : **0.92**

	Southbound		Westbound			Eastbound		TOTAL
	Right	Left	Right	Thru		Thru	Left	
Volume	106	121	624	2,227		2,302	294	5,674
PHF	0.78	0.78	0.94	0.92		0.84	0.84	0.92
Movement PHF	0.78			0.92		0.87		0.92

PM Period (4:00 PM - 6:00 PM)							
	Southbound		Westbound			Eastbound	
	Right	Left	Right	Thru		Thru	Left	TOTAL
4:00 PM	107	156	47	668		340	37	1,355
4:15 PM	74	176	43	604		363	38	1,298
4:30 PM	34	69	156	527		505	92	1,383
4:45 PM	106	150	43	581		311	31	1,222
5:00 PM	63	150	41	764		375	38	1,431
5:15 PM	37	68	130	473		484	80	1,272
5:30 PM	53	142	64	598		307	44	1,208
5:45 PM	56	141	40	586		355	37	1,215
Total	530	1052	564	4,801		3,040	397	10,384

PM Intersection Peak Hour : **4:15 PM - 5:15 PM** Intersection PHF : **0.93**

	Southbound		Westbound			Eastbound		TOTAL
	Right	Left	Right	Thru		Thru	Left	
Volume	277	545	283	2476		1554	199	5334
PHF	0.65	0.774	0.454	0.81		0.769	0.541	0.93
Movement PHF	0.80			0.86		0.73		0.93

U-Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-1536

Location: Miramar Road @ Eastgate Mall

AM Period (7:00 AM - 9:00 AM)					
	Southbound U-Turn	Westbound U-Turn		Eastbound U-Turn	TOTAL
7:00 AM	0	0		0	0
7:15 AM	0	0		0	0
7:30 AM	0	0		0	0
7:45 AM	0	2		0	2
8:00 AM	0	1		0	1
8:15 AM	0	1		0	1
8:30 AM	0	1		0	1
8:45 AM	0	1		0	1
Total	0	6		0	6

AM Intersection Peak Hour : **7:15 AM - 8:15 AM** Intersection PHF : **0.38**

	North Leg U-Turn	East Leg U-Turn		West Leg U-Turn	TOTAL
Volume	0	3		0	3
PHF	#DIV/0!	0.38		#DIV/0!	0.38
Movement PHF	#DIV/0!	0.38		#DIV/0!	0.38

PM Period (4:00 PM - 6:00 PM)					
	Southbound U-Turn	Westbound U-Turn		Eastbound U-Turn	TOTAL
4:00 PM	0	4		0	4
4:15 PM	0	4		0	4
4:30 PM	0	1		0	1
4:45 PM	0	2		0	2
5:00 PM	0	1		0	1
5:15 PM	0	1		0	1
5:30 PM	0	0		0	0
5:45 PM	0	5		0	5
Total	0	18		0	18

PM Intersection Peak Hour : **4:15 PM - 5:15 PM** Intersection PHF : **0.50**

	North Leg U-Turn	East Leg U-Turn		West Leg U-Turn	TOTAL
Volume	0	8		0	8
PHF	#DIV/0!	0.5		#DIV/0!	0.50
Movement PHF	#DIV/0!	0.50		#DIV/0!	0.50

Bike Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Miramar Road @ Eastgate Mall

Date of Count: *Wednesday, May 13, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Bike Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Miramar Road @ Eastgate Mall

AM Period (7:00 AM - 9:00 AM)							
	Southbound		Westbound			Eastbound	
	Right	Left	Right	Thru		Thru	Left	TOTAL
7:00 AM	0	0	2	2		0	0	4
7:15 AM	0	0	0	2		0	0	2
7:30 AM	0	0	0	0		1	0	1
7:45 AM	0	0	0	1		2	0	3
8:00 AM	0	0	3	2		1	0	6
8:15 AM	0	0	0	1		1	0	2
8:30 AM	0	0	0	1		3	0	4
8:45 AM	0	0	1	0		3	0	4
Total	0	0	6	9		11	0	26

AM Intersection Peak Hour : **8:00 AM - 9:00 AM** Intersection PHF : **0.67**

	Southbound		Westbound			Eastbound		TOTAL
	Right	Left	Right	Thru		Thru	Left	
Volume	0	0	4	4		8	0	16
PHF	#####	#####	0.33	0.50		0.67	#####	0.67
Movement PHF	#DIV/0!			0.40		0.67		0.67

PM Period (4:00 PM - 6:00 PM)							
	Southbound		Westbound			Eastbound	
	Right	Left	Right	Thru		Thru	Left	TOTAL
4:00 PM	0	0	0	1		1	0	2
4:15 PM	0	1	0	1		0	0	2
4:30 PM	0	0	0	2		0	0	2
4:45 PM	0	0	0	1		1	0	2
5:00 PM	0	1	0	2		1	0	4
5:15 PM	0	2	1	0		0	0	3
5:30 PM	0	0	0	2		1	1	4
5:45 PM	0	1	0	1		1	0	3
Total	0	5	1	10		5	1	22

PM Intersection Peak Hour : **5:00 PM - 6:00 PM** Intersection PHF : **0.88**

	Southbound		Westbound			Eastbound		TOTAL
	Right	Left	Right	Thru		Thru	Left	
Volume	0	4	1	5		3	1	14
PHF	#####	0.5	0.25	0.625		0.75	0.25	0.88
Movement PHF	0.50			0.75		0.50		0.88

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Miramar Road @ Miramar Mall

Date of Count: *Wednesday, May 13, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Miramar Road @ Miramar Mall

AM Period (7:00 AM - 9:00 AM)							
	Southbound		Westbound			Eastbound	
	Right	Left	Right	Thru		Thru	Left	TOTAL
7:00 AM	23	7	11	561		493	20	1,115
7:15 AM	17	8	7	764		733	24	1,553
7:30 AM	13	10	15	745		559	19	1,361
7:45 AM	12	6	18	809		629	19	1,493
8:00 AM	10	5	15	669		592	24	1,315
8:15 AM	7	7	15	697		472	12	1,210
8:30 AM	13	8	17	777		469	11	1,295
8:45 AM	17	12	15	730		439	18	1,231
Total	112	63	113	5,752		4,386	147	10,573

AM Intersection Peak Hour : **7:15 AM - 8:15 AM** Intersection PHF : **0.92**

	Southbound		Westbound			Eastbound		TOTAL
	Right	Left	Right	Thru		Thru	Left	
Volume	52	29	55	2,987		2,513	86	5,722
PHF	0.76	0.73	0.76	0.92		0.86	0.90	0.92
Movement PHF	0.81			0.92		0.86		0.92

PM Period (4:00 PM - 6:00 PM)							
	Southbound		Westbound			Eastbound	
	Right	Left	Right	Thru		Thru	Left	TOTAL
4:00 PM	22	27	17	694		475	4	1,239
4:15 PM	20	16	23	683		532	8	1,282
4:30 PM	21	20	13	713		621	5	1,393
4:45 PM	18	20	22	636		479	13	1,188
5:00 PM	26	16	15	829		571	5	1,462
5:15 PM	24	18	15	628		571	4	1,260
5:30 PM	22	20	15	689		444	3	1,193
5:45 PM	14	9	6	589		513	5	1,136
Total	167	146	126	5,461		4,206	47	10,153

PM Intersection Peak Hour : **4:15 PM - 5:15 PM** Intersection PHF : **0.91**

	Southbound		Westbound			Eastbound		TOTAL
	Right	Left	Right	Thru		Thru	Left	
Volume	85	72	73	2861		2203	31	5325
PHF	0.82	0.9	0.793	0.863		0.887	0.596	0.91
Movement PHF	0.93			0.87		0.89		0.91

U-Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-1536

Location: Miramar Road @ Miramar Mall

AM Period (7:00 AM - 9:00 AM)					
	Southbound U-Turn	Westbound U-Turn		Eastbound U-Turn	TOTAL
7:00 AM	0	6		4	10
7:15 AM	0	12		2	14
7:30 AM	0	3		7	10
7:45 AM	0	3		2	5
8:00 AM	0	6		6	12
8:15 AM	0	5		2	7
8:30 AM	0	3		2	5
8:45 AM	0	0		2	2
Total	0	38		27	65

AM Intersection Peak Hour : **7:15 AM - 8:15 AM** Intersection PHF : **0.73**

	North Leg U-Turn	East Leg U-Turn		West Leg U-Turn	TOTAL
Volume	0	24		17	41
PHF	#DIV/0!	0.50		0.61	0.73
Movement PHF	#DIV/0!	0.50		0.61	0.73

PM Period (4:00 PM - 6:00 PM)					
	Southbound U-Turn	Westbound U-Turn		Eastbound U-Turn	TOTAL
4:00 PM	0	0		0	0
4:15 PM	1	1		0	2
4:30 PM	0	0		0	0
4:45 PM	2	0		0	2
5:00 PM	0	0		0	0
5:15 PM	0	0		0	0
5:30 PM	0	0		0	0
5:45 PM	1	0		0	1
Total	4	1		0	5

PM Intersection Peak Hour : **4:15 PM - 5:15 PM** Intersection PHF : **0.50**

	North Leg U-Turn	East Leg U-Turn		West Leg U-Turn	TOTAL
Volume	3	1		0	4
PHF	0.38	0.25		#DIV/0!	0.50
Movement PHF	0.38	0.25		#DIV/0!	0.50

Bike Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Miramar Road @ Miramar Mall

Date of Count: *Wednesday, May 13, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Bike Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Miramar Road @ Miramar Mall

AM Period (7:00 AM - 9:00 AM)							
	Southbound		Westbound			Eastbound	
	Right	Left	Right	Thru		Thru	Left	TOTAL
7:00 AM	0	0	0	1		0	0	1
7:15 AM	0	0	0	1		0	0	1
7:30 AM	0	0	0	1		3	0	4
7:45 AM	0	0	0	0		1	0	1
8:00 AM	0	0	0	1		2	0	3
8:15 AM	0	0	1	1		1	0	3
8:30 AM	0	0	0	1		1	1	3
8:45 AM	0	0	0	0		2	0	2
Total	0	0	1	6		10	1	18

AM Intersection Peak Hour : **7:30 AM - 8:30 AM** Intersection PHF : **0.69**

	Southbound		Westbound			Eastbound		TOTAL
	Right	Left	Right	Thru		Thru	Left	
Volume	0	0	1	3		7	0	11
PHF	#####	#####	0.25	0.75		0.58	#####	0.69
Movement PHF	#DIV/0!			0.50		0.58		0.69

PM Period (4:00 PM - 6:00 PM)							
	Southbound		Westbound			Eastbound	
	Right	Left	Right	Thru		Thru	Left	TOTAL
4:00 PM	0	1	0	2		1	0	4
4:15 PM	0	0	0	1		2	0	3
4:30 PM	0	0	0	1		0	0	1
4:45 PM	0	0	0	2		2	0	4
5:00 PM	0	0	0	1		1	0	2
5:15 PM	0	0	0	0		2	0	2
5:30 PM	0	0	1	0		2	0	3
5:45 PM	0	0	0	3		1	0	4
Total	0	1	1	10		11	0	23

PM Intersection Peak Hour : **4:00 PM - 5:00 PM** Intersection PHF : **0.75**

	Southbound		Westbound			Eastbound		TOTAL
	Right	Left	Right	Thru		Thru	Left	
Volume	0	1	0	6		5	0	12
PHF	#####	0.25	#####	0.75		0.625	#####	0.75
Movement PHF	0.25			0.75		0.63		0.75

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Miramar Road @ Miramar Place

Date of Count: *Wednesday, May 13, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Miramar Road @ Miramar Place

AM Period (7:00 AM - 9:00 AM)								
	Southbound		Westbound			Eastbound		
	Right	Left	Right	Thru		Thru	Left	TOTAL
7:00 AM	15	20	26	513		476	30	1,080
7:15 AM	25	30	34	713		700	53	1,555
7:30 AM	2	4	15	702		555	16	1,294
7:45 AM	11	12	17	768		610	28	1,446
8:00 AM	10	7	22	700		577	26	1,342
8:15 AM	8	10	17	657		455	29	1,176
8:30 AM	19	22	29	779		466	14	1,329
8:45 AM	21	39	22	713		434	16	1,245
Total	111	144	182	5,545		4,273	212	10,467

AM Intersection Peak Hour : **7:15 AM - 8:15 AM** Intersection PHF : **0.91**

	Southbound		Westbound			Eastbound		TOTAL
	Right	Left	Right	Thru		Thru	Left	
Volume	48	53	88	2,883		2,442	123	5,637
PHF	0.48	0.44	0.65	0.94		0.87	0.58	0.91
Movement PHF	0.46			0.95		0.85		0.91

PM Period (4:00 PM - 6:00 PM)								
	Southbound		Westbound			Eastbound		
	Right	Left	Right	Thru		Thru	Left	TOTAL
4:00 PM	13	25	11	670		482	20	1,221
4:15 PM	19	26	13	709		538	11	1,316
4:30 PM	16	19	8	762		633	7	1,445
4:45 PM	3	25	17	708		493	6	1,252
5:00 PM	18	29	9	773		585	2	1,416
5:15 PM	9	9	13	688		574	14	1,307
5:30 PM	6	16	14	748		455	9	1,248
5:45 PM	8	14	12	641		518	4	1,197
Total	92	163	97	5,699		4,278	73	10,402

PM Intersection Peak Hour : **4:15 PM - 5:15 PM** Intersection PHF : **0.94**

	Southbound		Westbound			Eastbound		TOTAL
	Right	Left	Right	Thru		Thru	Left	
Volume	56	99	47	2952		2249	26	5429
PHF	0.74	0.853	0.691	0.955		0.888	0.591	0.94
Movement PHF	0.82			0.96		0.89		0.94

U-Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-1536

Location: Miramar Road @ Miramar Place

AM Period (7:00 AM - 9:00 AM)					
	Southbound U-Turn	Westbound U-Turn		Eastbound U-Turn	TOTAL
7:00 AM	0	11		0	11
7:15 AM	0	5		0	5
7:30 AM	0	7		1	8
7:45 AM	0	9		0	9
8:00 AM	0	1		0	1
8:15 AM	0	6		0	6
8:30 AM	0	4		0	4
8:45 AM	0	1		1	2
Total	0	44		2	46

AM Intersection Peak Hour : **7:15 AM - 8:15 AM** Intersection PHF : **0.64**

	North Leg U-Turn	East Leg U-Turn		West Leg U-Turn	TOTAL
Volume	0	22		1	23
PHF	#DIV/0!	0.61		0.25	0.64
Movement PHF	#DIV/0!	0.61		0.25	0.64

PM Period (4:00 PM - 6:00 PM)					
	Southbound U-Turn	Westbound U-Turn		Eastbound U-Turn	TOTAL
4:00 PM	0	2		0	2
4:15 PM	0	2		0	2
4:30 PM	0	2		1	3
4:45 PM	0	3		0	3
5:00 PM	0	1		0	1
5:15 PM	0	3		1	4
5:30 PM	0	0		0	0
5:45 PM	0	0		0	0
Total	0	13		2	15

PM Intersection Peak Hour : **4:15 PM - 5:15 PM** Intersection PHF : **0.75**

	North Leg U-Turn	East Leg U-Turn		West Leg U-Turn	TOTAL
Volume	0	8		1	9
PHF	#DIV/0!	0.666666667		0.25	0.75
Movement PHF	#DIV/0!	0.67		0.25	0.75

Bike Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Miramar Road @ Miramar Place

Date of Count: *Wednesday, May 13, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Bike Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Miramar Road @ Miramar Place

AM Period (7:00 AM - 9:00 AM)							
	Southbound		Westbound			Eastbound	
	Right	Left	Right	Thru		Thru	Left	TOTAL
7:00 AM	0	0	0	1		0	0	1
7:15 AM	0	0	0	1		0	0	1
7:30 AM	0	0	0	0		3	0	3
7:45 AM	0	0	0	0		1	0	1
8:00 AM	0	0	0	1		2	0	3
8:15 AM	0	0	0	0		1	0	1
8:30 AM	1	0	0	0		1	0	2
8:45 AM	0	0	0	0		2	0	2
Total	1	0	0	3		10	0	14

AM Intersection Peak Hour : **7:15 AM - 8:15 AM** Intersection PHF : **0.67**

	Southbound		Westbound			Eastbound		TOTAL
	Right	Left	Right	Thru		Thru	Left	
Volume	0	0	0	2		6	0	8
PHF	#####	#####	#####	0.50		0.50	#####	0.67
Movement PHF	#DIV/0!			0.50		0.50		0.67

PM Period (4:00 PM - 6:00 PM)							
	Southbound		Westbound			Eastbound	
	Right	Left	Right	Thru		Thru	Left	TOTAL
4:00 PM	0	0	0	2		2	0	4
4:15 PM	0	0	0	0		1	1	2
4:30 PM	0	0	0	1		0	0	1
4:45 PM	0	0	0	0		2	0	2
5:00 PM	0	1	0	1		1	0	3
5:15 PM	0	0	0	0		2	0	2
5:30 PM	0	0	0	1		2	0	3
5:45 PM	0	0	0	0		1	0	1
Total	0	1	0	5		11	1	18

PM Intersection Peak Hour : **4:45 PM - 5:45 PM** Intersection PHF : **0.83**

	Southbound		Westbound			Eastbound		TOTAL
	Right	Left	Right	Thru		Thru	Left	
Volume	0	1	0	2		7	0	10
PHF	#####	0.25	#####	0.5		0.875	#####	0.83
Movement PHF	0.25			0.50		0.88		0.83

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Miramar Road @ Camino Santa Fe

Date of Count: *Wednesday, May 13, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Miramar Road @ Camino Santa Fe

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	111	2	6	31	439	5	2	2	1	8	229	165	1,001
7:15 AM	173	8	11	25	388	7	1	4	5	13	230	184	1,049
7:30 AM	119	1	10	32	437	2	1	1	2	7	241	173	1,026
7:45 AM	173	1	17	27	438	3	1	2	5	5	229	152	1,053
8:00 AM	116	1	10	34	477	2	1	1	2	8	257	156	1,065
8:15 AM	136	2	9	30	456	6	2	2	2	9	221	190	1,065
8:30 AM	133	1	14	35	483	2	1	1	3	8	255	153	1,089
8:45 AM	181	1	17	27	468	3	1	2	5	5	241	169	1,120
Total	1,142	17	94	241	3,586	30	10	15	25	63	1,903	1,342	8,468

AM Intersection Peak Hour : **8:00 AM - 9:00 AM** Intersection PHF : **0.97**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	566	5	50	126	1,884	13	5	6	12	30	974	668	4,339
PHF	0.78	0.63	0.74	0.90	0.98	0.54	0.63	0.75	0.60	0.83	0.95	0.88	0.97
Movement PHF		0.78			0.97			0.72			0.99		0.97

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	297	0	45	24	403	5	3	2	20	27	411	173	1,410
4:15 PM	334	0	49	21	342	1	1	4	3	10	451	196	1,412
4:30 PM	347	2	44	18	368	6	5	3	21	15	473	188	1,490
4:45 PM	375	1	40	17	313	11	3	7	16	26	430	239	1,478
5:00 PM	385	0	43	15	395	7	3	9	30	18	374	185	1,464
5:15 PM	403	0	55	16	335	14	1	2	8	14	354	203	1,405
5:30 PM	351	0	38	10	338	3	3	2	16	18	308	180	1,267
5:45 PM	298	0	38	17	300	11	3	5	7	11	339	226	1,255
Total	2790	3	352	138	2,794	58	22	34	121	139	3,140	1,590	11,181

PM Intersection Peak Hour : **4:15 PM - 5:15 PM** Intersection PHF : **0.98**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	1441	3	176	71	1418	25	12	23	70	69	1728	808	5844
PHF	0.94	0.375	0.898	0.845	0.897	0.568	0.6	0.639	0.583	0.663	0.913	0.845	0.98
Movement PHF		0.95			0.91			0.63			0.94		0.98

U-Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-1536

Location: Miramar Road @ Camino Santa Fe

AM Period (7:00 AM - 9:00 AM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
7:00 AM	0	2	0	0	2
7:15 AM	5	0	0	0	5
7:30 AM	3	0	0	0	3
7:45 AM	12	1	0	0	13
8:00 AM	2	1	0	0	3
8:15 AM	5	3	0	0	8
8:30 AM	4	3	0	0	7
8:45 AM	0	0	0	0	0
Total	31	10	0	0	41

AM Intersection Peak Hour : **8:00 AM - 9:00 AM** Intersection PHF : **0.56**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	11	7	0	0	18
PHF	0.55	0.58	#DIV/0!	#DIV/0!	0.56
Movement PHF	0.55	0.58	#DIV/0!	#DIV/0!	0.56

PM Period (4:00 PM - 6:00 PM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
Total	0	0	0	0	0

PM Intersection Peak Hour : **4:15 PM - 5:15 PM** Intersection PHF : **#DIV/0!**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	0	0	0	0	0
PHF	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Movement PHF	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

Bike Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

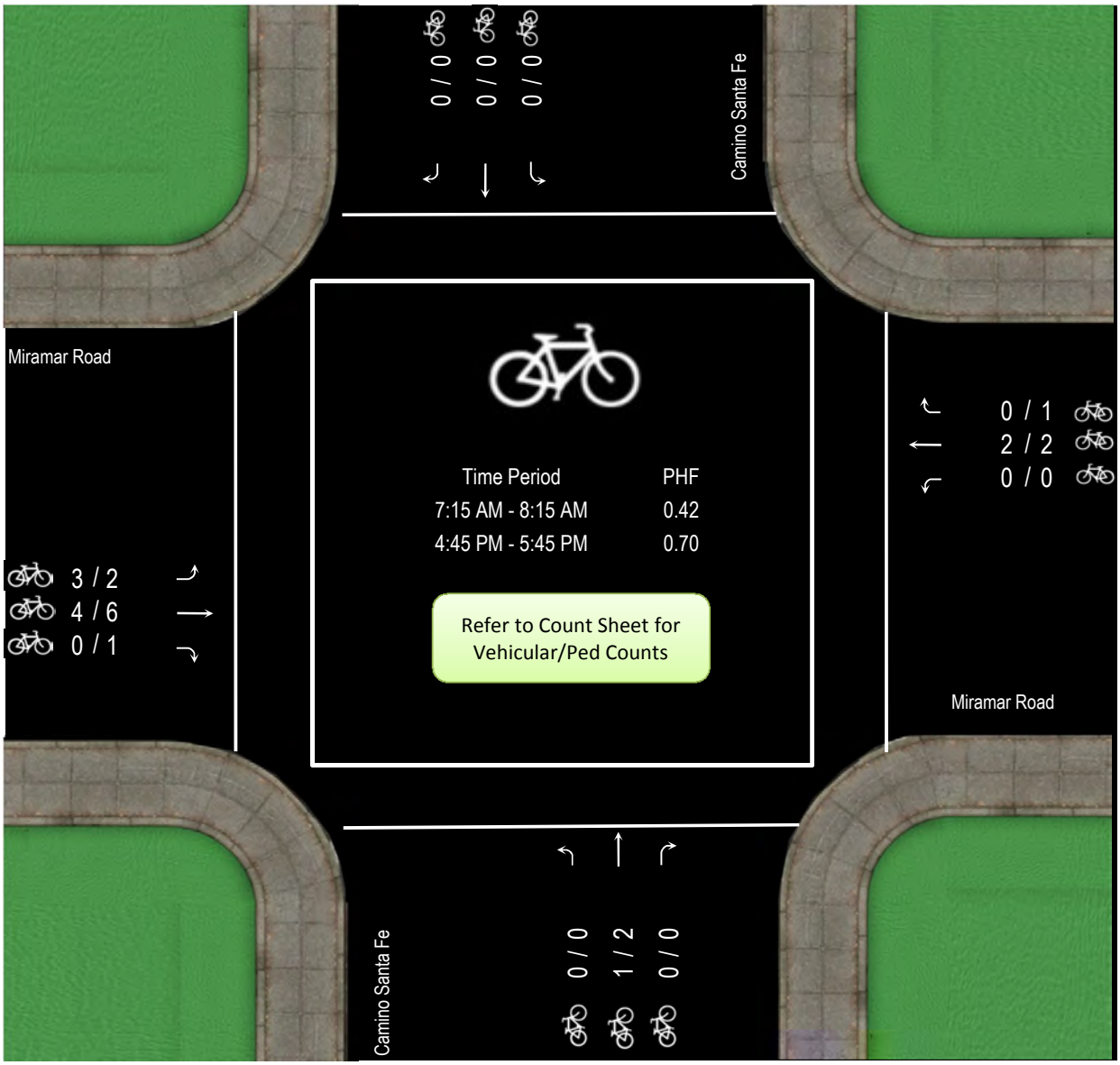
Location: Miramar Road @ Camino Santa Fe

Date of Count: *Wednesday, May 13, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*



Kimley»Horn

Bike Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Miramar Road @ Camino Santa Fe

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	1	0	0	3	2	6
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	1	0	0	0	0	0	1	1	3
8:15 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	1	1
8:45 AM	0	0	0	1	0	0	0	0	0	0	0	2	3
Total	0	0	0	1	3	0	0	1	0	0	5	6	16

AM Intersection Peak Hour : **7:15 AM - 8:15 AM** Intersection PHF : **0.42**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	0	0	0	2	0	0	1	0	0	4	3	10
PHF	#####	#####	#####	#####	0.50	#####	#####	0.25	#####	#####	0.33	0.38	0.42
Movement PHF	#DIV/0!			0.50			0.25			0.35			0.42

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	2	0	2
4:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
4:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	2	0	2
5:00 PM	0	0	0	0	1	0	0	0	0	0	1	1	3
5:15 PM	0	0	0	0	0	0	0	1	0	1	2	0	4
5:30 PM	0	0	0	1	1	0	0	1	0	0	1	1	5
5:45 PM	0	0	0	0	0	0	0	1	0	1	0	0	2
Total	0	1	0	1	2	0	0	3	0	2	9	2	20

PM Intersection Peak Hour : **4:45 PM - 5:45 PM** Intersection PHF : **0.70**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	0	0	1	2	0	0	2	0	1	6	2	14
PHF	#####	#####	#####	0.25	0.5	#####	#####	0.5	#####	0.25	0.75	0.5	0.70
Movement PHF	#DIV/0!			0.38			0.50			0.75			0.70

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Nobel Drive @ Villa La Jolla Drive

Date of Count: *Tuesday, April 28, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Kimley»Horn

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Nobel Drive @ Villa La Jolla Drive

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	17	8	55	1	11	21	58	0	0	0	1	172
7:15 AM	0	18	10	62	3	21	22	61	0	3	1	0	201
7:30 AM	1	24	32	74	0	25	23	70	1	2	4	2	258
7:45 AM	1	21	18	81	0	26	28	68	0	1	1	5	250
8:00 AM	1	28	23	80	0	20	33	91	0	0	2	4	282
8:15 AM	2	35	26	62	0	18	36	72	1	2	3	3	260
8:30 AM	1	41	26	74	1	14	24	81	3	0	2	2	269
8:45 AM	2	29	27	83	1	14	33	96	0	3	0	5	293
Total	8	213	170	571	6	149	220	597	5	11	13	22	1,985

AM Intersection Peak Hour : **8:00 AM - 9:00 AM** Intersection PHF : **0.94**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	6	133	102	299	2	66	126	340	4	5	7	14	1,104
PHF	0.75	0.81	0.94	0.90	0.50	0.83	0.88	0.89	0.33	0.42	0.58	0.70	0.94
Movement PHF		0.89			0.92			0.91			0.81		0.94

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	7	100	97	64	2	45	43	70	0	0	0	4	432
4:15 PM	3	83	83	62	2	32	53	62	0	0	0	0	380
4:30 PM	3	94	124	94	1	48	69	75	0	0	1	0	509
4:45 PM	0	86	130	80	5	49	52	83	0	1	3	1	490
5:00 PM	2	108	95	70	5	51	65	56	0	1	0	2	455
5:15 PM	4	99	97	66	4	63	89	73	2	0	3	1	501
5:30 PM	1	92	82	80	3	49	56	74	1	0	5	2	445
5:45 PM	3	88	76	68	3	64	77	65	3	4	2	1	454
Total	23	750	784	584	25	401	504	558	6	6	14	11	3,666

PM Intersection Peak Hour : **4:30 PM - 5:30 PM** Intersection PHF : **0.96**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	9	387	446	310	15	211	275	287	2	2	7	4	1955
PHF	0.56	0.896	0.858	0.824	0.75	0.837	0.772	0.864	0.25	0.5	0.583	0.5	0.96
Movement PHF		0.95			0.94			0.86			0.65		0.96

U-Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-1536

Location: Nobel Drive @ Villa La Jolla Drive

AM Period (7:00 AM - 9:00 AM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	1	1
7:30 AM	0	0	0	1	1
7:45 AM	0	0	0	0	0
8:00 AM	0	0	2	3	5
8:15 AM	0	0	3	0	3
8:30 AM	0	0	2	2	4
8:45 AM	0	0	0	1	1
Total	0	0	7	8	15

AM Intersection Peak Hour : **8:00 AM - 9:00 AM** Intersection PHF : **0.65**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	0	0	7	6	13
PHF	#DIV/0!	#DIV/0!	0.58	0.50	0.65
Movement PHF	#DIV/0!	#DIV/0!	0.58	0.50	0.65

PM Period (4:00 PM - 6:00 PM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
4:00 PM	0	0	2	3	5
4:15 PM	0	0	1	5	6
4:30 PM	0	0	0	2	2
4:45 PM	0	0	0	6	6
5:00 PM	0	0	0	4	4
5:15 PM	1	0	0	2	3
5:30 PM	0	0	0	8	8
5:45 PM	0	0	0	4	4
Total	1	0	3	34	38

PM Intersection Peak Hour : **4:30 PM - 5:30 PM** Intersection PHF : **0.63**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	1	0	0	14	15
PHF	0.25	#DIV/0!	#DIV/0!	0.583333333	0.63
Movement PHF	0.25	#DIV/0!	#DIV/0!	0.58	0.63

Bike Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

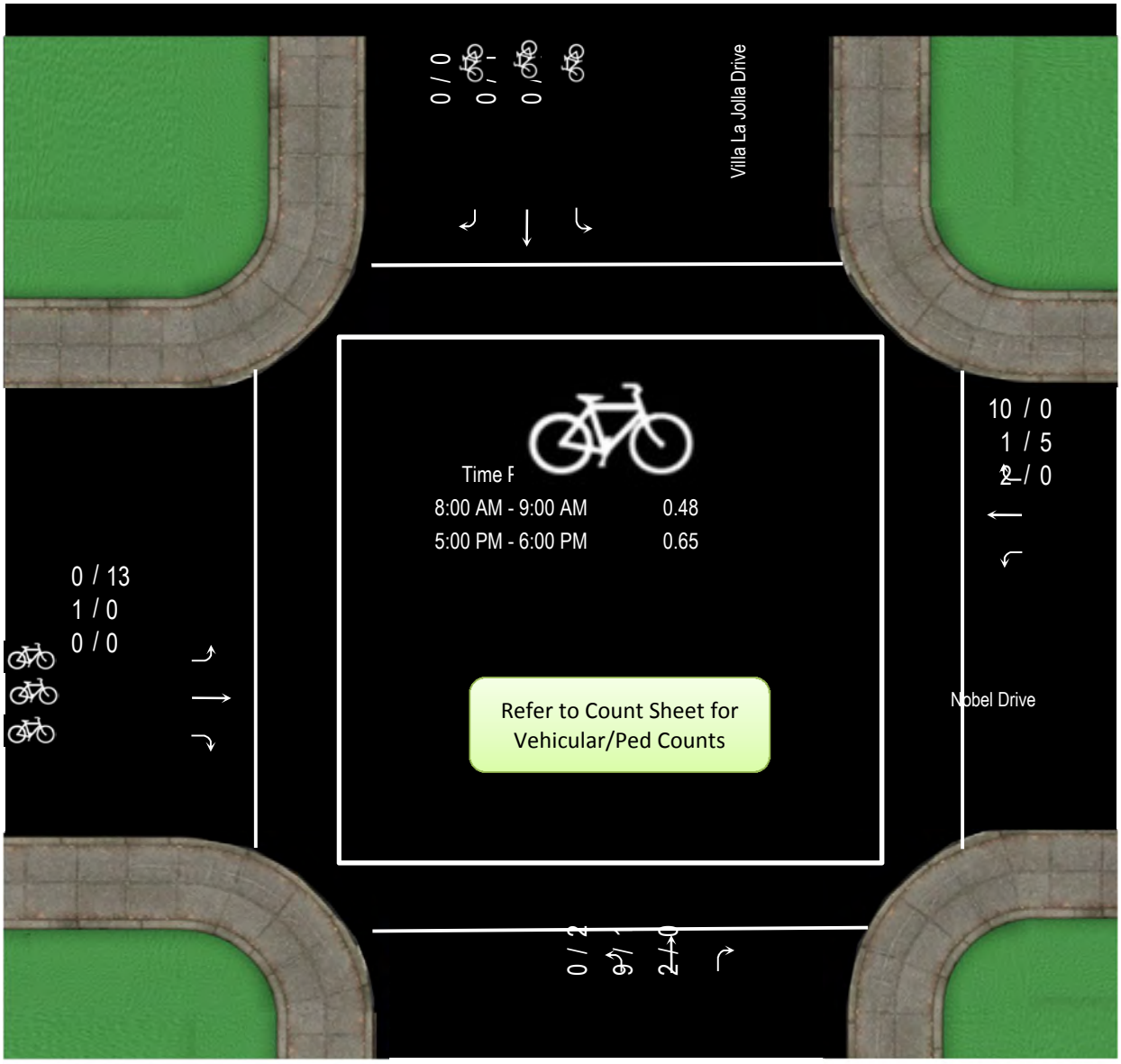
Location: Nobel Drive @ Villa La Jolla Drive

Date of Count: *Tuesday, April 28, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*



Bike Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Nobel Drive @ Villa La Jolla Drive

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	1	1	0	0	0	2	0	0	0	0	4
7:45 AM	0	1	1	0	0	0	1	1	0	1	1	0	6
8:00 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
8:15 AM	0	0	0	4	0	0	0	3	0	0	0	0	7
8:30 AM	0	0	0	0	0	0	0	4	0	0	0	0	4
8:45 AM	0	0	0	6	1	2	2	2	0	0	0	0	13
Total	0	1	2	11	1	2	3	13	0	1	2	0	36

AM Intersection Peak Hour : **8:00 AM - 9:00 AM** Intersection PHF : **0.48**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	0	0	10	1	2	2	9	0	0	1	0	25
PHF	#####	#####	#####	0.42	0.25	0.25	0.25	0.56	#####	#####	0.25	#####	0.48
Movement PHF	#DIV/0!			0.36			0.69			0.25			0.48

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	0	0	1	0	0	0	0	0	0	0	0	2	3
4:15 PM	0	0	0	0	0	1	0	1	0	0	0	1	3
4:30 PM	0	1	2	0	0	1	0	0	2	0	0	0	6
4:45 PM	0	0	2	0	0	0	0	0	0	0	0	3	5
5:00 PM	0	0	2	0	0	0	0	0	0	0	0	0	2
5:15 PM	0	0	2	0	2	0	0	0	1	0	0	0	5
5:30 PM	0	1	0	0	2	0	0	1	0	0	0	6	10
5:45 PM	0	0	0	0	1	0	0	0	1	0	0	7	9
Total	0	2	9	0	5	2	0	2	4	0	0	19	43

PM Intersection Peak Hour : **5:00 PM - 6:00 PM** Intersection PHF : **0.65**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	1	4	0	5	0	0	1	2	0	0	13	26
PHF	#####	0.25	0.5	#####	0.625	#####	#####	0.25	0.5	#####	#####	0.464	0.65
Movement PHF	0.63			0.63			0.75			0.46			0.65

Kimley»Horn

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Nobel Drive @ Villa la Jolla Drive

Date of Count: *Tuesday, October 21, 2014*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0429*

Kimley»Horn

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Nobel Drive @ Villa la Jolla Drive

Midday Period (11:00 AM - 1:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
11:00 AM	1	61	62	68	1	31	38	61	1	0	1	0	325
11:15 AM	1	56	55	71	1	33	40	58	1	2	0	2	320
11:30 AM	1	48	63	62	1	28	40	64	0	1	4	1	313
11:45 AM	0	62	75	72	1	31	49	58	1	0	1	1	351
12:00 PM	1	66	92	66	0	31	42	68	0	1	1	3	371
12:15 PM	1	84	80	74	1	35	52	64	4	0	1	2	398
12:30 PM	4	62	74	88	1	33	53	69	2	3	3	1	393
12:45 PM	2	72	62	94	1	23	45	59	1	1	2	1	363
Total	11	511	563	595	7	245	359	501	10	8	13	11	2,834

PM Intersection Peak Hour : **12:00 PM - 1:00 PM**

Intersection PHF : **0.96**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	8	284	308	322	3	122	192	260	7	5	7	7	1525
PHF	0.50	0.845	0.837	0.856	0.75	0.871	0.906	0.942	0.438	0.417	0.583	0.583	0.96
Movement PHF		0.91			0.92			0.93			0.68		0.96

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Nobel Drive @ La Jolla Village Square Drwy

Date of Count: *Tuesday, May 05, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Kimley»Horn

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Nobel Drive @ La Jolla Village Square Drwy

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	1	13	38	64	24	13	3	2	6	28	4	196
7:15 AM	0	3	20	46	68	21	13	0	3	6	30	2	212
7:30 AM	0	2	29	65	77	21	16	6	0	5	44	2	267
7:45 AM	1	3	20	53	103	37	15	1	1	11	41	0	286
8:00 AM	0	4	27	64	76	34	13	1	2	7	41	1	270
8:15 AM	0	3	22	38	74	36	20	1	3	8	52	6	263
8:30 AM	0	2	27	68	90	38	14	1	1	6	47	3	297
8:45 AM	0	8	37	78	93	26	12	9	7	9	57	3	339
Total	1	26	195	450	645	237	116	22	19	58	340	21	2,130

AM Intersection Peak Hour : **8:00 AM - 9:00 AM** Intersection PHF : **0.86**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	17	113	248	333	134	59	12	13	30	197	13	1,169
PHF	#####	0.53	0.76	0.79	0.90	0.88	0.74	0.33	0.46	0.83	0.86	0.54	0.86
Movement PHF		0.72			0.91			0.75			0.87		0.86

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	2	24	60	77	70	63	57	8	23	23	86	5	498
4:15 PM	4	20	68	94	64	69	76	8	18	29	110	8	568
4:30 PM	5	13	69	77	78	66	60	10	25	27	110	4	544
4:45 PM	2	24	67	66	93	79	40	14	26	18	120	11	560
5:00 PM	0	19	65	78	90	63	62	8	17	27	148	2	579
5:15 PM	0	13	66	106	91	93	64	7	20	19	110	5	594
5:30 PM	2	21	84	93	73	98	70	26	13	26	109	6	621
5:45 PM	1	17	82	80	108	69	75	16	22	27	86	4	587
Total	16	151	561	671	667	600	504	97	164	196	879	45	4,551

PM Intersection Peak Hour : **5:00 PM - 6:00 PM** Intersection PHF : **0.96**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	3	70	297	357	362	323	271	57	72	99	453	17	2381
PHF	0.38	0.833	0.884	0.842	0.838	0.824	0.903	0.548	0.818	0.917	0.765	0.708	0.96
Movement PHF		0.86			0.90			0.88			0.80		0.96

U-Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-1536

Location: Nobel Drive @ La Jolla Village Square Drwy

AM Period (7:00 AM - 9:00 AM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
7:00 AM	0	0	0	0	0
7:15 AM	0	1	0	0	1
7:30 AM	0	1	0	0	1
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
Total	0	2	0	0	2

AM Intersection Peak Hour : **8:00 AM - 9:00 AM** Intersection PHF : **#DIV/0!**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	0	0	0	0	0
PHF	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Movement PHF	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

PM Period (4:00 PM - 6:00 PM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
4:00 PM	0	0	0	0	0
4:15 PM	0	1	0	0	1
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	5	0	0	0	5
5:45 PM	0	1	0	0	1
Total	5	2	0	0	7

PM Intersection Peak Hour : **5:00 PM - 6:00 PM** Intersection PHF : **0.30**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	5	1	0	0	6
PHF	0.25	0.25	#DIV/0!	#DIV/0!	0.30
Movement PHF	0.25	0.25	#DIV/0!	#DIV/0!	0.30

Bike Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Nobel Drive @ La Jolla Village Square Drwy

Date of Count: *Tuesday, May 05, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Bike Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Nobel Drive @ La Jolla Village Square Drwy

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	1	0	2	0	1	0	0	0	0	0	0	4
7:15 AM	0	3	0	0	0	0	0	1	0	0	0	0	4
7:30 AM	0	2	0	1	0	0	0	0	0	0	0	0	3
7:45 AM	0	1	0	5	1	0	0	0	0	0	0	0	7
8:00 AM	0	3	0	1	1	0	0	0	0	0	0	0	5
8:15 AM	0	0	0	0	7	0	0	0	0	0	1	0	8
8:30 AM	0	0	0	7	5	0	0	0	0	0	2	0	14
8:45 AM	0	0	0	4	2	0	0	0	0	0	0	0	6
Total	0	10	0	20	16	1	0	1	0	0	3	0	51

AM Intersection Peak Hour : **7:45 AM - 8:45 AM** Intersection PHF : **0.61**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	4	0	13	14	0	0	0	0	0	3	0	34
PHF	#####	0.33	#####	0.46	0.50	#####	#####	#####	#####	#####	0.38	#####	0.61
Movement PHF		0.33			0.56			#DIV/0!			0.38		0.61

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	3	0	3
4:30 PM	0	0	0	0	3	0	0	0	0	0	5	0	8
4:45 PM	0	1	0	0	0	0	0	0	0	0	3	0	4
5:00 PM	0	0	0	0	0	0	0	0	0	0	6	0	6
5:15 PM	0	0	2	0	0	0	0	0	0	0	3	0	5
5:30 PM	0	1	1	1	0	0	0	0	0	0	5	0	8
5:45 PM	0	2	0	0	1	0	0	0	0	0	8	0	11
Total	0	4	3	1	4	0	0	0	0	0	33	0	45

PM Intersection Peak Hour : **5:00 PM - 6:00 PM** Intersection PHF : **0.68**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	3	3	1	1	0	0	0	0	0	22	0	30
PHF	#####	0.375	0.375	0.25	0.25	#####	#####	#####	#####	#####	0.688	#####	0.68
Movement PHF		0.75			0.50			#DIV/0!			0.69		0.68

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

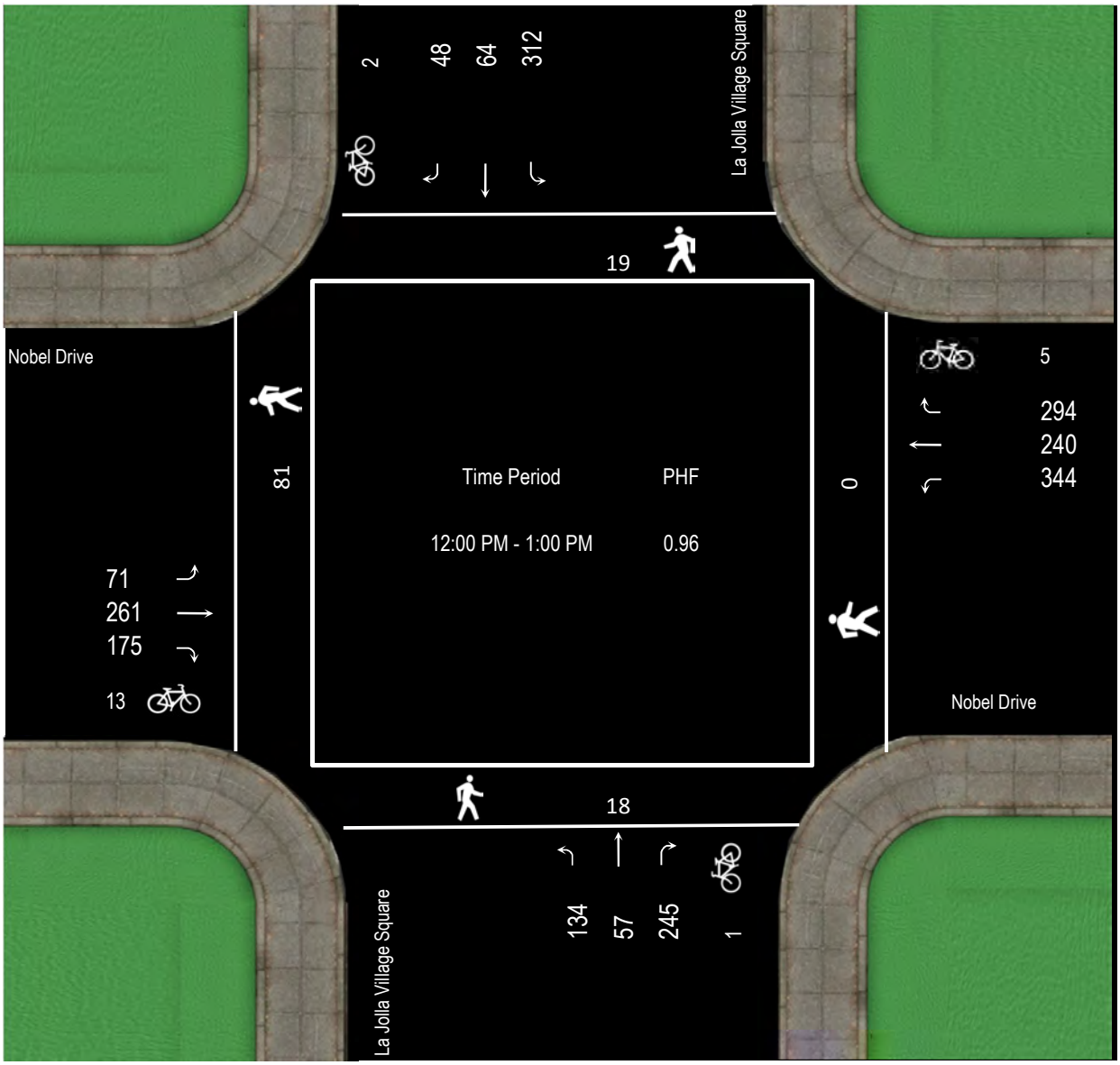
Location: Nobel Drive @ La Jolla Village Square

Date of Count: *Tuesday, October 21, 2014*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0429*



Kimley»Horn

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Nobel Drive @ La Jolla Village Square

Midday Period (11:00 AM - 1:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
11:00 AM	11	13	54	58	53	54	46	8	27	39	52	10	425
11:15 AM	9	21	50	59	70	78	59	7	23	48	29	18	471
11:30 AM	8	17	64	61	59	68	54	9	25	38	56	13	472
11:45 AM	10	18	45	73	66	87	59	9	20	49	69	7	512
12:00 PM	13	17	62	89	52	92	52	13	27	49	67	19	552
12:15 PM	13	16	76	76	64	94	61	12	34	36	75	22	579
12:30 PM	10	19	86	77	65	86	69	11	30	50	67	13	583
12:45 PM	12	12	88	52	59	72	63	21	43	40	52	17	531
Total	86	133	525	545	488	631	463	90	229	349	467	119	4,125

PM Intersection Peak Hour : **12:00 PM - 1:00 PM**

Intersection PHF : **0.96**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	48	64	312	294	240	344	245	57	134	175	261	71	2245
PHF	0.92	0.842	0.886	0.826	0.923	0.915	0.888	0.679	0.779	0.875	0.87	0.807	0.96
Movement PHF		0.92			0.94			0.86			0.94		0.96

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Nobel Drive @ I-5 SB On Ramp

Date of Count: *Tuesday, May 12, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Kimley»Horn

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Nobel Drive @ I-5 SB On Ramp

AM Period (7:00 AM - 9:00 AM)								
		Westbound		Northbound		Eastbound		
		Thru	Left	Right	Left	Right	Thru	TOTAL
7:00 AM		114	38	0	0	24	37	213
7:15 AM		152	60	0	0	18	34	264
7:30 AM		180	60	0	0	28	57	325
7:45 AM		197	83	0	0	25	62	367
8:00 AM		179	69	0	0	32	46	326
8:15 AM		164	56	0	0	42	63	325
8:30 AM		191	71	0	0	29	67	358
8:45 AM		185	51	0	0	25	67	328
Total		1,362	488	0	0	223	433	2,506

AM Intersection Peak Hour : **7:45 AM - 8:45 AM** Intersection PHF : **0.94**

		Westbound		Northbound		Eastbound		TOTAL
		Thru	Left	Right	Left	Right	Thru	
Volume		731	279	0	0	128	238	1,376
PHF		0.93	0.84	#####	#####	0.76	0.89	0.94
Movement PHF		0.90		#DIV/0!			0.87	0.94

PM Period (4:00 PM - 6:00 PM)								
		Westbound		Northbound		Eastbound		
		Thru	Left	Right	Left	Right	Thru	TOTAL
4:00 PM		220	150	0	0	97	144	611
4:15 PM		232	172	0	0	108	123	635
4:30 PM		243	186	0	0	96	166	691
4:45 PM		281	173	0	0	105	163	722
5:00 PM		261	182	0	0	106	183	732
5:15 PM		259	219	0	0	91	170	739
5:30 PM		257	175	0	0	111	173	716
5:45 PM		255	151	0	0	74	190	670
Total		2,008	1,408	0	0	788	1,312	5,516

PM Intersection Peak Hour : **4:45 PM - 5:45 PM** Intersection PHF : **0.98**

		Westbound		Northbound		Eastbound		TOTAL
		Thru	Left	Right	Left	Right	Thru	
Volume		1058	749	0	0	413	689	2909
PHF		0.941	0.855	#####	#####	0.93	0.941	0.98
Movement PHF		0.95		#DIV/0!			0.95	0.98

U-Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-1536

Location: Nobel Drive @ I-5 SB On Ramp

AM Period (7:00 AM - 9:00 AM)					
		Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
7:00 AM		0	0	3	3
7:15 AM		2	0	6	8
7:30 AM		1	0	8	9
7:45 AM		3	0	6	9
8:00 AM		1	0	3	4
8:15 AM		0	0	8	8
8:30 AM		0	0	4	4
8:45 AM		1	0	23	24
Total		8	0	61	69

AM Intersection Peak Hour : **7:45 AM - 8:45 AM** Intersection PHF : **0.69**

		East Leg U-Turn	South Leg U-Turn	West Leg U-Turn	TOTAL
Volume		4	0	21	25
PHF		0.33	#DIV/0!	0.66	0.69
Movement PHF		0.33	#DIV/0!	0.66	0.69

PM Period (4:00 PM - 6:00 PM)					
		Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
4:00 PM		3	0	0	3
4:15 PM		2	0	1	3
4:30 PM		2	0	5	7
4:45 PM		5	0	4	9
5:00 PM		12	0	4	16
5:15 PM		12	0	3	15
5:30 PM		7	0	2	9
5:45 PM		9	0	2	11
Total		52	0	21	73

PM Intersection Peak Hour : **4:45 PM - 5:45 PM** Intersection PHF : **0.77**

		East Leg U-Turn	South Leg U-Turn	West Leg U-Turn	TOTAL
Volume		36	0	13	49
PHF		0.75	#DIV/0!	0.8125	0.77
Movement PHF		0.75	#DIV/0!	0.81	0.77

Bike Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Nobel Drive @ I-5 SB On Ramp

Date of Count: *Tuesday, May 12, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Bike Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Nobel Drive @ I-5 SB On Ramp

AM Period (7:00 AM - 9:00 AM)								
		Westbound		Northbound		Eastbound		
		Thru	Left	Right	Left	Right	Thru	TOTAL
7:00 AM		3	0	0	0	0	0	3
7:15 AM		0	0	0	0	0	0	0
7:30 AM		1	0	0	0	0	0	1
7:45 AM		6	0	0	0	0	0	6
8:00 AM		2	0	0	0	0	0	2
8:15 AM		7	0	0	0	0	1	8
8:30 AM		12	0	0	0	0	2	14
8:45 AM		6	0	0	0	0	0	6
Total		37	0	0	0	0	3	40

AM Intersection Peak Hour : **7:45 AM - 8:45 AM** Intersection PHF : **0.54**

		Westbound		Northbound		Eastbound		TOTAL
		Thru	Left	Right	Left	Right	Thru	
Volume		27	0	0	0	0	3	30
PHF		0.56	#####	#####	#####	#####	0.38	0.54
Movement PHF		0.56		#DIV/0!			0.38	0.54

PM Period (4:00 PM - 6:00 PM)								
		Westbound		Northbound		Eastbound		
		Thru	Left	Right	Left	Right	Thru	TOTAL
4:00 PM		0	0	0	0	0	0	0
4:15 PM		0	0	0	0	0	3	3
4:30 PM		3	0	0	0	0	5	8
4:45 PM		0	0	0	0	0	3	3
5:00 PM		0	0	0	0	0	6	6
5:15 PM		0	0	0	0	0	5	5
5:30 PM		1	0	0	0	0	6	7
5:45 PM		1	0	0	0	0	8	9
Total		5	0	0	0	0	36	41

PM Intersection Peak Hour : **5:00 PM - 6:00 PM** Intersection PHF : **0.75**

		Westbound		Northbound		Eastbound		TOTAL
		Thru	Left	Right	Left	Right	Thru	
Volume		2	0	0	0	0	25	27
PHF		0.5	#####	#####	#####	#####	0.781	0.75
Movement PHF		0.50		#DIV/0!			0.78	0.75

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

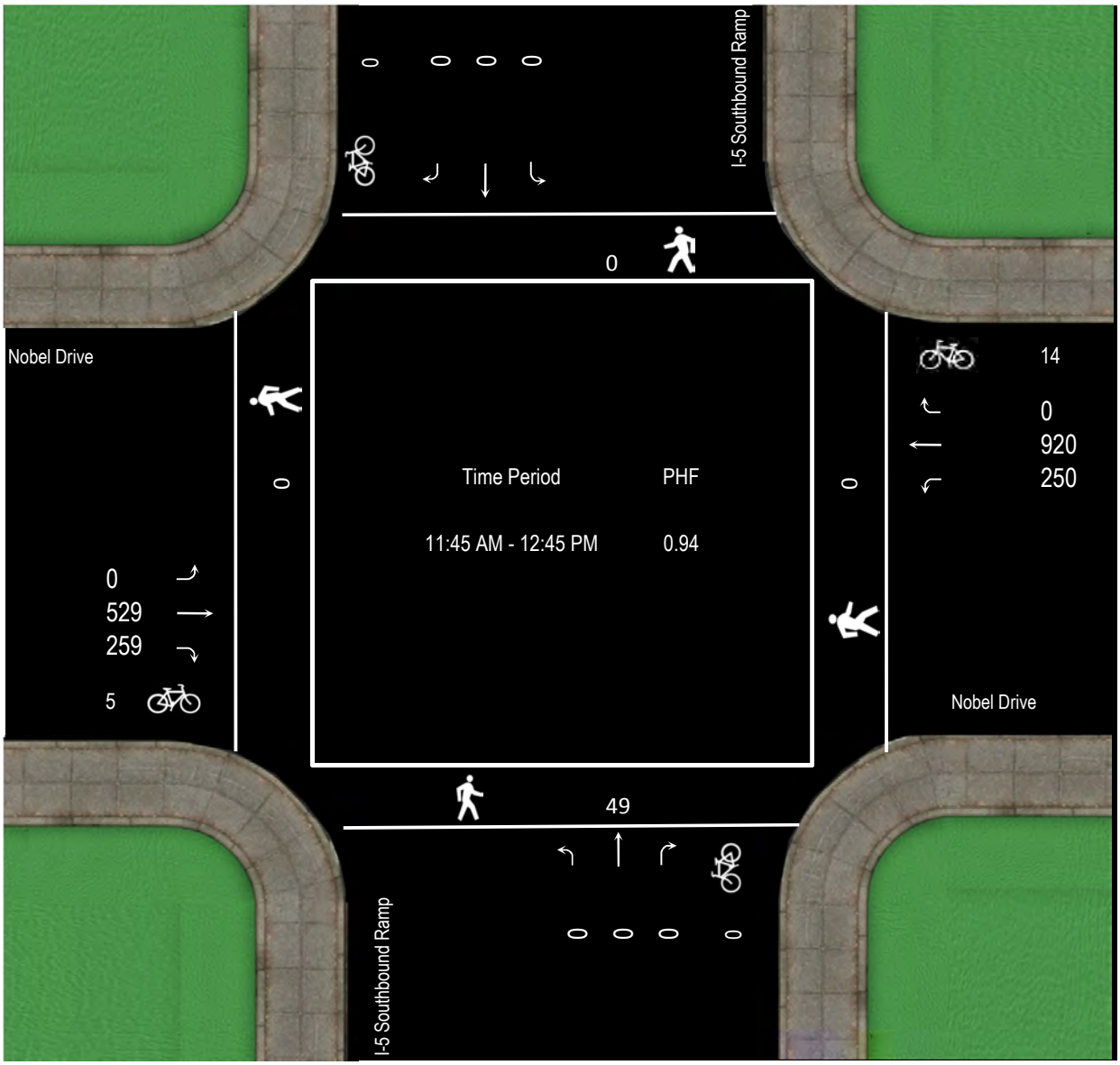
Location: Nobel Drive @ I-5 Southbound Ramp

Date of Count: *Tuesday, October 21, 2014*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0429*



Kimley»Horn

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Nobel Drive @ I-5 Southbound Ramp

Midday Period (11:00 AM - 1:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
11:00 AM	0	0	0	0	165	47	0	0	0	43	109	0	364
11:15 AM	0	0	0	0	199	55	0	0	0	47	91	0	392
11:30 AM	0	0	0	0	188	52	0	0	0	59	115	0	414
11:45 AM	0	0	0	0	226	59	0	0	0	56	117	0	458
12:00 PM	0	0	0	0	232	63	0	0	0	55	126	0	476
12:15 PM	0	0	0	0	234	56	0	0	0	67	145	0	502
12:30 PM	0	0	0	0	228	72	0	0	0	81	141	0	522
12:45 PM	0	0	0	0	183	43	0	0	0	60	143	0	429
Total	0	0	0	0	1,655	447	0	0	0	468	987	0	3,557

PM Intersection Peak Hour : **11:45 AM - 12:45 PM**

Intersection PHF : **0.94**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	0	0	0	920	250	0	0	0	259	529	0	1958
PHF	#####	#####	#####	#####	0.983	0.868	#####	#####	#####	0.799	0.912	#####	0.94
Movement PHF	#DIV/0!			0.98			#DIV/0!			0.89			0.94

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Nobel Drive @ University Center Lane

Date of Count: *Tuesday, April 28, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Nobel Drive @ University Center Lane

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	10	0	0	1	73	0	80	28	69	0	35	2	298
7:15 AM	12	0	0	3	119	0	88	28	83	0	36	0	369
7:30 AM	16	0	0	6	142	0	89	31	83	0	58	0	425
7:45 AM	19	0	0	7	203	0	81	46	61	0	65	0	482
8:00 AM	24	0	0	2	152	0	86	42	73	0	47	0	426
8:15 AM	13	0	0	3	145	0	88	31	62	0	63	0	405
8:30 AM	27	0	0	7	154	0	83	40	81	0	67	0	459
8:45 AM	23	0	0	5	136	0	87	24	78	0	67	1	421
Total	144	0	0	34	1,124	0	682	270	590	0	438	3	3,285

AM Intersection Peak Hour : **7:45 AM - 8:45 AM** Intersection PHF : **0.92**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	83	0	0	19	654	0	338	159	277	0	242	0	1,772
PHF	0.77	#####	#####	0.68	0.81	#####	0.96	0.86	0.85	#####	0.90	#####	0.92
Movement PHF		0.77			0.80			0.95			0.90		0.92

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	53	0	0	1	256	0	64	10	64	0	147	0	595
4:15 PM	58	0	0	3	282	0	60	14	66	0	125	0	608
4:30 PM	70	0	0	3	286	0	56	12	75	0	168	0	670
4:45 PM	53	0	0	2	322	0	51	13	84	0	167	1	693
5:00 PM	75	0	0	3	309	0	59	15	71	0	195	0	727
5:15 PM	70	0	0	2	338	0	88	10	82	0	181	1	772
5:30 PM	55	0	0	3	315	0	72	12	69	0	180	0	706
5:45 PM	49	0	0	2	298	0	65	10	68	0	199	0	691
Total	483	0	0	19	2,406	0	515	96	579	0	1,362	2	5,462

PM Intersection Peak Hour : **4:45 PM - 5:45 PM** Intersection PHF : **0.94**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	253	0	0	10	1284	0	270	50	306	0	723	2	2898
PHF	0.84	#####	#####	0.833	0.95	#####	0.767	0.833	0.911	#####	0.927	0.5	0.94
Movement PHF		0.84			0.95			0.87			0.93		0.94

U-Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-1536

Location: Nobel Drive @ University Center Lane

AM Period (7:00 AM - 9:00 AM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	1	0	0	0	1
7:45 AM	0	1	0	0	1
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
Total	1	1	0	0	2

AM Intersection Peak Hour : **7:45 AM - 8:45 AM** Intersection PHF : **0.25**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	0	1	0	0	1
PHF	#DIV/0!	0.25	#DIV/0!	#DIV/0!	0.25
Movement PHF	#DIV/0!	0.25	#DIV/0!	#DIV/0!	0.25

PM Period (4:00 PM - 6:00 PM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
Total	0	0	0	0	0

PM Intersection Peak Hour : **4:45 PM - 5:45 PM** Intersection PHF : **#DIV/0!**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	0	0	0	0	0
PHF	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Movement PHF	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

Bike Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Nobel Drive @ University Center Lane

Date of Count: *Tuesday, April 28, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Bike Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Nobel Drive @ University Center Lane

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	0	0	0	3	0	0	0	0	0	0	0	3
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
7:45 AM	0	0	0	0	6	0	0	0	0	0	0	0	6
8:00 AM	0	0	0	0	2	0	0	0	0	0	0	0	2
8:15 AM	0	0	0	0	7	0	0	0	0	0	1	0	8
8:30 AM	0	0	0	0	12	0	0	0	0	0	2	0	14
8:45 AM	0	0	0	0	6	0	0	0	0	0	0	0	6
Total	0	0	0	0	37	0	0	0	0	0	3	0	40

AM Intersection Peak Hour : **7:45 AM - 8:45 AM** Intersection PHF : **0.54**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	0	0	0	27	0	0	0	0	0	3	0	30
PHF	#####	#####	#####	#####	0.56	#####	#####	#####	#####	#####	0.38	#####	0.54
Movement PHF	#DIV/0!			0.56			#DIV/0!			0.38			0.54

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	3	0	3
4:30 PM	0	0	0	0	3	0	0	0	0	0	5	0	8
4:45 PM	0	0	0	0	0	0	0	0	0	0	3	0	3
5:00 PM	0	0	0	0	0	0	0	0	0	0	6	0	6
5:15 PM	0	0	0	0	0	0	0	0	0	0	5	0	5
5:30 PM	0	0	0	0	1	0	0	0	0	0	6	0	7
5:45 PM	0	0	0	0	1	0	0	0	0	0	8	0	9
Total	0	0	0	0	5	0	0	0	0	0	36	0	41

PM Intersection Peak Hour : **5:00 PM - 6:00 PM** Intersection PHF : **0.75**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	0	0	0	2	0	0	0	0	0	25	0	27
PHF	#####	#####	#####	#####	0.5	#####	#####	#####	#####	#####	0.781	#####	0.75
Movement PHF	#DIV/0!			0.50			#DIV/0!			0.78			0.75

Kimley»Horn

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

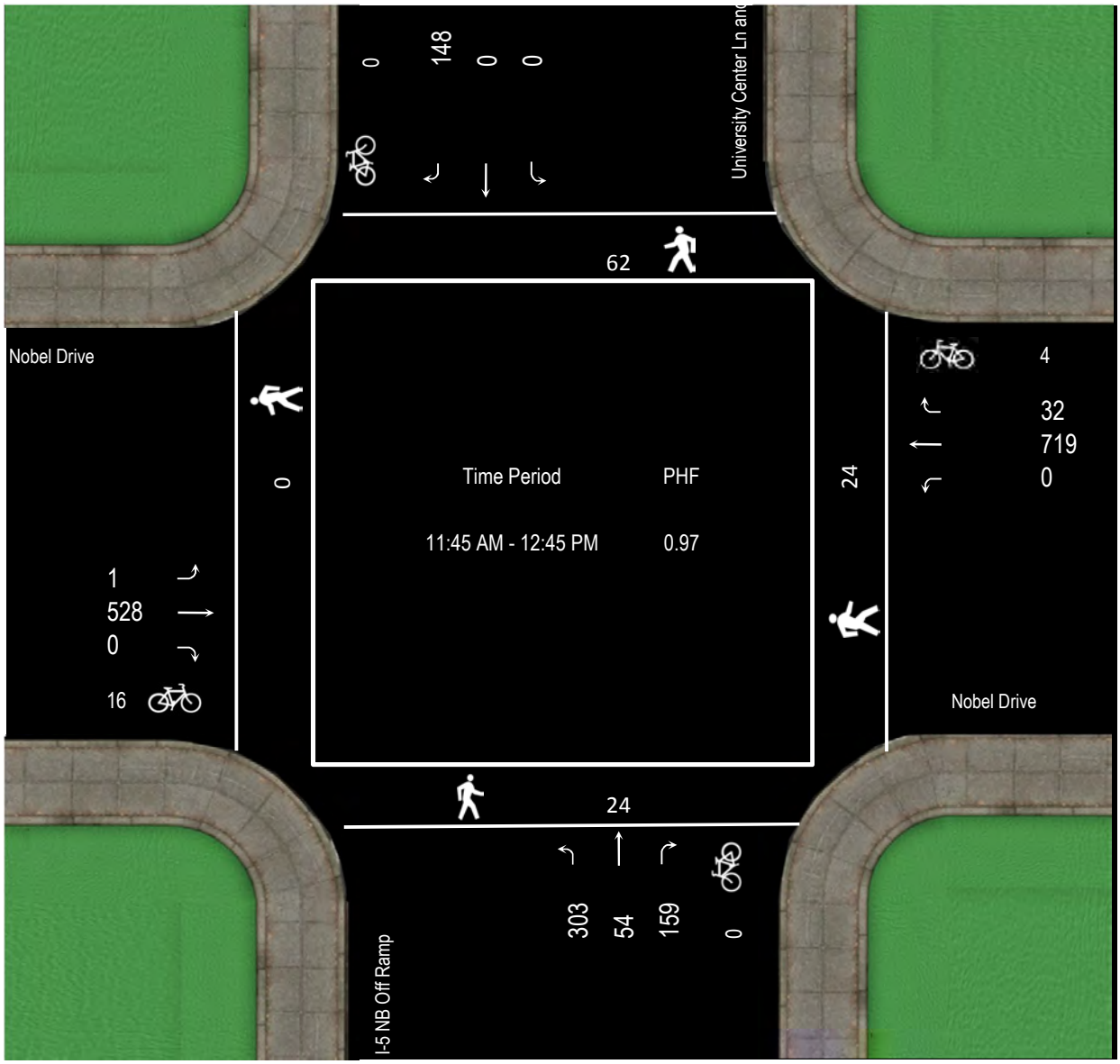
Location: Nobel Drive @ University Center Ln and I 5 Northboun

Date of Count: *Tuesday, October 21, 2014*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0429*



Kimley»Horn

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Nobel Drive @ University Center Ln and I 5 NorthI

Midday Period (11:00 AM - 1:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
11:00 AM	28	0	0	3	127	0	47	18	57	0	108	1	389
11:15 AM	34	0	0	5	159	0	43	9	61	0	90	1	402
11:30 AM	27	0	0	2	151	0	44	16	62	0	115	0	417
11:45 AM	40	0	0	3	165	0	39	10	80	0	117	0	454
12:00 PM	47	0	0	9	180	0	42	13	68	0	125	1	485
12:15 PM	27	0	0	9	186	0	46	12	77	0	145	0	502
12:30 PM	34	0	0	11	188	0	32	19	78	0	141	0	503
12:45 PM	26	0	0	9	137	0	48	19	63	0	142	1	445
Total	263	0	0	51	1,293	0	341	116	546	0	983	4	3,597

PM Intersection Peak Hour : **11:45 AM - 12:45 PM**

Intersection PHF : **0.97**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	148	0	0	32	719	0	159	54	303	0	528	1	1944
PHF	0.79	#####	#####	0.727	0.956	#####	0.864	0.711	0.947	#####	0.91	0.25	0.97
Movement PHF		0.79			0.94			0.96			0.91		0.97

Kimley»Horn

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Nobel Drive @ Caminito Plaza Centro

Date of Count: *Wednesday, October 21, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0428*

Kimley»Horn

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Nobel Drive @ Caminito Plaza Centro

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	6	0	1	0	88	5	3	0	1	2	91	9	206
7:15 AM	7	0	0	2	114	2	1	0	1	9	111	6	253
7:30 AM	7	1	0	4	127	8	3	0	10	7	90	11	268
7:45 AM	6	2	1	6	115	13	3	0	7	19	130	11	313
8:00 AM	9	2	1	5	149	8	5	0	7	24	121	12	343
8:15 AM	6	0	0	5	149	15	4	0	11	10	135	13	348
8:30 AM	16	0	1	4	134	16	1	0	5	18	122	6	323
8:45 AM	5	2	1	1	135	7	5	1	8	18	145	10	338
Total	62	7	5	27	1,011	74	25	1	50	107	945	78	2,392

AM Intersection Peak Hour : **8:00 AM - 9:00 AM** Intersection PHF : **0.97**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	36	4	3	15	567	46	15	1	31	70	523	41	1,352
PHF	0.56	0.50	0.75	0.75	0.95	0.72	0.75	0.25	0.70	0.73	0.90	0.79	0.97
Movement PHF		0.63			0.93			0.78			0.92		0.97

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	3	0	3	3	208	3	8	2	15	7	199	8	459
4:15 PM	12	1	5	6	236	4	9	1	13	10	219	11	527
4:30 PM	9	0	2	5	279	1	17	0	21	6	214	13	567
4:45 PM	6	3	2	3	285	9	10	1	16	11	210	15	571
5:00 PM	14	0	1	6	277	3	13	4	23	7	240	15	603
5:15 PM	14	1	2	12	293	4	16	3	16	8	219	16	604
5:30 PM	7	0	1	8	281	6	14	0	19	9	242	15	602
5:45 PM	6	1	3	6	272	7	13	0	10	11	241	18	588
Total	71	6	19	49	2,131	37	100	11	133	69	1,784	111	4,521

PM Intersection Peak Hour : **5:00 PM - 6:00 PM** Intersection PHF : **0.99**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	41	2	7	32	1123	20	56	7	68	35	942	64	2397
PHF	0.73	0.5	0.583	0.667	0.958	0.714	0.875	0.438	0.739	0.795	0.973	0.889	0.99
Movement PHF		0.74			0.95			0.82			0.96		0.99

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

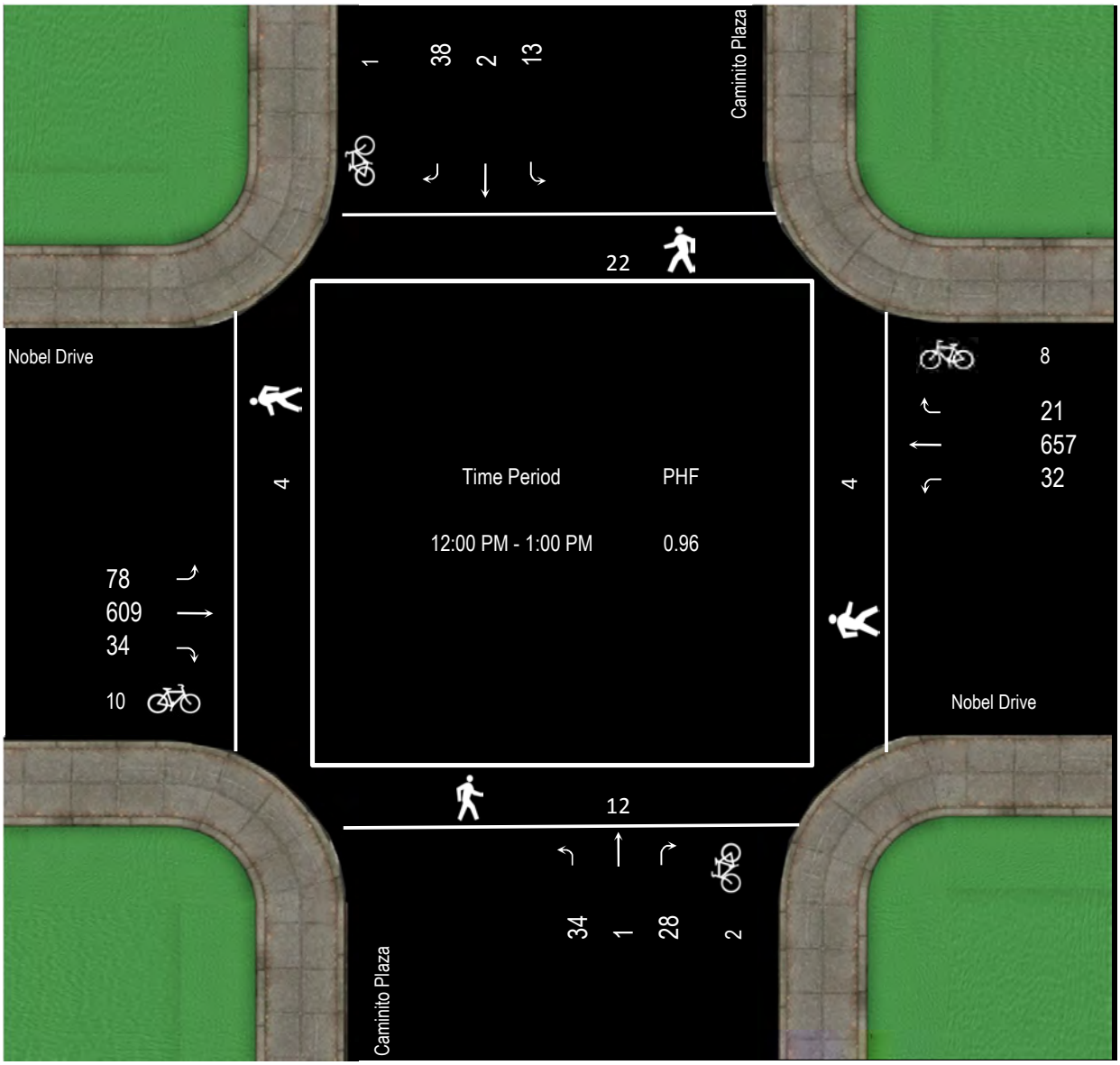
Location: Nobel Drive @ Caminito Plaza

Date of Count: *Tuesday, October 21, 2014*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0428*



Kimley»Horn

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Nobel Drive @ Caminito Plaza

Midday Period (11:00 AM - 1:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
11:00 AM	4	0	1	3	121	9	8	1	5	11	138	6	307
11:15 AM	7	2	4	4	148	4	5	2	9	5	116	12	318
11:30 AM	5	0	1	3	139	3	15	1	9	7	143	9	335
11:45 AM	7	1	3	4	149	5	11	1	12	9	135	12	349
12:00 PM	10	2	4	9	170	2	10	0	9	7	139	21	383
12:15 PM	10	0	3	4	180	3	7	1	5	7	169	15	404
12:30 PM	11	0	2	1	175	14	6	0	13	9	145	19	395
12:45 PM	7	0	4	7	132	13	5	0	7	11	156	23	365
Total	61	5	22	35	1,214	53	67	6	69	66	1,141	117	2,856

PM Intersection Peak Hour : **12:00 PM - 1:00 PM**

Intersection PHF : **0.96**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	38	2	13	21	657	32	28	1	34	34	609	78	1547
PHF	0.86	0.25	0.813	0.583	0.913	0.571	0.7	0.25	0.654	0.773	0.901	0.848	0.96
Movement PHF		0.83			0.93			0.83			0.94		0.96

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Nobel Drive @ Lebon Drive

Date of Count: *Tuesday, April 28, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Kimley»Horn

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Nobel Drive @ Lebon Drive

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	4	25	7	18	59	12	23	48	24	13	91	6	330
7:15 AM	5	15	8	15	76	1	15	50	25	12	108	4	334
7:30 AM	8	15	4	18	86	3	25	106	36	14	115	9	439
7:45 AM	13	16	9	27	125	5	24	80	38	8	116	6	467
8:00 AM	13	14	9	26	94	12	25	70	32	11	98	11	415
8:15 AM	13	23	14	22	94	14	23	43	37	10	112	8	413
8:30 AM	14	21	11	27	111	17	24	94	37	21	118	13	508
8:45 AM	14	33	4	18	87	12	17	65	32	16	103	4	405
Total	84	162	66	171	732	76	176	556	261	105	861	61	3,311

AM Intersection Peak Hour : **7:45 AM - 8:45 AM** Intersection PHF : **0.89**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	53	74	43	102	424	48	96	287	144	50	444	38	1,803
PHF	0.95	0.80	0.77	0.94	0.85	0.71	0.96	0.76	0.95	0.60	0.94	0.73	0.89
Movement PHF		0.85			0.91			0.85			0.88		0.89

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	11	49	27	20	173	19	18	41	34	30	155	18	595
4:15 PM	11	37	13	17	139	29	15	24	22	31	117	16	471
4:30 PM	6	41	12	17	179	20	26	35	37	31	156	27	587
4:45 PM	10	56	26	16	193	24	22	37	27	19	123	13	566
5:00 PM	24	66	28	13	164	16	17	41	30	42	169	23	633
5:15 PM	20	72	28	17	196	37	12	38	27	29	178	21	675
5:30 PM	119	65	29	23	179	33	14	43	31	37	157	16	746
5:45 PM	5	46	22	21	134	19	12	35	33	27	129	15	498
Total	206	432	185	144	1,357	197	136	294	241	246	1,184	149	4,771

PM Intersection Peak Hour : **4:45 PM - 5:45 PM** Intersection PHF : **0.88**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	173	259	111	69	732	110	65	159	115	127	627	73	2620
PHF	0.36	0.899	0.957	0.75	0.934	0.743	0.739	0.924	0.927	0.756	0.881	0.793	0.88
Movement PHF		0.64			0.91			0.96			0.88		0.88

U-Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-1536

Location: Nobel Drive @ Lebon Drive

AM Period (7:00 AM - 9:00 AM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
7:00 AM	0	9	0	0	9
7:15 AM	0	5	0	0	5
7:30 AM	0	2	0	0	2
7:45 AM	0	5	0	0	5
8:00 AM	0	5	0	0	5
8:15 AM	0	3	0	0	3
8:30 AM	0	5	0	0	5
8:45 AM	0	5	0	0	5
Total	0	39	0	0	39

AM Intersection Peak Hour : **7:45 AM - 8:45 AM** Intersection PHF : **0.90**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	0	18	0	0	18
PHF	#DIV/0!	0.90	#DIV/0!	#DIV/0!	0.90
Movement PHF	#DIV/0!	0.90	#DIV/0!	#DIV/0!	0.90

PM Period (4:00 PM - 6:00 PM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
4:00 PM	0	6	0	0	6
4:15 PM	0	9	0	0	9
4:30 PM	0	7	0	0	7
4:45 PM	0	6	0	0	6
5:00 PM	0	0	0	0	0
5:15 PM	0	6	0	0	6
5:30 PM	0	5	0	0	5
5:45 PM	0	3	0	0	3
Total	0	42	0	0	42

PM Intersection Peak Hour : **4:45 PM - 5:45 PM** Intersection PHF : **0.71**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	0	17	0	0	17
PHF	#DIV/0!	0.708333333	#DIV/0!	#DIV/0!	0.71
Movement PHF	#DIV/0!	0.71	#DIV/0!	#DIV/0!	0.71

Bike Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Nobel Drive @ Lebon Drive

Date of Count: *Tuesday, April 28, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Bike Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Nobel Drive @ Lebon Drive

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	1	0	0	1	0	2	0	0	0	1	0	5
7:15 AM	0	0	0	0	2	0	0	2	0	0	3	0	7
7:30 AM	0	1	0	0	4	0	1	2	0	0	1	0	9
7:45 AM	0	0	0	0	1	0	0	0	1	0	1	0	3
8:00 AM	0	0	0	0	2	0	0	0	4	0	2	0	8
8:15 AM	0	0	0	1	1	0	0	0	2	0	1	0	5
8:30 AM	0	1	0	0	0	0	0	1	6	0	0	0	8
8:45 AM	0	0	0	0	11	0	1	0	6	0	1	0	19
Total	0	3	0	1	22	0	4	5	19	0	10	0	64

AM Intersection Peak Hour : **8:00 AM - 9:00 AM** Intersection PHF : **0.53**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	1	0	1	14	0	1	1	18	0	4	0	40
PHF	#####	0.25	#####	0.25	0.32	#####	0.25	0.25	0.75	#####	0.50	#####	0.53
Movement PHF		0.25			0.34			0.71			0.50		0.53

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	0	0	0	0	1	0	0	1	0	1	1	0	4
4:15 PM	0	0	0	0	2	0	0	0	0	0	0	0	2
4:30 PM	0	0	0	1	1	1	0	0	0	0	0	0	3
4:45 PM	0	0	0	0	1	1	0	0	0	1	3	0	6
5:00 PM	0	0	0	2	0	0	0	0	0	5	3	0	10
5:15 PM	0	1	0	0	0	0	0	0	2	3	1	0	7
5:30 PM	0	0	0	0	1	0	0	0	0	1	5	0	7
5:45 PM	0	1	0	1	1	0	0	0	0	2	7	0	12
Total	0	2	0	4	7	2	0	1	2	13	20	0	51

PM Intersection Peak Hour : **5:00 PM - 6:00 PM** Intersection PHF : **0.75**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	2	0	3	2	0	0	0	2	11	16	0	36
PHF	#####	0.5	#####	0.375	0.5	#####	#####	#####	0.25	0.55	0.571	#####	0.75
Movement PHF		0.50			0.63			0.25			0.75		0.75

Kimley»Horn

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

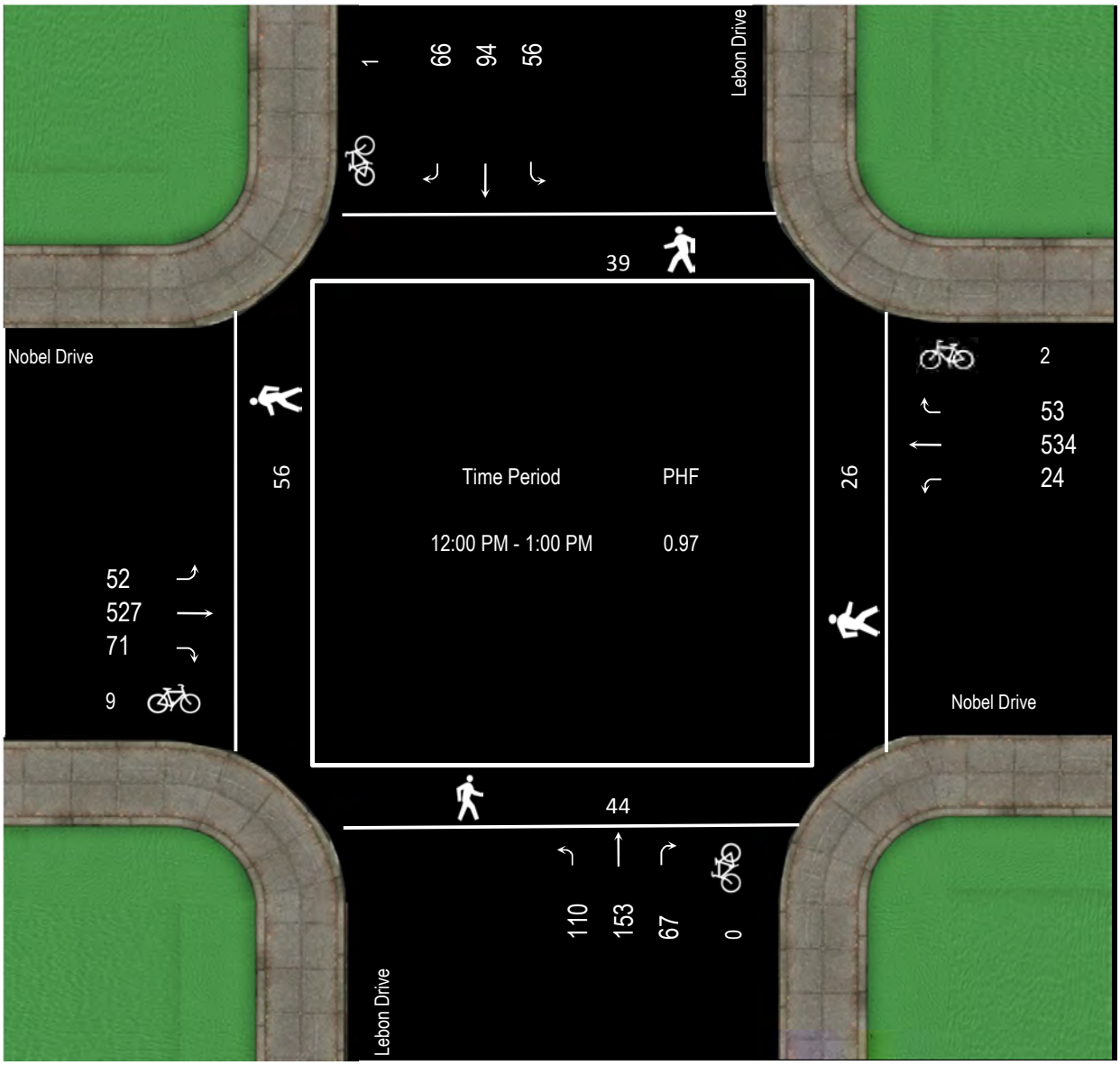
Location: Nobel Drive @ Lebon Drive

Date of Count: *Tuesday, October 21, 2014*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0429*



Kimley»Horn

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Nobel Drive @ Lebon Drive

Midday Period (11:00 AM - 1:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
11:00 AM	25	21	11	17	87	6	13	39	21	13	127	7	387
11:15 AM	10	29	7	12	131	6	12	31	15	9	101	15	378
11:30 AM	14	38	18	6	108	12	5	37	23	11	131	17	420
11:45 AM	13	18	9	16	127	13	17	28	18	13	129	7	408
12:00 PM	17	20	10	7	132	6	22	33	32	21	125	7	432
12:15 PM	12	18	11	18	146	8	14	32	29	19	143	17	467
12:30 PM	17	26	17	12	145	5	19	41	28	10	129	14	463
12:45 PM	20	30	18	16	111	5	12	47	21	21	130	14	445
Total	128	200	101	104	987	61	114	288	187	117	1,015	98	3,400

PM Intersection Peak Hour : **12:00 PM - 1:00 PM**

Intersection PHF : **0.97**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	66	94	56	53	534	24	67	153	110	71	527	52	1807
PHF	0.83	0.783	0.778	0.736	0.914	0.75	0.761	0.814	0.859	0.845	0.921	0.765	0.97
Movement PHF		0.79			0.89			0.94			0.91		0.97

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Nobel Drive @ Regents Road

Date of Count: *Wednesday, May 06, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Kimley»Horn

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Nobel Drive @ Regents Road

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	4	24	13	13	55	24	15	23	4	9	97	25	306
7:15 AM	7	84	10	20	68	53	30	45	17	19	97	36	486
7:30 AM	15	56	9	43	87	44	65	96	19	11	104	42	591
7:45 AM	10	31	17	30	96	17	53	87	25	6	114	42	528
8:00 AM	12	24	13	32	97	22	18	47	13	6	114	44	442
8:15 AM	17	21	9	28	84	11	18	63	1	3	88	33	376
8:30 AM	20	21	15	33	95	13	27	67	8	11	90	41	441
8:45 AM	14	20	8	30	117	18	26	63	10	10	109	44	469
Total	99	281	94	229	699	202	252	491	97	75	813	307	3,639

AM Intersection Peak Hour : **7:15 AM - 8:15 AM** Intersection PHF : **0.87**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	44	195	49	125	348	136	166	275	74	42	429	164	2,047
PHF	0.73	0.58	0.72	0.73	0.90	0.64	0.64	0.72	0.74	0.55	0.94	0.93	0.87
Movement PHF		0.71			0.88			0.72			0.97		0.87

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	49	71	61	20	134	45	13	26	8	14	129	30	600
4:15 PM	59	75	50	26	181	48	15	32	16	27	171	30	730
4:30 PM	66	94	52	28	188	38	33	35	10	11	155	27	737
4:45 PM	63	98	58	24	160	50	23	44	16	16	134	33	719
5:00 PM	72	118	50	15	189	43	27	31	9	17	158	48	777
5:15 PM	67	126	104	28	220	37	22	24	18	17	138	29	830
5:30 PM	61	147	57	20	182	53	27	28	17	13	167	36	808
5:45 PM	37	87	48	19	171	62	26	37	9	19	168	38	721
Total	474	816	480	180	1,425	376	186	257	103	134	1,220	271	5,922

PM Intersection Peak Hour : **5:00 PM - 6:00 PM** Intersection PHF : **0.94**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	237	478	259	82	762	195	102	120	53	66	631	151	3136
PHF	0.82	0.813	0.623	0.732	0.866	0.786	0.944	0.811	0.736	0.868	0.939	0.786	0.94
Movement PHF		0.82			0.91			0.95			0.94		0.94

U-Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-1536

Location: Nobel Drive @ Regents Road

AM Period (7:00 AM - 9:00 AM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
7:00 AM	0	1	2	1	4
7:15 AM	2	2	2	0	6
7:30 AM	4	3	0	0	7
7:45 AM	2	1	0	2	5
8:00 AM	1	3	1	1	6
8:15 AM	0	5	1	1	7
8:30 AM	1	1	1	1	4
8:45 AM	1	0	4	1	6
Total	11	16	11	7	45

AM Intersection Peak Hour : **7:15 AM - 8:15 AM** Intersection PHF : **0.86**

	North Leg U-Turn	East Leg U-Turn	South Leg U-Turn	West Leg U-Turn	TOTAL
Volume	9	9	3	3	24
PHF	0.56	0.75	0.38	0.38	0.86
Movement PHF	0.56	0.75	0.38	0.38	0.86

PM Period (4:00 PM - 6:00 PM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
4:00 PM	2	1	8	2	13
4:15 PM	2	2	6	1	11
4:30 PM	5	4	3	0	12
4:45 PM	0	4	6	0	10
5:00 PM	9	2	5	5	21
5:15 PM	2	0	4	4	10
5:30 PM	3	4	7	6	20
5:45 PM	7	2	7	0	16
Total	30	19	46	18	113

PM Intersection Peak Hour : **5:00 PM - 6:00 PM** Intersection PHF : **0.80**

	North Leg U-Turn	East Leg U-Turn	South Leg U-Turn	West Leg U-Turn	TOTAL
Volume	21	8	23	15	67
PHF	0.58	0.5	0.821428571	0.625	0.80
Movement PHF	0.58	0.50	0.82	0.63	0.80

Bike Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Nobel Drive @ Regents Road

Date of Count: *Wednesday, May 06, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Bike Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Nobel Drive @ Regents Road

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	0	0	2	3	0	0	3	0	0	0	0	8
7:15 AM	0	3	0	0	0	0	0	1	0	1	2	0	7
7:30 AM	0	2	0	0	2	0	0	10	1	0	1	2	18
7:45 AM	0	1	0	2	1	0	0	14	1	0	0	1	20
8:00 AM	0	3	0	0	3	1	0	4	1	0	1	2	15
8:15 AM	0	0	0	1	1	0	0	4	0	0	0	1	7
8:30 AM	0	0	0	1	1	0	1	7	1	0	1	1	13
8:45 AM	0	1	0	2	7	0	0	3	0	0	0	0	13
Total	0	10	0	8	18	1	1	46	4	1	5	7	101

AM Intersection Peak Hour : **7:15 AM - 8:15 AM** Intersection PHF : **0.75**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	9	0	2	6	1	0	29	3	1	4	5	60
PHF	#####	0.75	#####	0.25	0.50	0.25	#####	0.52	0.75	0.25	0.50	0.63	0.75
Movement PHF		0.75			0.56			0.53			0.83		0.75

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	1	0	0	0	0	0	0	0	0	0	3	0	4
4:15 PM	0	3	0	0	0	2	0	3	0	0	0	1	9
4:30 PM	0	2	1	0	1	0	0	2	0	0	0	0	6
4:45 PM	1	6	0	0	0	0	0	0	0	1	0	0	8
5:00 PM	1	4	3	1	1	0	0	0	0	0	1	0	11
5:15 PM	1	9	0	0	1	0	1	1	0	0	5	1	19
5:30 PM	1	9	1	0	2	0	0	0	0	0	4	0	17
5:45 PM	0	7	4	0	0	0	0	0	0	0	2	0	13
Total	5	40	9	1	5	2	1	6	0	1	15	2	87

PM Intersection Peak Hour : **5:00 PM - 6:00 PM** Intersection PHF : **0.79**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	3	29	8	1	4	0	1	1	0	0	12	1	60
PHF	0.75	0.806	0.5	0.25	0.5	#####	0.25	0.25	#####	#####	0.6	0.25	0.79
Movement PHF		0.91			0.63			0.25			0.54		0.79

Kimley»Horn

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

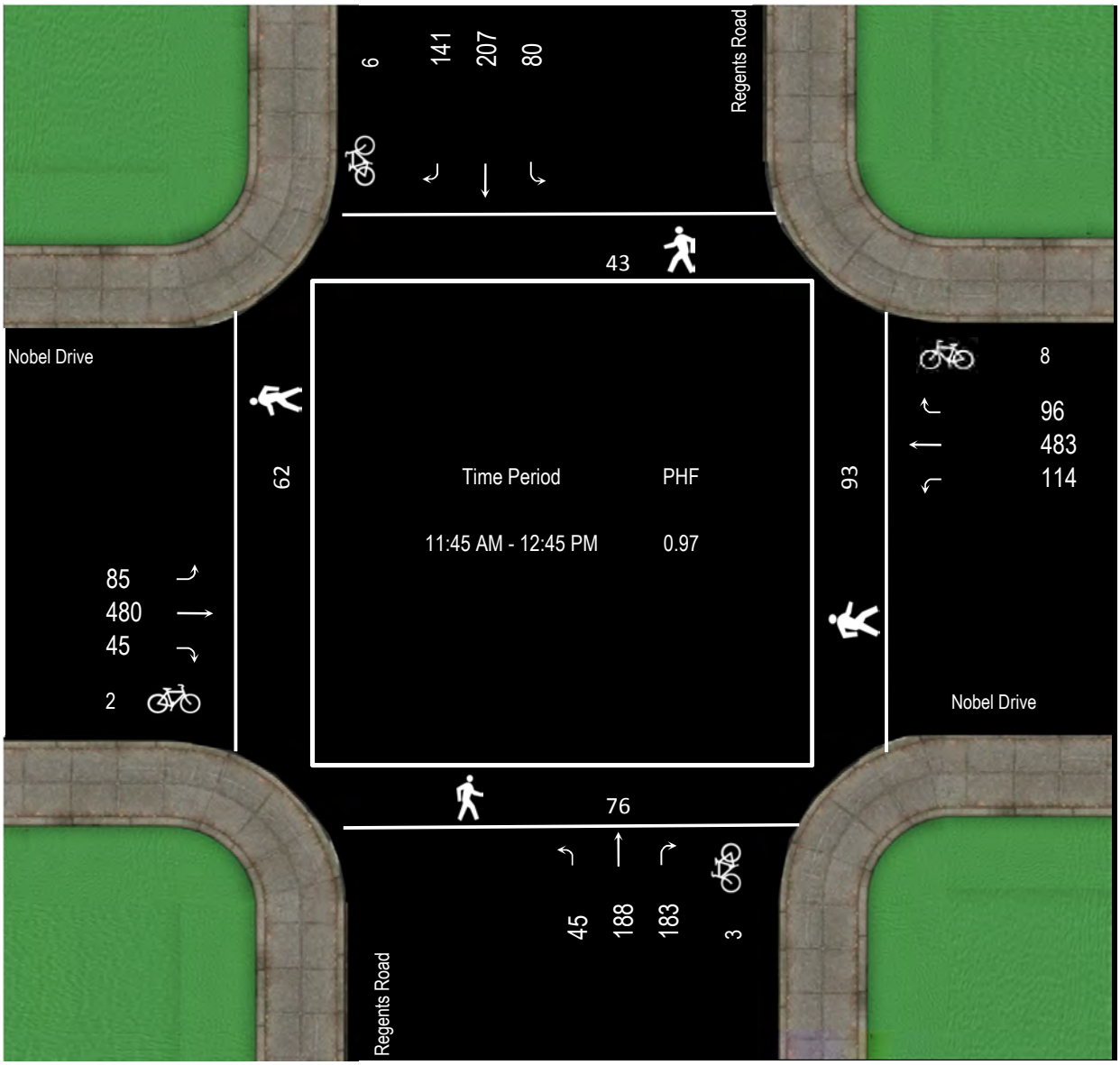
Location: Nobel Drive @ Regents Road

Date of Count: *Tuesday, October 21, 2014*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0429*



Kimley»Horn

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Nobel Drive @ Regents Road

Midday Period (11:00 AM - 1:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
11:00 AM	19	26	14	22	96	32	16	27	11	10	113	15	401
11:15 AM	19	48	21	18	114	41	14	27	9	10	114	16	451
11:30 AM	20	55	5	12	102	46	20	21	10	20	111	16	438
11:45 AM	39	55	17	26	100	36	79	52	10	7	103	20	544
12:00 PM	34	50	29	24	117	23	49	46	12	15	125	13	537
12:15 PM	30	56	14	22	134	27	28	33	10	11	130	19	514
12:30 PM	38	46	20	24	132	28	27	57	13	12	122	33	552
12:45 PM	26	39	11	22	118	19	32	43	7	7	138	53	515
Total	225	375	131	170	913	252	265	306	82	92	956	185	3,952

PM Intersection Peak Hour : **11:45 AM - 12:45 PM**

Intersection PHF : **0.97**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	141	207	80	96	483	114	183	188	45	45	480	85	2147
PHF	0.90	0.924	0.69	0.923	0.901	0.792	0.579	0.825	0.865	0.75	0.923	0.644	0.97
Movement PHF		0.95			0.94			0.74			0.91		0.97

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Nobel Drive @ Costa Verde Boulevard

Date of Count: *Thursday, May 07, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Kimley»Horn

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Nobel Drive @ Costa Verde Boulevard

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	14	9	19	11	59	3	8	10	9	7	83	31	263
7:15 AM	23	6	16	12	122	12	10	10	8	12	108	34	373
7:30 AM	21	11	15	10	107	14	20	13	10	9	113	40	383
7:45 AM	22	7	21	23	112	13	5	8	8	6	113	34	372
8:00 AM	17	3	22	25	106	12	7	4	9	2	83	32	322
8:15 AM	17	7	14	15	120	7	6	6	14	6	117	40	369
8:30 AM	23	6	19	22	123	13	4	10	10	3	113	24	370
8:45 AM	20	13	19	18	106	6	21	25	21	10	120	25	404
Total	157	62	145	136	855	80	81	86	89	55	850	260	2,856

AM Intersection Peak Hour : **8:00 AM - 9:00 AM** Intersection PHF : **0.91**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	77	29	74	80	455	38	38	45	54	21	433	121	1,465
PHF	0.84	0.56	0.84	0.80	0.92	0.73	0.45	0.45	0.64	0.53	0.90	0.76	0.91
Movement PHF		0.87			0.91			0.51			0.88		0.91

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	31	17	22	16	151	20	10	9	10	16	125	31	458
4:15 PM	31	21	24	21	177	29	9	6	9	21	144	36	528
4:30 PM	27	15	27	15	142	20	12	10	16	17	127	31	459
4:45 PM	32	15	27	30	151	16	8	13	11	6	146	45	500
5:00 PM	25	7	26	32	166	15	11	5	15	6	136	58	502
5:15 PM	31	13	26	15	156	19	17	14	17	17	163	39	527
5:30 PM	29	15	32	16	173	22	14	10	18	22	151	36	538
5:45 PM	20	18	23	22	196	25	14	15	9	20	159	44	565
Total	226	121	207	167	1,312	166	95	82	105	125	1,151	320	4,077

PM Intersection Peak Hour : **5:00 PM - 6:00 PM** Intersection PHF : **0.94**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	105	53	107	85	691	81	56	44	59	65	609	177	2132
PHF	0.85	0.736	0.836	0.664	0.881	0.81	0.824	0.733	0.819	0.739	0.934	0.763	0.94
Movement PHF		0.87			0.88			0.83			0.95		0.94

U-Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-1536

Location: Nobel Drive @ Costa Verde Boulevard

AM Period (7:00 AM - 9:00 AM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	1	1	0	0	2
8:00 AM	2	0	0	0	2
8:15 AM	4	0	0	0	4
8:30 AM	1	1	0	0	2
8:45 AM	0	0	0	0	0
Total	8	2	0	0	10

AM Intersection Peak Hour : **8:00 AM - 9:00 AM** Intersection PHF : **0.50**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	7	1	0	0	8
PHF	0.44	0.25	#DIV/0!	#DIV/0!	0.50
Movement PHF	0.44	0.25	#DIV/0!	#DIV/0!	0.50

PM Period (4:00 PM - 6:00 PM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
4:00 PM	0	5	0	2	7
4:15 PM	2	9	0	0	11
4:30 PM	0	6	0	1	7
4:45 PM	4	4	0	1	9
5:00 PM	2	9	0	0	11
5:15 PM	2	6	0	1	9
5:30 PM	0	3	0	1	4
5:45 PM	0	4	0	0	4
Total	10	46	0	6	62

PM Intersection Peak Hour : **5:00 PM - 6:00 PM** Intersection PHF : **0.64**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	4	22	0	2	28
PHF	0.50	0.611111111	#DIV/0!	0.5	0.64
Movement PHF	0.50	0.61	#DIV/0!	0.50	0.64

Bike Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Nobel Drive @ Costa Verde Boulevard

Date of Count: *Thursday, May 07, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Bike Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Nobel Drive @ Costa Verde Boulevard

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	1	0	0	2	0	1	1	3	1	0	0	9
7:15 AM	1	0	0	0	0	0	0	1	2	0	2	0	6
7:30 AM	0	2	0	1	2	0	0	1	2	1	1	0	10
7:45 AM	0	0	0	0	2	0	0	2	1	1	0	0	6
8:00 AM	0	0	1	0	1	1	0	1	1	0	1	1	7
8:15 AM	0	0	1	1	2	0	0	0	0	1	1	0	6
8:30 AM	0	1	0	0	1	0	0	2	4	0	0	0	8
8:45 AM	0	0	0	1	8	0	0	3	3	0	2	0	17
Total	1	4	2	3	18	1	1	11	16	4	7	1	69

AM Intersection Peak Hour : **8:00 AM - 9:00 AM** Intersection PHF : **0.56**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	1	2	2	12	1	0	6	8	1	4	1	38
PHF	#####	0.25	0.50	0.50	0.38	0.25	#####	0.50	0.50	0.25	0.50	0.25	0.56
Movement PHF		0.75			0.42			0.58			0.75		0.56

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	0	2	0	0	0	0	0	1	0	0	0	1	4
4:15 PM	0	1	0	0	2	0	0	0	0	1	2	0	6
4:30 PM	0	0	0	0	0	0	1	0	0	1	0	0	2
4:45 PM	0	0	0	0	0	0	0	0	0	1	0	0	1
5:00 PM	0	0	0	0	4	1	0	0	0	0	1	0	6
5:15 PM	0	0	0	0	1	0	1	0	0	0	2	0	4
5:30 PM	0	0	1	0	1	1	0	0	0	0	1	0	4
5:45 PM	0	0	0	0	0	0	0	0	0	1	1	0	2
Total	0	3	1	0	8	2	2	1	0	4	7	1	29

PM Intersection Peak Hour : **5:00 PM - 6:00 PM** Intersection PHF : **0.67**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	0	1	0	6	2	1	0	0	1	5	0	16
PHF	#####	#####	0.25	#####	0.375	0.5	0.25	#####	#####	0.25	0.625	#####	0.67
Movement PHF		0.25			0.40			0.25			0.75		0.67

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Nobel Drive @ Costa Verde Blvd

Date of Count: *Tuesday, October 21, 2014*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0429*

Kimley»Horn

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Nobel Drive @ Costa Verde Blvd

Midday Period (11:00 AM - 1:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
11:00 AM	29	9	22	19	107	6	11	4	14	7	103	29	360
11:15 AM	25	9	18	22	141	12	9	6	7	5	103	31	388
11:30 AM	14	9	17	24	139	13	7	13	7	11	87	26	367
11:45 AM	20	5	25	22	131	11	8	17	11	9	138	40	437
12:00 PM	22	5	22	25	136	13	17	5	6	12	144	40	447
12:15 PM	30	8	30	21	142	20	12	22	11	14	108	48	466
12:30 PM	17	9	22	21	159	14	10	13	8	6	127	40	446
12:45 PM	27	4	25	22	123	15	12	6	9	15	149	39	446
Total	184	58	181	176	1,078	104	86	86	73	79	959	293	3,357

PM Intersection Peak Hour : **12:00 PM - 1:00 PM**

Intersection PHF : **0.97**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	96	26	99	89	560	62	51	46	34	47	528	167	1805
PHF	0.80	0.722	0.825	0.89	0.881	0.775	0.75	0.523	0.773	0.783	0.886	0.87	0.97
Movement PHF		0.81			0.92			0.73			0.91		0.97

Kimley»Horn

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Nobel Drive @ Lombard Place

Date of Count: *Wednesday, October 21, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0428*

Kimley»Horn

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Nobel Drive @ Lombard Place

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	10	0	3	4	99	3	4	0	6	4	100	12	245
7:15 AM	16	0	6	12	164	1	5	0	10	3	137	20	374
7:30 AM	13	0	6	5	114	2	2	0	8	1	175	7	333
7:45 AM	6	0	4	3	95	2	4	0	4	7	259	14	398
8:00 AM	6	0	9	5	91	2	7	0	10	3	181	14	328
8:15 AM	12	0	10	8	95	3	5	0	6	1	178	15	333
8:30 AM	13	0	6	6	73	1	5	0	9	4	168	9	294
8:45 AM	8	0	9	7	114	0	3	0	6	0	180	27	354
Total	84	0	53	50	845	14	35	0	59	23	1,378	118	2,659

AM Intersection Peak Hour : **7:15 AM - 8:15 AM** Intersection PHF : **0.90**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	41	0	25	25	464	7	18	0	32	14	752	55	1,433
PHF	0.64	#####	0.69	0.52	0.71	0.88	0.64	#####	0.80	0.50	0.73	0.69	0.90
Movement PHF		0.75			0.70			0.74			0.73		0.90

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	38	1	21	17	197	1	2	0	5	6	119	44	451
4:15 PM	30	1	11	20	235	7	2	1	3	5	132	40	487
4:30 PM	57	0	19	27	250	3	4	0	7	2	102	48	519
4:45 PM	47	0	8	24	300	3	2	0	4	7	143	54	592
5:00 PM	62	0	26	16	262	6	2	4	5	6	109	51	549
5:15 PM	37	0	17	18	322	5	0	0	4	7	122	51	583
5:30 PM	44	0	14	19	258	7	3	1	8	9	118	46	527
5:45 PM	41	1	18	25	225	5	6	0	0	8	128	53	510
Total	356	3	134	166	2,049	37	21	6	36	50	973	387	4,218

PM Intersection Peak Hour : **4:45 PM - 5:45 PM** Intersection PHF : **0.95**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	190	0	65	77	1142	21	7	5	21	29	492	202	2251
PHF	0.77	#####	0.625	0.802	0.887	0.75	0.583	0.313	0.656	0.806	0.86	0.935	0.95
Movement PHF		0.72			0.90			0.69			0.89		0.95

Kimley»Horn

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

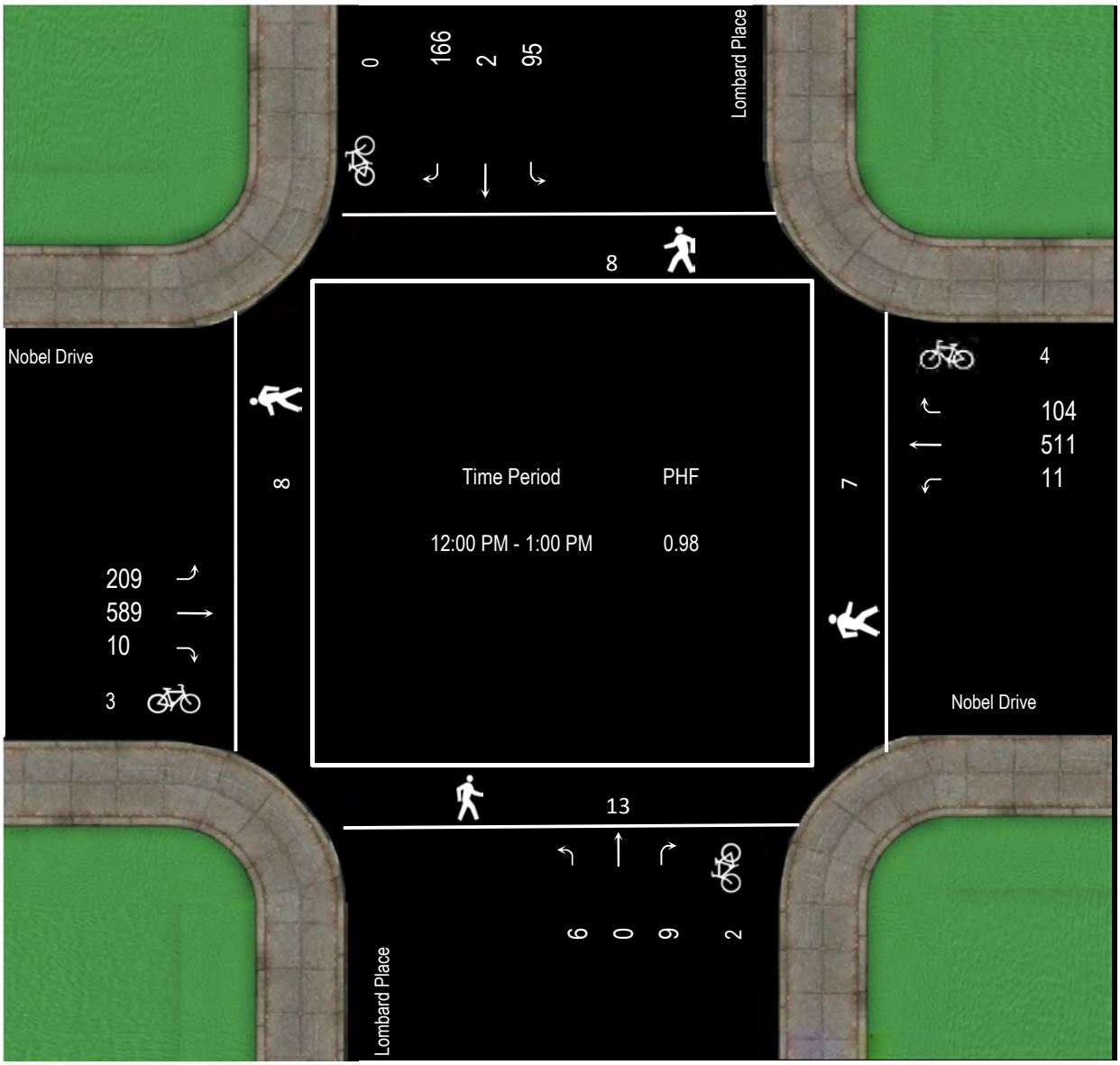
Location: Nobel Drive @ Lombard Place

Date of Count: *Tuesday, October 21, 2014*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0428*



Kimley»Horn

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Nobel Drive @ Lombard Place

Midday Period (11:00 AM - 1:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
11:00 AM	30	0	17	18	108	1	1	0	2	4	102	32	315
11:15 AM	47	0	9	25	133	4	1	0	6	4	115	38	382
11:30 AM	32	0	19	28	162	1	0	0	6	4	126	48	426
11:45 AM	19	0	21	24	144	1	2	1	6	7	140	46	411
12:00 PM	38	0	19	30	135	3	1	0	3	5	133	44	411
12:15 PM	34	1	22	26	130	0	4	0	1	0	152	61	431
12:30 PM	37	1	25	25	128	5	3	0	0	2	143	66	435
12:45 PM	57	0	29	23	118	3	1	0	2	3	161	38	435
Total	294	2	161	199	1,058	18	13	1	26	29	1,072	373	3,246

PM Intersection Peak Hour : **12:00 PM - 1:00 PM**

Intersection PHF : **0.98**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	166	2	95	104	511	11	9	0	6	10	589	209	1712
PHF	0.73	0.5	0.819	0.867	0.946	0.55	0.563	#####	0.5	0.5	0.915	0.792	0.98
Movement PHF		0.76			0.93			0.75			0.95		0.98

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Nobel Drive @ Towne Center Drive

Date of Count: *Thursday, May 07, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Kimley»Horn

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Nobel Drive @ Towne Center Drive

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	25	11	4	11	36	1	8	10	2	1	66	33	208
7:15 AM	52	16	1	13	52	5	9	16	2	3	72	38	279
7:30 AM	55	9	8	15	51	3	16	32	8	7	121	59	384
7:45 AM	42	11	3	18	39	3	27	45	1	4	138	106	437
8:00 AM	42	4	6	22	52	1	20	26	0	0	122	74	369
8:15 AM	46	7	4	21	48	0	24	23	7	0	119	91	390
8:30 AM	52	3	3	12	46	0	18	22	6	3	115	94	374
8:45 AM	32	7	6	16	36	1	20	31	7	2	90	104	352
Total	346	68	35	128	360	14	142	205	33	20	843	599	2,793

AM Intersection Peak Hour : **7:30 AM - 8:30 AM** Intersection PHF : **0.90**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	185	31	21	76	190	7	87	126	16	11	500	330	1,580
PHF	0.84	0.70	0.66	0.86	0.91	0.58	0.81	0.70	0.50	0.39	0.91	0.78	0.90
Movement PHF		0.82			0.91			0.78			0.85		0.90

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	111	32	12	6	136	15	8	8	3	4	67	47	449
4:15 PM	99	36	15	10	154	30	1	9	4	6	84	51	499
4:30 PM	102	40	13	15	134	25	4	11	5	5	51	54	459
4:45 PM	92	35	14	16	156	20	5	5	3	10	69	68	493
5:00 PM	166	56	19	10	179	27	4	8	2	3	88	82	644
5:15 PM	148	55	18	15	192	54	8	6	6	10	57	73	642
5:30 PM	119	63	15	15	159	39	4	6	1	5	76	73	575
5:45 PM	111	39	16	15	174	29	1	10	6	5	83	67	556
Total	948	356	122	102	1,284	239	35	63	30	48	575	515	4,317

PM Intersection Peak Hour : **5:00 PM - 6:00 PM** Intersection PHF : **0.94**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	544	213	68	55	704	149	17	30	15	23	304	295	2417
PHF	0.82	0.845	0.895	0.917	0.917	0.69	0.531	0.75	0.625	0.575	0.864	0.899	0.94
Movement PHF		0.86			0.87			0.78			0.90		0.94

U-Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-1536

Location: Nobel Drive @ Towne Center Drive

AM Period (7:00 AM - 9:00 AM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
7:00 AM	0	0	4	0	4
7:15 AM	0	0	0	1	1
7:30 AM	0	0	0	0	0
7:45 AM	0	0	1	0	1
8:00 AM	0	0	1	0	1
8:15 AM	0	0	1	0	1
8:30 AM	0	0	1	0	1
8:45 AM	1	0	1	0	2
Total	1	0	9	1	11

AM Intersection Peak Hour : **7:30 AM - 8:30 AM** Intersection PHF : **0.75**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	0	0	2	1	3
PHF	#DIV/0!	#DIV/0!	0.75	#DIV/0!	0.75
Movement PHF	#DIV/0!	#DIV/0!	0.75	#DIV/0!	0.75

PM Period (4:00 PM - 6:00 PM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
4:00 PM	0	0	1	0	1
4:15 PM	0	1	2	0	3
4:30 PM	0	0	0	0	0
4:45 PM	0	0	1	0	1
5:00 PM	0	0	1	0	1
5:15 PM	0	1	0	0	1
5:30 PM	0	0	4	0	4
5:45 PM	0	0	0	0	0
Total	0	2	9	0	11

PM Intersection Peak Hour : **5:00 PM - 6:00 PM** Intersection PHF : **0.38**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	0	1	5	0	6
PHF	#DIV/0!	0.25	0.3125	#DIV/0!	0.38
Movement PHF	#DIV/0!	0.25	0.31	#DIV/0!	0.38

Bike Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Nobel Drive @ Towne Center Drive

Date of Count: *Thursday, May 07, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Bike Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Nobel Drive @ Towne Center Drive

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
7:15 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
7:30 AM	1	0	0	0	0	0	0	0	0	0	0	0	1
7:45 AM	0	0	0	0	2	0	0	0	0	0	1	0	3
8:00 AM	0	0	0	0	0	0	0	0	0	0	3	0	3
8:15 AM	0	0	0	0	0	0	1	0	1	0	0	0	2
8:30 AM	0	0	0	1	0	0	2	0	0	0	1	0	4
8:45 AM	0	0	0	0	0	0	1	0	0	0	1	0	2
Total	1	0	0	1	3	0	4	0	1	0	7	0	17

AM Intersection Peak Hour : **7:45 AM - 8:45 AM** Intersection PHF : **0.75**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	0	0	1	2	0	3	0	1	0	5	0	12
PHF	#####	#####	#####	0.25	0.25	#####	0.38	#####	0.25	#####	0.42	#####	0.75
Movement PHF	#DIV/0!			0.38			0.50			0.42			0.75

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	1	0	0	0	0	1	2
4:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
4:45 PM	0	1	0	0	2	0	0	0	0	0	0	0	3
5:00 PM	0	0	0	0	2	0	0	0	0	0	0	0	2
5:15 PM	0	0	0	1	1	0	0	0	0	0	1	0	3
5:30 PM	0	1	0	0	0	0	0	0	1	0	0	0	2
5:45 PM	0	1	0	0	0	0	0	0	0	0	1	0	2
Total	0	3	0	1	6	0	1	0	1	0	3	1	16

PM Intersection Peak Hour : **4:45 PM - 5:45 PM** Intersection PHF : **0.83**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	2	0	1	5	0	0	0	1	0	1	0	10
PHF	#####	0.5	#####	0.25	0.625	#####	#####	#####	0.25	#####	0.25	#####	0.83
Movement PHF	0.50			0.75			0.25			0.25			0.83

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

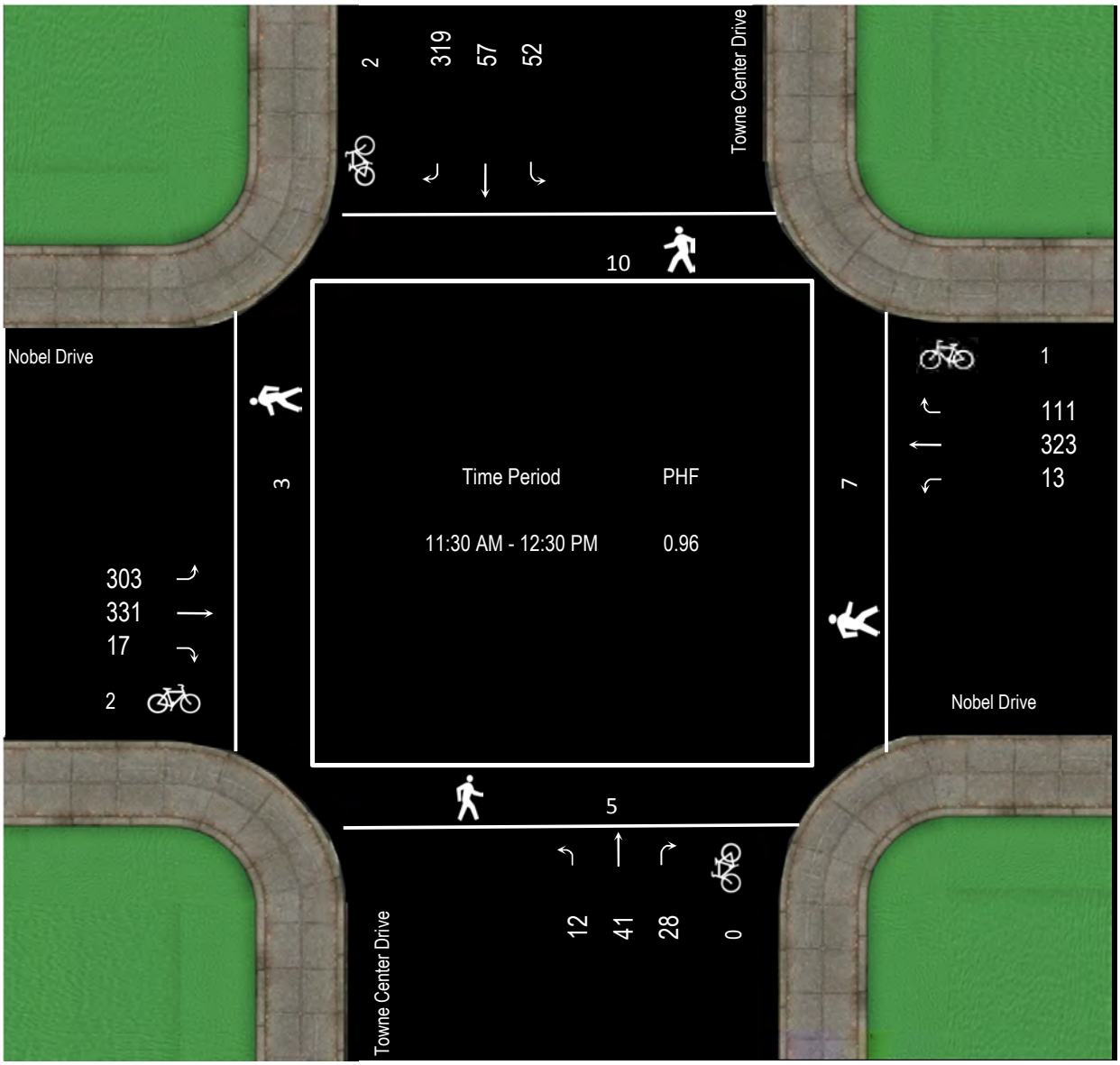
Location: Nobel Drive @ Towne Center Drive

Date of Count: *Tuesday, October 21, 2014*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0429*



Kimley»Horn

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Nobel Drive @ Towne Center Drive

Midday Period (11:00 AM - 1:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
11:00 AM	65	2	11	13	59	3	4	4	2	4	70	52	289
11:15 AM	67	8	10	27	80	3	6	9	7	7	78	51	353
11:30 AM	87	16	14	31	97	4	6	8	4	2	86	63	418
11:45 AM	80	8	4	25	94	3	6	9	2	5	85	80	401
12:00 PM	70	21	11	26	64	2	9	8	3	2	80	81	377
12:15 PM	82	12	23	29	68	4	7	16	3	8	80	79	411
12:30 PM	61	14	19	25	73	1	4	7	6	2	91	99	402
12:45 PM	60	9	26	20	72	3	8	10	2	0	93	96	399
Total	572	90	118	196	607	23	50	71	29	30	663	601	3,050

PM Intersection Peak Hour : **11:30 AM - 12:30 PM**

Intersection PHF : **0.96**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	319	57	52	111	323	13	28	41	12	17	331	303	1607
PHF	0.92	0.679	0.565	0.895	0.832	0.813	0.778	0.641	0.75	0.531	0.962	0.935	0.96
Movement PHF		0.91			0.85			0.78			0.96		0.96

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Nobel Drive @ Shoreline Drive

Date of Count: *Wednesday, May 13, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Kimley»Horn

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Nobel Drive @ Shoreline Drive

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	5	0	22	7	45	1	12	0	6	0	80	1	179
7:15 AM	9	1	26	5	61	0	12	0	9	1	125	3	252
7:30 AM	4	1	38	4	61	0	20	1	5	0	142	4	280
7:45 AM	6	0	41	14	40	0	12	4	4	1	171	2	295
8:00 AM	5	1	30	7	56	2	9	0	11	1	138	2	262
8:15 AM	5	0	31	11	55	3	17	2	6	2	158	1	291
8:30 AM	7	0	42	12	51	1	18	0	8	2	152	4	297
8:45 AM	6	0	38	2	84	1	7	0	6	2	114	3	263
Total	47	3	268	62	453	8	107	7	55	9	1,080	20	2,119

AM Intersection Peak Hour : **7:45 AM - 8:45 AM** Intersection PHF : **0.96**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	23	1	144	44	202	6	56	6	29	6	619	9	1,145
PHF	0.82	0.25	0.86	0.79	0.90	0.50	0.78	0.38	0.66	0.75	0.90	0.56	0.96
Movement PHF		0.86			0.91			0.88			0.91		0.96

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	11	0	15	32	148	4	5	1	5	6	60	7	294
4:15 PM	4	1	14	26	186	6	0	2	3	3	81	17	343
4:30 PM	9	1	7	28	200	9	3	0	5	10	55	9	336
4:45 PM	7	2	10	30	187	5	1	2	7	9	72	9	341
5:00 PM	5	1	11	46	216	6	2	0	4	5	65	14	375
5:15 PM	5	4	15	56	236	8	1	3	3	8	74	17	430
5:30 PM	13	1	27	56	203	12	5	1	1	9	62	14	404
5:45 PM	15	1	15	47	156	10	2	1	3	10	76	7	343
Total	69	11	114	321	1,532	60	19	10	31	60	545	94	2,866

PM Intersection Peak Hour : **5:00 PM - 6:00 PM** Intersection PHF : **0.90**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	38	7	68	205	811	36	10	5	11	32	277	52	1552
PHF	0.63	0.438	0.63	0.915	0.859	0.75	0.5	0.417	0.688	0.8	0.911	0.765	0.90
Movement PHF		0.69			0.88			0.93			0.91		0.90

U-Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-1536

Location: Nobel Drive @ Shoreline Drive

AM Period (7:00 AM - 9:00 AM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	1	0	0	1
8:30 AM	0	0	0	0	0
8:45 AM	0	1	0	0	1
Total	0	2	0	0	2

AM Intersection Peak Hour : **7:45 AM - 8:45 AM** Intersection PHF : **0.25**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	0	1	0	0	1
PHF	#DIV/0!	0.25	#DIV/0!	#DIV/0!	0.25
Movement PHF	#DIV/0!	0.25	#DIV/0!	#DIV/0!	0.25

PM Period (4:00 PM - 6:00 PM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
4:00 PM	0	0	0	1	1
4:15 PM	0	0	0	1	1
4:30 PM	0	0	0	1	1
4:45 PM	0	1	0	2	3
5:00 PM	0	0	0	0	0
5:15 PM	0	0	4	1	5
5:30 PM	0	0	1	0	1
5:45 PM	0	1	2	0	3
Total	0	2	7	6	15

PM Intersection Peak Hour : **5:00 PM - 6:00 PM** Intersection PHF : **0.45**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	0	1	4	4	9
PHF	#DIV/0!	0.25	0.4375	0.25	0.45
Movement PHF	#DIV/0!	0.25	0.44	0.25	0.45

Bike Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Nobel Drive @ Shoreline Drive

Date of Count: *Wednesday, May 13, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Bike Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Nobel Drive @ Shoreline Drive

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	1	0	1	0	0	0	2
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	2	0	2
8:45 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
Total	0	0	0	0	0	0	1	0	1	0	5	0	7

AM Intersection Peak Hour : **8:00 AM - 9:00 AM** Intersection PHF : **0.50**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	0	0	0	0	0	0	0	0	0	4	0	4
PHF	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	0.50	#####	0.50
Movement PHF	#DIV/0!			#DIV/0!			#DIV/0!			0.50			0.50

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	0	0	0	0	1	0	0	0	0	0	1	0	2
4:15 PM	1	0	0	0	0	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	2	0	0	0	0	0	0	0	2
5:30 PM	0	0	0	0	2	0	0	0	0	0	0	0	2
5:45 PM	0	0	0	0	3	0	0	0	0	0	1	0	4
Total	1	0	0	0	11	0	0	0	0	0	2	0	14

PM Intersection Peak Hour : **5:00 PM - 6:00 PM** Intersection PHF : **0.56**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	0	0	0	8	0	0	0	0	0	1	0	9
PHF	#####	#####	#####	#####	0.667	#####	#####	#####	#####	#####	0.25	#####	0.56
Movement PHF	#DIV/0!			0.67			#DIV/0!			0.25			0.56

Kimley»Horn

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

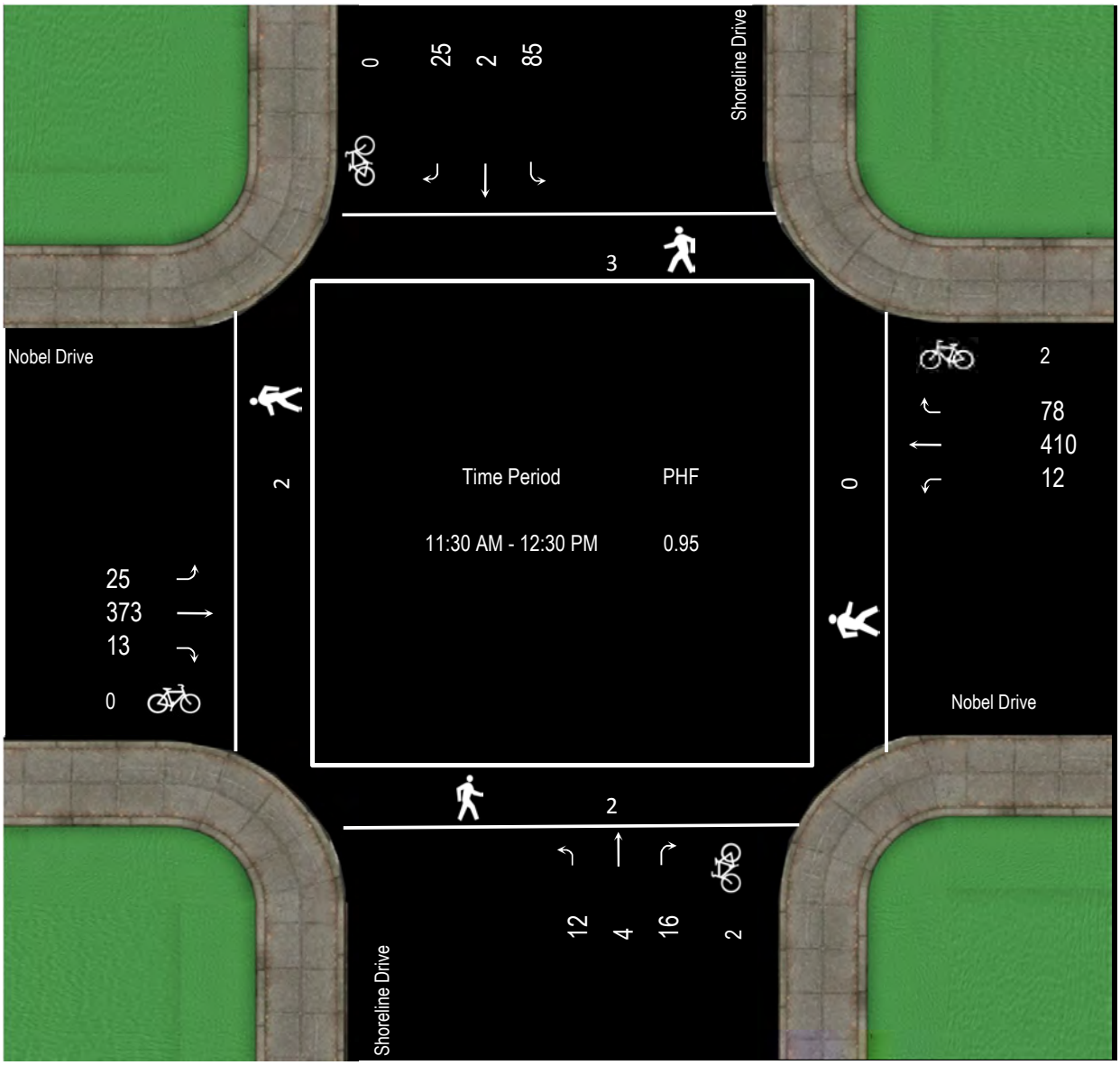
Location: Nobel Drive @ Shoreline Drive

Date of Count: *Tuesday, October 21, 2014*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0429*



Kimley»Horn

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Nobel Drive @ Shoreline Drive

Midday Period (11:00 AM - 1:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
11:00 AM	6	0	14	7	67	1	2	0	2	2	79	4	184
11:15 AM	4	0	18	8	104	9	3	1	2	3	86	5	243
11:30 AM	9	1	20	14	114	1	3	1	9	4	95	7	278
11:45 AM	7	0	22	27	114	2	6	0	1	3	88	4	274
12:00 PM	6	0	17	17	85	2	1	3	1	3	87	10	232
12:15 PM	3	1	26	20	97	7	6	0	1	3	103	4	271
12:30 PM	10	0	22	23	86	4	7	0	3	3	106	5	269
12:45 PM	4	0	21	16	86	5	1	2	5	0	122	5	267
Total	49	2	160	132	753	31	29	7	24	21	766	44	2,018

PM Intersection Peak Hour : **11:30 AM - 12:30 PM**

Intersection PHF : **0.95**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	25	2	85	78	410	12	16	4	12	13	373	25	1055
PHF	0.69	0.5	0.817	0.722	0.899	0.429	0.667	0.333	0.333	0.813	0.905	0.625	0.95
Movement PHF		0.93			0.87			0.62			0.93		0.95

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Nobel Drive @ Judicial Drive

Date of Count: *Wednesday, May 13, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Kimley»Horn

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Nobel Drive @ Judicial Drive

AM Period (7:00 AM - 9:00 AM)							
	Southbound		Westbound			Eastbound	
	Right	Left	Right	Thru		Thru	Left	TOTAL
7:00 AM	4	28	136	49		104	10	331
7:15 AM	10	33	157	56		136	27	419
7:30 AM	14	53	152	51		167	33	470
7:45 AM	7	43	241	47		168	56	562
8:00 AM	6	53	193	59		130	47	488
8:15 AM	5	53	188	61		159	44	510
8:30 AM	10	57	192	53		168	43	523
8:45 AM	2	48	197	84		123	35	489
Total	58	368	1,456	460		1,155	295	3,792

AM Intersection Peak Hour : **7:45 AM - 8:45 AM** Intersection PHF : **0.93**

	Southbound		Westbound			Eastbound		TOTAL
	Right	Left	Right	Thru		Thru	Left	
Volume	28	206	814	220		625	190	2,083
PHF	0.70	0.90	0.84	0.90		0.93	0.85	0.93
Movement PHF	0.87			0.90		0.91		0.93

PM Period (4:00 PM - 6:00 PM)							
	Southbound		Westbound			Eastbound	
	Right	Left	Right	Thru		Thru	Left	TOTAL
4:00 PM	41	91	47	143		69	11	402
4:15 PM	30	79	43	188		86	9	435
4:30 PM	48	98	37	189		54	11	437
4:45 PM	46	88	43	177		71	13	438
5:00 PM	53	133	55	215		66	12	534
5:15 PM	71	135	57	228		80	9	580
5:30 PM	54	99	54	217		81	13	518
5:45 PM	45	104	52	169		82	12	464
Total	388	827	388	1,526		589	90	3,808

PM Intersection Peak Hour : **5:00 PM - 6:00 PM** Intersection PHF : **0.90**

	Southbound		Westbound			Eastbound		TOTAL
	Right	Left	Right	Thru		Thru	Left	
Volume	223	471	218	829		309	46	2096
PHF	0.79	0.872	0.956	0.909		0.942	0.885	0.90
Movement PHF	0.84			0.92		0.94		0.90

U-Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-1536

Location: Nobel Drive @ Judicial Drive

AM Period (7:00 AM - 9:00 AM)					
	Southbound U-Turn	Westbound U-Turn		Eastbound U-Turn	TOTAL
7:00 AM	0	0		0	0
7:15 AM	0	0		0	0
7:30 AM	0	0		0	0
7:45 AM	0	0		0	0
8:00 AM	0	2		0	2
8:15 AM	0	1		4	5
8:30 AM	0	1		1	2
8:45 AM	0	0		2	2
Total	0	4		7	11

AM Intersection Peak Hour : **7:45 AM - 8:45 AM** Intersection PHF : **0.45**

	North Leg U-Turn	East Leg U-Turn		West Leg U-Turn	TOTAL
Volume	0	4		5	9
PHF	#DIV/0!	0.50		0.31	0.45
Movement PHF	#DIV/0!	0.50		0.31	0.45

PM Period (4:00 PM - 6:00 PM)					
	Southbound U-Turn	Westbound U-Turn		Eastbound U-Turn	TOTAL
4:00 PM	0	0		0	0
4:15 PM	0	0		0	0
4:30 PM	0	0		0	0
4:45 PM	0	0		0	0
5:00 PM	0	0		0	0
5:15 PM	0	0		1	1
5:30 PM	0	0		0	0
5:45 PM	0	0		0	0
Total	0	0		1	1

PM Intersection Peak Hour : **5:00 PM - 6:00 PM** Intersection PHF : **0.25**

	North Leg U-Turn	East Leg U-Turn		West Leg U-Turn	TOTAL
Volume	0	0		1	1
PHF	#DIV/0!	#DIV/0!		0.25	0.25
Movement PHF	#DIV/0!	#DIV/0!		0.25	0.25

Bike Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Nobel Drive @ Judicial Drive

Date of Count: *Wednesday, May 13, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Bike Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Nobel Drive @ Judicial Drive

AM Period (7:00 AM - 9:00 AM)							
	Southbound		Westbound			Eastbound	
	Right	Left	Right	Thru		Thru	Left	TOTAL
7:00 AM	0	0	0	0		0	1	1
7:15 AM	0	0	0	0		0	0	0
7:30 AM	0	0	0	0		0	1	1
7:45 AM	0	0	0	0		0	0	0
8:00 AM	0	0	0	0		1	0	1
8:15 AM	0	0	0	0		0	0	0
8:30 AM	0	0	0	0		1	1	2
8:45 AM	0	0	0	0		1	0	1
Total	0	0	0	0		3	3	6

AM Intersection Peak Hour : **8:00 AM - 9:00 AM** Intersection PHF : **0.50**

	Southbound		Westbound			Eastbound		TOTAL
	Right	Left	Right	Thru		Thru	Left	
Volume	0	0	0	0		3	1	4
PHF	#####	#####	#####	#####		0.75	0.25	0.50
Movement PHF	#DIV/0!		#DIV/0!			0.50		0.50

PM Period (4:00 PM - 6:00 PM)							
	Southbound		Westbound			Eastbound	
	Right	Left	Right	Thru		Thru	Left	TOTAL
4:00 PM	0	0	0	1		1	0	2
4:15 PM	0	0	0	0		0	0	0
4:30 PM	1	0	0	0		0	0	1
4:45 PM	0	0	0	1		0	0	1
5:00 PM	0	1	0	1		0	0	2
5:15 PM	1	0	0	1		0	0	2
5:30 PM	1	1	0	1		0	0	3
5:45 PM	0	0	0	3		1	0	4
Total	3	2	0	8		2	0	15

PM Intersection Peak Hour : **5:00 PM - 6:00 PM** Intersection PHF : **0.69**

	Southbound		Westbound			Eastbound		TOTAL
	Right	Left	Right	Thru		Thru	Left	
Volume	2	2	0	6		1	0	11
PHF	0.50	0.5	#####	0.5		0.25	#####	0.69
Movement PHF	0.50		0.50			0.25		0.69

Kimley»Horn

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Nobel Drive @ Judicial Drive

Date of Count: *Tuesday, October 21, 2014*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0429*

Kimley»Horn

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Nobel Drive @ Judicial Drive

Midday Period (11:00 AM - 1:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
11:00 AM	7	0	46	32	68	0	0	0	0	0	92	3	248
11:15 AM	18	0	44	43	103	0	0	0	0	0	97	10	315
11:30 AM	17	0	59	34	112	0	0	0	0	0	106	12	340
11:45 AM	22	0	66	55	121	0	0	0	0	0	105	11	380
12:00 PM	19	0	59	47	85	0	0	0	0	0	93	12	315
12:15 PM	19	0	54	52	105	0	0	0	0	0	113	22	365
12:30 PM	18	0	67	56	95	0	0	0	0	0	115	20	371
12:45 PM	10	0	49	85	97	0	0	0	0	0	105	39	385
Total	130	0	444	404	786	0	0	0	0	0	826	129	2,719

PM Intersection Peak Hour : **12:00 PM - 1:00 PM**

Intersection PHF : **0.93**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	66	0	229	240	382	0	0	0	0	0	426	93	1436
PHF	0.87	#####	0.854	0.706	0.91	#####	#####	#####	#####	#####	0.926	0.596	0.93
Movement PHF		0.87			0.85			#DIV/0!			0.90		0.93

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Nobel Drive @ I-805 SB On-Ramp

Date of Count: *Wednesday, May 06, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Nobel Drive @ I-805 SB On-Ramp

AM Period (7:00 AM - 9:00 AM)								
		Westbound		Northbound		Eastbound		
		Thru	Left	Right	Left	Right	Thru	TOTAL
7:00 AM		212	40	0	0	76	86	414
7:15 AM		237	33	0	0	133	73	476
7:30 AM		232	37	0	0	149	70	488
7:45 AM		258	49	0	0	139	93	539
8:00 AM		261	38	0	0	102	77	478
8:15 AM		226	36	0	0	124	58	444
8:30 AM		212	34	0	0	141	59	446
8:45 AM		248	26	0	0	89	61	424
Total		1,886	293	0	0	953	577	3,709

AM Intersection Peak Hour : **7:15 AM - 8:15 AM** Intersection PHF : **0.92**

		Westbound		Northbound		Eastbound		TOTAL
		Thru	Left	Right	Left	Right	Thru	
Volume		988	157	0	0	523	313	1,981
PHF		0.95	0.80	#####	#####	0.88	0.84	0.92
Movement PHF		0.93		#DIV/0!			0.90	0.92

PM Period (4:00 PM - 6:00 PM)								
		Westbound		Northbound		Eastbound		
		Thru	Left	Right	Left	Right	Thru	TOTAL
4:00 PM		219	87	0	0	101	85	492
4:15 PM		259	79	0	0	98	97	533
4:30 PM		252	57	0	0	91	90	490
4:45 PM		244	63	0	0	95	97	499
5:00 PM		236	57	0	0	113	77	483
5:15 PM		261	49	0	0	125	87	522
5:30 PM		243	46	0	0	136	74	499
5:45 PM		190	40	0	0	141	58	429
Total		1,904	478	0	0	900	665	3,947

PM Intersection Peak Hour : **4:00 PM - 5:00 PM** Intersection PHF : **0.94**

		Westbound		Northbound		Eastbound		TOTAL
		Thru	Left	Right	Left	Right	Thru	
Volume		974	286	0	0	385	369	2014
PHF		0.94	0.822	#####	#####	0.953	0.951	0.94
Movement PHF		0.93		#DIV/0!			0.97	0.94

U-Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-1536

Location: Nobel Drive @ I-805 SB On-Ramp

AM Period (7:00 AM - 9:00 AM)					
		Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
7:00 AM		0	0	0	0
7:15 AM		0	0	0	0
7:30 AM		0	0	0	0
7:45 AM		0	0	0	0
8:00 AM		0	0	0	0
8:15 AM		0	0	0	0
8:30 AM		0	0	0	0
8:45 AM		0	0	0	0
Total		0	0	0	0

AM Intersection Peak Hour : **7:15 AM - 8:15 AM** Intersection PHF : **#DIV/0!**

		East Leg U-Turn	South Leg U-Turn	West Leg U-Turn	TOTAL
Volume		0	0	0	0
PHF		#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Movement PHF		#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

PM Period (4:00 PM - 6:00 PM)					
		Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
4:00 PM		0	0	0	0
4:15 PM		0	0	0	0
4:30 PM		0	0	0	0
4:45 PM		0	0	0	0
5:00 PM		1	0	0	1
5:15 PM		0	0	0	0
5:30 PM		0	0	0	0
5:45 PM		0	0	0	0
Total		1	0	0	1

PM Intersection Peak Hour : **4:00 PM - 5:00 PM** Intersection PHF : **#DIV/0!**

		East Leg U-Turn	South Leg U-Turn	West Leg U-Turn	TOTAL
Volume		0	0	0	0
PHF		#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Movement PHF		#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

Bike Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Nobel Drive @ I-805 SB On-Ramp

Date of Count: *Wednesday, May 06, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Bike Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Nobel Drive @ I-805 SB On-Ramp

AM Period (7:00 AM - 9:00 AM)								
		Westbound		Northbound		Eastbound		
		Thru	Left	Right	Left	Right	Thru	TOTAL
7:00 AM		0	0	0	0	0	0	0
7:15 AM		0	0	0	0	0	0	0
7:30 AM		0	0	0	0	0	0	0
7:45 AM		0	0	0	0	0	0	0
8:00 AM		0	0	0	0	0	1	1
8:15 AM		0	0	0	0	0	0	0
8:30 AM		0	0	0	0	0	1	1
8:45 AM		0	0	0	0	0	1	1
Total		0	0	0	0	0	3	3

AM Intersection Peak Hour : **8:00 AM - 9:00 AM** Intersection PHF : **0.75**

		Westbound		Northbound		Eastbound		TOTAL
		Thru	Left	Right	Left	Right	Thru	
Volume		0	0	0	0	0	3	3
PHF		#####	#####	#####	#####	#####	0.75	0.75
Movement PHF		#DIV/0!		#DIV/0!			0.75	0.75

PM Period (4:00 PM - 6:00 PM)								
		Westbound		Northbound		Eastbound		
		Thru	Left	Right	Left	Right	Thru	TOTAL
4:00 PM		1	0	0	0	0	1	2
4:15 PM		0	0	0	0	0	0	0
4:30 PM		0	0	0	0	0	0	0
4:45 PM		1	0	0	0	0	0	1
5:00 PM		1	0	0	0	0	1	2
5:15 PM		1	0	0	0	0	0	1
5:30 PM		1	0	0	0	0	1	2
5:45 PM		3	0	0	0	0	1	4
Total		8	0	0	0	0	4	12

PM Intersection Peak Hour : **5:00 PM - 6:00 PM** Intersection PHF : **0.56**

		Westbound		Northbound		Eastbound		TOTAL
		Thru	Left	Right	Left	Right	Thru	
Volume		6	0	0	0	0	3	9
PHF		0.5	#####	#####	#####	#####	0.75	0.56
Movement PHF		0.50		#DIV/0!			0.75	0.56

Kimley»Horn

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

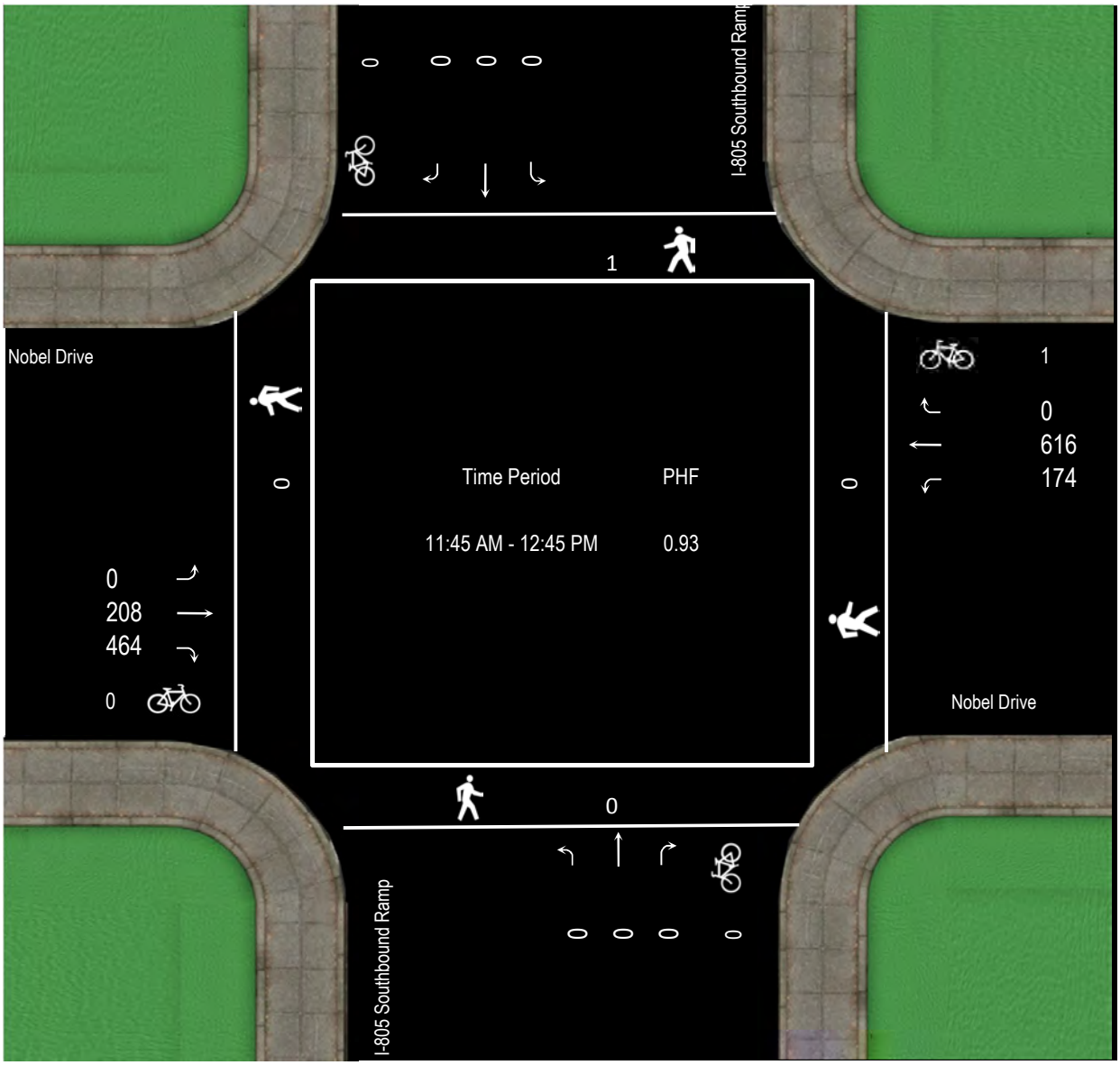
Location: Nobel Drive @ I-805 Southbound Ramp

Date of Count: *Tuesday, October 21, 2014*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0429*



Kimley»Horn

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Nobel Drive @ I-805 Southbound Ramp

Midday Period (11:00 AM - 1:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
11:00 AM	0	0	0	0	100	33	0	0	0	107	31	0	271
11:15 AM	0	0	0	0	146	30	0	0	0	93	48	0	317
11:30 AM	0	0	0	0	146	50	0	0	0	115	50	0	361
11:45 AM	0	0	0	0	176	33	0	0	0	108	63	0	380
12:00 PM	0	0	0	0	132	43	0	0	0	111	41	0	327
12:15 PM	0	0	0	0	157	40	0	0	0	120	47	0	364
12:30 PM	0	0	0	0	151	58	0	0	0	125	57	0	391
12:45 PM	0	0	0	0	182	37	0	0	0	101	53	0	373
Total	0	0	0	0	1,190	324	0	0	0	880	390	0	2,784

PM Intersection Peak Hour : **11:45 AM - 12:45 PM**

Intersection PHF : **0.93**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	0	0	0	616	174	0	0	0	464	208	0	1462
PHF	#####	#####	#####	#####	0.875	0.75	#####	#####	#####	0.928	0.825	#####	0.93
Movement PHF	#DIV/0!			0.94			#DIV/0!			0.92			0.93

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Nobel Drive @ I-805 N Off-Ramp

Date of Count: *Tuesday, May 12, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Nobel Drive @ I-805 N Off-Ramp

AM Period (7:00 AM - 9:00 AM)								
		Westbound		Northbound		Eastbound		
		Thru	Left	Right	Left	Right	Thru	TOTAL
7:00 AM		61	0	171	191	0	86	509
7:15 AM		75	0	159	195	0	73	502
7:30 AM		109	0	177	160	0	70	516
7:45 AM		124	0	161	183	0	93	561
8:00 AM		110	0	169	189	0	77	545
8:15 AM		127	0	150	135	0	58	470
8:30 AM		136	0	135	110	0	59	440
8:45 AM		134	0	126	140	0	61	461
Total		876	0	1,248	1,303	0	577	4,004

AM Intersection Peak Hour : **7:15 AM - 8:15 AM** Intersection PHF : **0.95**

		Westbound		Northbound		Eastbound		TOTAL
		Thru	Left	Right	Left	Right	Thru	
Volume		418	0	666	727	0	313	2,124
PHF		0.84	#####	0.94	0.93	#####	0.84	0.95
Movement PHF		0.84		0.97			0.84	0.95

PM Period (4:00 PM - 6:00 PM)								
		Westbound		Northbound		Eastbound		
		Thru	Left	Right	Left	Right	Thru	TOTAL
4:00 PM		178	0	110	128	0	85	501
4:15 PM		165	0	113	173	0	97	548
4:30 PM		195	0	106	114	0	90	505
4:45 PM		170	0	107	137	0	97	511
5:00 PM		189	0	101	105	0	78	473
5:15 PM		240	0	105	70	0	87	502
5:30 PM		148	0	133	141	0	74	496
5:45 PM		172	0	126	58	0	58	414
Total		1,457	0	901	926	0	666	3,950

PM Intersection Peak Hour : **4:00 PM - 5:00 PM** Intersection PHF : **0.94**

		Westbound		Northbound		Eastbound		TOTAL
		Thru	Left	Right	Left	Right	Thru	
Volume		708	0	436	552	0	369	2065
PHF		0.908	#####	0.965	0.798	#####	0.951	0.94
Movement PHF		0.91		0.86			0.95	0.94

U-Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-1536

Location: Nobel Drive @ I-805 N Off-Ramp

AM Period (7:00 AM - 9:00 AM)					
		Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
7:00 AM		0	0	0	0
7:15 AM		0	0	0	0
7:30 AM		0	0	0	0
7:45 AM		0	0	0	0
8:00 AM		0	0	0	0
8:15 AM		0	0	0	0
8:30 AM		0	0	0	0
8:45 AM		0	0	0	0
Total		0	0	0	0

AM Intersection Peak Hour : **7:15 AM - 8:15 AM** Intersection PHF : **#DIV/0!**

		East Leg U-Turn	South Leg U-Turn	West Leg U-Turn	TOTAL
Volume		0	0	0	0
PHF		#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Movement PHF		#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

PM Period (4:00 PM - 6:00 PM)					
		Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
4:00 PM		0	0	0	0
4:15 PM		0	0	0	0
4:30 PM		0	0	0	0
4:45 PM		0	0	0	0
5:00 PM		0	0	0	0
5:15 PM		0	0	0	0
5:30 PM		0	0	0	0
5:45 PM		0	0	0	0
Total		0	0	0	0

PM Intersection Peak Hour : **4:00 PM - 5:00 PM** Intersection PHF : **#DIV/0!**

		East Leg U-Turn	South Leg U-Turn	West Leg U-Turn	TOTAL
Volume		0	0	0	0
PHF		#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Movement PHF		#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

Bike Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Nobel Drive @ I-805 N Off-Ramp

Date of Count: *Tuesday, May 12, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Bike Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Nobel Drive @ I-805 N Off-Ramp

AM Period (7:00 AM - 9:00 AM)								
		Westbound		Northbound		Eastbound		
		Thru	Left	Right	Left	Right	Thru	TOTAL
7:00 AM		0	0	0	0	0	0	0
7:15 AM		0	0	0	0	0	0	0
7:30 AM		0	0	0	0	0	0	0
7:45 AM		0	0	0	0	0	0	0
8:00 AM		0	0	0	0	0	1	1
8:15 AM		0	0	0	0	0	0	0
8:30 AM		0	0	0	0	0	1	1
8:45 AM		0	0	0	0	0	1	1
Total		0	0	0	0	0	3	3

AM Intersection Peak Hour : **8:00 AM - 9:00 AM** Intersection PHF : **0.75**

		Westbound		Northbound		Eastbound		TOTAL
		Thru	Left	Right	Left	Right	Thru	
Volume		0	0	0	0	0	3	3
PHF		#####	#####	#####	#####	#####	0.75	0.75
Movement PHF		#DIV/0!		#DIV/0!			0.75	0.75

PM Period (4:00 PM - 6:00 PM)								
		Westbound		Northbound		Eastbound		
		Thru	Left	Right	Left	Right	Thru	TOTAL
4:00 PM		1	0	0	0	0	1	2
4:15 PM		0	0	0	0	0	0	0
4:30 PM		0	0	0	0	0	0	0
4:45 PM		1	0	0	0	0	0	1
5:00 PM		1	0	0	0	0	1	2
5:15 PM		1	0	0	0	0	0	1
5:30 PM		1	0	0	0	0	1	2
5:45 PM		3	0	0	0	0	1	4
Total		8	0	0	0	0	4	12

PM Intersection Peak Hour : **5:00 PM - 6:00 PM** Intersection PHF : **0.56**

		Westbound		Northbound		Eastbound		TOTAL
		Thru	Left	Right	Left	Right	Thru	
Volume		6	0	0	0	0	3	9
PHF		0.5	#####	#####	#####	#####	0.75	0.56
Movement PHF		0.50		#DIV/0!			0.75	0.56

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

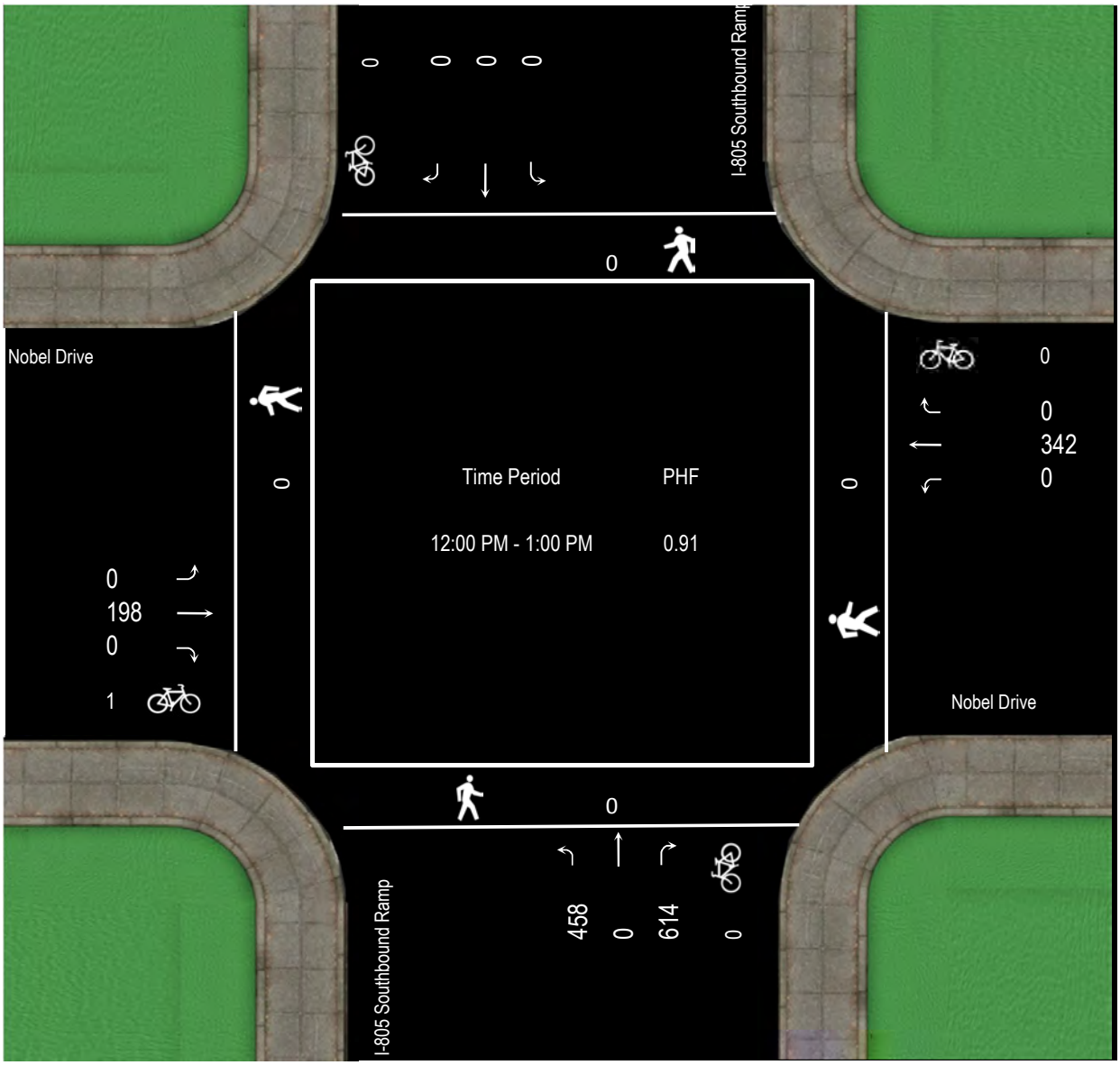
Location: Nobel Drive @ I-805 Southbound Ramp

Date of Count: *Tuesday, October 21, 2014*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0429*



Kimley»Horn

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Nobel Drive @ I-805 Southbound Ramp

Midday Period (11:00 AM - 1:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
11:00 AM	0	0	0	0	48	0	131	0	85	0	31	0	295
11:15 AM	0	0	0	0	65	0	132	0	111	0	48	0	356
11:30 AM	0	0	0	0	82	0	154	0	114	0	50	0	400
11:45 AM	0	0	0	0	83	0	135	0	126	0	63	0	407
12:00 PM	0	0	0	0	66	0	146	0	109	0	41	0	362
12:15 PM	0	0	0	0	90	0	151	0	107	0	47	0	395
12:30 PM	0	0	0	0	86	0	148	0	123	0	57	0	414
12:45 PM	0	0	0	0	100	0	169	0	119	0	53	0	441
Total	0	0	0	0	620	0	1,166	0	894	0	390	0	3,070

PM Intersection Peak Hour : **12:00 PM - 1:00 PM**

Intersection PHF : **0.91**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	0	0	0	342	0	614	0	458	0	198	0	1612
PHF	#####	#####	#####	#####	0.855	#####	0.908	#####	0.931	#####	0.868	#####	0.91
Movement PHF	#DIV/0!			0.86			0.93			0.87			0.91

Kimley»Horn

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Nobel Drive @ Avenue of Flags

Date of Count: *Wednesday, October 21, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0428*

Kimley»Horn

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Nobel Drive @ Avenue of Flags

AM Period (7:00 AM - 9:00 AM)								
		Westbound		Northbound		Eastbound		
		Thru	Left	Right	Left	Right	Thru	TOTAL
7:00 AM		71	3	0	0	0	243	317
7:15 AM		70	3	0	0	0	194	267
7:30 AM		79	2	0	1	1	241	324
7:45 AM		126	0	0	0	2	268	396
8:00 AM		118	1	0	0	1	252	372
8:15 AM		130	0	1	1	2	216	350
8:30 AM		129	1	0	0	0	205	335
8:45 AM		136	0	1	1	2	206	346
Total		859	10	2	3	8	1,825	2,707

AM Intersection Peak Hour : **7:45 AM - 8:45 AM** Intersection PHF : **0.92**

		Westbound		Northbound		Eastbound		TOTAL
		Thru	Left	Right	Left	Right	Thru	
Volume		503	2	1	1	5	941	1,453
PHF		0.97	0.50	0.25	0.25	0.63	0.88	0.92
Movement PHF		0.97		0.25			0.88	0.92

PM Period (4:00 PM - 6:00 PM)								
		Westbound		Northbound		Eastbound		
		Thru	Left	Right	Left	Right	Thru	TOTAL
4:00 PM		158	3	3	0	2	193	359
4:15 PM		161	1	4	3	1	194	364
4:30 PM		154	1	3	4	1	213	376
4:45 PM		192	1	1	1	0	212	407
5:00 PM		177	2	1	1	1	197	379
5:15 PM		197	2	1	1	1	248	450
5:30 PM		175	2	1	2	1	244	425
5:45 PM		132	1	2	2	0	203	340
Total		1,346	13	16	14	7	1,704	3,100

PM Intersection Peak Hour : **4:45 PM - 5:45 PM** Intersection PHF : **0.92**

		Westbound		Northbound		Eastbound		TOTAL
		Thru	Left	Right	Left	Right	Thru	
Volume		741	7	4	5	3	901	1661
PHF		0.94	0.875	1	0.625	0.75	0.908	0.92
Movement PHF		0.94		0.75			0.91	0.92

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Nobel Drive @ Avenue of Flags

Date of Count: *Tuesday, October 21, 2014*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0428*

Kimley»Horn

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Nobel Drive @ Avenue of Flags

Midday Period (11:00 AM - 1:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
11:00 AM	0	0	0	0	44	2	3	0	4	5	157	0	215
11:15 AM	0	0	0	0	61	3	2	0	4	3	177	0	250
11:30 AM	0	0	0	0	80	0	1	0	2	14	190	0	287
11:45 AM	0	0	0	0	79	5	8	0	4	3	195	0	294
12:00 PM	0	0	0	0	61	7	3	0	5	9	178	0	263
12:15 PM	0	0	0	0	87	7	2	0	3	13	185	0	297
12:30 PM	0	0	0	0	81	2	6	0	5	10	195	0	299
12:45 PM	0	0	0	0	92	3	4	0	8	4	218	0	329
Total	0	0	0	0	585	29	29	0	35	61	1,495	0	2,234

PM Intersection Peak Hour : **12:00 PM - 1:00 PM**

Intersection PHF : **0.90**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	0	0	0	321	19	15	0	21	36	776	0	1188
PHF	#####	#####	#####	#####	0.872	0.679	0.625	#####	0.656	0.692	0.89	#####	0.90
Movement PHF	#DIV/0!			0.89			0.75			0.91			0.90

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Health Center Drive @ Regents Road

Date of Count: *Tuesday, May 12, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Health Center Drive @ Regents Road

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	18	12	1	0	0	0	2	35	101	5	2	7	183
7:15 AM	19	13	2	1	0	0	5	65	141	15	0	3	264
7:30 AM	42	23	3	1	0	2	14	94	168	15	0	6	368
7:45 AM	30	42	4	0	0	0	11	71	194	18	0	4	374
8:00 AM	20	13	7	0	0	0	2	21	153	14	0	7	237
8:15 AM	20	5	1	0	0	0	1	61	142	23	0	2	255
8:30 AM	17	6	0	0	0	0	1	45	107	19	0	7	202
8:45 AM	19	10	1	0	0	0	0	34	163	28	0	4	259
Total	185	124	19	2	0	2	36	426	1,169	137	2	40	2,142

AM Intersection Peak Hour : **7:15 AM - 8:15 AM** Intersection PHF : **0.83**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	111	91	16	2	0	2	32	251	656	62	0	20	1,243
PHF	0.66	0.54	0.57	0.50	#####	0.25	0.57	0.67	0.85	0.86	#####	0.71	0.83
Movement PHF		0.72			0.33			0.85			0.93		0.83

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	4	191	1	0	0	1	0	27	49	45	0	17	335
4:15 PM	6	129	0	1	0	3	5	20	32	103	0	11	310
4:30 PM	6	202	3	1	0	1	4	29	64	40	2	13	365
4:45 PM	3	144	2	1	0	0	1	32	45	123	0	10	361
5:00 PM	1	109	6	1	0	2	4	33	30	105	0	14	305
5:15 PM	6	127	7	3	0	0	4	29	25	77	0	26	304
5:30 PM	6	122	4	2	0	1	4	47	39	106	0	14	345
5:45 PM	7	110	2	1	0	1	4	25	36	97	0	12	295
Total	39	1134	25	10	0	9	26	242	320	696	2	117	2,620

PM Intersection Peak Hour : **4:00 PM - 5:00 PM** Intersection PHF : **0.94**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	19	666	6	3	0	5	10	108	190	311	2	51	1371
PHF	0.79	0.824	0.5	0.75	#####	0.417	0.5	0.844	0.742	0.632	0.25	0.75	0.94
Movement PHF		0.82			0.50			0.79			0.68		0.94

U-Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-1536

Location: Health Center Drive @ Regents Road

AM Period (7:00 AM - 9:00 AM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
Total	0	0	0	0	0

AM Intersection Peak Hour : **7:15 AM - 8:15 AM** Intersection PHF : **#DIV/0!**

	North Leg U-Turn	East Leg U-Turn	South Leg U-Turn	West Leg U-Turn	TOTAL
Volume	0	0	0	0	0
PHF	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Movement PHF	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

PM Period (4:00 PM - 6:00 PM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
Total	0	0	0	0	0

PM Intersection Peak Hour : **4:00 PM - 5:00 PM** Intersection PHF : **#DIV/0!**

	North Leg U-Turn	East Leg U-Turn	South Leg U-Turn	West Leg U-Turn	TOTAL
Volume	0	0	0	0	0
PHF	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Movement PHF	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

Bike Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

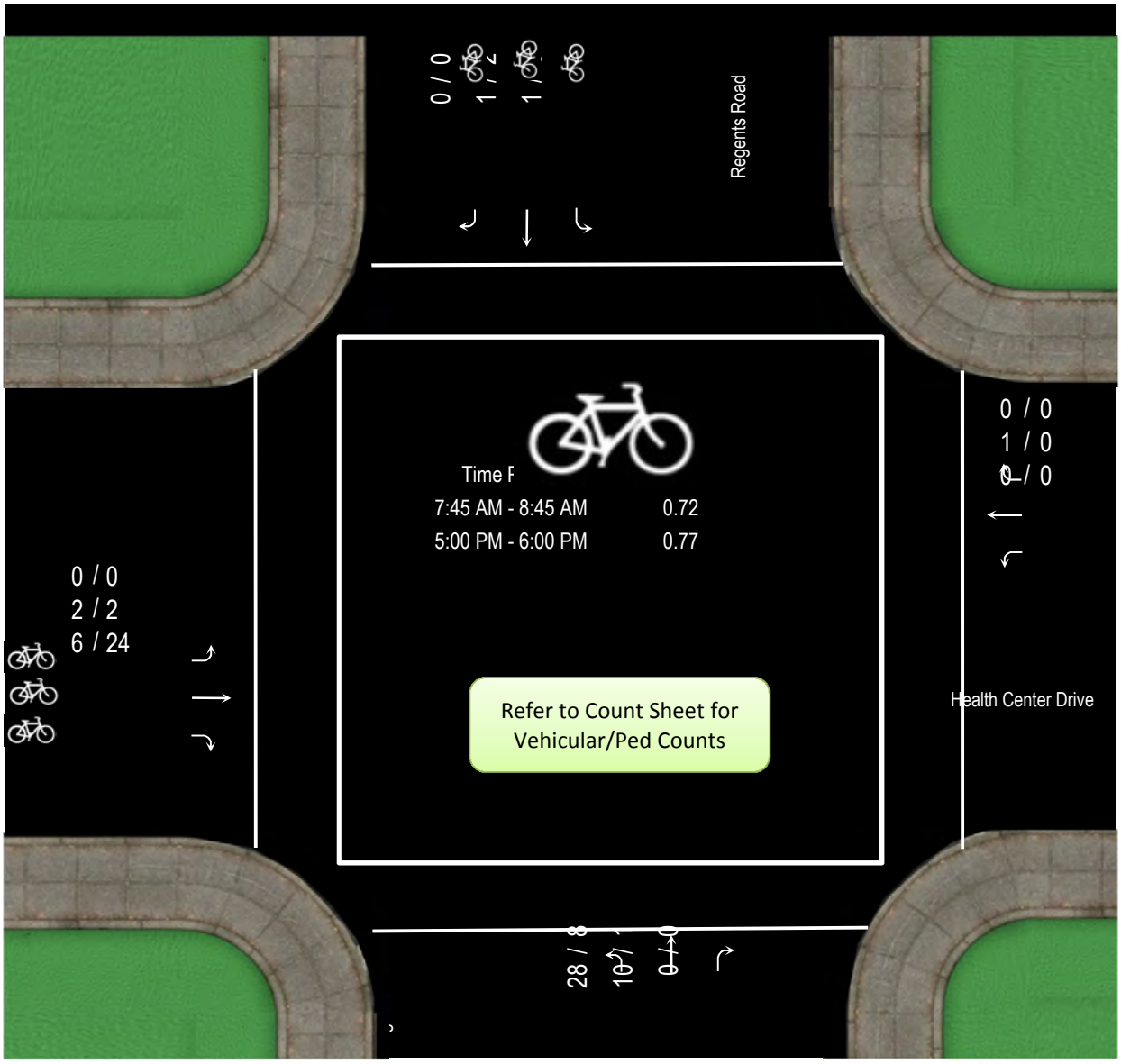
Location: Health Center Drive @ Regents Road

Date of Count: *Tuesday, May 12, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*



Bike Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Health Center Drive @ Regents Road

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	1	0	0	0	0	0	3	0	3	0	0	7
7:15 AM	0	1	0	0	0	0	0	2	0	1	0	0	4
7:30 AM	0	1	0	0	0	0	0	4	2	0	0	0	7
7:45 AM	0	0	0	0	1	0	0	3	11	2	0	0	17
8:00 AM	0	0	1	0	0	0	0	2	6	0	1	0	10
8:15 AM	0	0	0	0	0	0	0	3	7	1	1	0	12
8:30 AM	0	1	0	0	0	0	0	2	4	3	0	0	10
8:45 AM	0	1	0	0	0	0	0	2	1	2	0	0	6
Total	0	5	1	0	1	0	0	21	31	12	2	0	73

AM Intersection Peak Hour : **7:45 AM - 8:45 AM** Intersection PHF : **0.72**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	1	1	0	1	0	0	10	28	6	2	0	49
PHF	#####	0.25	0.25	#####	0.25	#####	#####	0.83	0.64	0.50	0.50	#####	0.72
Movement PHF		0.50			0.25			0.68			0.67		0.72

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	1	2	0	0	3
4:15 PM	0	0	0	0	0	0	0	0	1	4	0	0	5
4:30 PM	0	0	0	0	0	0	0	0	3	3	0	0	6
4:45 PM	0	0	0	0	0	0	0	3	0	6	0	0	9
5:00 PM	0	0	0	0	0	0	0	1	1	7	0	0	9
5:15 PM	0	0	0	0	0	0	0	0	2	3	0	0	5
5:30 PM	0	0	0	0	0	0	0	0	4	5	2	0	11
5:45 PM	0	2	0	0	0	0	0	0	1	9	0	0	12
Total	0	2	0	0	0	0	0	4	13	39	2	0	60

PM Intersection Peak Hour : **5:00 PM - 6:00 PM** Intersection PHF : **0.77**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	2	0	0	0	0	0	1	8	24	2	0	37
PHF	#####	0.25	#####	#####	#####	#####	#####	0.25	0.5	0.667	0.25	#####	0.77
Movement PHF		0.25			#DIV/0!			0.56			0.72		0.77

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

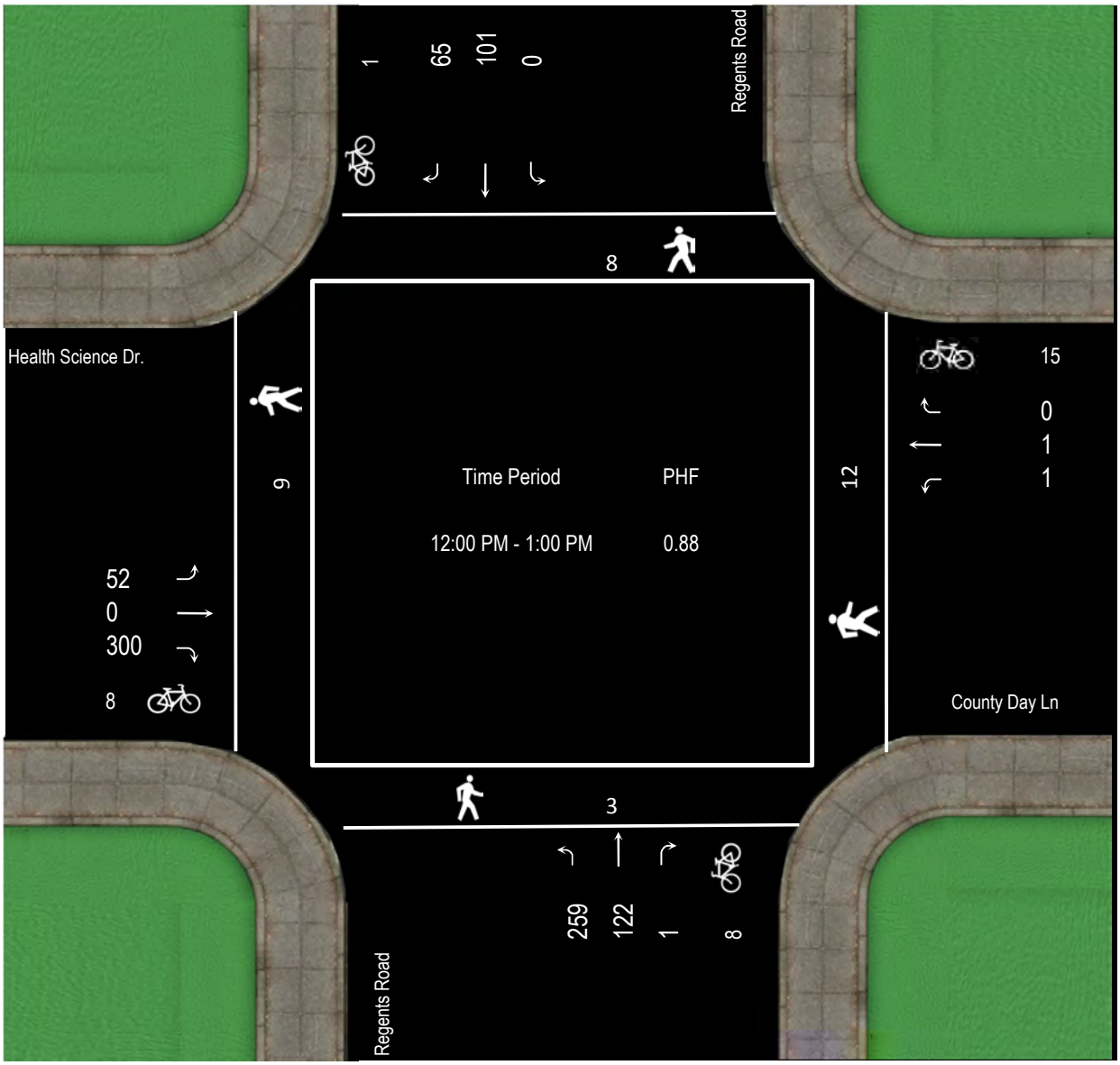
Location: County Day Ln and Health Scienc @ Regents Road

Date of Count: *Wednesday, October 22, 2014*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0429*



Kimley»Horn

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: nty Day Ln and Health Science Dr. @ Regents Road

Midday Period (11:00 AM - 1:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
11:00 AM	10	18	0	0	1	1	0	19	45	65	0	9	168
11:15 AM	13	27	0	0	0	0	0	21	69	73	0	10	213
11:30 AM	16	32	0	0	0	0	0	17	50	60	0	13	188
11:45 AM	17	28	0	0	0	0	0	25	66	54	0	7	197
12:00 PM	15	27	0	0	0	0	0	23	81	66	0	9	221
12:15 PM	20	31	0	0	1	0	1	33	57	60	0	12	215
12:30 PM	13	19	0	0	0	1	0	22	62	80	0	12	209
12:45 PM	17	24	0	0	0	0	0	44	59	94	0	19	257
Total	121	206	0	0	2	2	1	204	489	552	0	91	1,668

PM Intersection Peak Hour : **12:00 PM - 1:00 PM**

Intersection PHF : **0.88**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	65	101	0	0	1	1	1	122	259	300	0	52	902
PHF	0.81	0.815	#####	#####	0.25	0.25	0.25	0.693	0.799	0.798	#####	0.684	0.88
Movement PHF		0.81			0.50			0.92			0.78		0.88

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Eastgate Mall @ Regents Road

Date of Count: *Tuesday, May 12, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Eastgate Mall @ Regents Road

AM Period (7:00 AM - 9:00 AM)								
	Southbound		Westbound		Northbound			
	Thru	Left	Right	Left	Right	Thru		TOTAL
7:00 AM	27	4	10	7	26	122		196
7:15 AM	36	5	30	28	39	177		315
7:30 AM	39	16	76	41	55	211		438
7:45 AM	32	19	78	56	67	179		431
8:00 AM	38	7	47	32	47	84		255
8:15 AM	21	9	30	18	41	157		276
8:30 AM	28	5	24	9	49	149		264
8:45 AM	38	4	47	20	58	148		315
Total	259	69	342	211	382	1,227		2,490

AM Intersection Peak Hour : **7:15 AM - 8:15 AM** Intersection PHF : **0.82**

	Southbound		Westbound		Northbound			TOTAL
	Thru	Left	Right	Left	Right	Thru		
Volume	145	47	231	157	208	651		1,439
PHF	0.93	0.62	0.74	0.70	0.78	0.77		0.82
Movement PHF	0.87		0.72			0.81		0.82

PM Period (4:00 PM - 6:00 PM)								
	Southbound			Westbound		Northbound		
	Right	Thru	Left	Right	Left	Right	Thru	TOTAL
4:00 PM	0	221	35	12	58	20	49	395
4:15 PM	0	218	28	8	51	29	36	370
4:30 PM	0	216	39	15	64	20	88	442
4:45 PM	0	254	31	14	41	23	62	425
5:00 PM	0	202	38	8	83	16	62	409
5:15 PM	0	200	24	16	75	28	48	391
5:30 PM	0	185	42	23	64	34	56	404
5:45 PM	0	195	36	5	45	20	55	356
Total	0	1691	273	101	481	190	456	3,192

PM Intersection Peak Hour : **4:30 PM - 5:30 PM** Intersection PHF : **0.94**

	Southbound		Westbound		Northbound			TOTAL
	Thru	Left	Right	Left	Right	Thru		
Volume	872	132	53	263	87	260		1667
PHF	0.858	0.846	0.828	0.792	0.777	0.739		0.94
Movement PHF	0.88		0.87			0.80		0.94

U-Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-1536

Location: Eastgate Mall @ Regents Road

AM Period (7:00 AM - 9:00 AM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn		TOTAL
7:00 AM	0	0	0		0
7:15 AM	0	0	0		0
7:30 AM	0	0	0		0
7:45 AM	0	0	0		0
8:00 AM	0	0	0		0
8:15 AM	0	0	0		0
8:30 AM	0	0	0		0
8:45 AM	0	0	0		0
Total	0	0	0		0

AM Intersection Peak Hour : **7:15 AM - 8:15 AM** Intersection PHF : **#DIV/0!**

	North Leg EB	East Leg SB	South Leg EB		TOTAL
Volume	0	0	0		0
PHF	#DIV/0!	#DIV/0!	#DIV/0!		#DIV/0!
Movement PHF	#DIV/0!	#DIV/0!	#DIV/0!		#DIV/0!

PM Period (4:00 PM - 6:00 PM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn		TOTAL
4:00 PM	0	0	0		0
4:15 PM	0	0	0		0
4:30 PM	0	0	0		0
4:45 PM	0	0	0		0
5:00 PM	0	0	0		0
5:15 PM	0	0	0		0
5:30 PM	0	0	0		0
5:45 PM	0	0	0		0
Total	0	0	0		0

PM Intersection Peak Hour : **4:30 PM - 5:30 PM** Intersection PHF : **#DIV/0!**

	North Leg EB	East Leg SB	South Leg EB		TOTAL
Volume	0	0	0		0
PHF	#DIV/0!	#DIV/0!	#DIV/0!		#DIV/0!
Movement PHF	#DIV/0!	#DIV/0!	#DIV/0!		#DIV/0!

Bike Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Eastgate Mall @ Regents Road

Date of Count: *Tuesday, May 12, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Bike Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Eastgate Mall @ Regents Road

AM Period (7:00 AM - 9:00 AM)								
	Southbound		Westbound		Northbound			
	Thru	Left	Right	Left	Right	Thru		TOTAL
7:00 AM	3	1	0	0	1	0		5
7:15 AM	0	2	0	0	0	2		4
7:30 AM	1	0	1	0	1	5		8
7:45 AM	2	0	0	0	0	14		16
8:00 AM	0	0	1	0	1	7		9
8:15 AM	1	0	2	0	0	8		11
8:30 AM	1	3	2	0	3	4		13
8:45 AM	2	1	1	0	1	2		7
Total	10	7	7	0	7	42		73

AM Intersection Peak Hour : **7:45 AM - 8:45 AM** Intersection PHF : **0.77**

	Southbound		Westbound		Northbound			TOTAL
	Thru	Left	Right	Left	Right	Thru		
Volume	4	3	5	0	4	33		49
PHF	0.50	0.25	0.63	#####	0.33	0.59		0.77
Movement PHF	0.44		0.63			0.66		0.77

PM Period (4:00 PM - 6:00 PM)								
	Southbound		Westbound		Northbound			
	Thru	Left	Right	Left	Right	Thru		TOTAL
4:00 PM	0	2	1	0	0	0		3
4:15 PM	4	0	0	1	0	1		6
4:30 PM	2	1	2	0	0	1		6
4:45 PM	5	1	0	1	0	1		8
5:00 PM	7	0	1	0	0	1		9
5:15 PM	3	0	0	1	0	2		6
5:30 PM	4	1	1	2	0	3		11
5:45 PM	10	1	0	1	0	1		13
Total	35	6	5	6	0	10		62

PM Intersection Peak Hour : **5:00 PM - 6:00 PM** Intersection PHF : **0.75**

	Southbound		Westbound		Northbound			TOTAL
	Thru	Left	Right	Left	Right	Thru		
Volume	24	2	2	4	0	7		39
PHF	0.6	0.5	0.5	0.5	#####	0.583		0.75
Movement PHF	0.59		0.50			0.58		0.75

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

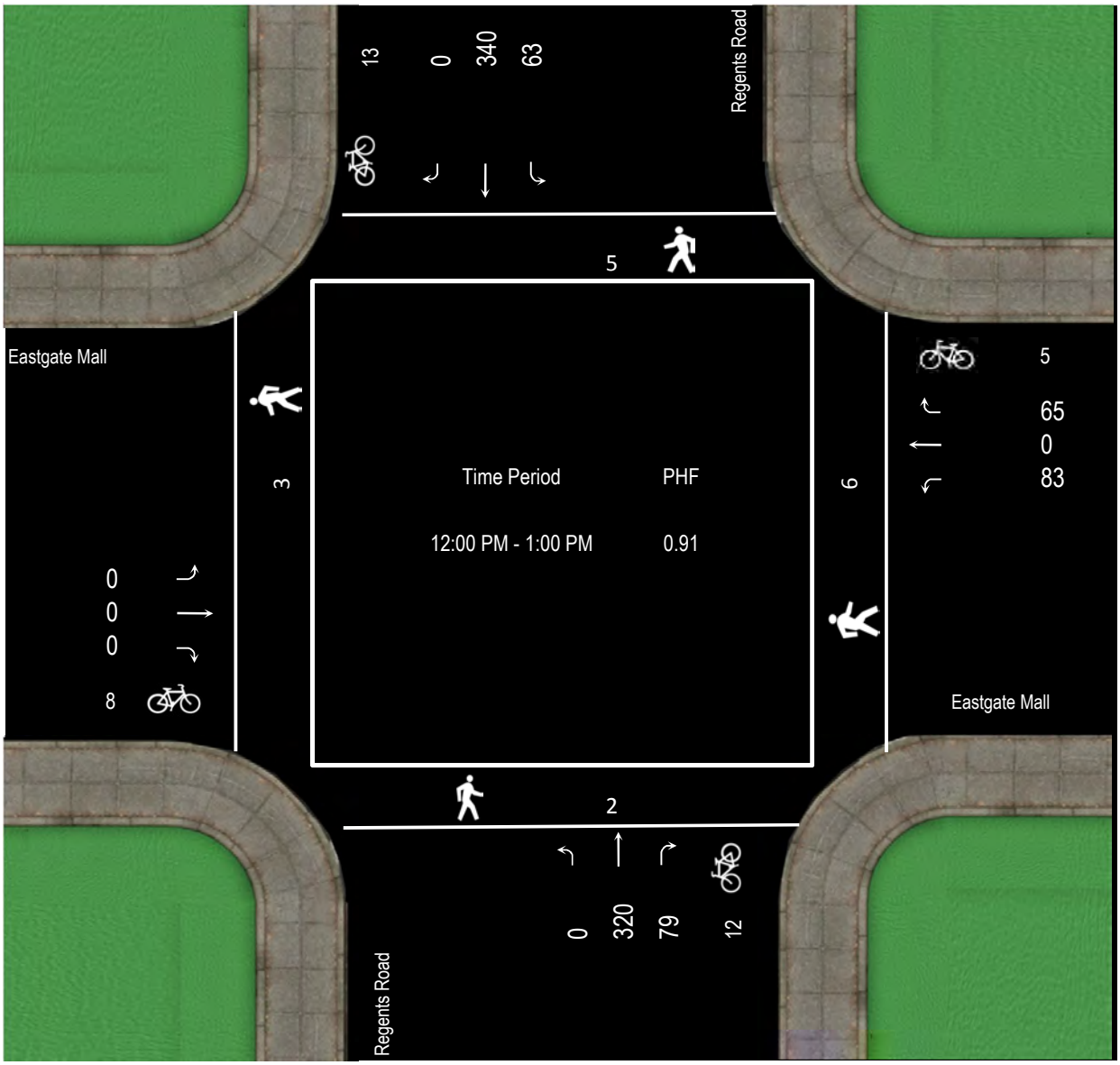
Location: Eastgate Mall @ Regents Road

Date of Count: *Wednesday, October 22, 2014*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0429*



Kimley»Horn

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Eastgate Mall @ Regents Road

Midday Period (11:00 AM - 1:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
11:00 AM	0	72	23	10	0	8	14	58	0	0	0	0	185
11:15 AM	0	88	10	16	0	16	10	71	0	0	0	0	211
11:30 AM	0	87	7	7	0	24	26	65	0	0	0	0	216
11:45 AM	0	79	7	17	0	21	21	77	0	0	0	0	222
12:00 PM	0	85	12	17	0	20	21	85	0	0	0	0	240
12:15 PM	0	74	15	14	0	22	19	78	0	0	0	0	222
12:30 PM	0	83	16	11	0	25	20	73	0	0	0	0	228
12:45 PM	0	98	20	23	0	16	19	84	0	0	0	0	260
Total	0	666	110	115	0	152	150	591	0	0	0	0	1,784

PM Intersection Peak Hour : **12:00 PM - 1:00 PM**

Intersection PHF : **0.91**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	340	63	65	0	83	79	320	0	0	0	0	950
PHF	#####	0.867	0.788	0.707	#####	0.83	0.94	0.941	#####	#####	#####	#####	0.91
Movement PHF		0.85			0.95			0.94			#DIV/0!		0.91

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Executive Drive @ Regents Road

Date of Count: *Tuesday, May 12, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Kimley»Horn

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Executive Drive @ Regents Road

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	29	4	9	0	4	15	153	0	1	0	0	215
7:15 AM	1	47	7	8	1	5	21	209	2	2	0	0	303
7:30 AM	1	67	4	17	0	3	25	243	2	1	1	0	364
7:45 AM	1	82	5	9	0	9	27	249	0	1	0	0	383
8:00 AM	1	55	9	13	0	10	28	103	0	1	1	1	222
8:15 AM	0	32	4	11	0	14	39	197	0	1	0	0	298
8:30 AM	0	27	7	14	2	18	38	177	0	1	0	0	284
8:45 AM	0	48	10	19	0	11	30	206	0	1	2	0	327
Total	4	387	50	100	3	74	223	1,537	4	9	4	1	2,396

AM Intersection Peak Hour : **7:15 AM - 8:15 AM** Intersection PHF : **0.83**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	4	251	25	47	1	27	101	804	4	5	2	1	1,272
PHF	1.00	0.77	0.69	0.69	0.25	0.68	0.90	0.81	0.50	0.63	0.50	0.25	0.83
Movement PHF		0.80			0.82			0.82			0.67		0.83

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	5	244	10	20	3	47	16	54	1	2	3	3	408
4:15 PM	8	274	9	7	3	48	17	75	0	2	1	2	446
4:30 PM	11	240	8	11	2	58	13	105	1	4	3	6	462
4:45 PM	13	272	14	13	1	47	17	59	0	0	1	6	443
5:00 PM	2	286	11	19	5	68	19	69	5	4	3	2	493
5:15 PM	7	270	13	11	5	57	16	65	0	3	1	3	451
5:30 PM	4	211	15	27	3	58	17	67	0	3	1	2	408
5:45 PM	6	252	3	18	5	37	17	51	1	4	2	3	399
Total	56	2049	83	126	27	420	132	545	8	22	15	27	3,510

PM Intersection Peak Hour : **4:30 PM - 5:30 PM** Intersection PHF : **0.94**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	33	1068	46	54	13	230	65	298	6	11	8	17	1849
PHF	0.63	0.934	0.821	0.711	0.65	0.846	0.855	0.71	0.3	0.688	0.667	0.708	0.94
Movement PHF		0.96			0.81			0.78			0.69		0.94

U-Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-1536

Location: Executive Drive @ Regents Road

AM Period (7:00 AM - 9:00 AM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
7:00 AM	1	0	0	0	1
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
Total	1	0	0	0	1

AM Intersection Peak Hour : **7:15 AM - 8:15 AM** Intersection PHF : **#DIV/0!**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	0	0	0	0	0
PHF	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Movement PHF	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

PM Period (4:00 PM - 6:00 PM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
Total	0	0	0	0	0

PM Intersection Peak Hour : **4:30 PM - 5:30 PM** Intersection PHF : **#DIV/0!**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	0	0	0	0	0
PHF	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Movement PHF	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

Bike Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Executive Drive @ Regents Road

Date of Count: *Tuesday, May 12, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Bike Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Executive Drive @ Regents Road

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	3	0	0	2	0	0	1	0	0	0	0	6
7:15 AM	0	0	0	0	1	0	1	2	2	0	0	0	6
7:30 AM	0	1	0	2	0	0	0	4	0	0	0	0	7
7:45 AM	0	2	0	1	0	0	1	12	0	0	2	1	19
8:00 AM	0	0	0	0	1	0	0	8	4	0	0	0	13
8:15 AM	0	1	0	1	1	0	0	7	2	0	0	0	12
8:30 AM	0	1	0	1	0	0	2	6	1	0	0	0	11
8:45 AM	0	1	1	0	0	0	0	3	0	0	0	0	5
Total	0	9	1	5	5	0	4	43	9	0	2	1	79

AM Intersection Peak Hour : **7:45 AM - 8:45 AM** Intersection PHF : **0.72**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	4	0	3	2	0	3	33	7	0	2	1	55
PHF	#####	0.50	#####	0.75	0.50	#####	0.38	0.69	0.44	#####	0.25	0.25	0.72
Movement PHF		0.50			0.63			0.83			0.25		0.72

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	0	0	0	0	1	0	0	0	0	1	0	0	2
4:15 PM	0	5	0	0	0	2	0	1	2	0	0	0	10
4:30 PM	0	2	0	0	0	0	0	1	0	0	0	0	3
4:45 PM	0	5	1	0	0	1	0	1	1	0	1	0	10
5:00 PM	0	7	0	0	0	1	0	1	0	0	1	0	10
5:15 PM	0	4	0	1	0	2	0	1	0	3	0	0	11
5:30 PM	0	6	0	0	0	0	1	3	0	0	0	0	10
5:45 PM	0	10	1	0	0	0	0	1	0	1	1	0	14
Total	0	39	2	1	1	6	1	9	3	5	3	0	70

PM Intersection Peak Hour : **5:00 PM - 6:00 PM** Intersection PHF : **0.80**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	27	1	1	0	3	1	6	0	4	2	0	45
PHF	#####	0.675	0.25	0.25	#####	0.375	0.25	0.5	#####	0.333	0.5	#####	0.80
Movement PHF		0.64			0.33			0.44			0.50		0.80

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

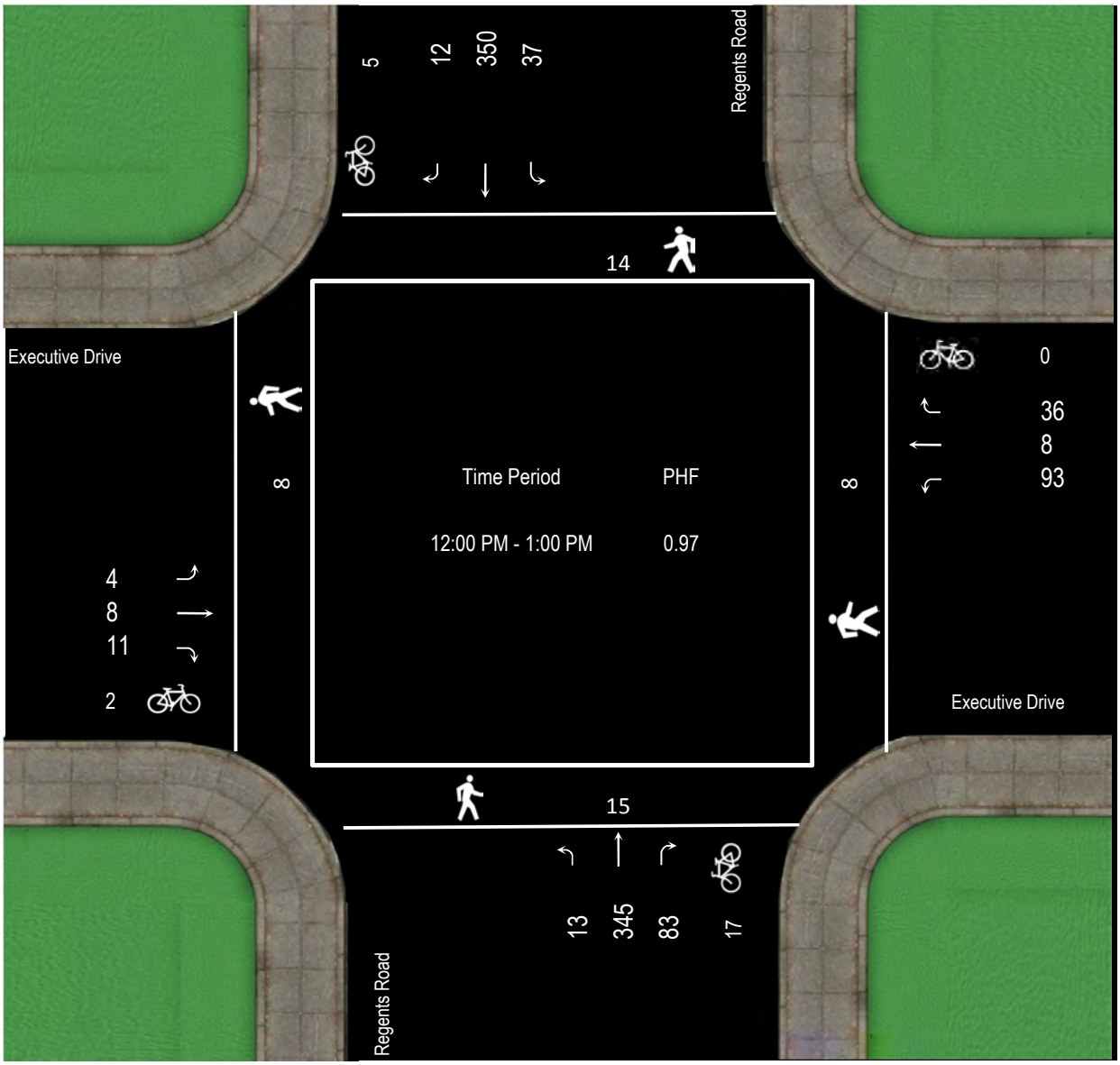
Location: Executive Drive @ Regents Road

Date of Count: *Wednesday, October 22, 2014*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0429*



Kimley»Horn

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Executive Drive @ Regents Road

Midday Period (11:00 AM - 1:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
11:00 AM	0	68	3	12	1	14	7	56	4	2	2	0	169
11:15 AM	4	90	8	10	1	13	14	73	2	2	0	0	217
11:30 AM	1	92	17	18	0	13	12	72	4	5	2	0	236
11:45 AM	2	84	6	14	5	36	13	86	5	1	3	0	255
12:00 PM	7	82	10	8	2	28	13	92	3	3	2	1	251
12:15 PM	0	88	6	8	2	24	19	82	5	1	2	2	239
12:30 PM	3	92	4	12	1	22	27	82	2	5	0	1	251
12:45 PM	2	88	17	8	3	19	24	89	3	2	4	0	259
Total	19	684	71	90	15	169	129	632	28	21	15	4	1,877

PM Intersection Peak Hour : **12:00 PM - 1:00 PM**

Intersection PHF : **0.97**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	12	350	37	36	8	93	83	345	13	11	8	4	1000
PHF	0.43	0.951	0.544	0.75	0.667	0.83	0.769	0.938	0.65	0.55	0.5	0.5	0.97
Movement PHF		0.93			0.90			0.95			0.96		0.97

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Miramar Street @ Regents Road

Date of Count: *Tuesday, May 12, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Kimley»Horn

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Miramar Street @ Regents Road

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	3	29	6	15	1	16	42	169	13	15	1	4	314
7:15 AM	7	50	5	22	2	8	45	187	26	56	1	7	416
7:30 AM	6	74	9	20	3	9	56	263	44	44	1	9	538
7:45 AM	6	68	14	16	4	16	55	223	42	35	1	19	499
8:00 AM	9	45	15	20	1	19	69	84	50	44	0	11	367
8:15 AM	8	48	6	14	9	30	48	206	38	40	4	13	464
8:30 AM	2	48	3	5	2	13	54	175	27	44	0	18	391
8:45 AM	4	68	4	13	1	24	59	230	32	51	0	13	499
Total	45	430	62	125	23	135	428	1,537	272	329	8	94	3,488

AM Intersection Peak Hour : **7:30 AM - 8:30 AM** Intersection PHF : **0.87**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	29	235	44	70	17	74	228	776	174	163	6	52	1,868
PHF	0.81	0.79	0.73	0.88	0.47	0.62	0.83	0.74	0.87	0.93	0.38	0.68	0.87
Movement PHF		0.87			0.76			0.81			0.97		0.87

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	8	297	14	8	0	39	19	82	16	39	2	3	527
4:15 PM	4	337	9	15	1	28	22	91	29	32	1	2	571
4:30 PM	10	268	7	13	1	46	20	114	40	47	0	6	572
4:45 PM	7	322	8	9	1	23	20	72	37	45	1	3	548
5:00 PM	5	370	6	4	1	36	20	101	19	50	1	4	617
5:15 PM	2	339	9	6	2	44	10	82	35	27	0	4	560
5:30 PM	5	271	11	12	4	39	12	88	38	33	2	3	518
5:45 PM	2	295	11	3	2	37	24	82	32	28	1	3	520
Total	43	2499	75	70	12	292	147	712	246	301	8	28	4,433

PM Intersection Peak Hour : **4:15 PM - 5:15 PM** Intersection PHF : **0.94**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	26	1297	30	41	4	133	82	378	125	174	3	15	2308
PHF	0.65	0.876	0.833	0.683	1	0.723	0.932	0.829	0.781	0.87	0.75	0.625	0.94
Movement PHF		0.89			0.74			0.84			0.87		0.94

U-Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-1536

Location: Miramar Street @ Regents Road

AM Period (7:00 AM - 9:00 AM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
7:00 AM	0	0	0	0	0
7:15 AM	0	1	0	0	1
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
Total	0	1	0	0	1

AM Intersection Peak Hour : **7:30 AM - 8:30 AM** Intersection PHF : **#DIV/0!**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	0	0	0	0	0
PHF	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Movement PHF	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

PM Period (4:00 PM - 6:00 PM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	1	0	0	1
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
Total	0	1	0	0	1

PM Intersection Peak Hour : **4:15 PM - 5:15 PM** Intersection PHF : **0.25**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	0	1	0	0	1
PHF	#DIV/0!	0.25	#DIV/0!	#DIV/0!	0.25
Movement PHF	#DIV/0!	0.25	#DIV/0!	#DIV/0!	0.25

Bike Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

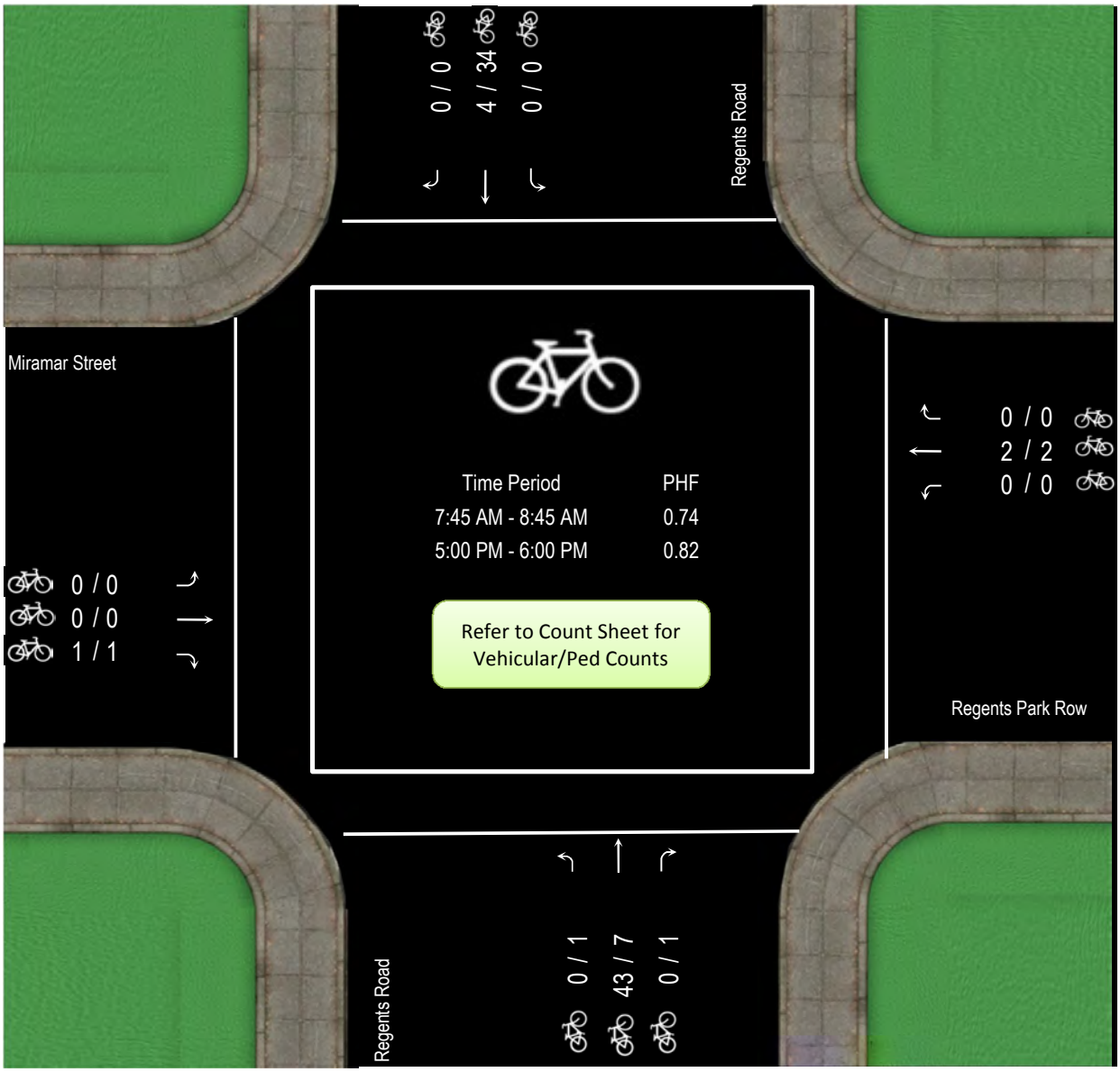
Location: Miramar Street @ Regents Road

Date of Count: *Tuesday, May 12, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*



Bike Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Miramar Street @ Regents Road

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	3	0	0	0	0	0	1	0	1	0	0	5
7:15 AM	1	0	1	0	0	0	0	5	0	0	0	0	7
7:30 AM	0	1	0	0	0	0	0	4	0	0	0	0	5
7:45 AM	0	2	0	0	2	0	0	13	0	0	0	0	17
8:00 AM	0	0	0	0	0	0	0	12	0	1	0	0	13
8:15 AM	0	1	0	0	0	0	0	9	0	0	0	0	10
8:30 AM	0	1	0	0	0	0	0	9	0	0	0	0	10
8:45 AM	3	0	0	0	0	0	0	3	2	0	0	0	8
Total	4	8	1	0	2	0	0	56	2	2	0	0	75

AM Intersection Peak Hour : **7:45 AM - 8:45 AM** Intersection PHF : **0.74**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	4	0	0	2	0	0	43	0	1	0	0	50
PHF	#####	0.50	#####	#####	0.25	#####	#####	0.83	#####	0.25	#####	#####	0.74
Movement PHF		0.50			0.25			0.83			0.25		0.74

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
4:15 PM	0	7	0	0	0	0	0	3	1	0	0	0	11
4:30 PM	0	2	0	1	1	0	0	0	0	0	0	0	4
4:45 PM	0	6	0	0	1	0	0	2	0	0	0	0	9
5:00 PM	0	8	0	0	0	0	0	1	0	0	0	0	9
5:15 PM	0	9	0	0	0	0	0	1	0	0	0	0	10
5:30 PM	0	6	0	0	1	0	1	4	1	1	0	0	14
5:45 PM	0	11	0	0	1	0	0	1	0	0	0	0	13
Total	0	50	0	1	4	0	1	12	2	1	0	0	71

PM Intersection Peak Hour : **5:00 PM - 6:00 PM** Intersection PHF : **0.82**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	34	0	0	2	0	1	7	1	1	0	0	46
PHF	#####	0.773	#####	#####	0.5	#####	0.25	0.438	0.25	0.25	#####	#####	0.82
Movement PHF		0.77			0.50			0.38			0.25		0.82

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

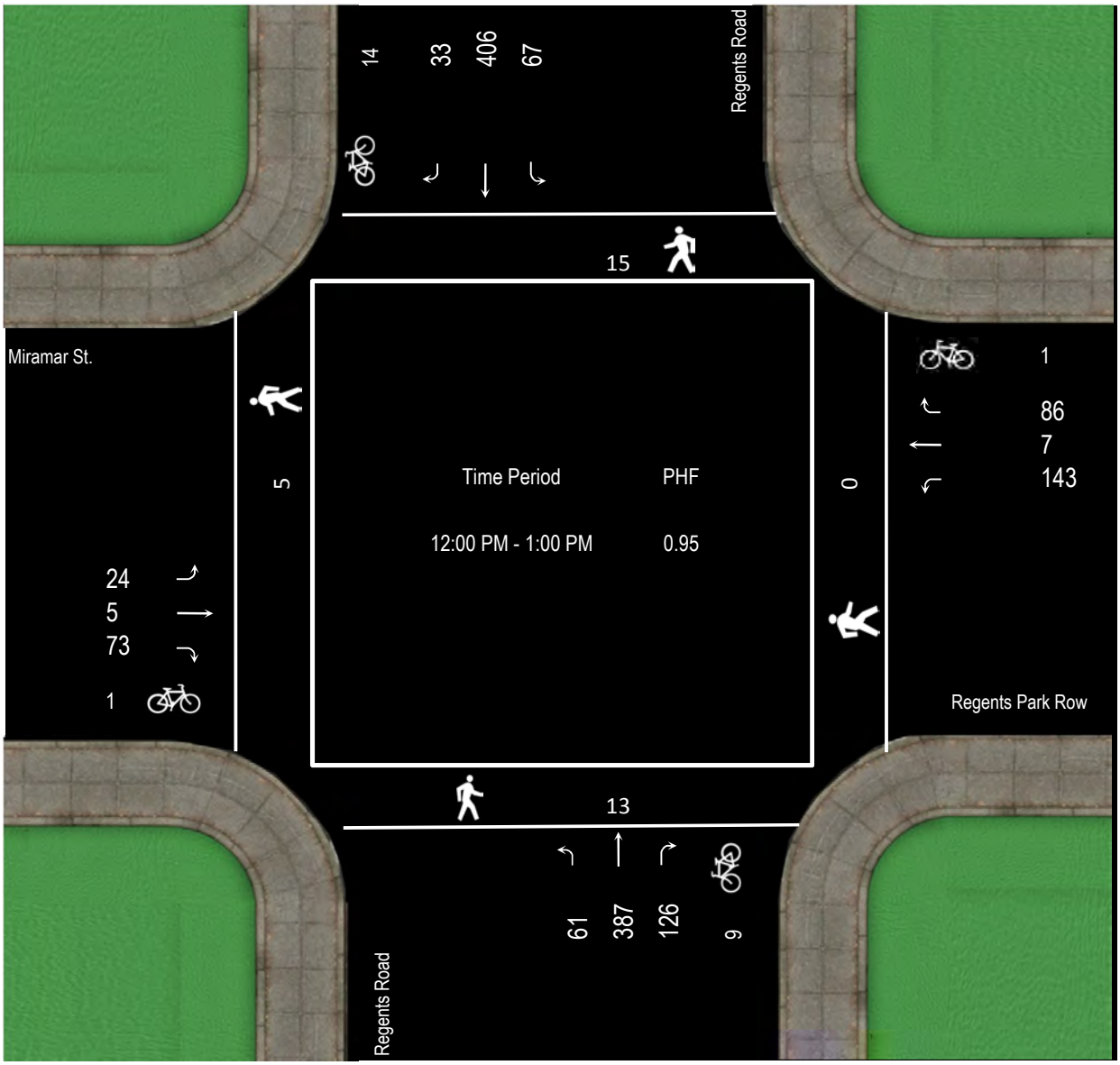
Location: Regents Park Row andMiramar St @ Regents Road

Date of Count: *Wednesday, October 22, 2014*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0429*



Kimley»Horn

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Regents Park Row andMiramar St. @ Regents Road

Midday Period (11:00 AM - 1:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
11:00 AM	4	79	14	9	0	20	24	69	15	14	1	4	253
11:15 AM	6	95	12	10	2	42	34	75	15	18	1	9	319
11:30 AM	4	78	25	10	2	23	56	85	27	20	1	6	337
11:45 AM	9	124	16	17	2	28	23	91	14	13	0	3	340
12:00 PM	7	98	19	18	3	35	42	109	16	23	1	4	375
12:15 PM	7	99	23	22	1	39	20	83	16	12	1	3	326
12:30 PM	8	117	14	25	1	34	28	106	10	16	1	7	367
12:45 PM	11	92	11	21	2	35	36	89	19	22	2	10	350
Total	56	782	134	132	13	256	263	707	132	138	8	46	2,667

PM Intersection Peak Hour : **12:00 PM - 1:00 PM**

Intersection PHF : **0.95**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	33	406	67	86	7	143	126	387	61	73	5	24	1418
PHF	0.75	0.868	0.728	0.86	0.583	0.917	0.75	0.888	0.803	0.793	0.625	0.6	0.95
Movement PHF		0.91			0.95			0.86			0.75		0.95

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Mahaile Ave/Plaza De Palmas @ Regents Road

Date of Count: *Tuesday, May 12, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Mahaile Ave/Plaza De Palmas @ Regents Road

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	2	33	3	20	0	5	1	86	4	0	1	10	165
7:15 AM	1	85	0	30	1	6	1	92	8	4	3	10	241
7:30 AM	3	68	3	24	3	13	4	155	3	6	3	20	305
7:45 AM	1	34	3	38	0	2	6	216	3	7	2	14	326
8:00 AM	4	43	4	30	2	5	2	133	3	3	1	15	245
8:15 AM	2	35	6	42	2	8	5	148	1	4	2	13	268
8:30 AM	5	47	6	31	3	6	3	141	1	1	5	9	258
8:45 AM	1	55	3	40	0	6	3	151	2	5	1	9	276
Total	19	400	28	255	11	51	25	1,122	25	30	18	100	2,084

AM Intersection Peak Hour : **7:30 AM - 8:30 AM** Intersection PHF : **0.88**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	10	180	16	134	7	28	17	652	10	20	8	62	1,144
PHF	0.63	0.66	0.67	0.80	0.58	0.54	0.71	0.75	0.83	0.71	0.67	0.78	0.88
Movement PHF		0.70			0.81			0.75			0.78		0.88

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	7	148	9	23	4	8	5	44	2	6	0	9	265
4:15 PM	9	197	14	32	6	4	7	66	3	7	2	11	358
4:30 PM	16	228	10	24	2	7	3	81	6	2	3	4	386
4:45 PM	13	237	14	25	4	9	12	74	2	3	3	6	402
5:00 PM	12	261	22	11	2	6	1	51	3	3	2	10	384
5:15 PM	28	249	24	14	4	8	1	67	6	3	3	7	414
5:30 PM	19	273	16	14	2	7	0	64	2	1	5	3	406
5:45 PM	17	299	16	20	5	10	3	89	2	2	3	7	473
Total	121	1892	125	163	29	59	32	536	26	27	21	57	3,088

PM Intersection Peak Hour : **5:00 PM - 6:00 PM** Intersection PHF : **0.89**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	76	1082	78	59	13	31	5	271	13	9	13	27	1677
PHF	0.68	0.905	0.813	0.738	0.65	0.775	0.417	0.761	0.542	0.75	0.65	0.675	0.89
Movement PHF		0.93			0.74			0.77			0.82		0.89

U-Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-1536

Location: Mahaile Ave/Plaza De Palmas @ Regents Road

AM Period (7:00 AM - 9:00 AM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
7:00 AM	0	0	1	0	1
7:15 AM	0	0	5	0	5
7:30 AM	0	0	1	0	1
7:45 AM	0	0	3	0	3
8:00 AM	0	0	4	0	4
8:15 AM	0	0	2	0	2
8:30 AM	0	0	4	0	4
8:45 AM	0	0	3	0	3
Total	0	0	23	0	23

AM Intersection Peak Hour : **7:30 AM - 8:30 AM** Intersection PHF : **0.63**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	0	0	10	0	10
PHF	#DIV/0!	#DIV/0!	0.63	#DIV/0!	0.63
Movement PHF	#DIV/0!	#DIV/0!	0.63	#DIV/0!	0.63

PM Period (4:00 PM - 6:00 PM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
4:00 PM	0	0	4	0	4
4:15 PM	3	0	2	0	5
4:30 PM	0	0	11	0	11
4:45 PM	0	0	4	0	4
5:00 PM	0	0	4	0	4
5:15 PM	0	0	5	0	5
5:30 PM	3	0	6	0	9
5:45 PM	0	0	1	0	1
Total	6	0	37	0	43

PM Intersection Peak Hour : **5:00 PM - 6:00 PM** Intersection PHF : **0.53**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	3	0	16	0	19
PHF	0.25	#DIV/0!	0.666666667	#DIV/0!	0.53
Movement PHF	0.25	#DIV/0!	0.67	#DIV/0!	0.53

Bike Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

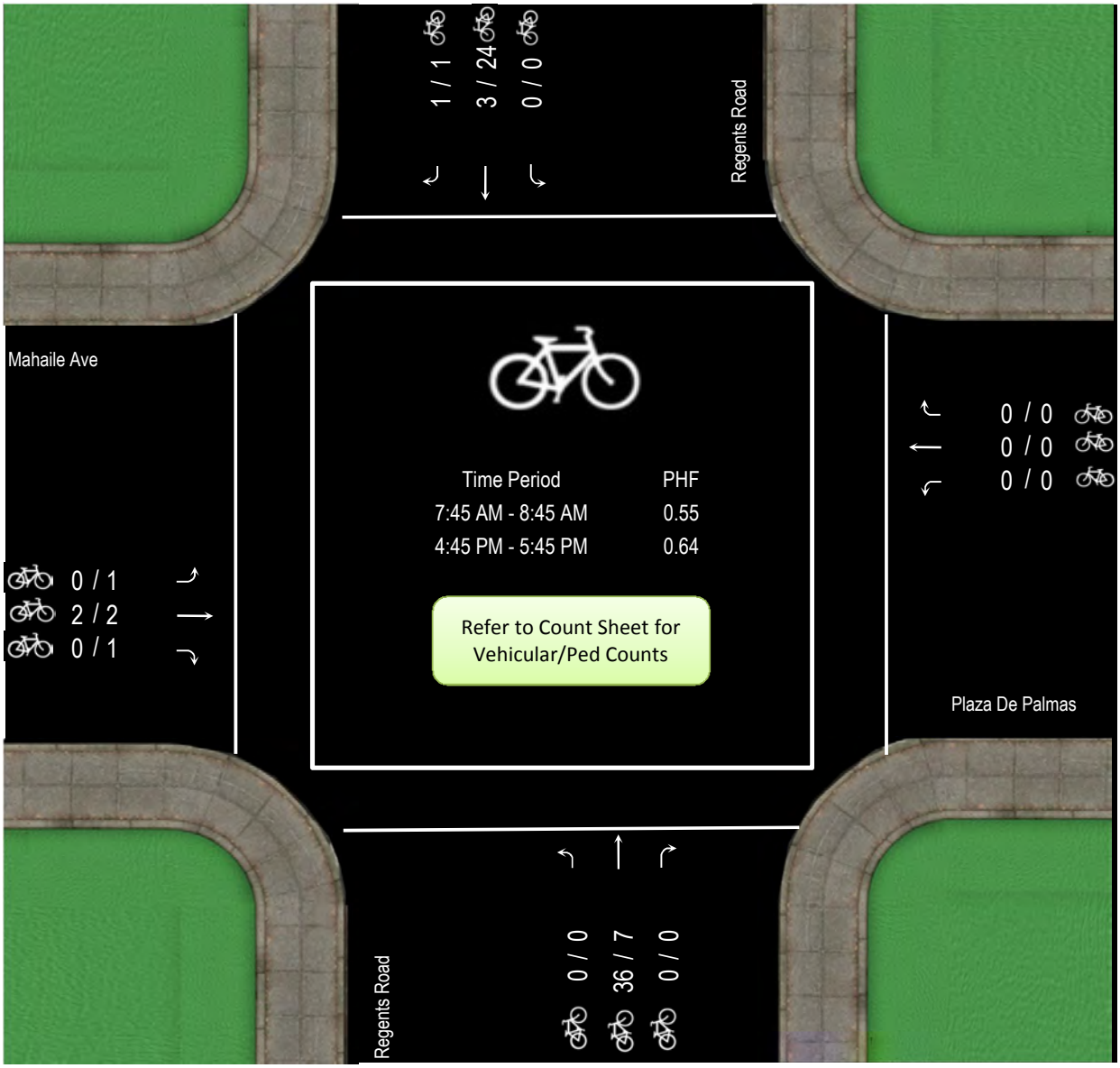
Location: Mahaile Ave/Plaza De Palmas @ Regents Road

Date of Count: *Tuesday, May 12, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*



Bike Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Mahaile Ave/Plaza De Palmas @ Regents Road

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	1	1	0	0	0	0	0	1	0	0	0	0	3
7:15 AM	0	5	0	1	0	1	0	1	0	0	0	0	8
7:30 AM	0	2	0	0	0	0	0	6	0	0	0	0	8
7:45 AM	0	2	0	0	0	0	0	15	0	0	2	0	19
8:00 AM	1	0	0	0	0	0	0	4	0	0	0	0	5
8:15 AM	0	1	0	0	0	0	0	5	0	0	0	0	6
8:30 AM	0	0	0	0	0	0	0	12	0	0	0	0	12
8:45 AM	0	2	0	3	0	0	0	7	0	0	0	2	14
Total	2	13	0	4	0	1	0	51	0	0	2	2	75

AM Intersection Peak Hour : **7:45 AM - 8:45 AM** Intersection PHF : **0.55**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	1	3	0	0	0	0	0	36	0	0	2	0	42
PHF	0.25	0.38	#####	#####	#####	#####	#####	0.60	#####	#####	0.25	#####	0.55
Movement PHF		0.50			#DIV/0!			0.60			0.25		0.55

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	0	2	0	0	0	0	0	3	0	0	0	0	5
4:15 PM	0	3	0	0	0	0	0	4	0	0	0	1	8
4:30 PM	0	3	0	0	0	0	1	3	0	0	1	0	8
4:45 PM	0	9	0	0	0	0	0	4	0	0	1	0	14
5:00 PM	0	5	0	0	0	0	0	0	0	0	0	0	5
5:15 PM	0	5	0	0	0	0	0	0	0	0	0	0	5
5:30 PM	1	5	0	0	0	0	0	3	0	1	1	1	12
5:45 PM	0	7	0	0	0	0	0	3	0	0	1	0	11
Total	1	39	0	0	0	0	1	20	0	1	4	2	68

PM Intersection Peak Hour : **4:45 PM - 5:45 PM** Intersection PHF : **0.64**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	1	24	0	0	0	0	0	7	0	1	2	1	36
PHF	0.25	0.667	#####	#####	#####	#####	#####	0.438	#####	0.25	0.5	0.25	0.64
Movement PHF		0.69			#DIV/0!			0.44			0.33		0.64

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

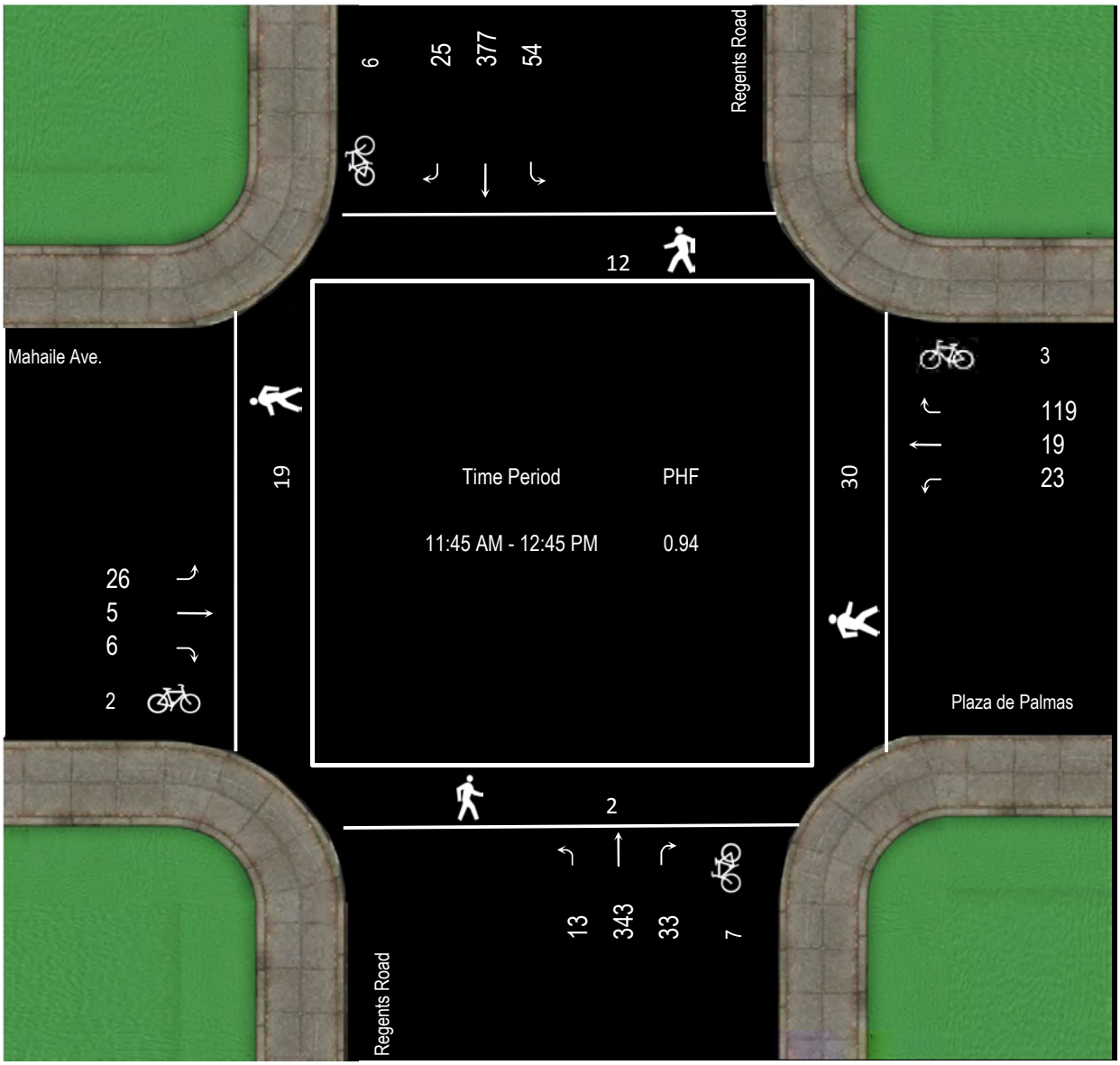
Location: Plaza de Palmas and Mahaile Ave @ Regents Road

Date of Count: *Wednesday, October 22, 2014*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0429*



Kimley»Horn

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Plaza de Palmas and Mahaile Ave. @ Regents Road

Midday Period (11:00 AM - 1:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
11:00 AM	7	53	9	16	4	9	3	57	3	3	4	5	173
11:15 AM	5	80	11	20	0	6	12	50	6	2	2	7	201
11:30 AM	6	68	12	24	1	7	10	58	2	5	1	7	201
11:45 AM	6	97	11	36	1	4	10	80	3	1	2	1	252
12:00 PM	6	94	13	23	8	3	11	81	1	2	0	10	252
12:15 PM	5	83	13	30	6	7	4	99	5	1	1	8	262
12:30 PM	8	103	17	30	4	9	8	83	4	2	2	7	277
12:45 PM	5	92	9	24	3	4	10	75	5	3	2	9	241
Total	48	670	95	203	27	49	68	583	29	19	14	54	1,859

PM Intersection Peak Hour : **11:45 AM - 12:45 PM**

Intersection PHF : **0.94**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	25	377	54	119	19	23	33	343	13	6	5	26	1043
PHF	0.78	0.915	0.794	0.826	0.594	0.639	0.75	0.866	0.65	0.75	0.625	0.65	0.94
Movement PHF		0.89			0.94			0.90			0.77		0.94

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Berino Court @ Regents Road

Date of Count: *Wednesday, May 13, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Berino Court @ Regents Road

AM Period (7:00 AM - 9:00 AM)							
	Southbound		Westbound		Northbound		
	Thru	Left	Right	Left	Right	Thru	TOTAL
7:00 AM	28	19	4	2	12	19	84
7:15 AM	41	57	29	8	47	42	224
7:30 AM	59	52	18	19	39	80	267
7:45 AM	50	47	35	44	32	73	281
8:00 AM	31	7	7	2	5	48	100
8:15 AM	42	3	3	10	2	37	97
8:30 AM	36	8	1	2	7	55	109
8:45 AM	33	3	1	1	3	40	81
Total	320	196	98	88	147	394	1,243

AM Intersection Peak Hour : **7:15 AM - 8:15 AM** Intersection PHF : **0.78**

	Southbound		Westbound		Northbound		TOTAL
	Thru	Left	Right	Left	Right	Thru	
Volume	181	163	89	73	123	243	872
PHF	0.77	0.71	0.64	0.41	0.65	0.76	0.78
Movement PHF	0.77		0.51		0.77		0.78

PM Period (4:00 PM - 6:00 PM)								
	Southbound			Westbound		Northbound		
	Right	Thru	Left	Right	Left	Right	Thru	TOTAL
4:00 PM	0	83	4	2	5	6	51	151
4:15 PM	0	98	5	3	2	2	38	148
4:30 PM	0	102	7	0	5	2	42	158
4:45 PM	0	111	9	3	7	6	47	183
5:00 PM	0	151	11	1	3	8	51	225
5:15 PM	0	150	5	3	9	5	34	206
5:30 PM	0	130	22	4	10	3	48	217
5:45 PM	0	120	16	6	7	11	52	212
Total	0	945	79	22	48	43	363	1,500

PM Intersection Peak Hour : **5:00 PM - 6:00 PM** Intersection PHF : **0.96**

	Southbound		Westbound		Northbound		TOTAL
	Thru	Left	Right	Left	Right	Thru	
Volume	551	54	14	29	27	185	860
PHF	0.912	0.614	0.583	0.725	0.614	0.889	0.96
Movement PHF	0.93		0.77		0.84		0.96

U-Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-1536

Location: Berino Court @ Regents Road

AM Period (7:00 AM - 9:00 AM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn		TOTAL
7:00 AM	13	0	0		13
7:15 AM	33	0	0		33
7:30 AM	9	1	0		10
7:45 AM	22	0	0		22
8:00 AM	17	0	0		17
8:15 AM	31	0	0		31
8:30 AM	37	0	0		37
8:45 AM	32	0	0		32
Total	194	1	0		195

AM Intersection Peak Hour : **7:15 AM - 8:15 AM** Intersection PHF : **0.62**

	North Leg EB	East Leg SB	South Leg EB		TOTAL
Volume	81	1	0		82
PHF	0.61	0.25	#DIV/0!		0.62
Movement PHF	0.61	0.25	#DIV/0!		0.62

PM Period (4:00 PM - 6:00 PM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn		TOTAL
4:00 PM	19	0	0		19
4:15 PM	18	0	0		18
4:30 PM	15	0	0		15
4:45 PM	25	0	0		25
5:00 PM	23	0	1		24
5:15 PM	24	0	0		24
5:30 PM	26	0	0		26
5:45 PM	22	0	0		22
Total	172	0	1		173

PM Intersection Peak Hour : **5:00 PM - 6:00 PM** Intersection PHF : **0.92**

	North Leg EB	East Leg SB	South Leg EB		TOTAL
Volume	95	0	1		96
PHF	0.91	#DIV/0!	0.25		0.92
Movement PHF	0.91	#DIV/0!	0.25		0.92

Bike Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location:	Berino Court	@	Regents Road
Date of Count:	*Wednesday, May 13, 2015*		
Analysts:	*LV/CD*		
Weather:	*Sunny*		
AVC Proj No:	*15-0345*		

Kimley»Horn

Bike Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Berino Court @ Regents Road

AM Period (7:00 AM - 9:00 AM)								
	Southbound		Westbound		Northbound			
	Thru	Left	Right	Left	Right	Thru		TOTAL
7:00 AM	0	0	0	0	0	6		6
7:15 AM	0	0	0	0	1	0		1
7:30 AM	2	0	0	0	1	2		5
7:45 AM	1	0	0	0	1	2		4
8:00 AM	0	0	0	0	0	4		4
8:15 AM	1	0	0	0	0	4		5
8:30 AM	0	0	0	0	1	0		1
8:45 AM	0	0	0	0	0	1		1
Total	4	0	0	0	4	19		27

AM Intersection Peak Hour : **7:30 AM - 8:30 AM** Intersection PHF : **0.90**

	Southbound		Westbound		Northbound			TOTAL
	Thru	Left	Right	Left	Right	Thru		
Volume	4	0	0	0	2	12		18
PHF	0.50	#####	#####	#####	0.50	0.75		0.90
Movement PHF	0.50		#DIV/0!			0.88		0.90

PM Period (4:00 PM - 6:00 PM)								
	Southbound		Westbound		Northbound			
	Thru	Left	Right	Left	Right	Thru		TOTAL
4:00 PM	3	0	0	0	0	0		3
4:15 PM	1	0	0	0	0	0		1
4:30 PM	1	0	0	0	0	0		1
4:45 PM	2	0	0	0	0	0		2
5:00 PM	3	1	0	0	0	0		4
5:15 PM	3	1	0	0	0	1		5
5:30 PM	5	0	0	6	0	0		11
5:45 PM	5	0	0	0	0	0		5
Total	23	2	0	6	0	1		32

PM Intersection Peak Hour : **5:00 PM - 6:00 PM** Intersection PHF : **0.57**

	Southbound		Westbound		Northbound			TOTAL
	Thru	Left	Right	Left	Right	Thru		
Volume	16	2	0	6	0	1		25
PHF	0.8	0.5	#####	0.25	#####	0.25		0.57
Movement PHF	0.90		0.25			0.25		0.57

Kimley»Horn

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Berino Court @ Regents Road

Date of Count: *Wednesday, October 22, 2014*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0429*

Kimley»Horn

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Berino Court @ Regents Road

Midday Period (11:00 AM - 1:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
11:00 AM	0	42	21	1	0	3	5	26	1	0	0	0	99
11:15 AM	0	46	20	1	0	1	1	26	0	0	0	0	95
11:30 AM	0	57	13	0	0	2	4	39	0	0	0	0	115
11:45 AM	0	60	11	1	0	5	3	29	0	0	0	0	109
12:00 PM	0	58	19	0	0	3	2	36	0	0	0	0	118
12:15 PM	0	62	18	1	0	2	0	34	0	0	0	0	117
12:30 PM	0	73	15	1	0	3	3	40	0	0	0	0	135
12:45 PM	0	68	25	0	0	3	0	37	0	0	0	0	133
Total	0	466	142	5	0	22	18	267	1	0	0	0	921

PM Intersection Peak Hour : **12:00 PM - 1:00 PM**

Intersection PHF : **0.93**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	261	77	2	0	11	5	147	0	0	0	0	503
PHF	#####	0.894	0.77	0.5	#####	0.917	0.417	0.919	#####	#####	#####	#####	0.93
Movement PHF		0.91			0.81			0.88			#DIV/0!		0.93

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Arriba Street @ Regents Road

Date of Count: *Tuesday, May 12, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Kimley»Horn

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Arriba Street @ Regents Road

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	7	0	19	8	26	1	3	3	1	1	23	19	111
7:15 AM	21	0	15	39	29	0	1	2	1	3	13	57	181
7:30 AM	25	4	37	38	35	3	8	5	1	1	28	39	224
7:45 AM	26	2	24	21	41	0	3	5	3	3	25	19	172
8:00 AM	12	1	14	14	28	0	1	5	1	1	12	14	103
8:15 AM	21	0	13	13	25	0	2	8	1	3	17	15	118
8:30 AM	16	2	14	15	29	0	2	8	4	5	21	24	140
8:45 AM	17	3	16	15	21	4	6	7	2	2	20	16	129
Total	145	12	152	163	234	8	26	43	14	19	159	203	1,178

AM Intersection Peak Hour : **7:00 AM - 8:00 AM** Intersection PHF : **0.77**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	79	6	95	106	131	4	15	15	6	8	89	134	688
PHF	0.76	0.38	0.64	0.68	0.80	0.33	0.47	0.75	0.50	0.67	0.79	0.59	0.77
Movement PHF		0.68			0.79			0.64			0.79		0.77

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	57	3	30	10	39	6	2	4	2	3	29	25	210
4:15 PM	61	7	29	2	29	3	4	4	3	1	28	16	187
4:30 PM	62	9	30	14	25	5	9	6	3	3	22	10	198
4:45 PM	65	12	30	10	33	0	6	4	2	1	28	16	207
5:00 PM	99	9	27	7	22	4	5	2	4	6	27	11	223
5:15 PM	82	11	46	4	31	4	5	5	4	2	35	22	251
5:30 PM	66	8	57	12	37	2	4	5	4	2	39	15	251
5:45 PM	56	11	34	11	35	2	7	3	3	7	40	14	223
Total	548	70	283	70	251	26	42	33	25	25	248	129	1,750

PM Intersection Peak Hour : **5:00 PM - 6:00 PM** Intersection PHF : **0.94**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	303	39	164	34	125	12	21	15	15	17	141	62	948
PHF	0.77	0.886	0.719	0.708	0.845	0.75	0.75	0.75	0.938	0.607	0.881	0.705	0.94
Movement PHF		0.91			0.84			0.91			0.90		0.94

U-Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-1536

Location: Arriba Street @ Regents Road

AM Period (7:00 AM - 9:00 AM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
7:00 AM	6	0	0	0	6
7:15 AM	7	0	0	0	7
7:30 AM	65	0	0	0	65
7:45 AM	12	0	0	0	12
8:00 AM	18	0	0	0	18
8:15 AM	8	0	0	0	8
8:30 AM	14	0	0	0	14
8:45 AM	10	0	0	1	11
Total	140	0	0	1	141

AM Intersection Peak Hour : **7:00 AM - 8:00 AM** Intersection PHF : **0.35**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	90	0	0	0	90
PHF	0.35	#DIV/0!	#DIV/0!	#DIV/0!	0.35
Movement PHF	0.35	#DIV/0!	#DIV/0!	#DIV/0!	0.35

PM Period (4:00 PM - 6:00 PM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
4:00 PM	12	0	1	0	13
4:15 PM	12	0	0	0	12
4:30 PM	15	0	0	0	15
4:45 PM	11	0	1	0	12
5:00 PM	15	0	0	0	15
5:15 PM	19	0	0	0	19
5:30 PM	26	0	0	0	26
5:45 PM	18	0	0	0	18
Total	128	0	2	0	130

PM Intersection Peak Hour : **5:00 PM - 6:00 PM** Intersection PHF : **0.75**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	78	0	0	0	78
PHF	0.75	#DIV/0!	#DIV/0!	#DIV/0!	0.75
Movement PHF	0.75	#DIV/0!	#DIV/0!	#DIV/0!	0.75

Bike Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

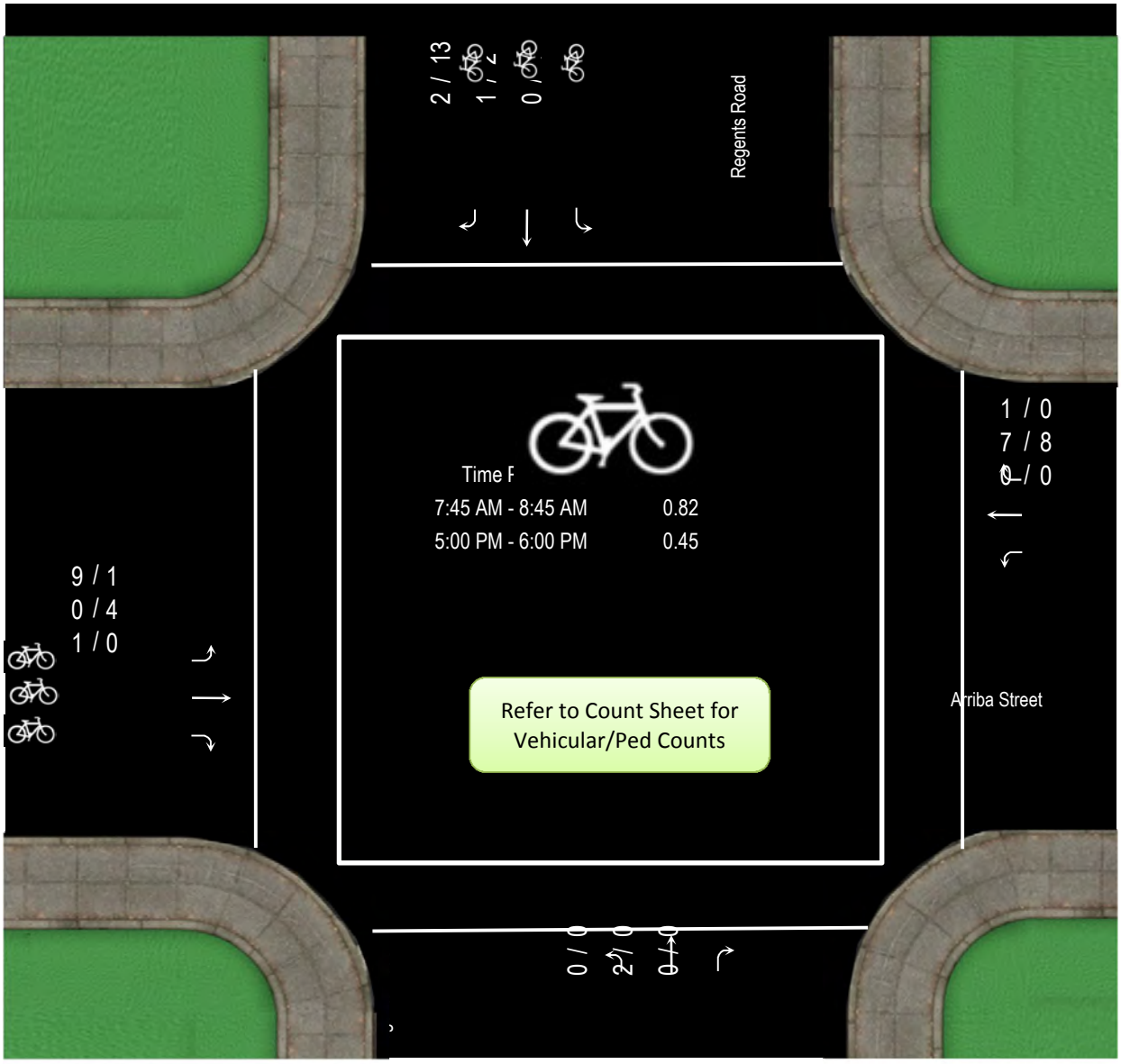
Location: Arriba Street @ Regents Road

Date of Count: *Tuesday, May 12, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*



Bike Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Arriba Street @ Regents Road

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	1	1	1	4	7
7:15 AM	0	0	0	1	0	0	0	0	0	0	2	2	5
7:30 AM	0	0	0	1	0	0	0	0	0	0	0	1	2
7:45 AM	1	1	0	1	1	0	0	1	0	1	0	1	7
8:00 AM	0	0	0	0	1	0	0	1	0	0	0	2	4
8:15 AM	0	0	0	0	2	0	0	0	0	0	0	3	5
8:30 AM	1	0	0	0	3	0	0	0	0	0	0	3	7
8:45 AM	0	0	0	0	3	0	0	0	0	0	0	2	5
Total	2	1	0	3	10	0	0	2	1	2	3	18	42

AM Intersection Peak Hour : **7:45 AM - 8:45 AM** Intersection PHF : **0.82**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	2	1	0	1	7	0	0	2	0	1	0	9	23
PHF	0.50	0.25	#####	0.25	0.58	#####	#####	0.50	#####	0.25	#####	0.75	0.82
Movement PHF		0.38			0.67			0.50			0.83		0.82

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	1	0	0	0	0	0	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	1	0	0	0	0	0	1	0	2
4:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
4:45 PM	0	0	0	1	0	0	0	0	0	0	0	1	2
5:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
5:15 PM	1	1	1	0	0	0	0	0	0	0	0	1	4
5:30 PM	9	0	0	0	6	0	0	0	0	0	1	0	16
5:45 PM	3	0	0	0	2	0	0	0	0	0	3	0	8
Total	14	2	1	1	9	0	0	0	0	0	6	2	35

PM Intersection Peak Hour : **5:00 PM - 6:00 PM** Intersection PHF : **0.45**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	13	2	1	0	8	0	0	0	0	0	4	1	29
PHF	0.36	0.5	0.25	#####	0.333	#####	#####	#####	#####	#####	0.333	0.25	0.45
Movement PHF		0.44			0.33			#DIV/0!			0.42		0.45

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Arriba Street @ Regents Road

Date of Count: *Wednesday, October 22, 2014*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0429*

Kimley»Horn

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Arriba Street @ Regents Road

Midday Period (11:00 AM - 1:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
11:00 AM	9	3	28	7	17	1	2	1	2	5	18	12	105
11:15 AM	14	2	25	8	17	3	1	3	3	5	15	12	108
11:30 AM	14	4	29	6	21	2	2	5	3	2	10	11	109
11:45 AM	16	3	25	11	23	2	1	2	0	4	19	10	116
12:00 PM	21	5	26	10	28	0	1	3	1	4	29	11	139
12:15 PM	13	4	26	5	16	0	2	3	1	2	19	14	105
12:30 PM	15	9	37	5	19	2	3	0	1	2	19	16	128
12:45 PM	19	6	38	6	17	0	3	1	2	4	15	14	125
Total	121	36	234	58	158	10	15	18	13	28	144	100	935

PM Intersection Peak Hour : **12:00 PM - 1:00 PM**

Intersection PHF : **0.89**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	68	24	127	26	80	2	9	7	5	12	82	55	497
PHF	0.81	0.667	0.836	0.65	0.714	0.25	0.75	0.583	0.625	0.75	0.707	0.859	0.89
Movement PHF		0.87			0.71			0.88			0.85		0.89

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Governor Drive @ Regents Road

Date of Count: *Tuesday, April 28, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Kimley»Horn

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Governor Drive @ Regents Road

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	1	8	3	3	16	55	79	9	6	16	52	2	250
7:15 AM	3	9	3	4	19	63	71	18	7	14	32	4	247
7:30 AM	4	13	7	1	20	75	61	21	10	9	69	2	292
7:45 AM	3	6	21	0	62	83	118	20	14	10	43	3	383
8:00 AM	5	15	5	1	49	104	73	16	10	10	39	3	330
8:15 AM	6	7	1	0	22	71	55	11	8	12	46	5	244
8:30 AM	1	6	4	1	20	63	67	14	6	14	56	6	258
8:45 AM	4	9	5	1	36	84	119	24	12	14	67	13	388
Total	27	73	49	11	244	598	643	133	73	99	404	38	2,392

AM Intersection Peak Hour : **7:15 AM - 8:15 AM** Intersection PHF : **0.82**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	15	43	36	6	150	325	323	75	41	43	183	12	1,252
PHF	0.75	0.72	0.43	0.38	0.60	0.78	0.68	0.89	0.73	0.77	0.66	0.75	0.82
Movement PHF		0.78			0.78			0.72			0.74		0.82

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	0	14	3	0	47	94	82	21	11	5	47	6	330
4:15 PM	0	9	5	2	56	91	87	17	14	12	49	6	348
4:30 PM	1	8	4	1	53	71	82	22	12	8	33	2	297
4:45 PM	1	15	3	3	61	108	97	16	11	3	32	6	356
5:00 PM	1	5	8	1	69	82	77	21	23	9	40	3	339
5:15 PM	0	8	3	2	52	102	84	30	14	11	51	2	359
5:30 PM	0	8	4	1	45	96	91	14	6	11	27	1	304
5:45 PM	0	6	1	3	59	71	72	23	16	10	36	1	298
Total	3	73	31	13	442	715	672	164	107	69	315	27	2,631

PM Intersection Peak Hour : **4:45 PM - 5:45 PM** Intersection PHF : **0.95**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	2	36	18	7	227	388	349	81	54	34	150	12	1358
PHF	0.50	0.6	0.563	0.583	0.822	0.898	0.899	0.675	0.587	0.773	0.735	0.5	0.95
Movement PHF		0.74			0.90			0.95			0.77		0.95

U-Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-1536

Location: Governor Drive @ Regents Road

AM Period (7:00 AM - 9:00 AM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
7:00 AM	0	0	0	0	0
7:15 AM	1	0	0	0	1
7:30 AM	0	1	0	0	1
7:45 AM	0	0	0	0	0
8:00 AM	0	3	0	0	3
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	1	0	0	1	2
Total	2	4	0	1	7

AM Intersection Peak Hour : **7:15 AM - 8:15 AM** Intersection PHF : **0.42**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	1	4	0	0	5
PHF	0.25	0.33	#DIV/0!	#DIV/0!	0.42
Movement PHF	0.25	0.33	#DIV/0!	#DIV/0!	0.42

PM Period (4:00 PM - 6:00 PM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
4:00 PM	0	1	0	0	1
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	1	0	0	1
5:30 PM	0	1	0	0	1
5:45 PM	0	0	0	0	0
Total	0	3	0	0	3

PM Intersection Peak Hour : **4:45 PM - 5:45 PM** Intersection PHF : **0.50**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	0	2	0	0	2
PHF	#DIV/0!	0.5	#DIV/0!	#DIV/0!	0.50
Movement PHF	#DIV/0!	0.50	#DIV/0!	#DIV/0!	0.50

Bike Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Governor Drive @ Regents Road

Date of Count: *Tuesday, April 28, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Kimley»Horn

Bike Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Governor Drive @ Regents Road

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	1	0	0	0	1	0	2
7:30 AM	0	0	0	0	1	0	0	0	0	0	2	0	3
7:45 AM	0	0	0	0	1	0	2	0	0	0	1	0	4
8:00 AM	0	0	0	0	0	0	0	0	0	0	2	0	2
8:15 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
8:45 AM	0	0	0	0	1	1	1	0	0	1	1	0	5
Total	0	0	0	0	3	1	4	0	0	1	9	0	18

AM Intersection Peak Hour : **7:15 AM - 8:15 AM** Intersection PHF : **0.69**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	0	0	0	2	0	3	0	0	0	6	0	11
PHF	#####	#####	#####	#####	0.50	#####	0.38	#####	#####	#####	0.75	#####	0.69
Movement PHF	#DIV/0!			0.50			0.38			0.75			0.69

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	0	0	0	0	1	1	0	0	0	0	1	0	3
4:15 PM	0	0	0	0	1	0	0	0	0	0	1	0	2
4:30 PM	0	0	0	0	2	0	0	0	0	0	1	0	3
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	2	0	2	0	0	0	1	0	5
5:15 PM	0	0	0	0	1	0	1	0	0	0	2	0	4
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	1	0	0	0	0	0	1	0	2
Total	0	0	0	0	8	1	3	0	0	0	7	0	19

PM Intersection Peak Hour : **4:30 PM - 5:30 PM** Intersection PHF : **0.60**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	0	0	0	5	0	3	0	0	0	4	0	12
PHF	#####	#####	#####	#####	0.625	#####	0.375	#####	#####	#####	0.5	#####	0.60
Movement PHF	#DIV/0!			0.63			0.38			0.50			0.60

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

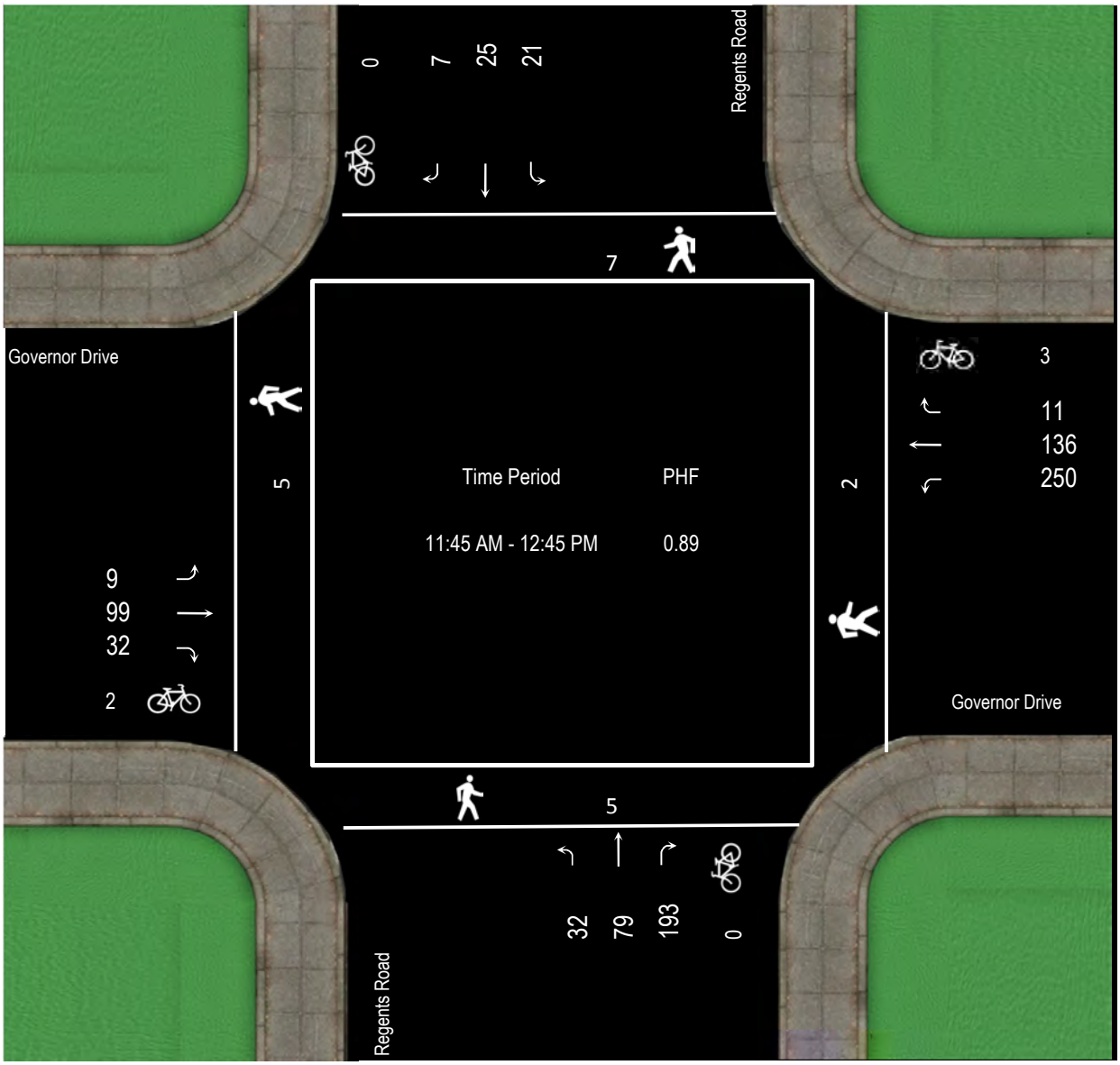
Location: Governor Drive @ Regents Road

Date of Count: *Wednesday, October 22, 2014*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0429*



Kimley»Horn

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Governor Drive @ Regents Road

Midday Period (11:00 AM - 1:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
11:00 AM	0	6	4	2	19	53	33	17	6	6	12	3	161
11:15 AM	0	9	4	4	29	47	55	18	8	7	21	3	205
11:30 AM	0	6	4	1	27	57	53	18	12	6	23	5	212
11:45 AM	1	8	5	0	44	64	55	27	9	11	24	3	251
12:00 PM	5	3	6	3	31	65	50	15	12	2	29	2	223
12:15 PM	1	10	5	2	30	43	43	17	8	12	24	3	198
12:30 PM	0	4	5	6	31	78	45	20	3	7	22	1	222
12:45 PM	3	5	6	1	36	53	45	18	15	4	32	2	220
Total	10	51	39	19	247	460	379	150	73	55	187	22	1,692

PM Intersection Peak Hour : **11:45 AM - 12:45 PM**

Intersection PHF : **0.89**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	7	25	21	11	136	250	193	79	32	32	99	9	894
PHF	0.35	0.625	0.875	0.458	0.773	0.801	0.877	0.731	0.667	0.667	0.853	0.75	0.89
Movement PHF		0.83			0.86			0.84			0.90		0.89

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: SR-52 WB Ramps @ Regents Road

Date of Count: *Tuesday, April 28, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: SR-52 WB Ramps @ Regents Road

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	81	55	0	11	0	31	0	124	105	0	0	0	407
7:15 AM	71	63	0	28	0	61	0	130	132	0	0	0	485
7:30 AM	90	87	0	37	0	53	0	148	139	0	0	0	554
7:45 AM	101	68	0	37	1	48	0	183	120	0	0	0	558
8:00 AM	112	100	0	54	0	146	0	170	104	0	0	0	686
8:15 AM	114	83	0	38	0	52	0	161	145	0	0	0	593
8:30 AM	111	83	0	32	0	42	0	129	109	0	0	0	506
8:45 AM	93	91	0	51	1	74	0	138	115	0	0	0	563
Total	773	630	0	288	2	507	0	1,183	969	0	0	0	4,352

AM Intersection Peak Hour : **7:30 AM - 8:30 AM** Intersection PHF : **0.87**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	417	338	0	166	1	299	0	662	508	0	0	0	2,391
PHF	0.91	0.85	#####	0.77	0.25	0.51	#####	0.90	0.88	#####	#####	#####	0.87
Movement PHF		0.89			0.58			0.96			#DIV/0!		0.87

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	87	97	0	90	0	91	0	118	81	0	0	0	564
4:15 PM	97	104	0	56	1	136	0	109	47	0	0	0	550
4:30 PM	68	89	0	51	0	120	0	92	75	0	0	0	495
4:45 PM	63	88	0	56	0	148	0	125	82	0	0	0	562
5:00 PM	55	76	0	45	0	138	0	124	64	0	0	0	502
5:15 PM	53	113	0	57	0	106	0	135	61	0	0	0	525
5:30 PM	60	109	0	63	0	143	0	92	83	0	0	0	550
5:45 PM	34	93	0	40	0	151	0	80	74	0	0	0	472
Total	517	769	0	458	1	1,033	0	875	567	0	0	0	4,220

PM Intersection Peak Hour : **4:00 PM - 5:00 PM** Intersection PHF : **0.96**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	315	378	0	253	1	495	0	444	285	0	0	0	2171
PHF	0.81	0.909	#####	0.703	0.25	0.836	#####	0.888	0.869	#####	#####	#####	0.96
Movement PHF		0.86			0.92			0.88			#DIV/0!		0.96

U-Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-1536

Location: SR-52 WB Ramps @ Regents Road

AM Period (7:00 AM - 9:00 AM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
7:00 AM	1	0	0	0	1
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	1	0	0	0	1
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	1	0	1
8:45 AM	0	0	0	0	0
Total	2	0	1	0	3

AM Intersection Peak Hour : **7:30 AM - 8:30 AM** Intersection PHF : **0.25**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	1	0	0	0	1
PHF	0.25	#DIV/0!	#DIV/0!	#DIV/0!	0.25
Movement PHF	0.25	#DIV/0!	#DIV/0!	#DIV/0!	0.25

PM Period (4:00 PM - 6:00 PM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
4:00 PM	0	0	3	0	3
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
Total	0	0	3	0	3

PM Intersection Peak Hour : **4:00 PM - 5:00 PM** Intersection PHF : **0.25**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	0	0	3	0	3
PHF	#DIV/0!	#DIV/0!	0.25	#DIV/0!	0.25
Movement PHF	#DIV/0!	#DIV/0!	0.25	#DIV/0!	0.25

Bike Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

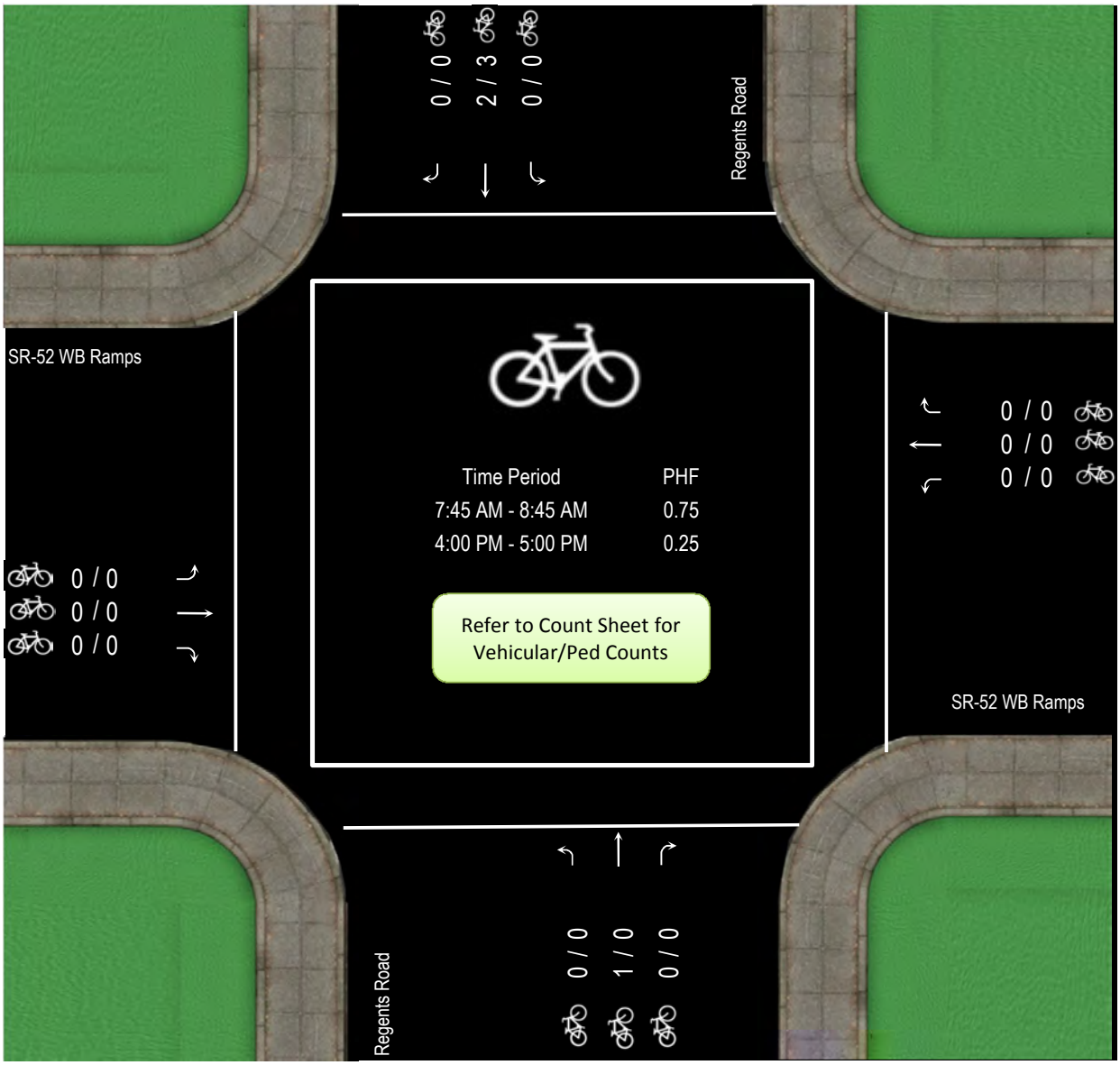
Location: SR-52 WB Ramps @ Regents Road

Date of Count: *Tuesday, April 28, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*



Bike Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: SR-52 WB Ramps @ Regents Road

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	1	0	0	0	0	0	0	0	0	0	0	1
8:30 AM	0	1	0	0	0	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	2	0	0	0	0	0	2	0	0	0	0	4

AM Intersection Peak Hour : **7:45 AM - 8:45 AM** Intersection PHF : **0.75**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	2	0	0	0	0	0	1	0	0	0	0	3
PHF	#####	0.50	#####	#####	#####	#####	#####	0.25	#####	#####	#####	#####	0.75
Movement PHF		0.50			#DIV/0!			0.25			#DIV/0!		0.75

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	0	3	0	0	0	0	0	0	0	0	0	0	3
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	4	0	0	0	0	0	0	0	0	0	0	4

PM Intersection Peak Hour : **4:00 PM - 5:00 PM** Intersection PHF : **0.25**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	3	0	0	0	0	0	0	0	0	0	0	3
PHF	#####	0.25	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	0.25
Movement PHF		0.25			#DIV/0!			#DIV/0!			#DIV/0!		0.25

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

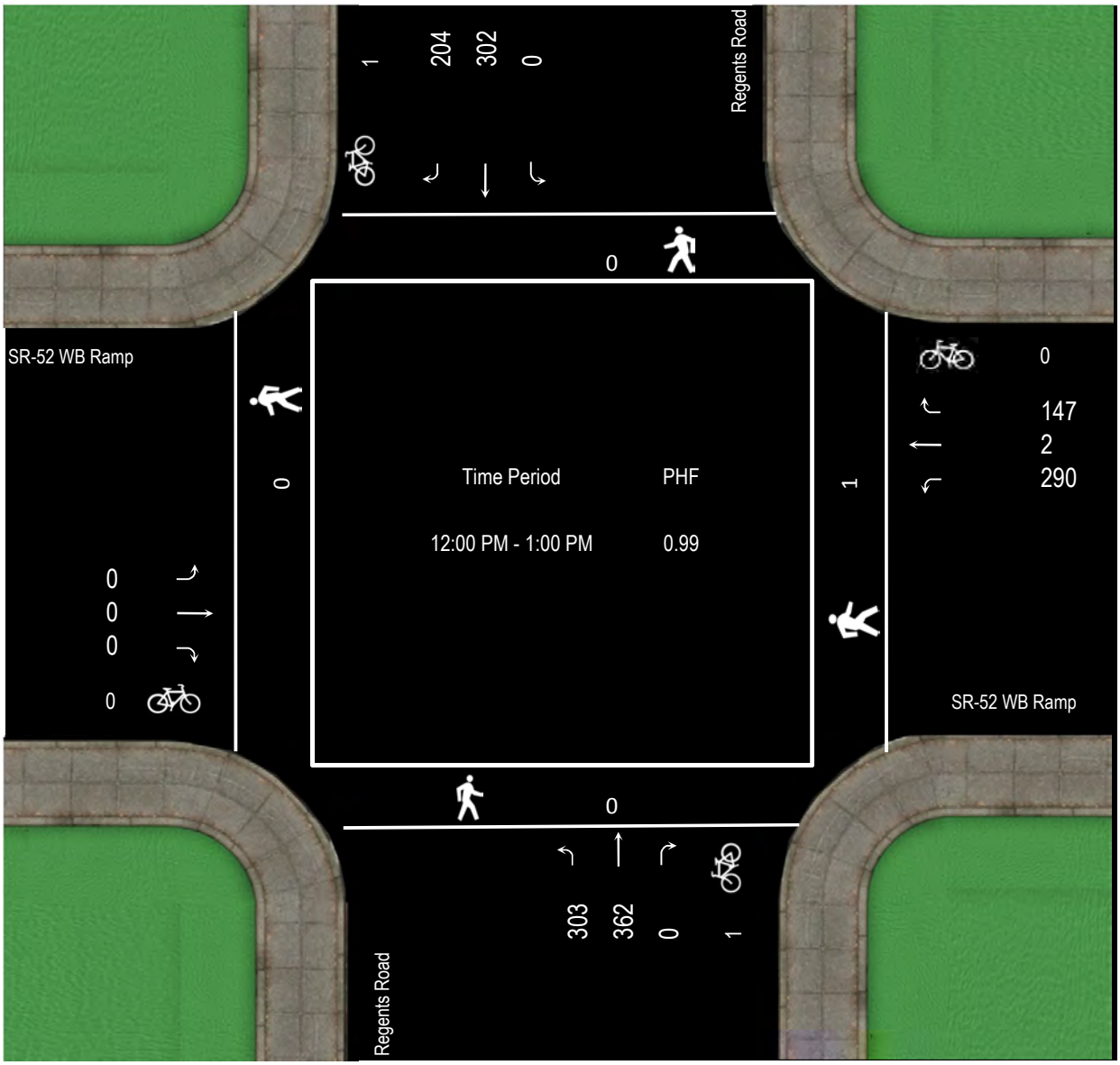
Location: SR-52 WB Ramp @ Regents Road

Date of Count: *Wednesday, October 22, 2014*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0429*



Kimley»Horn

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: SR-52 WB Ramp @ Regents Road

Midday Period (11:00 AM - 1:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
11:00 AM	51	64	0	22	0	57	0	54	86	0	0	0	334
11:15 AM	59	49	0	29	0	79	0	100	73	0	0	0	389
11:30 AM	48	67	0	35	0	51	0	88	74	0	0	0	363
11:45 AM	53	77	0	29	0	68	0	97	82	0	0	0	406
12:00 PM	60	74	0	47	0	71	0	90	60	0	0	0	402
12:15 PM	38	83	0	30	0	84	0	88	76	0	0	0	399
12:30 PM	56	90	0	26	2	72	0	89	66	0	0	0	401
12:45 PM	50	55	0	44	0	63	0	95	101	0	0	0	408
Total	415	559	0	262	2	545	0	701	618	0	0	0	3,102

PM Intersection Peak Hour : **12:00 PM - 1:00 PM**

Intersection PHF : **0.99**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	204	302	0	147	2	290	0	362	303	0	0	0	1610
PHF	0.85	0.839	#####	0.782	0.25	0.863	#####	0.953	0.75	#####	#####	#####	0.99
Movement PHF		0.87			0.93			0.85			#DIV/0!		0.99

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: SR-52 EB Ramps @ Regents Road

Date of Count: *Tuesday, April 28, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: SR-52 EB Ramps @ Regents Road

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	48	38	0	0	0	90	199	0	22	0	30	427
7:15 AM	0	94	30	0	0	0	118	221	0	24	0	41	528
7:30 AM	0	87	53	0	0	0	138	239	0	23	0	48	588
7:45 AM	0	58	58	0	0	0	139	248	0	46	0	55	604
8:00 AM	0	120	126	0	0	0	108	208	0	46	0	66	674
8:15 AM	0	73	62	0	0	0	113	216	0	44	0	90	598
8:30 AM	0	60	66	0	0	0	99	191	0	44	1	48	509
8:45 AM	0	101	64	0	0	0	137	197	0	52	0	56	607
Total	0	641	497	0	0	0	942	1,719	0	301	1	434	4,535

AM Intersection Peak Hour : **7:30 AM - 8:30 AM** Intersection PHF : **0.91**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	338	299	0	0	0	498	911	0	159	0	259	2,464
PHF	#####	0.70	0.59	#####	#####	#####	0.90	0.92	#####	0.86	#####	0.72	0.91
Movement PHF		0.65			#DIV/0!			0.91			0.78		0.91

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	0	146	45	0	0	0	70	115	0	139	1	87	603
4:15 PM	0	185	55	0	0	0	62	74	0	159	1	82	618
4:30 PM	0	178	31	0	0	0	61	98	0	156	4	69	597
4:45 PM	0	202	34	0	0	0	51	136	0	166	3	71	663
5:00 PM	0	180	34	0	0	0	64	106	0	158	2	82	626
5:15 PM	0	193	26	0	0	0	58	101	0	189	0	95	662
5:30 PM	0	217	35	0	0	0	46	94	0	164	1	81	638
5:45 PM	0	220	24	0	0	0	56	79	0	153	0	75	607
Total	0	1521	284	0	0	0	468	803	0	1,284	12	642	5,014

PM Intersection Peak Hour : **4:45 PM - 5:45 PM** Intersection PHF : **0.98**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	792	129	0	0	0	219	437	0	677	6	329	2589
PHF	#####	0.912	0.921	#####	#####	#####	0.855	0.803	#####	0.896	0.5	0.866	0.98
Movement PHF		0.91			#DIV/0!			0.88			0.89		0.98

U-Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-1536

Location: SR-52 EB Ramps @ Regents Road

AM Period (7:00 AM - 9:00 AM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
Total	0	0	0	0	0

AM Intersection Peak Hour : **7:30 AM - 8:30 AM** Intersection PHF : **#DIV/0!**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	0	0	0	0	0
PHF	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Movement PHF	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

PM Period (4:00 PM - 6:00 PM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
Total	0	0	0	0	0

PM Intersection Peak Hour : **4:45 PM - 5:45 PM** Intersection PHF : **#DIV/0!**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	0	0	0	0	0
PHF	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Movement PHF	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

Bike Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

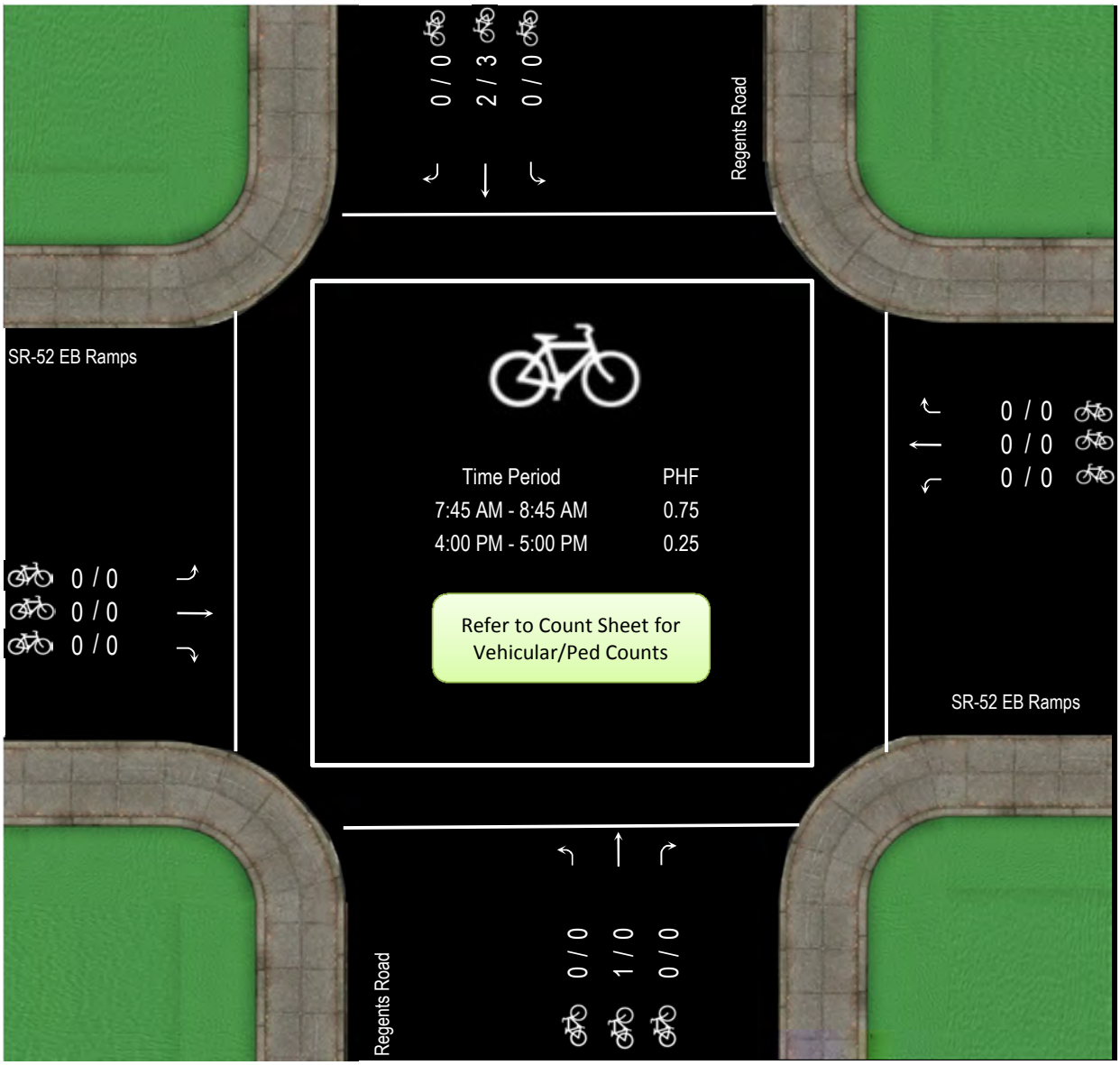
Location: SR-52 EB Ramps @ Regents Road

Date of Count: *Tuesday, April 28, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*



Bike Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: SR-52 EB Ramps @ Regents Road

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	1	0	0	0	0	0	0	0	0	0	0	1
8:30 AM	0	1	0	0	0	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	2	0	0	0	0	0	2	0	0	0	0	4

AM Intersection Peak Hour : **7:45 AM - 8:45 AM** Intersection PHF : **0.75**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	2	0	0	0	0	0	1	0	0	0	0	3
PHF	#####	0.50	#####	#####	#####	#####	#####	0.25	#####	#####	#####	#####	0.75
Movement PHF		0.50			#DIV/0!			0.25			#DIV/0!		0.75

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	0	3	0	0	0	0	0	0	0	0	0	0	3
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	4	0	0	0	0	0	0	0	0	0	0	4

PM Intersection Peak Hour : **4:00 PM - 5:00 PM** Intersection PHF : **0.25**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	3	0	0	0	0	0	0	0	0	0	0	3
PHF	#####	0.25	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	0.25
Movement PHF		0.25			#DIV/0!			#DIV/0!			#DIV/0!		0.25

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

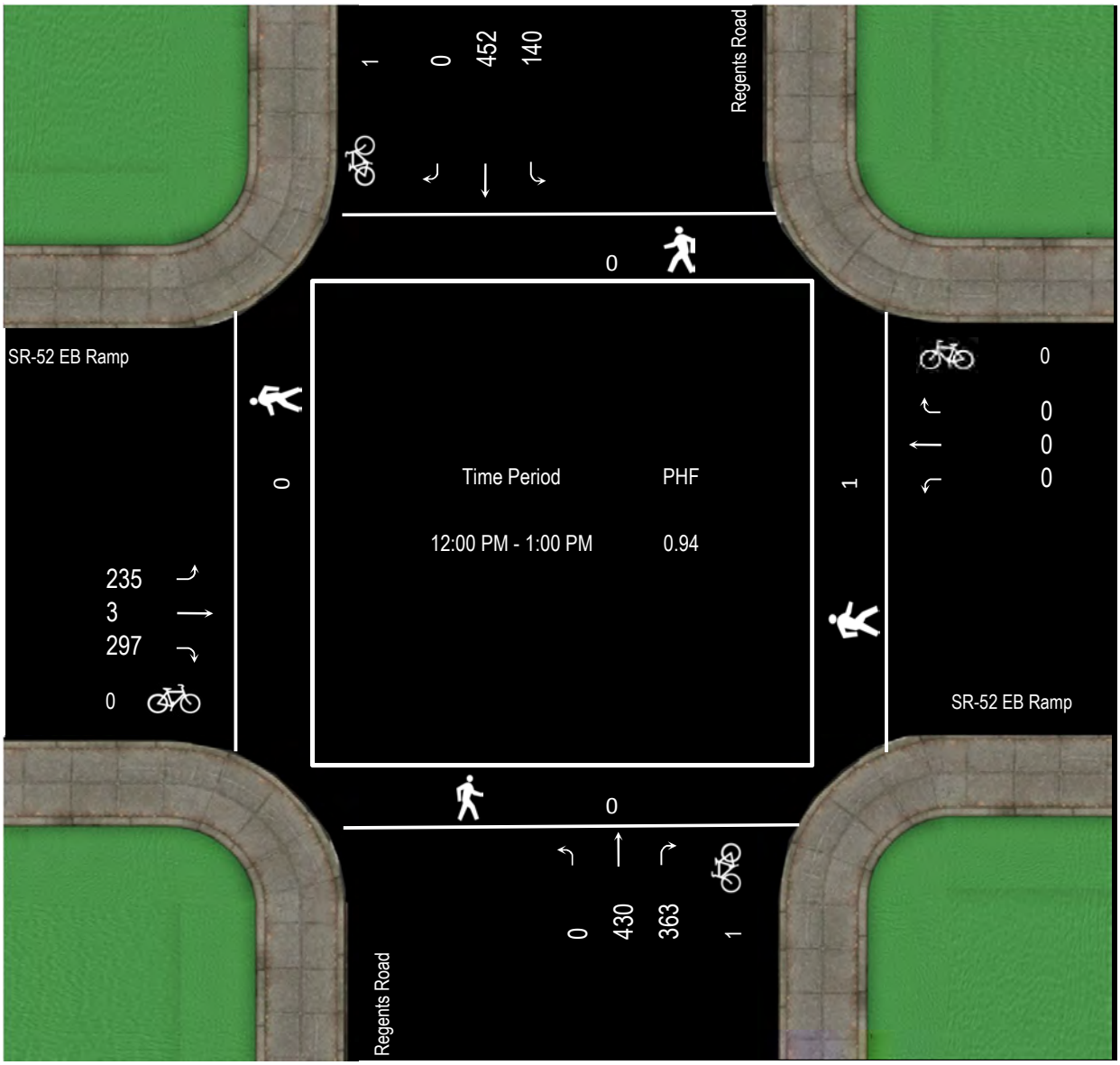
Location: SR-52 EB Ramp @ Regents Road

Date of Count: *Wednesday, October 22, 2014*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0429*



Kimley»Horn

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: SR-52 EB Ramp @ Regents Road

Midday Period (11:00 AM - 1:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
11:00 AM	0	84	37	0	0	0	77	93	0	61	0	47	399
11:15 AM	0	105	23	0	0	0	72	101	0	76	1	72	450
11:30 AM	0	87	31	0	0	0	65	94	0	72	1	68	418
11:45 AM	0	108	37	0	0	0	54	111	0	80	0	68	458
12:00 PM	0	115	30	0	0	0	64	87	0	66	1	63	426
12:15 PM	0	133	34	0	0	0	98	111	0	77	2	53	508
12:30 PM	0	119	43	0	0	0	102	101	0	79	0	54	498
12:45 PM	0	85	33	0	0	0	99	131	0	75	0	65	488
Total	0	836	268	0	0	0	631	829	0	586	5	490	3,645

PM Intersection Peak Hour : **12:00 PM - 1:00 PM**

Intersection PHF : **0.94**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	452	140	0	0	0	363	430	0	297	3	235	1920
PHF	#####	0.85	0.814	#####	#####	#####	0.89	0.821	#####	0.94	0.375	0.904	0.94
Movement PHF		0.89			#DIV/0!			0.86			0.96		0.94

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Luna Avenue @ Regents Road

Date of Count: *Tuesday, April 28, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Luna Avenue @ Regents Road

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	33	40	0	22	2	4	2	157	13	21	1	111	406
7:15 AM	56	61	1	26	3	1	2	200	12	20	1	120	503
7:30 AM	58	50	1	33	4	2	4	216	29	18	0	132	547
7:45 AM	51	55	1	13	1	0	0	210	37	15	2	165	550
8:00 AM	86	79	5	19	4	2	0	186	27	29	1	114	552
8:15 AM	40	67	2	12	3	3	0	199	29	32	4	120	511
8:30 AM	44	56	0	10	0	3	0	148	23	31	3	140	458
8:45 AM	80	74	5	15	0	1	2	190	29	33	3	137	569
Total	448	482	15	150	17	16	10	1,506	199	199	15	1,039	4,096

AM Intersection Peak Hour : **7:30 AM - 8:30 AM** Intersection PHF : **0.98**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	235	251	9	77	12	7	4	811	122	94	7	531	2,160
PHF	0.68	0.79	0.45	0.58	0.75	0.58	0.25	0.94	0.82	0.73	0.44	0.80	0.98
Movement PHF		0.73			0.62			0.94			0.87		0.98

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	74	202	4	3	3	2	1	80	52	22	2	105	550
4:15 PM	129	208	7	3	2	1	1	49	41	33	6	82	562
4:30 PM	109	208	15	5	4	1	2	69	52	40	3	91	599
4:45 PM	124	229	11	5	5	2	1	88	33	45	2	98	643
5:00 PM	119	209	5	3	5	2	0	63	28	35	5	107	581
5:15 PM	137	224	12	6	0	1	1	61	31	36	3	88	600
5:30 PM	122	231	18	6	2	2	1	73	32	34	2	61	584
5:45 PM	142	210	15	5	3	2	1	65	48	36	3	65	595
Total	956	1721	87	36	24	13	8	548	317	281	26	697	4,714

PM Intersection Peak Hour : **4:30 PM - 5:30 PM** Intersection PHF : **0.94**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	489	870	43	19	14	6	4	281	144	156	13	384	2423
PHF	0.89	0.95	0.717	0.792	0.7	0.75	0.5	0.798	0.692	0.867	0.65	0.897	0.94
Movement PHF		0.94			0.81			0.87			0.94		0.94

U-Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-1536

Location: Luna Avenue @ Regents Road

AM Period (7:00 AM - 9:00 AM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
Total	0	0	0	0	0

AM Intersection Peak Hour : **7:30 AM - 8:30 AM** Intersection PHF : **#DIV/0!**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	0	0	0	0	0
PHF	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Movement PHF	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

PM Period (4:00 PM - 6:00 PM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
4:00 PM	1	0	0	0	1
4:15 PM	0	0	0	0	0
4:30 PM	1	0	0	0	1
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	2	0	0	0	2
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
Total	4	0	0	0	4

PM Intersection Peak Hour : **4:30 PM - 5:30 PM** Intersection PHF : **0.38**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	3	0	0	0	3
PHF	0.38	#DIV/0!	#DIV/0!	#DIV/0!	0.38
Movement PHF	0.38	#DIV/0!	#DIV/0!	#DIV/0!	0.38

Bike Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

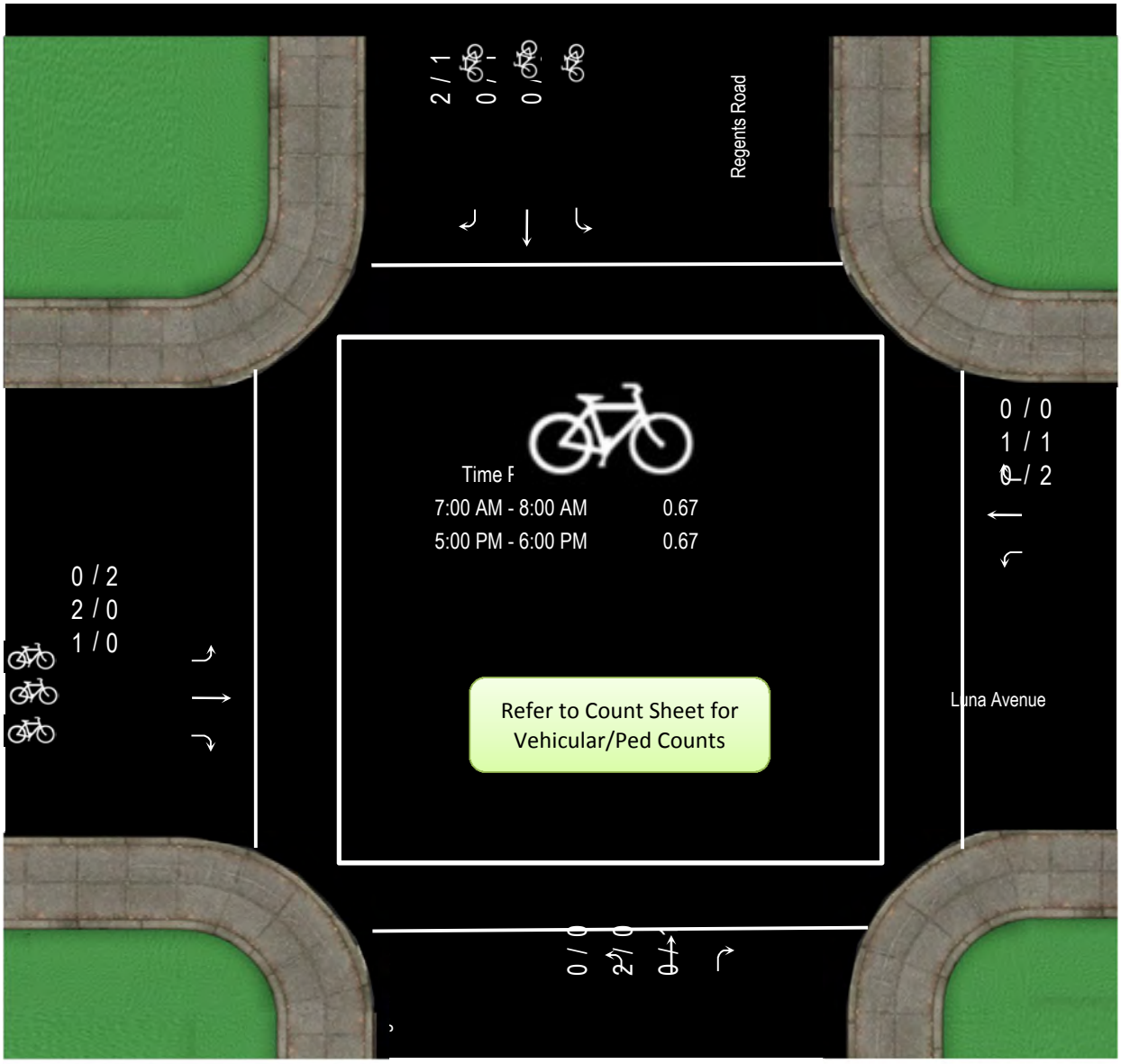
Location: Luna Avenue @ Regents Road

Date of Count: *Tuesday, April 28, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*



Kimley»Horn

Bike Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Luna Avenue @ Regents Road

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	1	0	0	0	0	0	0	1	0	0	1	0	3
7:15 AM	1	0	0	0	1	0	0	0	0	0	0	0	2
7:30 AM	0	0	0	0	0	0	0	0	0	1	1	0	2
7:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	1	0	0	0	0	0	0	0	0	0	1	2
8:30 AM	1	0	0	0	0	0	1	0	0	0	0	1	3
8:45 AM	0	0	0	0	0	2	0	0	0	0	0	0	2
Total	3	1	0	0	1	2	1	2	0	1	2	2	15

AM Intersection Peak Hour : **7:00 AM - 8:00 AM** Intersection PHF : **0.67**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	2	0	0	0	1	0	0	2	0	1	2	0	8
PHF	0.50	#####	#####	#####	0.25	#####	#####	0.50	#####	0.25	0.50	#####	0.67
Movement PHF		0.50			0.25			0.50			0.38		0.67

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	1	2	0	0	0	0	0	0	0	0	1	0	4
4:15 PM	1	0	0	0	0	0	0	0	0	0	1	0	2
4:30 PM	0	0	0	0	0	0	0	0	0	1	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	1	0	0	1	0	0	0	0	0	0	1	3
5:30 PM	1	0	0	0	0	0	1	0	0	0	0	1	3
5:45 PM	0	0	0	0	0	2	0	0	0	0	0	0	2
Total	3	3	0	0	1	2	1	0	0	1	2	2	15

PM Intersection Peak Hour : **5:00 PM - 6:00 PM** Intersection PHF : **0.67**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	1	1	0	0	1	2	1	0	0	0	0	2	8
PHF	0.25	0.25	#####	#####	0.25	0.25	0.25	#####	#####	#####	#####	0.5	0.67
Movement PHF		0.50			0.38			0.25			0.50		0.67

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: USCD Northpoint Driveway @ N. Torrey Pines Road

Date of Count: *Wednesday, April 29, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Kimley»Horn

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: USCD Northpoint Driveway @ N. Torrey Pines Road

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	10	73	21	7	6	3	6	98	11	1	5	0	241
7:15 AM	15	86	58	7	7	4	17	110	13	1	4	2	324
7:30 AM	15	91	33	14	5	7	28	149	13	3	2	1	361
7:45 AM	24	110	44	12	2	4	25	171	17	4	4	3	420
8:00 AM	16	111	34	9	4	5	17	155	16	1	5	3	376
8:15 AM	12	112	27	14	3	11	18	123	10	5	5	0	340
8:30 AM	6	111	40	17	5	9	24	170	9	1	6	2	400
8:45 AM	12	124	57	7	4	8	14	139	9	3	3	2	382
Total	110	818	314	87	36	51	149	1,115	98	19	34	13	2,844

AM Intersection Peak Hour : **7:45 AM - 8:45 AM** Intersection PHF : **0.91**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	58	444	145	52	14	29	84	619	52	11	20	8	1,536
PHF	0.60	0.99	0.82	0.76	0.70	0.66	0.84	0.90	0.76	0.55	0.83	0.67	0.91
Movement PHF		0.91			0.77			0.89			0.89		0.91

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	8	280	25	38	4	23	8	126	1	17	5	25	560
4:15 PM	3	261	28	27	3	14	12	160	2	16	7	9	542
4:30 PM	5	335	32	47	3	20	15	128	3	29	10	31	658
4:45 PM	3	293	44	38	3	18	27	137	8	8	3	10	592
5:00 PM	0	367	39	47	3	42	11	96	1	14	6	8	634
5:15 PM	1	391	27	35	2	22	8	113	2	5	4	8	618
5:30 PM	1	400	19	37	2	16	9	107	4	6	2	10	613
5:45 PM	2	305	36	27	2	21	11	129	0	8	4	3	548
Total	23	2632	250	296	22	176	101	996	21	103	41	104	4,765

PM Intersection Peak Hour : **4:30 PM - 5:30 PM** Intersection PHF : **0.95**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	9	1386	142	167	11	102	61	474	14	56	23	57	2502
PHF	0.45	0.886	0.807	0.888	0.917	0.607	0.565	0.865	0.438	0.483	0.575	0.46	0.95
Movement PHF		0.92			0.76			0.80			0.49		0.95

U-Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-1536

Location: USCD Northpoint Driveway @ N. Torrey Pines Road

AM Period (7:00 AM - 9:00 AM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
7:00 AM	0	0	1	0	1
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	1	0	0	0	1
8:45 AM	0	0	0	0	0
Total	1	0	1	0	2

AM Intersection Peak Hour : **7:45 AM - 8:45 AM** Intersection PHF : **0.25**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	0	0	1	0	1
PHF	0.25	#DIV/0!	#DIV/0!	#DIV/0!	0.25
Movement PHF	0.25	#DIV/0!	#DIV/0!	#DIV/0!	0.25

PM Period (4:00 PM - 6:00 PM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	1	0	0	0	1
5:00 PM	2	1	0	0	3
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
Total	3	1	0	0	4

PM Intersection Peak Hour : **4:30 PM - 5:30 PM** Intersection PHF : **0.33**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	3	1	0	0	4
PHF	0.38	0.25	#DIV/0!	#DIV/0!	0.33
Movement PHF	0.38	0.25	#DIV/0!	#DIV/0!	0.33

Bike Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

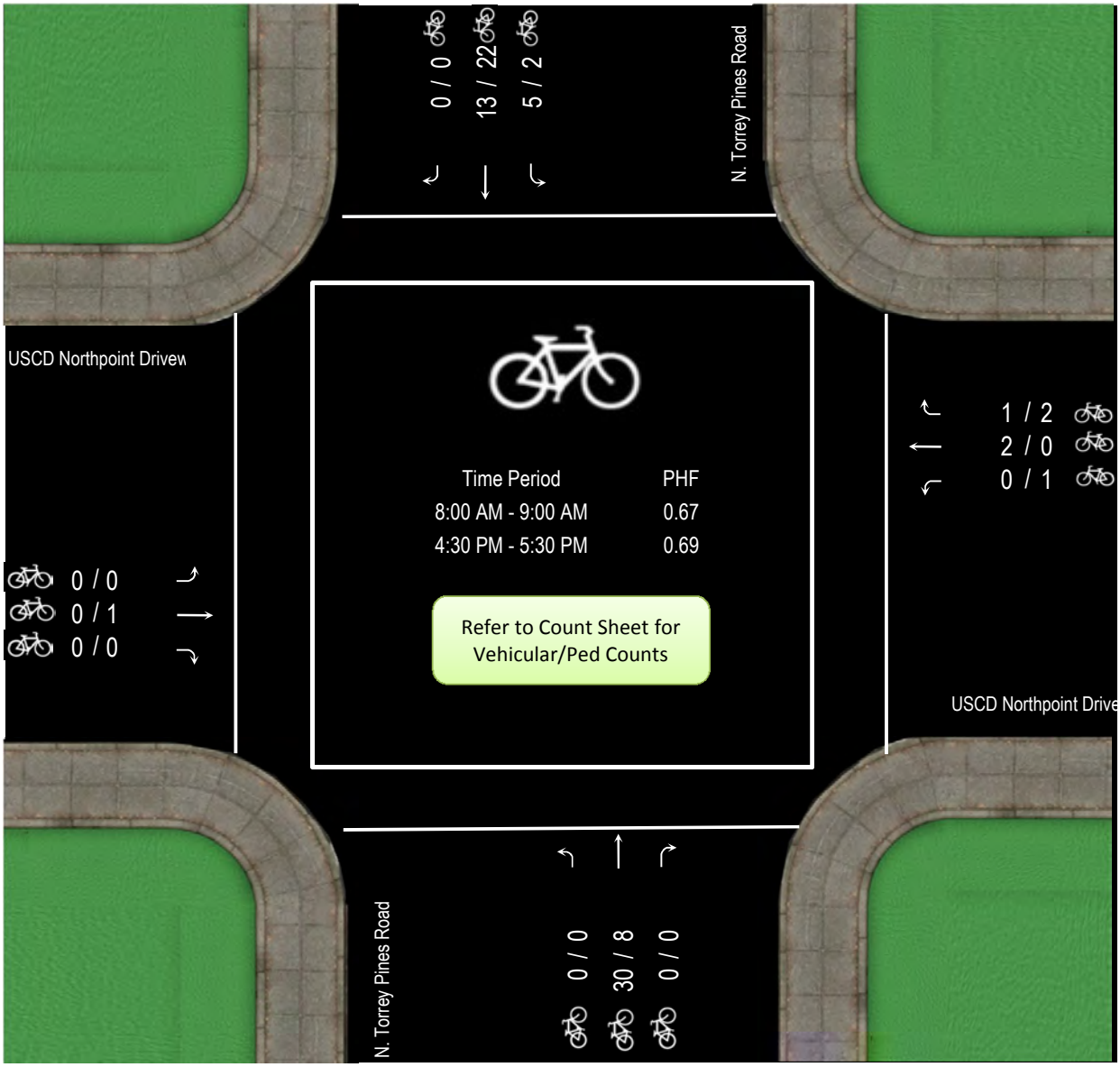
Location: USCD Northpoint Driveway @ N. Torrey Pines Road

Date of Count: *Wednesday, April 29, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*



Kimley»Horn

Bike Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: USCD Northpoint Driveway @ N. Torrey Pines Road

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	0	1	0	1	0	0	4	0	0	0	0	6
7:15 AM	0	1	2	1	1	1	0	4	0	0	0	0	10
7:30 AM	0	2	0	0	0	0	0	4	0	0	0	0	6
7:45 AM	0	2	0	0	0	0	0	4	0	0	0	0	6
8:00 AM	0	2	1	0	0	0	0	5	0	0	0	0	8
8:15 AM	0	1	3	0	0	0	0	7	0	0	0	0	11
8:30 AM	0	3	0	1	2	0	0	7	0	0	0	0	13
8:45 AM	0	7	1	0	0	0	0	11	0	0	0	0	19
Total	0	18	8	2	4	1	0	46	0	0	0	0	79

AM Intersection Peak Hour : **8:00 AM - 9:00 AM** Intersection PHF : **0.67**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	13	5	1	2	0	0	30	0	0	0	0	51
PHF	#####	0.46	0.42	0.25	0.25	#####	#####	0.68	#####	#####	#####	#####	0.67
Movement PHF		0.56			0.25			0.68			#DIV/0!		0.67

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	0	2	0	0	1	1	0	1	0	0	1	0	6
4:15 PM	0	1	0	0	0	0	0	2	0	0	0	2	5
4:30 PM	0	5	0	0	0	0	0	2	0	0	0	0	7
4:45 PM	0	6	0	0	0	1	0	1	0	0	1	0	9
5:00 PM	0	4	1	1	0	0	0	1	0	0	0	0	7
5:15 PM	0	7	1	1	0	0	0	4	0	0	0	0	13
5:30 PM	1	4	0	0	0	0	0	0	0	0	2	0	7
5:45 PM	0	6	0	0	1	0	0	1	0	0	1	0	9
Total	1	35	2	2	2	2	0	12	0	0	5	2	63

PM Intersection Peak Hour : **4:30 PM - 5:30 PM** Intersection PHF : **0.69**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	22	2	2	0	1	0	8	0	0	1	0	36
PHF	#####	0.786	0.5	0.5	#####	0.25	#####	0.5	#####	#####	0.25	#####	0.69
Movement PHF		0.75			0.75			0.50			0.25		0.69

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Pangea Drive @ N. Torrey Pines Road

Date of Count: *Wednesday, April 29, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Kimley»Horn

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Pangea Drive @ N. Torrey Pines Road

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	1	44	3	7	0	2	9	156	1	1	0	1	225
7:15 AM	3	56	4	2	0	0	14	180	5	2	0	5	271
7:30 AM	2	60	9	6	0	4	19	219	4	10	0	6	339
7:45 AM	1	73	7	1	0	4	11	226	0	2	0	2	327
8:00 AM	1	79	6	5	0	3	17	231	3	3	0	2	350
8:15 AM	1	86	3	4	0	4	11	181	5	3	0	3	301
8:30 AM	2	84	8	2	0	3	23	236	5	1	0	1	365
8:45 AM	3	71	12	4	0	11	11	180	2	4	0	6	304
Total	14	553	52	31	0	31	115	1,609	25	26	0	26	2,482

AM Intersection Peak Hour : **7:45 AM - 8:45 AM** Intersection PHF : **0.92**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	5	322	24	12	0	14	62	874	13	9	0	8	1,343
PHF	0.63	0.94	0.75	0.60	#####	0.88	0.67	0.93	0.65	0.75	#####	0.67	0.92
Movement PHF		0.93			0.81			0.90			0.71		0.92

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	5	331	9	16	1	32	7	125	4	2	0	0	532
4:15 PM	8	349	11	12	2	30	9	140	1	6	1	7	576
4:30 PM	2	338	9	12	0	25	19	95	1	3	0	0	504
4:45 PM	6	362	20	5	0	28	11	122	7	1	0	1	563
5:00 PM	2	419	9	5	1	24	17	93	8	10	0	1	589
5:15 PM	8	380	12	7	0	10	19	99	6	3	0	4	548
5:30 PM	5	381	3	14	0	20	16	92	9	5	1	3	549
5:45 PM	9	314	5	8	1	14	19	95	14	5	2	5	491
Total	45	2874	78	79	5	183	117	861	50	35	4	21	4,352

PM Intersection Peak Hour : **4:45 PM - 5:45 PM** Intersection PHF : **0.95**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	21	1542	44	31	1	82	63	406	30	19	1	9	2249
PHF	0.66	0.92	0.55	0.554	0.25	0.732	0.829	0.832	0.833	0.475	0.25	0.563	0.95
Movement PHF		0.93			0.84			0.89			0.66		0.95

U-Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-1536

Location: Pangea Drive @ N. Torrey Pines Road

AM Period (7:00 AM - 9:00 AM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	1	0	0	0	1
8:00 AM	0	0	0	0	0
8:15 AM	0	0	1	0	1
8:30 AM	1	0	0	0	1
8:45 AM	1	0	0	0	1
Total	3	0	1	0	4

AM Intersection Peak Hour : **7:45 AM - 8:45 AM** Intersection PHF : **0.75**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	2	0	1	0	3
PHF	0.50	#DIV/0!	0.25	#DIV/0!	0.75
Movement PHF	0.50	#DIV/0!	0.25	#DIV/0!	0.75

PM Period (4:00 PM - 6:00 PM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
4:00 PM	1	0	0	0	1
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	1	0	0	0	1
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
Total	2	0	0	0	2

PM Intersection Peak Hour : **4:45 PM - 5:45 PM** Intersection PHF : **0.25**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	1	0	0	0	1
PHF	0.25	#DIV/0!	#DIV/0!	#DIV/0!	0.25
Movement PHF	0.25	#DIV/0!	#DIV/0!	#DIV/0!	0.25

Bike Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

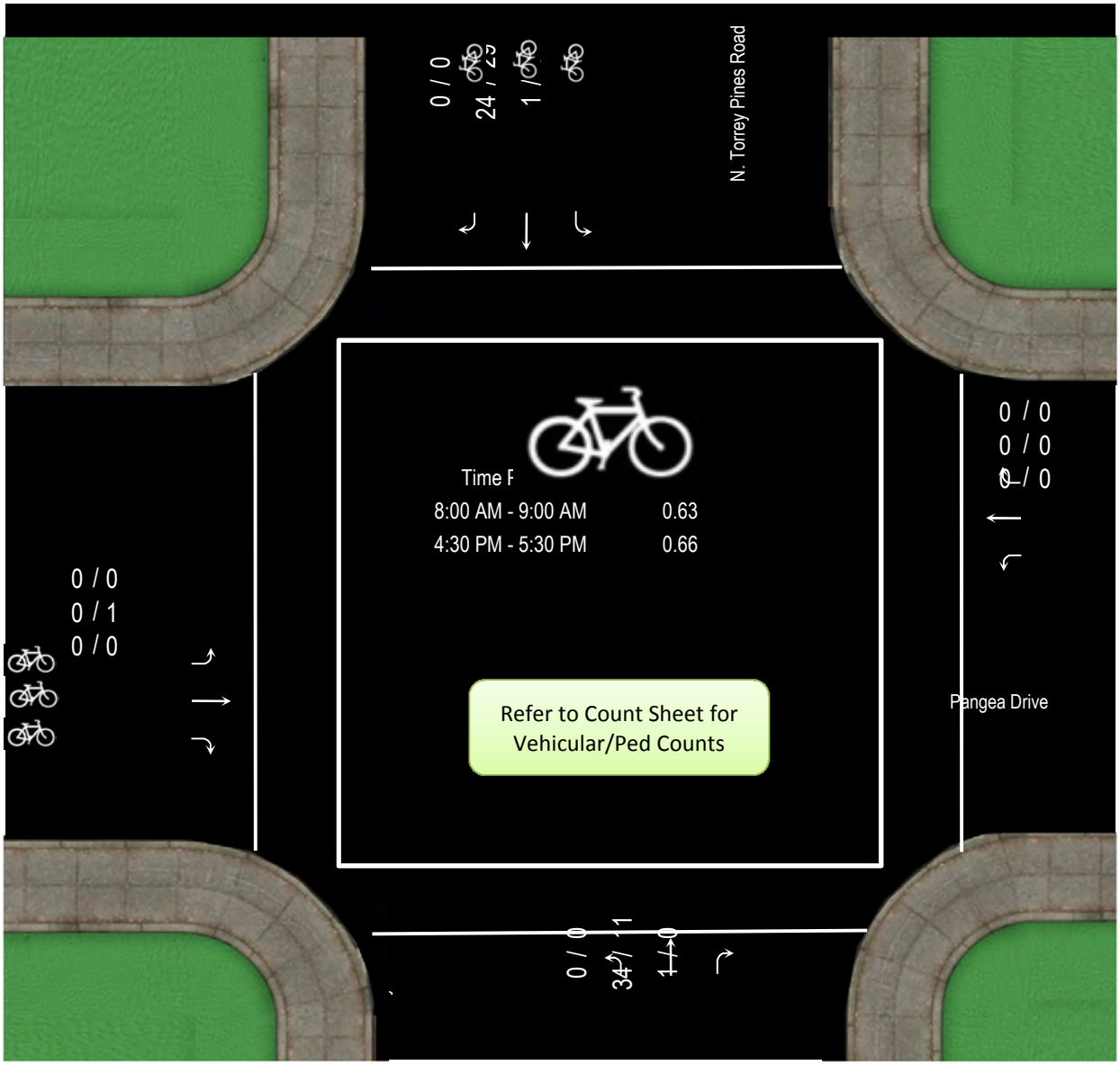
Location: Pangea Drive @ N. Torrey Pines Road

Date of Count: *Wednesday, April 29, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*



Kimley»Horn

Bike Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Pangea Drive @ N. Torrey Pines Road

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	0	1	0	0	0	0	3	0	0	0	0	4
7:15 AM	0	2	0	0	0	0	0	5	0	0	0	0	7
7:30 AM	0	1	0	0	0	0	0	3	0	0	0	1	5
7:45 AM	0	2	0	0	0	0	0	3	0	0	0	0	5
8:00 AM	0	5	0	0	0	0	0	7	0	0	0	0	12
8:15 AM	0	5	0	0	0	0	1	6	0	0	0	0	12
8:30 AM	0	3	0	0	0	0	0	9	0	0	0	0	12
8:45 AM	0	11	1	0	0	0	0	12	0	0	0	0	24
Total	0	29	2	0	0	0	1	48	0	0	0	1	81

AM Intersection Peak Hour : **8:00 AM - 9:00 AM** Intersection PHF : **0.63**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	24	1	0	0	0	1	34	0	0	0	0	60
PHF	#####	0.55	0.25	#####	#####	#####	0.25	0.71	#####	#####	#####	#####	0.63
Movement PHF		0.52			#DIV/0!			0.73			#DIV/0!		0.63

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	0	5	0	0	0	0	0	3	0	0	0	0	8
4:15 PM	0	1	0	0	0	0	0	5	0	0	0	0	6
4:30 PM	0	4	0	0	0	0	0	1	0	0	0	0	5
4:45 PM	0	7	0	0	0	0	0	1	0	0	0	0	8
5:00 PM	0	9	1	0	0	0	0	6	0	0	0	0	16
5:15 PM	0	9	0	0	0	0	0	3	0	0	1	0	13
5:30 PM	1	2	0	0	0	0	0	1	0	1	0	0	5
5:45 PM	0	5	0	0	0	0	0	1	0	0	0	0	6
Total	1	42	1	0	0	0	0	21	0	1	1	0	67

PM Intersection Peak Hour : **4:30 PM - 5:30 PM** Intersection PHF : **0.66**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	29	1	0	0	0	0	11	0	0	1	0	42
PHF	#####	0.806	0.25	#####	#####	#####	#####	0.458	#####	#####	0.25	#####	0.66
Movement PHF		0.75			#DIV/0!			0.46			0.25		0.66

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: La Jolla Shores Drive @ N. Torrey Pines Road

Date of Count: *Wednesday, April 29, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: La Jolla Shores Drive @ N. Torrey Pines Road

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	19	13	2	12	3	1	11	66	30	10	3	21	191
7:15 AM	23	19	3	14	3	2	12	229	39	15	4	29	392
7:30 AM	20	37	10	16	3	5	17	250	40	21	7	52	478
7:45 AM	31	36	8	15	8	7	21	315	31	21	4	58	555
8:00 AM	37	54	3	17	4	1	10	277	35	20	3	59	520
8:15 AM	41	70	10	8	6	1	10	287	30	30	4	39	536
8:30 AM	32	40	10	24	5	9	9	304	43	21	4	66	567
8:45 AM	25	47	10	21	4	5	21	272	47	20	7	70	549
Total	228	316	56	127	36	31	111	2,000	295	158	36	394	3,788

AM Intersection Peak Hour : **7:45 AM - 8:45 AM** Intersection PHF : **0.96**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	141	200	31	64	23	18	50	1,183	139	92	15	222	2,178
PHF	0.86	0.71	0.78	0.67	0.72	0.50	0.60	0.94	0.81	0.77	0.94	0.84	0.96
Movement PHF		0.77			0.69			0.93			0.90		0.96

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	46	284	39	14	10	16	13	112	28	38	2	50	652
4:15 PM	66	344	35	12	5	7	27	79	15	47	5	47	689
4:30 PM	47	318	31	12	13	23	17	102	31	36	5	32	667
4:45 PM	44	367	31	9	13	11	24	169	37	29	14	29	777
5:00 PM	80	363	40	11	13	29	10	82	26	23	19	52	748
5:15 PM	89	367	42	12	8	21	10	114	41	20	2	25	751
5:30 PM	57	317	25	11	6	10	17	105	34	25	6	28	641
5:45 PM	72	285	32	12	3	14	11	131	44	27	6	43	680
Total	501	2645	275	93	71	131	129	894	256	245	59	306	5,605

PM Intersection Peak Hour : **4:30 PM - 5:30 PM** Intersection PHF : **0.95**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	260	1415	144	44	47	84	61	467	135	108	40	138	2943
PHF	0.73	0.964	0.857	0.917	0.904	0.724	0.635	0.691	0.823	0.75	0.526	0.663	0.95
Movement PHF		0.91			0.83			0.72			0.76		0.95

U-Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-1536

Location: La Jolla Shores Drive @ N. Torrey Pines Road

AM Period (7:00 AM - 9:00 AM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
7:00 AM	0	0	1	0	1
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	1	0	1
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	1	0	1
Total	0	0	3	0	3

AM Intersection Peak Hour : **7:45 AM - 8:45 AM** Intersection PHF : **0.25**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	0	0	1	0	1
PHF	#DIV/0!	#DIV/0!	0.25	#DIV/0!	0.25
Movement PHF	#DIV/0!	#DIV/0!	0.25	#DIV/0!	0.25

PM Period (4:00 PM - 6:00 PM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
4:00 PM	0	0	1	0	1
4:15 PM	1	0	0	0	1
4:30 PM	0	0	1	0	1
4:45 PM	0	0	1	0	1
5:00 PM	0	0	0	0	0
5:15 PM	3	0	3	0	6
5:30 PM	2	0	0	0	2
5:45 PM	2	0	0	0	2
Total	8	0	6	0	14

PM Intersection Peak Hour : **4:30 PM - 5:30 PM** Intersection PHF : **0.33**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	3	0	5	0	8
PHF	0.25	#DIV/0!	0.416666667	#DIV/0!	0.33
Movement PHF	0.25	#DIV/0!	0.42	#DIV/0!	0.33

Bike Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: La Jolla Shores Drive @ N. Torrey Pines Road

Date of Count: *Wednesday, April 29, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Bike Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: La Jolla Shores Drive @ N. Torrey Pines Road

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	1	0	1	1	2	0	1	0	0	0	1	1	8
7:15 AM	0	0	0	0	2	0	0	1	0	0	1	2	6
7:30 AM	0	1	1	0	3	0	1	0	0	0	2	3	11
7:45 AM	1	2	0	3	0	0	0	0	0	0	3	3	12
8:00 AM	1	2	1	0	0	0	0	2	0	0	7	3	16
8:15 AM	1	0	0	0	1	0	0	6	0	0	3	5	16
8:30 AM	1	0	1	2	2	0	2	2	0	1	1	1	13
8:45 AM	2	3	1	2	4	0	1	1	0	0	2	1	17
Total	7	8	5	8	14	0	5	12	0	1	20	19	99

AM Intersection Peak Hour : **8:00 AM - 9:00 AM** Intersection PHF : **0.91**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	5	5	3	4	7	0	3	11	0	1	13	10	62
PHF	0.63	0.42	0.75	0.50	0.44	#####	0.38	0.46	#####	0.25	0.46	0.50	0.91
Movement PHF		0.54			0.46			0.58			0.60		0.91

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	0	1	2	0	1	0	0	1	0	0	1	0	6
4:15 PM	0	2	1	0	2	0	0	1	0	0	1	0	7
4:30 PM	0	3	0	0	2	0	1	0	1	0	0	0	7
4:45 PM	3	4	0	0	2	0	0	0	0	0	1	1	11
5:00 PM	0	3	1	0	0	0	0	2	0	0	4	0	10
5:15 PM	0	4	0	0	4	0	0	2	0	0	2	0	12
5:30 PM	1	2	0	0	6	0	0	2	0	0	4	0	15
5:45 PM	0	5	0	0	1	0	0	0	0	0	1	0	7
Total	4	24	4	0	18	0	1	8	1	0	14	1	75

PM Intersection Peak Hour : **4:45 PM - 5:45 PM** Intersection PHF : **0.80**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	4	13	1	0	12	0	0	6	0	0	11	1	48
PHF	0.33	0.813	0.25	#####	0.5	#####	#####	0.75	#####	#####	0.688	0.25	0.80
Movement PHF		0.64			0.50			0.75			0.75		0.80

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Expedition Way/Revelle C.Dr @ N. Torrey Pines Road

Date of Count: *Wednesday, April 29, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Kimley»Horn

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Expedition Way/Revelle C.Dr @ N. Torrey Pines Road

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	1	23	1	0	0	1	3	106	5	11	5	2	158
7:15 AM	0	35	1	2	1	1	24	278	34	10	5	0	391
7:30 AM	2	57	4	3	5	0	22	304	43	11	2	0	453
7:45 AM	1	62	1	0	4	3	48	367	54	15	2	0	557
8:00 AM	2	70	4	1	2	6	22	322	73	13	7	0	522
8:15 AM	2	93	6	0	3	4	27	327	55	15	6	0	538
8:30 AM	1	61	8	2	7	5	40	353	67	16	5	1	566
8:45 AM	3	68	2	4	0	3	50	336	61	16	6	1	550
Total	12	469	27	12	22	23	236	2,393	392	107	38	4	3,735

AM Intersection Peak Hour : **7:45 AM - 8:45 AM** Intersection PHF : **0.96**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	6	286	19	3	16	18	137	1,369	249	59	20	1	2,183
PHF	0.75	0.77	0.59	0.38	0.57	0.75	0.71	0.93	0.85	0.92	0.71	0.25	0.96
Movement PHF		0.77			0.66			0.94			0.91		0.96

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	3	334	2	6	3	24	17	146	20	43	3	2	603
4:15 PM	2	387	8	2	0	13	13	116	23	35	2	2	603
4:30 PM	2	375	1	3	0	31	21	146	25	61	4	2	671
4:45 PM	0	402	6	3	1	30	28	221	30	39	5	7	772
5:00 PM	0	410	5	4	4	27	9	109	27	62	4	5	666
5:15 PM	5	398	7	3	4	22	14	161	18	36	2	3	673
5:30 PM	4	344	3	2	3	14	12	148	28	26	4	5	593
5:45 PM	3	321	2	2	10	17	13	184	42	29	0	0	623
Total	19	2971	34	25	25	178	127	1,231	213	331	24	26	5,204

PM Intersection Peak Hour : **4:30 PM - 5:30 PM** Intersection PHF : **0.90**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	7	1585	19	13	9	110	72	637	100	198	15	17	2782
PHF	0.35	0.966	0.679	0.813	0.563	0.887	0.643	0.721	0.833	0.798	0.75	0.607	0.90
Movement PHF		0.97			0.94			0.72			0.81		0.90

U-Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-1536

Location: Expedition Way/Revelle C.Dr @ N. Torrey Pines Road

AM Period (7:00 AM - 9:00 AM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	1	0	1
8:30 AM	0	0	0	0	0
8:45 AM	0	0	1	0	1
Total	0	0	2	0	2

AM Intersection Peak Hour : **7:45 AM - 8:45 AM** Intersection PHF : **0.25**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	0	0	1	0	1
PHF	#DIV/0!	#DIV/0!	0.25	#DIV/0!	0.25
Movement PHF	#DIV/0!	#DIV/0!	0.25	#DIV/0!	0.25

PM Period (4:00 PM - 6:00 PM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
4:00 PM	0	0	1	0	1
4:15 PM	1	0	3	0	4
4:30 PM	0	0	2	0	2
4:45 PM	0	0	1	0	1
5:00 PM	0	0	2	0	2
5:15 PM	1	0	0	0	1
5:30 PM	1	0	8	0	9
5:45 PM	0	0	4	0	4
Total	3	0	21	0	24

PM Intersection Peak Hour : **4:30 PM - 5:30 PM** Intersection PHF : **0.75**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	1	0	5	0	6
PHF	0.25	#DIV/0!	0.625	#DIV/0!	0.75
Movement PHF	0.25	#DIV/0!	0.63	#DIV/0!	0.75

Bike Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Expedition Way/Revelle C.Dr @ N. Torrey Pines Road

Date of Count: *Wednesday, April 29, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Bike Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Expedition Way/Revelle C.Dr @ N. Torrey Pines Road

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	1	0	0	1	0	2
7:30 AM	0	1	0	0	0	0	0	1	0	0	0	0	2
7:45 AM	0	2	0	0	1	0	0	0	0	0	0	0	3
8:00 AM	0	2	0	0	0	0	0	2	0	0	0	0	4
8:15 AM	0	0	0	0	0	0	0	6	0	0	0	0	6
8:30 AM	0	0	0	0	2	0	0	4	1	0	1	0	8
8:45 AM	0	3	0	0	0	0	0	2	0	0	0	0	5
Total	0	8	0	0	3	0	0	16	1	0	2	0	30

AM Intersection Peak Hour : **8:00 AM - 9:00 AM** Intersection PHF : **0.72**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	5	0	0	2	0	0	14	1	0	1	0	23
PHF	#####	0.42	#####	#####	0.25	#####	#####	0.58	0.25	#####	0.25	#####	0.72
Movement PHF		0.42			0.25			0.63			0.25		0.72

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	0	1	0	0	0	0	0	1	1	0	0	0	3
4:15 PM	0	2	0	0	1	0	0	1	0	1	1	0	6
4:30 PM	0	3	0	0	0	1	0	2	0	1	2	0	9
4:45 PM	0	4	0	0	0	0	0	0	0	1	0	0	5
5:00 PM	0	3	0	0	1	0	0	2	0	2	0	0	8
5:15 PM	0	4	0	0	0	0	0	2	0	0	0	0	6
5:30 PM	0	2	0	0	0	0	1	2	0	1	0	0	6
5:45 PM	0	5	0	0	0	1	0	0	0	2	0	0	8
Total	0	24	0	0	2	2	1	10	1	8	3	0	51

PM Intersection Peak Hour : **4:15 PM - 5:15 PM** Intersection PHF : **0.78**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	12	0	0	2	1	0	5	0	5	3	0	28
PHF	#####	0.75	#####	#####	0.5	0.25	#####	0.625	#####	0.625	0.375	#####	0.78
Movement PHF		0.75			0.75			0.63			0.67		0.78

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Villa La Jolla Drive @ Gilman Drive

Date of Count: *Thursday, April 30, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Kimley»Horn

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Villa La Jolla Drive @ Gilman Drive

AM Period (7:00 AM - 9:00 AM)								
	Southbound		Westbound		Northbound			
	Thru	Left	Right	Left	Right	Thru		TOTAL
7:00 AM	37	12	24	12	29	184		298
7:15 AM	54	9	19	9	31	174		296
7:30 AM	54	17	29	14	20	174		308
7:45 AM	61	15	33	10	25	204		348
8:00 AM	24	5	10	3	9	79		130
8:15 AM	101	50	38	16	27	169		401
8:30 AM	106	54	25	15	22	164		386
8:45 AM	52	27	19	12	34	129		273
Total	489	189	197	91	197	1,277		2,440

AM Intersection Peak Hour : **7:45 AM - 8:45 AM** Intersection PHF : **0.79**

	Southbound		Westbound		Northbound			TOTAL
	Thru	Left	Right	Left	Right	Thru		
Volume	292	124	106	44	83	616		1,265
PHF	0.69	0.57	0.70	0.69	0.77	0.75		0.79
Movement PHF	0.65		0.69			0.76		0.79

PM Period (4:00 PM - 6:00 PM)								
	Southbound			Westbound		Northbound		
	Right	Thru	Left	Right	Left	Right	Thru	TOTAL
4:00 PM	0	297	51	19	60	18	104	549
4:15 PM	0	278	33	32	61	24	61	489
4:30 PM	0	314	46	25	55	24	76	540
4:45 PM	0	324	43	25	43	32	81	548
5:00 PM	0	294	69	43	51	32	83	572
5:15 PM	0	365	66	40	56	31	87	645
5:30 PM	0	303	51	22	49	40	87	552
5:45 PM	0	246	55	42	39	16	67	465
Total	0	2421	414	248	414	217	646	4,360

PM Intersection Peak Hour : **4:45 PM - 5:45 PM** Intersection PHF : **0.90**

	Southbound		Westbound		Northbound			TOTAL
	Thru	Left	Right	Left	Right	Thru		
Volume	1286	229	130	199	135	338		2317
PHF	0.881	0.83	0.756	0.888	0.844	0.971		0.90
Movement PHF	0.88		0.86			0.93		0.90

U-Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-1536

Location: Villa La Jolla Drive @ Gilman Drive

AM Period (7:00 AM - 9:00 AM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn		TOTAL
7:00 AM	6	0	6		12
7:15 AM	1	0	11		12
7:30 AM	0	0	7		7
7:45 AM	0	0	0		0
8:00 AM	5	0	0		5
8:15 AM	12	4	6		22
8:30 AM	9	1	2		12
8:45 AM	13	0	3		16
Total	46	5	35		86

AM Intersection Peak Hour : **7:45 AM - 8:45 AM** Intersection PHF : **0.44**

	North Leg EB	East Leg SB	South Leg EB		TOTAL
Volume	26	5	8		39
PHF	0.54	0.31	0.33		0.44
Movement PHF	0.54	0.31	0.33		0.44

PM Period (4:00 PM - 6:00 PM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn		TOTAL
4:00 PM	1	0	0		1
4:15 PM	1	0	0		1
4:30 PM	0	0	0		0
4:45 PM	0	0	0		0
5:00 PM	0	0	1		1
5:15 PM	2	0	0		2
5:30 PM	0	0	0		0
5:45 PM	0	0	0		0
Total	4	0	1		5

PM Intersection Peak Hour : **4:45 PM - 5:45 PM** Intersection PHF : **0.38**

	North Leg EB	East Leg SB	South Leg EB		TOTAL
Volume	2	0	1		3
PHF	0.25	#DIV/0!	0.25		0.38
Movement PHF	0.25	#DIV/0!	0.25		0.38

Bike Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Villa La Jolla Drive @ Gilman Drive

Date of Count: *Thursday, April 30, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Bike Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Villa La Jolla Drive @ Gilman Drive

AM Period (7:00 AM - 9:00 AM)								
	Southbound		Westbound		Northbound			
	Thru	Left	Right	Left	Right	Thru		TOTAL
7:00 AM	0	1	1	0	0	2		4
7:15 AM	1	0	1	0	0	6		8
7:30 AM	1	0	3	0	0	7		11
7:45 AM	0	0	3	0	0	9		12
8:00 AM	0	0	1	0	0	9		10
8:15 AM	0	0	3	0	0	7		10
8:30 AM	2	0	2	0	0	8		12
8:45 AM	1	0	1	1	0	9		12
Total	5	1	15	1	0	57		79

AM Intersection Peak Hour : **7:45 AM - 8:45 AM** Intersection PHF : **0.92**

	Southbound		Westbound		Northbound			TOTAL
	Thru	Left	Right	Left	Right	Thru		
Volume	2	0	9	0	0	33		44
PHF	0.25	#####	0.75	#####	#####	0.92		0.92
Movement PHF	0.25		0.75			0.92		0.92

PM Period (4:00 PM - 6:00 PM)								
	Southbound		Westbound		Northbound			
	Thru	Left	Right	Left	Right	Thru		TOTAL
4:00 PM	0	0	0	1	0	3		4
4:15 PM	0	2	0	0	0	3		5
4:30 PM	0	1	0	0	0	3		4
4:45 PM	0	0	1	0	2	3		6
5:00 PM	0	0	1	1	0	2		4
5:15 PM	0	1	0	0	0	3		4
5:30 PM	0	1	1	0	0	2		4
5:45 PM	1	1	0	1	0	1		4
Total	1	6	3	3	2	20		35

PM Intersection Peak Hour : **4:00 PM - 5:00 PM** Intersection PHF : **0.79**

	Southbound		Westbound		Northbound			TOTAL
	Thru	Left	Right	Left	Right	Thru		
Volume	0	3	1	1	2	12		19
PHF	#####	0.375	0.25	0.25	0.25	1		0.79
Movement PHF	0.38		0.50			0.70		0.79

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Gilman Drive @ I-5 SB Ramps

Date of Count: *Tuesday, April 28, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Gilman Drive @ I-5 SB Ramps

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	0	5	0	145	44	0	0	0	63	13	0	270
7:15 AM	1	1	5	0	165	69	0	0	0	70	16	0	327
7:30 AM	7	0	4	0	162	86	0	0	0	103	12	0	374
7:45 AM	5	0	2	0	172	87	0	0	0	124	21	0	411
8:00 AM	6	0	1	0	180	74	0	0	0	84	13	0	358
8:15 AM	8	0	0	0	148	65	0	0	0	112	20	0	353
8:30 AM	6	0	4	0	146	65	0	0	0	125	26	0	372
8:45 AM	5	0	2	0	142	58	0	0	0	105	19	0	331
Total	38	1	23	0	1,260	548	0	0	0	786	140	0	2,796

AM Intersection Peak Hour : **7:30 AM - 8:30 AM** Intersection PHF : **0.91**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	26	0	7	0	662	312	0	0	0	423	66	0	1,496
PHF	0.81	#####	0.44	#####	0.92	0.90	#####	#####	#####	0.85	0.79	#####	0.91
Movement PHF		0.75			0.94			#DIV/0!			0.84		0.91

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	3	0	5	0	103	71	0	0	0	337	7	0	526
4:15 PM	4	0	2	0	75	84	0	0	0	291	51	0	507
4:30 PM	3	1	6	0	100	118	0	0	0	316	59	0	603
4:45 PM	6	1	4	0	108	141	0	0	0	254	53	0	567
5:00 PM	1	0	6	0	82	139	0	0	0	266	56	0	550
5:15 PM	2	3	2	0	115	114	0	0	0	267	68	0	571
5:30 PM	0	0	1	0	99	143	0	0	0	216	37	0	496
5:45 PM	1	0	0	0	102	115	0	0	0	313	43	0	574
Total	20	5	26	0	784	925	0	0	0	2,260	374	0	4,394

PM Intersection Peak Hour : **4:30 PM - 5:30 PM** Intersection PHF : **0.95**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	12	5	18	0	405	512	0	0	0	1103	236	0	2291
PHF	0.50	0.417	0.75	#####	0.88	0.908	#####	#####	#####	0.873	0.868	#####	0.95
Movement PHF		0.80			0.92			#DIV/0!			0.89		0.95

U-Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-1536

Location: Gilman Drive @ I-5 SB Ramps

AM Period (7:00 AM - 9:00 AM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
Total	0	0	0	0	0

AM Intersection Peak Hour : **7:30 AM - 8:30 AM** Intersection PHF : **#DIV/0!**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	0	0	0	0	0
PHF	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Movement PHF	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

PM Period (4:00 PM - 6:00 PM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
Total	0	0	0	0	0

PM Intersection Peak Hour : **4:30 PM - 5:30 PM** Intersection PHF : **#DIV/0!**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	0	0	0	0	0
PHF	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Movement PHF	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

Bike Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Gilman Drive @ I-5 SB Ramps

Date of Count: *Tuesday, April 28, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Kimley»Horn

Bike Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Gilman Drive @ I-5 SB Ramps

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	0	0	0	2	0	0	0	0	0	0	0	2
7:15 AM	0	0	0	0	1	0	0	0	0	0	1	0	2
7:30 AM	0	0	0	0	4	0	0	0	0	0	0	0	4
7:45 AM	0	0	0	0	6	0	0	0	0	0	2	0	8
8:00 AM	0	0	0	0	6	0	0	0	0	0	1	0	7
8:15 AM	0	0	0	0	12	0	0	0	0	0	3	0	15
8:30 AM	0	0	0	0	11	0	0	0	0	0	1	0	12
8:45 AM	0	0	0	0	6	0	0	0	0	0	2	0	8
Total	0	0	0	0	48	0	0	0	0	0	10	0	58

AM Intersection Peak Hour : **7:45 AM - 8:45 AM** Intersection PHF : **0.70**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	0	0	0	35	0	0	0	0	0	7	0	42
PHF	#####	#####	#####	#####	0.73	#####	#####	#####	#####	#####	0.58	#####	0.70
Movement PHF	#DIV/0!			0.73			#DIV/0!			0.58			0.70

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	0	0	0	0	1	0	0	0	0	0	2	0	3
4:15 PM	0	0	0	0	2	0	0	0	0	0	4	0	6
4:30 PM	0	0	0	0	0	0	0	0	0	0	5	0	5
4:45 PM	0	0	0	0	0	0	0	0	0	0	8	0	8
5:00 PM	0	0	0	0	2	0	0	0	0	0	7	0	9
5:15 PM	0	0	0	0	5	0	0	0	0	0	4	0	9
5:30 PM	0	0	0	0	3	0	0	0	0	0	6	0	9
5:45 PM	0	0	0	0	3	0	0	0	0	0	7	0	10
Total	0	0	0	0	16	0	0	0	0	0	43	0	59

PM Intersection Peak Hour : **5:00 PM - 6:00 PM** Intersection PHF : **0.93**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	0	0	0	13	0	0	0	0	0	24	0	37
PHF	#####	#####	#####	#####	0.65	#####	#####	#####	#####	#####	0.857	#####	0.93
Movement PHF	#DIV/0!			0.65			#DIV/0!			0.86			0.93

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Gilman Drive @ I-5 NB Ramps

Date of Count: *Tuesday, April 28, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Kimley»Horn

Location: Gilman Drive @ I-5 NB Ramps

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	0	0	8	52	0	31	0	137	0	13	5	246
7:15 AM	0	0	0	18	74	0	43	0	160	0	9	12	316
7:30 AM	0	0	0	21	89	0	30	0	159	0	5	11	315
7:45 AM	0	0	0	24	102	0	24	0	157	0	7	16	330
8:00 AM	0	0	0	12	82	0	24	0	172	0	3	11	304
8:15 AM	0	0	0	15	76	0	25	0	137	0	5	15	273
8:30 AM	0	0	0	15	74	0	35	0	137	0	10	20	291
8:45 AM	0	0	0	15	71	0	29	0	129	0	7	14	265
Total	0	0	0	128	620	0	241	0	1,188	0	59	104	2,340

AM Intersection Peak Hour : **7:15 AM - 8:15 AM** Intersection PHF : **0.96**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	0	0	75	347	0	121	0	648	0	24	50	1,265
PHF	#####	#####	#####	0.78	0.85	#####	0.70	#####	0.94	#####	0.67	0.78	0.96
Movement PHF	#DIV/0!			0.84			0.95			0.80			0.96

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	0	0	0	7	76	0	56	1	98	0	3	9	250
4:15 PM	0	0	0	3	66	0	55	1	82	0	17	25	249
4:30 PM	0	0	0	1	78	0	58	0	114	0	23	16	290
4:45 PM	0	0	0	3	95	0	57	0	119	0	18	4	296
5:00 PM	0	0	0	4	116	0	61	1	80	0	27	10	299
5:15 PM	0	0	0	2	93	0	71	0	99	0	23	10	298
5:30 PM	0	0	0	1	123	0	69	0	109	0	23	5	330
5:45 PM	0	0	0	2	99	0	70	0	110	0	25	10	316
Total	0	0	0	23	746	0	497	3	811	0	159	89	2,328

PM Intersection Peak Hour : **5:00 PM - 6:00 PM** Intersection PHF : **0.94**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	0	0	9	431	0	271	1	398	0	98	35	1243
PHF	#####	#####	#####	0.563	0.876	#####	0.954	0.25	0.905	#####	0.907	0.875	0.94
Movement PHF	#DIV/0!			0.89			0.93			0.90			0.94

U-Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-1536

Location: Gilman Drive @ I-5 NB Ramps

AM Period (7:00 AM - 9:00 AM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
Total	0	0	0	0	0

AM Intersection Peak Hour : **7:15 AM - 8:15 AM** Intersection PHF : **#DIV/0!**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	0	0	0	0	0
PHF	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Movement PHF	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

PM Period (4:00 PM - 6:00 PM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	11	11
4:30 PM	0	0	0	26	26
4:45 PM	0	0	0	35	35
5:00 PM	0	0	0	25	25
5:15 PM	0	0	0	37	37
5:30 PM	0	0	0	10	10
5:45 PM	0	0	0	8	8
Total	0	0	0	152	152

PM Intersection Peak Hour : **5:00 PM - 6:00 PM** Intersection PHF : **0.54**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	0	0	0	80	80
PHF	#DIV/0!	#DIV/0!	#DIV/0!	0.540540541	0.54
Movement PHF	#DIV/0!	#DIV/0!	#DIV/0!	0.54	0.54

Bike Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Gilman Drive @ I-5 NB Ramps

Date of Count: *Tuesday, April 28, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Kimley»Horn

Bike Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Gilman Drive @ I-5 NB Ramps

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	0	0	0	2	0	0	0	0	0	0	0	2
7:15 AM	0	0	0	0	1	0	0	0	0	0	1	0	2
7:30 AM	0	0	0	0	4	0	0	0	0	0	0	0	4
7:45 AM	0	0	0	0	6	0	0	0	0	0	2	0	8
8:00 AM	0	0	0	0	6	0	0	0	0	0	1	0	7
8:15 AM	0	0	0	0	12	0	0	0	0	0	3	0	15
8:30 AM	0	0	0	0	11	0	0	0	0	0	1	0	12
8:45 AM	0	0	0	0	6	0	0	0	0	0	2	0	8
Total	0	0	0	0	48	0	0	0	0	0	10	0	58

AM Intersection Peak Hour : **7:45 AM - 8:45 AM** Intersection PHF : **0.70**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	0	0	0	35	0	0	0	0	0	7	0	42
PHF	#####	#####	#####	#####	0.73	#####	#####	#####	#####	#####	0.58	#####	0.70
Movement PHF	#DIV/0!			0.73			#DIV/0!			0.58			0.70

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	0	0	0	0	1	0	0	0	0	0	2	0	3
4:15 PM	0	0	0	0	2	0	0	0	0	0	4	0	6
4:30 PM	0	0	0	0	0	0	0	0	0	0	5	0	5
4:45 PM	0	0	0	0	0	0	0	0	0	0	8	0	8
5:00 PM	0	0	0	0	2	0	0	0	0	0	7	0	9
5:15 PM	0	0	0	0	5	0	0	0	0	0	4	0	9
5:30 PM	0	0	0	0	3	0	0	0	0	0	6	0	9
5:45 PM	0	0	0	0	3	0	0	0	0	0	7	0	10
Total	0	0	0	0	16	0	0	0	0	0	43	0	59

PM Intersection Peak Hour : **5:00 PM - 6:00 PM** Intersection PHF : **0.93**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	0	0	0	13	0	0	0	0	0	24	0	37
PHF	#####	#####	#####	#####	0.65	#####	#####	#####	#####	#####	0.857	#####	0.93
Movement PHF	#DIV/0!			0.65			#DIV/0!			0.86			0.93

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Palmilla Drive/Charmant Dr. @ Lebon Drive

Date of Count: *Wednesday, April 29, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Kimley»Horn

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Palmilla Drive/Charmant Dr. @ Lebon Drive

AM Period (7:00 AM - 9:00 AM)							
	Southbound		Westbound			Eastbound	
	Right	Left	Right	Thru		Thru	Left	TOTAL
7:00 AM	14	18	28	2		15	36	113
7:15 AM	20	20	60	6		16	42	164
7:30 AM	14	11	52	6		9	58	150
7:45 AM	12	11	53	6		4	57	143
8:00 AM	11	12	50	5		11	55	144
8:15 AM	8	15	47	3		5	59	137
8:30 AM	15	15	66	4		8	57	165
8:45 AM	10	20	76	1		2	70	179
Total	104	122	432	33		70	434	1,195

AM Intersection Peak Hour : **8:00 AM - 9:00 AM** Intersection PHF : **0.87**

	Southbound		Westbound			Eastbound		TOTAL
	Right	Left	Right	Thru		Thru	Left	
Volume	44	62	239	13		26	241	625
PHF	0.73	0.78	0.79	0.65		0.59	0.86	0.87
Movement PHF	0.88		0.82			0.93		0.87

PM Period (4:00 PM - 6:00 PM)							
	Southbound		Westbound			Eastbound	
	Right	Left	Right	Thru		Thru	Left	TOTAL
4:00 PM	7	6	7	1		0	7	28
4:15 PM	26	28	45	10		5	22	136
4:30 PM	25	32	41	6		6	22	132
4:45 PM	29	42	56	7		8	29	171
5:00 PM	24	42	38	11		4	17	136
5:15 PM	26	38	25	3		3	25	120
5:30 PM	29	40	44	5		5	22	145
5:45 PM	29	35	40	8		4	28	144
Total	195	263	296	51		35	172	1,012

PM Intersection Peak Hour : **4:15 PM - 5:15 PM** Intersection PHF : **0.84**

	Southbound		Westbound			Eastbound		TOTAL
	Right	Left	Right	Thru		Thru	Left	
Volume	104	144	180	34		23	90	575
PHF	0.90	0.857	0.804	0.773		0.719	0.776	0.84
Movement PHF	0.87		0.85			0.76		0.84

U-Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-1536

Location: Palmilla Drive/Charmant Dr. @ Lebon Drive

AM Period (7:00 AM - 9:00 AM)					
	Southbound U-Turn	Westbound U-Turn		Eastbound U-Turn	TOTAL
7:00 AM	1	0		0	1
7:15 AM	0	0		0	0
7:30 AM	0	0		0	0
7:45 AM	0	0		0	0
8:00 AM	0	0		0	0
8:15 AM	4	1		0	5
8:30 AM	3	0		0	3
8:45 AM	0	0		0	0
Total	8	1		0	9

AM Intersection Peak Hour : **8:00 AM - 9:00 AM** Intersection PHF : **0.40**

	North Leg U-Turn	East Leg U-Turn		West Leg U-Turn	TOTAL
Volume	7	1		0	8
PHF	0.44	0.25		#DIV/0!	0.40
Movement PHF	0.44	0.25		#DIV/0!	0.40

PM Period (4:00 PM - 6:00 PM)					
	Southbound U-Turn	Westbound U-Turn		Eastbound U-Turn	TOTAL
4:00 PM	0	0		0	0
4:15 PM	1	0		0	1
4:30 PM	1	0		0	1
4:45 PM	0	0		0	0
5:00 PM	0	0		0	0
5:15 PM	0	0		0	0
5:30 PM	0	0		0	0
5:45 PM	0	0		0	0
Total	2	0		0	2

PM Intersection Peak Hour : **4:15 PM - 5:15 PM** Intersection PHF : **0.50**

	North Leg U-Turn	East Leg U-Turn		West Leg U-Turn	TOTAL
Volume	2	0		0	2
PHF	0.50	#DIV/0!		#DIV/0!	0.50
Movement PHF	0.50	#DIV/0!		#DIV/0!	0.50

Bike Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Palmilla Drive/Charmant Dr. @ Lebon Drive

Date of Count: *Wednesday, April 29, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Kimley»Horn

Bike Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Palmilla Drive/Charmant Dr. @ Lebon Drive

AM Period (7:00 AM - 9:00 AM)							
	Southbound		Westbound			Eastbound	
	Right	Left	Right	Thru		Thru	Left	TOTAL
7:00 AM	0	0	0	0		0	0	0
7:15 AM	1	0	1	0		1	1	4
7:30 AM	2	1	2	0		2	3	10
7:45 AM	1	0	1	0		2	3	7
8:00 AM	0	0	1	0		2	2	5
8:15 AM	0	0	0	0		0	3	3
8:30 AM	0	0	3	0		0	2	5
8:45 AM	0	0	2	0		0	1	3
Total	4	1	10	0		7	15	37

AM Intersection Peak Hour : **7:15 AM - 8:15 AM** Intersection PHF : **0.65**

	Southbound		Westbound			Eastbound		TOTAL
	Right	Left	Right	Thru		Thru	Left	
Volume	4	1	5	0		7	9	26
PHF	0.50	0.25	0.63	#####		0.88	0.75	0.65
Movement PHF	0.42		0.63			0.80		0.65

PM Period (4:00 PM - 6:00 PM)							
	Southbound		Westbound			Eastbound	
	Right	Left	Right	Thru		Thru	Left	TOTAL
4:00 PM	0	1	0	0		0	0	1
4:15 PM	0	1	0	0		1	0	2
4:30 PM	1	0	0	0		0	0	1
4:45 PM	0	2	0	0		0	0	2
5:00 PM	0	1	0	1		0	0	2
5:15 PM	1	0	1	0		0	1	3
5:30 PM	0	0	0	0		0	0	0
5:45 PM	0	1	0	0		1	0	2
Total	2	6	1	1		2	1	13

PM Intersection Peak Hour : **4:30 PM - 5:30 PM** Intersection PHF : **0.67**

	Southbound		Westbound			Eastbound		TOTAL
	Right	Left	Right	Thru		Thru	Left	
Volume	2	3	1	1		0	1	8
PHF	0.50	0.375	0.25	0.25		#####	0.25	0.67
Movement PHF	0.63		0.50			0.25		0.67

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Arriba Street @ Palmilla Drive

Date of Count: *Tuesday, May 05, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Arriba Street @ Palmilla Drive

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	13	12	8	0	29	34	9	0	0	0	0	105
7:15 AM	0	12	26	21	0	26	39	21	0	0	0	0	145
7:30 AM	0	18	22	32	0	32	51	12	0	0	0	0	167
7:45 AM	0	8	7	20	0	38	30	17	0	0	0	0	120
8:00 AM	0	9	13	18	0	25	25	16	0	0	0	0	106
8:15 AM	0	10	7	14	0	17	40	13	0	0	0	0	101
8:30 AM	0	9	9	16	0	16	42	16	0	0	0	0	108
8:45 AM	0	11	7	17	0	28	17	18	0	0	0	0	98
Total	0	90	103	146	0	211	278	122	0	0	0	0	950

AM Intersection Peak Hour : **7:15 AM - 8:15 AM** Intersection PHF : **0.81**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	47	68	91	0	121	145	66	0	0	0	0	538
PHF	#####	0.65	0.65	0.71	#####	0.80	0.71	0.79	#####	#####	#####	#####	0.81
Movement PHF		0.72			0.83			0.84			#DIV/0!		0.81

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	0	13	16	20	0	40	24	20	0	0	0	0	133
4:15 PM	0	17	16	18	0	68	18	26	0	0	0	0	163
4:30 PM	0	24	8	20	0	64	27	17	0	0	0	0	160
4:45 PM	0	21	16	20	0	73	33	25	0	0	0	0	188
5:00 PM	0	23	10	25	0	63	26	32	0	0	0	0	179
5:15 PM	0	30	15	35	0	91	38	30	0	0	0	0	239
5:30 PM	0	22	15	27	0	78	29	18	0	0	0	0	189
5:45 PM	0	23	15	28	0	68	22	43	0	0	0	0	199
Total	0	173	111	193	0	545	217	211	0	0	0	0	1,450

PM Intersection Peak Hour : **5:00 PM - 6:00 PM** Intersection PHF : **0.84**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	98	55	115	0	300	115	123	0	0	0	0	806
PHF	#####	0.817	0.917	0.821	#####	0.824	0.757	0.715	#####	#####	#####	#####	0.84
Movement PHF		0.85			0.82			0.88			#DIV/0!		0.84

U-Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-1536

Location: Arriba Street @ Palmilla Drive

AM Period (7:00 AM - 9:00 AM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
Total	0	0	0	0	0

AM Intersection Peak Hour : **7:15 AM - 8:15 AM** Intersection PHF : **#DIV/0!**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	0	0	0	0	0
PHF	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Movement PHF	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

PM Period (4:00 PM - 6:00 PM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
Total	0	0	0	0	0

PM Intersection Peak Hour : **5:00 PM - 6:00 PM** Intersection PHF : **#DIV/0!**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	0	0	0	0	0
PHF	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Movement PHF	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

Bike Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Arriba Street @ Palmilla Drive

Date of Count: *Tuesday, May 05, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Bike Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Arriba Street @ Palmilla Drive

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	0	1	0	0	1	2	0	0	0	0	0	4
7:15 AM	0	1	0	0	0	3	0	1	0	0	0	0	5
7:30 AM	0	1	0	0	0	2	2	0	0	0	0	0	5
7:45 AM	0	2	1	1	0	4	2	0	0	0	0	0	10
8:00 AM	0	0	1	0	0	0	4	0	0	0	0	0	5
8:15 AM	0	0	0	0	0	4	1	1	0	0	0	0	6
8:30 AM	0	0	0	2	0	1	1	0	0	0	0	0	4
8:45 AM	0	0	0	0	0	2	2	0	0	0	0	0	4
Total	0	4	3	3	0	17	14	2	0	0	0	0	43

AM Intersection Peak Hour : **7:30 AM - 8:30 AM** Intersection PHF : **0.65**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	3	2	1	0	10	9	1	0	0	0	0	26
PHF	#####	0.38	0.50	0.25	#####	0.63	0.56	0.25	#####	#####	#####	#####	0.65
Movement PHF		0.42			0.55			0.63			#DIV/0!		0.65

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	0	0	2	0	0	1	1	2	0	0	0	0	6
4:15 PM	0	0	0	0	0	2	1	0	0	0	0	0	3
4:30 PM	0	0	0	0	0	2	2	1	0	0	0	0	5
4:45 PM	0	1	0	0	0	1	2	2	0	0	0	0	6
5:00 PM	0	4	0	0	0	1	0	0	0	0	0	0	5
5:15 PM	0	1	0	0	0	2	1	0	0	0	0	0	4
5:30 PM	0	4	0	0	0	9	2	0	0	0	0	0	15
5:45 PM	0	3	0	0	0	5	6	2	0	0	0	0	16
Total	0	13	2	0	0	23	15	7	0	0	0	0	60

PM Intersection Peak Hour : **5:00 PM - 6:00 PM** Intersection PHF : **0.63**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	12	0	0	0	17	9	2	0	0	0	0	40
PHF	#####	0.75	#####	#####	#####	0.472	0.375	0.25	#####	#####	#####	#####	0.63
Movement PHF		0.75			0.47			0.34			#DIV/0!		0.63

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Eastgate Mall @ Towne Center Drive

Date of Count: *Thursday, May 14, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Kimley»Horn

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Eastgate Mall @ Towne Center Drive

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	4	5	1	12	74	11	33	85	25	12	37	19	318
7:15 AM	2	5	3	15	103	9	33	105	38	15	43	28	399
7:30 AM	1	8	6	25	111	10	26	95	50	22	59	28	441
7:45 AM	1	14	4	20	119	9	45	135	48	22	63	38	518
8:00 AM	2	9	2	20	119	5	43	101	53	33	53	29	469
8:15 AM	5	7	2	22	109	11	35	83	40	17	72	27	430
8:30 AM	1	7	3	22	118	13	50	103	46	32	46	29	470
8:45 AM	5	13	6	33	124	12	47	97	47	15	53	34	486
Total	21	68	27	169	877	80	312	804	347	168	426	232	3,531

AM Intersection Peak Hour : **7:45 AM - 8:45 AM** Intersection PHF : **0.91**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	9	37	11	84	465	38	173	422	187	104	234	123	1,887
PHF	0.45	0.66	0.69	0.95	0.98	0.73	0.87	0.78	0.88	0.79	0.81	0.81	0.91
Movement PHF		0.75			0.96			0.86			0.94		0.91

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	24	95	33	3	49	50	23	12	18	62	80	1	450
4:15 PM	19	94	28	2	49	37	7	13	40	68	125	6	488
4:30 PM	13	116	52	1	51	54	13	16	24	67	87	6	500
4:45 PM	26	86	21	1	64	27	13	17	18	82	112	10	477
5:00 PM	41	146	51	0	60	36	20	12	30	67	107	3	573
5:15 PM	32	109	43	1	59	33	21	15	18	71	94	2	498
5:30 PM	14	76	32	1	53	31	12	4	23	89	105	2	442
5:45 PM	22	73	34	0	69	31	15	10	28	60	79	2	423
Total	191	795	294	9	454	299	124	99	199	566	789	32	3,851

PM Intersection Peak Hour : **4:30 PM - 5:30 PM** Intersection PHF : **0.89**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	112	457	167	3	234	150	67	60	90	287	400	21	2048
PHF	0.68	0.783	0.803	0.75	0.914	0.694	0.798	0.882	0.75	0.875	0.893	0.525	0.89
Movement PHF		0.77			0.91			0.88			0.87		0.89

U-Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-1536

Location: Eastgate Mall @ Towne Center Drive

AM Period (7:00 AM - 9:00 AM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
7:00 AM	0	0	6	0	6
7:15 AM	0	0	2	0	2
7:30 AM	0	0	8	0	8
7:45 AM	0	1	7	0	8
8:00 AM	0	0	0	0	0
8:15 AM	0	0	1	0	1
8:30 AM	0	1	4	0	5
8:45 AM	0	0	5	1	6
Total	0	2	33	1	36

AM Intersection Peak Hour : **7:45 AM - 8:45 AM** Intersection PHF : **0.44**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	0	2	12	0	14
PHF	#DIV/0!	0.50	0.43	#DIV/0!	0.44
Movement PHF	#DIV/0!	0.50	0.43	#DIV/0!	0.44

PM Period (4:00 PM - 6:00 PM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
4:00 PM	0	1	3	0	4
4:15 PM	0	0	5	0	5
4:30 PM	0	1	3	2	6
4:45 PM	0	0	4	0	4
5:00 PM	0	1	4	1	6
5:15 PM	0	1	2	1	4
5:30 PM	0	0	2	1	3
5:45 PM	0	0	4	1	5
Total	0	4	27	6	37

PM Intersection Peak Hour : **4:30 PM - 5:30 PM** Intersection PHF : **0.83**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	0	3	13	4	20
PHF	#DIV/0!	0.75	0.8125	0.5	0.83
Movement PHF	#DIV/0!	0.75	0.81	0.50	0.83

Bike Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Eastgate Mall @ Towne Center Drive

Date of Count: *Thursday, May 14, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Kimley»Horn

Bike Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Eastgate Mall @ Towne Center Drive

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	1	0	0	2	0	1	0	0	0	1	0	5
7:15 AM	0	1	0	0	2	0	0	0	0	0	1	0	4
7:30 AM	1	0	0	0	0	0	0	2	0	0	2	1	6
7:45 AM	0	0	0	0	0	0	0	0	0	0	2	1	3
8:00 AM	0	0	0	0	2	0	0	0	0	0	0	1	3
8:15 AM	0	0	0	0	4	0	0	0	0	0	2	0	6
8:30 AM	0	2	0	0	2	0	0	0	0	0	0	0	4
8:45 AM	0	0	0	0	0	0	0	0	0	0	5	1	6
Total	1	4	0	0	12	0	1	2	0	0	13	4	37

AM Intersection Peak Hour : **8:00 AM - 9:00 AM** Intersection PHF : **0.79**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	2	0	0	8	0	0	0	0	0	7	2	19
PHF	#####	0.25	#####	#####	0.50	#####	#####	#####	#####	#####	0.35	0.50	0.79
Movement PHF		0.25			0.50			#DIV/0!			0.38		0.79

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	1	0	0	0	3	0	0	0	0	0	2	0	6
4:15 PM	0	0	0	0	0	0	0	1	0	0	1	0	2
4:30 PM	1	1	0	0	0	0	0	0	0	0	1	0	3
4:45 PM	0	1	0	0	2	0	0	0	0	0	1	0	4
5:00 PM	1	1	0	0	1	0	0	0	0	0	3	0	6
5:15 PM	1	0	0	0	4	0	0	0	0	0	1	0	6
5:30 PM	1	0	0	0	2	0	0	1	0	0	0	0	4
5:45 PM	0	0	0	0	1	0	0	0	0	0	1	0	2
Total	5	3	0	0	13	0	0	2	0	0	10	0	33

PM Intersection Peak Hour : **4:45 PM - 5:45 PM** Intersection PHF : **0.83**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	3	2	0	0	9	0	0	1	0	0	5	0	20
PHF	0.75	0.5	#####	#####	0.563	#####	#####	0.25	#####	#####	0.417	#####	0.83
Movement PHF		0.63			0.56			0.25			0.42		0.83

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Executive Drive @ Towne Center Drive

Date of Count: *Wednesday, May 13, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Kimley»Horn

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Executive Drive @ Towne Center Drive

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	6	16	1	3	9	3	96	141	29	6	17	6	333
7:15 AM	4	24	2	1	11	13	99	183	27	8	16	9	397
7:30 AM	4	48	2	2	9	6	121	201	41	10	26	17	487
7:45 AM	2	23	2	3	15	17	104	171	49	5	29	13	433
8:00 AM	9	52	3	2	11	8	91	215	43	8	39	12	493
8:15 AM	5	34	1	3	18	7	98	183	57	6	26	8	446
8:30 AM	8	36	4	4	15	9	99	181	38	11	22	16	443
8:45 AM	9	32	3	3	17	17	95	180	48	8	24	20	456
Total	47	265	18	21	105	80	803	1,455	332	62	199	101	3,488

AM Intersection Peak Hour : **7:30 AM - 8:30 AM** Intersection PHF : **0.94**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	20	157	8	10	53	38	414	770	190	29	120	50	1,859
PHF	0.56	0.75	0.67	0.83	0.74	0.56	0.86	0.90	0.83	0.73	0.77	0.74	0.94
Movement PHF		0.72			0.72			0.95			0.84		0.94

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	12	221	2	3	49	53	12	39	25	29	12	6	463
4:15 PM	12	160	10	7	35	70	10	49	27	25	9	2	416
4:30 PM	12	262	5	7	49	61	18	28	28	35	3	6	514
4:45 PM	5	204	2	2	30	63	15	48	19	24	9	6	427
5:00 PM	17	236	2	3	47	67	19	30	40	28	15	9	513
5:15 PM	11	234	1	4	39	70	17	28	31	30	20	5	490
5:30 PM	14	193	4	4	25	53	23	51	28	35	8	6	444
5:45 PM	9	99	3	3	12	33	6	12	9	15	6	6	213
Total	92	1609	29	33	286	470	120	285	207	221	82	46	3,480

PM Intersection Peak Hour : **4:30 PM - 5:30 PM** Intersection PHF : **0.95**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	45	936	10	16	165	261	69	134	118	117	47	26	1944
PHF	0.66	0.893	0.5	0.571	0.842	0.932	0.908	0.698	0.738	0.836	0.588	0.722	0.95
Movement PHF		0.89			0.94			0.90			0.86		0.95

U-Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-1536

Location: Executive Drive @ Towne Center Drive

AM Period (7:00 AM - 9:00 AM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
7:00 AM	0	0	2	0	2
7:15 AM	0	0	1	0	1
7:30 AM	2	0	0	0	2
7:45 AM	1	1	3	0	5
8:00 AM	1	0	4	0	5
8:15 AM	0	1	0	0	1
8:30 AM	1	1	0	0	2
8:45 AM	0	0	3	1	4
Total	5	3	13	1	22

AM Intersection Peak Hour : **7:30 AM - 8:30 AM** Intersection PHF : **0.65**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	4	1	8	0	13
PHF	0.50	0.50	0.44	#DIV/0!	0.65
Movement PHF	0.50	0.50	0.44	#DIV/0!	0.65

PM Period (4:00 PM - 6:00 PM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
4:00 PM	0	0	9	0	9
4:15 PM	0	0	12	0	12
4:30 PM	0	0	8	0	8
4:45 PM	1	0	15	0	16
5:00 PM	0	0	12	0	12
5:15 PM	0	0	11	1	12
5:30 PM	0	0	5	0	5
5:45 PM	0	0	0	0	0
Total	1	0	72	1	74

PM Intersection Peak Hour : **4:30 PM - 5:30 PM** Intersection PHF : **0.75**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	1	0	47	0	48
PHF	0.25	#DIV/0!	0.766666667	0.25	0.75
Movement PHF	0.25	#DIV/0!	0.77	0.25	0.75

Bike Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

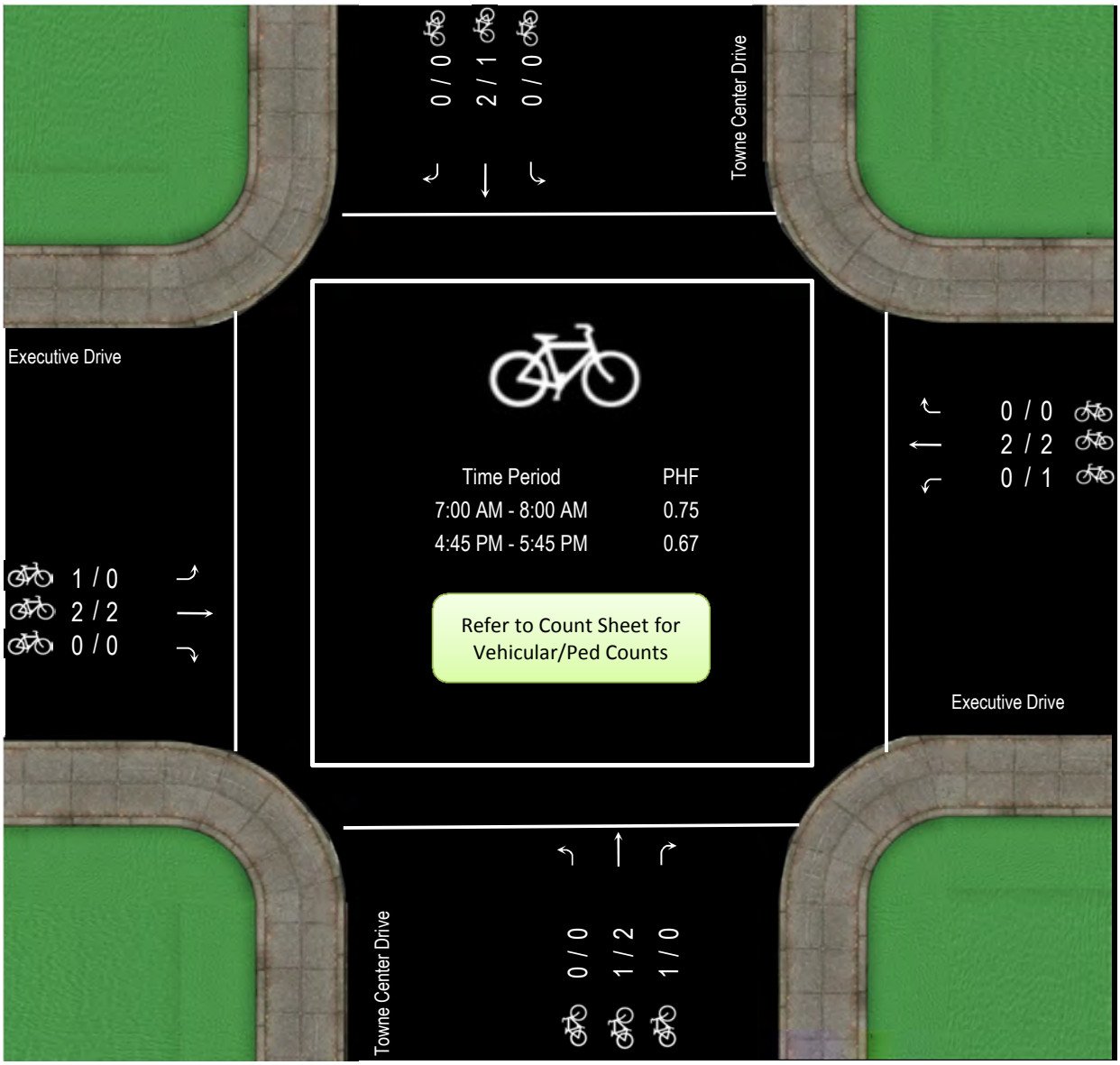
Location: Executive Drive @ Towne Center Drive

Date of Count: *Wednesday, May 13, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*



Bike Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Executive Drive @ Towne Center Drive

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
7:15 AM	0	0	0	0	1	0	1	0	0	0	0	1	3
7:30 AM	0	2	0	0	1	0	0	0	0	0	0	0	3
7:45 AM	0	0	0	0	0	0	0	0	0	0	2	0	2
8:00 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
8:15 AM	0	0	0	0	0	0	0	0	1	0	2	0	3
8:30 AM	0	0	0	0	0	0	1	2	0	0	0	0	3
8:45 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
Total	0	2	0	0	2	0	2	3	1	0	6	1	17

AM Intersection Peak Hour : **7:00 AM - 8:00 AM** Intersection PHF : **0.75**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	2	0	0	2	0	1	1	0	0	2	1	9
PHF	#####	0.25	#####	#####	0.50	#####	0.25	0.25	#####	#####	0.25	0.25	0.75
Movement PHF		0.25			0.50			0.50			0.38		0.75

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	1	0	0	1
4:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
4:45 PM	0	0	0	0	1	0	0	1	0	0	1	0	3
5:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
5:15 PM	0	0	0	0	1	1	0	0	0	0	0	0	2
5:30 PM	0	1	0	0	0	0	0	0	0	0	1	0	2
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	2	0	0	2	1	0	3	0	1	2	0	11

PM Intersection Peak Hour : **4:45 PM - 5:45 PM** Intersection PHF : **0.67**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	1	0	0	2	1	0	2	0	0	2	0	8
PHF	#####	0.25	#####	#####	0.5	0.25	#####	0.5	#####	#####	0.5	#####	0.67
Movement PHF		0.25			0.38			0.50			0.50		0.67

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Golden Haven Drive @ Towne Center Drive

Date of Count: *Wednesday, May 13, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Kimley»Horn

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Golden Haven Drive @ Towne Center Drive

AM Period (7:00 AM - 9:00 AM)								
	Southbound		Westbound		Northbound			
	Thru	Left	Right	Left	Right	Thru		TOTAL
7:00 AM	12	20	31	19	11	48		141
7:15 AM	17	20	59	31	28	71		226
7:30 AM	18	19	87	18	26	73		241
7:45 AM	15	32	78	6	36	114		281
8:00 AM	28	48	87	14	37	77		291
8:15 AM	23	40	87	18	25	80		273
8:30 AM	25	41	99	15	32	90		302
8:45 AM	33	52	99	22	46	94		346
Total	171	272	627	143	241	647		2,101

AM Intersection Peak Hour : **8:00 AM - 9:00 AM** Intersection PHF : **0.88**

	Southbound		Westbound		Northbound			TOTAL
	Thru	Left	Right	Left	Right	Thru		
Volume	109	181	372	69	140	341		1,212
PHF	0.83	0.87	0.94	0.78	0.76	0.91		0.88
Movement PHF	0.85		0.91			0.86		0.88

PM Period (4:00 PM - 6:00 PM)								
	Southbound			Westbound		Northbound		
	Right	Thru	Left	Right	Left	Right	Thru	TOTAL
4:00 PM	0	100	43	76	33	18	46	316
4:15 PM	0	93	49	79	28	17	47	313
4:30 PM	0	119	47	85	39	15	41	346
4:45 PM	0	118	44	67	26	12	60	327
5:00 PM	0	142	45	82	45	18	44	376
5:15 PM	0	167	46	85	29	19	63	409
5:30 PM	0	157	43	81	31	17	57	386
5:45 PM	0	148	42	78	28	16	45	357
Total	0	1044	359	633	259	132	403	2,830

PM Intersection Peak Hour : **5:00 PM - 6:00 PM** Intersection PHF : **0.93**

	Southbound		Westbound		Northbound			TOTAL
	Thru	Left	Right	Left	Right	Thru		
Volume	614	176	326	133	70	209		1528
PHF	0.919	0.957	0.959	0.739	0.921	0.829		0.93
Movement PHF	0.93		0.90			0.85		0.93

U-Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-1536

Location: Golden Haven Drive @ Towne Center Drive

AM Period (7:00 AM - 9:00 AM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn		TOTAL
7:00 AM	0	0	0		0
7:15 AM	0	0	0		0
7:30 AM	0	0	0		0
7:45 AM	0	1	0		1
8:00 AM	0	1	0		1
8:15 AM	0	1	0		1
8:30 AM	0	0	0		0
8:45 AM	0	0	0		0
Total	0	3	0		3

AM Intersection Peak Hour : **8:00 AM - 9:00 AM** Intersection PHF : **0.50**

	North Leg EB	East Leg SB	South Leg EB		TOTAL
Volume	0	2	0		2
PHF	#DIV/0!	0.50	#DIV/0!		0.50
Movement PHF	#DIV/0!	0.50	#DIV/0!		0.50

PM Period (4:00 PM - 6:00 PM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn		TOTAL
4:00 PM	0	2	0		2
4:15 PM	0	0	0		0
4:30 PM	0	0	0		0
4:45 PM	0	0	0		0
5:00 PM	0	0	0		0
5:15 PM	0	0	0		0
5:30 PM	0	1	0		1
5:45 PM	0	0	0		0
Total	0	3	0		3

PM Intersection Peak Hour : **5:00 PM - 6:00 PM** Intersection PHF : **0.25**

	North Leg EB	East Leg SB	South Leg EB		TOTAL
Volume	0	1	0		1
PHF	#DIV/0!	0.25	#DIV/0!		0.25
Movement PHF	#DIV/0!	0.25	#DIV/0!		0.25

Bike Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Golden Haven Drive @ Towne Center Drive

Date of Count: *Wednesday, May 13, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Bike Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Golden Haven Drive @ Towne Center Drive

AM Period (7:00 AM - 9:00 AM)								
	Southbound		Westbound		Northbound			
	Thru	Left	Right	Left	Right	Thru		TOTAL
7:00 AM	0	0	0	0	0	0		0
7:15 AM	0	0	0	0	0	0		0
7:30 AM	0	0	0	0	0	0		0
7:45 AM	0	0	0	0	0	0		0
8:00 AM	0	0	0	0	0	0		0
8:15 AM	0	0	0	0	0	1		1
8:30 AM	0	0	1	0	0	0		1
8:45 AM	0	0	0	0	0	0		0
Total	0	0	1	0	0	1		2

AM Intersection Peak Hour : **7:45 AM - 8:45 AM** Intersection PHF : **0.50**

	Southbound		Westbound		Northbound			TOTAL
	Thru	Left	Right	Left	Right	Thru		
Volume	0	0	1	0	0	1		2
PHF	#####	#####	0.25	#####	#####	0.25		0.50
Movement PHF	#DIV/0!		0.25			0.25		0.50

PM Period (4:00 PM - 6:00 PM)								
	Southbound		Westbound		Northbound			
	Thru	Left	Right	Left	Right	Thru		TOTAL
4:00 PM	0	0	0	0	1	0		1
4:15 PM	0	0	0	0	0	0		0
4:30 PM	0	1	0	0	0	0		1
4:45 PM	0	0	0	0	0	0		0
5:00 PM	0	1	1	0	0	0		2
5:15 PM	2	0	0	0	0	0		2
5:30 PM	1	0	0	0	1	0		2
5:45 PM	1	1	1	0	0	0		3
Total	4	3	2	0	2	0		11

PM Intersection Peak Hour : **5:00 PM - 6:00 PM** Intersection PHF : **0.75**

	Southbound		Westbound		Northbound			TOTAL
	Thru	Left	Right	Left	Right	Thru		
Volume	4	2	2	0	1	0		9
PHF	0.5	0.5	0.5	#####	0.25	#####		0.75
Movement PHF	0.75		0.50			0.25		0.75

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Executive Drive @ Executive Way

Date of Count: *Wednesday, May 13, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Kimley»Horn

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Executive Drive @ Executive Way

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	0	1	3	28	5	7	11	25	3	30	4	117
7:15 AM	2	3	1	2	34	7	7	13	44	2	31	10	156
7:30 AM	4	2	2	1	33	1	11	15	59	8	41	10	187
7:45 AM	0	6	1	3	40	3	22	8	49	9	46	10	197
8:00 AM	15	6	3	7	38	4	14	17	44	7	41	14	210
8:15 AM	5	4	1	8	46	9	13	26	57	7	50	10	236
8:30 AM	5	8	6	4	45	6	17	16	41	11	43	11	213
8:45 AM	4	7	3	8	45	7	25	22	56	15	40	26	258
Total	35	36	18	36	309	42	116	128	375	62	322	95	1,574

AM Intersection Peak Hour : **8:00 AM - 9:00 AM** Intersection PHF : **0.89**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	29	25	13	27	174	26	69	81	198	40	174	61	917
PHF	0.48	0.78	0.54	0.84	0.95	0.72	0.69	0.78	0.87	0.67	0.87	0.59	0.89
Movement PHF		0.70			0.90			0.84			0.85		0.89

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	13	23	5	2	37	45	8	3	9	78	29	8	260
4:15 PM	11	13	1	1	40	39	3	7	13	65	32	2	227
4:30 PM	10	18	1	3	43	52	5	7	12	103	34	2	290
4:45 PM	15	13	2	1	36	39	7	8	6	81	26	3	237
5:00 PM	13	24	6	1	45	69	6	8	11	136	43	4	366
5:15 PM	9	13	2	1	64	47	11	6	18	82	49	6	308
5:30 PM	8	11	2	0	54	29	5	7	11	69	37	3	236
5:45 PM	4	8	0	0	45	35	8	6	6	59	35	3	209
Total	83	123	19	9	364	355	53	52	86	673	285	31	2,133

PM Intersection Peak Hour : **4:30 PM - 5:30 PM** Intersection PHF : **0.82**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	47	68	11	6	188	207	29	29	47	402	152	15	1201
PHF	0.78	0.708	0.458	0.5	0.734	0.75	0.659	0.906	0.653	0.739	0.776	0.625	0.82
Movement PHF		0.73			0.87			0.75			0.78		0.82

U-Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-1536

Location: Executive Drive @ Executive Way

AM Period (7:00 AM - 9:00 AM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
7:00 AM	0	0	1	0	1
7:15 AM	0	0	0	0	0
7:30 AM	0	1	0	1	2
7:45 AM	0	0	0	0	0
8:00 AM	0	1	0	1	2
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
Total	0	2	1	2	5

AM Intersection Peak Hour : **8:00 AM - 9:00 AM** Intersection PHF : **0.25**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	0	1	0	1	2
PHF	#DIV/0!	0.25	#DIV/0!	0.25	0.25
Movement PHF	#DIV/0!	0.25	#DIV/0!	0.25	0.25

PM Period (4:00 PM - 6:00 PM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	1	1
5:45 PM	0	0	1	0	1
Total	0	0	1	1	2

PM Intersection Peak Hour : **4:30 PM - 5:30 PM** Intersection PHF : **#DIV/0!**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	0	0	0	0	0
PHF	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Movement PHF	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

Bike Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location:	Executive Drive	@	Executive Way
Date of Count:	*Wednesday, May 13, 2015*		
Analysts:	*LV/CD*		
Weather:	*Sunny*		
AVC Proj No:	*15-0345*		

Bike Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Executive Drive @ Executive Way

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	1	0	0	0	1	0	1	0	3
7:30 AM	0	0	0	0	1	0	0	1	1	0	0	0	3
7:45 AM	0	0	0	0	1	0	1	0	0	0	0	0	2
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	1	0	0	0	0	0	2	0	3
8:30 AM	0	0	0	0	1	0	0	0	0	0	2	0	3
8:45 AM	0	0	0	0	0	0	0	0	0	0	2	0	2
Total	0	0	0	0	5	0	1	1	2	0	7	0	16

AM Intersection Peak Hour : **7:00 AM - 8:00 AM** Intersection PHF : **0.67**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	0	0	0	3	0	1	1	2	0	1	0	8
PHF	#####	#####	#####	#####	0.75	#####	0.25	0.25	0.50	#####	0.25	#####	0.67
Movement PHF	#DIV/0!			0.75			0.50			0.25			0.67

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
4:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	1	2	0	3
4:45 PM	0	0	0	0	1	0	0	0	0	0	2	0	3
5:00 PM	0	0	0	0	1	1	0	0	0	0	1	0	3
5:15 PM	0	0	0	0	0	0	0	0	0	0	2	0	2
5:30 PM	0	0	0	0	1	1	0	0	0	0	2	0	4
5:45 PM	0	0	0	0	1	0	0	0	0	0	1	0	2
Total	0	0	0	0	4	2	0	1	0	1	11	0	19

PM Intersection Peak Hour : **4:45 PM - 5:45 PM** Intersection PHF : **0.75**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	0	0	0	3	2	0	0	0	0	7	0	12
PHF	#####	#####	#####	#####	0.75	0.5	#####	#####	#####	#####	0.875	#####	0.75
Movement PHF	#DIV/0!			0.63			#DIV/0!			0.88			0.75

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Eastgate Mall @ Judicial Drive

Date of Count: *Thursday, May 14, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Kimley»Horn

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Eastgate Mall @ Judicial Drive

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	2	4	1	9	84	23	12	13	11	3	35	33	230
7:15 AM	1	0	1	9	107	38	11	15	19	9	35	35	280
7:30 AM	5	1	2	10	118	32	12	19	23	8	42	41	313
7:45 AM	1	3	0	12	114	52	20	24	34	13	68	32	373
8:00 AM	6	3	1	8	109	35	18	24	29	13	47	38	331
8:15 AM	2	2	0	6	98	30	19	23	42	6	64	39	331
8:30 AM	4	0	1	10	101	21	10	23	49	9	47	44	319
8:45 AM	1	2	2	9	128	44	18	15	40	13	61	32	365
Total	22	15	8	73	859	275	120	156	247	74	399	294	2,542

AM Intersection Peak Hour : **7:45 AM - 8:45 AM** Intersection PHF : **0.91**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	13	8	2	36	422	138	67	94	154	41	226	153	1,354
PHF	0.54	0.67	0.50	0.75	0.93	0.66	0.84	0.98	0.79	0.79	0.83	0.87	0.91
Movement PHF		0.58			0.84			0.94			0.93		0.91

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	30	20	13	2	51	25	47	2	22	24	110	3	349
4:15 PM	23	13	13	1	39	11	29	2	26	20	137	3	317
4:30 PM	31	20	18	1	44	19	40	1	32	22	128	3	359
4:45 PM	25	10	9	0	51	14	36	2	16	19	122	5	309
5:00 PM	32	19	17	3	42	16	38	1	23	37	137	5	370
5:15 PM	24	19	16	0	44	19	33	1	26	31	125	3	341
5:30 PM	20	15	11	3	35	16	31	1	30	26	118	5	311
5:45 PM	17	3	10	1	49	12	24	2	34	23	105	0	280
Total	202	119	107	11	355	132	278	12	209	202	982	27	2,636

PM Intersection Peak Hour : **4:30 PM - 5:30 PM** Intersection PHF : **0.93**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	112	68	60	4	181	68	147	5	97	109	512	16	1379
PHF	0.88	0.85	0.833	0.333	0.887	0.895	0.919	0.625	0.758	0.736	0.934	0.8	0.93
Movement PHF		0.87			0.97			0.85			0.89		0.93

U-Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-1536

Location: Eastgate Mall @ Judicial Drive

AM Period (7:00 AM - 9:00 AM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	3	0	3
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
Total	0	0	3	0	3

AM Intersection Peak Hour : **7:45 AM - 8:45 AM** Intersection PHF : **#DIV/0!**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	0	0	0	0	0
PHF	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Movement PHF	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

PM Period (4:00 PM - 6:00 PM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
4:00 PM	0	0	0	0	0
4:15 PM	0	0	3	0	3
4:30 PM	0	0	1	0	1
4:45 PM	0	0	7	0	7
5:00 PM	0	0	3	0	3
5:15 PM	0	0	2	0	2
5:30 PM	0	0	1	0	1
5:45 PM	0	0	0	0	0
Total	0	0	17	0	17

PM Intersection Peak Hour : **4:30 PM - 5:30 PM** Intersection PHF : **0.46**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	0	0	13	0	13
PHF	#DIV/0!	#DIV/0!	0.464285714	#DIV/0!	0.46
Movement PHF	#DIV/0!	#DIV/0!	0.46	#DIV/0!	0.46

Bike Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

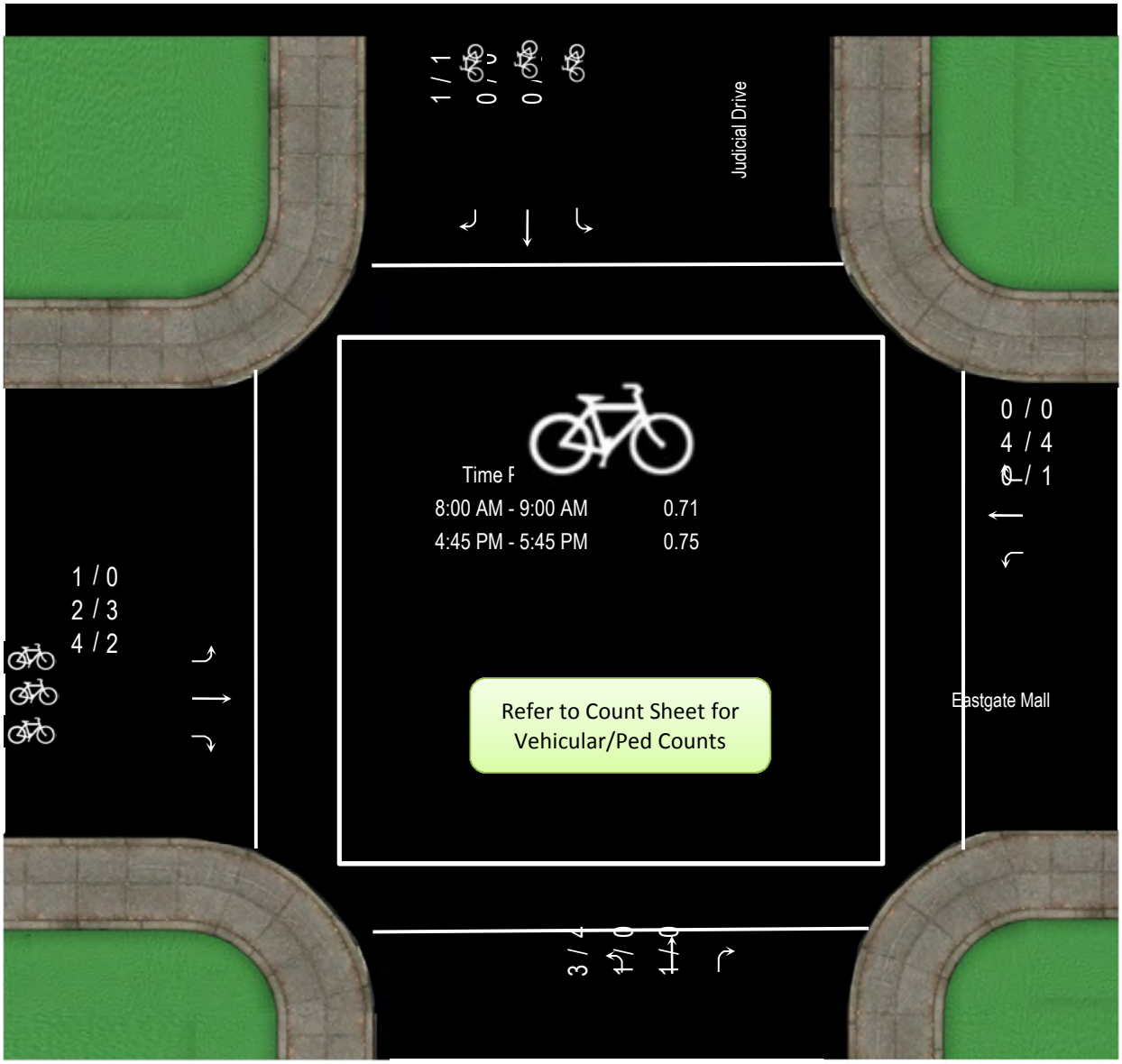
Location: Eastgate Mall @ Judicial Drive

Date of Count: *Thursday, May 14, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*



Bike Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Eastgate Mall @ Judicial Drive

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	0	0	0	2	0	0	0	0	1	1	0	4
7:15 AM	0	0	0	0	2	1	0	0	0	0	0	1	4
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	2	2
7:45 AM	0	0	0	0	0	0	0	0	0	1	0	1	2
8:00 AM	0	0	0	0	2	0	1	0	0	0	0	0	3
8:15 AM	0	0	0	0	2	0	0	0	2	1	0	1	6
8:30 AM	1	0	0	0	0	0	0	0	1	0	0	0	2
8:45 AM	0	0	0	0	0	0	0	1	0	3	2	0	6
Total	1	0	0	0	8	1	1	1	3	6	3	5	29

AM Intersection Peak Hour : **8:00 AM - 9:00 AM** Intersection PHF : **0.71**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	1	0	0	0	4	0	1	1	3	4	2	1	17
PHF	0.25	#####	#####	#####	0.50	#####	0.25	0.25	0.38	0.33	0.25	0.25	0.71
Movement PHF		0.25			0.50			0.63			0.35		0.71

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	0	0	0	0	1	0	0	0	2	1	1	0	5
4:15 PM	0	0	0	0	0	1	0	0	0	0	1	0	2
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	1	1
4:45 PM	0	0	0	0	1	0	0	0	1	0	1	0	3
5:00 PM	0	0	0	0	0	1	0	0	1	1	2	0	5
5:15 PM	1	0	0	0	1	0	0	0	2	1	0	0	5
5:30 PM	0	0	0	0	2	0	0	0	0	0	0	0	2
5:45 PM	1	0	0	0	0	0	0	0	0	0	1	0	2
Total	2	0	0	0	5	2	0	0	6	3	6	1	25

PM Intersection Peak Hour : **4:45 PM - 5:45 PM** Intersection PHF : **0.75**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	1	0	0	0	4	1	0	0	4	2	3	0	15
PHF	0.25	#####	#####	#####	0.5	0.25	#####	#####	0.5	0.5	0.375	#####	0.75
Movement PHF		0.25			0.63			0.50			0.42		0.75

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Governor Drive @ I-805 SB Ramps

Date of Count: *Tuesday, April 28, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Governor Drive @ I-805 SB Ramps

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	55	2	14	0	89	7	0	0	0	67	45	0	279
7:15 AM	71	2	20	0	114	3	0	0	0	87	67	0	364
7:30 AM	88	0	18	0	106	6	0	0	0	132	84	0	434
7:45 AM	77	0	16	0	125	6	0	0	0	141	88	0	453
8:00 AM	71	0	18	0	101	4	0	0	0	105	101	0	400
8:15 AM	68	0	22	0	108	5	0	0	0	76	78	0	357
8:30 AM	69	0	19	0	104	4	0	0	0	114	79	0	389
8:45 AM	91	1	20	0	130	6	0	0	0	116	86	0	450
Total	590	5	147	0	877	41	0	0	0	838	628	0	3,126

AM Intersection Peak Hour : **7:15 AM - 8:15 AM** Intersection PHF : **0.91**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	307	2	72	0	446	19	0	0	0	465	340	0	1,651
PHF	0.87	0.25	0.90	#####	0.89	0.79	#####	#####	#####	0.82	0.84	#####	0.91
Movement PHF		0.90			0.89			#DIV/0!			0.88		0.91

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	42	1	6	0	75	13	0	0	0	229	65	0	431
4:15 PM	31	0	7	0	93	16	0	0	0	269	56	0	472
4:30 PM	50	2	2	0	66	12	0	0	0	264	74	0	470
4:45 PM	39	1	5	0	88	6	0	0	0	196	83	0	418
5:00 PM	47	5	3	0	85	16	0	0	0	249	82	0	487
5:15 PM	51	5	5	0	137	7	0	0	0	265	75	0	545
5:30 PM	62	4	2	0	116	8	0	0	0	184	53	0	429
5:45 PM	80	1	5	0	130	12	0	0	0	130	57	0	415
Total	402	19	35	0	790	90	0	0	0	1,786	545	0	3,667

PM Intersection Peak Hour : **4:30 PM - 5:30 PM** Intersection PHF : **0.88**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	187	13	15	0	376	41	0	0	0	974	314	0	1920
PHF	0.92	0.65	0.75	#####	0.686	0.641	#####	#####	#####	0.919	0.946	#####	0.88
Movement PHF		0.88			0.72			#DIV/0!			0.95		0.88

U-Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-1536

Location: Governor Drive @ I-805 SB Ramps

AM Period (7:00 AM - 9:00 AM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	1	1
8:00 AM	0	1	0	0	1
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	1	1
Total	0	1	0	2	3

AM Intersection Peak Hour : **7:15 AM - 8:15 AM** Intersection PHF : **0.50**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	0	1	0	1	2
PHF	#DIV/0!	0.25	#DIV/0!	0.25	0.50
Movement PHF	#DIV/0!	0.25	#DIV/0!	0.25	0.50

PM Period (4:00 PM - 6:00 PM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	1	0	0	1
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	1	1
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
Total	0	1	0	1	2

PM Intersection Peak Hour : **4:30 PM - 5:30 PM** Intersection PHF : **0.50**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	0	1	0	1	2
PHF	#DIV/0!	0.25	#DIV/0!	0.25	0.50
Movement PHF	#DIV/0!	0.25	#DIV/0!	0.25	0.50

Bike Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

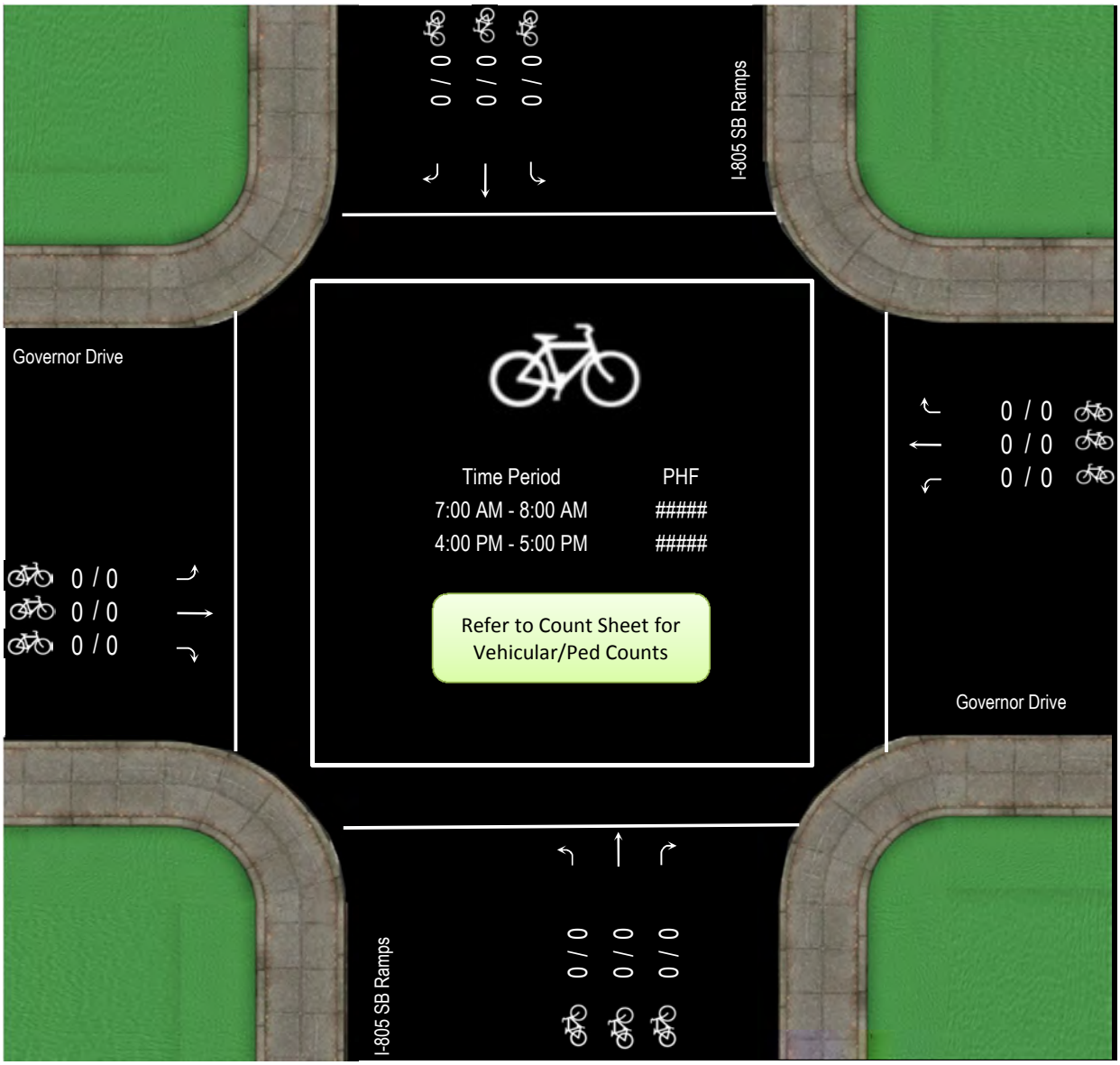
Location: Governor Drive @ I-805 SB Ramps

Date of Count: *Tuesday, April 28, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*



Bike Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Governor Drive @ I-805 SB Ramps

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0

AM Intersection Peak Hour : **7:00 AM - 8:00 AM** Intersection PHF : **#DIV/0!**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	0	0	0	0	0	0	0	0	0	0	0	0
PHF	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#DIV/0!
Movement PHF	#DIV/0!			#DIV/0!			#DIV/0!			#DIV/0!			#DIV/0!

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0

PM Intersection Peak Hour : **4:00 PM - 5:00 PM** Intersection PHF : **#DIV/0!**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	0	0	0	0	0	0	0	0	0	0	0	0
PHF	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#DIV/0!
Movement PHF	#DIV/0!			#DIV/0!			#DIV/0!			#DIV/0!			#DIV/0!

Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Governor Drive @ I-805 NB Ramps

Date of Count: *Tuesday, April 28, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*

Vehicular Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Governor Drive @ I-805 NB Ramps

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	0	0	2	3	0	5	5	99	0	2	61	177
7:15 AM	0	0	0	3	2	0	3	4	102	0	3	68	185
7:30 AM	0	0	0	5	9	0	5	2	126	0	8	86	241
7:45 AM	0	0	0	1	5	0	1	3	121	0	4	101	236
8:00 AM	0	0	0	2	5	0	3	2	116	0	3	102	233
8:15 AM	0	0	0	1	3	0	5	4	115	0	1	97	226
8:30 AM	0	0	0	4	2	0	5	3	100	0	3	101	218
8:45 AM	0	0	0	1	5	0	7	4	118	0	4	96	235
Total	0	0	0	19	34	0	34	27	897	0	28	712	1,751

AM Intersection Peak Hour : **7:30 AM - 8:30 AM** Intersection PHF : **0.97**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	0	0	9	22	0	14	11	478	0	16	386	936
PHF	#####	#####	#####	0.45	0.61	#####	0.70	0.69	0.95	#####	0.50	0.95	0.97
Movement PHF	#DIV/0!			0.55			0.95			0.96			0.97

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	0	0	0	0	14	0	2	3	76	0	2	69	166
4:15 PM	0	0	0	3	6	0	3	1	105	0	0	62	180
4:30 PM	0	0	0	2	4	0	1	3	84	0	1	68	163
4:45 PM	0	0	0	0	2	0	1	1	90	0	1	95	190
5:00 PM	0	0	0	1	6	0	1	0	120	0	0	82	210
5:15 PM	0	0	0	1	4	0	0	0	104	0	0	112	221
5:30 PM	0	0	0	0	3	0	0	1	121	0	0	67	192
5:45 PM	0	0	0	1	2	0	1	2	122	0	0	73	201
Total	0	0	0	8	41	0	9	11	822	0	4	628	1,523

PM Intersection Peak Hour : **5:00 PM - 6:00 PM** Intersection PHF : **0.93**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	0	0	3	15	0	2	3	467	0	0	334	824
PHF	#####	#####	#####	0.75	0.625	#####	0.5	0.375	0.957	#####	#####	0.746	0.93
Movement PHF	#DIV/0!			0.64			0.94			0.75			0.93

U-Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-1536

Location: Governor Drive @ I-805 NB Ramps

AM Period (7:00 AM - 9:00 AM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	1	1
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	1	1
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
Total	0	0	0	2	2

AM Intersection Peak Hour : **7:30 AM - 8:30 AM** Intersection PHF : **0.25**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	0	0	0	1	1
PHF	#DIV/0!	#DIV/0!	#DIV/0!	0.25	0.25
Movement PHF	#DIV/0!	#DIV/0!	#DIV/0!	0.25	0.25

PM Period (4:00 PM - 6:00 PM)					
	Southbound U-Turn	Westbound U-Turn	Northbound U-Turn	Eastbound U-Turn	TOTAL
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	2	2
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	1	1
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
Total	0	0	0	3	3

PM Intersection Peak Hour : **5:00 PM - 6:00 PM** Intersection PHF : **0.25**

	North Leg EB	East Leg SB	South Leg EB	West Leg SB	TOTAL
Volume	0	0	0	1	1
PHF	#DIV/0!	#DIV/0!	#DIV/0!	0.25	0.25
Movement PHF	#DIV/0!	#DIV/0!	#DIV/0!	0.25	0.25

Bike Turn Count Summary

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

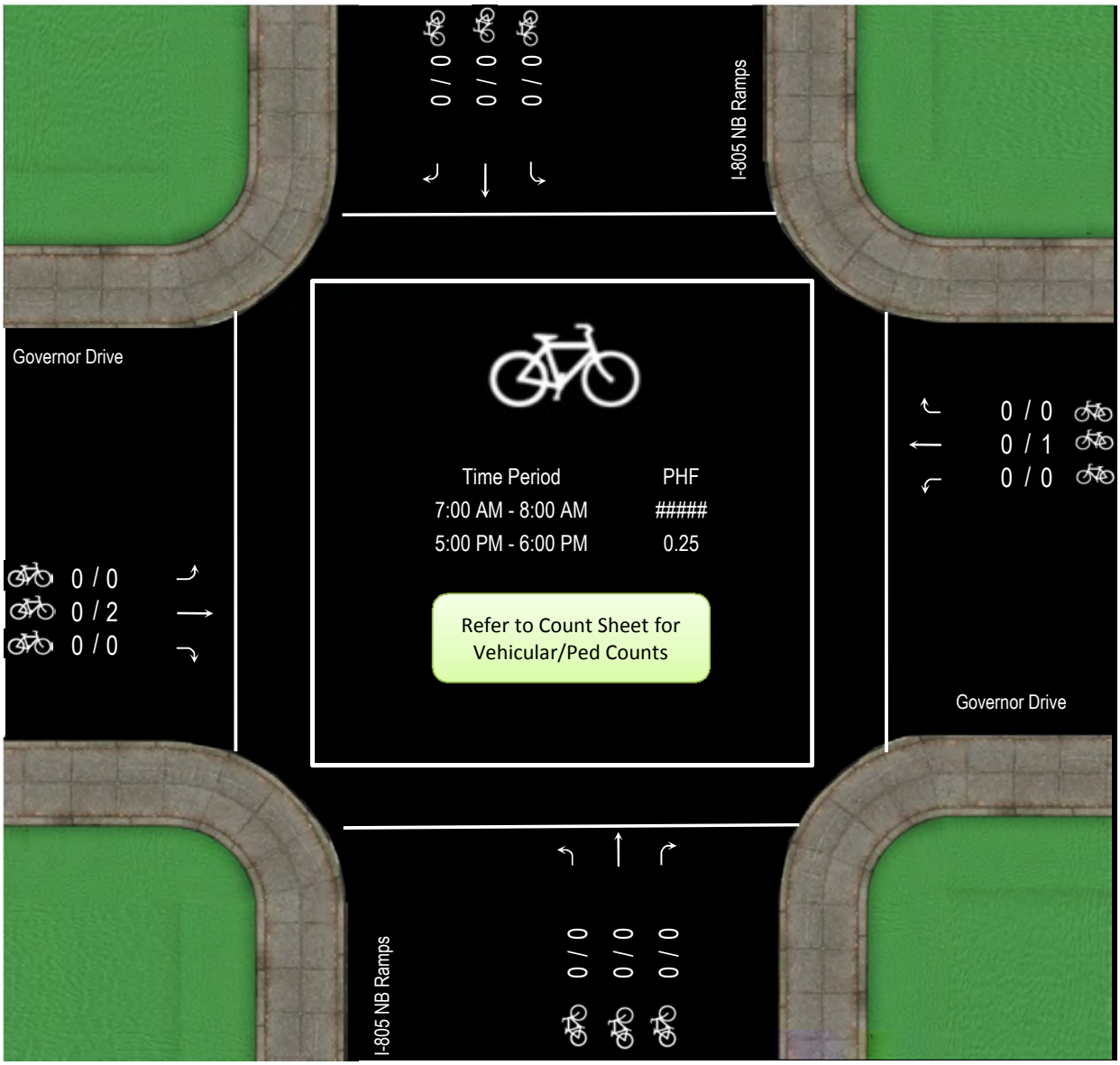
Location: Governor Drive @ I-805 NB Ramps

Date of Count: *Tuesday, April 28, 2015*

Analysts: *LV/CD*

Weather: *Sunny*

AVC Proj No: *15-0345*



Bike Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: Governor Drive @ I-805 NB Ramps

AM Period (7:00 AM - 9:00 AM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0

AM Intersection Peak Hour : **7:00 AM - 8:00 AM** Intersection PHF : **#DIV/0!**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	0	0	0	0	0	0	0	0	0	0	0	0
PHF	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#DIV/0!
Movement PHF	#DIV/0!			#DIV/0!			#DIV/0!			#DIV/0!			#DIV/0!

PM Period (4:00 PM - 6:00 PM)													
	Southbound			Westbound			Northbound			Eastbound			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	1	0	0	0	0	0	2	0	3
Total	0	0	0	0	1	0	0	0	0	0	2	0	3

PM Intersection Peak Hour : **5:00 PM - 6:00 PM** Intersection PHF : **0.25**

	Southbound			Westbound			Northbound			Eastbound			TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Volume	0	0	0	0	1	0	0	0	0	0	2	0	3
PHF	#####	#####	#####	#####	0.25	#####	#####	#####	#####	#####	0.25	#####	0.25
Movement PHF	#DIV/0!			0.25			#DIV/0!			0.25			0.25

Kimley»Horn

24 Hour Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: 41. Eastgate Mall West of Genesee Ave

Orientation: *East-West*

Date of Count: *Tuesday, May 12, 2015*

Analysts: *DASH*

Weather: *Sunny*

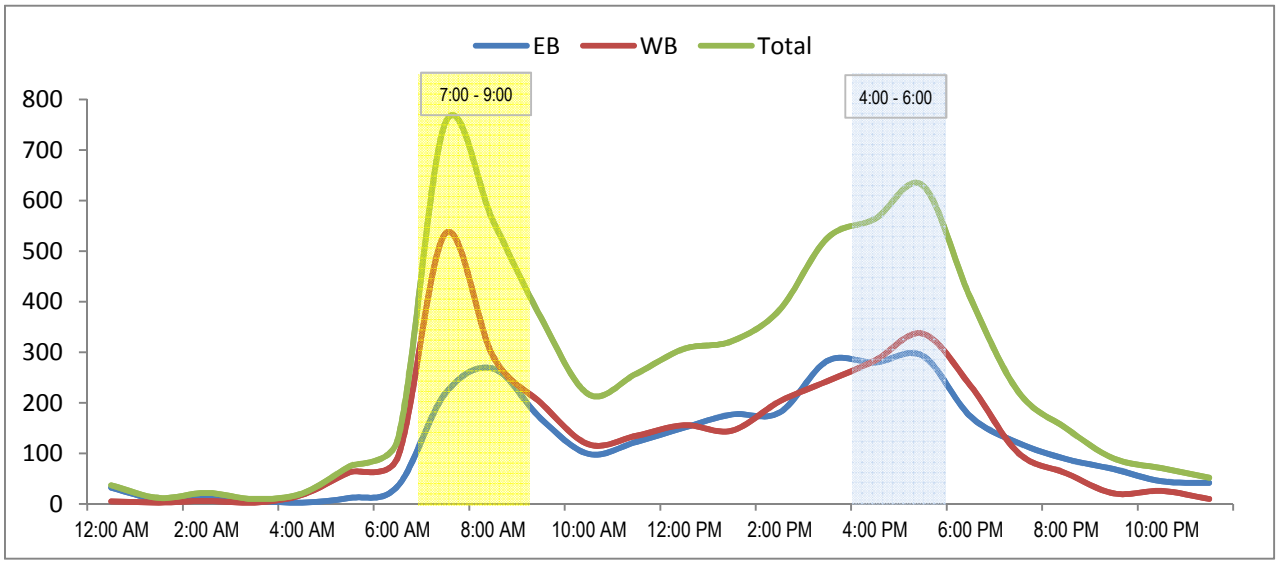
AVC Proj. No: *15-0345*

24 Hour Segment Volume			*6,187*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	32	5	37
1:00 AM - 2:00 AM	9	3	12
2:00 AM - 3:00 AM	16	6	22
3:00 AM - 4:00 AM	7	3	10
4:00 AM - 5:00 AM	3	18	21
5:00 AM - 6:00 AM	12	63	75
6:00 AM - 7:00 AM	35	92	127
7:00 AM - 8:00 AM	219	535	754
8:00 AM - 9:00 AM	268	292	560
9:00 AM - 10:00 AM	169	200	369
10:00 AM - 11:00 AM	99	118	217
11:00 AM - 12:00 PM	123	135	258
Total	**992**	**1,470**	**2,462**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	151	156	307
1:00 PM - 2:00 PM	177	145	322
2:00 PM - 3:00 PM	181	203	384
3:00 PM - 4:00 PM	283	243	526
4:00 PM - 5:00 PM	280	284	564
5:00 PM - 6:00 PM	293	337	630
6:00 PM - 7:00 PM	173	234	407
7:00 PM - 8:00 PM	121	101	222
8:00 PM - 9:00 PM	89	61	150
9:00 PM - 10:00 PM	69	21	90
10:00 PM - 11:00 PM	45	26	71
11:00 PM - 12:00 AM	42	10	52
Total	**1,904**	**1,821**	**3,725**

24-Hour	*EB*	*Volume*	*2,896*	*24-Hour*	*WB*	*Volume*	*3,291*



Kimley»Horn

24 Hour Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: 42. Eastgate Mall East of Genesee Avenue

Orientation: *East-West*

Date of Count: *Tuesday, May 12, 2015*

Analysts: *DASH*

Weather: *Sunny*

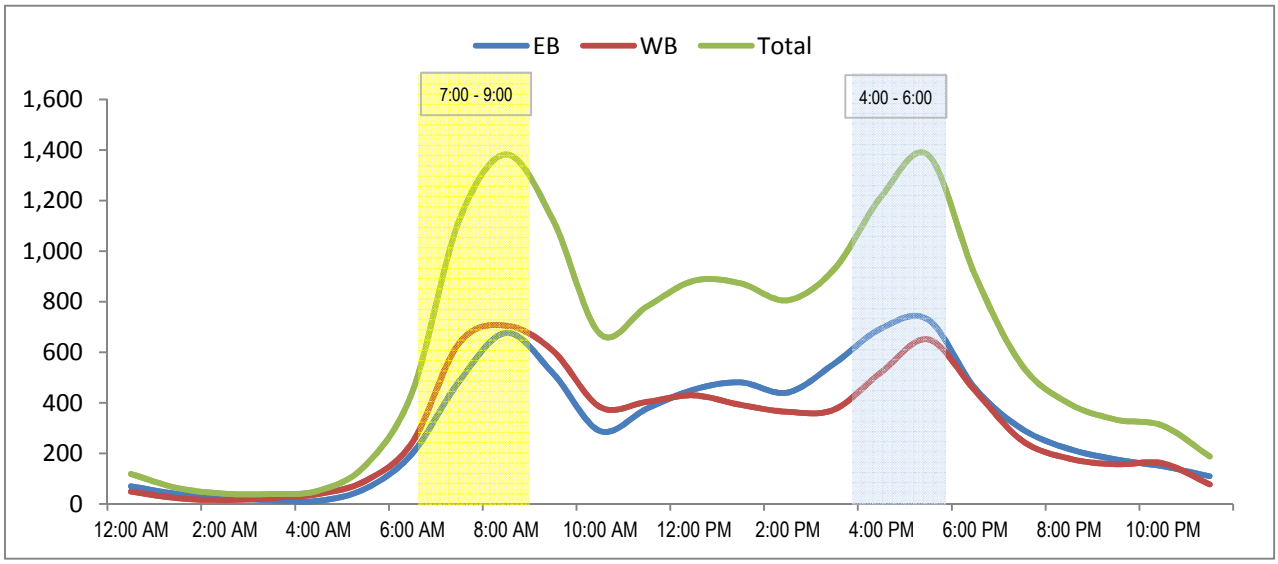
AVC Proj. No: *15-0345*

24 Hour Segment Volume			*14,767*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	70	49	119
1:00 AM - 2:00 AM	40	23	63
2:00 AM - 3:00 AM	25	16	41
3:00 AM - 4:00 AM	15	24	39
4:00 AM - 5:00 AM	13	40	53
5:00 AM - 6:00 AM	61	92	153
6:00 AM - 7:00 AM	200	244	444
7:00 AM - 8:00 AM	486	637	1,123
8:00 AM - 9:00 AM	677	706	1,383
9:00 AM - 10:00 AM	517	606	1,123
10:00 AM - 11:00 AM	289	384	673
11:00 AM - 12:00 PM	377	404	781
Total	**2,770**	**3,225**	**5,995**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	453	430	883
1:00 PM - 2:00 PM	481	392	873
2:00 PM - 3:00 PM	441	365	806
3:00 PM - 4:00 PM	556	374	930
4:00 PM - 5:00 PM	695	522	1,217
5:00 PM - 6:00 PM	729	651	1,380
6:00 PM - 7:00 PM	457	448	905
7:00 PM - 8:00 PM	297	251	548
8:00 PM - 9:00 PM	218	180	398
9:00 PM - 10:00 PM	177	157	334
10:00 PM - 11:00 PM	149	161	310
11:00 PM - 12:00 AM	110	78	188
Total	**4,763**	**4,009**	**8,772**

24-Hour	*EB*	*Volume*	*7,533*	*24-Hour*	*WB*	*Volume*	*7,234*



Kimley»Horn

24 Hour Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: 43. Eastgate Mall West of Judicial Dr

Orientation: *East-West*

Date of Count: *Thursday, May 14, 2015*

Analysts: *DASH*

Weather: *Sunny*

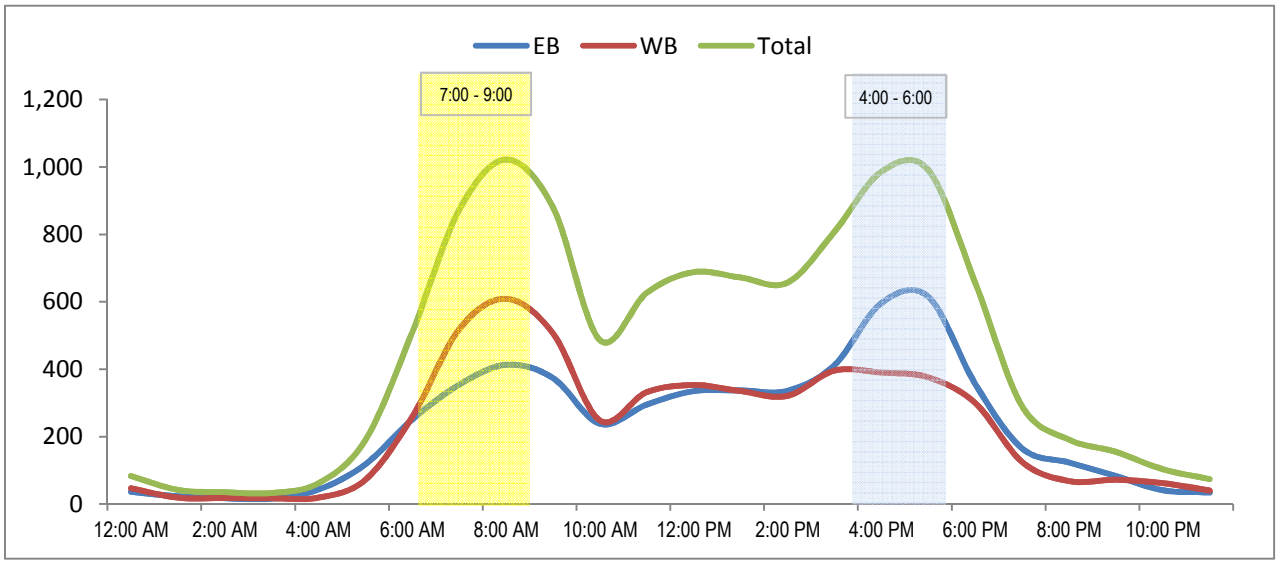
AVC Proj. No: *15-0345*

24 Hour Segment Volume			*11,115*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	36	47	83
1:00 AM - 2:00 AM	23	19	42
2:00 AM - 3:00 AM	17	18	35
3:00 AM - 4:00 AM	16	17	33
4:00 AM - 5:00 AM	43	19	62
5:00 AM - 6:00 AM	118	72	190
6:00 AM - 7:00 AM	251	259	510
7:00 AM - 8:00 AM	354	519	873
8:00 AM - 9:00 AM	413	609	1,022
9:00 AM - 10:00 AM	374	506	880
10:00 AM - 11:00 AM	238	248	486
11:00 AM - 12:00 PM	295	332	627
Total	**2,178**	**2,665**	**4,843**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	335	353	688
1:00 PM - 2:00 PM	337	335	672
2:00 PM - 3:00 PM	336	321	657
3:00 PM - 4:00 PM	412	396	808
4:00 PM - 5:00 PM	596	390	986
5:00 PM - 6:00 PM	615	376	991
6:00 PM - 7:00 PM	357	300	657
7:00 PM - 8:00 PM	165	125	290
8:00 PM - 9:00 PM	123	68	191
9:00 PM - 10:00 PM	83	72	155
10:00 PM - 11:00 PM	41	62	103
11:00 PM - 12:00 AM	34	40	74
Total	**3,434**	**2,838**	**6,272**

24-Hour	*EB*	*Volume*	*5,612*	*24-Hour*	*WB*	*Volume*	*5,503*



Kimley»Horn

24 Hour Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: 44. Eastgate Mall East of Judicial Dr

Orientation: *East-West*

Date of Count: *Thursday, May 14, 2015*

Analysts: *DASH*

Weather: *Sunny*

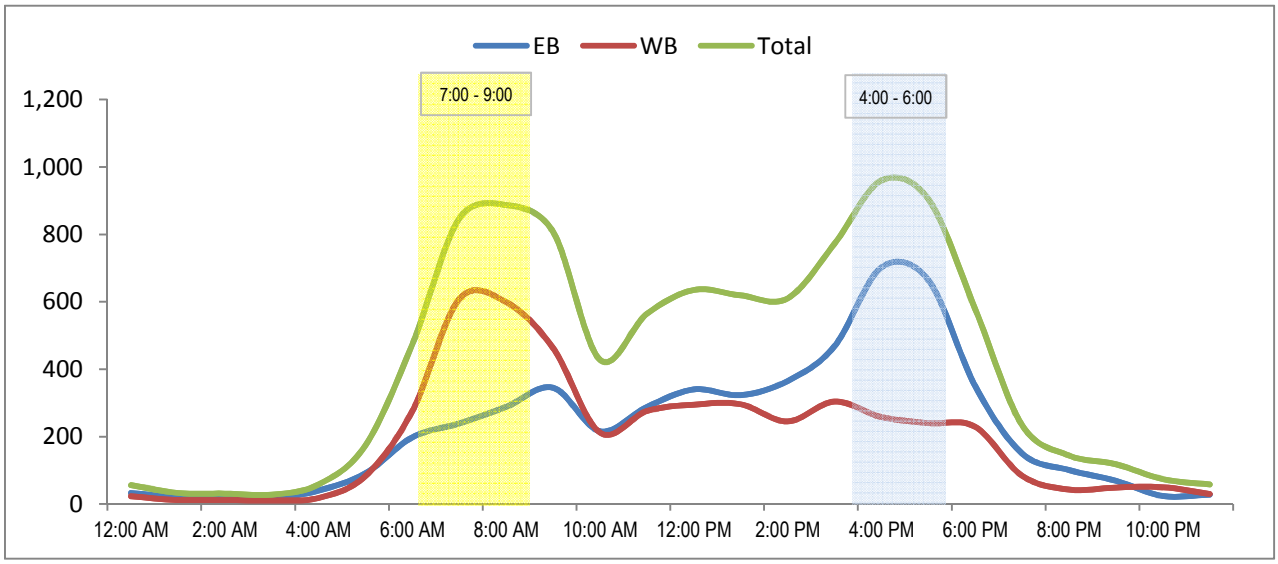
AVC Proj. No: *15-0345*

24 Hour Segment Volume			*10,096*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	33	23	56
1:00 AM - 2:00 AM	21	12	33
2:00 AM - 3:00 AM	19	12	31
3:00 AM - 4:00 AM	17	11	28
4:00 AM - 5:00 AM	40	18	58
5:00 AM - 6:00 AM	91	83	174
6:00 AM - 7:00 AM	198	276	474
7:00 AM - 8:00 AM	239	608	847
8:00 AM - 9:00 AM	288	599	887
9:00 AM - 10:00 AM	345	463	808
10:00 AM - 11:00 AM	216	212	428
11:00 AM - 12:00 PM	288	276	564
Total	**1,795**	**2,593**	**4,388**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	340	295	635
1:00 PM - 2:00 PM	323	296	619
2:00 PM - 3:00 PM	365	245	610
3:00 PM - 4:00 PM	468	304	772
4:00 PM - 5:00 PM	702	258	960
5:00 PM - 6:00 PM	665	240	905
6:00 PM - 7:00 PM	350	229	579
7:00 PM - 8:00 PM	150	84	234
8:00 PM - 9:00 PM	101	43	144
9:00 PM - 10:00 PM	69	49	118
10:00 PM - 11:00 PM	24	50	74
11:00 PM - 12:00 AM	28	30	58
Total	**3,585**	**2,123**	**5,708**

24-Hour	*EB*	*Volume*	*5,380*	*24-Hour*	*WB*	*Volume*	*4,716*



Kimley»Horn

24 Hour Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: 80. Eastgate Mall, North of Airport Mall

Orientation: *North-South*

Date of Count: *Thursday, June 11, 2015*

Analysts: *DASH*

Weather: *Sunny*

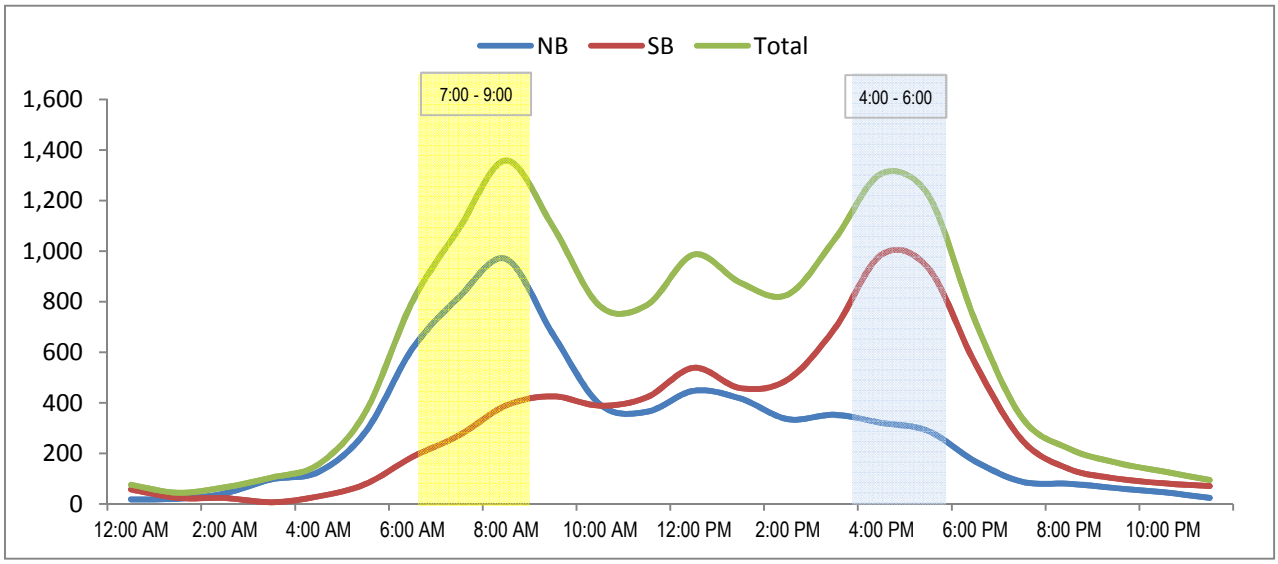
AVC Proj. No: *15-0345*

24 Hour Segment Volume			*14,668*

Time	Hourly Volume		
	NB	SB	Total
12:00 AM - 1:00 AM	18	58	76
1:00 AM - 2:00 AM	21	24	45
2:00 AM - 3:00 AM	42	24	66
3:00 AM - 4:00 AM	98	7	105
4:00 AM - 5:00 AM	127	30	157
5:00 AM - 6:00 AM	285	79	364
6:00 AM - 7:00 AM	614	186	800
7:00 AM - 8:00 AM	819	272	1,091
8:00 AM - 9:00 AM	969	390	1,359
9:00 AM - 10:00 AM	671	426	1,097
10:00 AM - 11:00 AM	394	389	783
11:00 AM - 12:00 PM	365	422	787
Total	**4,423**	**2,307**	**6,730**

Time	Hourly Volume		
	NB	SB	Total
12:00 PM - 1:00 PM	448	539	987
1:00 PM - 2:00 PM	417	458	875
2:00 PM - 3:00 PM	336	492	828
3:00 PM - 4:00 PM	353	693	1,046
4:00 PM - 5:00 PM	321	986	1,307
5:00 PM - 6:00 PM	289	933	1,222
6:00 PM - 7:00 PM	169	556	725
7:00 PM - 8:00 PM	88	253	341
8:00 PM - 9:00 PM	80	139	219
9:00 PM - 10:00 PM	63	101	164
10:00 PM - 11:00 PM	47	82	129
11:00 PM - 12:00 AM	24	71	95
Total	**2,635**	**5,303**	**7,938**

24-Hour	*NB*	*Volume*	*7,058*	*24-Hour*	*SB*	*Volume*	*7,610*



Kimley»Horn

24 Hour Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: 16. Executive Drive West of Genesee Ave

Orientation: *East-West*

Date of Count: *Tuesday, May 12, 2015*

Analysts: *DASH*

Weather: *Sunny*

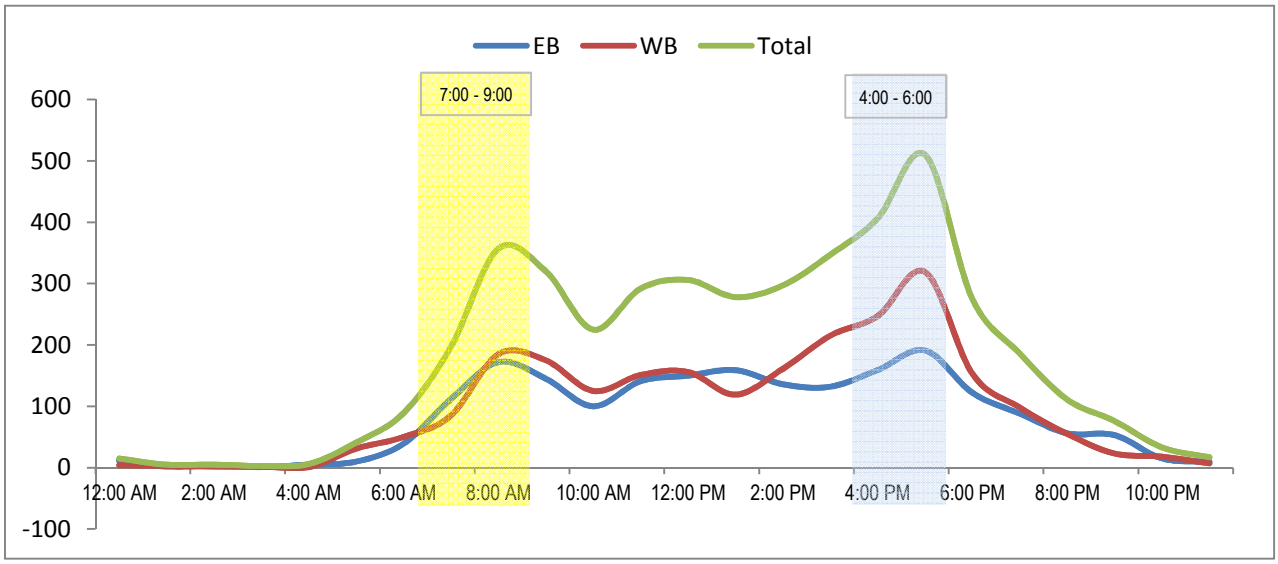
AVC Proj. No: *15-0345*

24 Hour Segment Volume			4,397

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	11	4	15
1:00 AM - 2:00 AM	2	3	5
2:00 AM - 3:00 AM	3	2	5
3:00 AM - 4:00 AM	1	2	3
4:00 AM - 5:00 AM	5	1	6
5:00 AM - 6:00 AM	10	31	41
6:00 AM - 7:00 AM	39	50	89
7:00 AM - 8:00 AM	112	85	197
8:00 AM - 9:00 AM	172	185	357
9:00 AM - 10:00 AM	145	175	320
10:00 AM - 11:00 AM	100	125	225
11:00 AM - 12:00 PM	141	151	292
Total	**741**	**814**	**1,555**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	150	156	306
1:00 PM - 2:00 PM	159	119	278
2:00 PM - 3:00 PM	136	161	297
3:00 PM - 4:00 PM	132	215	347
4:00 PM - 5:00 PM	159	247	406
5:00 PM - 6:00 PM	191	319	510
6:00 PM - 7:00 PM	122	153	275
7:00 PM - 8:00 PM	88	98	186
8:00 PM - 9:00 PM	56	55	111
9:00 PM - 10:00 PM	53	23	76
10:00 PM - 11:00 PM	15	18	33
11:00 PM - 12:00 AM	10	7	17
Total	**1,271**	**1,571**	**2,842**

24-Hour EB Volume	2,012	24-Hour WB Volume	2,385



Kimley»Horn

24 Hour Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: 17. Executive Dr, West of Towne Center Dr

Orientation: *East-West*

Date of Count: *Wednesday, May 13, 2015*

Analysts: *DASH*

Weather: *Sunny*

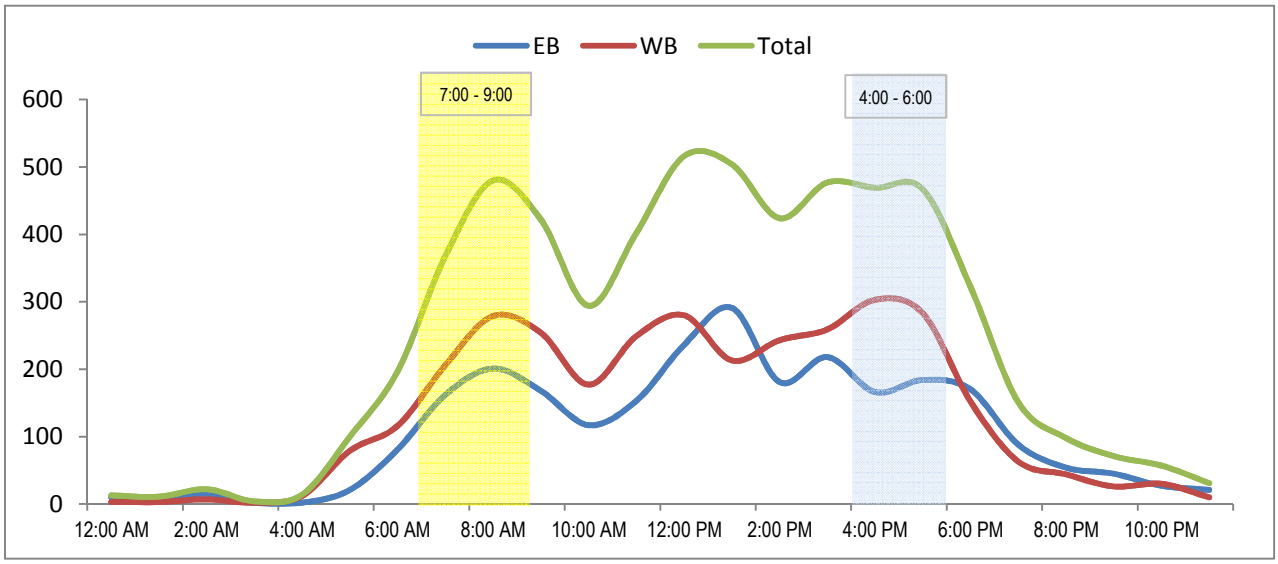
AVC Proj. No: *15-0345*

24 Hour Segment Volume			*5,914*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	10	3	13
1:00 AM - 2:00 AM	8	3	11
2:00 AM - 3:00 AM	15	7	22
3:00 AM - 4:00 AM	2	2	4
4:00 AM - 5:00 AM	2	12	14
5:00 AM - 6:00 AM	21	79	100
6:00 AM - 7:00 AM	81	116	197
7:00 AM - 8:00 AM	162	206	368
8:00 AM - 9:00 AM	201	279	480
9:00 AM - 10:00 AM	168	254	422
10:00 AM - 11:00 AM	117	177	294
11:00 AM - 12:00 PM	153	249	402
Total	**940**	**1,387**	**2,327**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	236	280	516
1:00 PM - 2:00 PM	291	213	504
2:00 PM - 3:00 PM	181	243	424
3:00 PM - 4:00 PM	218	259	477
4:00 PM - 5:00 PM	166	303	469
5:00 PM - 6:00 PM	184	283	467
6:00 PM - 7:00 PM	170	152	322
7:00 PM - 8:00 PM	88	63	151
8:00 PM - 9:00 PM	54	44	98
9:00 PM - 10:00 PM	45	26	71
10:00 PM - 11:00 PM	27	30	57
11:00 PM - 12:00 AM	21	10	31
Total	**1,681**	**1,906**	**3,587**

24-Hour	*EB*	*Volume*	*2,621*	*24-Hour*	*WB*	*Volume*	*3,293*



Kimley»Horn

24 Hour Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: 76. Executive Way, South of Executive Dr

Orientation: *North-South*

Date of Count: *Tuesday, June 16, 2015*

Analysts: *DASH*

Weather: *Sunny*

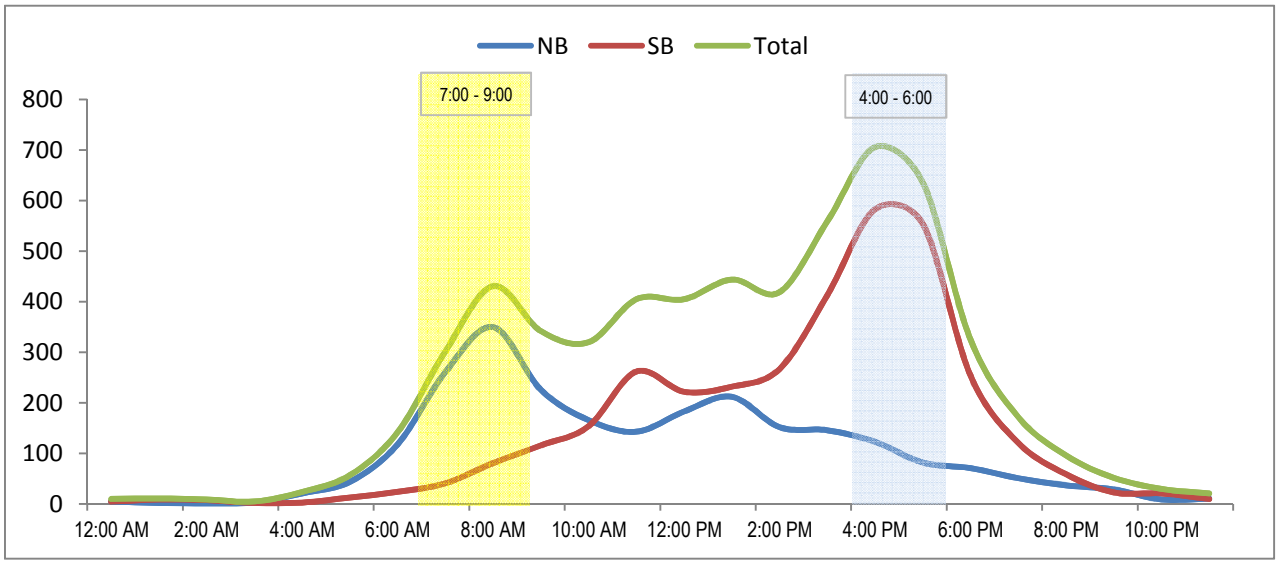
AVC Proj. No: *15-0345*

24 Hour Segment Volume			*5,923*

Time	Hourly Volume		
	NB	SB	Total
12:00 AM - 1:00 AM	5	5	10
1:00 AM - 2:00 AM	2	9	11
2:00 AM - 3:00 AM	1	8	9
3:00 AM - 4:00 AM	3	2	5
4:00 AM - 5:00 AM	21	3	24
5:00 AM - 6:00 AM	44	13	57
6:00 AM - 7:00 AM	118	24	142
7:00 AM - 8:00 AM	261	41	302
8:00 AM - 9:00 AM	350	81	431
9:00 AM - 10:00 AM	226	116	342
10:00 AM - 11:00 AM	166	154	320
11:00 AM - 12:00 PM	143	262	405
Total	**1,340**	**718**	**2,058**

Time	Hourly Volume		
	NB	SB	Total
12:00 PM - 1:00 PM	183	222	405
1:00 PM - 2:00 PM	212	232	444
2:00 PM - 3:00 PM	152	267	419
3:00 PM - 4:00 PM	146	413	559
4:00 PM - 5:00 PM	123	583	706
5:00 PM - 6:00 PM	82	554	636
6:00 PM - 7:00 PM	71	254	325
7:00 PM - 8:00 PM	51	121	172
8:00 PM - 9:00 PM	37	59	96
9:00 PM - 10:00 PM	29	23	52
10:00 PM - 11:00 PM	9	21	30
11:00 PM - 12:00 AM	11	10	21
Total	**1,106**	**2,759**	**3,865**

24-Hour	*NB*	*Volume*	*2,446*	*24-Hour*	*SB*	*Volume*	*3,477*



Kimley»Horn

24 Hour Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: 20. Genesee Ave, West of Science Center Dr

Orientation: *East-West*

Date of Count: *Tuesday, May 12, 2015*

Analysts: *DASH*

Weather: *Sunny*

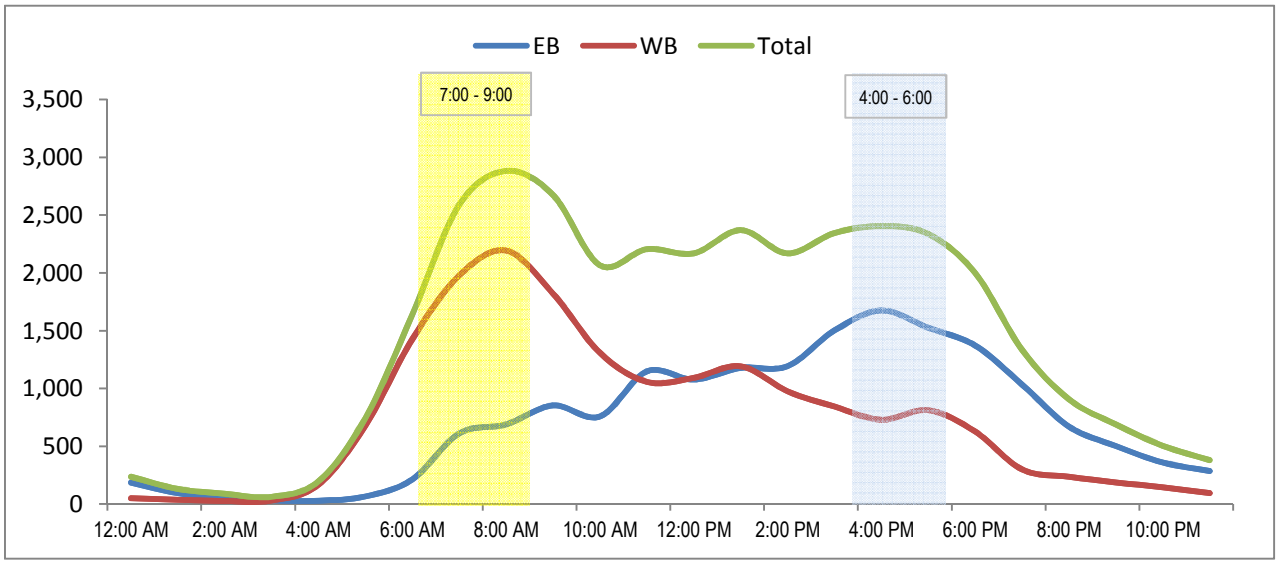
AVC Proj. No: *15-0345*

24 Hour Segment Volume			*35,124*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	186	50	236
1:00 AM - 2:00 AM	94	37	131
2:00 AM - 3:00 AM	63	26	89
3:00 AM - 4:00 AM	33	30	63
4:00 AM - 5:00 AM	29	168	197
5:00 AM - 6:00 AM	66	679	745
6:00 AM - 7:00 AM	213	1,427	1,640
7:00 AM - 8:00 AM	611	1,978	2,589
8:00 AM - 9:00 AM	689	2,193	2,882
9:00 AM - 10:00 AM	853	1,821	2,674
10:00 AM - 11:00 AM	758	1,308	2,066
11:00 AM - 12:00 PM	1,148	1,057	2205
Total	**4,743**	**10,774**	**15,517**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	1,077	1,092	2,169
1:00 PM - 2:00 PM	1,178	1,192	2,370
2:00 PM - 3:00 PM	1,193	976	2,169
3:00 PM - 4:00 PM	1,502	843	2,345
4:00 PM - 5:00 PM	1,675	730	2,405
5:00 PM - 6:00 PM	1,525	812	2,337
6:00 PM - 7:00 PM	1,372	627	1,999
7:00 PM - 8:00 PM	1,034	300	1,334
8:00 PM - 9:00 PM	670	236	906
9:00 PM - 10:00 PM	502	187	689
10:00 PM - 11:00 PM	359	145	504
11:00 PM - 12:00 AM	286	94	380
Total	**12,373**	**7,234**	**19,607**

24-Hour	*EB*	*Volume*	*17,116*	*24-Hour*	*WB*	*Volume*	*18,008*



Kimley»Horn

24 Hour Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: 59. Genesee Avenue Between I-5 NB & SB Ramps

Orientation: *East-West*

Date of Count: *Tuesday, May 12, 2015*

Analysts: *DASH*

Weather: *Sunny*

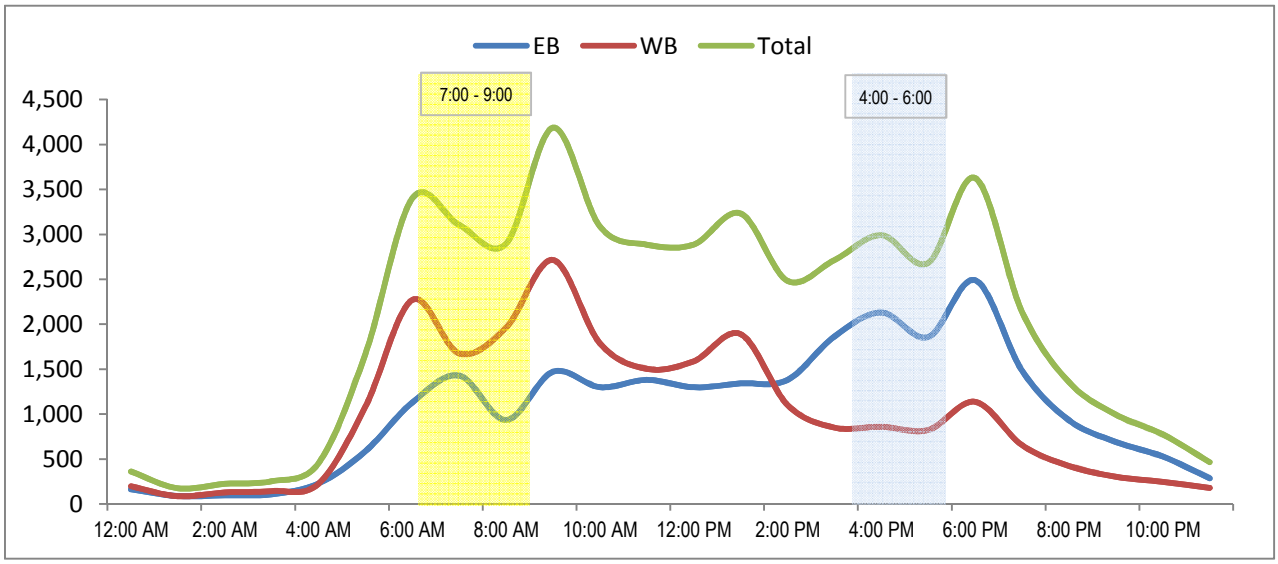
AVC Proj. No: *15-0345*

24 Hour Segment Volume			*49,051*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	163	198	361
1:00 AM - 2:00 AM	89	87	176
2:00 AM - 3:00 AM	96	129	225
3:00 AM - 4:00 AM	109	144	253
4:00 AM - 5:00 AM	228	226	454
5:00 AM - 6:00 AM	588	1,083	1,671
6:00 AM - 7:00 AM	1,130	2,271	3,401
7:00 AM - 8:00 AM	1,429	1,675	3,104
8:00 AM - 9:00 AM	934	1,963	2,897
9:00 AM - 10:00 AM	1,472	2,715	4,187
10:00 AM - 11:00 AM	1,300	1,788	3,088
11:00 AM - 12:00 PM	1,381	1,504	2885
Total	**8,919**	**13,783**	**22,702**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	1,299	1,588	2,887
1:00 PM - 2:00 PM	1,342	1,890	3,232
2:00 PM - 3:00 PM	1,381	1,102	2,483
3:00 PM - 4:00 PM	1,865	850	2,715
4:00 PM - 5:00 PM	2,131	860	2,991
5:00 PM - 6:00 PM	1,858	825	2,683
6:00 PM - 7:00 PM	2,490	1,137	3,627
7:00 PM - 8:00 PM	1,484	655	2,139
8:00 PM - 9:00 PM	932	424	1,356
9:00 PM - 10:00 PM	691	304	995
10:00 PM - 11:00 PM	529	246	775
11:00 PM - 12:00 AM	286	180	466
Total	**16,288**	**10,061**	**26,349**

24-Hour	*EB*	*Volume*	*25,207*	*24-Hour*	*WB*	*Volume*	*23,844*



Kimley»Horn

24 Hour Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: 19. Genesee Avenue North of Scripps Hospital

Orientation: *East-West*

Date of Count: *Tuesday, May 12, 2015*

Analysts: *DASH*

Weather: *Sunny*

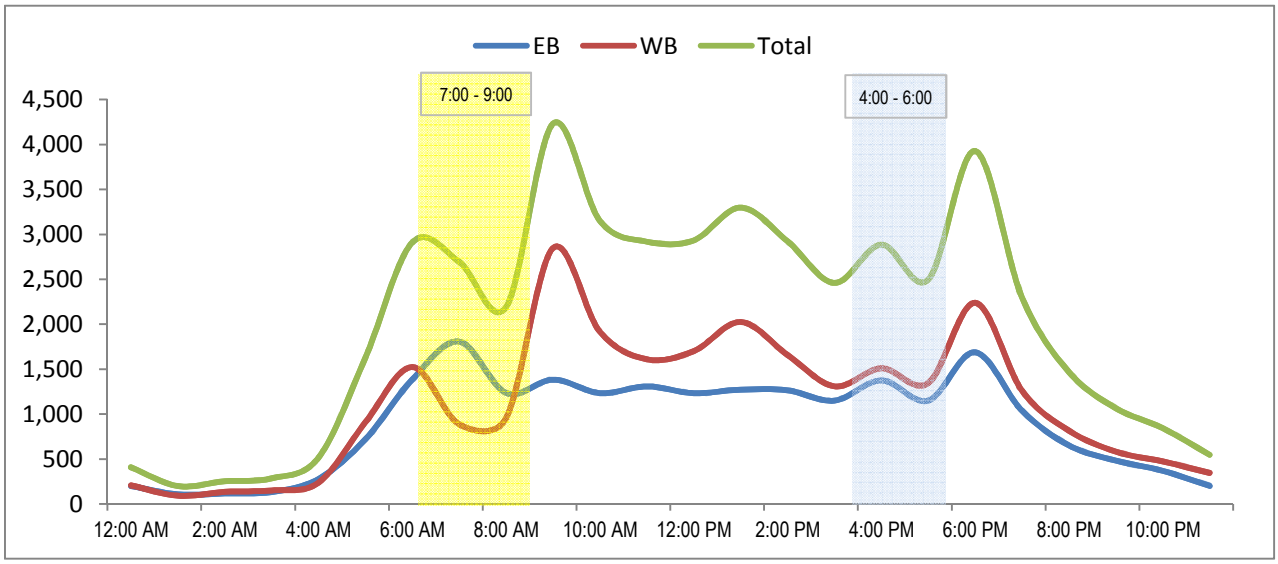
AVC Proj. No: *15-0345*

24 Hour Segment Volume			*48,542*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	201	208	409
1:00 AM - 2:00 AM	108	92	200
2:00 AM - 3:00 AM	117	136	253
3:00 AM - 4:00 AM	134	152	286
4:00 AM - 5:00 AM	279	238	517
5:00 AM - 6:00 AM	721	909	1,630
6:00 AM - 7:00 AM	1,387	1,524	2,911
7:00 AM - 8:00 AM	1,807	887	2,694
8:00 AM - 9:00 AM	1,236	957	2,193
9:00 AM - 10:00 AM	1,384	2,847	4,231
10:00 AM - 11:00 AM	1,234	1,916	3,150
11:00 AM - 12:00 PM	1,309	1,610	2919
Total	**9,917**	**11,476**	**21,393**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	1,233	1,701	2,934
1:00 PM - 2:00 PM	1,273	2,025	3,298
2:00 PM - 3:00 PM	1,265	1,659	2,924
3:00 PM - 4:00 PM	1,151	1,309	2,460
4:00 PM - 5:00 PM	1,376	1,510	2,886
5:00 PM - 6:00 PM	1,151	1,346	2,497
6:00 PM - 7:00 PM	1,688	2,239	3,927
7:00 PM - 8:00 PM	1,038	1,260	2,298
8:00 PM - 9:00 PM	652	816	1,468
9:00 PM - 10:00 PM	483	583	1,066
10:00 PM - 11:00 PM	370	474	844
11:00 PM - 12:00 AM	201	346	547
Total	**11,881**	**15,268**	**27,149**

24-Hour	*EB*	*Volume*	*21,798*	*24-Hour*	*WB*	*Volume*	*26,744*



Kimley»Horn

24 Hour Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: 18. Genesee Avenue South of Regents Road

Orientation: *North-South*

Date of Count: *Tuesday, May 12, 2015*

Analysts: *DASH*

Weather: *Sunny*

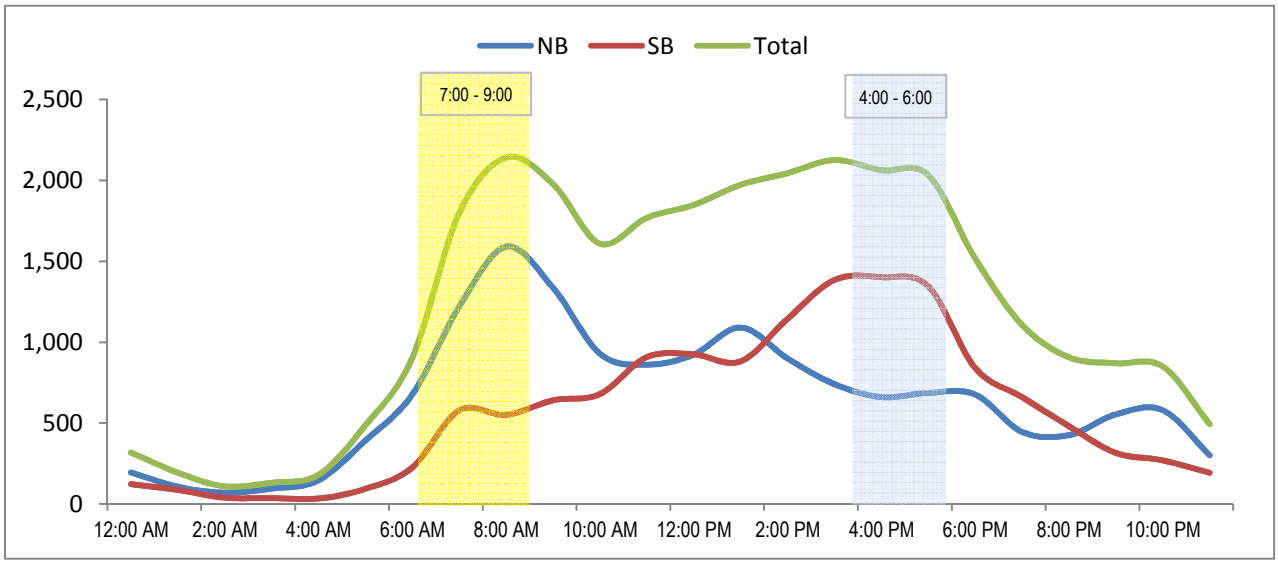
AVC Proj. No: *15-0345*

24 Hour Segment Volume			*29,457*

Time	Hourly Volume		
	NB	SB	Total
12:00 AM - 1:00 AM	195	123	318
1:00 AM - 2:00 AM	107	87	194
2:00 AM - 3:00 AM	70	39	109
3:00 AM - 4:00 AM	95	37	132
4:00 AM - 5:00 AM	147	34	181
5:00 AM - 6:00 AM	393	94	487
6:00 AM - 7:00 AM	678	226	904
7:00 AM - 8:00 AM	1,220	579	1,799
8:00 AM - 9:00 AM	1,591	551	2,142
9:00 AM - 10:00 AM	1,337	641	1,978
10:00 AM - 11:00 AM	929	680	1,609
11:00 AM - 12:00 PM	861	908	1769
Total	**7,623**	**3,999**	**11,622**

Time	Hourly Volume		
	NB	SB	Total
12:00 PM - 1:00 PM	924	925	1,849
1:00 PM - 2:00 PM	1,091	882	1,973
2:00 PM - 3:00 PM	900	1,145	2,045
3:00 PM - 4:00 PM	741	1,385	2,126
4:00 PM - 5:00 PM	661	1,402	2,063
5:00 PM - 6:00 PM	687	1,346	2,033
6:00 PM - 7:00 PM	677	841	1,518
7:00 PM - 8:00 PM	446	661	1,107
8:00 PM - 9:00 PM	426	481	907
9:00 PM - 10:00 PM	554	316	870
10:00 PM - 11:00 PM	580	270	850
11:00 PM - 12:00 AM	301	193	494
Total	**7,988**	**9,847**	**17,835**

24-Hour	*NB*	*Volume*	*15,611*	*24-Hour*	*SB*	*Volume*	*13,846*



Kimley»Horn

24 Hour Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: 12. Genesee Avenue South of La Jolla Village Dr

Orientation: *North-South*

Date of Count: *Tuesday, May 05, 2015*

Analysts: *DASH*

Weather: *Sunny*

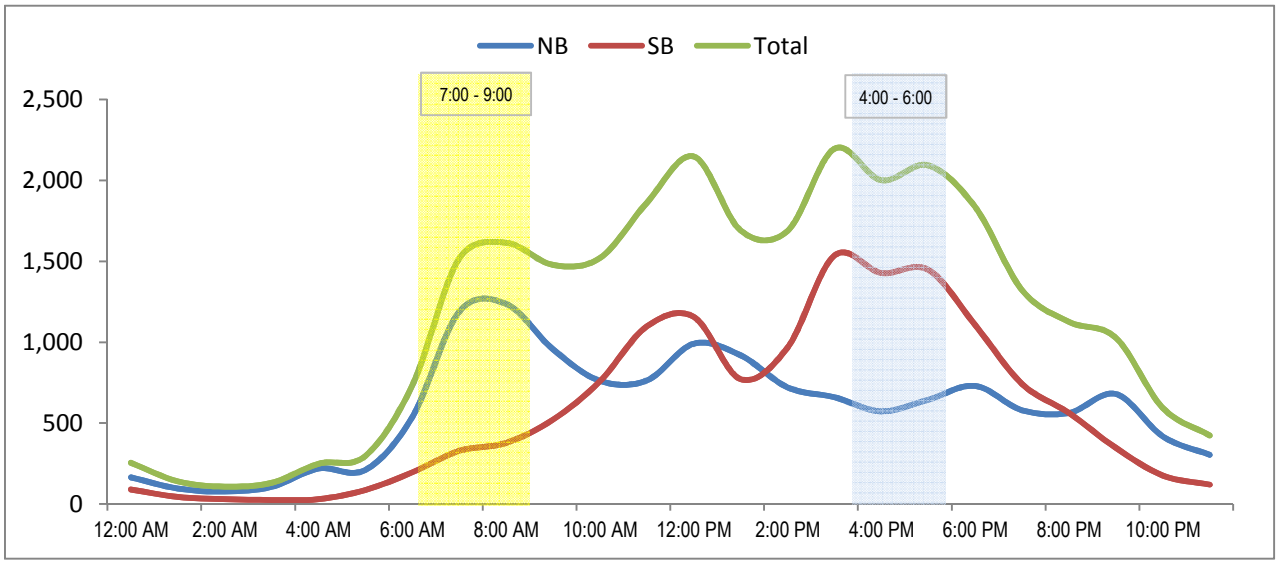
AVC Proj. No: *15-0345*

24 Hour Segment Volume			*28,054*

Time	Hourly Volume		
	NB	SB	Total
12:00 AM - 1:00 AM	165	90	255
1:00 AM - 2:00 AM	96	44	140
2:00 AM - 3:00 AM	77	31	108
3:00 AM - 4:00 AM	106	25	131
4:00 AM - 5:00 AM	219	30	249
5:00 AM - 6:00 AM	211	87	298
6:00 AM - 7:00 AM	538	196	734
7:00 AM - 8:00 AM	1,189	329	1,518
8:00 AM - 9:00 AM	1,237	378	1,615
9:00 AM - 10:00 AM	956	522	1,478
10:00 AM - 11:00 AM	761	759	1,520
11:00 AM - 12:00 PM	764	1,098	1862
Total	**6,319**	**3,589**	**9,908**

Time	Hourly Volume		
	NB	SB	Total
12:00 PM - 1:00 PM	991	1,157	2,148
1:00 PM - 2:00 PM	919	772	1,691
2:00 PM - 3:00 PM	721	967	1,688
3:00 PM - 4:00 PM	660	1,536	2,196
4:00 PM - 5:00 PM	573	1,428	2,001
5:00 PM - 6:00 PM	645	1,448	2,093
6:00 PM - 7:00 PM	730	1,106	1,836
7:00 PM - 8:00 PM	580	742	1,322
8:00 PM - 9:00 PM	563	563	1,126
9:00 PM - 10:00 PM	680	347	1,027
10:00 PM - 11:00 PM	418	176	594
11:00 PM - 12:00 AM	304	120	424
Total	**7,784**	**10,362**	**18,146**

24-Hour	*NB*	*Volume*	*14,103*	*24-Hour*	*SB*	*Volume*	*13,951*



Kimley»Horn

24 Hour Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: 15. Genesee Avenue North of Executive Dr

Orientation: *North-South*

Date of Count: *Tuesday, May 12, 2015*

Analysts: *DASH*

Weather: *Sunny*

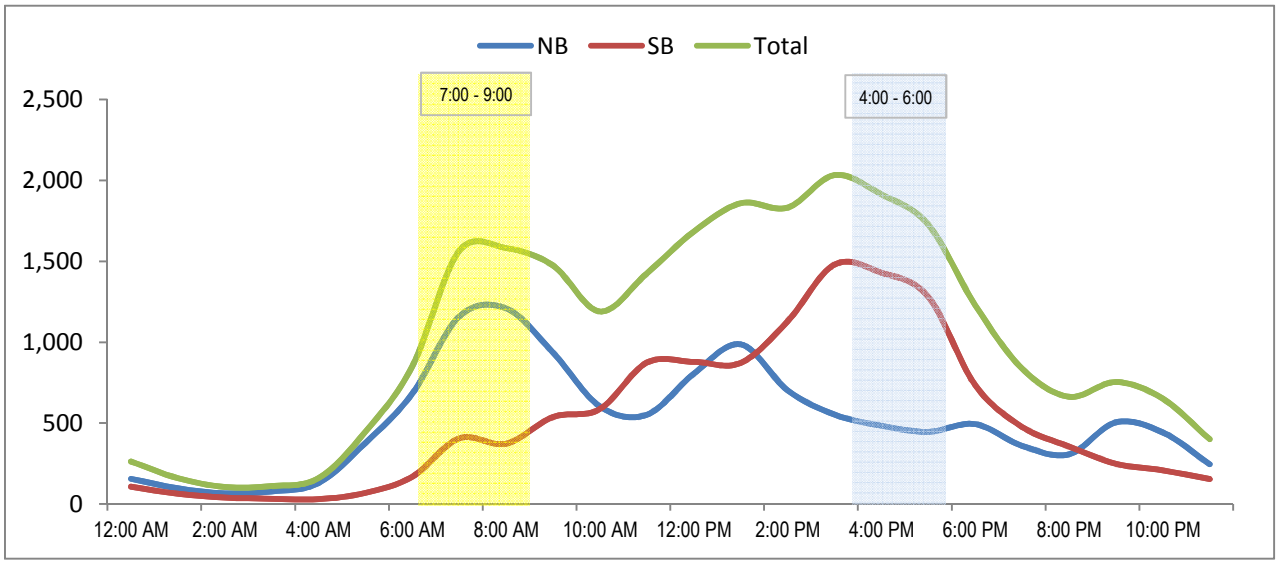
AVC Proj. No: *15-0345*

24 Hour Segment Volume			*24,921*

Time	Hourly Volume		
	NB	SB	Total
12:00 AM - 1:00 AM	156	107	263
1:00 AM - 2:00 AM	97	63	160
2:00 AM - 3:00 AM	66	40	106
3:00 AM - 4:00 AM	78	33	111
4:00 AM - 5:00 AM	130	30	160
5:00 AM - 6:00 AM	378	69	447
6:00 AM - 7:00 AM	683	169	852
7:00 AM - 8:00 AM	1,159	406	1,565
8:00 AM - 9:00 AM	1,209	373	1,582
9:00 AM - 10:00 AM	936	538	1,474
10:00 AM - 11:00 AM	603	587	1,190
11:00 AM - 12:00 PM	552	874	1426
Total	**6,047**	**3,289**	**9,336**

Time	Hourly Volume		
	NB	SB	Total
12:00 PM - 1:00 PM	805	879	1,684
1:00 PM - 2:00 PM	987	872	1,859
2:00 PM - 3:00 PM	703	1,129	1,832
3:00 PM - 4:00 PM	553	1,480	2,033
4:00 PM - 5:00 PM	484	1,430	1,914
5:00 PM - 6:00 PM	446	1,281	1,727
6:00 PM - 7:00 PM	494	736	1,230
7:00 PM - 8:00 PM	360	477	837
8:00 PM - 9:00 PM	307	356	663
9:00 PM - 10:00 PM	505	249	754
10:00 PM - 11:00 PM	443	208	651
11:00 PM - 12:00 AM	246	155	401
Total	**6,333**	**9,252**	**15,585**

24-Hour	*NB*	*Volume*	*12,380*	*24-Hour*	*SB*	*Volume*	*12,541*



Kimley»Horn

24 Hour Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: 10. Genesee Avenue North of Nobel Dr

Orientation: *North-South*

Date of Count: *Wednesday, May 06, 2015*

Analysts: *DASH*

Weather: *Sunny*

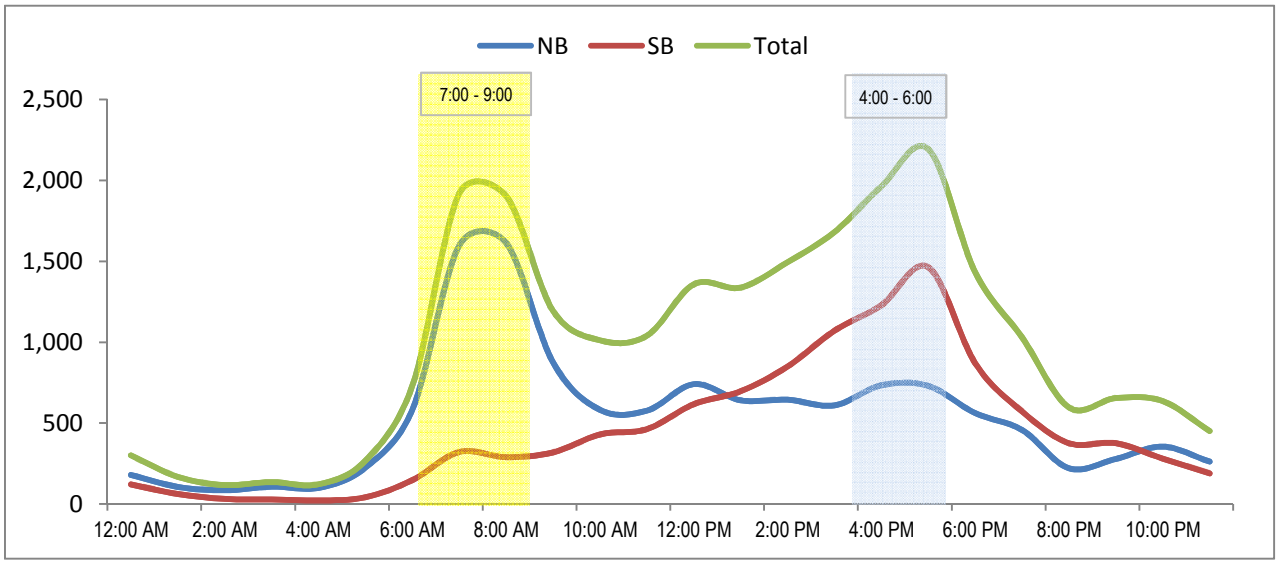
AVC Proj. No: *15-0345*

24 Hour Segment Volume			*23,744*

Time	Hourly Volume		
	NB	SB	Total
12:00 AM - 1:00 AM	180	121	301
1:00 AM - 2:00 AM	106	62	168
2:00 AM - 3:00 AM	85	32	117
3:00 AM - 4:00 AM	108	28	136
4:00 AM - 5:00 AM	100	22	122
5:00 AM - 6:00 AM	226	42	268
6:00 AM - 7:00 AM	583	148	731
7:00 AM - 8:00 AM	1,598	322	1,920
8:00 AM - 9:00 AM	1,614	290	1,904
9:00 AM - 10:00 AM	875	319	1,194
10:00 AM - 11:00 AM	582	430	1,012
11:00 AM - 12:00 PM	577	463	1040
Total	**6,634**	**2,279**	**8,913**

Time	Hourly Volume		
	NB	SB	Total
12:00 PM - 1:00 PM	741	617	1,358
1:00 PM - 2:00 PM	641	697	1,338
2:00 PM - 3:00 PM	645	850	1,495
3:00 PM - 4:00 PM	610	1,071	1,681
4:00 PM - 5:00 PM	734	1,229	1,963
5:00 PM - 6:00 PM	730	1,464	2,194
6:00 PM - 7:00 PM	562	871	1,433
7:00 PM - 8:00 PM	458	572	1,030
8:00 PM - 9:00 PM	221	376	597
9:00 PM - 10:00 PM	279	376	655
10:00 PM - 11:00 PM	355	281	636
11:00 PM - 12:00 AM	262	189	451
Total	**6,238**	**8,593**	**14,831**

24-Hour	*NB*	*Volume*	*12,872*	*24-Hour*	*SB*	*Volume*	*10,872*



Kimley»Horn

24 Hour Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: 9. Genesee Avenue South of Nobel Drive

Orientation: *North-South*

Date of Count: *Wednesday, May 06, 2015*

Analysts: *DASH*

Weather: *Sunny*

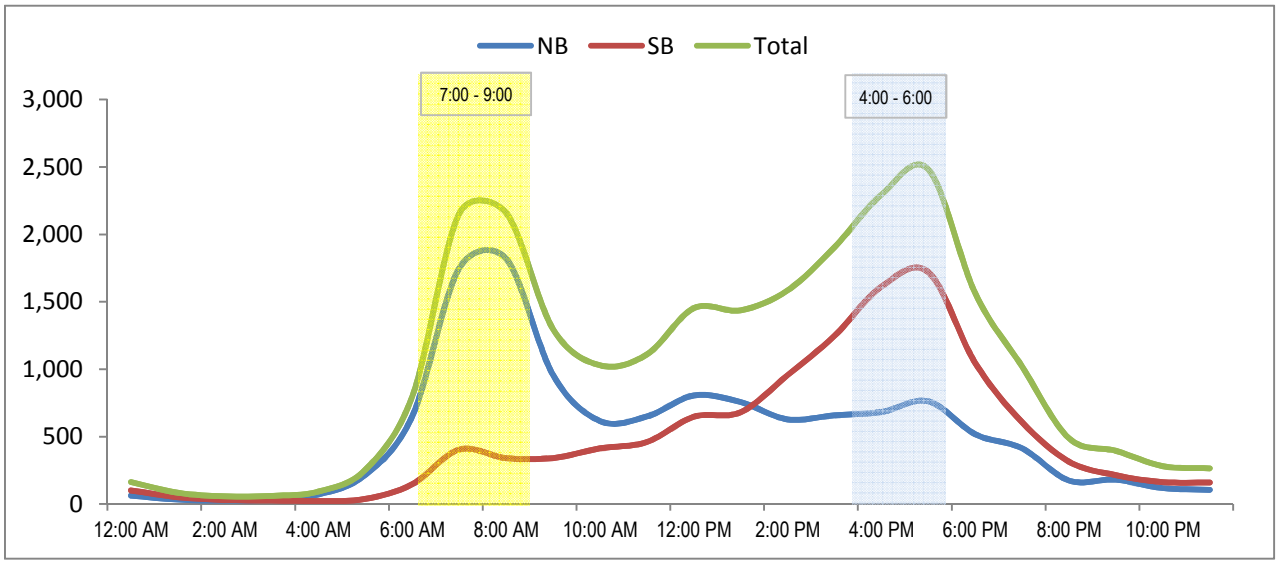
AVC Proj. No: *15-0345*

24 Hour Segment Volume			*24,431*

Time	Hourly Volume		
	NB	SB	Total
12:00 AM - 1:00 AM	62	101	163
1:00 AM - 2:00 AM	33	51	84
2:00 AM - 3:00 AM	27	30	57
3:00 AM - 4:00 AM	34	27	61
4:00 AM - 5:00 AM	71	22	93
5:00 AM - 6:00 AM	217	38	255
6:00 AM - 7:00 AM	653	147	800
7:00 AM - 8:00 AM	1,750	404	2,154
8:00 AM - 9:00 AM	1,820	340	2,160
9:00 AM - 10:00 AM	957	341	1,298
10:00 AM - 11:00 AM	616	413	1,029
11:00 AM - 12:00 PM	649	460	1109
Total	**6,889**	**2,374**	**9,263**

Time	Hourly Volume		
	NB	SB	Total
12:00 PM - 1:00 PM	805	647	1,452
1:00 PM - 2:00 PM	756	681	1,437
2:00 PM - 3:00 PM	628	956	1,584
3:00 PM - 4:00 PM	658	1,247	1,905
4:00 PM - 5:00 PM	682	1,612	2,294
5:00 PM - 6:00 PM	762	1,720	2,482
6:00 PM - 7:00 PM	518	1,047	1,565
7:00 PM - 8:00 PM	413	607	1,020
8:00 PM - 9:00 PM	174	314	488
9:00 PM - 10:00 PM	181	214	395
10:00 PM - 11:00 PM	118	163	281
11:00 PM - 12:00 AM	106	159	265
Total	**5,801**	**9,367**	**15,168**

24-Hour	*NB*	*Volume*	*12,690*	*24-Hour*	*SB*	*Volume*	*11,741*



Prepared by NDS/ATD

VOLUME

Genesee Ave Bet. Nobel Dr & Decoro St

Day: Tuesday
Date: 10/27/2015

City: San Diego
Project #: CA15_4322_001

DAILY TOTALS	NB	SB	EB	WB	Total
	12,746	12,145	0	0	24,891

AM Period	NB		SB		EB	WB	TOTAL		PM Period	NB		SB		EB	WB	TOTAL	
00:00	24		44				68		12:00	138		191				329	
00:15	10		21				31		12:15	154		135				289	
00:30	10		11				21		12:30	190		171				361	
00:45	10	54	23	99			33	153	12:45	151	633	152	649			303	1282
01:00	8		13				21		13:00	159		155				314	
01:15	6		13				19		13:15	174		149				323	
01:30	4		7				11		13:30	158		148				306	
01:45	3	21	11	44			14	65	13:45	136	627	200	652			336	1279
02:00	3		3				6		14:00	127		217				344	
02:15	5		5				10		14:15	225		215				440	
02:30	8		7				15		14:30	153		280				433	
02:45	5	21	5	20			10	41	14:45	148	653	336	1048			484	1701
03:00	5		8				13		15:00	156		372				528	
03:15	7		5				12		15:15	149		345				494	
03:30	5		4				9		15:30	155		377				532	
03:45	4	21	6	23			10	44	15:45	140	600	315	1409			455	2009
04:00	9		4				13		16:00	139		380				519	
04:15	13		3				16		16:15	159		413				572	
04:30	12		5				17		16:30	187		409				596	
04:45	22	56	3	15			25	71	16:45	157	642	375	1577			532	2219
05:00	44		2				46		17:00	154		355				509	
05:15	37		13				50		17:15	143		351				494	
05:30	84		12				96		17:30	159		352				511	
05:45	81	246	16	43			97	289	17:45	166	622	310	1368			476	1990
06:00	149		20				169		18:00	153		282				435	
06:15	155		22				177		18:15	157		247				404	
06:30	278		40				318		18:30	152		266				418	
06:45	266	848	96	178			362	1026	18:45	117	579	165	960			282	1539
07:00	318		106				424		19:00	104		183				287	
07:15	431		94				525		19:15	115		155				270	
07:30	430		125				555		19:30	107		123				230	
07:45	456	1635	105	430			561	2065	19:45	90	416	171	632			261	1048
08:00	395		68				463		20:00	86		139				225	
08:15	421		91				512		20:15	72		134				206	
08:30	439		97				536		20:30	80		107				187	
08:45	423	1678	87	343			510	2021	20:45	81	319	101	481			182	800
09:00	416		103				519		21:00	82		104				186	
09:15	325		96				421		21:15	68		86				154	
09:30	349		105				454		21:30	59		73				132	
09:45	248	1338	108	412			356	1750	21:45	55	264	81	344			136	608
10:00	149		99				248		22:00	47		81				128	
10:15	162		117				279		22:15	44		60				104	
10:30	178		125				303		22:30	37		46				83	
10:45	145	634	143	484			288	1118	22:45	29	157	46	233			75	390
11:00	133		144				277		23:00	38		33				71	
11:15	140		138				278		23:15	32		36				68	
11:30	166		150				316		23:30	23		30				53	
11:45	133	572	141	573			274	1145	23:45	17	110	29	128			46	238
TOTALS		7124		2664				9788	TOTALS		5622		9481				15103
SPLIT %		72.8%		27.2%				39.3%	SPLIT %		37.2%		62.8%				60.7%

DAILY TOTALS	NB	SB	EB	WB	Total
	12,746	12,145	0	0	24,891

AM Peak Hour	07:15	11:45			07:15	PM Peak Hour	14:15	16:00			16:00
AM Pk Volume	1712	638			2104	PM Pk Volume	682	1577			2219
Pk Hr Factor	0.939	0.835			0.938	Pk Hr Factor	0.758	0.955			0.931
7 - 9 Volume	3313	773	0	0	4086	4 - 6 Volume	1264	2945	0	0	4209
7 - 9 Peak Hour	07:15	07:00			07:15	4 - 6 Peak Hour	16:15	16:00			16:00
7 - 9 Pk Volume	1712	430	0	0	2104	4 - 6 Pk Volume	657	1577	0	0	2219
Pk Hr Factor	0.939	0.860	0.000	0.000	0.938	Pk Hr Factor	0.878	0.955	0.000	0.000	0.931

Prepared by NDS/ATD

VOLUME

Genesee Ave N/O The High School Access & S/O Decoro St

Day: Tuesday
Date: 10/20/2015

City: San Diego
Project #: CA15_4322_002

DAILY TOTALS	NB	SB	EB	WB	Total
	14,526	14,869	0	0	29,395

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	12		37						49		12:00	175		186						361	
00:15	15		22						37		12:15	215		187						402	
00:30	14		18						32		12:30	206		160						366	
00:45	8	49	13	90					21	139	12:45	212	808	185	718					397	1526
01:00	10		22						32		13:00	173		189						362	
01:15	4		13						17		13:15	213		165						378	
01:30	4		12						16		13:30	195		195						390	
01:45	7	25	7	54					14	79	13:45	135	716	212	761					347	1477
02:00	4		6						10		14:00	165		260						425	
02:15	6		6						12		14:15	256		262						518	
02:30	10		6						16		14:30	200		308						508	
02:45	2	22	6	24					8	46	14:45	177	798	330	1160					507	1958
03:00	5		3						8		15:00	203		431						634	
03:15	5		5						10		15:15	172		412						584	
03:30	9		0						9		15:30	172		444						616	
03:45	6	25	4	12					10	37	15:45	174	721	434	1721					608	2442
04:00	13		3						16		16:00	190		465						655	
04:15	8		3						11		16:15	191		469						660	
04:30	13		7						20		16:30	192		493						685	
04:45	23	57	8	21					31	78	16:45	193	766	473	1900					666	2666
05:00	30		11						41		17:00	206		506						712	
05:15	55		16						71		17:15	196		449						645	
05:30	87		25						112		17:30	197		489						686	
05:45	109	281	31	83					140	364	17:45	190	789	467	1911					657	2700
06:00	149		39						188		18:00	178		354						532	
06:15	201		44						245		18:15	191		306						497	
06:30	283		69						352		18:30	155		292						447	
06:45	278	911	127	279					405	1190	18:45	148	672	229	1181					377	1853
07:00	349		193						542		19:00	126		195						321	
07:15	477		153						630		19:15	144		180						324	
07:30	455		203						658		19:30	131		158						289	
07:45	509	1790	144	693					653	2483	19:45	105	506	133	666					238	1172
08:00	438		130						568		20:00	91		158						249	
08:15	461		133						594		20:15	106		116						222	
08:30	451		125						576		20:30	110		101						211	
08:45	438	1788	142	530					580	2318	20:45	101	408	132	507					233	915
09:00	431		114						545		21:00	94		129						223	
09:15	313		132						445		21:15	91		109						200	
09:30	273		138						411		21:30	62		78						140	
09:45	250	1267	116	500					366	1767	21:45	70	317	83	399					153	716
10:00	223		115						338		22:00	60		75						135	
10:15	199		130						329		22:15	41		90						131	
10:30	210		161						371		22:30	44		58						102	
10:45	179	811	145	551					324	1362	22:45	38	183	54	277					92	460
11:00	170		168						338		23:00	42		38						80	
11:15	156		160						316		23:15	36		27						63	
11:30	197		202						399		23:30	26		43						69	
11:45	166	689	165	695					331	1384	23:45	23	127	28	136					51	263
TOTALS		7715		3532						11247	TOTALS		6811		11337						18148
SPLIT %		68.6%		31.4%						38.3%	SPLIT %		37.5%		62.5%						61.7%

DAILY TOTALS	NB	SB	EB	WB	Total
	14,526	14,869	0	0	29,395

AM Peak Hour	07:15	11:30			07:15	PM Peak Hour	14:15	16:15			16:15
AM Pk Volume	1879	740			2509	PM Pk Volume	836	1941			2723
Pk Hr Factor	0.923	0.916			0.953	Pk Hr Factor	0.816	0.959			0.956
7 - 9 Volume	3578	1223	0	0	4801	4 - 6 Volume	1555	3811	0	0	5366
7 - 9 Peak Hour	07:15	07:00			07:15	4 - 6 Peak Hour	16:45	16:15			16:15
7 - 9 Pk Volume	1879	693	0	0	2509	4 - 6 Pk Volume	792	1941	0	0	2723
Pk Hr Factor	0.923	0.853	0.000	0.000	0.953	Pk Hr Factor	0.961	0.959	0.000	0.000	0.956

Kimley»Horn

24 Hour Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: 8. Genesee Avenue North of Centurion Square

Orientation: *North-South*

Date of Count: *Tuesday, May 12, 2015*

Analysts: *DASH*

Weather: *Sunny*

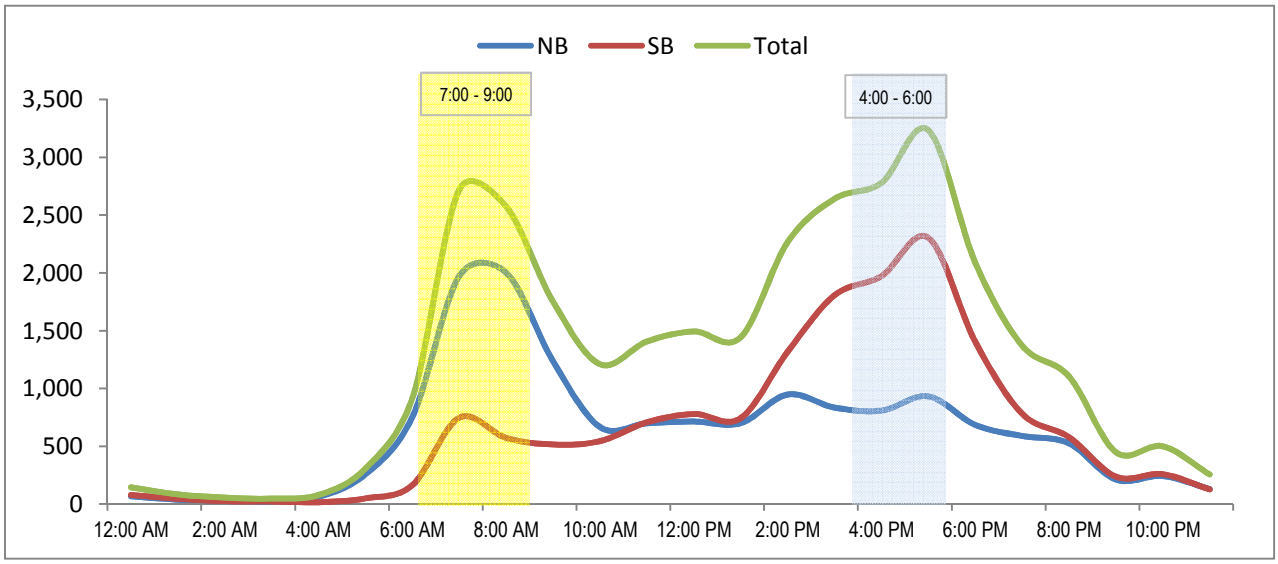
AVC Proj. No: *15-0345*

24 Hour Segment Volume			*30,922*

Time	Hourly Volume		
	NB	SB	Total
12:00 AM - 1:00 AM	67	78	145
1:00 AM - 2:00 AM	38	45	83
2:00 AM - 3:00 AM	31	25	56
3:00 AM - 4:00 AM	25	22	47
4:00 AM - 5:00 AM	63	15	78
5:00 AM - 6:00 AM	258	49	307
6:00 AM - 7:00 AM	753	163	916
7:00 AM - 8:00 AM	1,972	747	2,719
8:00 AM - 9:00 AM	2,002	572	2,574
9:00 AM - 10:00 AM	1,237	515	1,752
10:00 AM - 11:00 AM	666	544	1,210
11:00 AM - 12:00 PM	699	707	1406
Total	**7,811**	**3,482**	**11,293**

Time	Hourly Volume		
	NB	SB	Total
12:00 PM - 1:00 PM	714	779	1,493
1:00 PM - 2:00 PM	700	743	1,443
2:00 PM - 3:00 PM	948	1,317	2,265
3:00 PM - 4:00 PM	835	1,806	2,641
4:00 PM - 5:00 PM	808	1,971	2,779
5:00 PM - 6:00 PM	932	2,304	3,236
6:00 PM - 7:00 PM	685	1,406	2,091
7:00 PM - 8:00 PM	589	783	1,372
8:00 PM - 9:00 PM	525	579	1,104
9:00 PM - 10:00 PM	212	237	449
10:00 PM - 11:00 PM	242	258	500
11:00 PM - 12:00 AM	130	126	256
Total	**7,320**	**12,309**	**19,629**

24-Hour	*NB*	*Volume*	*15,131*	*24-Hour*	*SB*	*Volume*	*15,791*



Prepared by NDS/ATD

VOLUME

Genesee Ave N/O SB Off Ramp to SR-52 & S/O April Ct

Day: Tuesday
Date: 10/20/2015

City: San Diego
Project #: CA15_4322_003

DAILY TOTALS	NB	SB	EB	WB	Total
	16,247	15,533	0	0	31,780

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	12		25						37		12:00	188		213						401	
00:15	13		12						25		12:15	229		188						417	
00:30	13		9						22		12:30	200		194						394	
00:45	7	45	5	51					12	96	12:45	229	846	165	760					394	1606
01:00	12		15						27		13:00	197		188						385	
01:15	4		4						8		13:15	187		177						364	
01:30	3		10						13		13:30	244		186						430	
01:45	7	26	4	33					11	59	13:45	225	853	204	755					429	1608
02:00	6		6						12		14:00	234		238						472	
02:15	7		6						13		14:15	262		329						591	
02:30	7		5						12		14:30	244		339						583	
02:45	2	22	2	19					4	41	14:45	261	1001	364	1270					625	2271
03:00	4		1						5		15:00	220		368						588	
03:15	4		2						6		15:15	222		425						647	
03:30	9		1						10		15:30	219		395						614	
03:45	5	22	0	4					5	26	15:45	235	896	411	1599					646	2495
04:00	7		6						13		16:00	241		458						699	
04:15	8		7						15		16:15	243		478						721	
04:30	13		8						21		16:30	229		478						707	
04:45	23	51	12	33					35	84	16:45	255	968	448	1862					703	2830
05:00	27		20						47		17:00	281		461						742	
05:15	53		18						71		17:15	258		472						730	
05:30	96		40						136		17:30	249		433						682	
05:45	122	298	39	117					161	415	17:45	250	1038	413	1779					663	2817
06:00	179		64						243		18:00	212		409						621	
06:15	268		79						347		18:15	190		333						523	
06:30	418		104						522		18:30	197		287						484	
06:45	411	1276	187	434					598	1710	18:45	172	771	198	1227					370	1998
07:00	369		243						612		19:00	164		198						362	
07:15	457		265						722		19:15	153		171						324	
07:30	479		290						769		19:30	142		149						291	
07:45	395	1700	292	1090					687	2790	19:45	123	582	120	638					243	1220
08:00	451		175						626		20:00	111		113						224	
08:15	458		188						646		20:15	127		94						221	
08:30	485		205						690		20:30	105		111						216	
08:45	398	1792	207	775					605	2567	20:45	124	467	120	438					244	905
09:00	350		160						510		21:00	120		84						204	
09:15	321		152						473		21:15	105		87						192	
09:30	314		161						475		21:30	86		58						144	
09:45	234	1219	157	630					391	1849	21:45	89	400	65	294					154	694
10:00	218		160						378		22:00	75		58						133	
10:15	220		170						390		22:15	52		66						118	
10:30	193		166						359		22:30	55		44						99	
10:45	174	805	168	664					342	1469	22:45	51	233	50	218					101	451
11:00	207		175						382		23:00	44		34						78	
11:15	192		177						369		23:15	38		24						62	
11:30	221		221						442		23:30	36		26						62	
11:45	177	797	169	742					346	1539	23:45	21	139	17	101					38	240
TOTALS		8053		4592						12645	TOTALS		8194		10941						19135
SPLIT %		63.7%		36.3%						39.8%	SPLIT %		42.8%		57.2%						60.2%

DAILY TOTALS	NB	SB	EB	WB	Total
	16,247	15,533	0	0	31,780

AM Peak Hour	08:00	07:00				07:15	PM Peak Hour	16:45	16:15				16:30
AM Pk Volume	1792	1090				2804	PM Pk Volume	1043	1865				2882
Pk Hr Factor	0.924	0.933				0.912	Pk Hr Factor	0.928	0.975				0.971
7 - 9 Volume	3492	1865	0	0		5357	4 - 6 Volume	2006	3641	0	0		5647
7 - 9 Peak Hour	08:00	07:00				07:15	4 - 6 Peak Hour	16:45	16:15				16:30
7 - 9 Pk Volume	1792	1090	0	0		2804	4 - 6 Pk Volume	1043	1865	0	0		2882
Pk Hr Factor	0.924	0.933	0.000	0.000		0.912	Pk Hr Factor	0.928	0.975	0.000	0.000		0.971

Kimley»Horn

24 Hour Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: 2. Genesee Avenu North of SR-52 WB Ramps

Orientation: *North-South*

Date of Count: *Tuesday, May 12, 2015*

Analysts: *DASH*

Weather: *Sunny*

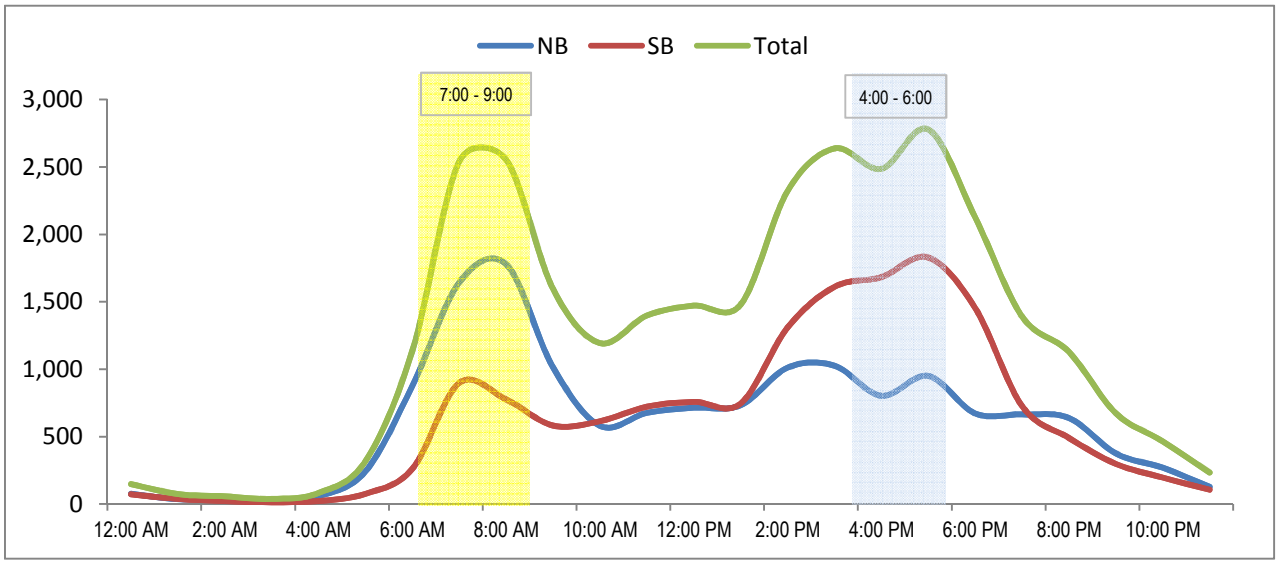
AVC Proj. No: *15-0345*

24 Hour Segment Volume			*30,325*

Time	Hourly Volume		
	NB	SB	Total
12:00 AM - 1:00 AM	76	72	148
1:00 AM - 2:00 AM	36	38	74
2:00 AM - 3:00 AM	35	22	57
3:00 AM - 4:00 AM	25	13	38
4:00 AM - 5:00 AM	59	23	82
5:00 AM - 6:00 AM	242	76	318
6:00 AM - 7:00 AM	876	261	1,137
7:00 AM - 8:00 AM	1,643	898	2,541
8:00 AM - 9:00 AM	1,778	776	2,554
9:00 AM - 10:00 AM	1,013	582	1,595
10:00 AM - 11:00 AM	580	614	1,194
11:00 AM - 12:00 PM	676	722	1398
Total	**7,039**	**4,097**	**11,136**

Time	Hourly Volume		
	NB	SB	Total
12:00 PM - 1:00 PM	714	758	1,472
1:00 PM - 2:00 PM	733	746	1,479
2:00 PM - 3:00 PM	1,012	1,309	2,321
3:00 PM - 4:00 PM	1,026	1,611	2,637
4:00 PM - 5:00 PM	803	1,683	2,486
5:00 PM - 6:00 PM	950	1,828	2,778
6:00 PM - 7:00 PM	672	1,454	2,126
7:00 PM - 8:00 PM	664	727	1,391
8:00 PM - 9:00 PM	638	490	1,128
9:00 PM - 10:00 PM	375	298	673
10:00 PM - 11:00 PM	269	196	465
11:00 PM - 12:00 AM	127	106	233
Total	**7,983**	**11,206**	**19,189**

24-Hour	*NB*	*Volume*	*15,022*	*24-Hour*	*SB*	*Volume*	*15,303*



Kimley»Horn

24 Hour Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: 67. Genesee Avenue Between SR-52 EB & WB Ramps

Orientation: *North-South*

Date of Count: *Tuesday, May 12, 2015*

Analysts: *DASH*

Weather: *Sunny*

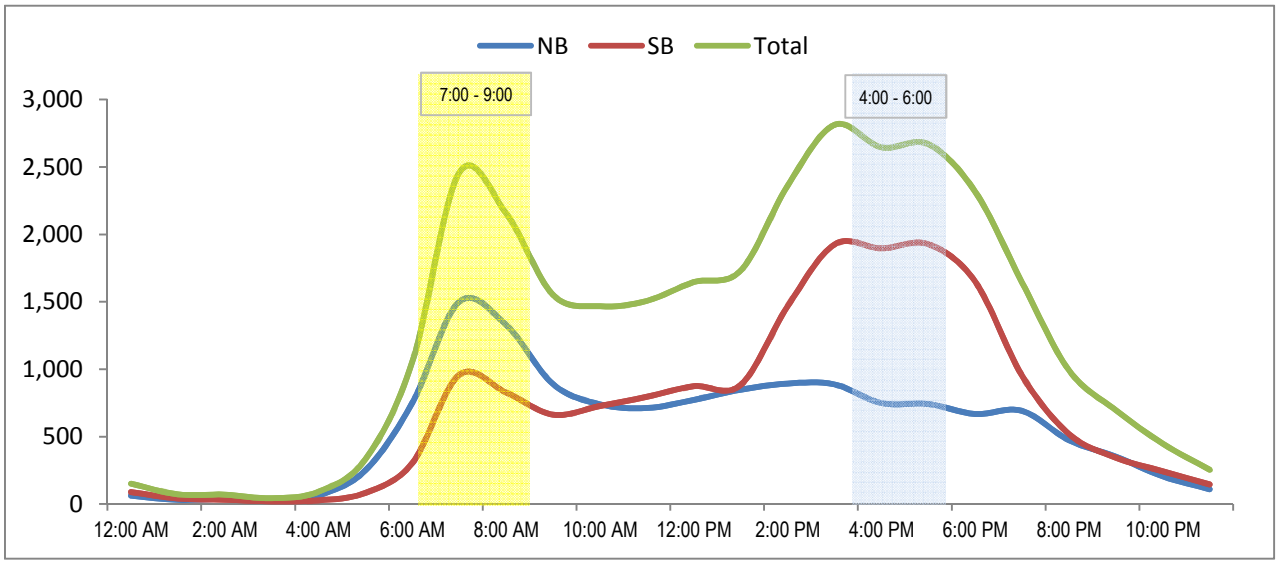
AVC Proj. No: *15-0345*

24 Hour Segment Volume			31,170

Time	Hourly Volume		
	NB	SB	Total
12:00 AM - 1:00 AM	62	89	151
1:00 AM - 2:00 AM	31	41	72
2:00 AM - 3:00 AM	38	32	70
3:00 AM - 4:00 AM	23	20	43
4:00 AM - 5:00 AM	65	27	92
5:00 AM - 6:00 AM	250	83	333
6:00 AM - 7:00 AM	751	304	1,055
7:00 AM - 8:00 AM	1,500	958	2,458
8:00 AM - 9:00 AM	1,329	827	2,156
9:00 AM - 10:00 AM	889	663	1,552
10:00 AM - 11:00 AM	740	727	1,467
11:00 AM - 12:00 PM	712	795	1507
Total	**6,390**	**4,566**	**10,956**

Time	Hourly Volume		
	NB	SB	Total
12:00 PM - 1:00 PM	772	874	1,646
1:00 PM - 2:00 PM	848	883	1,731
2:00 PM - 3:00 PM	894	1,466	2,360
3:00 PM - 4:00 PM	887	1,925	2,812
4:00 PM - 5:00 PM	749	1,896	2,645
5:00 PM - 6:00 PM	742	1,927	2,669
6:00 PM - 7:00 PM	668	1,650	2,318
7:00 PM - 8:00 PM	691	952	1,643
8:00 PM - 9:00 PM	473	519	992
9:00 PM - 10:00 PM	352	344	696
10:00 PM - 11:00 PM	205	243	448
11:00 PM - 12:00 AM	109	145	254
Total	**7,390**	**12,824**	**20,214**

24-Hour NB Volume	13,780	24-Hour SB Volume	17,390



Kimley»Horn

24 Hour Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: 1.Genesee Avenu South o f SR-52 EB Ramps

Orientation: *North-South*

Date of Count: *Tuesday, May 12, 2015*

Analysts: *DASH*

Weather: *Sunny*

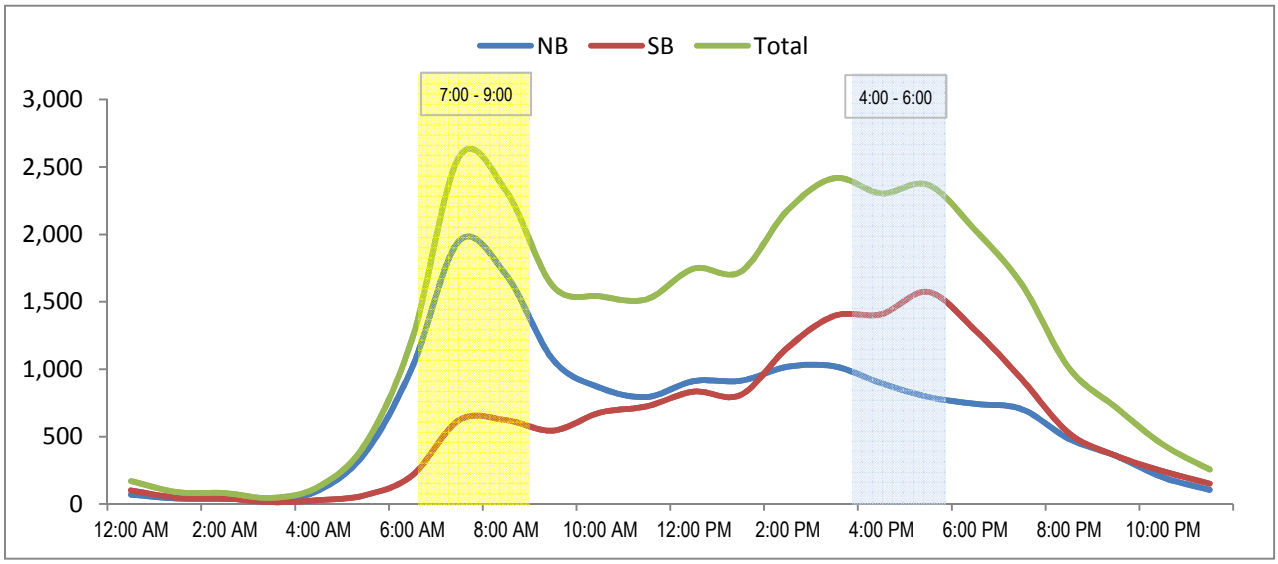
AVC Proj. No: *15-0345*

24 Hour Segment Volume			*30,581*

Time	Hourly Volume		
	NB	SB	Total
12:00 AM - 1:00 AM	69	101	170
1:00 AM - 2:00 AM	41	47	88
2:00 AM - 3:00 AM	39	42	81
3:00 AM - 4:00 AM	32	14	46
4:00 AM - 5:00 AM	101	28	129
5:00 AM - 6:00 AM	382	66	448
6:00 AM - 7:00 AM	1,016	213	1,229
7:00 AM - 8:00 AM	1,953	623	2,576
8:00 AM - 9:00 AM	1,699	622	2,321
9:00 AM - 10:00 AM	1,070	545	1,615
10:00 AM - 11:00 AM	863	678	1,541
11:00 AM - 12:00 PM	794	725	1519
Total	**8,059**	**3,704**	**11,763**

Time	Hourly Volume		
	NB	SB	Total
12:00 PM - 1:00 PM	912	834	1,746
1:00 PM - 2:00 PM	914	809	1,723
2:00 PM - 3:00 PM	1,018	1,161	2,179
3:00 PM - 4:00 PM	1,021	1,396	2,417
4:00 PM - 5:00 PM	896	1,408	2,304
5:00 PM - 6:00 PM	794	1,573	2,367
6:00 PM - 7:00 PM	743	1,289	2,032
7:00 PM - 8:00 PM	703	923	1,626
8:00 PM - 9:00 PM	483	526	1,009
9:00 PM - 10:00 PM	358	359	717
10:00 PM - 11:00 PM	198	244	442
11:00 PM - 12:00 AM	105	151	256
Total	**8,145**	**10,673**	**18,818**

24-Hour	*NB*	*Volume*	*16,204*	*24-Hour*	*SB*	*Volume*	*14,377*



Kimley»Horn

24 Hour Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: 27. Gilman Dr, North of La Jolla Village Dr

Orientation: *North-South*

Date of Count: *Tuesday, May 05, 2015*

Analysts: *DASH*

Weather: *Sunny*

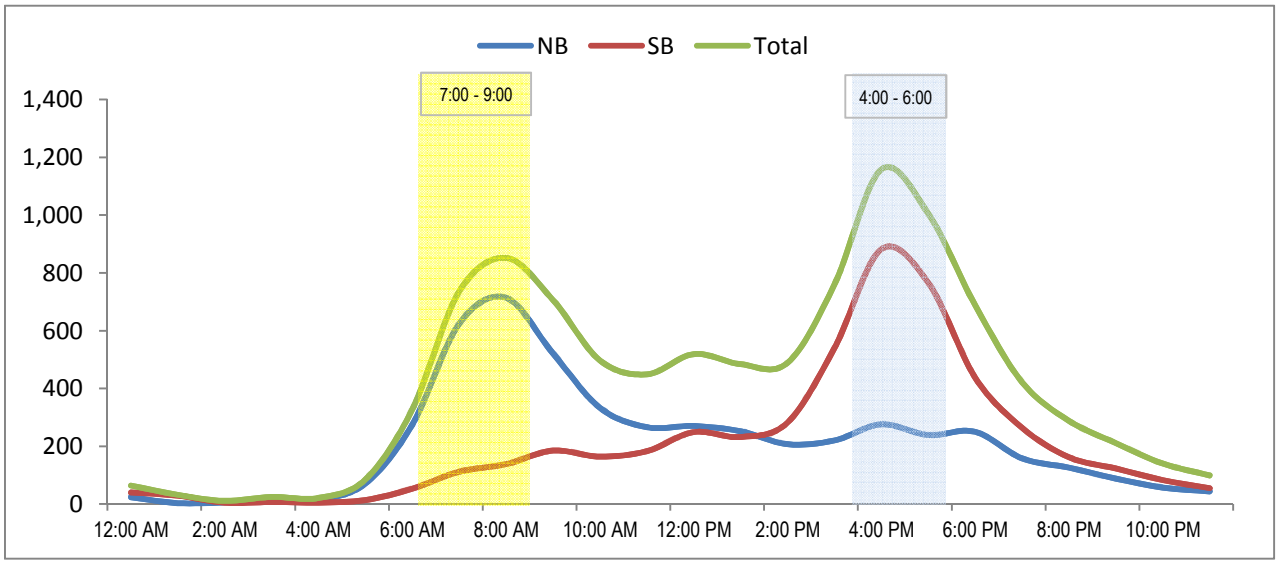
AVC Proj. No: *15-0345*

24 Hour Segment Volume			*10,069*

Time	Hourly Volume		
	NB	SB	Total
12:00 AM - 1:00 AM	24	40	64
1:00 AM - 2:00 AM	3	29	32
2:00 AM - 3:00 AM	6	5	11
3:00 AM - 4:00 AM	18	7	25
4:00 AM - 5:00 AM	16	5	21
5:00 AM - 6:00 AM	71	14	85
6:00 AM - 7:00 AM	275	53	328
7:00 AM - 8:00 AM	624	112	736
8:00 AM - 9:00 AM	714	138	852
9:00 AM - 10:00 AM	521	185	706
10:00 AM - 11:00 AM	333	164	497
11:00 AM - 12:00 PM	266	183	449
Total	**2,871**	**935**	**3,806**

Time	Hourly Volume		
	NB	SB	Total
12:00 PM - 1:00 PM	270	249	519
1:00 PM - 2:00 PM	252	232	484
2:00 PM - 3:00 PM	207	282	489
3:00 PM - 4:00 PM	220	540	760
4:00 PM - 5:00 PM	276	882	1,158
5:00 PM - 6:00 PM	239	766	1,005
6:00 PM - 7:00 PM	250	438	688
7:00 PM - 8:00 PM	158	264	422
8:00 PM - 9:00 PM	126	162	288
9:00 PM - 10:00 PM	88	123	211
10:00 PM - 11:00 PM	57	83	140
11:00 PM - 12:00 AM	44	55	99
Total	**2,187**	**4,076**	**6,263**

24-Hour	*NB*	*Volume*	*5,058*	*24-Hour*	*SB*	*Volume*	*5,011*



Kimley»Horn

24 Hour Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: 28. Gilman Dr, South of La Jolla Village Dr

Orientation: *North-South*

Date of Count: *Tuesday, May 05, 2015*

Analysts: *DASH*

Weather: *Sunny*

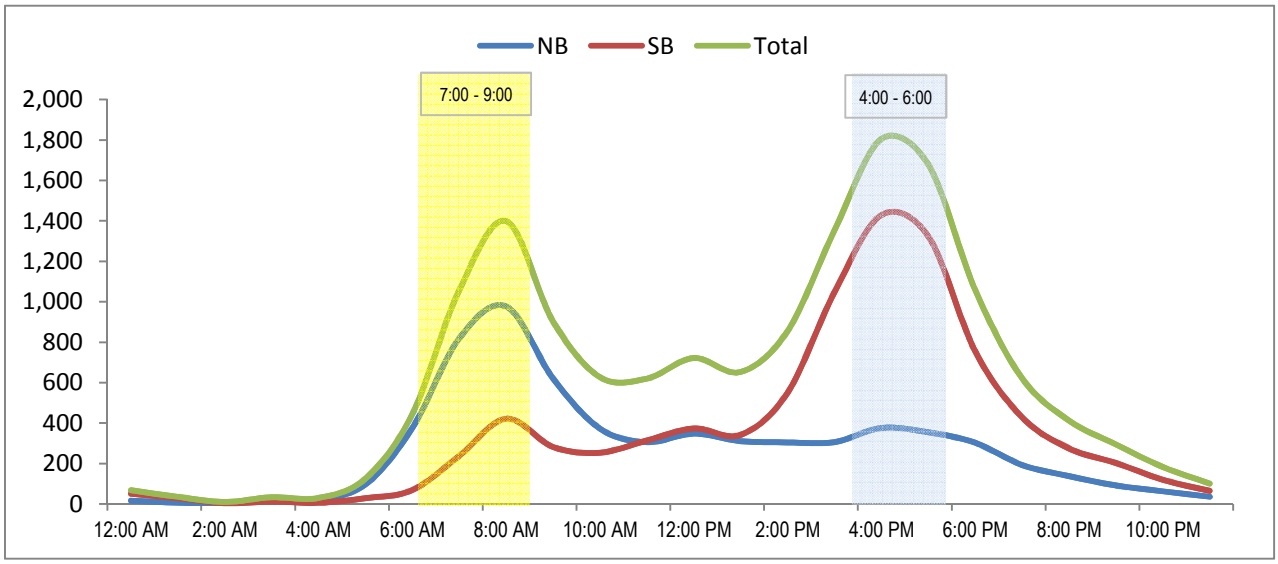
AVC Proj. No: *15-0345*

24 Hour Segment Volume			*15,095*

Time	Hourly Volume		
	NB	SB	Total
12:00 AM - 1:00 AM	17	51	68
1:00 AM - 2:00 AM	7	29	36
2:00 AM - 3:00 AM	6	4	10
3:00 AM - 4:00 AM	22	12	34
4:00 AM - 5:00 AM	24	6	30
5:00 AM - 6:00 AM	97	29	126
6:00 AM - 7:00 AM	376	69	445
7:00 AM - 8:00 AM	819	238	1,057
8:00 AM - 9:00 AM	977	422	1,399
9:00 AM - 10:00 AM	621	282	903
10:00 AM - 11:00 AM	373	254	627
11:00 AM - 12:00 PM	306	314	620
Total	**3,645**	**1,710**	**5,355**

Time	Hourly Volume		
	NB	SB	Total
12:00 PM - 1:00 PM	348	374	722
1:00 PM - 2:00 PM	311	342	653
2:00 PM - 3:00 PM	305	550	855
3:00 PM - 4:00 PM	306	1,047	1,353
4:00 PM - 5:00 PM	376	1,429	1,805
5:00 PM - 6:00 PM	355	1,324	1,679
6:00 PM - 7:00 PM	303	756	1,059
7:00 PM - 8:00 PM	193	429	622
8:00 PM - 9:00 PM	138	275	413
9:00 PM - 10:00 PM	92	203	295
10:00 PM - 11:00 PM	63	120	183
11:00 PM - 12:00 AM	36	65	101
Total	**2,826**	**6,914**	**9,740**

24-Hour	*NB*	*Volume*	*6,471*	*24-Hour*	*SB*	*Volume*	*8,624*



Kimley»Horn

24 Hour Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: 56. Gilman Drive North of I-5 SB On Ramp

Orientation: *East-West*

Date of Count: *Tuesday, April 28, 2015*

Analysts: *DASH*

Weather: *Sunny*

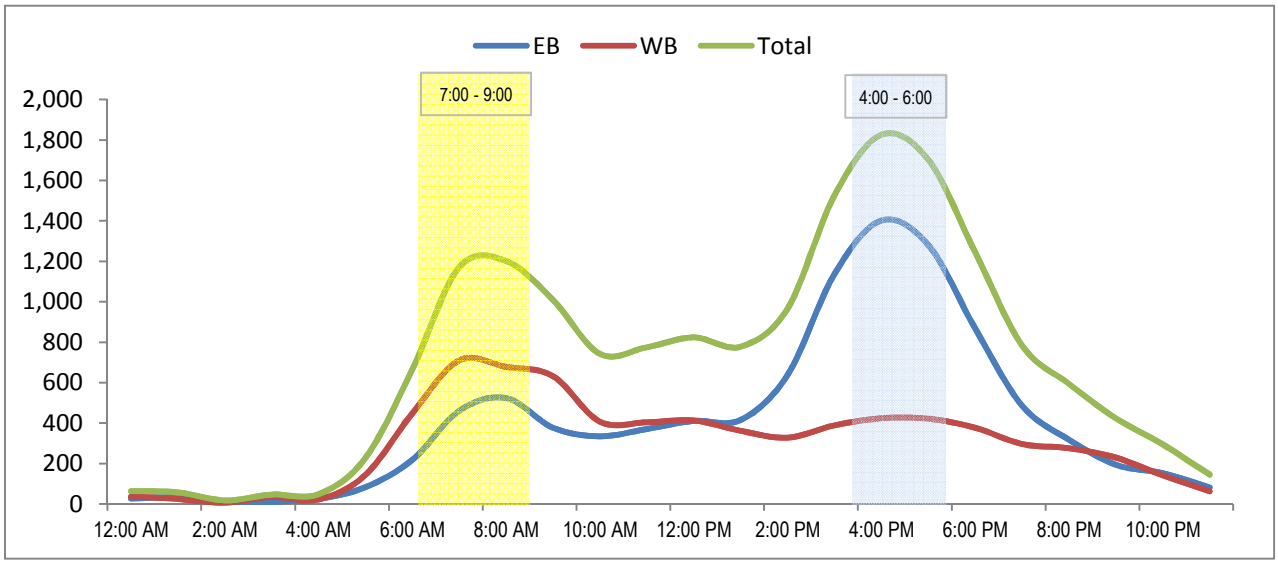
AVC Proj. No: *15-0345*

24 Hour Segment Volume			*17,138*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	27	37	64
1:00 AM - 2:00 AM	33	25	58
2:00 AM - 3:00 AM	11	7	18
3:00 AM - 4:00 AM	12	35	47
4:00 AM - 5:00 AM	26	23	49
5:00 AM - 6:00 AM	83	144	227
6:00 AM - 7:00 AM	218	448	666
7:00 AM - 8:00 AM	461	710	1,171
8:00 AM - 9:00 AM	524	678	1,202
9:00 AM - 10:00 AM	377	632	1,009
10:00 AM - 11:00 AM	335	407	742
11:00 AM - 12:00 PM	371	404	775
Total	**2,478**	**3,550**	**6,028**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	411	413	824
1:00 PM - 2:00 PM	416	362	778
2:00 PM - 3:00 PM	638	328	966
3:00 PM - 4:00 PM	1,137	389	1,526
4:00 PM - 5:00 PM	1,402	424	1,826
5:00 PM - 6:00 PM	1,281	422	1,703
6:00 PM - 7:00 PM	868	377	1,245
7:00 PM - 8:00 PM	487	297	784
8:00 PM - 9:00 PM	318	276	594
9:00 PM - 10:00 PM	194	230	424
10:00 PM - 11:00 PM	153	142	295
11:00 PM - 12:00 AM	82	63	145
Total	**7,387**	**3,723**	**11,110**

24-Hour	*EB*	*Volume*	*9,865*	*24-Hour*	*WB*	*Volume*	*7,273*



Kimley»Horn

24 Hour Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: 62. Gilman Drive Between I-5 NB & SB Ramps

Orientation: *East-West*

Date of Count: *Tuesday, April 28, 2015*

Analysts: *DASH*

Weather: *Sunny*

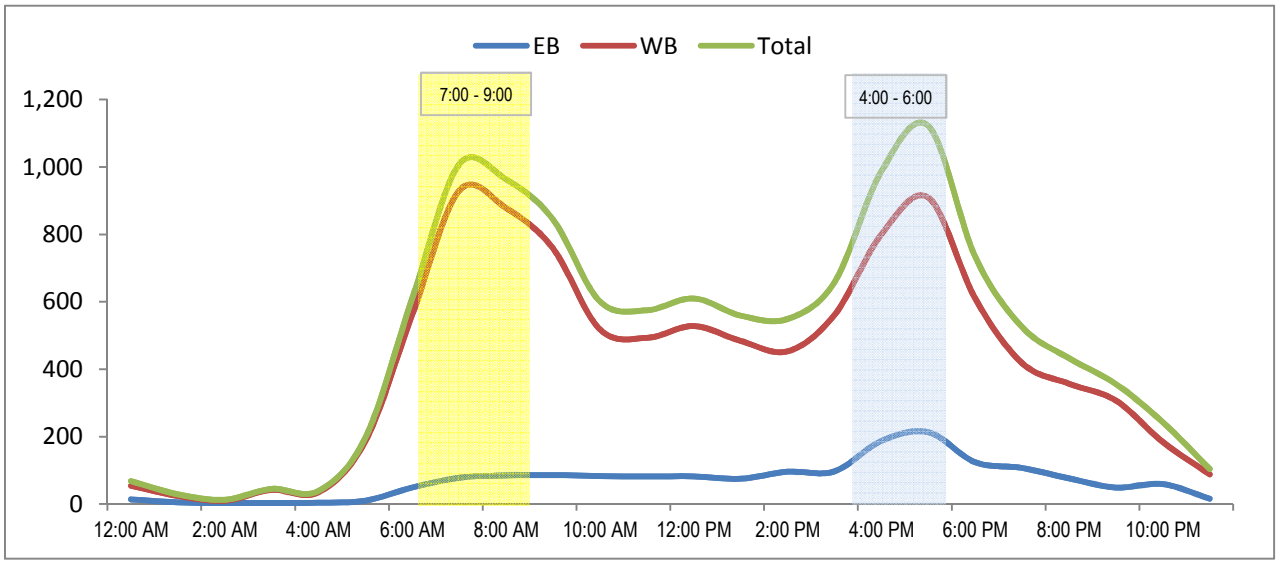
AVC Proj. No: *15-0345*

24 Hour Segment Volume			11,873

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	14	54	68
1:00 AM - 2:00 AM	5	24	29
2:00 AM - 3:00 AM	3	10	13
3:00 AM - 4:00 AM	3	42	45
4:00 AM - 5:00 AM	4	35	39
5:00 AM - 6:00 AM	10	187	197
6:00 AM - 7:00 AM	49	562	611
7:00 AM - 8:00 AM	78	930	1,008
8:00 AM - 9:00 AM	85	878	963
9:00 AM - 10:00 AM	86	758	844
10:00 AM - 11:00 AM	83	518	601
11:00 AM - 12:00 PM	82	493	575
Total	**502**	**4,491**	**4,993**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	82	528	610
1:00 PM - 2:00 PM	75	484	559
2:00 PM - 3:00 PM	96	453	549
3:00 PM - 4:00 PM	97	561	658
4:00 PM - 5:00 PM	187	800	987
5:00 PM - 6:00 PM	213	909	1,122
6:00 PM - 7:00 PM	124	610	734
7:00 PM - 8:00 PM	107	418	525
8:00 PM - 9:00 PM	76	357	433
9:00 PM - 10:00 PM	49	307	356
10:00 PM - 11:00 PM	59	184	243
11:00 PM - 12:00 AM	16	88	104
Total	**1,181**	**5,699**	**6,880**

24-Hour EB Volume	1,683	24-Hour WB Volume	10,190



Kimley»Horn

24 Hour Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: 79. Golden Haven Dr, West of Judicial Dr

Orientation: *East-West*

Date of Count: *Tuesday, June 16, 2015*

Analysts: *DASH*

Weather: *Sunny*

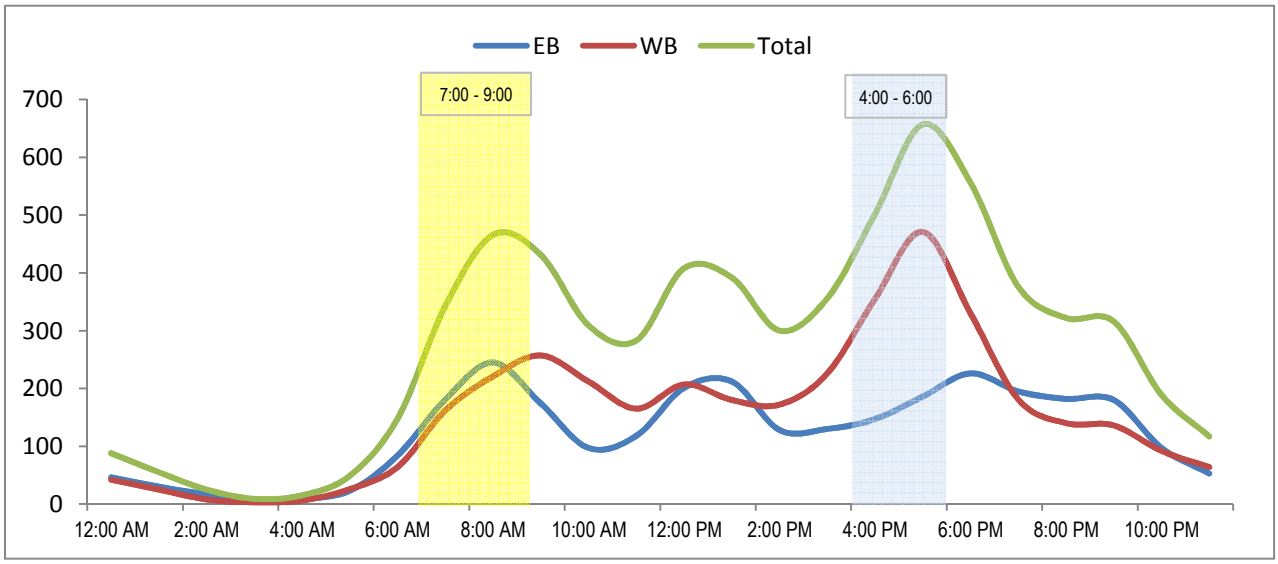
AVC Proj. No: *15-0345*

24 Hour Segment Volume			*6,712*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	46	42	88
1:00 AM - 2:00 AM	30	25	55
2:00 AM - 3:00 AM	17	8	25
3:00 AM - 4:00 AM	6	3	9
4:00 AM - 5:00 AM	9	6	15
5:00 AM - 6:00 AM	23	26	49
6:00 AM - 7:00 AM	84	64	148
7:00 AM - 8:00 AM	181	162	343
8:00 AM - 9:00 AM	245	221	466
9:00 AM - 10:00 AM	174	257	431
10:00 AM - 11:00 AM	97	212	309
11:00 AM - 12:00 PM	118	165	283
Total	**1,030**	**1,191**	**2,221**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	201	207	408
1:00 PM - 2:00 PM	212	180	392
2:00 PM - 3:00 PM	128	172	300
3:00 PM - 4:00 PM	130	226	356
4:00 PM - 5:00 PM	147	355	502
5:00 PM - 6:00 PM	186	471	657
6:00 PM - 7:00 PM	226	330	556
7:00 PM - 8:00 PM	195	181	376
8:00 PM - 9:00 PM	182	140	322
9:00 PM - 10:00 PM	180	136	316
10:00 PM - 11:00 PM	97	92	189
11:00 PM - 12:00 AM	53	64	117
Total	**1,937**	**2,554**	**4,491**

24-Hour	*EB*	*Volume*	*2,967*	*24-Hour*	*WB*	*Volume*	*3,745*



Kimley»Horn

24 Hour Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: 4. Governer Drve West of Genesee Avenue

Orientation: *East-West*

Date of Count: *Tuesday, May 12, 2015*

Analysts: *DASH*

Weather: *Sunny*

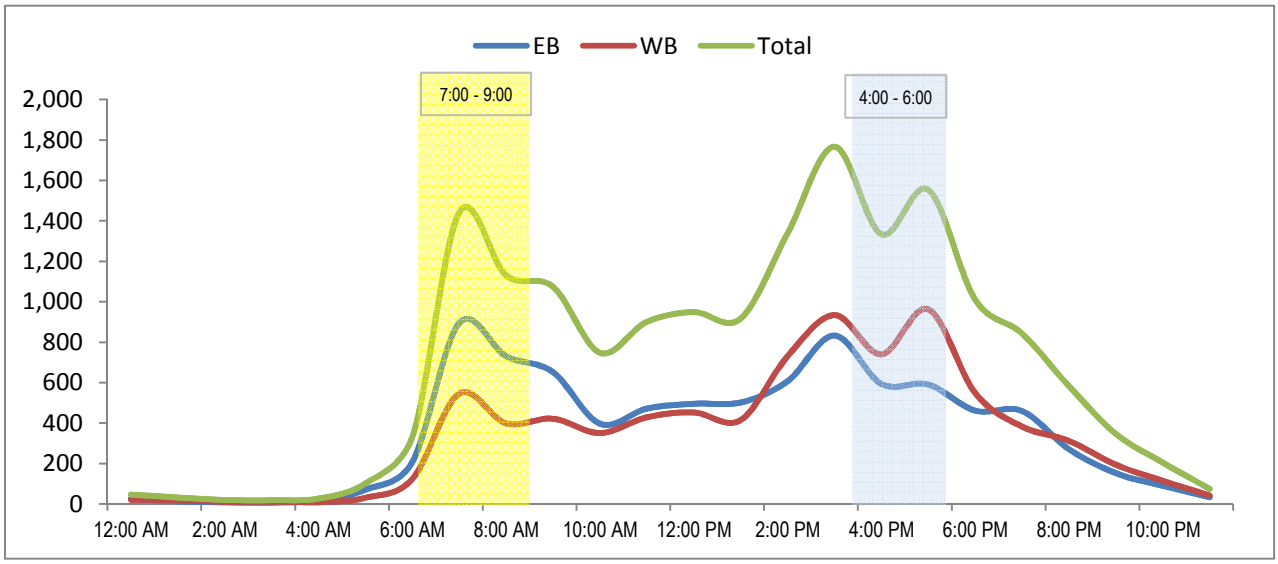
AVC Proj. No: *15-0345*

24 Hour Segment Volume			*16,796*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	26	21	47
1:00 AM - 2:00 AM	13	19	32
2:00 AM - 3:00 AM	9	11	20
3:00 AM - 4:00 AM	7	12	19
4:00 AM - 5:00 AM	18	9	27
5:00 AM - 6:00 AM	71	31	102
6:00 AM - 7:00 AM	208	124	332
7:00 AM - 8:00 AM	895	546	1,441
8:00 AM - 9:00 AM	731	399	1,130
9:00 AM - 10:00 AM	652	422	1,074
10:00 AM - 11:00 AM	397	351	748
11:00 AM - 12:00 PM	472	429	901
Total	**3,499**	**2,374**	**5,873**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	496	453	949
1:00 PM - 2:00 PM	502	415	917
2:00 PM - 3:00 PM	607	731	1,338
3:00 PM - 4:00 PM	833	934	1,767
4:00 PM - 5:00 PM	594	740	1,334
5:00 PM - 6:00 PM	591	963	1,554
6:00 PM - 7:00 PM	462	549	1,011
7:00 PM - 8:00 PM	460	383	843
8:00 PM - 9:00 PM	271	312	583
9:00 PM - 10:00 PM	153	194	347
10:00 PM - 11:00 PM	90	115	205
11:00 PM - 12:00 AM	33	42	75
Total	**5,092**	**5,831**	**10,923**

24-Hour	*EB*	*Volume*	*8,591*	*24-Hour*	*WB*	*Volume*	*8,205*



Kimley»Horn

24 Hour Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: 3. Governer Driv East of Genesee Ave

Orientation: *East-West*

Date of Count: *Tuesday, May 12, 2015*

Analysts: *DASH*

Weather: *Sunny*

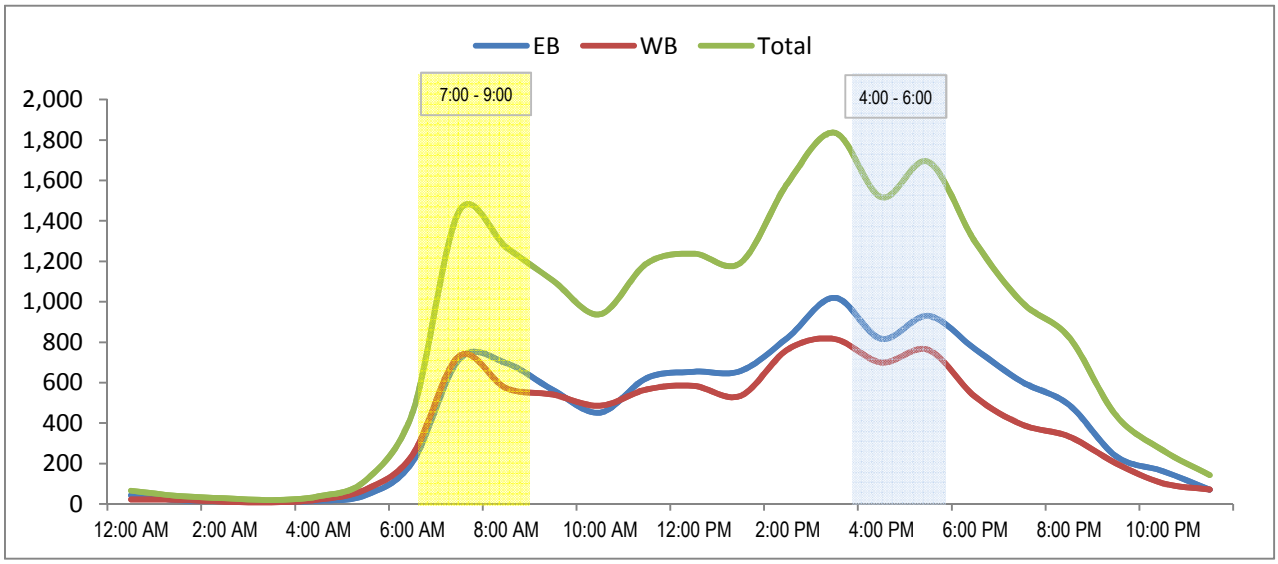
AVC Proj. No: *15-0345*

24 Hour Segment Volume			*19,737*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	43	23	66
1:00 AM - 2:00 AM	19	21	40
2:00 AM - 3:00 AM	17	12	29
3:00 AM - 4:00 AM	12	8	20
4:00 AM - 5:00 AM	16	22	38
5:00 AM - 6:00 AM	44	72	116
6:00 AM - 7:00 AM	207	242	449
7:00 AM - 8:00 AM	716	732	1,448
8:00 AM - 9:00 AM	697	573	1,270
9:00 AM - 10:00 AM	564	541	1,105
10:00 AM - 11:00 AM	452	486	938
11:00 AM - 12:00 PM	623	567	1190
Total	**3,410**	**3,299**	**6,709**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	654	584	1,238
1:00 PM - 2:00 PM	658	535	1,193
2:00 PM - 3:00 PM	822	764	1,586
3:00 PM - 4:00 PM	1,020	816	1,836
4:00 PM - 5:00 PM	817	700	1,517
5:00 PM - 6:00 PM	930	762	1,692
6:00 PM - 7:00 PM	766	530	1,296
7:00 PM - 8:00 PM	604	393	997
8:00 PM - 9:00 PM	491	334	825
9:00 PM - 10:00 PM	237	202	439
10:00 PM - 11:00 PM	163	103	266
11:00 PM - 12:00 AM	71	72	143
Total	**7,233**	**5,795**	**13,028**

24-Hour	*EB*	*Volume*	*10,643*	*24-Hour*	*WB*	*Volume*	*9,094*



Kimley»Horn

24 Hour Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: 5. Governer Drie West I-805 SB Ramps

Orientation: *East-West*

Date of Count: *Thursday, April 30, 2015*

Analysts: *DASH*

Weather: *Sunny*

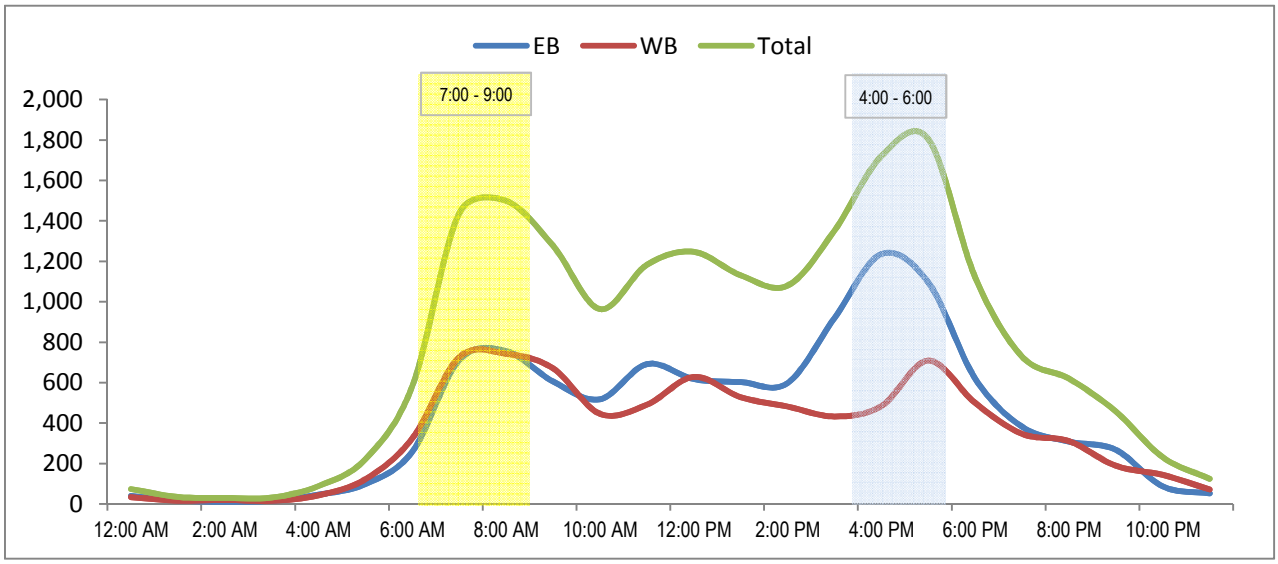
AVC Proj. No: *15-0345*

24 Hour Segment Volume			*19,046*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	40	34	74
1:00 AM - 2:00 AM	18	17	35
2:00 AM - 3:00 AM	11	20	31
3:00 AM - 4:00 AM	16	16	32
4:00 AM - 5:00 AM	46	43	89
5:00 AM - 6:00 AM	99	123	222
6:00 AM - 7:00 AM	259	325	584
7:00 AM - 8:00 AM	712	726	1,438
8:00 AM - 9:00 AM	756	743	1,499
9:00 AM - 10:00 AM	606	671	1,277
10:00 AM - 11:00 AM	518	446	964
11:00 AM - 12:00 PM	692	491	1183
Total	**3,773**	**3,655**	**7,428**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	618	629	1,247
1:00 PM - 2:00 PM	603	528	1,131
2:00 PM - 3:00 PM	598	482	1,080
3:00 PM - 4:00 PM	919	433	1,352
4:00 PM - 5:00 PM	1,236	484	1,720
5:00 PM - 6:00 PM	1,096	709	1,805
6:00 PM - 7:00 PM	621	500	1,121
7:00 PM - 8:00 PM	382	347	729
8:00 PM - 9:00 PM	309	311	620
9:00 PM - 10:00 PM	268	189	457
10:00 PM - 11:00 PM	87	144	231
11:00 PM - 12:00 AM	53	72	125
Total	**6,790**	**4,828**	**11,618**

24-Hour	*EB*	*Volume*	*10,563*	*24-Hour*	*WB*	*Volume*	*8,483*



Kimley»Horn

24 Hour Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: 65. Governer Drive Between I-805 NB & SB Ramps

Orientation: *East-West*

Date of Count: *Thursday, April 30, 2015*

Analysts: *DASH*

Weather: *Sunny*

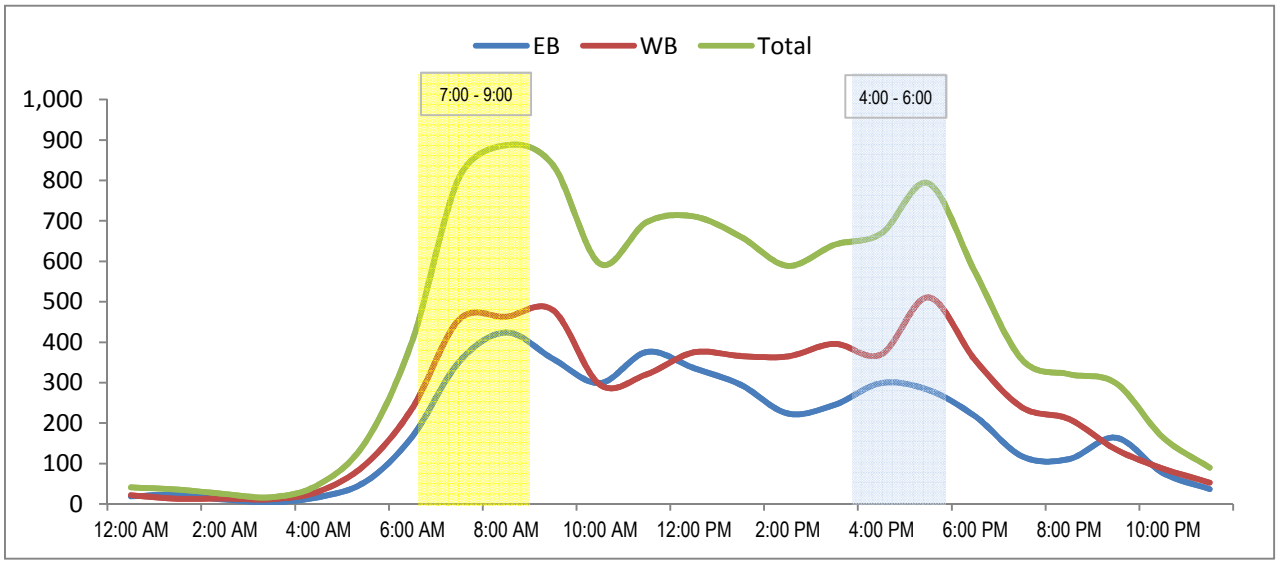
AVC Proj. No: *15-0345*

24 Hour Segment Volume			*10,417*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	19	22	41
1:00 AM - 2:00 AM	23	13	36
2:00 AM - 3:00 AM	11	14	25
3:00 AM - 4:00 AM	5	12	17
4:00 AM - 5:00 AM	17	31	48
5:00 AM - 6:00 AM	55	98	153
6:00 AM - 7:00 AM	167	237	404
7:00 AM - 8:00 AM	352	456	808
8:00 AM - 9:00 AM	424	463	887
9:00 AM - 10:00 AM	359	479	838
10:00 AM - 11:00 AM	299	295	594
11:00 AM - 12:00 PM	376	321	697
Total	**2,107**	**2,441**	**4,548**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	336	375	711
1:00 PM - 2:00 PM	295	366	661
2:00 PM - 3:00 PM	224	365	589
3:00 PM - 4:00 PM	245	396	641
4:00 PM - 5:00 PM	299	370	669
5:00 PM - 6:00 PM	282	511	793
6:00 PM - 7:00 PM	217	356	573
7:00 PM - 8:00 PM	118	239	357
8:00 PM - 9:00 PM	111	210	321
9:00 PM - 10:00 PM	164	135	299
10:00 PM - 11:00 PM	77	88	165
11:00 PM - 12:00 AM	37	53	90
Total	**2,405**	**3,464**	**5,869**

24-Hour	*EB*	*Volume*	*4,512*	*24-Hour*	*WB*	*Volume*	*5,905*



Kimley»Horn

24 Hour Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: 57. Judicial Drive South of Eastgate Mall

Orientation: *North-South*

Date of Count: *Thursday, May 14, 2015*

Analysts: *DASH*

Weather: *Sunny*

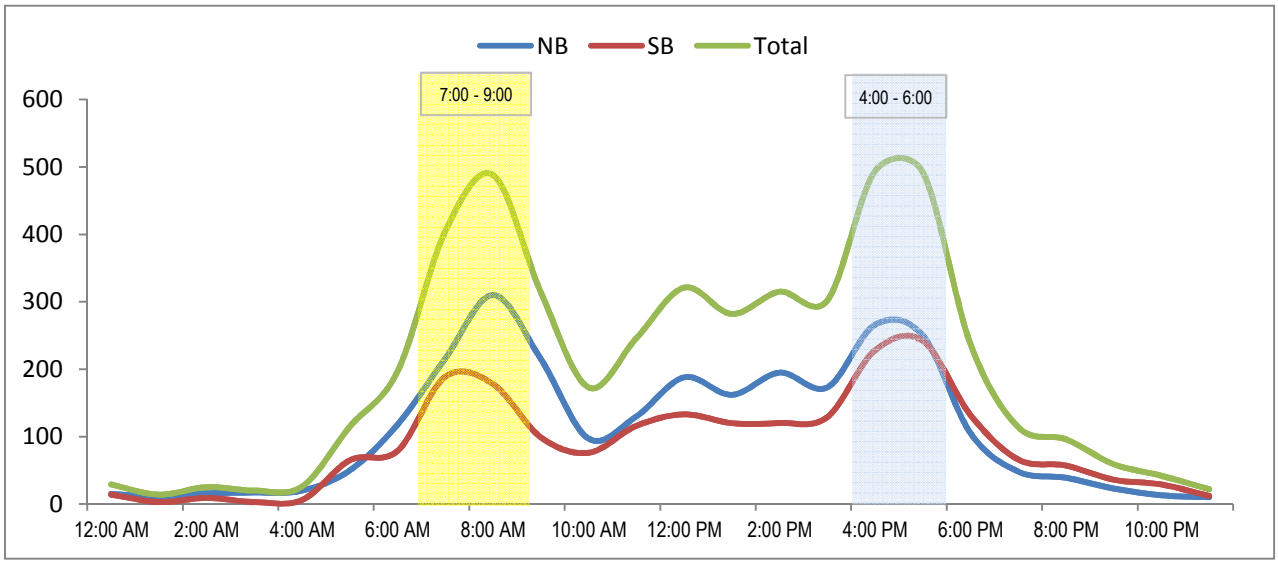
AVC Proj. No: *15-0345*

24 Hour Segment Volume			*4,828*

Time	Hourly Volume		
	NB	SB	Total
12:00 AM - 1:00 AM	15	14	29
1:00 AM - 2:00 AM	11	3	14
2:00 AM - 3:00 AM	16	9	25
3:00 AM - 4:00 AM	17	3	20
4:00 AM - 5:00 AM	20	6	26
5:00 AM - 6:00 AM	50	65	115
6:00 AM - 7:00 AM	118	79	197
7:00 AM - 8:00 AM	216	189	405
8:00 AM - 9:00 AM	310	178	488
9:00 AM - 10:00 AM	215	99	314
10:00 AM - 11:00 AM	97	76	173
11:00 AM - 12:00 PM	130	116	246
Total	**1,215**	**837**	**2,052**

Time	Hourly Volume		
	NB	SB	Total
12:00 PM - 1:00 PM	188	133	321
1:00 PM - 2:00 PM	162	120	282
2:00 PM - 3:00 PM	195	120	315
3:00 PM - 4:00 PM	173	129	302
4:00 PM - 5:00 PM	266	228	494
5:00 PM - 6:00 PM	250	242	492
6:00 PM - 7:00 PM	105	132	237
7:00 PM - 8:00 PM	48	66	114
8:00 PM - 9:00 PM	39	57	96
9:00 PM - 10:00 PM	23	36	59
10:00 PM - 11:00 PM	13	29	42
11:00 PM - 12:00 AM	10	12	22
Total	**1,472**	**1,304**	**2,776**

24-Hour	*NB*	*Volume*	*2,687*	*24-Hour*	*SB*	*Volume*	*2,141*



Kimley»Horn

24 Hour Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: 58. Judicial Dr, North of Golden Haven Dr

Orientation: *North-South*

Date of Count: *Thursday, May 21, 2015*

Analysts: *DASH*

Weather: *Sunny*

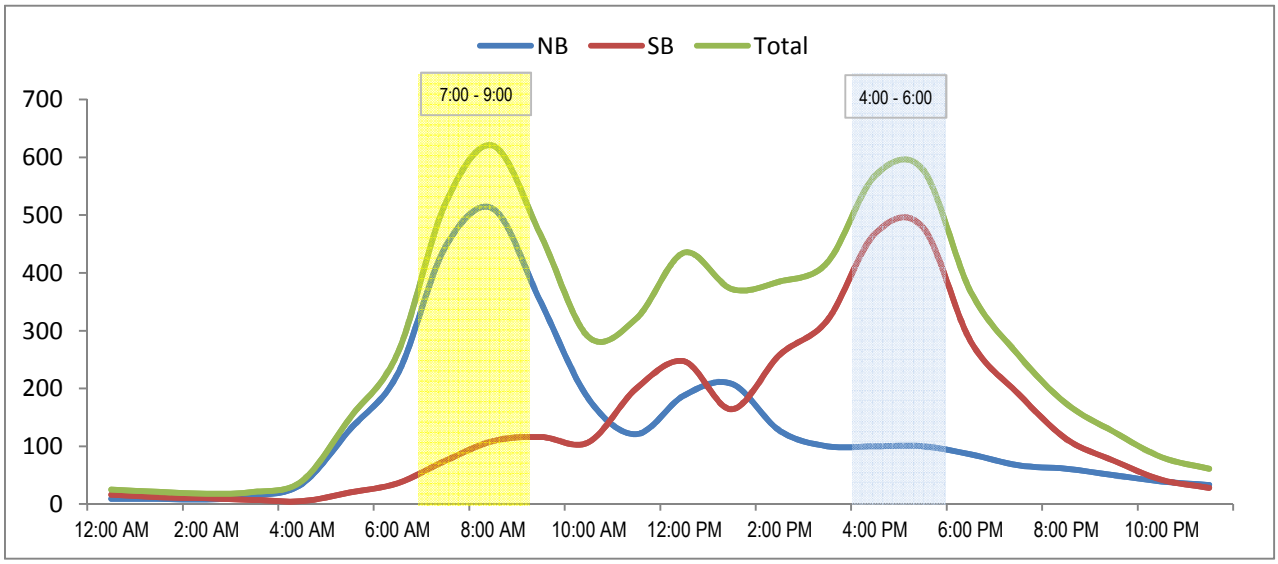
AVC Proj. No: *15-0345*

24 Hour Segment Volume			*6,574*

Time	Hourly Volume		
	NB	SB	Total
12:00 AM - 1:00 AM	9	16	25
1:00 AM - 2:00 AM	9	12	21
2:00 AM - 3:00 AM	8	10	18
3:00 AM - 4:00 AM	14	7	21
4:00 AM - 5:00 AM	35	5	40
5:00 AM - 6:00 AM	129	20	149
6:00 AM - 7:00 AM	225	36	261
7:00 AM - 8:00 AM	445	75	520
8:00 AM - 9:00 AM	511	109	620
9:00 AM - 10:00 AM	349	116	465
10:00 AM - 11:00 AM	182	107	289
11:00 AM - 12:00 PM	121	200	321
Total	**2,037**	**713**	**2,750**

Time	Hourly Volume		
	NB	SB	Total
12:00 PM - 1:00 PM	188	247	435
1:00 PM - 2:00 PM	208	164	372
2:00 PM - 3:00 PM	127	258	385
3:00 PM - 4:00 PM	100	318	418
4:00 PM - 5:00 PM	100	468	568
5:00 PM - 6:00 PM	100	479	579
6:00 PM - 7:00 PM	86	282	368
7:00 PM - 8:00 PM	67	191	258
8:00 PM - 9:00 PM	61	113	174
9:00 PM - 10:00 PM	50	75	125
10:00 PM - 11:00 PM	39	42	81
11:00 PM - 12:00 AM	33	28	61
Total	**1,159**	**2,665**	**3,824**

24-Hour	*NB*	*Volume*	*3,196*	*24-Hour*	*SB*	*Volume*	*3,378*



Kimley»Horn

24 Hour Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: 26. La Jolla Scenic Dr, South of La Jolla Village Dr

Orientation: *North-South*

Date of Count: *Tuesday, May 05, 2015*

Analysts: *DASH*

Weather: *Sunny*

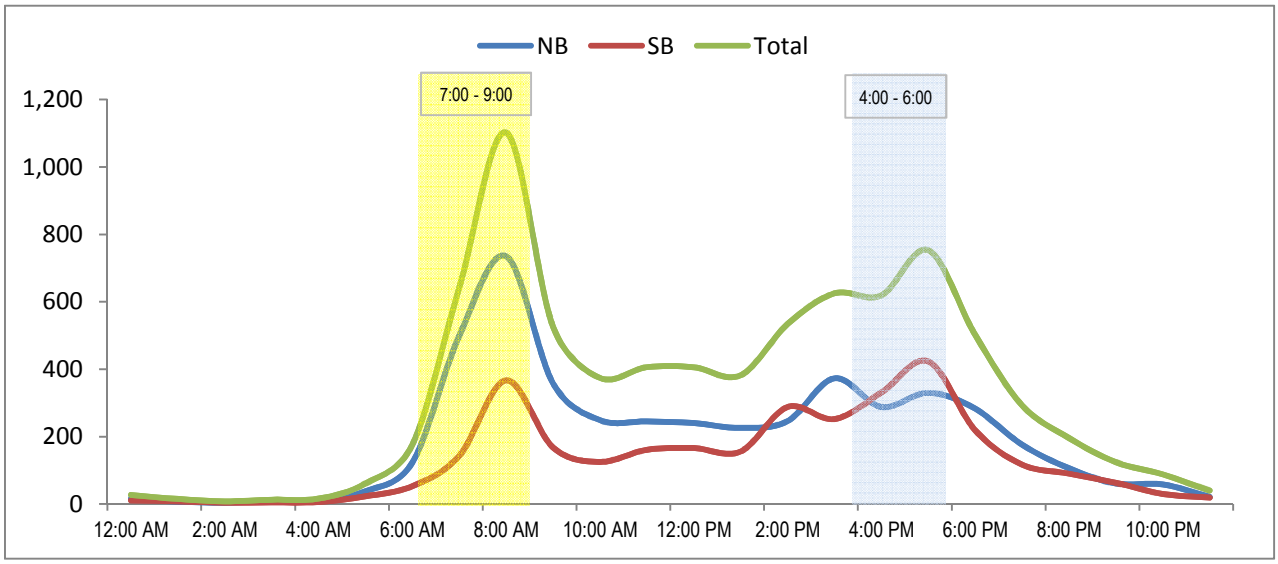
AVC Proj. No: *15-0345*

24 Hour Segment Volume			*7,928*

Time	Hourly Volume		
	NB	SB	Total
12:00 AM - 1:00 AM	16	11	27
1:00 AM - 2:00 AM	7	8	15
2:00 AM - 3:00 AM	4	4	8
3:00 AM - 4:00 AM	8	5	13
4:00 AM - 5:00 AM	10	6	16
5:00 AM - 6:00 AM	38	23	61
6:00 AM - 7:00 AM	123	53	176
7:00 AM - 8:00 AM	499	143	642
8:00 AM - 9:00 AM	735	367	1,102
9:00 AM - 10:00 AM	358	168	526
10:00 AM - 11:00 AM	249	125	374
11:00 AM - 12:00 PM	245	161	406
Total	**2,292**	**1,074**	**3,366**

Time	Hourly Volume		
	NB	SB	Total
12:00 PM - 1:00 PM	240	166	406
1:00 PM - 2:00 PM	226	156	382
2:00 PM - 3:00 PM	246	288	534
3:00 PM - 4:00 PM	373	252	625
4:00 PM - 5:00 PM	288	331	619
5:00 PM - 6:00 PM	330	423	753
6:00 PM - 7:00 PM	283	219	502
7:00 PM - 8:00 PM	176	117	293
8:00 PM - 9:00 PM	106	90	196
9:00 PM - 10:00 PM	61	63	124
10:00 PM - 11:00 PM	58	30	88
11:00 PM - 12:00 AM	21	19	40
Total	**2,408**	**2,154**	**4,562**

24-Hour	*NB*	*Volume*	*4,700*	*24-Hour*	*SB*	*Volume*	*3,228*



Kimley»Horn

24 Hour Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: 25. La Jolla Village Drive West of La Jolla Scenic Dr

Orientation: *East-West*

Date of Count: *Tuesday, May 05, 2015*

Analysts: *DASH*

Weather: *Sunny*

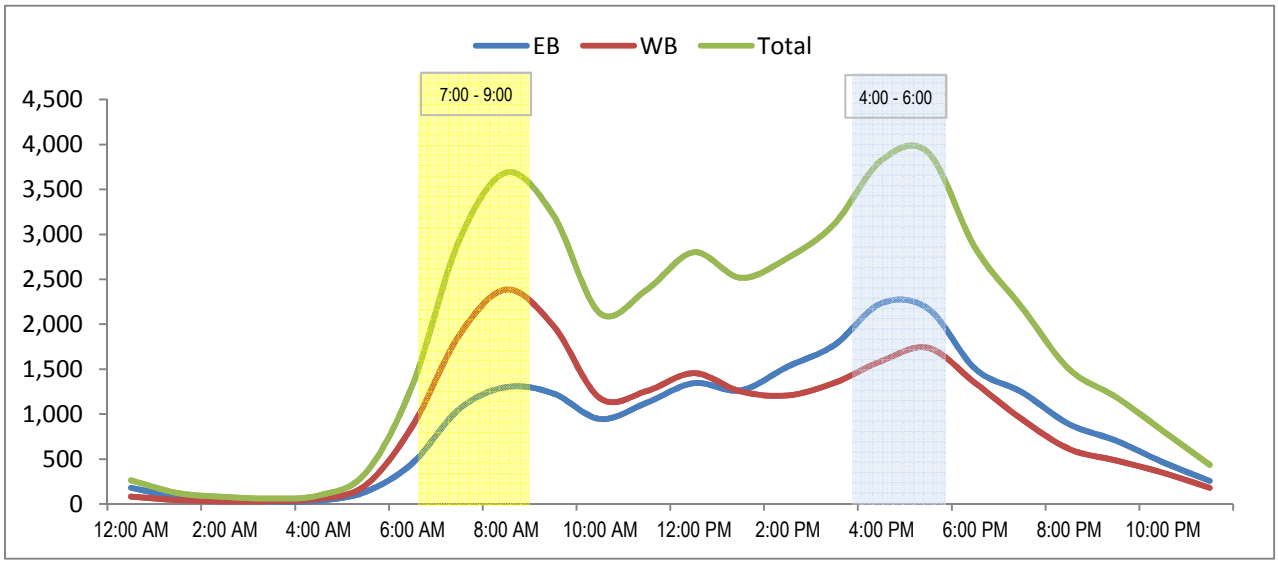
AVC Proj. No: *15-0345*

24 Hour Segment Volume			44,520

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	181	83	264
1:00 AM - 2:00 AM	78	44	122
2:00 AM - 3:00 AM	50	31	81
3:00 AM - 4:00 AM	29	33	62
4:00 AM - 5:00 AM	38	58	96
5:00 AM - 6:00 AM	135	208	343
6:00 AM - 7:00 AM	453	866	1,319
7:00 AM - 8:00 AM	1,056	1,878	2,934
8:00 AM - 9:00 AM	1,301	2,386	3,687
9:00 AM - 10:00 AM	1,232	1,988	3,220
10:00 AM - 11:00 AM	946	1,177	2,123
11:00 AM - 12:00 PM	1,127	1,258	2385
Total	**6,626**	**10,010**	**16,636**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	1,345	1,456	2,801
1:00 PM - 2:00 PM	1,264	1,253	2,517
2:00 PM - 3:00 PM	1,528	1,208	2,736
3:00 PM - 4:00 PM	1,770	1,348	3,118
4:00 PM - 5:00 PM	2,233	1,590	3,823
5:00 PM - 6:00 PM	2,172	1,737	3,909
6:00 PM - 7:00 PM	1,504	1,346	2,850
7:00 PM - 8:00 PM	1,243	942	2,185
8:00 PM - 9:00 PM	889	613	1,502
9:00 PM - 10:00 PM	706	485	1,191
10:00 PM - 11:00 PM	466	349	815
11:00 PM - 12:00 AM	257	180	437
Total	**15,377**	**12,507**	**27,884**

24-Hour EB Volume	22,003	24-Hour WB Volume	22,517



Kimley»Horn

24 Hour Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: 32. La Jolla Village Drive West of I-5 SB On Ramps

Orientation: *East-West*

Date of Count: *Wednesday, May 06, 2015*

Analysts: *DASH*

Weather: *Sunny*

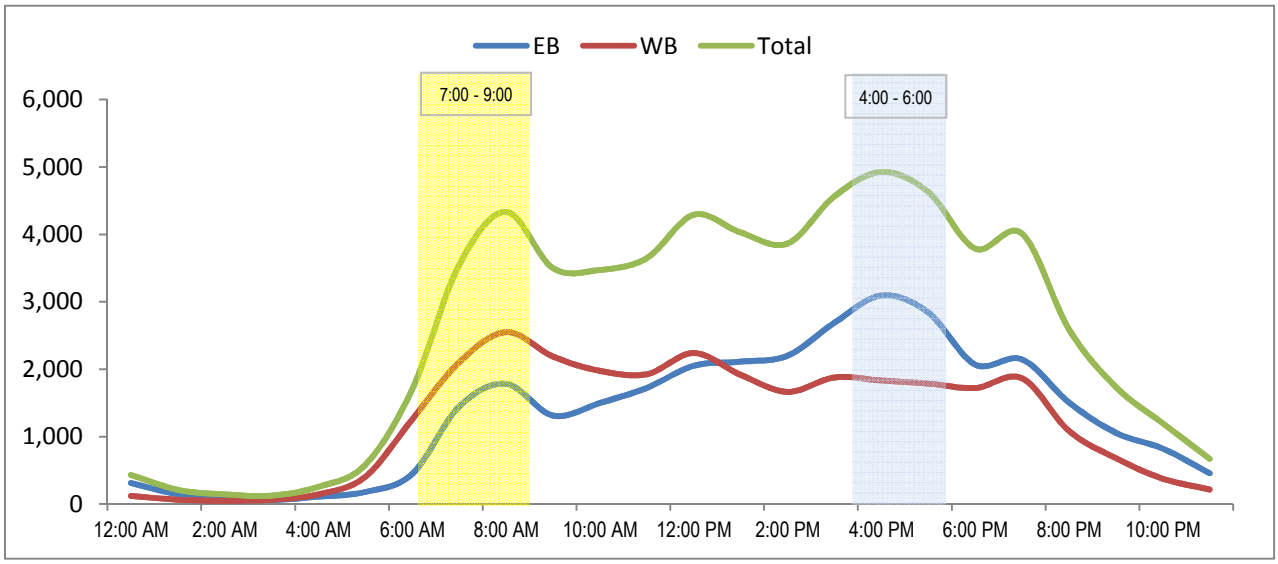
AVC Proj. No: *15-0345*

24 Hour Segment Volume			*62,258*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	312	120	432
1:00 AM - 2:00 AM	146	64	210
2:00 AM - 3:00 AM	94	50	144
3:00 AM - 4:00 AM	61	64	125
4:00 AM - 5:00 AM	110	145	255
5:00 AM - 6:00 AM	179	405	584
6:00 AM - 7:00 AM	448	1,258	1,706
7:00 AM - 8:00 AM	1,447	2,103	3,550
8:00 AM - 9:00 AM	1,783	2,550	4,333
9:00 AM - 10:00 AM	1,312	2,187	3,499
10:00 AM - 11:00 AM	1,498	1,975	3,473
11:00 AM - 12:00 PM	1,723	1,925	3648
Total	**9,113**	**12,846**	**21,959**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	2,051	2,240	4,291
1:00 PM - 2:00 PM	2,112	1,916	4,028
2:00 PM - 3:00 PM	2,201	1,664	3,865
3:00 PM - 4:00 PM	2,688	1,877	4,565
4:00 PM - 5:00 PM	3,093	1,832	4,925
5:00 PM - 6:00 PM	2,841	1,788	4,629
6:00 PM - 7:00 PM	2,069	1,720	3,789
7:00 PM - 8:00 PM	2,145	1,865	4,010
8:00 PM - 9:00 PM	1,507	1,085	2,592
9:00 PM - 10:00 PM	1,056	679	1,735
10:00 PM - 11:00 PM	822	376	1,198
11:00 PM - 12:00 AM	456	216	672
Total	**23,041**	**17,258**	**40,299**

24-Hour	*EB*	*Volume*	*32,154*	*24-Hour*	*WB*	*Volume*	*30,104*



Kimley»Horn

24 Hour Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: 60. La Jolla Village Drive Between I-5 NB & SB Ramps

Orientation: *East-West*

Date of Count: *Wednesday, May 06, 2015*

Analysts: *DASH*

Weather: *Sunny*

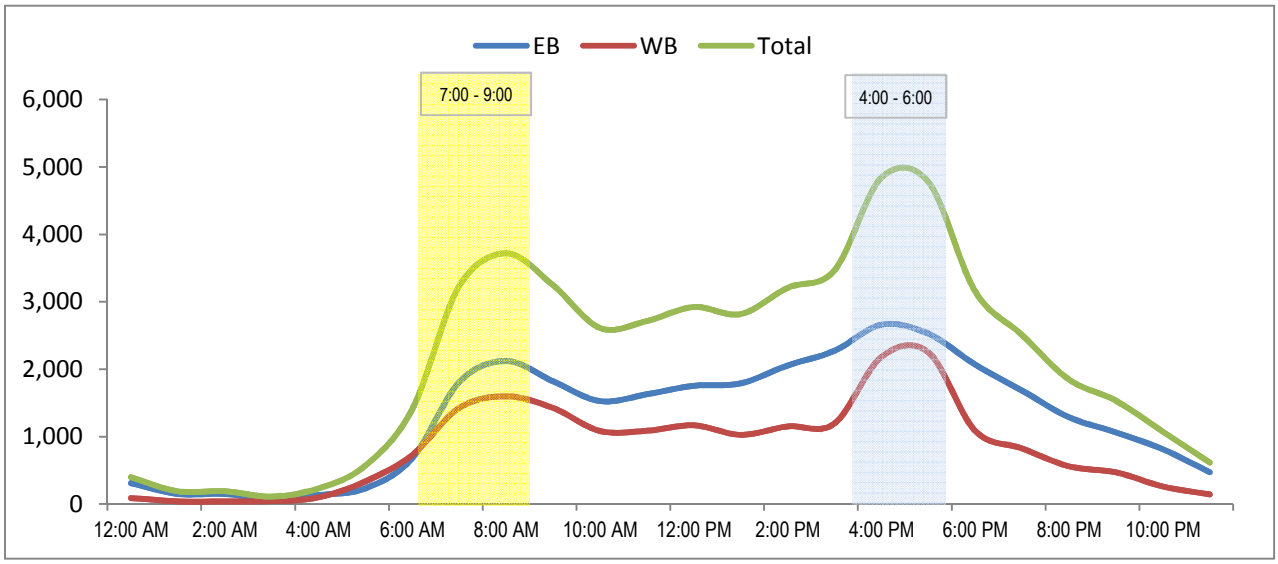
AVC Proj. No: *15-0345*

24 Hour Segment Volume			51,391

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	309	89	398
1:00 AM - 2:00 AM	150	39	189
2:00 AM - 3:00 AM	150	41	191
3:00 AM - 4:00 AM	69	42	111
4:00 AM - 5:00 AM	133	98	231
5:00 AM - 6:00 AM	233	337	570
6:00 AM - 7:00 AM	681	728	1,409
7:00 AM - 8:00 AM	1,809	1,425	3,234
8:00 AM - 9:00 AM	2,121	1,598	3,719
9:00 AM - 10:00 AM	1,821	1,425	3,246
10:00 AM - 11:00 AM	1,527	1,084	2,611
11:00 AM - 12:00 PM	1,628	1,087	2715
Total	**10,631**	**7,993**	**18,624**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	1,754	1,168	2,922
1:00 PM - 2:00 PM	1,791	1,027	2,818
2:00 PM - 3:00 PM	2,056	1,151	3,207
3:00 PM - 4:00 PM	2,272	1,195	3,467
4:00 PM - 5:00 PM	2,660	2,181	4,841
5:00 PM - 6:00 PM	2,528	2,252	4,780
6:00 PM - 7:00 PM	2,068	1,087	3,155
7:00 PM - 8:00 PM	1,683	825	2,508
8:00 PM - 9:00 PM	1,287	560	1,847
9:00 PM - 10:00 PM	1,064	470	1,534
10:00 PM - 11:00 PM	813	261	1,074
11:00 PM - 12:00 AM	472	142	614
Total	**20,448**	**12,319**	**32,767**

24-Hour EB Volume	31,079	24-Hour WB Volume	20,312



Kimley»Horn

24 Hour Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: 34. La Jolla Village Drive West of Lebon Dr

Orientation: *East-West*

Date of Count: *Tuesday, May 05, 2015*

Analysts: *DASH*

Weather: *Sunny*

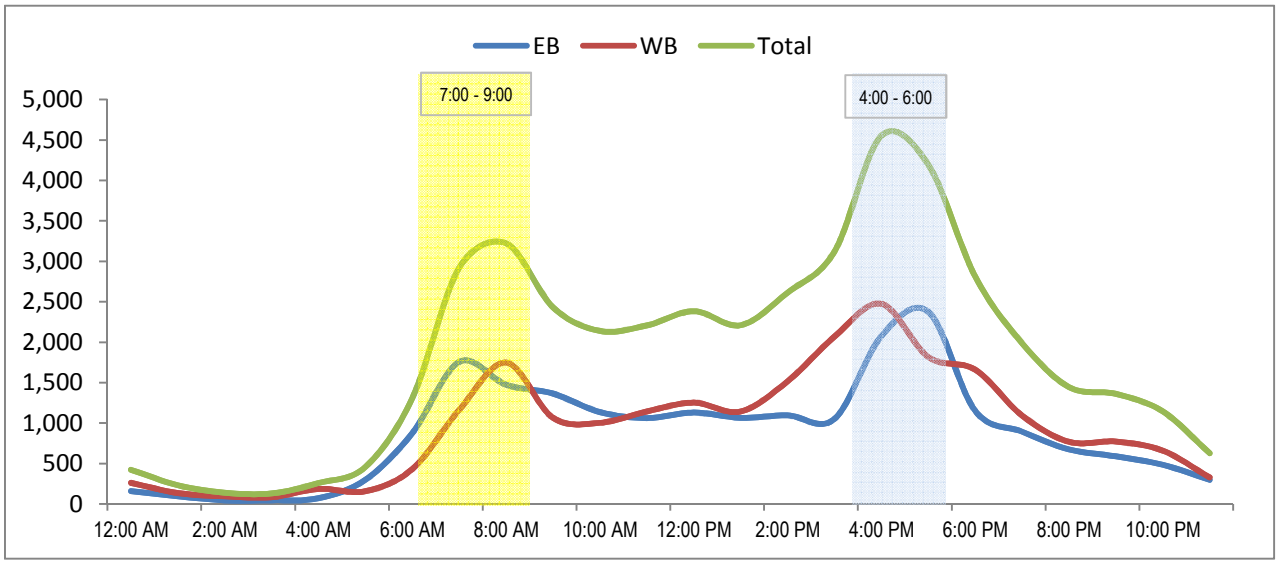
AVC Proj. No: *15-0345*

24 Hour Segment Volume			*44,335*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	161	263	424
1:00 AM - 2:00 AM	96	136	232
2:00 AM - 3:00 AM	46	95	141
3:00 AM - 4:00 AM	46	85	131
4:00 AM - 5:00 AM	72	187	259
5:00 AM - 6:00 AM	300	159	459
6:00 AM - 7:00 AM	878	433	1,311
7:00 AM - 8:00 AM	1,757	1,164	2,921
8:00 AM - 9:00 AM	1,474	1,749	3,223
9:00 AM - 10:00 AM	1,365	1,066	2,431
10:00 AM - 11:00 AM	1,136	1,004	2,140
11:00 AM - 12:00 PM	1,063	1,145	2208
Total	**8,394**	**7,486**	**15,880**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	1,131	1,253	2,384
1:00 PM - 2:00 PM	1,066	1,144	2,210
2:00 PM - 3:00 PM	1,096	1,517	2,613
3:00 PM - 4:00 PM	1,052	2,069	3,121
4:00 PM - 5:00 PM	2,076	2,475	4,551
5:00 PM - 6:00 PM	2,377	1,817	4,194
6:00 PM - 7:00 PM	1,153	1,661	2,814
7:00 PM - 8:00 PM	895	1,094	1,989
8:00 PM - 9:00 PM	676	769	1,445
9:00 PM - 10:00 PM	589	772	1,361
10:00 PM - 11:00 PM	485	660	1,145
11:00 PM - 12:00 AM	299	329	628
Total	**12,895**	**15,560**	**28,455**

24-Hour	*EB*	*Volume*	*21,289*	*24-Hour*	*WB*	*Volume*	*23,046*



Kimley»Horn

24 Hour Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: 33. La Jolla Village Drive East of Lebon Dr

Orientation: *East-West*

Date of Count: *Tuesday, May 05, 2015*

Analysts: *DASH*

Weather: *Sunny*

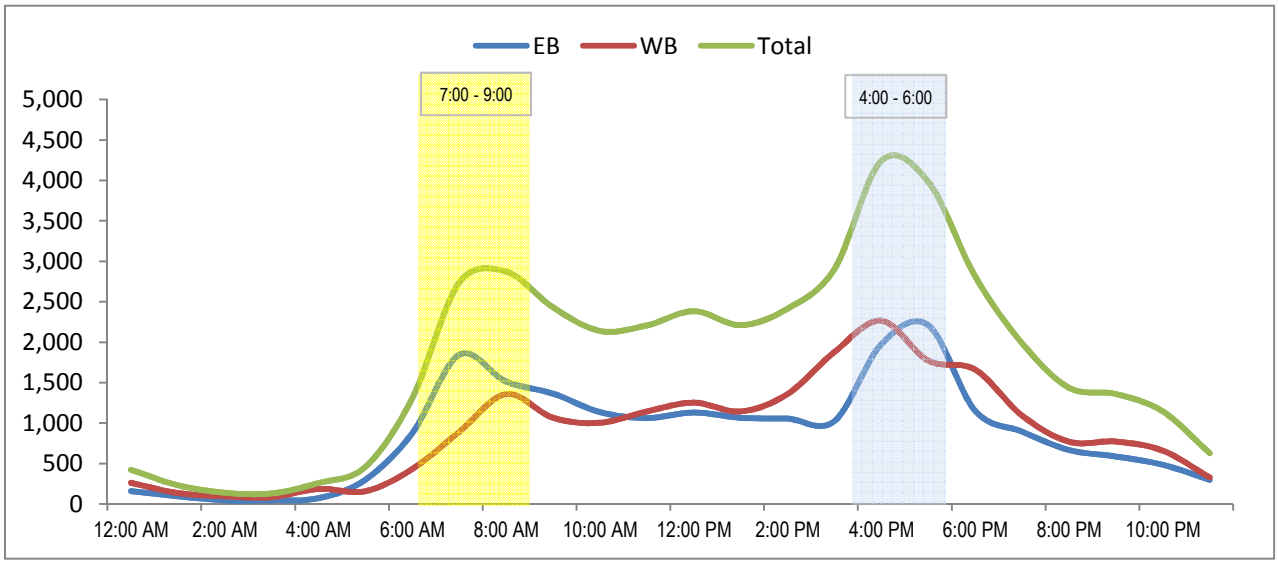
AVC Proj. No: *15-0345*

24 Hour Segment Volume			*42,863*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	161	263	424
1:00 AM - 2:00 AM	96	136	232
2:00 AM - 3:00 AM	46	95	141
3:00 AM - 4:00 AM	46	85	131
4:00 AM - 5:00 AM	72	187	259
5:00 AM - 6:00 AM	301	159	460
6:00 AM - 7:00 AM	878	433	1,311
7:00 AM - 8:00 AM	1,845	893	2,738
8:00 AM - 9:00 AM	1,514	1,359	2,873
9:00 AM - 10:00 AM	1,365	1,066	2,431
10:00 AM - 11:00 AM	1,136	1,004	2,140
11:00 AM - 12:00 PM	1,063	1,145	2208
Total	**8,523**	**6,825**	**15,348**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	1,131	1,253	2,384
1:00 PM - 2:00 PM	1,066	1,145	2,211
2:00 PM - 3:00 PM	1,056	1,359	2,415
3:00 PM - 4:00 PM	1,026	1,880	2,906
4:00 PM - 5:00 PM	1,976	2,266	4,242
5:00 PM - 6:00 PM	2,211	1,772	3,983
6:00 PM - 7:00 PM	1,153	1,661	2,814
7:00 PM - 8:00 PM	895	1,094	1,989
8:00 PM - 9:00 PM	668	770	1,438
9:00 PM - 10:00 PM	588	772	1,360
10:00 PM - 11:00 PM	485	660	1,145
11:00 PM - 12:00 AM	299	329	628
Total	**12,554**	**14,961**	**27,515**

24-Hour	*EB*	*Volume*	*21,077*	*24-Hour*	*WB*	*Volume*	*21,786*



Kimley»Horn

24 Hour Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: 14. La Jolla Village Drive West of Genesee Ave

Orientation: *East-West*

Date of Count: *Tuesday, May 05, 2015*

Analysts: *DASH*

Weather: *Sunny*

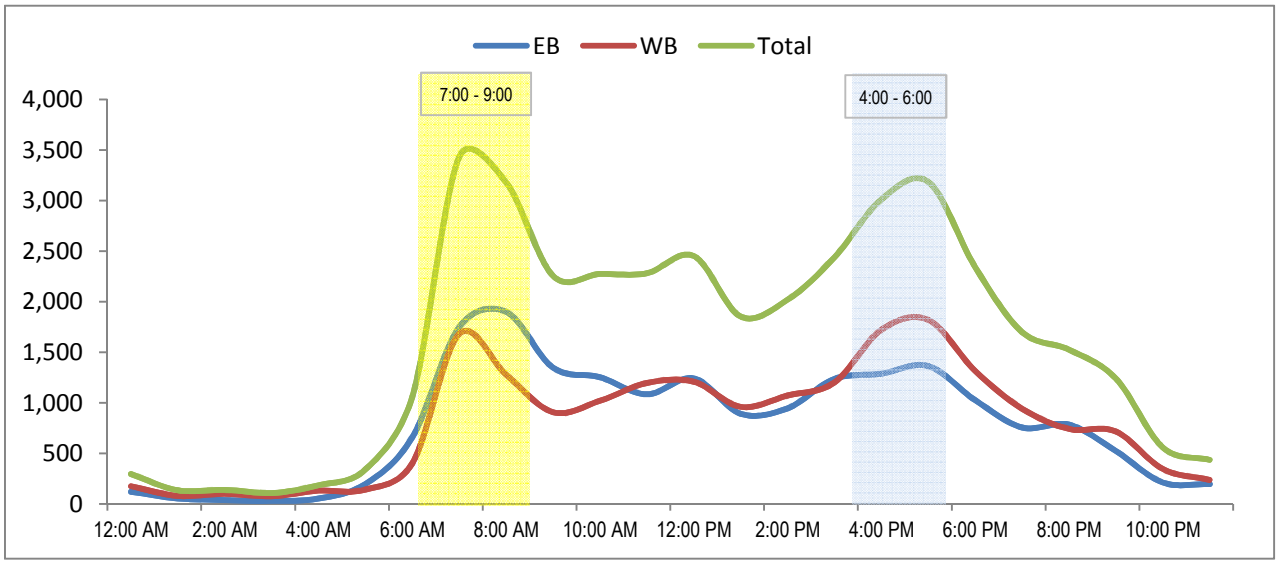
AVC Proj. No: *15-0345*

24 Hour Segment Volume			*38,474*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	121	176	297
1:00 AM - 2:00 AM	55	81	136
2:00 AM - 3:00 AM	40	101	141
3:00 AM - 4:00 AM	31	78	109
4:00 AM - 5:00 AM	54	132	186
5:00 AM - 6:00 AM	199	143	342
6:00 AM - 7:00 AM	660	403	1,063
7:00 AM - 8:00 AM	1,750	1,683	3,433
8:00 AM - 9:00 AM	1,900	1,280	3,180
9:00 AM - 10:00 AM	1,349	908	2,257
10:00 AM - 11:00 AM	1,254	1,021	2,275
11:00 AM - 12:00 PM	1,085	1,197	2282
Total	**8,498**	**7,203**	**15,701**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	1,243	1,210	2,453
1:00 PM - 2:00 PM	893	961	1,854
2:00 PM - 3:00 PM	947	1,073	2,020
3:00 PM - 4:00 PM	1,238	1,202	2,440
4:00 PM - 5:00 PM	1,289	1,723	3,012
5:00 PM - 6:00 PM	1,365	1,821	3,186
6:00 PM - 7:00 PM	1,027	1,317	2,344
7:00 PM - 8:00 PM	757	943	1,700
8:00 PM - 9:00 PM	785	742	1,527
9:00 PM - 10:00 PM	524	717	1,241
10:00 PM - 11:00 PM	213	347	560
11:00 PM - 12:00 AM	197	239	436
Total	**10,478**	**12,295**	**22,773**

24-Hour	*EB*	*Volume*	*18,976*	*24-Hour*	*WB*	*Volume*	*19,498*



Kimley»Horn

24 Hour Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: 13. La Jolla Village Drive East of Genesee Ave

Orientation: *East-West*

Date of Count: *Tuesday, May 05, 2015*

Analysts: *DASH*

Weather: *Sunny*

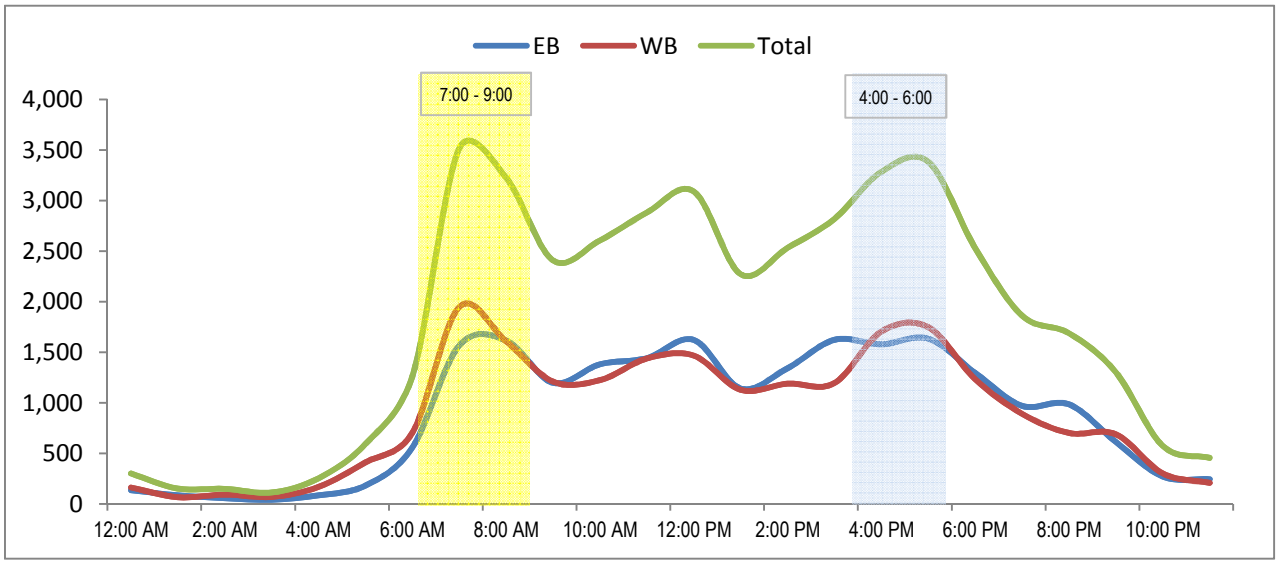
AVC Proj. No: *15-0345*

24 Hour Segment Volume			*43,277*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	138	164	302
1:00 AM - 2:00 AM	85	68	153
2:00 AM - 3:00 AM	58	93	151
3:00 AM - 4:00 AM	43	71	114
4:00 AM - 5:00 AM	86	169	255
5:00 AM - 6:00 AM	183	412	595
6:00 AM - 7:00 AM	559	705	1,264
7:00 AM - 8:00 AM	1,567	1,948	3,515
8:00 AM - 9:00 AM	1,617	1,609	3,226
9:00 AM - 10:00 AM	1,198	1,211	2,409
10:00 AM - 11:00 AM	1,382	1,225	2,607
11:00 AM - 12:00 PM	1,443	1,439	2882
Total	**8,359**	**9,114**	**17,473**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	1,623	1,468	3,091
1:00 PM - 2:00 PM	1,143	1,130	2,273
2:00 PM - 3:00 PM	1,343	1,190	2,533
3:00 PM - 4:00 PM	1,624	1,196	2,820
4:00 PM - 5:00 PM	1,579	1,706	3,285
5:00 PM - 6:00 PM	1,635	1,749	3,384
6:00 PM - 7:00 PM	1,297	1,235	2,532
7:00 PM - 8:00 PM	971	892	1,863
8:00 PM - 9:00 PM	986	703	1,689
9:00 PM - 10:00 PM	614	689	1,303
10:00 PM - 11:00 PM	272	303	575
11:00 PM - 12:00 AM	246	210	456
Total	**13,333**	**12,471**	**25,804**

24-Hour EB Volume	*21,692*	*24-Hour WB Volume*	*21,585*



Kimley»Horn

24 Hour Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: 35. La Jolla Village Drive West of Towne Center Dr

Orientation: *East-West*

Date of Count: *Tuesday, May 05, 2015*

Analysts: *DASH*

Weather: *Sunny*

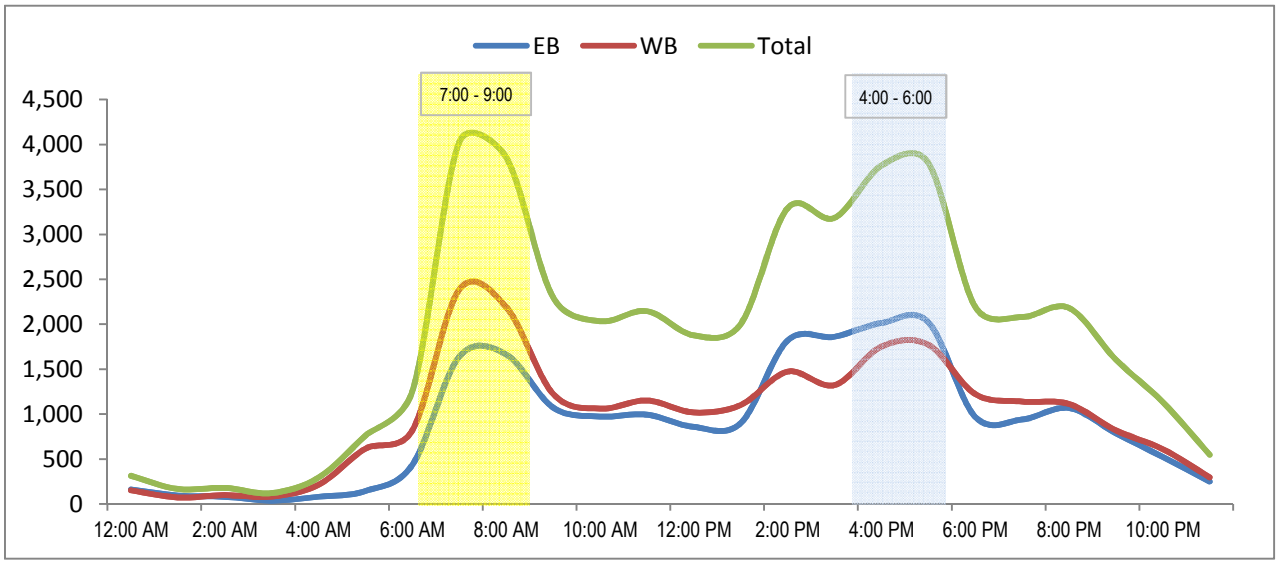
AVC Proj. No: *15-0345*

24 Hour Segment Volume			*45,117*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	162	152	314
1:00 AM - 2:00 AM	94	73	167
2:00 AM - 3:00 AM	81	99	180
3:00 AM - 4:00 AM	38	84	122
4:00 AM - 5:00 AM	81	214	295
5:00 AM - 6:00 AM	145	616	761
6:00 AM - 7:00 AM	436	819	1,255
7:00 AM - 8:00 AM	1,639	2,385	4,024
8:00 AM - 9:00 AM	1,665	2,192	3,857
9:00 AM - 10:00 AM	1,074	1,227	2,301
10:00 AM - 11:00 AM	974	1,061	2,035
11:00 AM - 12:00 PM	994	1,152	2146
Total	**7,383**	**10,074**	**17,457**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	858	1,019	1,877
1:00 PM - 2:00 PM	900	1,101	2,001
2:00 PM - 3:00 PM	1,818	1,473	3,291
3:00 PM - 4:00 PM	1,861	1,323	3,184
4:00 PM - 5:00 PM	2,014	1,751	3,765
5:00 PM - 6:00 PM	2,023	1,773	3,796
6:00 PM - 7:00 PM	971	1,224	2,195
7:00 PM - 8:00 PM	940	1,141	2,081
8:00 PM - 9:00 PM	1,068	1,113	2,181
9:00 PM - 10:00 PM	787	819	1,606
10:00 PM - 11:00 PM	524	611	1,135
11:00 PM - 12:00 AM	251	297	548
Total	**14,015**	**13,645**	**27,660**

24-Hour	*EB*	*Volume*	*21,398*	*24-Hour*	*WB*	*Volume*	*23,719*



Kimley»Horn

24 Hour Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: 36. La Jolla Village Drive East of Towne Center Drive

Orientation: *East-West*

Date of Count: *Tuesday, May 05, 2015*

Analysts: *DASH*

Weather: *Sunny*

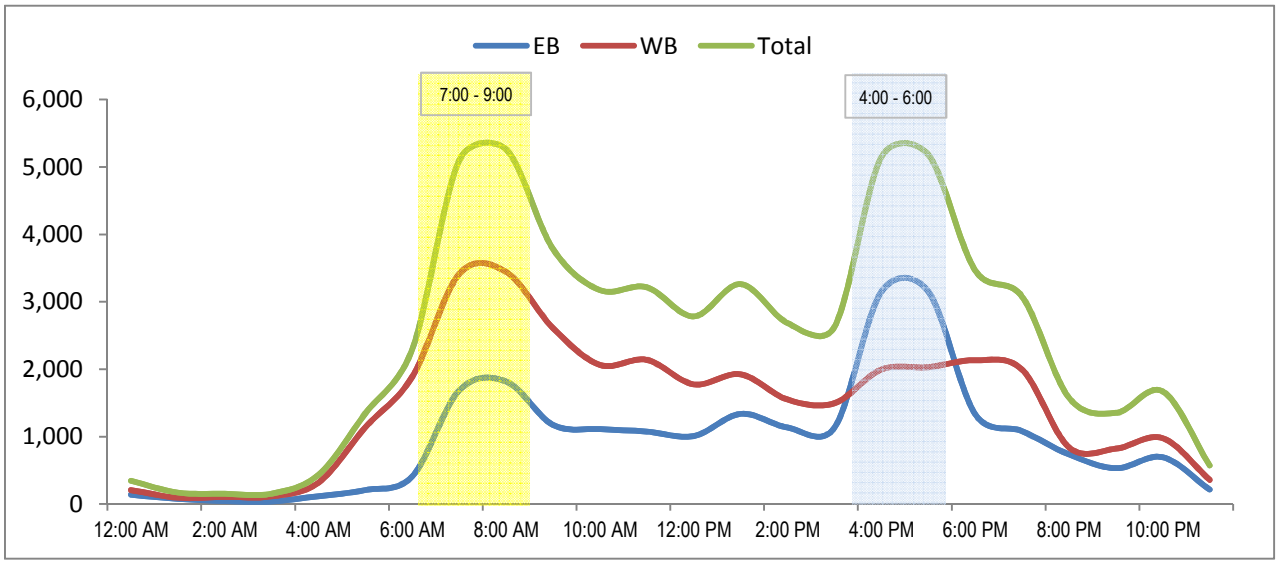
AVC Proj. No: *15-0345*

24 Hour Segment Volume			*58,833*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	138	206	344
1:00 AM - 2:00 AM	76	94	170
2:00 AM - 3:00 AM	45	107	152
3:00 AM - 4:00 AM	40	114	154
4:00 AM - 5:00 AM	117	318	435
5:00 AM - 6:00 AM	208	1,139	1,347
6:00 AM - 7:00 AM	411	1,890	2,301
7:00 AM - 8:00 AM	1,686	3,413	5,099
8:00 AM - 9:00 AM	1,818	3,443	5,261
9:00 AM - 10:00 AM	1,174	2,609	3,783
10:00 AM - 11:00 AM	1,110	2,063	3,173
11:00 AM - 12:00 PM	1,076	2,139	3215
Total	**7,899**	**17,535**	**25,434**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	1,008	1,775	2,783
1:00 PM - 2:00 PM	1,338	1,924	3,262
2:00 PM - 3:00 PM	1,135	1,549	2,684
3:00 PM - 4:00 PM	1,132	1,496	2,628
4:00 PM - 5:00 PM	3,149	1,996	5,145
5:00 PM - 6:00 PM	3,153	2,029	5,182
6:00 PM - 7:00 PM	1,334	2,133	3,467
7:00 PM - 8:00 PM	1,083	1,994	3,077
8:00 PM - 9:00 PM	736	841	1,577
9:00 PM - 10:00 PM	531	821	1,352
10:00 PM - 11:00 PM	694	976	1,670
11:00 PM - 12:00 AM	214	358	572
Total	**15,507**	**17,892**	**33,399**

24-Hour	*EB*	*Volume*	*23,406*	*24-Hour*	*WB*	*Volume*	*35,427*



Kimley»Horn

24 Hour Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: 52. Lebon Drive North of Nobel Dr

Orientation: *North-South*

Date of Count: *Tuesday, April 28, 2015*

Analysts: *DASH*

Weather: *Sunny*

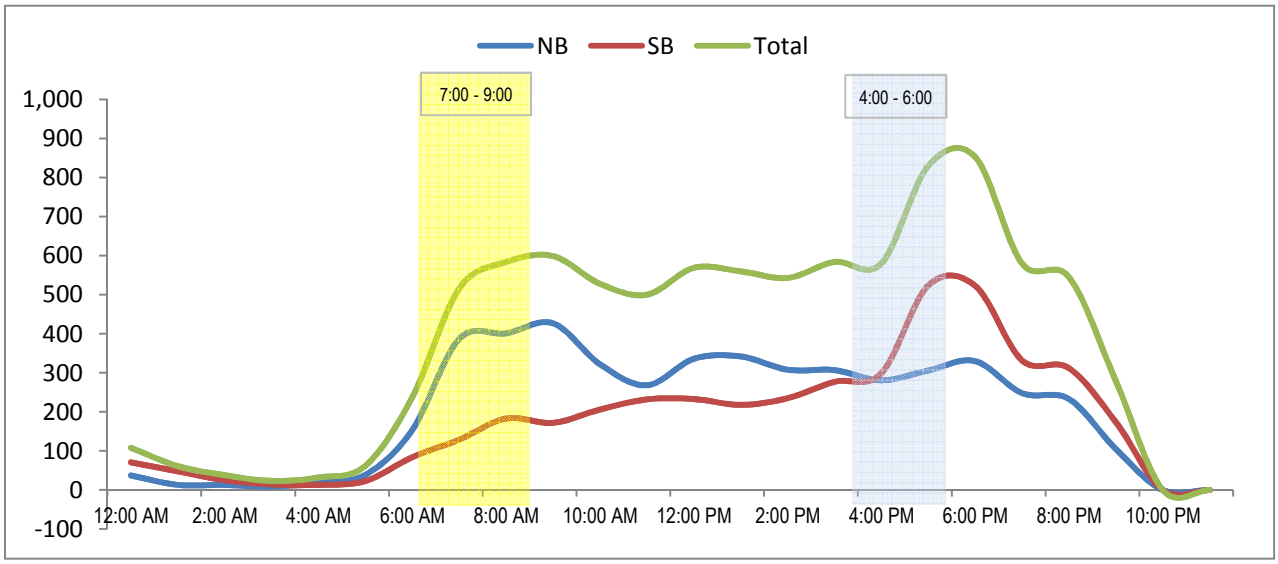
AVC Proj. No: *15-0345*

24 Hour Segment Volume			*9,212*

Time	Hourly Volume		
	NB	SB	Total
12:00 AM - 1:00 AM	37	71	108
1:00 AM - 2:00 AM	13	48	61
2:00 AM - 3:00 AM	13	25	38
3:00 AM - 4:00 AM	9	14	23
4:00 AM - 5:00 AM	19	13	32
5:00 AM - 6:00 AM	39	23	62
6:00 AM - 7:00 AM	154	84	238
7:00 AM - 8:00 AM	387	129	516
8:00 AM - 9:00 AM	401	183	584
9:00 AM - 10:00 AM	427	172	599
10:00 AM - 11:00 AM	322	206	528
11:00 AM - 12:00 PM	268	232	500
Total	**2,089**	**1,200**	**3,289**

Time	Hourly Volume		
	NB	SB	Total
12:00 PM - 1:00 PM	336	233	569
1:00 PM - 2:00 PM	342	218	560
2:00 PM - 3:00 PM	308	235	543
3:00 PM - 4:00 PM	307	277	584
4:00 PM - 5:00 PM	281	299	580
5:00 PM - 6:00 PM	306	524	830
6:00 PM - 7:00 PM	330	523	853
7:00 PM - 8:00 PM	248	332	580
8:00 PM - 9:00 PM	233	312	545
9:00 PM - 10:00 PM	105	174	279
10:00 PM - 11:00 PM	0	0	0
11:00 PM - 12:00 AM	0	0	0
Total	**2,796**	**3,127**	**5,923**

24-Hour	*NB*	*Volume*	*4,885*	*24-Hour*	*SB*	*Volume*	*4,327*



Kimley»Horn

24 Hour Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: 53. Lebon Drive South of Nobel Dr

Orientation: *North-South*

Date of Count: *Tuesday, April 28, 2015*

Analysts: *DASH*

Weather: *Sunny*

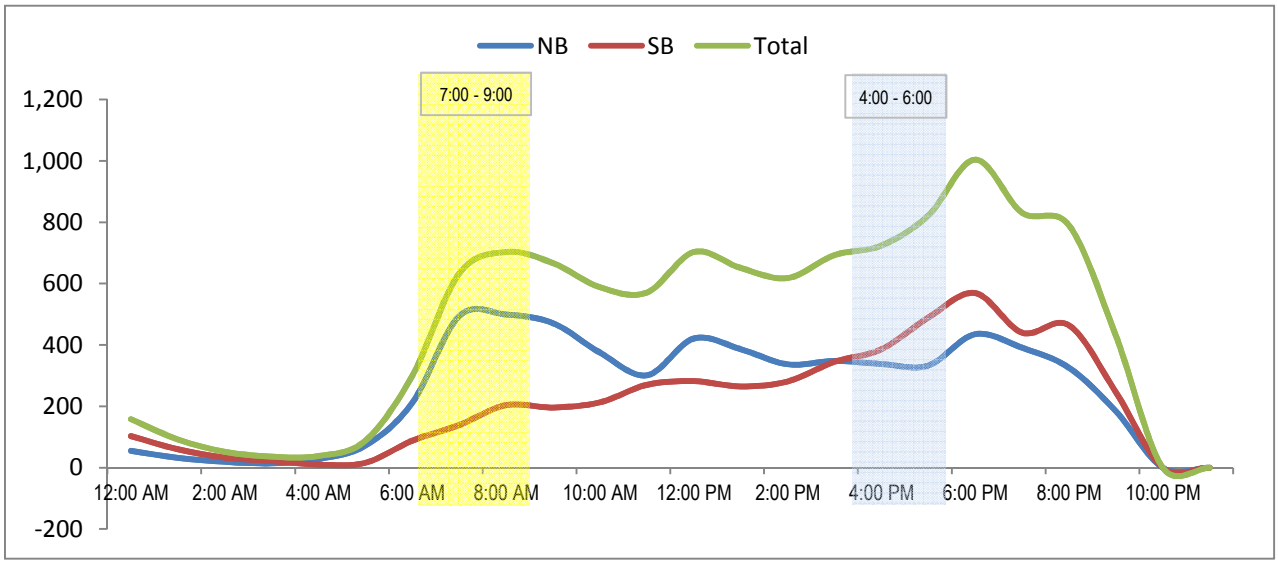
AVC Proj. No: *15-0345*

24 Hour Segment Volume			*11,192*

Time	Hourly Volume		
	NB	SB	Total
12:00 AM - 1:00 AM	55	103	158
1:00 AM - 2:00 AM	32	60	92
2:00 AM - 3:00 AM	19	33	52
3:00 AM - 4:00 AM	14	22	36
4:00 AM - 5:00 AM	28	10	38
5:00 AM - 6:00 AM	72	16	88
6:00 AM - 7:00 AM	212	88	300
7:00 AM - 8:00 AM	494	139	633
8:00 AM - 9:00 AM	499	204	703
9:00 AM - 10:00 AM	471	196	667
10:00 AM - 11:00 AM	375	213	588
11:00 AM - 12:00 PM	301	270	571
Total	**2,572**	**1,354**	**3,926**

Time	Hourly Volume		
	NB	SB	Total
12:00 PM - 1:00 PM	421	282	703
1:00 PM - 2:00 PM	386	265	651
2:00 PM - 3:00 PM	337	281	618
3:00 PM - 4:00 PM	348	345	693
4:00 PM - 5:00 PM	338	386	724
5:00 PM - 6:00 PM	333	489	822
6:00 PM - 7:00 PM	435	569	1,004
7:00 PM - 8:00 PM	391	440	831
8:00 PM - 9:00 PM	326	464	790
9:00 PM - 10:00 PM	184	246	430
10:00 PM - 11:00 PM	0	0	0
11:00 PM - 12:00 AM	0	0	0
Total	**3,499**	**3,767**	**7,266**

24-Hour	*NB*	*Volume*	*6,071*	*24-Hour*	*SB*	*Volume*	*5,121*



Kimley»Horn

24 Hour Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: 63. Miramar Road Between I-805 NB & SB Ramps

Orientation: *East-West*

Date of Count: *Tuesday, May 05, 2015*

Analysts: *DASH*

Weather: *Sunny*

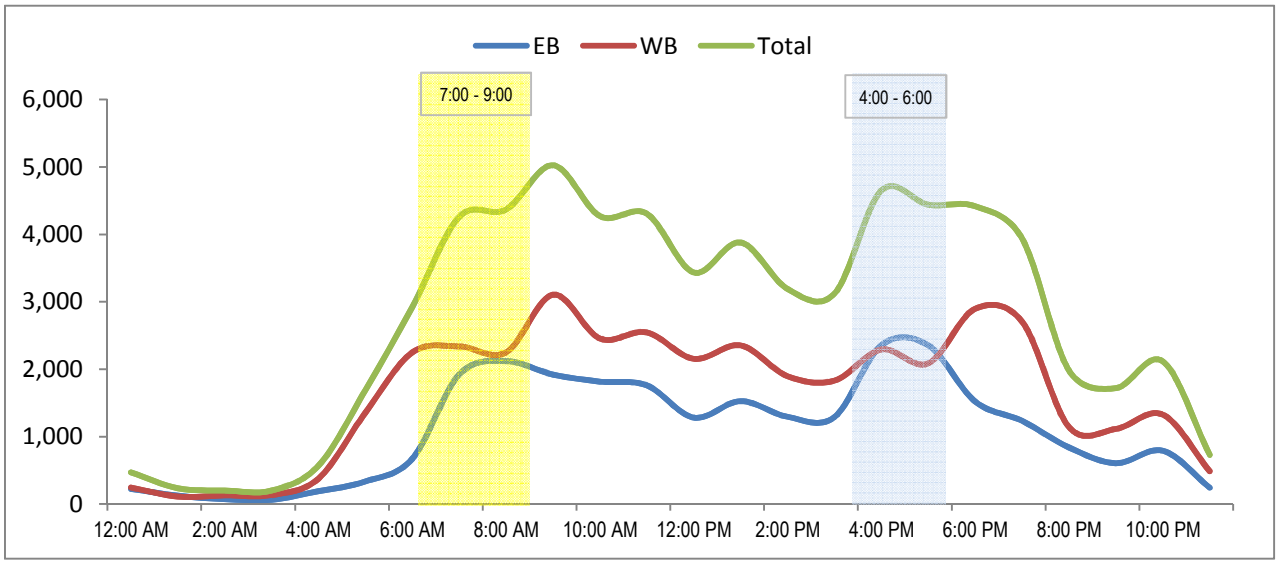
AVC Proj. No: *15-0345*

24 Hour Segment Volume			*66,139*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	225	245	470
1:00 AM - 2:00 AM	123	112	235
2:00 AM - 3:00 AM	73	128	201
3:00 AM - 4:00 AM	65	135	200
4:00 AM - 5:00 AM	191	378	569
5:00 AM - 6:00 AM	335	1,356	1,691
6:00 AM - 7:00 AM	673	2,249	2,922
7:00 AM - 8:00 AM	1,923	2,338	4,261
8:00 AM - 9:00 AM	2,119	2,250	4,369
9:00 AM - 10:00 AM	1,920	3,105	5,025
10:00 AM - 11:00 AM	1,816	2,455	4,271
11:00 AM - 12:00 PM	1,760	2,546	4306
Total	**11,223**	**17,297**	**28,520**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	1,282	2,153	3,435
1:00 PM - 2:00 PM	1,526	2,353	3,879
2:00 PM - 3:00 PM	1,294	1,896	3,190
3:00 PM - 4:00 PM	1,291	1,830	3,121
4:00 PM - 5:00 PM	2,357	2,293	4,650
5:00 PM - 6:00 PM	2,354	2,086	4,440
6:00 PM - 7:00 PM	1,521	2,896	4,417
7:00 PM - 8:00 PM	1,234	2,706	3,940
8:00 PM - 9:00 PM	839	1,142	1,981
9:00 PM - 10:00 PM	605	1,114	1,719
10:00 PM - 11:00 PM	791	1,326	2,117
11:00 PM - 12:00 AM	244	486	730
Total	**15,338**	**22,281**	**37,619**

24-Hour	*EB*	*Volume*	*26,561*	*24-Hour*	*WB*	*Volume*	*39,578*



Kimley»Horn

24 Hour Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: 37. Miramar Road West of Nobel Dr

Orientation: *East-West*

Date of Count: *Wednesday, May 13, 2015*

Analysts: *DASH*

Weather: *Sunny*

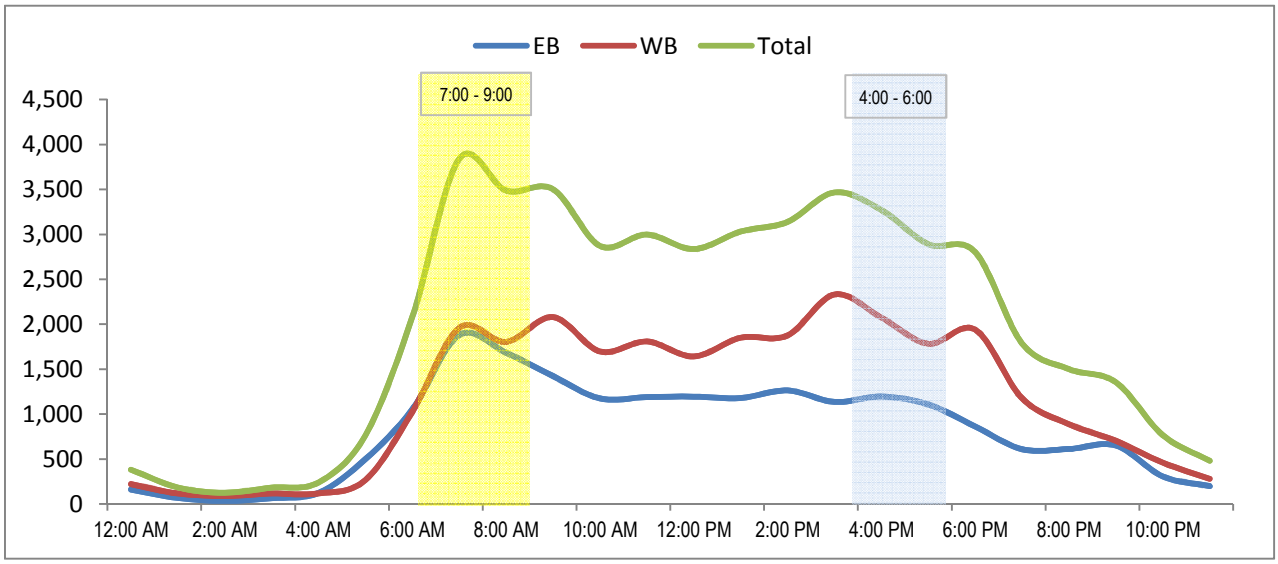
AVC Proj. No: *15-0345*

24 Hour Segment Volume			*47,991*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	161	221	382
1:00 AM - 2:00 AM	68	117	185
2:00 AM - 3:00 AM	36	90	126
3:00 AM - 4:00 AM	65	117	182
4:00 AM - 5:00 AM	124	117	241
5:00 AM - 6:00 AM	499	267	766
6:00 AM - 7:00 AM	1,055	1,026	2,081
7:00 AM - 8:00 AM	1,880	1,960	3,840
8:00 AM - 9:00 AM	1,683	1,804	3,487
9:00 AM - 10:00 AM	1,423	2,079	3,502
10:00 AM - 11:00 AM	1,175	1,697	2,872
11:00 AM - 12:00 PM	1,190	1,808	2998
Total	**9,359**	**11,303**	**20,662**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	1,195	1,642	2,837
1:00 PM - 2:00 PM	1,180	1,851	3,031
2:00 PM - 3:00 PM	1,263	1,876	3,139
3:00 PM - 4:00 PM	1,136	2,331	3,467
4:00 PM - 5:00 PM	1,196	2,075	3,271
5:00 PM - 6:00 PM	1,108	1,783	2,891
6:00 PM - 7:00 PM	863	1,940	2,803
7:00 PM - 8:00 PM	610	1,177	1,787
8:00 PM - 9:00 PM	613	888	1,501
9:00 PM - 10:00 PM	650	704	1,354
10:00 PM - 11:00 PM	307	460	767
11:00 PM - 12:00 AM	200	281	481
Total	**10,321**	**17,008**	**27,329**

24-Hour	*EB*	*Volume*	*19,680*	*24-Hour*	*WB*	*Volume*	*28,311*



Kimley»Horn

24 Hour Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: 38. Miramar Road East of Nobel Dr

Orientation: *East-West*

Date of Count: *Wednesday, May 13, 2015*

Analysts: *DASH*

Weather: *Sunny*

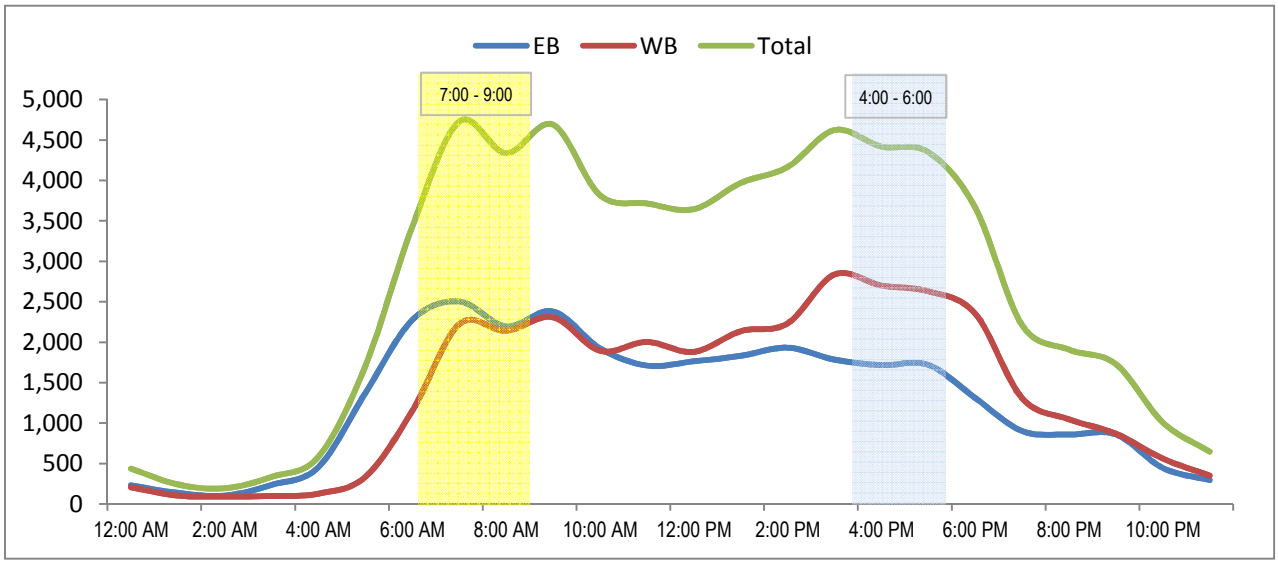
AVC Proj. No: *15-0345*

24 Hour Segment Volume			*64,557*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	231	206	437
1:00 AM - 2:00 AM	138	104	242
2:00 AM - 3:00 AM	103	91	194
3:00 AM - 4:00 AM	237	99	336
4:00 AM - 5:00 AM	457	129	586
5:00 AM - 6:00 AM	1,373	336	1,709
6:00 AM - 7:00 AM	2,276	1,153	3,429
7:00 AM - 8:00 AM	2,504	2,223	4,727
8:00 AM - 9:00 AM	2,195	2,141	4,336
9:00 AM - 10:00 AM	2,381	2,308	4,689
10:00 AM - 11:00 AM	1,924	1,894	3,818
11:00 AM - 12:00 PM	1,712	2,003	3715
Total	**15,531**	**12,687**	**28,218**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	1,764	1,881	3,645
1:00 PM - 2:00 PM	1,831	2,137	3,968
2:00 PM - 3:00 PM	1,933	2,232	4,165
3:00 PM - 4:00 PM	1,785	2,837	4,622
4:00 PM - 5:00 PM	1,717	2,701	4,418
5:00 PM - 6:00 PM	1,720	2,630	4,350
6:00 PM - 7:00 PM	1,312	2,354	3,666
7:00 PM - 8:00 PM	902	1,310	2,212
8:00 PM - 9:00 PM	860	1,048	1,908
9:00 PM - 10:00 PM	860	870	1,730
10:00 PM - 11:00 PM	446	562	1,008
11:00 PM - 12:00 AM	295	352	647
Total	**15,425**	**20,914**	**36,339**

24-Hour	*EB*	*Volume*	*30,956*	*24-Hour*	*WB*	*Volume*	*33,601*



Kimley»Horn

24 Hour Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: 81. Miramar Rd, West of Camino Santa Fe

Orientation: *East-West*

Date of Count: *Wednesday, June 17, 2015*

Analysts: *DASH*

Weather: *Sunny*

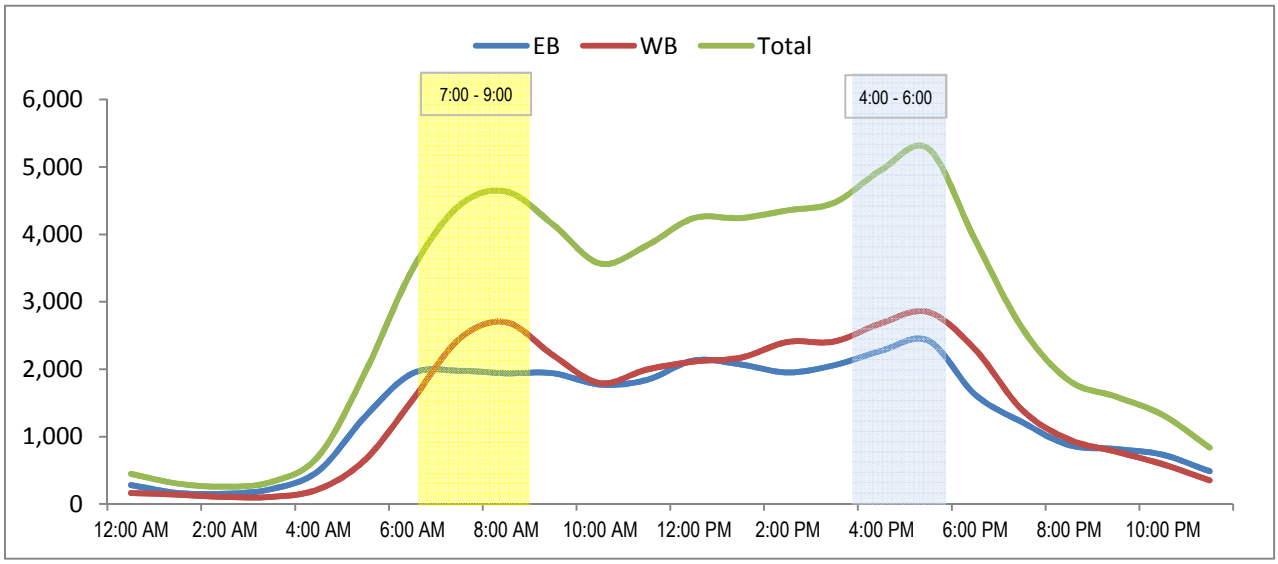
AVC Proj. No: *15-0345*

24 Hour Segment Volume			*67,748*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	281	165	446
1:00 AM - 2:00 AM	163	140	303
2:00 AM - 3:00 AM	153	104	257
3:00 AM - 4:00 AM	222	107	329
4:00 AM - 5:00 AM	492	220	712
5:00 AM - 6:00 AM	1,303	660	1,963
6:00 AM - 7:00 AM	1,937	1,540	3,477
7:00 AM - 8:00 AM	1,978	2,448	4,426
8:00 AM - 9:00 AM	1,939	2,697	4,636
9:00 AM - 10:00 AM	1,940	2,206	4,146
10:00 AM - 11:00 AM	1,773	1,794	3,567
11:00 AM - 12:00 PM	1,841	1,995	3836
Total	**14,022**	**14,076**	**28,098**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	2,130	2,112	4,242
1:00 PM - 2:00 PM	2,071	2,171	4,242
2:00 PM - 3:00 PM	1,952	2,404	4,356
3:00 PM - 4:00 PM	2,060	2,411	4,471
4:00 PM - 5:00 PM	2,273	2,683	4,956
5:00 PM - 6:00 PM	2,424	2,848	5,272
6:00 PM - 7:00 PM	1,623	2,293	3,916
7:00 PM - 8:00 PM	1,216	1,396	2,612
8:00 PM - 9:00 PM	875	957	1,832
9:00 PM - 10:00 PM	816	777	1,593
10:00 PM - 11:00 PM	731	590	1,321
11:00 PM - 12:00 AM	486	351	837
Total	**18,657**	**20,993**	**39,650**

24-Hour	*EB*	*Volume*	*32,679*	*24-Hour*	*WB*	*Volume*	*35,069*



Kimley»Horn

24 Hour Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: 6. Regents Rd, South of SR-52 EB Ramps

Orientation: *North-South*

Date of Count: *Tuesday, April 28, 2015*

Analysts: *DASH*

Weather: *Sunny*

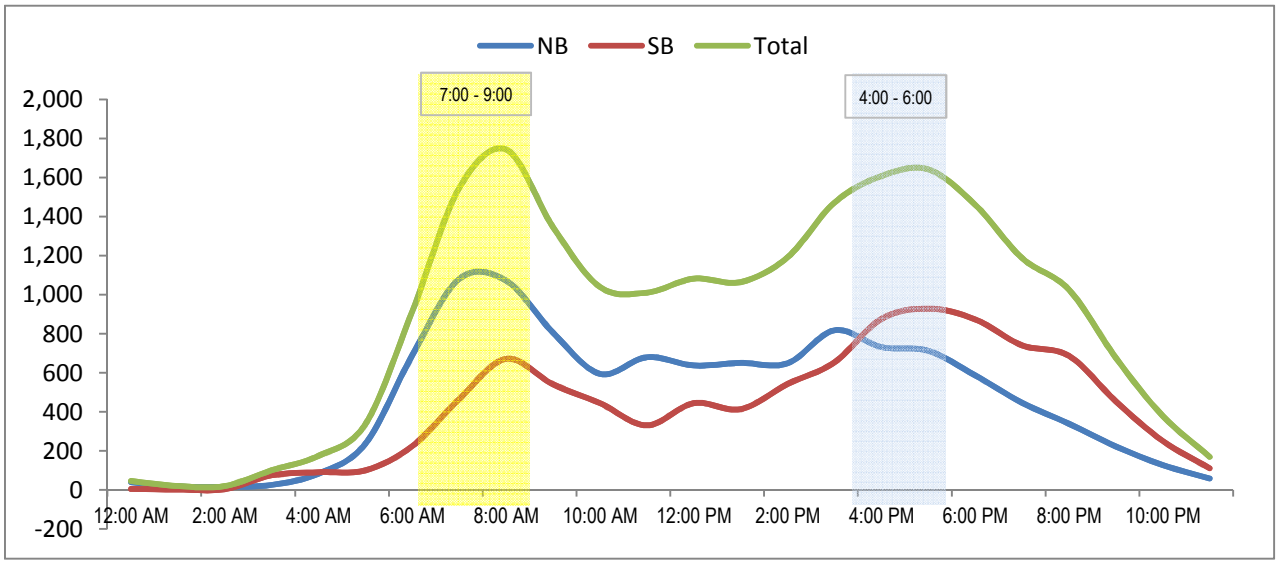
AVC Proj. No: *15-0345*

24 Hour Segment Volume			*21,268*

Time	Hourly Volume		
	NB	SB	Total
12:00 AM - 1:00 AM	40	6	46
1:00 AM - 2:00 AM	18	2	20
2:00 AM - 3:00 AM	16	4	20
3:00 AM - 4:00 AM	26	75	101
4:00 AM - 5:00 AM	84	91	175
5:00 AM - 6:00 AM	237	101	338
6:00 AM - 7:00 AM	691	225	916
7:00 AM - 8:00 AM	1,081	466	1,547
8:00 AM - 9:00 AM	1,072	672	1,744
9:00 AM - 10:00 AM	806	541	1,347
10:00 AM - 11:00 AM	595	445	1,040
11:00 AM - 12:00 PM	680	331	1011
Total	**5,346**	**2,959**	**8,305**

Time	Hourly Volume		
	NB	SB	Total
12:00 PM - 1:00 PM	638	445	1,083
1:00 PM - 2:00 PM	651	414	1,065
2:00 PM - 3:00 PM	649	543	1,192
3:00 PM - 4:00 PM	818	654	1,472
4:00 PM - 5:00 PM	732	876	1,608
5:00 PM - 6:00 PM	713	929	1,642
6:00 PM - 7:00 PM	587	874	1,461
7:00 PM - 8:00 PM	447	741	1,188
8:00 PM - 9:00 PM	339	687	1,026
9:00 PM - 10:00 PM	223	454	677
10:00 PM - 11:00 PM	128	251	379
11:00 PM - 12:00 AM	59	111	170
Total	**5,984**	**6,979**	**12,963**

24-Hour	*NB*	*Volume*	*11,330*	*24-Hour*	*SB*	*Volume*	*9,938*



Kimley»Horn

24 Hour Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: 7. Regents Road North of SR-52 WB Ramps

Orientation: *North-South*

Date of Count: *Tuesday, April 28, 2015*

Analysts: *DASH*

Weather: *Sunny*

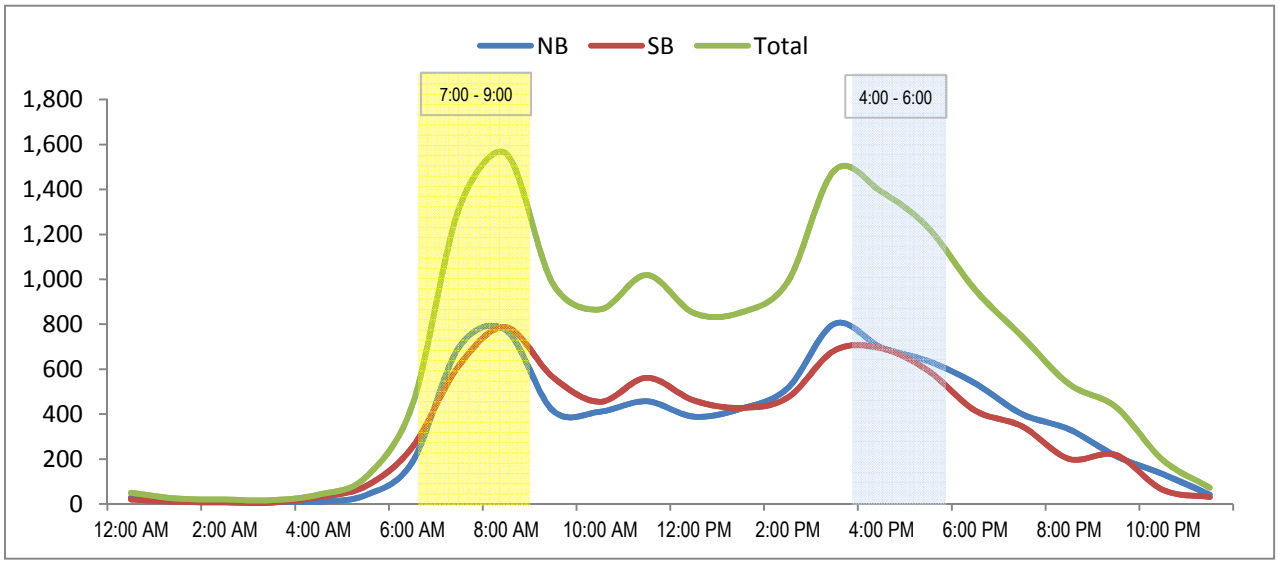
AVC Proj. No: *15-0345*

24 Hour Segment Volume			*16,181*

Time	Hourly Volume		
	NB	SB	Total
12:00 AM - 1:00 AM	29	21	50
1:00 AM - 2:00 AM	14	10	24
2:00 AM - 3:00 AM	13	7	20
3:00 AM - 4:00 AM	11	6	17
4:00 AM - 5:00 AM	11	31	42
5:00 AM - 6:00 AM	39	79	118
6:00 AM - 7:00 AM	187	253	440
7:00 AM - 8:00 AM	700	618	1,318
8:00 AM - 9:00 AM	773	787	1,560
9:00 AM - 10:00 AM	415	564	979
10:00 AM - 11:00 AM	411	455	866
11:00 AM - 12:00 PM	457	562	1019
Total	**3,060**	**3,393**	**6,453**

Time	Hourly Volume		
	NB	SB	Total
12:00 PM - 1:00 PM	389	461	850
1:00 PM - 2:00 PM	424	428	852
2:00 PM - 3:00 PM	515	473	988
3:00 PM - 4:00 PM	802	683	1,485
4:00 PM - 5:00 PM	697	693	1,390
5:00 PM - 6:00 PM	636	593	1,229
6:00 PM - 7:00 PM	537	416	953
7:00 PM - 8:00 PM	400	346	746
8:00 PM - 9:00 PM	333	201	534
9:00 PM - 10:00 PM	214	218	432
10:00 PM - 11:00 PM	133	63	196
11:00 PM - 12:00 AM	42	31	73
Total	**5,122**	**4,606**	**9,728**

24-Hour	*NB*	*Volume*	*8,182*	*24-Hour*	*SB*	*Volume*	*7,999*



Kimley»Horn

24 Hour Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: 21. North Torrey Pines Road North of Genesee Avenue

Orientation: *East-West*

Date of Count: *Tuesday, May 12, 2015*

Analysts: *DASH*

Weather: *Sunny*

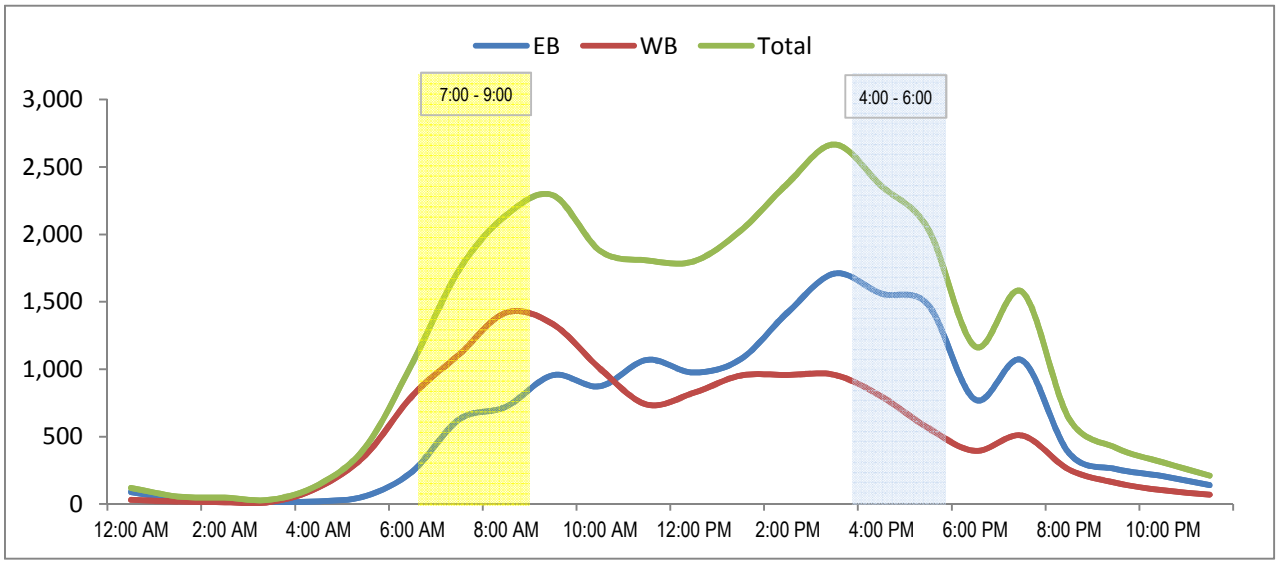
AVC Proj. No: *15-0345*

24 Hour Segment Volume			*29,303*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	89	31	120
1:00 AM - 2:00 AM	36	20	56
2:00 AM - 3:00 AM	34	13	47
3:00 AM - 4:00 AM	17	16	33
4:00 AM - 5:00 AM	20	124	144
5:00 AM - 6:00 AM	59	363	422
6:00 AM - 7:00 AM	241	804	1,045
7:00 AM - 8:00 AM	628	1,110	1,738
8:00 AM - 9:00 AM	722	1,420	2,142
9:00 AM - 10:00 AM	956	1,334	2,290
10:00 AM - 11:00 AM	873	1,005	1,878
11:00 AM - 12:00 PM	1,069	738	1807
Total	**4,744**	**6,978**	**11,722**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	975	825	1,800
1:00 PM - 2:00 PM	1,074	953	2,027
2:00 PM - 3:00 PM	1,420	957	2,377
3:00 PM - 4:00 PM	1,709	958	2,667
4:00 PM - 5:00 PM	1,561	798	2,359
5:00 PM - 6:00 PM	1,476	563	2,039
6:00 PM - 7:00 PM	774	394	1,168
7:00 PM - 8:00 PM	1,066	508	1,574
8:00 PM - 9:00 PM	378	256	634
9:00 PM - 10:00 PM	260	157	417
10:00 PM - 11:00 PM	207	102	309
11:00 PM - 12:00 AM	140	70	210
Total	**11,040**	**6,541**	**17,581**

24-Hour	*EB*	*Volume*	*15,784*	*24-Hour*	*WB*	*Volume*	*13,519*



Kimley»Horn

24 Hour Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: 22. North Torrey Pines Road South of Genesee Ave

Orientation: *North-South*

Date of Count: *Tuesday, May 12, 2015*

Analysts: *DASH*

Weather: *Sunny*

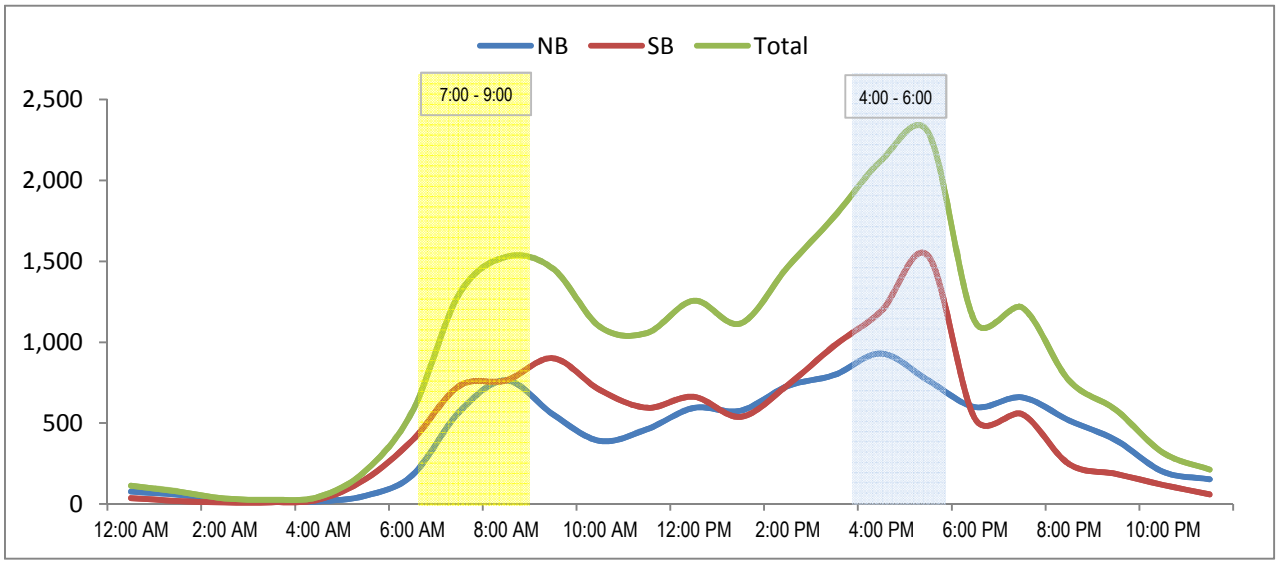
AVC Proj. No: *15-0345*

24 Hour Segment Volume			*21,760*

Time	Hourly Volume		
	NB	SB	Total
12:00 AM - 1:00 AM	77	37	114
1:00 AM - 2:00 AM	58	19	77
2:00 AM - 3:00 AM	25	10	35
3:00 AM - 4:00 AM	15	11	26
4:00 AM - 5:00 AM	17	27	44
5:00 AM - 6:00 AM	51	154	205
6:00 AM - 7:00 AM	178	394	572
7:00 AM - 8:00 AM	569	730	1,299
8:00 AM - 9:00 AM	764	764	1,528
9:00 AM - 10:00 AM	554	901	1,455
10:00 AM - 11:00 AM	390	705	1,095
11:00 AM - 12:00 PM	462	595	1057
Total	**3,160**	**4,347**	**7,507**

Time	Hourly Volume		
	NB	SB	Total
12:00 PM - 1:00 PM	594	663	1,257
1:00 PM - 2:00 PM	577	539	1,116
2:00 PM - 3:00 PM	729	735	1,464
3:00 PM - 4:00 PM	798	980	1,778
4:00 PM - 5:00 PM	930	1,194	2,124
5:00 PM - 6:00 PM	764	1,533	2,297
6:00 PM - 7:00 PM	599	526	1,125
7:00 PM - 8:00 PM	659	556	1,215
8:00 PM - 9:00 PM	517	247	764
9:00 PM - 10:00 PM	395	187	582
10:00 PM - 11:00 PM	200	118	318
11:00 PM - 12:00 AM	153	60	213
Total	**6,915**	**7,338**	**14,253**

24-Hour	*NB*	*Volume*	*10,075*	*24-Hour*	*SB*	*Volume*	*11,685*



Kimley»Horn

24 Hour Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: 69. N. Torrey Pines Rd, North of NU System Drwy

Orientation: *North-South*

Date of Count: *Tuesday, June 16, 2015*

Analysts: *DASH*

Weather: *Sunny*

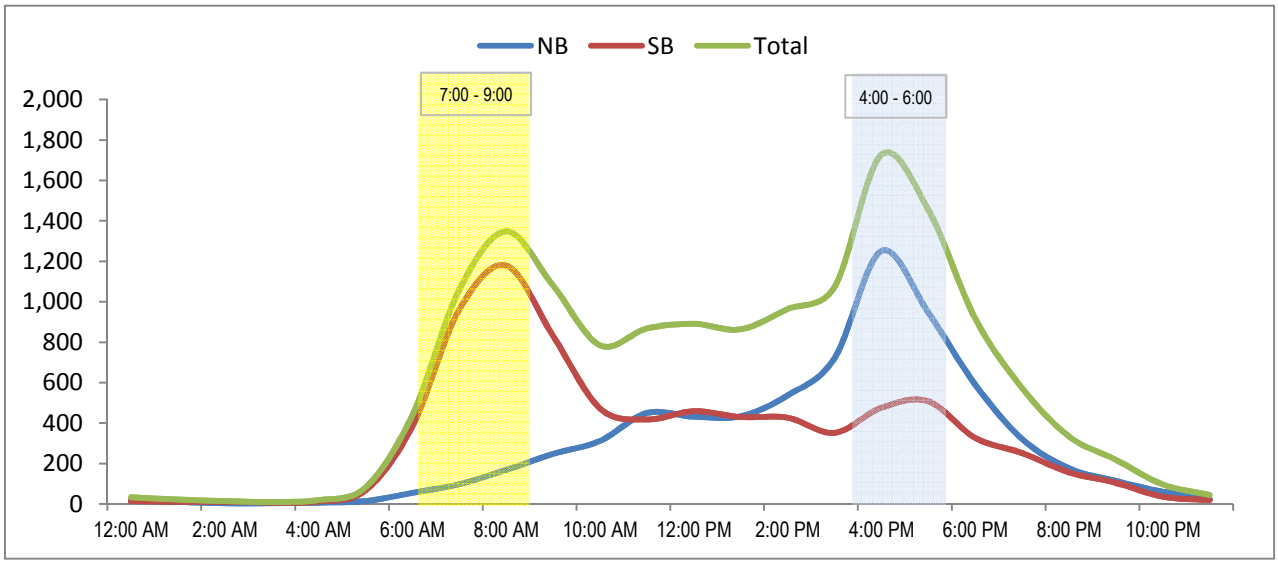
AVC Proj. No: *15-0345*

24 Hour Segment Volume			*14,922*

Time	Hourly Volume		
	NB	SB	Total
12:00 AM - 1:00 AM	18	15	33
1:00 AM - 2:00 AM	11	11	22
2:00 AM - 3:00 AM	3	12	15
3:00 AM - 4:00 AM	3	7	10
4:00 AM - 5:00 AM	7	13	20
5:00 AM - 6:00 AM	15	67	82
6:00 AM - 7:00 AM	55	384	439
7:00 AM - 8:00 AM	98	961	1,059
8:00 AM - 9:00 AM	169	1,179	1,348
9:00 AM - 10:00 AM	248	832	1,080
10:00 AM - 11:00 AM	312	473	785
11:00 AM - 12:00 PM	450	418	868
Total	**1,389**	**4,372**	**5,761**

Time	Hourly Volume		
	NB	SB	Total
12:00 PM - 1:00 PM	432	459	891
1:00 PM - 2:00 PM	434	430	864
2:00 PM - 3:00 PM	537	427	964
3:00 PM - 4:00 PM	721	352	1,073
4:00 PM - 5:00 PM	1,251	476	1,727
5:00 PM - 6:00 PM	947	508	1,455
6:00 PM - 7:00 PM	591	327	918
7:00 PM - 8:00 PM	322	252	574
8:00 PM - 9:00 PM	177	157	334
9:00 PM - 10:00 PM	114	105	219
10:00 PM - 11:00 PM	61	36	97
11:00 PM - 12:00 AM	25	20	45
Total	**5,612**	**3,549**	**9,161**

24-Hour	*NB*	*Volume*	*7,001*	*24-Hour*	*SB*	*Volume*	*7,921*



Kimley»Horn

24 Hour Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: 23. N. Torrey Pines Rd, South of Rovelle College Dr

Orientation: *North-South*

Date of Count: *Wednesday, April 29, 2015*

Analysts: *DASH*

Weather: *Sunny*

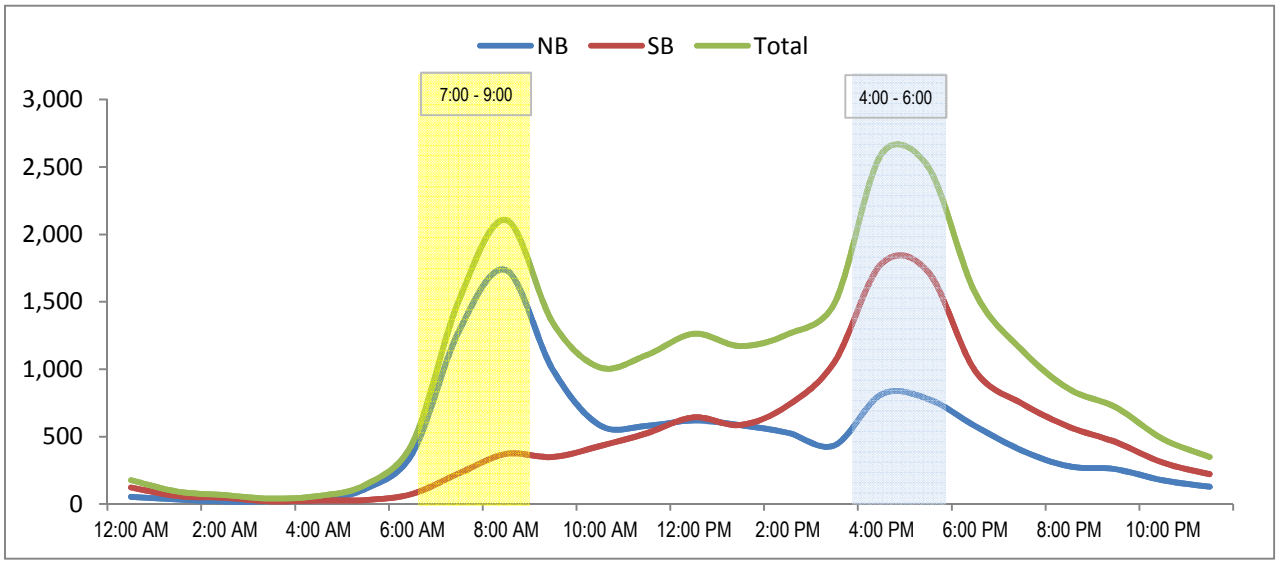
AVC Proj. No: *15-0345*

24 Hour Segment Volume			23,498

Time	Hourly Volume		
	NB	SB	Total
12:00 AM - 1:00 AM	54	123	177
1:00 AM - 2:00 AM	33	59	92
2:00 AM - 3:00 AM	19	47	66
3:00 AM - 4:00 AM	21	20	41
4:00 AM - 5:00 AM	33	27	60
5:00 AM - 6:00 AM	113	30	143
6:00 AM - 7:00 AM	376	75	451
7:00 AM - 8:00 AM	1,288	229	1,517
8:00 AM - 9:00 AM	1,735	372	2,107
9:00 AM - 10:00 AM	993	349	1,342
10:00 AM - 11:00 AM	583	430	1,013
11:00 AM - 12:00 PM	580	525	1105
Total	**5,828**	**2,286**	**8,114**

Time	Hourly Volume		
	NB	SB	Total
12:00 PM - 1:00 PM	620	643	1,263
1:00 PM - 2:00 PM	585	586	1,171
2:00 PM - 3:00 PM	529	730	1,259
3:00 PM - 4:00 PM	435	1,054	1,489
4:00 PM - 5:00 PM	813	1,781	2,594
5:00 PM - 6:00 PM	779	1,720	2,499
6:00 PM - 7:00 PM	578	988	1,566
7:00 PM - 8:00 PM	396	745	1,141
8:00 PM - 9:00 PM	280	573	853
9:00 PM - 10:00 PM	258	459	717
10:00 PM - 11:00 PM	176	307	483
11:00 PM - 12:00 AM	128	221	349
Total	**5,577**	**9,807**	**15,384**

24-Hour NB Volume	11,405	24-Hour SB Volume	12,093



Kimley»Horn

24 Hour Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: 55. Nobel Drive West of I-5 SB On Ramps

Orientation: *East-West*

Date of Count: *Tuesday, May 12, 2015*

Analysts: *DASH*

Weather: *Sunny*

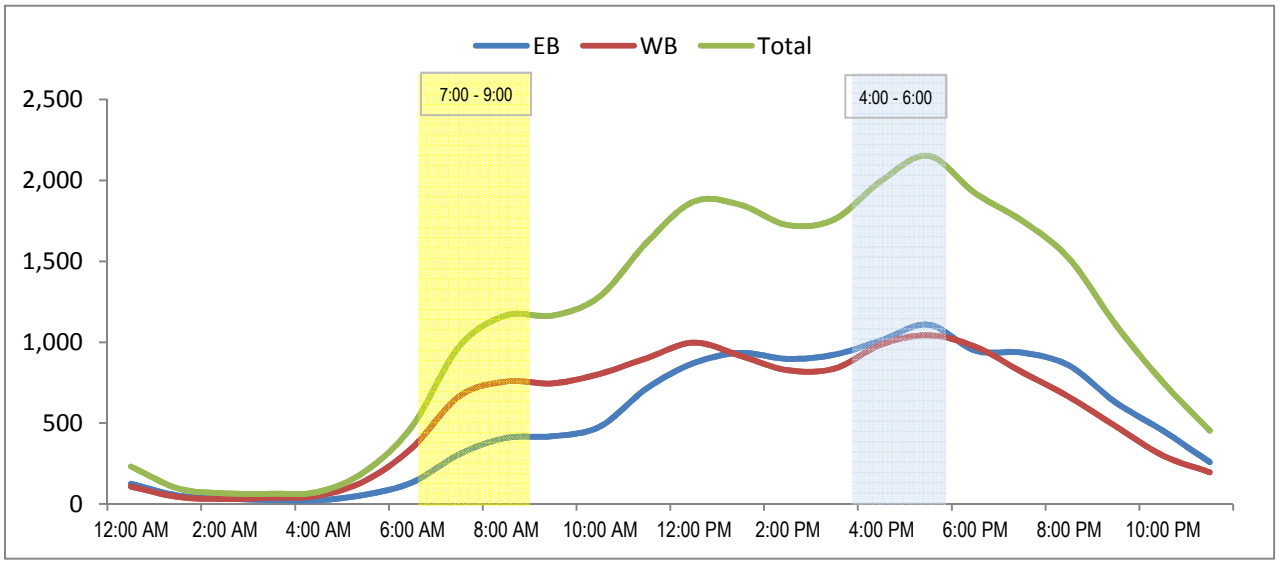
AVC Proj. No: *15-0345*

24 Hour Segment Volume			*26,284*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	125	107	232
1:00 AM - 2:00 AM	53	44	97
2:00 AM - 3:00 AM	35	31	66
3:00 AM - 4:00 AM	25	39	64
4:00 AM - 5:00 AM	24	52	76
5:00 AM - 6:00 AM	58	145	203
6:00 AM - 7:00 AM	134	349	483
7:00 AM - 8:00 AM	308	666	974
8:00 AM - 9:00 AM	409	757	1,166
9:00 AM - 10:00 AM	419	746	1,165
10:00 AM - 11:00 AM	479	805	1,284
11:00 AM - 12:00 PM	715	902	1617
Total	**2,784**	**4,643**	**7,427**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	871	998	1,869
1:00 PM - 2:00 PM	934	915	1,849
2:00 PM - 3:00 PM	897	827	1,724
3:00 PM - 4:00 PM	923	837	1,760
4:00 PM - 5:00 PM	1,012	986	1,998
5:00 PM - 6:00 PM	1,109	1,043	2,152
6:00 PM - 7:00 PM	948	973	1,921
7:00 PM - 8:00 PM	936	815	1,751
8:00 PM - 9:00 PM	856	662	1,518
9:00 PM - 10:00 PM	627	480	1,107
10:00 PM - 11:00 PM	454	300	754
11:00 PM - 12:00 AM	258	196	454
Total	**9,825**	**9,032**	**18,857**

24-Hour	*EB*	*Volume*	*12,609*	*24-Hour*	*WB*	*Volume*	*13,675*



Kimley»Horn

24 Hour Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: 61. Nobel Drive Between I-5 NB & SB Ramps

Orientation: *East-West*

Date of Count: *Tuesday, May 12, 2015*

Analysts: *DASH*

Weather: *Sunny*

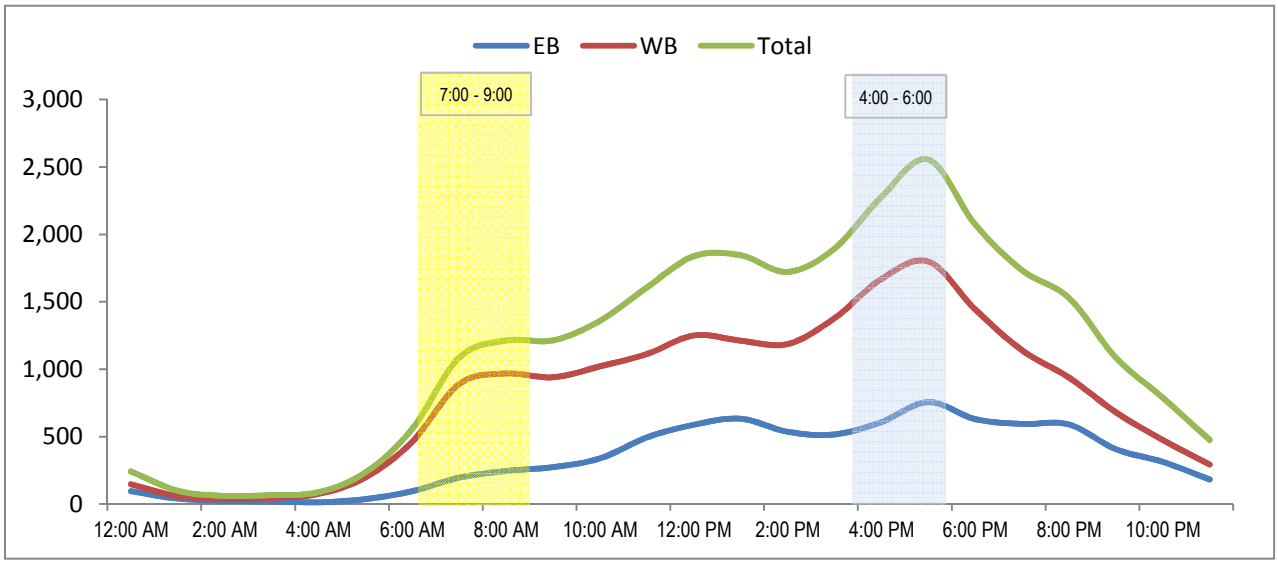
AVC Proj. No: *15-0345*

24 Hour Segment Volume			*27,642*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	95	147	242
1:00 AM - 2:00 AM	40	58	98
2:00 AM - 3:00 AM	23	38	61
3:00 AM - 4:00 AM	20	46	66
4:00 AM - 5:00 AM	13	75	88
5:00 AM - 6:00 AM	37	197	234
6:00 AM - 7:00 AM	95	463	558
7:00 AM - 8:00 AM	196	890	1,086
8:00 AM - 9:00 AM	245	968	1,213
9:00 AM - 10:00 AM	274	940	1,214
10:00 AM - 11:00 AM	338	1,021	1,359
11:00 AM - 12:00 PM	494	1,112	1606
Total	**1,870**	**5,955**	**7,825**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	588	1,250	1,838
1:00 PM - 2:00 PM	633	1,212	1,845
2:00 PM - 3:00 PM	536	1,186	1,722
3:00 PM - 4:00 PM	516	1,378	1,894
4:00 PM - 5:00 PM	608	1,669	2,277
5:00 PM - 6:00 PM	756	1,799	2,555
6:00 PM - 7:00 PM	630	1,444	2,074
7:00 PM - 8:00 PM	594	1,140	1,734
8:00 PM - 9:00 PM	590	938	1,528
9:00 PM - 10:00 PM	406	680	1,086
10:00 PM - 11:00 PM	313	476	789
11:00 PM - 12:00 AM	182	293	475
Total	**6,352**	**13,465**	**19,817**

24-Hour	*EB*	*Volume*	*8,222*	*24-Hour*	*WB*	*Volume*	*19,420*



Kimley»Horn

24 Hour Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: 54. Nobel Drive East of University Center Lane

Orientation: *East-West*

Date of Count: *Tuesday, April 28, 2015*

Analysts: *DASH*

Weather: *Sunny*

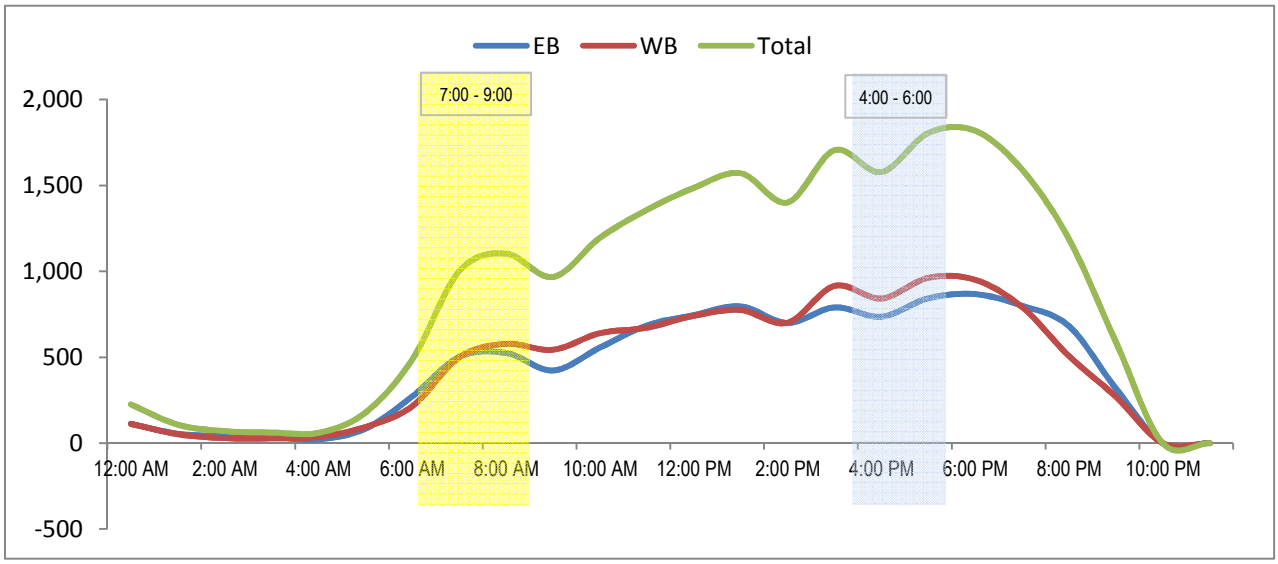
AVC Proj. No: *15-0345*

24 Hour Segment Volume			*21,546*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	113	112	225
1:00 AM - 2:00 AM	55	52	107
2:00 AM - 3:00 AM	41	29	70
3:00 AM - 4:00 AM	35	27	62
4:00 AM - 5:00 AM	23	37	60
5:00 AM - 6:00 AM	84	94	178
6:00 AM - 7:00 AM	272	215	487
7:00 AM - 8:00 AM	502	499	1,001
8:00 AM - 9:00 AM	525	578	1,103
9:00 AM - 10:00 AM	423	544	967
10:00 AM - 11:00 AM	556	640	1,196
11:00 AM - 12:00 PM	685	672	1357
Total	**3,314**	**3,499**	**6,813**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	745	741	1,486
1:00 PM - 2:00 PM	796	775	1,571
2:00 PM - 3:00 PM	700	701	1,401
3:00 PM - 4:00 PM	790	915	1,705
4:00 PM - 5:00 PM	736	842	1,578
5:00 PM - 6:00 PM	843	962	1,805
6:00 PM - 7:00 PM	867	951	1,818
7:00 PM - 8:00 PM	800	792	1,592
8:00 PM - 9:00 PM	681	507	1,188
9:00 PM - 10:00 PM	318	271	589
10:00 PM - 11:00 PM	0	0	0
11:00 PM - 12:00 AM	0	0	0
Total	**7,276**	**7,457**	**14,733**

24-Hour	*EB*	*Volume*	*10,590*	*24-Hour*	*WB*	*Volume*	*10,956*



Kimley»Horn

24 Hour Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: 51. Nobel Drive East of Lebon Drive

Orientation: *East-West*

Date of Count: *Tuesday, April 28, 2015*

Analysts: *DASH*

Weather: *Sunny*

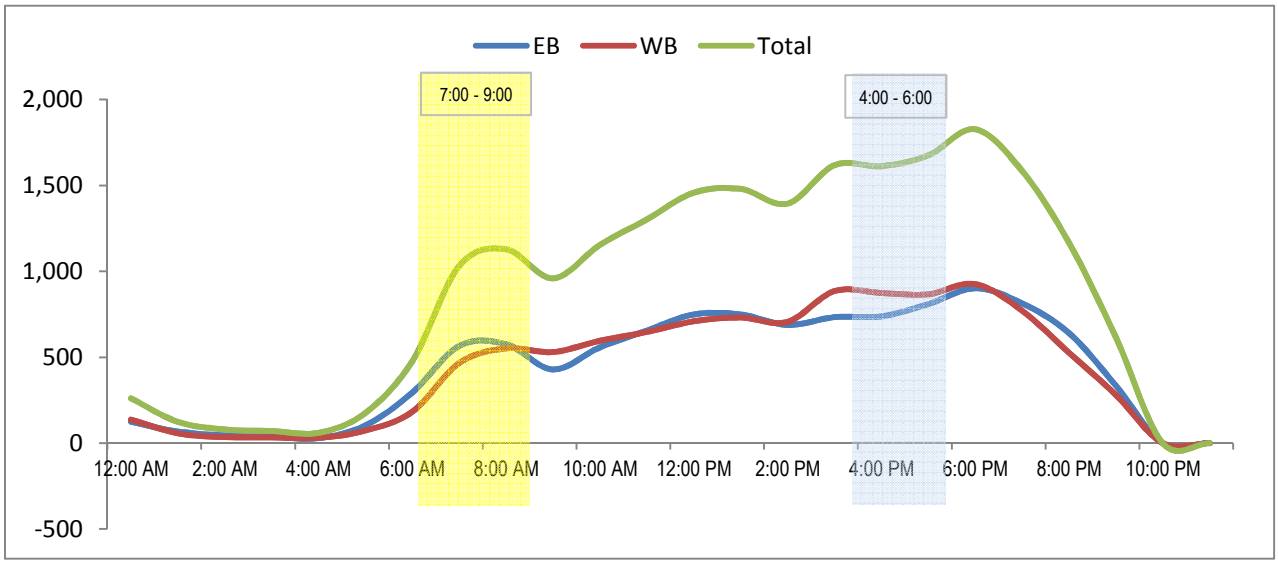
AVC Proj. No: *15-0345*

24 Hour Segment Volume			*21,256*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	124	137	261
1:00 AM - 2:00 AM	67	57	124
2:00 AM - 3:00 AM	45	35	80
3:00 AM - 4:00 AM	38	33	71
4:00 AM - 5:00 AM	29	31	60
5:00 AM - 6:00 AM	103	73	176
6:00 AM - 7:00 AM	294	183	477
7:00 AM - 8:00 AM	566	466	1,032
8:00 AM - 9:00 AM	576	552	1,128
9:00 AM - 10:00 AM	429	530	959
10:00 AM - 11:00 AM	558	596	1,154
11:00 AM - 12:00 PM	655	647	1302
Total	**3,484**	**3,340**	**6,824**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	749	709	1,458
1:00 PM - 2:00 PM	749	731	1,480
2:00 PM - 3:00 PM	688	706	1,394
3:00 PM - 4:00 PM	733	885	1,618
4:00 PM - 5:00 PM	738	874	1,612
5:00 PM - 6:00 PM	809	866	1,675
6:00 PM - 7:00 PM	901	926	1,827
7:00 PM - 8:00 PM	814	771	1,585
8:00 PM - 9:00 PM	641	526	1,167
9:00 PM - 10:00 PM	335	281	616
10:00 PM - 11:00 PM	0	0	0
11:00 PM - 12:00 AM	0	0	0
Total	**7,157**	**7,275**	**14,432**

24-Hour	*EB*	*Volume*	*10,641*	*24-Hour*	*WB*	*Volume*	*10,615*



Kimley»Horn

24 Hour Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: 50. Nobel Drive West of Regents Road

Orientation: *East-West*

Date of Count: *Wednesday, May 06, 2015*

Analysts: *DASH*

Weather: *Sunny*

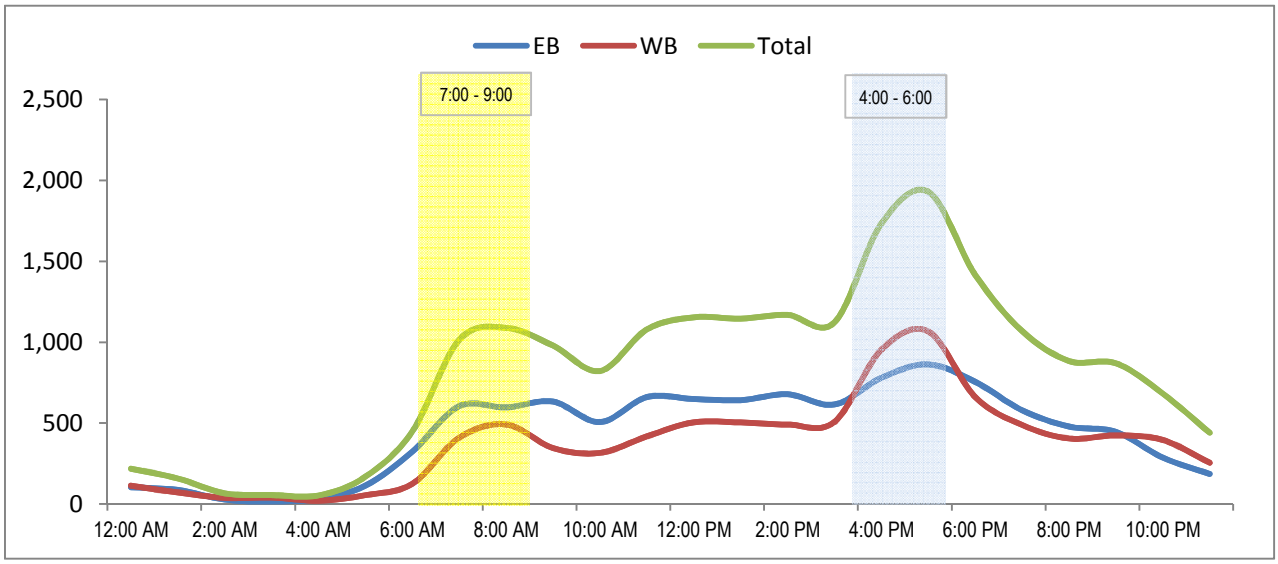
AVC Proj. No: *15-0345*

24 Hour Segment Volume			*19,772*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	104	114	218
1:00 AM - 2:00 AM	87	71	158
2:00 AM - 3:00 AM	28	38	66
3:00 AM - 4:00 AM	16	40	56
4:00 AM - 5:00 AM	32	21	53
5:00 AM - 6:00 AM	114	55	169
6:00 AM - 7:00 AM	324	125	449
7:00 AM - 8:00 AM	605	410	1,015
8:00 AM - 9:00 AM	597	492	1,089
9:00 AM - 10:00 AM	633	346	979
10:00 AM - 11:00 AM	506	316	822
11:00 AM - 12:00 PM	661	418	1079
Total	**3,707**	**2,446**	**6,153**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	649	505	1,154
1:00 PM - 2:00 PM	642	504	1,146
2:00 PM - 3:00 PM	678	491	1,169
3:00 PM - 4:00 PM	615	508	1,123
4:00 PM - 5:00 PM	780	953	1,733
5:00 PM - 6:00 PM	863	1,067	1,930
6:00 PM - 7:00 PM	755	662	1,417
7:00 PM - 8:00 PM	580	489	1,069
8:00 PM - 9:00 PM	479	405	884
9:00 PM - 10:00 PM	446	424	870
10:00 PM - 11:00 PM	287	396	683
11:00 PM - 12:00 AM	186	255	441
Total	**6,960**	**6,659**	**13,619**

24-Hour	*EB*	*Volume*	*10,667*	*24-Hour*	*WB*	*Volume*	*9,105*



Kimley»Horn

24 Hour Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: 11. Nobel Drive East of Genesee Avenue

Orientation: *East-West*

Date of Count: *Wednesday, May 06, 2015*

Analysts: *DASH*

Weather: *Sunny*

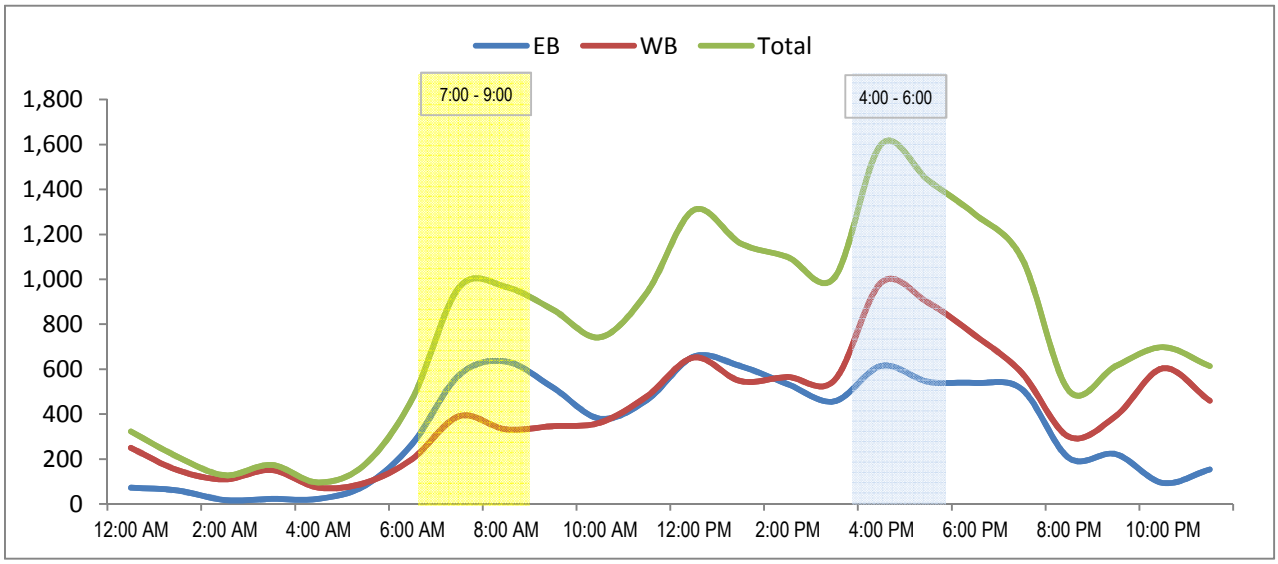
AVC Proj. No: *15-0345*

24 Hour Segment Volume			*18,484*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	73	250	323
1:00 AM - 2:00 AM	60	150	210
2:00 AM - 3:00 AM	18	110	128
3:00 AM - 4:00 AM	23	151	174
4:00 AM - 5:00 AM	23	73	96
5:00 AM - 6:00 AM	83	95	178
6:00 AM - 7:00 AM	268	201	469
7:00 AM - 8:00 AM	574	391	965
8:00 AM - 9:00 AM	634	332	966
9:00 AM - 10:00 AM	518	347	865
10:00 AM - 11:00 AM	380	362	742
11:00 AM - 12:00 PM	462	479	941
Total	**3,116**	**2,941**	**6,057**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	656	652	1,308
1:00 PM - 2:00 PM	613	547	1,160
2:00 PM - 3:00 PM	534	565	1,099
3:00 PM - 4:00 PM	457	551	1,008
4:00 PM - 5:00 PM	615	986	1,601
5:00 PM - 6:00 PM	544	896	1,440
6:00 PM - 7:00 PM	539	750	1,289
7:00 PM - 8:00 PM	510	582	1,092
8:00 PM - 9:00 PM	205	299	504
9:00 PM - 10:00 PM	222	392	614
10:00 PM - 11:00 PM	94	604	698
11:00 PM - 12:00 AM	154	460	614
Total	**5,143**	**7,284**	**12,427**

24-Hour	*EB*	*Volume*	*8,259*	*24-Hour*	*WB*	*Volume*	*10,225*



Kimley»Horn

24 Hour Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: 49. Nobel Drive East of Towne Center Dr

Orientation: *East-West*

Date of Count: *Wednesday, May 13, 2015*

Analysts: *DASH*

Weather: *Sunny*

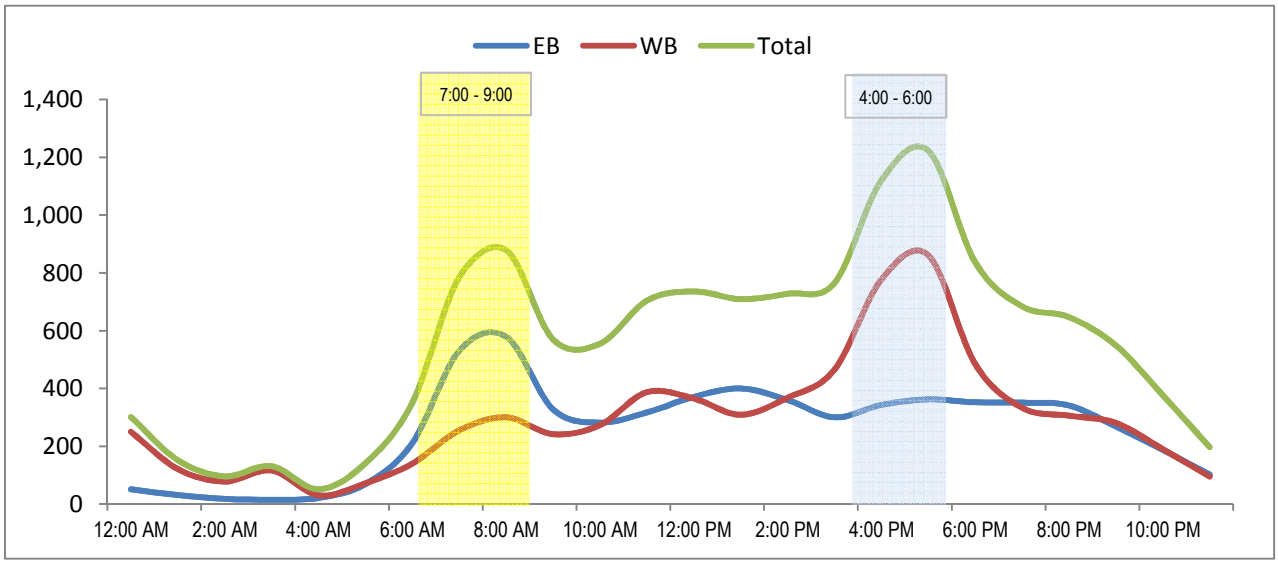
AVC Proj. No: *15-0345*

24 Hour Segment Volume			*13,288*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	51	250	301
1:00 AM - 2:00 AM	31	121	152
2:00 AM - 3:00 AM	18	78	96
3:00 AM - 4:00 AM	15	116	131
4:00 AM - 5:00 AM	21	30	51
5:00 AM - 6:00 AM	69	72	141
6:00 AM - 7:00 AM	211	140	351
7:00 AM - 8:00 AM	530	255	785
8:00 AM - 9:00 AM	579	300	879
9:00 AM - 10:00 AM	328	242	570
10:00 AM - 11:00 AM	282	273	555
11:00 AM - 12:00 PM	317	387	704
Total	**2,452**	**2,264**	**4,716**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	371	365	736
1:00 PM - 2:00 PM	400	309	709
2:00 PM - 3:00 PM	360	368	728
3:00 PM - 4:00 PM	300	465	765
4:00 PM - 5:00 PM	343	777	1,120
5:00 PM - 6:00 PM	362	861	1,223
6:00 PM - 7:00 PM	352	485	837
7:00 PM - 8:00 PM	351	333	684
8:00 PM - 9:00 PM	341	306	647
9:00 PM - 10:00 PM	268	281	549
10:00 PM - 11:00 PM	187	190	377
11:00 PM - 12:00 AM	102	95	197
Total	**3,737**	**4,835**	**8,572**

24-Hour	*EB*	*Volume*	*6,189*	*24-Hour*	*WB*	*Volume*	*7,099*



Kimley»Horn

24 Hour Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: 48. Nobel Drive West of Judicial Dr

Orientation: *East-West*

Date of Count: *Wednesday, May 13, 2015*

Analysts: *DASH*

Weather: *Sunny*

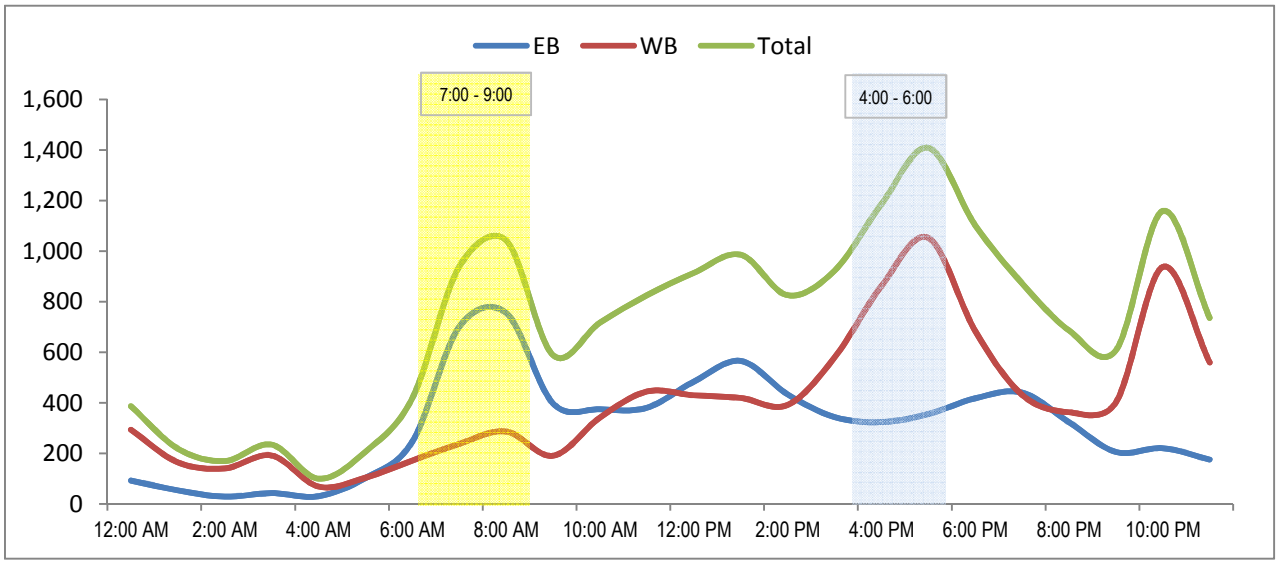
AVC Proj. No: *15-0345*

24 Hour Segment Volume			*17,261*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	93	294	387
1:00 AM - 2:00 AM	54	165	219
2:00 AM - 3:00 AM	29	141	170
3:00 AM - 4:00 AM	43	192	235
4:00 AM - 5:00 AM	31	69	100
5:00 AM - 6:00 AM	103	104	207
6:00 AM - 7:00 AM	247	172	419
7:00 AM - 8:00 AM	701	238	939
8:00 AM - 9:00 AM	756	287	1,043
9:00 AM - 10:00 AM	398	191	589
10:00 AM - 11:00 AM	375	342	717
11:00 AM - 12:00 PM	381	445	826
Total	**3,211**	**2,640**	**5,851**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	484	430	914
1:00 PM - 2:00 PM	566	420	986
2:00 PM - 3:00 PM	434	392	826
3:00 PM - 4:00 PM	344	579	923
4:00 PM - 5:00 PM	324	862	1,186
5:00 PM - 6:00 PM	356	1,053	1,409
6:00 PM - 7:00 PM	418	685	1,103
7:00 PM - 8:00 PM	441	432	873
8:00 PM - 9:00 PM	324	363	687
9:00 PM - 10:00 PM	206	402	608
10:00 PM - 11:00 PM	221	938	1,159
11:00 PM - 12:00 AM	176	560	736
Total	**4,294**	**7,116**	**11,410**

24-Hour	*EB*	*Volume*	*7,505*	*24-Hour*	*WB*	*Volume*	*9,756*



Kimley»Horn

24 Hour Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: 47. Nobel Drive East of Judicial Dr

Orientation: *East-West*

Date of Count: *Wednesday, May 13, 2015*

Analysts: *DASH*

Weather: *Sunny*

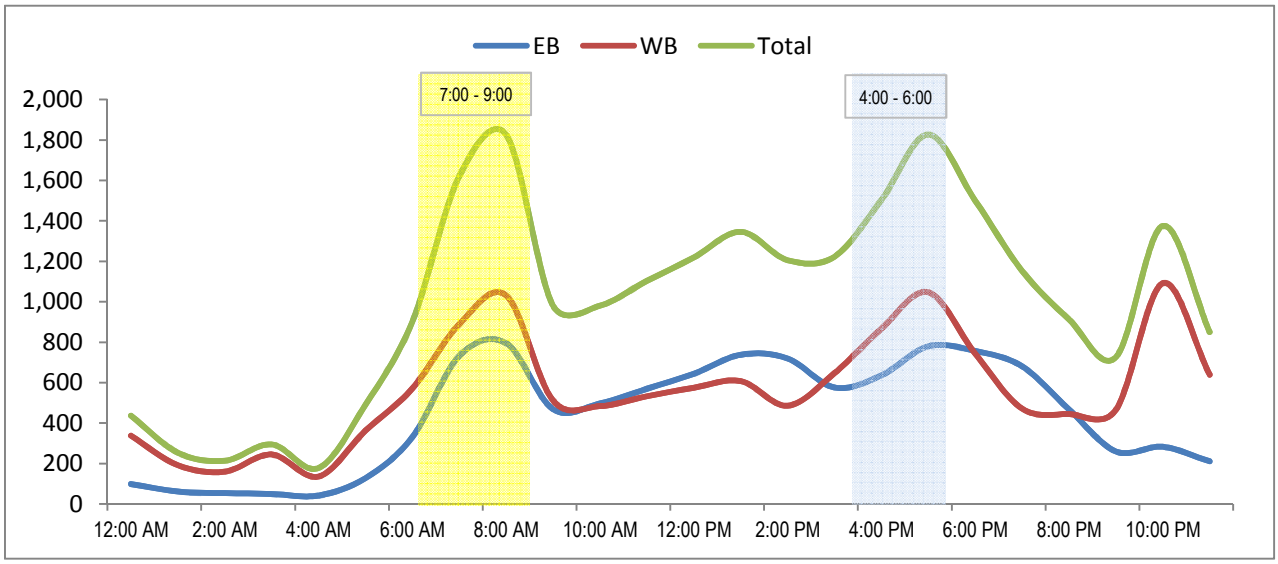
AVC Proj. No: *15-0345*

24 Hour Segment Volume			*24,125*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	99	338	437
1:00 AM - 2:00 AM	62	192	254
2:00 AM - 3:00 AM	54	160	214
3:00 AM - 4:00 AM	50	245	295
4:00 AM - 5:00 AM	42	136	178
5:00 AM - 6:00 AM	128	363	491
6:00 AM - 7:00 AM	331	571	902
7:00 AM - 8:00 AM	732	889	1,621
8:00 AM - 9:00 AM	795	1,031	1,826
9:00 AM - 10:00 AM	469	512	981
10:00 AM - 11:00 AM	497	484	981
11:00 AM - 12:00 PM	570	533	1103
Total	**3,829**	**5,454**	**9,283**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	644	575	1,219
1:00 PM - 2:00 PM	738	608	1,346
2:00 PM - 3:00 PM	720	486	1,206
3:00 PM - 4:00 PM	576	647	1,223
4:00 PM - 5:00 PM	636	867	1,503
5:00 PM - 6:00 PM	780	1,047	1,827
6:00 PM - 7:00 PM	757	744	1,501
7:00 PM - 8:00 PM	681	472	1,153
8:00 PM - 9:00 PM	468	445	913
9:00 PM - 10:00 PM	260	466	726
10:00 PM - 11:00 PM	283	1,092	1,375
11:00 PM - 12:00 AM	211	639	850
Total	**6,754**	**8,088**	**14,842**

24-Hour	*EB*	*Volume*	*10,583*	*24-Hour*	*WB*	*Volume*	*13,542*



Kimley»Horn

24 Hour Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: 64. Nobel Drive Between I-805 NB & SB Ramps

Orientation: *East-West*

Date of Count: *Wednesday, May 06, 2015*

Analysts: *DASH*

Weather: *Sunny*

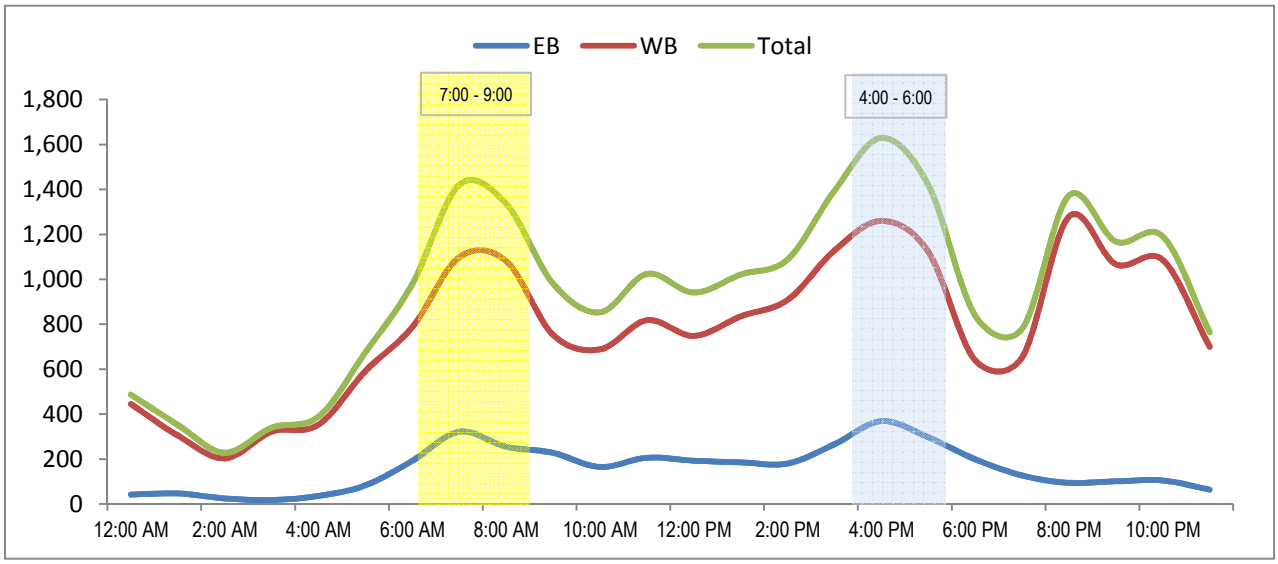
AVC Proj. No: *15-0345*

24 Hour Segment Volume			*22,672*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	42	445	487
1:00 AM - 2:00 AM	47	305	352
2:00 AM - 3:00 AM	25	203	228
3:00 AM - 4:00 AM	18	322	340
4:00 AM - 5:00 AM	36	353	389
5:00 AM - 6:00 AM	83	592	675
6:00 AM - 7:00 AM	192	787	979
7:00 AM - 8:00 AM	322	1,098	1,420
8:00 AM - 9:00 AM	255	1,081	1,336
9:00 AM - 10:00 AM	228	753	981
10:00 AM - 11:00 AM	165	688	853
11:00 AM - 12:00 PM	206	818	1024
Total	**1,619**	**7,445**	**9,064**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	193	748	941
1:00 PM - 2:00 PM	186	835	1,021
2:00 PM - 3:00 PM	180	908	1,088
3:00 PM - 4:00 PM	266	1,128	1,394
4:00 PM - 5:00 PM	369	1,260	1,629
5:00 PM - 6:00 PM	297	1,123	1,420
6:00 PM - 7:00 PM	199	640	839
7:00 PM - 8:00 PM	127	653	780
8:00 PM - 9:00 PM	94	1,279	1,373
9:00 PM - 10:00 PM	101	1,067	1,168
10:00 PM - 11:00 PM	105	1,086	1,191
11:00 PM - 12:00 AM	64	700	764
Total	**2,181**	**11,427**	**13,608**

24-Hour	*EB*	*Volume*	*3,800*	*24-Hour*	*WB*	*Volume*	*18,872*



Kimley»Horn

24 Hour Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: 39. Nobel Drive South of Miramar Road

Orientation: *North-South*

Date of Count: *Wednesday, May 13, 2015*

Analysts: *DASH*

Weather: *Sunny*

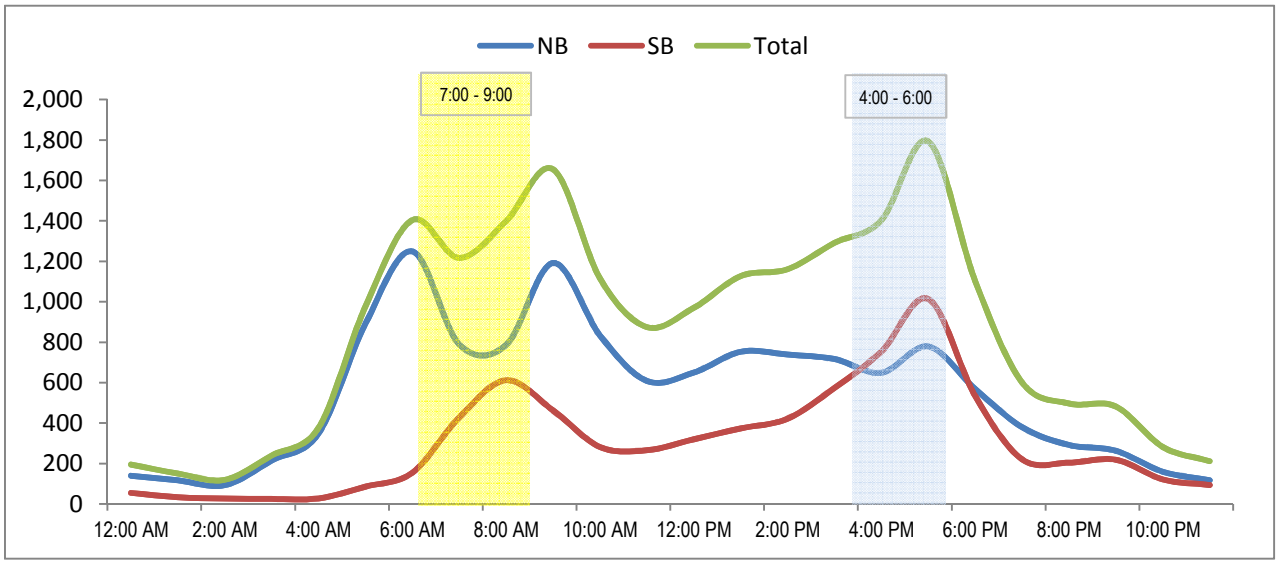
AVC Proj. No: *15-0345*

24 Hour Segment Volume			*20,648*

Time	Hourly Volume		
	NB	SB	Total
12:00 AM - 1:00 AM	140	55	195
1:00 AM - 2:00 AM	117	34	151
2:00 AM - 3:00 AM	93	27	120
3:00 AM - 4:00 AM	215	25	240
4:00 AM - 5:00 AM	349	28	377
5:00 AM - 6:00 AM	891	86	977
6:00 AM - 7:00 AM	1,249	155	1,404
7:00 AM - 8:00 AM	789	428	1,217
8:00 AM - 9:00 AM	787	612	1,399
9:00 AM - 10:00 AM	1,192	463	1,655
10:00 AM - 11:00 AM	834	282	1,116
11:00 AM - 12:00 PM	609	266	875
Total	**7,265**	**2,461**	**9,726**

Time	Hourly Volume		
	NB	SB	Total
12:00 PM - 1:00 PM	650	320	970
1:00 PM - 2:00 PM	753	374	1,127
2:00 PM - 3:00 PM	739	422	1,161
3:00 PM - 4:00 PM	717	574	1,291
4:00 PM - 5:00 PM	649	754	1,403
5:00 PM - 6:00 PM	779	1,014	1,793
6:00 PM - 7:00 PM	569	534	1,103
7:00 PM - 8:00 PM	380	221	601
8:00 PM - 9:00 PM	292	205	497
9:00 PM - 10:00 PM	263	219	482
10:00 PM - 11:00 PM	160	122	282
11:00 PM - 12:00 AM	118	94	212
Total	**6,069**	**4,853**	**10,922**

24-Hour	*NB*	*Volume*	*13,334*	*24-Hour*	*SB*	*Volume*	*7,314*



Kimley»Horn

24 Hour Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: 68. Regents Road South of Genesee Avenue

Orientation: *East-West*

Date of Count: *Tuesday, May 12, 2015*

Analysts: *DASH*

Weather: *Sunny*

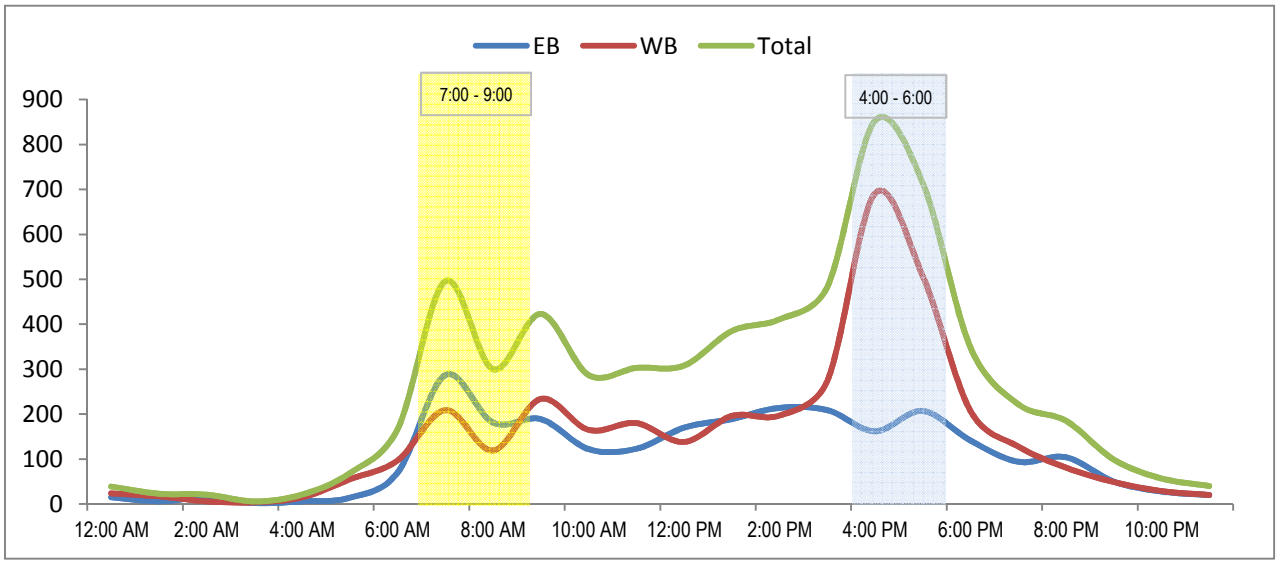
AVC Proj. No: *15-0345*

24 Hour Segment Volume			*6,260*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	15	24	39
1:00 AM - 2:00 AM	6	17	23
2:00 AM - 3:00 AM	15	6	21
3:00 AM - 4:00 AM	2	4	6
4:00 AM - 5:00 AM	6	15	21
5:00 AM - 6:00 AM	14	55	69
6:00 AM - 7:00 AM	70	97	167
7:00 AM - 8:00 AM	287	209	496
8:00 AM - 9:00 AM	181	119	300
9:00 AM - 10:00 AM	189	234	423
10:00 AM - 11:00 AM	122	165	287
11:00 AM - 12:00 PM	123	180	303
Total	**1,030**	**1,125**	**2,155**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	170	138	308
1:00 PM - 2:00 PM	189	196	385
2:00 PM - 3:00 PM	214	197	411
3:00 PM - 4:00 PM	209	274	483
4:00 PM - 5:00 PM	162	691	853
5:00 PM - 6:00 PM	207	507	714
6:00 PM - 7:00 PM	141	207	348
7:00 PM - 8:00 PM	94	128	222
8:00 PM - 9:00 PM	104	81	185
9:00 PM - 10:00 PM	50	49	99
10:00 PM - 11:00 PM	28	29	57
11:00 PM - 12:00 AM	20	20	40
Total	**1,588**	**2,517**	**4,105**

24-Hour	*EB*	*Volume*	*2,618*	*24-Hour*	*WB*	*Volume*	*3,642*



Kimley»Horn

24 Hour Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: 40. Regents Rd, South of Executive Dr

Orientation: *North-South*

Date of Count: *Tuesday, May 12, 2015*

Analysts: *DASH*

Weather: *Sunny*

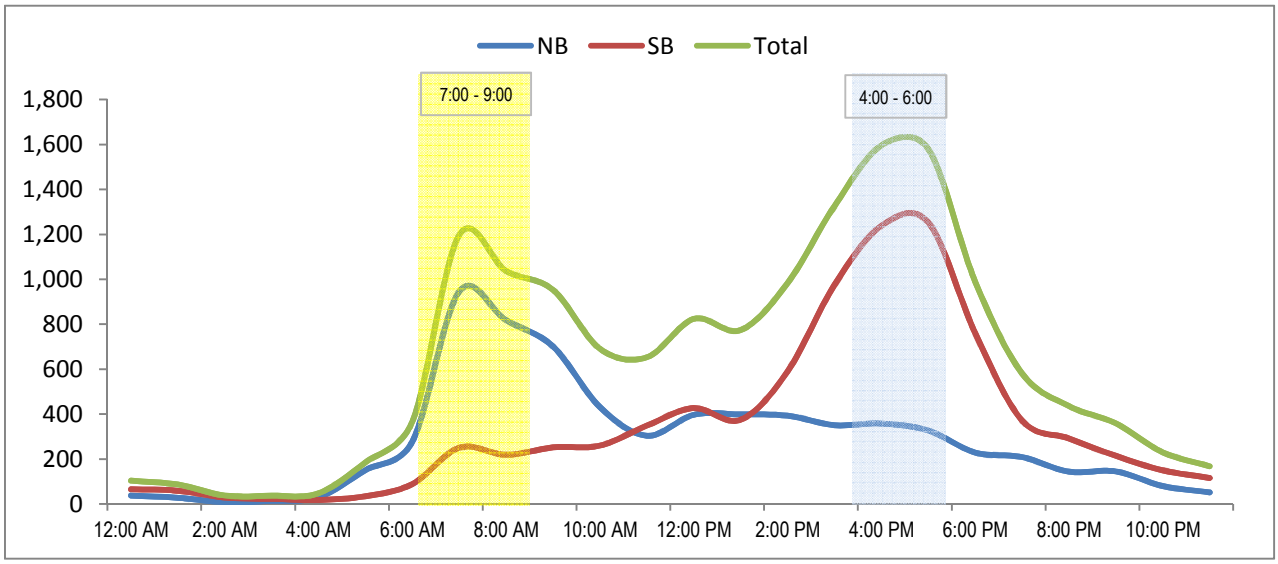
AVC Proj. No: *15-0345*

24 Hour Segment Volume			*15,245*

Time	Hourly Volume		
	NB	SB	Total
12:00 AM - 1:00 AM	38	66	104
1:00 AM - 2:00 AM	28	59	87
2:00 AM - 3:00 AM	9	29	38
3:00 AM - 4:00 AM	14	23	37
4:00 AM - 5:00 AM	30	18	48
5:00 AM - 6:00 AM	151	35	186
6:00 AM - 7:00 AM	278	89	367
7:00 AM - 8:00 AM	946	251	1,197
8:00 AM - 9:00 AM	818	219	1,037
9:00 AM - 10:00 AM	701	252	953
10:00 AM - 11:00 AM	431	260	691
11:00 AM - 12:00 PM	304	349	653
Total	**3,748**	**1,650**	**5,398**

Time	Hourly Volume		
	NB	SB	Total
12:00 PM - 1:00 PM	397	427	824
1:00 PM - 2:00 PM	399	375	774
2:00 PM - 3:00 PM	393	590	983
3:00 PM - 4:00 PM	351	975	1,326
4:00 PM - 5:00 PM	358	1,238	1,596
5:00 PM - 6:00 PM	327	1,253	1,580
6:00 PM - 7:00 PM	229	761	990
7:00 PM - 8:00 PM	209	372	581
8:00 PM - 9:00 PM	144	292	436
9:00 PM - 10:00 PM	145	214	359
10:00 PM - 11:00 PM	80	150	230
11:00 PM - 12:00 AM	52	116	168
Total	**3,084**	**6,763**	**9,847**

24-Hour	*NB*	*Volume*	*6,832*	*24-Hour*	*SB*	*Volume*	*8,413*



Kimley»Horn

24 Hour Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: 45. Regents Road South of La Jolla Village Dr

Orientation: *North-South*

Date of Count: *Tuesday, May 05, 2015*

Analysts: *DASH*

Weather: *Sunny*

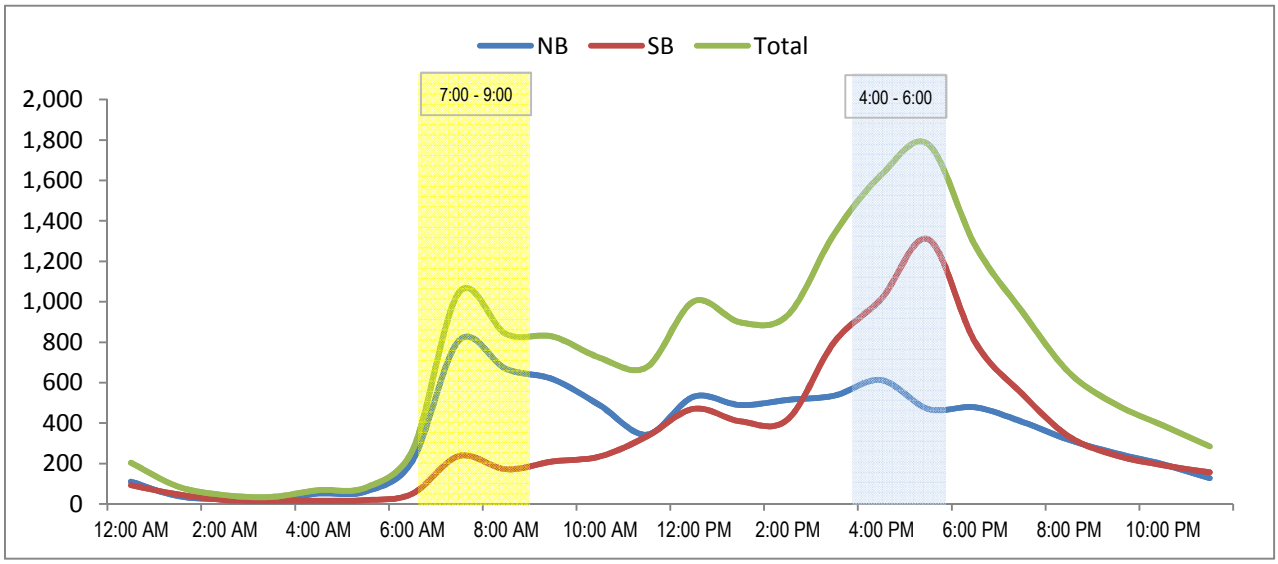
AVC Proj. No: *15-0345*

24 Hour Segment Volume			16,525

Time	Hourly Volume		
	NB	SB	Total
12:00 AM - 1:00 AM	111	93	204
1:00 AM - 2:00 AM	39	48	87
2:00 AM - 3:00 AM	24	20	44
3:00 AM - 4:00 AM	19	16	35
4:00 AM - 5:00 AM	52	17	69
5:00 AM - 6:00 AM	62	19	81
6:00 AM - 7:00 AM	213	51	264
7:00 AM - 8:00 AM	810	238	1,048
8:00 AM - 9:00 AM	668	172	840
9:00 AM - 10:00 AM	617	211	828
10:00 AM - 11:00 AM	488	235	723
11:00 AM - 12:00 PM	343	334	677
Total	**3,446**	**1,454**	**4,900**

Time	Hourly Volume		
	NB	SB	Total
12:00 PM - 1:00 PM	531	471	1,002
1:00 PM - 2:00 PM	489	409	898
2:00 PM - 3:00 PM	515	418	933
3:00 PM - 4:00 PM	536	802	1,338
4:00 PM - 5:00 PM	613	1,015	1,628
5:00 PM - 6:00 PM	470	1,309	1,779
6:00 PM - 7:00 PM	478	800	1,278
7:00 PM - 8:00 PM	407	545	952
8:00 PM - 9:00 PM	317	334	651
9:00 PM - 10:00 PM	251	241	492
10:00 PM - 11:00 PM	197	192	389
11:00 PM - 12:00 AM	128	157	285
Total	**4,932**	**6,693**	**11,625**

24-Hour NB Volume	8,378	24-Hour SB Volume	8,147



Kimley»Horn

24 Hour Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: 46. Regents Road South of Nobel Drive

Orientation: *North-South*

Date of Count: *Wednesday, May 06, 2015*

Analysts: *DASH*

Weather: *Sunny*

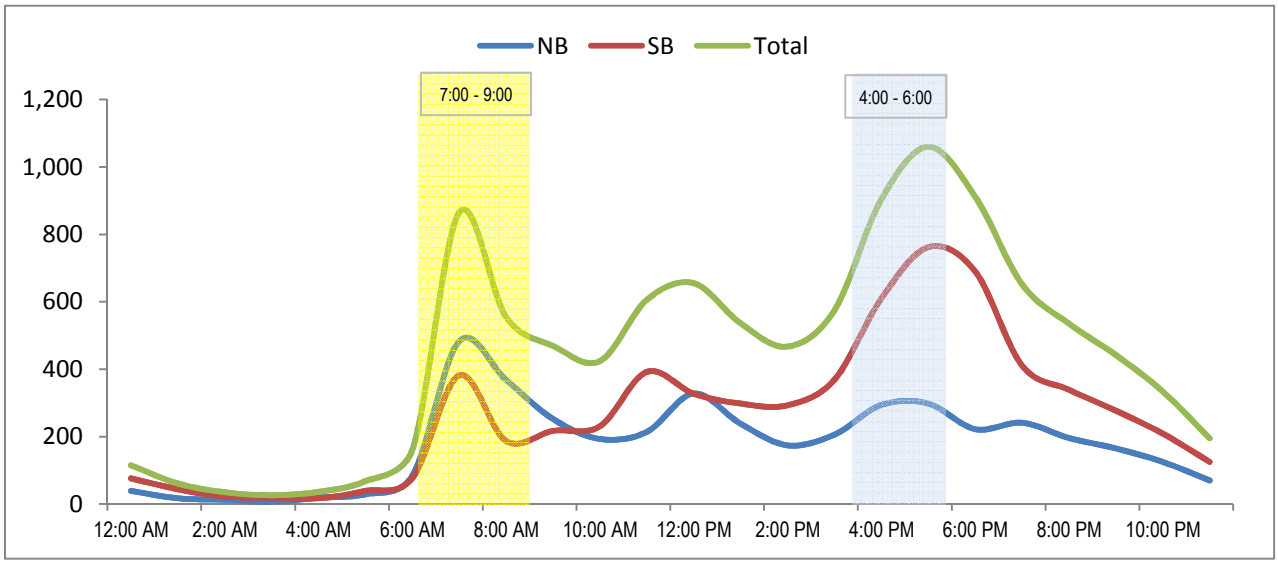
AVC Proj. No: *15-0345*

24 Hour Segment Volume			*10,688*

Time	Hourly Volume		
	NB	SB	Total
12:00 AM - 1:00 AM	39	76	115
1:00 AM - 2:00 AM	17	44	61
2:00 AM - 3:00 AM	13	22	35
3:00 AM - 4:00 AM	7	19	26
4:00 AM - 5:00 AM	19	17	36
5:00 AM - 6:00 AM	29	39	68
6:00 AM - 7:00 AM	84	77	161
7:00 AM - 8:00 AM	483	382	865
8:00 AM - 9:00 AM	368	187	555
9:00 AM - 10:00 AM	252	217	469
10:00 AM - 11:00 AM	193	231	424
11:00 AM - 12:00 PM	214	392	606
Total	**1,718**	**1,703**	**3,421**

Time	Hourly Volume		
	NB	SB	Total
12:00 PM - 1:00 PM	328	327	655
1:00 PM - 2:00 PM	238	298	536
2:00 PM - 3:00 PM	174	293	467
3:00 PM - 4:00 PM	206	369	575
4:00 PM - 5:00 PM	294	610	904
5:00 PM - 6:00 PM	298	762	1,060
6:00 PM - 7:00 PM	222	690	912
7:00 PM - 8:00 PM	241	411	652
8:00 PM - 9:00 PM	196	339	535
9:00 PM - 10:00 PM	165	277	442
10:00 PM - 11:00 PM	125	209	334
11:00 PM - 12:00 AM	70	125	195
Total	**2,557**	**4,710**	**7,267**

24-Hour	*NB*	*Volume*	*4,275*	*24-Hour*	*SB*	*Volume*	*6,413*



Kimley»Horn

24 Hour Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: 66. Regents Road Between SR-52 EB & WB Ramps

Orientation: *North-South*

Date of Count: *Tuesday, April 28, 2015*

Analysts: *DASH*

Weather: *Sunny*

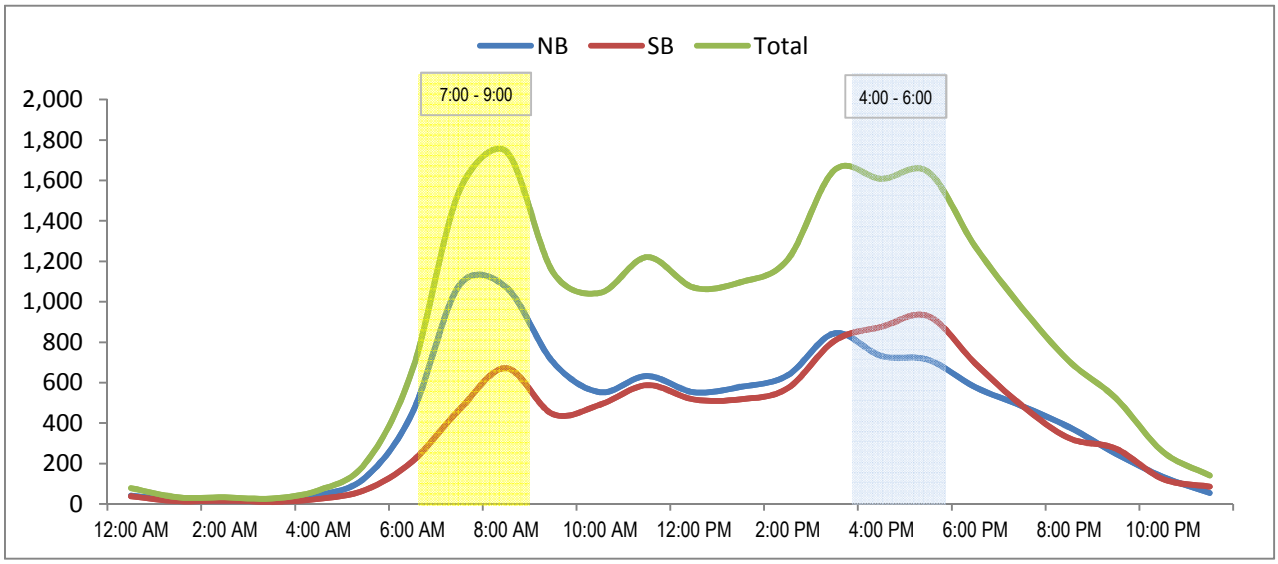
AVC Proj. No: *15-0345*

24 Hour Segment Volume			*19,957*

Time	Hourly Volume		
	NB	SB	Total
12:00 AM - 1:00 AM	41	38	79
1:00 AM - 2:00 AM	19	14	33
2:00 AM - 3:00 AM	16	17	33
3:00 AM - 4:00 AM	16	12	28
4:00 AM - 5:00 AM	43	25	68
5:00 AM - 6:00 AM	132	70	202
6:00 AM - 7:00 AM	451	211	662
7:00 AM - 8:00 AM	1,081	466	1,547
8:00 AM - 9:00 AM	1,072	672	1,744
9:00 AM - 10:00 AM	702	444	1,146
10:00 AM - 11:00 AM	553	491	1,044
11:00 AM - 12:00 PM	633	588	1221
Total	**4,759**	**3,048**	**7,807**

Time	Hourly Volume		
	NB	SB	Total
12:00 PM - 1:00 PM	553	517	1,070
1:00 PM - 2:00 PM	579	518	1,097
2:00 PM - 3:00 PM	636	572	1,208
3:00 PM - 4:00 PM	844	807	1,651
4:00 PM - 5:00 PM	732	876	1,608
5:00 PM - 6:00 PM	713	929	1,642
6:00 PM - 7:00 PM	578	696	1,274
7:00 PM - 8:00 PM	484	486	970
8:00 PM - 9:00 PM	381	326	707
9:00 PM - 10:00 PM	249	274	523
10:00 PM - 11:00 PM	135	124	259
11:00 PM - 12:00 AM	55	86	141
Total	**5,939**	**6,211**	**12,150**

24-Hour	*NB*	*Volume*	*10,698*	*24-Hour*	*SB*	*Volume*	*9,259*



Kimley»Horn

24 Hour Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: 24. Torrey Pines Road South of La Jolla Village Drive

Orientation: *North-South*

Date of Count: *Tuesday, May 05, 2015*

Analysts: *DASH*

Weather: *Sunny*

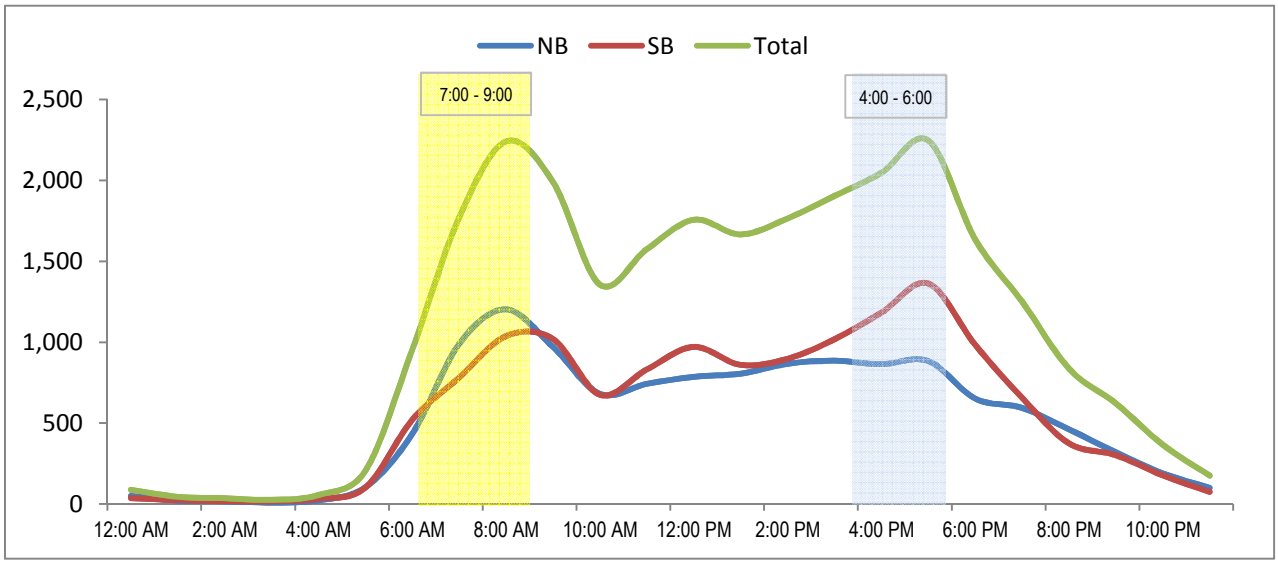
AVC Proj. No: *15-0345*

24 Hour Segment Volume			*26,620*

Time	Hourly Volume		
	NB	SB	Total
12:00 AM - 1:00 AM	51	37	88
1:00 AM - 2:00 AM	21	24	45
2:00 AM - 3:00 AM	17	19	36
3:00 AM - 4:00 AM	9	17	26
4:00 AM - 5:00 AM	23	33	56
5:00 AM - 6:00 AM	104	102	206
6:00 AM - 7:00 AM	434	521	955
7:00 AM - 8:00 AM	990	782	1,772
8:00 AM - 9:00 AM	1,203	1,038	2,241
9:00 AM - 10:00 AM	970	1,020	1,990
10:00 AM - 11:00 AM	681	675	1,356
11:00 AM - 12:00 PM	743	832	1575
Total	**5,246**	**5,100**	**10,346**

Time	Hourly Volume		
	NB	SB	Total
12:00 PM - 1:00 PM	786	971	1,757
1:00 PM - 2:00 PM	806	860	1,666
2:00 PM - 3:00 PM	867	898	1,765
3:00 PM - 4:00 PM	886	1,018	1,904
4:00 PM - 5:00 PM	864	1,183	2,047
5:00 PM - 6:00 PM	884	1,363	2,247
6:00 PM - 7:00 PM	652	984	1,636
7:00 PM - 8:00 PM	594	657	1,251
8:00 PM - 9:00 PM	462	375	837
9:00 PM - 10:00 PM	320	302	622
10:00 PM - 11:00 PM	190	177	367
11:00 PM - 12:00 AM	100	75	175
Total	**7,411**	**8,863**	**16,274**

24-Hour	*NB*	*Volume*	*12,657*	*24-Hour*	*SB*	*Volume*	*13,963*



Kimley»Horn

24 Hour Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: 77. Towne Centre Dr North of La Jolla Village Dr.

Orientation: *North-South*

Date of Count: *Tuesday, May 05, 2015*

Analysts: *DASH*

Weather: *Sunny*

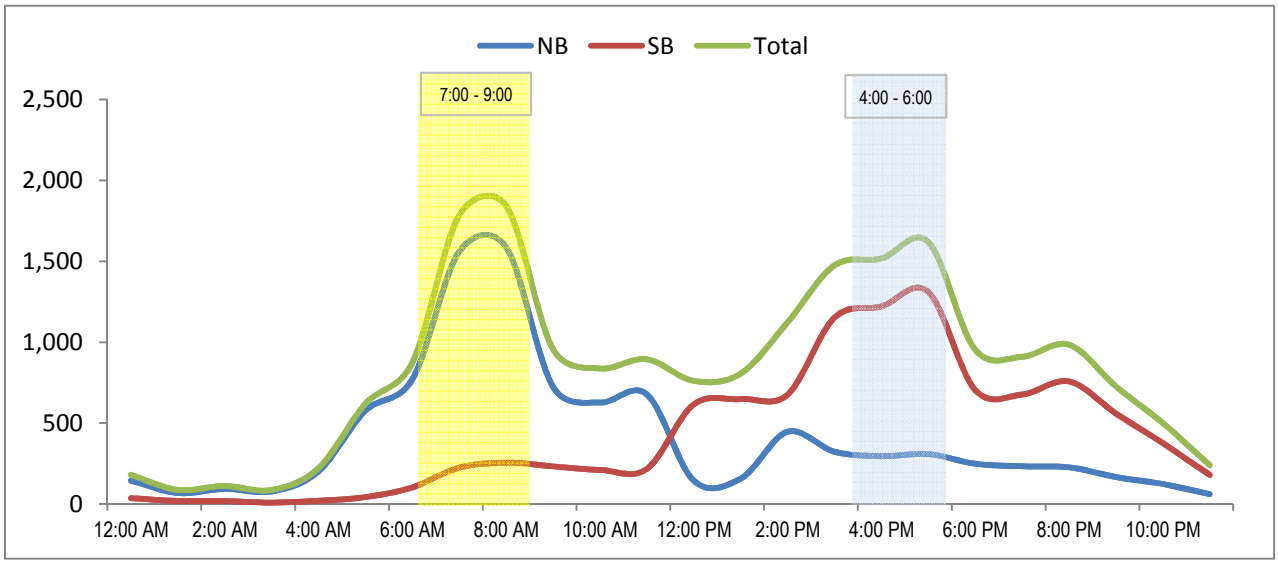
AVC Proj. No: *15-0345*

24 Hour Segment Volume			*20,121*

Time	Hourly Volume		
	NB	SB	Total
12:00 AM - 1:00 AM	145	36	181
1:00 AM - 2:00 AM	68	19	87
2:00 AM - 3:00 AM	94	18	112
3:00 AM - 4:00 AM	78	9	87
4:00 AM - 5:00 AM	202	20	222
5:00 AM - 6:00 AM	578	43	621
6:00 AM - 7:00 AM	771	103	874
7:00 AM - 8:00 AM	1,560	225	1,785
8:00 AM - 9:00 AM	1,587	256	1,843
9:00 AM - 10:00 AM	724	233	957
10:00 AM - 11:00 AM	627	211	838
11:00 AM - 12:00 PM	678	217	895
Total	**7,112**	**1,390**	**8,502**

Time	Hourly Volume		
	NB	SB	Total
12:00 PM - 1:00 PM	145	616	761
1:00 PM - 2:00 PM	157	649	806
2:00 PM - 3:00 PM	447	676	1,123
3:00 PM - 4:00 PM	323	1,152	1,475
4:00 PM - 5:00 PM	296	1,221	1,517
5:00 PM - 6:00 PM	309	1,311	1,620
6:00 PM - 7:00 PM	249	705	954
7:00 PM - 8:00 PM	233	677	910
8:00 PM - 9:00 PM	227	758	985
9:00 PM - 10:00 PM	167	560	727
10:00 PM - 11:00 PM	124	377	501
11:00 PM - 12:00 AM	61	179	240
Total	**2,738**	**8,881**	**11,619**

24-Hour	*NB*	*Volume*	*9,850*	*24-Hour*	*SB*	*Volume*	*10,271*



Kimley»Horn

24 Hour Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: 78. Towne Centre Dr South of La Jolla Village Dr.

Orientation: *North-South*

Date of Count: *Tuesday, May 05, 2015*

Analysts: *DASH*

Weather: *Sunny*

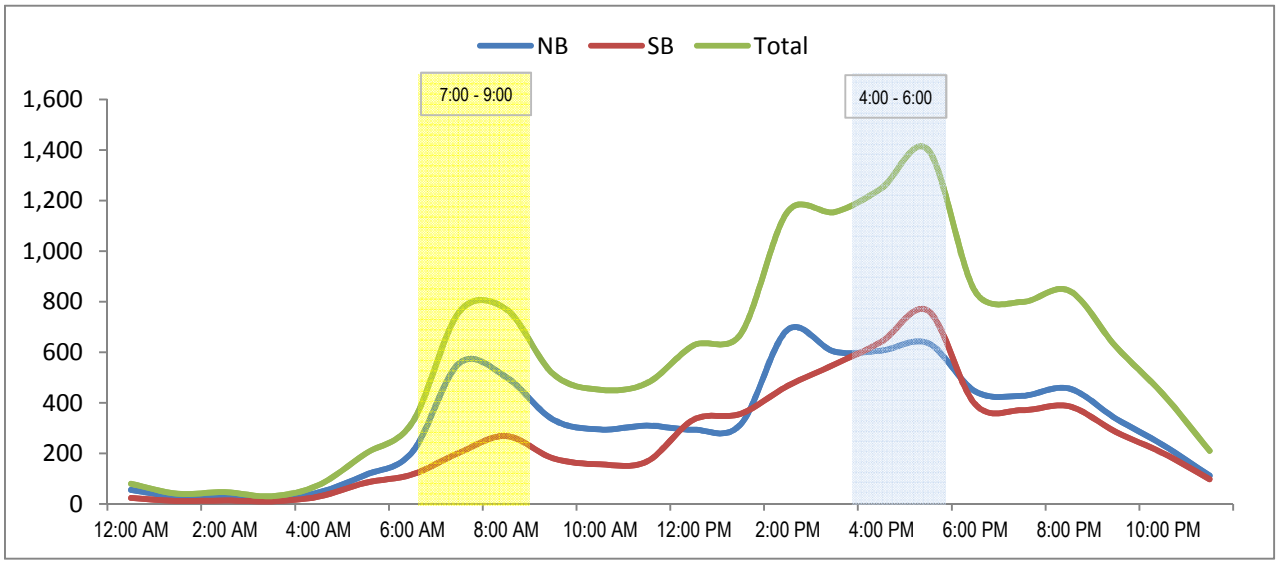
AVC Proj. No: *15-0345*

24 Hour Segment Volume			*13,785*

Time	Hourly Volume		
	NB	SB	Total
12:00 AM - 1:00 AM	56	24	80
1:00 AM - 2:00 AM	29	12	41
2:00 AM - 3:00 AM	33	14	47
3:00 AM - 4:00 AM	20	11	31
4:00 AM - 5:00 AM	46	29	75
5:00 AM - 6:00 AM	115	84	199
6:00 AM - 7:00 AM	206	117	323
7:00 AM - 8:00 AM	557	203	760
8:00 AM - 9:00 AM	502	269	771
9:00 AM - 10:00 AM	334	181	515
10:00 AM - 11:00 AM	295	157	452
11:00 AM - 12:00 PM	310	168	478
Total	**2,503**	**1,269**	**3,772**

Time	Hourly Volume		
	NB	SB	Total
12:00 PM - 1:00 PM	294	334	628
1:00 PM - 2:00 PM	315	357	672
2:00 PM - 3:00 PM	689	467	1,156
3:00 PM - 4:00 PM	603	552	1,155
4:00 PM - 5:00 PM	607	642	1,249
5:00 PM - 6:00 PM	636	764	1,400
6:00 PM - 7:00 PM	446	395	841
7:00 PM - 8:00 PM	428	371	799
8:00 PM - 9:00 PM	457	387	844
9:00 PM - 10:00 PM	338	285	623
10:00 PM - 11:00 PM	234	202	436
11:00 PM - 12:00 AM	112	98	210
Total	**5,159**	**4,854**	**10,013**

24-Hour	*NB*	*Volume*	*7,662*	*24-Hour*	*SB*	*Volume*	*6,123*



Kimley»Horn

24 Hour Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: 29. Villa La Jolla Drive East of Gilman Dr

Orientation: *East-West*

Date of Count: *Thursday, April 30, 2015*

Analysts: *DASH*

Weather: *Sunny*

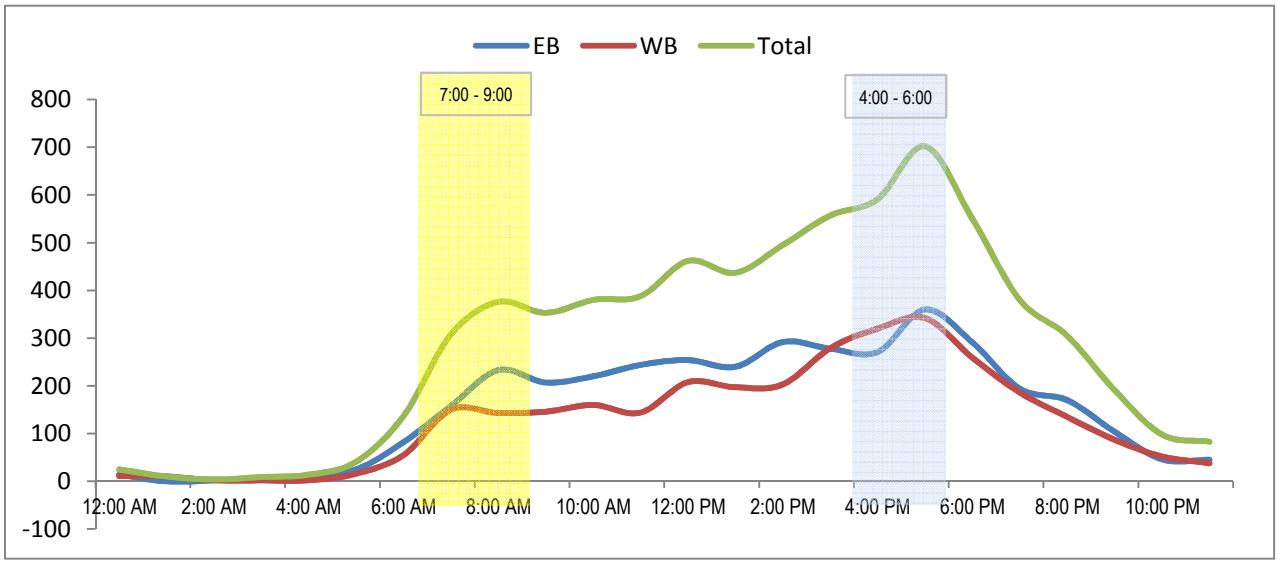
AVC Proj. No: *15-0345*

24 Hour Segment Volume			6,896

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	14	11	25
1:00 AM - 2:00 AM	0	10	10
2:00 AM - 3:00 AM	2	2	4
3:00 AM - 4:00 AM	7	2	9
4:00 AM - 5:00 AM	12	2	14
5:00 AM - 6:00 AM	25	16	41
6:00 AM - 7:00 AM	82	55	137
7:00 AM - 8:00 AM	158	150	308
8:00 AM - 9:00 AM	233	143	376
9:00 AM - 10:00 AM	207	146	353
10:00 AM - 11:00 AM	220	160	380
11:00 AM - 12:00 PM	244	144	388
Total	**1,204**	**841**	**2,045**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	254	208	462
1:00 PM - 2:00 PM	240	197	437
2:00 PM - 3:00 PM	292	203	495
3:00 PM - 4:00 PM	278	279	557
4:00 PM - 5:00 PM	271	320	591
5:00 PM - 6:00 PM	360	342	702
6:00 PM - 7:00 PM	291	259	550
7:00 PM - 8:00 PM	194	186	380
8:00 PM - 9:00 PM	170	135	305
9:00 PM - 10:00 PM	104	87	191
10:00 PM - 11:00 PM	46	52	98
11:00 PM - 12:00 AM	45	38	83
Total	**2,545**	**2,306**	**4,851**

24-Hour EB Volume	3,749	24-Hour WB Volume	3,147



Kimley»Horn

24 Hour Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: 30. Villa La Jolla Drive North of Nobel Dr

Orientation: *North-South*

Date of Count: *Thursday, April 30, 2015*

Analysts: *DASH*

Weather: *Sunny*

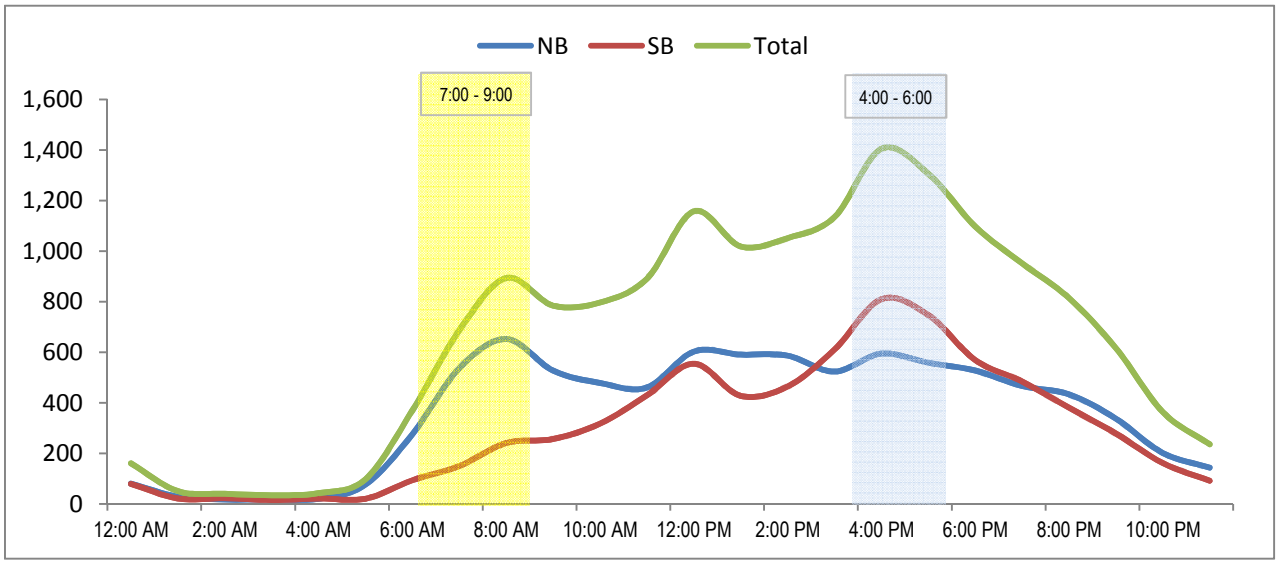
AVC Proj. No: *15-0345*

24 Hour Segment Volume			16,011

Time	Hourly Volume		
	NB	SB	Total
12:00 AM - 1:00 AM	81	80	161
1:00 AM - 2:00 AM	29	22	51
2:00 AM - 3:00 AM	18	23	41
3:00 AM - 4:00 AM	19	16	35
4:00 AM - 5:00 AM	21	22	43
5:00 AM - 6:00 AM	77	21	98
6:00 AM - 7:00 AM	276	94	370
7:00 AM - 8:00 AM	537	150	687
8:00 AM - 9:00 AM	653	241	894
9:00 AM - 10:00 AM	528	257	785
10:00 AM - 11:00 AM	479	318	797
11:00 AM - 12:00 PM	461	430	891
Total	**3,179**	**1,674**	**4,853**

Time	Hourly Volume		
	NB	SB	Total
12:00 PM - 1:00 PM	603	555	1,158
1:00 PM - 2:00 PM	591	428	1,019
2:00 PM - 3:00 PM	587	465	1,052
3:00 PM - 4:00 PM	524	611	1,135
4:00 PM - 5:00 PM	595	810	1,405
5:00 PM - 6:00 PM	559	748	1,307
6:00 PM - 7:00 PM	528	570	1,098
7:00 PM - 8:00 PM	467	485	952
8:00 PM - 9:00 PM	434	381	815
9:00 PM - 10:00 PM	338	279	617
10:00 PM - 11:00 PM	202	162	364
11:00 PM - 12:00 AM	144	92	236
Total	**5,572**	**5,586**	**11,158**

24-Hour NB Volume	8,751	24-Hour SB Volume	7,260



Kimley»Horn

24 Hour Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: 31. Villa La Jolla Drive North of La Jolla Village Dr

Orientation: *North-South*

Date of Count: *Wednesday, May 06, 2015*

Analysts: *DASH*

Weather: *Sunny*

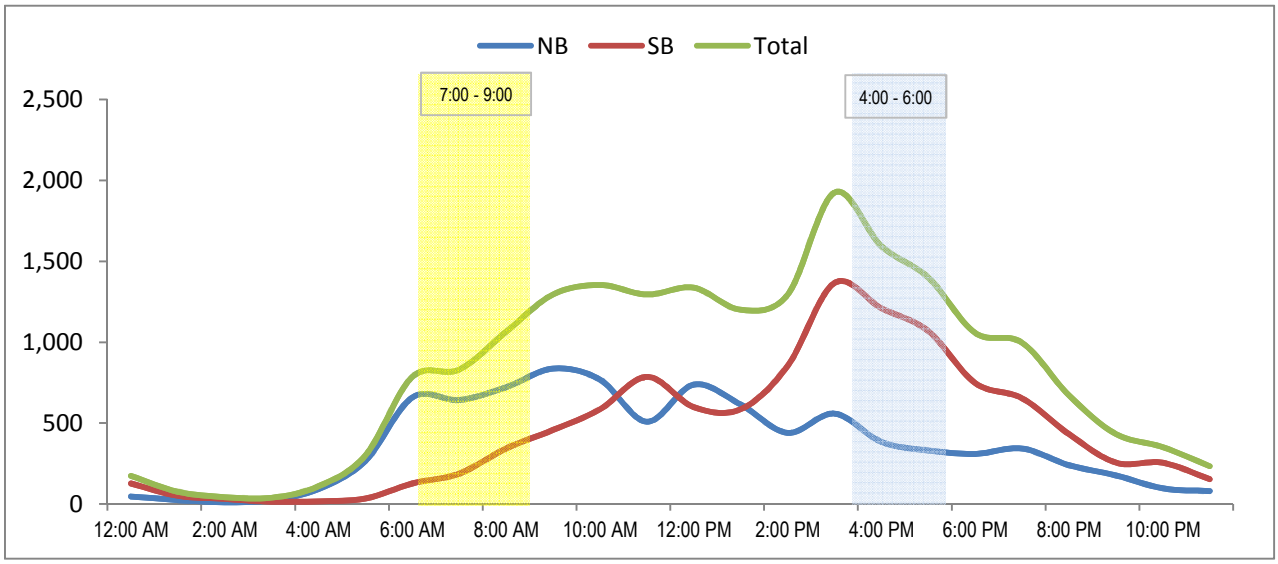
AVC Proj. No: *15-0345*

24 Hour Segment Volume			*19,865*

Time	Hourly Volume		
	NB	SB	Total
12:00 AM - 1:00 AM	47	127	174
1:00 AM - 2:00 AM	25	51	76
2:00 AM - 3:00 AM	11	32	43
3:00 AM - 4:00 AM	24	15	39
4:00 AM - 5:00 AM	93	17	110
5:00 AM - 6:00 AM	267	34	301
6:00 AM - 7:00 AM	659	127	786
7:00 AM - 8:00 AM	643	188	831
8:00 AM - 9:00 AM	722	343	1,065
9:00 AM - 10:00 AM	837	458	1,295
10:00 AM - 11:00 AM	769	585	1,354
11:00 AM - 12:00 PM	509	786	1295
Total	**4,606**	**2,763**	**7,369**

Time	Hourly Volume		
	NB	SB	Total
12:00 PM - 1:00 PM	738	599	1,337
1:00 PM - 2:00 PM	615	586	1,201
2:00 PM - 3:00 PM	440	853	1,293
3:00 PM - 4:00 PM	559	1,366	1,925
4:00 PM - 5:00 PM	384	1,210	1,594
5:00 PM - 6:00 PM	331	1,069	1,400
6:00 PM - 7:00 PM	310	748	1,058
7:00 PM - 8:00 PM	343	654	997
8:00 PM - 9:00 PM	240	432	672
9:00 PM - 10:00 PM	177	256	433
10:00 PM - 11:00 PM	97	255	352
11:00 PM - 12:00 AM	80	154	234
Total	**4,314**	**8,182**	**12,496**

24-Hour	*NB*	*Volume*	*8,920*	*24-Hour*	*SB*	*Volume*	*10,945*



APPENDIX F

FUTURE YEAR VOLUME ESTIMATES

- Model Calibration Tables
- Future Year Turning Movement Volume Summary
- Future Year Turning Movement Volume Projection Worksheets

ROADWAY SEGMENT VOLUME POST-MODELING ADJUSTMENTS

ROADWAY SEGMENT	EXISTING					NOTES
	Model Volume	Counted Volume	Model - Count	(Model - Count) / (Count)	Rating	
LEGEND					🟢	Model-to-volume difference is within 10%
					🟡	Model-to-volume difference is between 10% - 25%
					🔴	Model-to-volume difference is greater than 25%
No adjustments to the model volumes are needed.						NONE
Volumes from the Model should be decreased to account for difference between counts and the calibrated model.						DOWN
Volumes from the Model should be increased to account for difference between counts and the calibrated model.						UP
Special situation, see notes for adjustment discussion						SPECIAL
Eastgate Mall						
Regents Rd to Genesee Ave	8,000	6,187	1,813	29.3%	🔴	Within acceptable +/-2,000
Genesee Ave to Easter Way	22,700	14,767	7,933	53.7%	🔴	No adjustment: future network w/ Judicial corrects this
Easter Way to Judicial Dr	10,600	11,115	-515	-4.6%	🟢	Within acceptable +/-2,000
Judicial Dr to Eastgate Dr (Freeway Overpass)	12,500	10,096	2,404	23.8%	🟡	**Adjust -2400**
Eastgate Dr to Miramar Rd	16,100	14,668	1,432	9.8%	🟢	Within acceptable +/-2,000
Executive Drive						
Regents Rd to Genesee Ave	8,400	4,397	4,003	91.0%	🔴	No adjustment: future network w/ Judicial corrects this
Genesee Ave to Judicial Dr	4,100	5,914	-1,814	-30.7%	🔴	Within acceptable +/-2,000
Executive Way						
Executive Dr to La Jolla Village Dr	10,500	5,923	4,577	77.3%	🔴	**Adjust -4600**
Genesee Ave						
N. Torrey Pines Rd to I-5 SB Ramps	50,800	35,124	15,676	44.6%	🔴	**Adjust -15600**
I-5 SB Ramps to I-5 NB Ramps	48,700	49,051	-351	-0.7%	🟢	Within acceptable +/-2,000
I-5 NB Ramps to Regents Rd	41,700	48,542	-6,842	-14.1%	🟡	**Adjust +6800**
Regents Rd to Eastgate Mall	31,600	29,457	2,143	7.3%	🟢	Within acceptable +/-10%
Eastgate Mall to La Jolla Village Dr	21,000	24,921	-3,921	-15.7%	🟡	**Adjust +4000**
La Jolla Village Dr to Esplande Ct	29,300	28,054	1,246	4.4%	🟢	Within acceptable +/-2,000
Esplande Ct to Nobel Dr	21,100	23,744	-2,644	-11.1%	🟡	**Adjust +2600**
Nobel Dr to Centurion Square	30,200	24,891	5,309	21.3%	🟡	No adjustment: accounts for full vacancy and community buildout
Centurion Square to Governor Dr	40,400	30,922	9,478	30.7%	🔴	No adjustment: accounts for full vacancy and community buildout
Governor Dr to SR-52 WB Ramps	37,300	30,325	6,975	23.0%	🟡	No adjustment: accounts for full vacancy and community buildout
SR-52 WB Ramps to SR-52 EB Ramps	32,500	31,170	1,330	4.3%	🟢	Within acceptable +/-2,000
SR-52 EB Ramps to Lehrer Dr	31,800	30,581	1,219	4.0%	🟢	Within acceptable +/-2,000
Gilman Drive						
UCSD Campus to La Jolla Village Dr	28,600	10,069	18,531	184.0%	🔴	**Adjust -18500**
La Jolla Village Dr to Via Alicante	22,200	15,095	7,105	47.1%	🔴	**Adjust -7100**
Via Alicante to I-5 SB Ramps	17,300	17,138	162	0.9%	🟢	Within acceptable +/-2,000
I-5 SB Ramps to I-5 NB Ramps	17,900	11,873	6,027	50.8%	🔴	**Adjust -6000**
Golden Haven Drive						
Towne Center Dr to Judicial Dr	2,000	6,712	-4,712	-70.2%	🔴	No adjustment: future network w/ Judicial corrects this
Governor Drive						
Regents Rd to Genesee Ave	17,900	16,796	1,104	6.6%	🟢	Within acceptable +/-2,000
Genesee Ave to I-805 SB Ramps	20,400	19,737	663	3.4%	🟢	Within acceptable +/-2,000
I-805 SB Ramps to I-805 NB Ramps	14,200	10,417	3,783	36.3%	🔴	**Adjust -3700**
Judicial Drive						
Eastgate Mall to La Jolla Village Dr	2,800	4,828	-2,028	-42.0%	🔴	No adjustment: future network w/ Judicial corrects this
La Jolla Village Dr to Nobel Dr	1,600	6,574	-4,974	-75.7%	🔴	No adjustment: future network w/ Judicial corrects this
La Jolla Scenic Drive						
La Jolla Village Drive to Community Boundary (South)	9,000	7,928	1,072	13.5%	🟡	Within acceptable +/-2,000
La Jolla Village Drive						
Revelle College Dr to Villa La Jolla Dr	49,400	44,520	4,880	11.0%	🟡	**Adjust -4900**
Villa La Jolla Dr to I-5 SB Ramps	65,500	62,258	3,242	5.2%	🟢	Within acceptable +/-10%
I-5 SB Ramps to I-5 NB Ramps	53,900	51,391	2,509	4.9%	🟢	Within acceptable +/-10%
I-5 NB Ramps to Lebon Dr	45,500	44,335	1,165	2.6%	🟢	Within acceptable +/-2,000
Lebon Dr to Regents Rd	42,500	42,863	-363	-0.8%	🟢	Within acceptable +/-2,000
Regents Rd to Genesee Ave	40,300	38,474	1,826	4.7%	🟢	Within acceptable +/-2,000
Genesee Ave to Towne Center Dr	42,400	45,117	-2,717	-6.0%	🟢	Within acceptable +/-10%
Towne Center Dr to I-805 SB Ramps	70,100	58,833	11,267	19.2%	🟡	**Adjust -11200**
Lebon Drive						
Palmilla Dr to Nobel Dr	16,200	11,192	5,008	44.7%	🔴	**Adjust -5000**
Nobel Dr to La Jolla Village Dr	10,800	9,212	1,588	17.2%	🟡	Within acceptable +/-2,000
Miramar Road						
I-805 SB Ramps to I-805 NB Ramps	53,800	66,139	-12,339	-18.7%	🟡	**Adjust +12300**
I-805 NB Ramps to Nobel Dr	50,600	47,991	2,609	5.4%	🟢	Within acceptable +/-10%
Nobel Dr to Eastgate Mall	79,000	64,557	14,443	22.4%	🟡	**Adjust -14400**
Eastgate Mall to Camino Santa Fe	76,900	67,748	9,152	13.5%	🟡	**Adjust -9100**
North Torrey Pines Road						
Science Park Rd to Genesee Ave	38,800	29,303	9,497	32.4%	🔴	**Adjust -9500**
Genesee Ave to UCSD Northpoint Dwy	29,000	21,760	7,240	33.3%	🔴	**Adjust -7200**

ROADWAY SEGMENT VOLUME POST-MODELING ADJUSTMENTS

ROADWAY SEGMENT	EXISTING					NOTES
	Model Volume	Counted Volume	Model - Count	(Model - Count) / (Count)	Rating	
LEGEND					🟢	Model-to-volume difference is within 10%
					🟡	Model-to-volume difference is between 10% - 25%
					🔴	Model-to-volume difference is greater than 25%
No adjustments to the model volumes are needed.						NONE
Volumes from the Model should be decreased to account for difference between counts and the calibrated model.						DOWN
Volumes from the Model should be increased to account for difference between counts and the calibrated model.						UP
Special situation, see notes for adjustment discussion						SPECIAL
Nobel Drive						
Villa La Jolla Dr to I-5 SB On Ramp	27,400	26,284	1,116	4.2%	🟢	Within acceptable +/-2,000
I-5 SB On Ramp to I-5 NB Off Ramp/University Center Lane	26,700	27,642	-942	-3.4%	🟢	Within acceptable +/-2,000
I-5 NB Off Ramp/University Center Lane to Lebon Dr	18,000	21,546	-3,546	-16.5%	🟡	**Adjust +3500**
Lebon Dr to Regents Rd	18,000	21,256	-3,256	-15.3%	🟡	**Adjust +3200**
Regents Rd to Genesee Ave	20,700	19,772	928	4.7%	🟢	Within acceptable +/-2,000
Genesee Ave to Towne Center Dr	23,900	18,484	5,416	29.3%	🔴	**Adjust -5400**
Towne Center Dr to Judicial Dr	14,200	17,261	-3,061	-17.7%	🟡	**Adjust +3000**
Judicial Dr to Avenue of Flags	16,100	24,125	-8,025	-33.3%	🔴	No adjustment: future network w/ Judicial corrects this
Avenue of Flags to Miramar Rd	29,400	20,648	8,752	42.4%	🔴	No adjustment: future network w/ Judicial corrects this
Regents Road						
Genesee Ave to Eastgate Mall	7,200	6,260	940	15.0%	🟡	Within acceptable +/-2,000
Eastgate Mall to La Jolla Village Dr	17,000	15,245	1,755	11.5%	🟡	Within acceptable +/-2,000
La Jolla Village Dr to Nobel Dr	15,600	16,525	-925	-5.6%	🟢	Within acceptable +/-2,000
Nobel Dr to Rose Canyon (end)	13,200	10,688	2,512	23.5%	🟡	**Adjust -2500 to Future Alt C and D only**
Rose Canyon (end) to Governor Dr	2,900	1,940	960	49.5%	🔴	Within acceptable +/-2,000
Governor Dr to SR-52 WB Ramps	21,700	16,181	5,519	34.1%	🔴	**Adjust -5500 to Future Alt C and D only**
SR-52 WB Ramps to SR-52 EB Ramps	26,600	19,957	6,643	33.3%	🔴	**Adjust -6600 to Future Alt C and D only**
SR-52 EB Ramps to Luna Ave	32,900	21,268	11,632	54.7%	🔴	**Adjust -11600 to Future Alt C and D only**
Torrey Pines Road						
La Jolla Village Dr to Community Boundary (South)	35,000	26,620	8,380	31.5%	🔴	**Adjust -8300**
Towne Center Drive						
End to La Jolla Village Dr	21,000	20,121	879	4.4%	🟢	Within acceptable +/-2,000
La Jolla Village Dr to Nobel Dr	18,500	13,785	4,715	34.2%	🔴	**Adjust -4700**
Villa La Jolla Drive						
Gilman Dr (South) to Nobel Dr	3,600	6,896	-3,296	-47.8%	🔴	**Adjust +3300**
Nobel Dr to La Jolla Village Dr	12,000	16,011	-4,011	-25.1%	🔴	**Adjust +4000**
La Jolla Village Dr to VA Medical Center	10,100	19,865	-9,765	-49.2%	🔴	**Adjust +9800**

UNIVERSITY ALTERNATIVE A
[INCLUDES REGENTS BRIDGE, 6-LANE GENESEE]
YEAR 2035 MODEL VOLUMES

ROADWAY SEGMENT	Volume Comparison							NOTES
	Existing Model Volume	Adjustment	Adjusted Existing Model Volume	Alt A Model Volume	Adjustment	Adjusted Alt A Model Volume	Change in Volume	
Eastgate Mall								
Regents Rd to Genesee Ave	8,000	0	8,000	12,100	0	12,100	4,100	
Genesee Ave to Easter Way	22,700	0	22,700	25,000	0	25,000	2,300	
Easter Way to Judicial Dr	10,600	0	10,600	14,100	0	14,100	3,500	
Judicial Dr to Eastgate Dr (Freeway Overpass)	12,500	-2,400	10,100	21,900	-2,400	19,500	9,400	
Eastgate Dr to Miramar Rd	16,100	0	16,100	28,800	0	28,800	12,700	
Executive Drive								
Regents Rd to Genesee Ave	8,400	0	8,400	5,900	0	5,900	-2,500	
Genesee Ave to Judicial Dr	4,100	0	4,100	8,900	0	8,900	4,800	
Executive Way								
Executive Dr to La Jolla Village Dr	10,500	-4,600	5,900	16,000	-4,600	11,400	5,500	
Genesee Ave								
N. Torrey Pines Rd to I-5 SB Ramps	50,800	-15,600	35,200	61,700	-15,600	46,100	10,900	
I-5 SB Ramps to I-5 NB Ramps	48,700	0	48,700	62,100	0	62,100	13,400	
I-5 NB Ramps to Regents Rd	41,700	6,800	48,500	47,500	6,800	54,300	5,800	
Regents Rd to Eastgate Mall	31,600	0	31,600	40,600	0	40,600	9,000	
Eastgate Mall to La Jolla Village Dr	21,000	4,000	25,000	31,100	4,000	35,100	10,100	
La Jolla Village Dr to Esplande Ct	29,300	0	29,300	41,800	0	41,800	12,500	
Esplande Ct to Nobel Dr	21,100	2,600	23,700	24,700	2,600	27,300	3,600	
Nobel Dr to Centurion Square	30,200	0	30,200	39,600	0	39,600	9,400	
Centurion Square to Governor Dr	40,400	0	40,400	43,900	0	43,900	3,500	
Governor Dr to SR-52 WB Ramps	37,300	0	37,300	48,700	0	48,700	11,400	
SR-52 WB Ramps to SR-52 EB Ramps	32,500	0	32,500	37,300	0	37,300	4,800	
SR-52 EB Ramps to Lehrer Dr	31,800	0	31,800	37,100	0	37,100	5,300	
Gilman Drive								
UCSD Campus to La Jolla Village Dr	28,600	-18,500	10,100	32,300	-18,500	13,800	3,700	
La Jolla Village Dr to Via Alicante	22,200	-7,100	15,100	28,900	-7,100	21,800	6,700	
Via Alicante to I-5 SB Ramps	17,300	0	17,300	24,300	0	24,300	7,000	
I-5 SB Ramps to I-5 NB Ramps	17,900	-6,000	11,900	20,900	-6,000	14,900	3,000	
Golden Haven Drive								
Towne Center Dr to Judicial Dr	2,000	0	2,000	7,500	0	7,500	5,500	
Governor Drive								
Regents Rd to Genesee Ave	17,900	0	17,900	11,400	0	11,400	-6,500	
Genesee Ave to I-805 SB Ramps	20,400	0	20,400	24,000	0	24,000	3,600	
I-805 SB Ramps to I-805 NB Ramps	14,200	-3,700	10,500	13,600	-3,700	9,900	-600	
Judicial Drive								
Eastgate Mall to La Jolla Village Dr	2,800	0	2,800	10,600	0	10,600	7,800	
La Jolla Village Dr to Nobel Dr	1,600	0	1,600	9,300	0	9,300	7,700	
La Jolla Scenic Drive								
La Jolla Village Drive to Community Boundary (South)	9,000	0	9,000	12,900	0	12,900	3,900	
La Jolla Village Drive								
Revelle College Dr to Villa La Jolla Dr	49,400	-4,900	44,500	59,200	-4,900	54,300	9,800	
Villa La Jolla Dr to I-5 SB Ramps	65,500	0	65,500	76,400	0	76,400	10,900	
I-5 SB Ramps to I-5 NB Ramps	53,900	0	53,900	59,400	0	59,400	5,500	
I-5 NB Ramps to Lebon Dr	45,500	0	45,500	52,000	0	52,000	6,500	
Lebon Dr to Regents Rd	42,500	0	42,500	49,900	0	49,900	7,400	
Regents Rd to Genesee Ave	40,300	0	40,300	52,400	0	52,400	12,100	
Genesee Ave to Towne Center Dr	42,400	0	42,400	49,400	0	49,400	7,000	
Towne Center Dr to I-805 SB Ramps	70,100	-11,200	58,900	78,800	-11,200	67,600	8,700	
Lebon Drive								
Palmilla Dr to Nobel Dr	16,200	-5,000	11,200	21,100	-5,000	16,100	4,900	
Nobel Dr to La Jolla Village Dr	10,800	0	10,800	13,600	0	13,600	2,800	
Miramar Road								
I-805 SB Ramps to I-805 NB Ramps	53,800	12,300	66,100	52,300	12,300	64,600	-1,500	
I-805 NB Ramps to Nobel Dr	50,600	0	50,600	51,400	0	51,400	800	
Nobel Dr to Eastgate Mall	79,000	-14,400	64,600	83,400	-14,400	69,000	4,400	
Eastgate Mall to Camino Santa Fe	76,900	-9,100	67,800	81,300	-9,100	72,200	4,400	
North Torrey Pines Road								
Science Park Rd to Genesee Ave	38,800	-9,500	29,300	49,900	-9,500	40,400	11,100	
Genesee Ave to UCSD Northpoint Dwy	29,000	-7,200	21,800	30,900	-7,200	23,700	1,900	
Nobel Drive								
Villa La Jolla Dr to I-5 SB On Ramp	27,400	0	27,400	47,500	0	47,500	20,100	
I-5 SB On Ramp to I-5 NB Off Ramp/University Center Lane	26,700	0	26,700	40,800	0	40,800	14,100	
I-5 NB Off Ramp/University Center Lane to Lebon Dr	18,000	3,500	21,500	27,800	3,500	31,300	9,800	
Lebon Dr to Regents Rd	18,000	3,200	21,200	24,100	3,200	27,300	6,100	
Regents Rd to Genesee Ave	20,700	0	20,700	32,800	0	32,800	12,100	
Genesee Ave to Towne Center Dr	23,900	-5,400	18,500	37,800	-5,400	32,400	13,900	
Towne Center Dr to Judicial Dr	14,200	3,000	17,200	22,000	3,000	25,000	7,800	
Judicial Dr to Avenue of Flags	16,100	0	16,100	31,400	0	31,400	15,300	
Avenue of Flags to Miramar Rd	29,400	0	29,400	33,900	0	33,900	4,500	
Regents Road								
Genesee Ave to Eastgate Mall	7,200	0	7,200	9,700	0	9,700	2,500	
Eastgate Mall to La Jolla Village Dr	17,000	0	17,000	18,900	0	18,900	1,900	
La Jolla Village Dr to Nobel Dr	15,600	0	15,600	24,500	0	24,500	8,900	
Nobel Dr to Rose Canyon (end)	13,200	0	13,200	27,000	0	27,000	13,800	
Rose Canyon (end) to Governor Dr	2,900	0	2,900	30,000	0	30,000	27,100	
Governor Dr to SR-52 WB Ramps	21,700	0	21,700	30,300	0	30,300	8,600	
SR-52 WB Ramps to SR-52 EB Ramps	26,600	0	26,600	35,300	0	35,300	8,700	
SR-52 EB Ramps to Luna Ave	32,900	0	32,900	40,600	0	40,600	7,700	
Torrey Pines Road								
La Jolla Village Dr to Community Boundary (South)	35,000	-8,300	26,700	43,900	-8,300	35,600	8,900	
Towne Center Drive								
End to La Jolla Village Dr	21,000	0	21,000	21,400	0	21,400	400	
La Jolla Village Dr to Nobel Dr	18,500	-4,700	13,800	23,300	-4,700	18,600	4,800	
Villa La Jolla Drive								
Gilman Dr (South) to Nobel Dr	3,600	3,300	6,900	9,000	3,300	12,300	5,400	
Nobel Dr to La Jolla Village Dr	12,000	4,000	16,000	20,300	4,000	24,300	8,300	
La Jolla Village Dr to VA Medical Center	10,100	9,800	19,900	23,600	9,800	33,400	13,500	

UNIVERSITY ALTERNATIVE B
[INCLUDES REGENTS BRIDGE, 4-LANE GENESEE]
YEAR 2035 MODEL VOLUMES

ROADWAY SEGMENT	Volume Comparison							NOTES
	Existing Model Volume	Adjustment	Adjusted Existing Model Volume	Alt B Model Volume	Adjustment	Adjusted Alt B Model Volume	Change in Volume	
Eastgate Mall								
Regents Rd to Genesee Ave	8,000	0	8,000	12,200	0	12,200	4,200	
Genesee Ave to Easter Way	22,700	0	22,700	25,100	0	25,100	2,400	
Easter Way to Judicial Dr	10,600	0	10,600	14,300	0	14,300	3,700	
Judicial Dr to Eastgate Dr (Freeway Overpass)	12,500	-2,400	10,100	21,900	-2,400	19,500	9,400	
Eastgate Dr to Miramar Rd	16,100	0	16,100	28,700	0	28,700	12,600	
Executive Drive								
Regents Rd to Genesee Ave	8,400	0	8,400	6,000	0	6,000	-2,400	
Genesee Ave to Judicial Dr	4,100	0	4,100	8,700	0	8,700	4,600	
Executive Way								
Executive Dr to La Jolla Village Dr	10,500	-4,600	5,900	15,700	-4,600	11,100	5,200	
Genesee Ave								
N. Torrey Pines Rd to I-5 SB Ramps	50,800	-15,600	35,200	61,700	-15,600	46,100	10,900	
I-5 SB Ramps to I-5 NB Ramps	48,700	0	48,700	62,200	0	62,200	13,500	
I-5 NB Ramps to Regents Rd	41,700	6,800	48,500	47,900	6,800	54,700	6,200	
Regents Rd to Eastgate Mall	31,600	0	31,600	40,300	0	40,300	8,700	
Eastgate Mall to La Jolla Village Dr	21,000	4,000	25,000	30,800	4,000	34,800	9,800	
La Jolla Village Dr to Esplande Ct	29,300	0	29,300	41,900	0	41,900	12,600	
Esplande Ct to Nobel Dr	21,100	2,600	23,700	24,800	2,600	27,400	3,700	
Nobel Dr to Centurion Square	30,200	0	30,200	39,600	0	39,600	9,400	
Centurion Square to Governor Dr	40,400	0	40,400	40,900	0	40,900	500	
Governor Dr to SR-52 WB Ramps	37,300	0	37,300	44,300	0	44,300	7,000	
SR-52 WB Ramps to SR-52 EB Ramps	32,500	0	32,500	36,500	0	36,500	4,000	
SR-52 EB Ramps to Lehrer Dr	31,800	0	31,800	36,600	0	36,600	4,800	
Gilman Drive								
UCSD Campus to La Jolla Village Dr	28,600	-18,500	10,100	32,400	-18,500	13,900	3,800	
La Jolla Village Dr to Via Alicante	22,200	-7,100	15,100	28,900	-7,100	21,800	6,700	
Via Alicante to I-5 SB Ramps	17,300	0	17,300	24,500	0	24,500	7,200	
I-5 SB Ramps to I-5 NB Ramps	17,900	-6,000	11,900	21,000	-6,000	15,000	3,100	
Golden Haven Drive								
Towne Center Dr to Judicial Dr	2,000	0	2,000	7,300	0	7,300	5,300	
Governor Drive								
Regents Rd to Genesee Ave	17,900	0	17,900	10,700	0	10,700	-7,200	
Genesee Ave to I-805 SB Ramps	20,400	0	20,400	23,300	0	23,300	2,900	
I-805 SB Ramps to I-805 NB Ramps	14,200	-3,700	10,500	14,300	-3,700	10,600	100	
Judicial Drive								
Eastgate Mall to La Jolla Village Dr	2,800	0	2,800	10,400	0	10,400	7,600	
La Jolla Village Dr to Nobel Dr	1,600	0	1,600	9,300	0	9,300	7,700	
La Jolla Scenic Drive								
La Jolla Village Drive to Community Boundary (South)	9,000	0	9,000	12,900	0	12,900	3,900	
La Jolla Village Drive								
Revelle College Dr to Villa La Jolla Dr	49,400	-4,900	44,500	59,000	-4,900	54,100	9,600	
Villa La Jolla Dr to I-5 SB Ramps	65,500	0	65,500	76,400	0	76,400	10,900	
I-5 SB Ramps to I-5 NB Ramps	53,900	0	53,900	60,100	0	60,100	6,200	
I-5 NB Ramps to Lebon Dr	45,500	0	45,500	52,500	0	52,500	7,000	
Lebon Dr to Regents Rd	42,500	0	42,500	50,100	0	50,100	7,600	
Regents Rd to Genesee Ave	40,300	0	40,300	52,400	0	52,400	12,100	
Genesee Ave to Towne Center Dr	42,400	0	42,400	49,600	0	49,600	7,200	
Towne Center Dr to I-805 SB Ramps	70,100	-11,200	58,900	79,900	-11,200	68,700	9,800	
Lebon Drive								
Palmilla Dr to Nobel Dr	16,200	-5,000	11,200	21,000	-5,000	16,000	4,800	
Nobel Dr to La Jolla Village Dr	10,800	0	10,800	13,600	0	13,600	2,800	
Miramar Road								
I-805 SB Ramps to I-805 NB Ramps	53,800	12,300	66,100	53,400	12,300	65,700	-400	
I-805 NB Ramps to Nobel Dr	50,600	0	50,600	50,400	0	50,400	-200	
Nobel Dr to Eastgate Mall	79,000	-14,400	64,600	83,400	-14,400	69,000	4,400	
Eastgate Mall to Camino Santa Fe	76,900	-9,100	67,800	81,400	-9,100	72,300	4,500	
North Torrey Pines Road								
Science Park Rd to Genesee Ave	38,800	-9,500	29,300	50,100	-9,500	40,600	11,300	
Genesee Ave to UCSD Northpoint Dwy	29,000	-7,200	21,800	30,900	-7,200	23,700	1,900	
Nobel Drive								
Villa La Jolla Dr to I-5 SB On Ramp	27,400	0	27,400	47,200	0	47,200	19,800	
I-5 SB On Ramp to I-5 NB Off Ramp/University Center Lane	26,700	0	26,700	40,600	0	40,600	13,900	
I-5 NB Off Ramp/University Center Lane to Lebon Dr	18,000	3,500	21,500	28,100	3,500	31,600	10,100	
Lebon Dr to Regents Rd	18,000	3,200	21,200	24,600	3,200	27,800	6,600	
Regents Rd to Genesee Ave	20,700	0	20,700	33,100	0	33,100	12,400	
Genesee Ave to Towne Center Dr	23,900	-5,400	18,500	35,800	-5,400	30,400	11,900	
Towne Center Dr to Judicial Dr	14,200	3,000	17,200	21,900	3,000	24,900	7,700	
Judicial Dr to Avenue of Flags	16,100	0	16,100	31,300	0	31,300	15,200	
Avenue of Flags to Miramar Rd	29,400	0	29,400	34,900	0	34,900	5,500	
Regents Road								
Genesee Ave to Eastgate Mall	7,200	0	7,200	9,900	0	9,900	2,700	
Eastgate Mall to La Jolla Village Dr	17,000	0	17,000	19,100	0	19,100	2,100	
La Jolla Village Dr to Nobel Dr	15,600	0	15,600	24,700	0	24,700	9,100	
Nobel Dr to Rose Canyon (end)	13,200	0	13,200	27,100	0	27,100	13,900	
Rose Canyon (end) to Governor Dr	2,900	0	2,900	29,900	0	29,900	27,000	
Governor Dr to SR-52 WB Ramps	21,700	0	21,700	30,900	0	30,900	9,200	
SR-52 WB Ramps to SR-52 EB Ramps	26,600	0	26,600	35,500	0	35,500	8,900	
SR-52 EB Ramps to Luna Ave	32,900	0	32,900	40,800	0	40,800	7,900	
Torrey Pines Road								
La Jolla Village Dr to Community Boundary (South)	35,000	-8,300	26,700	44,000	-8,300	35,700	9,000	
Towne Center Drive								
End to La Jolla Village Dr	21,000	0	21,000	21,600	0	21,600	600	
La Jolla Village Dr to Nobel Dr	18,500	-4,700	13,800	24,200	-4,700	19,500	5,700	
Villa La Jolla Drive								
Gilman Dr (South) to Nobel Dr	3,600	3,300	6,900	9,000	3,300	12,300	5,400	
Nobel Dr to La Jolla Village Dr	12,000	4,000	16,000	20,100	4,000	24,100	8,100	
La Jolla Village Dr to VA Medical Center	10,100	9,800	19,900	23,500	9,800	33,300	13,400	

UNIVERSITY ALTERNATIVE C
[DOES NOT INCLUDES REGENTS BRIDGE, 6-LANE GENESEE]
YEAR 2035 MODEL VOLUMES

ROADWAY SEGMENT	Volume Comparison							NOTES
	Existing Model Volume	Adjustment	Adjusted Existing Model Volume	Alt C Model Volume	Adjustment	Adjusted Alt C Model Volume	Change in Volume	
Eastgate Mall								
Regents Rd to Genesee Ave	8,000	0	8,000	12,300	0	12,300	4,300	
Genesee Ave to Easter Way	22,700	0	22,700	24,900	0	24,900	2,200	
Easter Way to Judicial Dr	10,600	0	10,600	14,000	0	14,000	3,400	
Judicial Dr to Eastgate Dr (Freeway Overpass)	12,500	-2,400	10,100	21,900	-2,400	19,500	9,400	
Eastgate Dr to Miramar Rd	16,100	0	16,100	29,000	0	29,000	12,900	
Executive Drive								
Regents Rd to Genesee Ave	8,400	0	8,400	6,600	0	6,600	-1,800	
Genesee Ave to Judicial Dr	4,100	0	4,100	9,300	0	9,300	5,200	
Executive Way								
Executive Dr to La Jolla Village Dr	10,500	-4,600	5,900	15,600	-4,600	11,000	5,100	
Genesee Ave								
N. Torrey Pines Rd to I-5 SB Ramps	50,800	-15,600	35,200	61,700	-15,600	46,100	10,900	
I-5 SB Ramps to I-5 NB Ramps	48,700	0	48,700	62,300	0	62,300	13,600	
I-5 NB Ramps to Regents Rd	41,700	6,800	48,500	48,000	6,800	54,800	6,300	
Regents Rd to Eastgate Mall	31,600	0	31,600	40,700	0	40,700	9,100	
Eastgate Mall to La Jolla Village Dr	21,000	4,000	25,000	31,700	4,000	35,700	10,700	
La Jolla Village Dr to Esplande Ct	29,300	0	29,300	46,500	0	46,500	17,200	
Esplande Ct to Nobel Dr	21,100	2,600	23,700	27,700	2,600	30,300	6,600	
Nobel Dr to Centurion Square	30,200	0	30,200	49,400	0	49,400	19,200	
Centurion Square to Governor Dr	40,400	0	40,400	58,200	0	58,200	17,800	
Governor Dr to SR-52 WB Ramps	37,300	0	37,300	47,700	0	47,700	10,400	
SR-52 WB Ramps to SR-52 EB Ramps	32,500	0	32,500	39,000	0	39,000	6,500	
SR-52 EB Ramps to Lehrer Dr	31,800	0	31,800	38,900	0	38,900	7,100	
Gilman Drive								
UCSD Campus to La Jolla Village Dr	28,600	-18,500	10,100	32,200	-18,500	13,700	3,600	
La Jolla Village Dr to Via Alicante	22,200	-7,100	15,100	28,100	-7,100	21,000	5,900	
Via Alicante to I-5 SB Ramps	17,300	0	17,300	24,000	0	24,000	6,700	
I-5 SB Ramps to I-5 NB Ramps	17,900	-6,000	11,900	22,800	-6,000	16,800	4,900	
Golden Haven Drive								
Towne Center Dr to Judicial Dr	2,000	0	2,000	7,700	0	7,700	5,700	
Governor Drive								
Regents Rd to Genesee Ave	17,900	0	17,900	23,200	0	23,200	5,300	
Genesee Ave to I-805 SB Ramps	20,400	0	20,400	23,900	0	23,900	3,500	
I-805 SB Ramps to I-805 NB Ramps	14,200	-3,700	10,500	13,700	-3,700	10,000	-500	
Judicial Drive								
Eastgate Mall to La Jolla Village Dr	2,800	0	2,800	9,900	0	9,900	7,100	
La Jolla Village Dr to Nobel Dr	1,600	0	1,600	9,500	0	9,500	7,900	
La Jolla Scenic Drive								
La Jolla Village Drive to Community Boundary (South)	9,000	0	9,000	14,100	0	14,100	5,100	
La Jolla Village Drive								
Revelle College Dr to Villa La Jolla Dr	49,400	-4,900	44,500	60,000	-4,900	55,100	10,600	
Villa La Jolla Dr to I-5 SB Ramps	65,500	0	65,500	76,600	0	76,600	11,100	
I-5 SB Ramps to I-5 NB Ramps	53,900	0	53,900	61,200	0	61,200	7,300	
I-5 NB Ramps to Lebon Dr	45,500	0	45,500	53,200	0	53,200	7,700	
Lebon Dr to Regents Rd	42,500	0	42,500	51,500	0	51,500	9,000	
Regents Rd to Genesee Ave	40,300	0	40,300	50,500	0	50,500	10,200	
Genesee Ave to Towne Center Dr	42,400	0	42,400	48,900	0	48,900	6,500	
Towne Center Dr to I-805 SB Ramps	70,100	-11,200	58,900	80,500	-11,200	69,300	10,400	
Lebon Drive								
Palmilla Dr to Nobel Dr	16,200	-5,000	11,200	17,300	-5,000	12,300	1,100	
Nobel Dr to La Jolla Village Dr	10,800	0	10,800	11,300	0	11,300	500	
Miramar Road								
I-805 SB Ramps to I-805 NB Ramps	53,800	12,300	66,100	53,100	12,300	65,400	-700	
I-805 NB Ramps to Nobel Dr	50,600	0	50,600	49,600	0	49,600	-1,000	
Nobel Dr to Eastgate Mall	79,000	-14,400	64,600	83,400	-14,400	69,000	4,400	
Eastgate Mall to Camino Santa Fe	76,900	-9,100	67,800	81,300	-9,100	72,200	4,400	
North Torrey Pines Road								
Science Park Rd to Genesee Ave	38,800	-9,500	29,300	50,800	-9,500	41,300	12,000	
Genesee Ave to UCSD Northpoint Dwy	29,000	-7,200	21,800	31,000	-7,200	23,800	2,000	
Nobel Drive								
Villa La Jolla Dr to I-5 SB On Ramp	27,400	0	27,400	47,200	0	47,200	19,800	
I-5 SB On Ramp to I-5 NB Off Ramp/University Center Lane	26,700	0	26,700	40,700	0	40,700	14,000	
I-5 NB Off Ramp/University Center Lane to Lebon Dr	18,000	3,500	21,500	26,900	3,500	30,400	8,900	
Lebon Dr to Regents Rd	18,000	3,200	21,200	27,500	3,200	30,700	9,500	
Regents Rd to Genesee Ave	20,700	0	20,700	32,200	0	32,200	11,500	
Genesee Ave to Towne Center Dr	23,900	-5,400	18,500	37,400	-5,400	32,000	13,500	
Towne Center Dr to Judicial Dr	14,200	3,000	17,200	22,000	3,000	25,000	7,800	
Judicial Dr to Avenue of Flags	16,100	0	16,100	31,700	0	31,700	15,600	
Avenue of Flags to Miramar Rd	29,400	0	29,400	35,600	0	35,600	6,200	
Regents Road								
Genesee Ave to Eastgate Mall	7,200	0	7,200	8,700	0	8,700	1,500	
Eastgate Mall to La Jolla Village Dr	17,000	0	17,000	16,000	0	16,000	-1,000	
La Jolla Village Dr to Nobel Dr	15,600	0	15,600	18,700	0	18,700	3,100	
Nobel Dr to Rose Canyon (end)	13,200	-2,500	10,700	14,100	-2,500	11,600	900	Adjustment made to Alt C and D only
Rose Canyon (end) to Governor Dr	2,900	0	2,900	2,400	0	2,400	-500	
Governor Dr to SR-52 WB Ramps	21,700	-5,500	16,200	23,300	-5,500	17,800	1,600	Adjustment made to Alt C and D only
SR-52 WB Ramps to SR-52 EB Ramps	26,600	-6,600	20,000	30,000	-6,600	23,400	3,400	Adjustment made to Alt C and D only
SR-52 EB Ramps to Luna Ave	32,900	-11,600	21,300	37,100	-11,600	25,500	4,200	Adjustment made to Alt C and D only
Torrey Pines Road								
La Jolla Village Dr to Community Boundary (South)	35,000	-8,300	26,700	44,900	-8,300	36,600	9,900	
Towne Center Drive								
End to La Jolla Village Dr	21,000	0	21,000	21,600	0	21,600	600	
La Jolla Village Dr to Nobel Dr	18,500	-4,700	13,800	25,400	-4,700	20,700	6,900	
Villa La Jolla Drive								
Gilman Dr (South) to Nobel Dr	3,600	3,300	6,900	9,000	3,300	12,300	5,400	
Nobel Dr to La Jolla Village Dr	12,000	4,000	16,000	19,700	4,000	23,700	7,700	
La Jolla Village Dr to VA Medical Center	10,100	9,800	19,900	23,800	9,800	33,600	13,700	

UNIVERSITY ALTERNATIVE D
[DOES NOT INCLUDES REGENTS BRIDGE, 4-LANE GENESEE]
YEAR 2035 MODEL VOLUMES

ROADWAY SEGMENT	Volume Comparison							NOTES
	Existing Model Volume	Adjustment	Adjusted Existing Model Volume	Alt D Model Volume	Adjustment	Adjusted Alt D Model Volume	Change in Volume	
Eastgate Mall								
Regents Rd to Genesee Ave	8,000	0	8,000	12,300	0	12,300	4,300	
Genesee Ave to Easter Way	22,700	0	22,700	25,400	0	25,400	2,700	
Easter Way to Judicial Dr	10,600	0	10,600	14,300	0	14,300	3,700	
Judicial Dr to Eastgate Dr (Freeway Overpass)	12,500	-2,400	10,100	21,800	-2,400	19,400	9,300	
Eastgate Dr to Miramar Rd	16,100	0	16,100	29,200	0	29,200	13,100	
Executive Drive								
Regents Rd to Genesee Ave	8,400	0	8,400	6,400	0	6,400	-2,000	
Genesee Ave to Judicial Dr	4,100	0	4,100	9,300	0	9,300	5,200	
Executive Way								
Executive Dr to La Jolla Village Dr	10,500	-4,600	5,900	15,700	-4,600	11,100	5,200	
Genesee Ave								
N. Torrey Pines Rd to I-5 SB Ramps	50,800	-15,600	35,200	61,600	-15,600	46,000	10,800	
I-5 SB Ramps to I-5 NB Ramps	48,700	0	48,700	62,100	0	62,100	13,400	
I-5 NB Ramps to Regents Rd	41,700	6,800	48,500	47,800	6,800	54,600	6,100	
Regents Rd to Eastgate Mall	31,600	0	31,600	40,800	0	40,800	9,200	
Eastgate Mall to La Jolla Village Dr	21,000	4,000	25,000	31,500	4,000	35,500	10,500	
La Jolla Village Dr to Esplande Ct	29,300	0	29,300	46,400	0	46,400	17,100	
Esplande Ct to Nobel Dr	21,100	2,600	23,700	27,100	2,600	29,700	6,000	
Nobel Dr to Centurion Square	30,200	0	30,200	46,500	0	46,500	16,300	
Centurion Square to Governor Dr	40,400	0	40,400	54,600	0	54,600	14,200	
Governor Dr to SR-52 WB Ramps	37,300	0	37,300	43,500	0	43,500	6,200	
SR-52 WB Ramps to SR-52 EB Ramps	32,500	0	32,500	38,000	0	38,000	5,500	
SR-52 EB Ramps to Lehrer Dr	31,800	0	31,800	38,400	0	38,400	6,600	
Gilman Drive								
UCSD Campus to La Jolla Village Dr	28,600	-18,500	10,100	32,200	-18,500	13,700	3,600	
La Jolla Village Dr to Via Alicante	22,200	-7,100	15,100	27,800	-7,100	20,700	5,600	
Via Alicante to I-5 SB Ramps	17,300	0	17,300	23,400	0	23,400	6,100	
I-5 SB Ramps to I-5 NB Ramps	17,900	-6,000	11,900	22,500	-6,000	16,500	4,600	
Golden Haven Drive								
Towne Center Dr to Judicial Dr	2,000	0	2,000	7,600	0	7,600	5,600	
Governor Drive								
Regents Rd to Genesee Ave	17,900	0	17,900	23,000	0	23,000	5,100	
Genesee Ave to I-805 SB Ramps	20,400	0	20,400	23,300	0	23,300	2,900	
I-805 SB Ramps to I-805 NB Ramps	14,200	-3,700	10,500	14,400	-3,700	10,700	200	
Judicial Drive								
Eastgate Mall to La Jolla Village Dr	2,800	0	2,800	9,700	0	9,700	6,900	
La Jolla Village Dr to Nobel Dr	1,600	0	1,600	9,400	0	9,400	7,800	
La Jolla Scenic Drive								
La Jolla Village Drive to Community Boundary (South)	9,000	0	9,000	14,100	0	14,100	5,100	
La Jolla Village Drive								
Revelle College Dr to Villa La Jolla Dr	49,400	-4,900	44,500	59,900	-4,900	55,000	10,500	
Villa La Jolla Dr to I-5 SB Ramps	65,500	0	65,500	76,800	0	76,800	11,300	
I-5 SB Ramps to I-5 NB Ramps	53,900	0	53,900	60,900	0	60,900	7,000	
I-5 NB Ramps to Lebon Dr	45,500	0	45,500	53,200	0	53,200	7,700	
Lebon Dr to Regents Rd	42,500	0	42,500	51,500	0	51,500	9,000	
Regents Rd to Genesee Ave	40,300	0	40,300	50,700	0	50,700	10,400	
Genesee Ave to Towne Center Dr	42,400	0	42,400	49,200	0	49,200	6,800	
Towne Center Dr to I-805 SB Ramps	70,100	-11,200	58,900	80,700	-11,200	69,500	10,600	
Lebon Drive								
Palmilla Dr to Nobel Dr	16,200	-5,000	11,200	17,400	-5,000	12,400	1,200	
Nobel Dr to La Jolla Village Dr	10,800	0	10,800	11,800	0	11,800	1,000	
Miramar Road								
I-805 SB Ramps to I-805 NB Ramps	53,800	12,300	66,100	53,700	12,300	66,000	-100	
I-805 NB Ramps to Nobel Dr	50,600	0	50,600	50,300	0	50,300	-300	
Nobel Dr to Eastgate Mall	79,000	-14,400	64,600	83,500	-14,400	69,100	4,500	
Eastgate Mall to Camino Santa Fe	76,900	-9,100	67,800	81,300	-9,100	72,200	4,400	
North Torrey Pines Road								
Science Park Rd to Genesee Ave	38,800	-9,500	29,300	51,600	-9,500	42,100	12,800	
Genesee Ave to UCSD Northpoint Dwy	29,000	-7,200	21,800	31,100	-7,200	23,900	2,100	
Nobel Drive								
Villa La Jolla Dr to I-5 SB On Ramp	27,400	0	27,400	47,600	0	47,600	20,200	
I-5 SB On Ramp to I-5 NB Off Ramp/University Center Lane	26,700	0	26,700	41,700	0	41,700	15,000	
I-5 NB Off Ramp/University Center Lane to Lebon Dr	18,000	3,500	21,500	27,600	3,500	31,100	9,600	
Lebon Dr to Regents Rd	18,000	3,200	21,200	28,100	3,200	31,300	10,100	
Regents Rd to Genesee Ave	20,700	0	20,700	32,700	0	32,700	12,000	
Genesee Ave to Towne Center Dr	23,900	-5,400	18,500	36,200	-5,400	30,800	12,300	
Towne Center Dr to Judicial Dr	14,200	3,000	17,200	23,200	3,000	26,200	9,000	
Judicial Dr to Avenue of Flags	16,100	0	16,100	32,900	0	32,900	16,800	
Avenue of Flags to Miramar Rd	29,400	0	29,400	35,000	0	35,000	5,600	
Regents Road								
Genesee Ave to Eastgate Mall	7,200	0	7,200	8,600	0	8,600	1,400	
Eastgate Mall to La Jolla Village Dr	17,000	0	17,000	16,100	0	16,100	-900	
La Jolla Village Dr to Nobel Dr	15,600	0	15,600	18,600	0	18,600	3,000	
Nobel Dr to Rose Canyon (end)	13,200	-2,500	10,700	14,100	-2,500	11,600	900	Adjustment made to Alt C and D only
Rose Canyon (end) to Governor Dr	2,900	0	2,900	2,400	0	2,400	-500	
Governor Dr to SR-52 WB Ramps	21,700	-5,500	16,200	23,300	-5,500	17,800	1,600	Adjustment made to Alt C and D only
SR-52 WB Ramps to SR-52 EB Ramps	26,600	-6,600	20,000	30,100	-6,600	23,500	3,500	Adjustment made to Alt C and D only
SR-52 EB Ramps to Luna Ave	32,900	-11,600	21,300	37,200	-11,600	25,600	4,300	Adjustment made to Alt C and D only
Torrey Pines Road								
La Jolla Village Dr to Community Boundary (South)	35,000	-8,300	26,700	45,100	-8,300	36,800	10,100	
Towne Center Drive								
End to La Jolla Village Dr	21,000	0	21,000	21,500	0	21,500	500	
La Jolla Village Dr to Nobel Dr	18,500	-4,700	13,800	24,500	-4,700	19,800	6,000	
Villa La Jolla Drive								
Gilman Dr (South) to Nobel Dr	3,600	3,300	6,900	8,900	3,300	12,200	5,300	
Nobel Dr to La Jolla Village Dr	12,000	4,000	16,000	19,700	4,000	23,700	7,700	
La Jolla Village Dr to VA Medical Center	10,100	9,800	19,900	23,700	9,800	33,500	13,600	

UNIVERSITY YEAR 2035 SERIES 12 MODEL ALTERNATIVES COMPARISON

ROADWAY SEGMENT	Volume Comparison				
	Existing Model Volume	Alt A Model Volume (REGENTS BRIDGE + 6-LN	Alt B Model Volume (REGENTS BRIDGE + 4-LN	Alt C Model Volume (NO BRIDGE, 6-LN GEN)	Alt D Model Volume (NO BRIDGE, 4-LN GEN)
Eastgate Mall					
Regents Rd to Genesee Ave	8,000	12,100	12,200	12,300	12,300
Genesee Ave to Easter Way	22,700	25,000	25,100	24,900	25,400
Easter Way to Judicial Dr	10,600	14,100	14,300	14,000	14,300
Judicial Dr to Eastgate Dr (Freeway Overpass)	12,500	21,900	21,900	21,900	21,800
Eastgate Dr to Miramar Rd	16,100	28,800	28,700	29,000	29,200
Executive Drive					
Regents Rd to Genesee Ave	8,400	5,900	6,000	6,600	6,400
Genesee Ave to Judicial Dr	4,100	8,900	8,700	9,300	9,300
Executive Way					
Executive Dr to La Jolla Village Dr	10,500	16,000	15,700	15,600	15,700
Genesee Ave					
N. Torrey Pines Rd to I-5 SB Ramps	50,800	61,700	61,700	61,700	61,600
I-5 SB Ramps to I-5 NB Ramps	48,700	62,100	62,200	62,300	62,100
I-5 NB Ramps to Regents Rd	41,700	47,500	47,900	48,000	47,800
Regents Rd to Eastgate Mall	31,600	40,600	40,300	40,700	40,800
Eastgate Mall to La Jolla Village Dr	21,000	31,100	30,800	31,700	31,500
La Jolla Village Dr to Esplande Ct	29,300	41,800	41,900	46,500	46,400
Esplande Ct to Nobel Dr	21,100	24,700	24,800	27,700	27,100
Nobel Dr to Centurion Square	30,200	39,600	39,600	49,400	46,500
Centurion Square to Governor Dr	40,400	43,900	40,900	58,200	54,600
Governor Dr to SR-52 WB Ramps	37,300	48,700	44,300	47,700	43,500
SR-52 WB Ramps to SR-52 EB Ramps	32,500	37,300	36,500	39,000	38,000
SR-52 EB Ramps to Lehrer Dr	31,800	37,100	36,600	38,900	38,400
Gilman Drive					
UCSD Campus to La Jolla Village Dr	28,600	32,300	32,400	32,200	32,200
La Jolla Village Dr to Via Alicante	22,200	28,900	28,900	28,100	27,800
Via Alicante to I-5 SB Ramps	17,300	24,300	24,500	24,000	23,400
I-5 SB Ramps to I-5 NB Ramps	17,900	20,900	21,000	22,800	22,500
Golden Haven Drive					
Towne Center Dr to Judicial Dr	2,000	7,500	7,300	7,700	7,600
Governor Drive					
Regents Rd to Genesee Ave	17,900	11,400	10,700	23,200	23,000
Genesee Ave to I-805 SB Ramps	20,400	24,000	23,300	23,900	23,300
I-805 SB Ramps to I-805 NB Ramps	14,200	13,600	14,300	13,700	14,400
Judicial Drive					
Eastgate Mall to La Jolla Village Dr	2,800	10,600	10,400	9,900	9,700
La Jolla Village Dr to Nobel Dr	1,600	9,300	9,300	9,500	9,400
La Jolla Scenic Drive					
La Jolla Village Drive to Community Boundary (South)	9,000	12,900	12,900	14,100	14,100
La Jolla Village Drive					
Revelle College Dr to Villa La Jolla Dr	49,400	59,200	59,000	60,000	59,900
Villa La Jolla Dr to I-5 SB Ramps	65,500	76,400	76,400	76,600	76,800
I-5 SB Ramps to I-5 NB Ramps	53,900	59,400	60,100	61,200	60,900
I-5 NB Ramps to Lebon Dr	45,500	52,000	52,500	53,200	53,200
Lebon Dr to Regents Rd	42,500	49,900	50,100	51,500	51,500
Regents Rd to Genesee Ave	40,300	52,400	52,400	50,500	50,700
Genesee Ave to Towne Center Dr	42,400	49,400	49,600	48,900	49,200
Towne Center Dr to I-805 SB Ramps	70,100	78,800	79,900	80,500	80,700
Lebon Drive					
Palmilla Dr to Nobel Dr	16,200	21,100	21,000	17,300	17,400
Nobel Dr to La Jolla Village Dr	10,800	13,600	13,600	11,300	11,800
Miramar Road					
I-805 SB Ramps to I-805 NB Ramps	53,800	52,300	53,400	53,100	53,700
I-805 NB Ramps to Nobel Dr	50,600	51,400	50,400	49,600	50,300
Nobel Dr to Eastgate Mall	79,000	83,400	83,400	83,400	83,500
Eastgate Mall to Camino Santa Fe	76,900	81,300	81,400	81,300	81,300
North Torrey Pines Road					
Science Park Rd to Genesee Ave	38,800	49,900	50,100	50,800	51,600
Genesee Ave to UCSD Northpoint Dwy	29,000	30,900	30,900	31,000	31,100
Nobel Drive					
Villa La Jolla Dr to I-5 SB On Ramp	27,400	47,500	47,200	47,200	47,600
I-5 SB On Ramp to I-5 NB Off Ramp/University Center Lane	26,700	40,800	40,600	40,700	41,700
I-5 NB Off Ramp/University Center Lane to Lebon Dr	18,000	27,800	28,100	26,900	27,600
Lebon Dr to Regents Rd	18,000	24,100	24,600	27,500	28,100
Regents Rd to Genesee Ave	20,700	32,800	33,100	32,200	32,700
Genesee Ave to Towne Center Dr	23,900	37,800	35,800	37,400	36,200
Towne Center Dr to Judicial Dr	14,200	22,000	21,900	22,000	23,200
Judicial Dr to Avenue of Flags	16,100	31,400	31,300	31,700	32,900
Avenue of Flags to Miramar Rd	29,400	33,900	34,900	35,600	35,000
Regents Road					
Genesee Ave to Eastgate Mall	7,200	9,700	9,900	8,700	8,600
Eastgate Mall to La Jolla Village Dr	17,000	18,900	19,100	16,000	16,100
La Jolla Village Dr to Nobel Dr	15,600	24,500	24,700	18,700	18,600
Nobel Dr to Rose Canyon (end)	13,200	27,000	27,100	14,100	14,100
Rose Canyon (end) to Governor Dr	2,900	30,000	29,900	2,400	2,400
Governor Dr to SR-52 WB Ramps	21,700	30,300	30,900	23,300	23,300
SR-52 WB Ramps to SR-52 EB Ramps	26,600	35,300	35,500	30,000	30,100
SR-52 EB Ramps to Luna Ave	32,900	40,600	40,800	37,100	37,200
Torrey Pines Road					
La Jolla Village Dr to Community Boundary (South)	35,000	43,900	44,000	44,900	45,100
Towne Center Drive					
End to La Jolla Village Dr	21,000	21,400	21,600	21,600	21,500
La Jolla Village Dr to Nobel Dr	18,500	23,300	24,200	25,400	24,500
Villa La Jolla Drive					
Gilman Dr (South) to Nobel Dr	3,600	9,000	9,000	9,000	8,900
Nobel Dr to La Jolla Village Dr	12,000	20,300	20,100	19,700	19,700
La Jolla Village Dr to VA Medical Center	10,100	23,600	23,500	23,800	23,700

UNIVERSITY YEARS 2035 SERIES 12 MODEL ALTERNATIVES COMPARISON

LEGEND

- *+/-1,000-2,000*
- *+/-2,000-4,000*
- *+/-4,000-5,000*
- *+/-5,000-10,000*
- *+/-10,000*

ROADWAY SEGMENT	Volume Comparison							
	Existing Model Volume	Alt A Model (REGENTS BRIDGE + 6-LN GEN)		Alt B Model (REGENTS BRIDGE + 4-LN GEN)		Alt C Model (NO BRIDGE, 6-LN GEN)		Alt D Model Volume (NO BRIDGE, 4-LN GEN)
		Volume	Change from Alt D	Volume	Change from Alt D	Volume	Change from Alt D	
Eastgate Mall								
Regents Rd to Genesee Ave	8,000	12,100	-200	12,200	-100	12,300	0	12,300
Genesee Ave to Easter Way	22,700	25,000	-400	25,100	-300	24,900	-500	25,400
Easter Way to Judicial Dr	10,600	14,100	-200	14,300	0	14,000	-300	14,300
Judicial Dr to Eastgate Dr (Freeway Overpass)	12,500	21,900	100	21,900	100	21,900	100	21,800
Eastgate Dr to Miramar Rd	16,100	28,800	-400	28,700	-500	29,000	-200	29,200
Executive Drive								
Regents Rd to Genesee Ave	8,400	5,900	-500	6,000	-400	6,600	200	6,400
Genesee Ave to Judicial Dr	4,100	8,900	-400	8,700	-600	9,300	0	9,300
Executive Way								
Executive Dr to La Jolla Village Dr	10,500	16,000	300	15,700	0	15,600	-100	15,700
Genesee Ave								
N. Torrey Pines Rd to I-5 SB Ramps	50,800	61,700	100	61,700	100	61,700	100	61,600
I-5 SB Ramps to I-5 NB Ramps	48,700	62,100	0	62,200	100	62,300	200	62,100
I-5 NB Ramps to Regents Rd	41,700	47,500	-300	47,900	100	48,000	200	47,800
Regents Rd to Eastgate Mall	31,600	40,600	-200	40,300	-500	40,700	-100	40,800
Eastgate Mall to La Jolla Village Dr	21,000	31,100	-400	30,800	-700	31,700	200	31,500
La Jolla Village Dr to Esplande Ct	29,300	41,800	-4,600	41,900	-4,500	46,500	100	46,400
Esplande Ct to Nobel Dr	21,100	24,700	-2,400	24,800	-2,300	27,700	600	27,100
Nobel Dr to Centurion Square	30,200	39,600	-6,900	39,600	-6,900	49,400	2,900	46,500
Centurion Square to Governor Dr	40,400	43,900	-10,700	40,900	-13,700	58,200	3,600	54,600
Governor Dr to SR-52 WB Ramps	37,300	48,700	5,200	44,300	800	47,700	4,200	43,500
SR-52 WB Ramps to SR-52 EB Ramps	32,500	37,300	-700	36,500	-1,500	39,000	1,000	38,000
SR-52 EB Ramps to Lehrer Dr	31,800	37,100	-1,300	36,600	-1,800	38,900	500	38,400
Gilman Drive								
UCSD Campus to La Jolla Village Dr	28,600	32,300	100	32,400	200	32,200	0	32,200
La Jolla Village Dr to Via Alicante	22,200	28,900	1,100	28,900	1,100	28,100	300	27,800
Via Alicante to I-5 SB Ramps	17,300	24,300	900	24,500	1,100	24,000	600	23,400
I-5 SB Ramps to I-5 NB Ramps	17,900	20,900	-1,600	21,000	-1,500	22,800	300	22,500
Golden Haven Drive								
Towne Center Dr to Judicial Dr	2,000	7,500	-100	7,300	-300	7,700	100	7,600
Governor Drive								
Regents Rd to Genesee Ave	17,900	11,400	-11,600	10,700	-12,300	23,200	200	23,000
Genesee Ave to I-805 SB Ramps	20,400	24,000	700	23,300	0	23,900	600	23,300
I-805 SB Ramps to I-805 NB Ramps	14,200	13,600	-800	14,300	-100	13,700	-700	14,400
Judicial Drive								
Eastgate Mall to La Jolla Village Dr	2,800	10,600	900	10,400	700	9,900	200	9,700
La Jolla Village Dr to Nobel Dr	1,600	9,300	-100	9,300	-100	9,500	100	9,400
La Jolla Scenic Drive								
La Jolla Village Drive to Community Boundary (South)	9,000	12,900	-1,200	12,900	-1,200	14,100	0	14,100
La Jolla Village Drive								
Revelle College Dr to Villa La Jolla Dr	49,400	59,200	-700	59,000	-900	60,000	100	59,900
Villa La Jolla Dr to I-5 SB Ramps	65,500	76,400	-400	76,400	-400	76,600	-200	76,800
I-5 SB Ramps to I-5 NB Ramps	53,900	59,400	-1,500	60,100	-800	61,200	300	60,900
I-5 NB Ramps to Lebon Dr	45,500	52,000	-1,200	52,500	-700	53,200	0	53,200
Lebon Dr to Regents Rd	42,500	49,900	-1,600	50,100	-1,400	51,500	0	51,500
Regents Rd to Genesee Ave	40,300	52,400	1,700	52,400	1,700	50,500	-200	50,700
Genesee Ave to Towne Center Dr	42,400	49,400	200	49,600	400	48,900	-300	49,200
Towne Center Dr to I-805 SB Ramps	70,100	78,800	-1,900	79,900	-800	80,500	-200	80,700
Lebon Drive								
Palmilla Dr to Nobel Dr	16,200	21,100	3,700	21,000	3,600	17,300	-100	17,400

UNIVERSITY YEARS 2035 SERIES 12 MODEL ALTERNATIVES COMPARISON

LEGEND

- *+/-1,000-2,000*
- *+/-2,000-4,000*
- *+/-4,000-5,000*
- *+/-5,000-10,000*
- *+/-10,000*

ROADWAY SEGMENT	Volume Comparison							
	Existing Model Volume	Alt A Model (REGENTS BRIDGE + 6-LN GEN)		Alt B Model (REGENTS BRIDGE + 4-LN GEN)		Alt C Model (NO BRIDGE, 6-LN GEN)		Alt D Model Volume (NO BRIDGE, 4-LN GEN)
		Volume	Change from Alt D	Volume	Change from Alt D	Volume	Change from Alt D	
Nobel Dr to La Jolla Village Dr	10,800	13,600	1,800	13,600	1,800	11,300	-500	11,800
Miramar Road								
I-805 SB Ramps to I-805 NB Ramps	53,800	52,300	-1,400	53,400	-300	53,100	-600	53,700
I-805 NB Ramps to Nobel Dr	50,600	51,400	1,100	50,400	100	49,600	-700	50,300
Nobel Dr to Eastgate Mall	79,000	83,400	-100	83,400	-100	83,400	-100	83,500
Eastgate Mall to Camino Santa Fe	76,900	81,300	0	81,400	100	81,300	0	81,300
North Torrey Pines Road								
Science Park Rd to Genesee Ave	38,800	49,900	-1,700	50,100	-1,500	50,800	-800	51,600
Genesee Ave to UCSD Northpoint Dwy	29,000	30,900	-200	30,900	-200	31,000	-100	31,100

UNIVERSITY YEARS 2035 SERIES 12 MODEL ALTERNATIVES COMPARISON

LEGEND

- *+/-1,000-2,000*
- *+/-2,000-4,000*
- *+/-4,000-5,000*
- *+/-5,000-10,000*
- *+/-10,000*

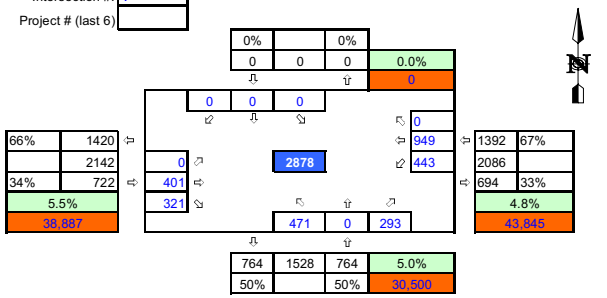
ROADWAY SEGMENT	Volume Comparison							
	Existing Model Volume	Alt A Model (REGENTS BRIDGE + 6-LN GEN)		Alt B Model (REGENTS BRIDGE + 4-LN GEN)		Alt C Model (NO BRIDGE, 6-LN GEN)		Alt D Model Volume (NO BRIDGE, 4-LN GEN)
		Volume	Change from Alt D	Volume	Change from Alt D	Volume	Change from Alt D	
Nobel Drive								
Villa La Jolla Dr to I-5 SB On Ramp	27,400	47,500	-100	47,200	-400	47,200	-400	47,600
I-5 SB On Ramp to I-5 NB Off Ramp/University Center Lane	26,700	40,800	-900	40,600	-1,100	40,700	-1,000	41,700
I-5 NB Off Ramp/University Center Lane to Lebon Dr	18,000	27,800	200	28,100	500	26,900	-700	27,600
Lebon Dr to Regents Rd	18,000	24,100	-4,000	24,600	-3,500	27,500	-600	28,100
Regents Rd to Genesee Ave	20,700	32,800	100	33,100	400	32,200	-500	32,700
Genesee Ave to Towne Center Dr	23,900	37,800	1,600	35,800	-400	37,400	1,200	36,200
Towne Center Dr to Judicial Dr	14,200	22,000	-1,200	21,900	-1,300	22,000	-1,200	23,200
Judicial Dr to Avenue of Flags	16,100	31,400	-1,500	31,300	-1,600	31,700	-1,200	32,900
Avenue of Flags to Miramar Rd	29,400	33,900	-1,100	34,900	-100	35,600	600	35,000
Regents Road								
Genesee Ave to Eastgate Mall	7,200	9,700	1,100	9,900	1,300	8,700	100	8,600
Eastgate Mall to La Jolla Village Dr	17,000	18,900	2,800	19,100	3,000	16,000	-100	16,100
La Jolla Village Dr to Nobel Dr	15,600	24,500	5,900	24,700	6,100	18,700	100	18,600
Nobel Dr to Rose Canyon (end)	13,200	27,000	12,900	27,100	13,000	14,100	0	14,100
Rose Canyon (end) to Governor Dr	2,900	30,000	27,600	29,900	27,500	2,400	0	2,400
Governor Dr to SR-52 WB Ramps	21,700	30,300	7,000	30,900	7,600	23,300	0	23,300
SR-52 WB Ramps to SR-52 EB Ramps	26,600	35,300	5,200	35,500	5,400	30,000	-100	30,100
SR-52 EB Ramps to Luna Ave	32,900	40,600	3,400	40,800	3,600	37,100	-100	37,200
Torrey Pines Road								
La Jolla Village Dr to Community Boundary (South)	35,000	43,900	-1,200	44,000	-1,100	44,900	-200	45,100
Towne Center Drive								
End to La Jolla Village Dr	21,000	21,400	-100	21,600	100	21,600	100	21,500
La Jolla Village Dr to Nobel Dr	18,500	23,300	-1,200	24,200	-300	25,400	900	24,500
Villa La Jolla Drive								
Gilman Dr (South) to Nobel Dr	3,600	9,000	100	9,000	100	9,000	100	8,900
Nobel Dr to La Jolla Village Dr	12,000	20,300	600	20,100	400	19,700	0	19,700
La Jolla Village Dr to VA Medical Center	10,100	23,600	-100	23,500	-200	23,800	100	23,700
I-5								
SR-52 to Gliman Dr	203,039	235,252	-9,428	236,678	-8,002	243,536	-1,144	244,680
Gilman Dr to Nobel Dr	182,803	213,577	-6,680	214,813	-5,444	218,884	-1,373	220,257
Nobel Dr to La Jolla Village Dr	164,395	191,232	-3,456	192,286	-2,402	194,805	117	194,688
La Jolla Village to Genesee Ave	196,933	226,936	191	226,908	163	226,144	-601	226,745
I-805								
SR-52 to Governor Dr	267,721	339,746	-6,928	341,520	-5,154	344,142	-2,532	346,674
Governor Dr to Nobel Dr	259,926	333,431	-6,555	334,415	-5,571	338,314	-1,672	339,986
Nobel Dr to La Jolla Village Dr	229,934	285,395	-3,847	285,418	-3,824	288,410	-832	289,242
La Jolla Village Dr to Mira Mesa Blvd	225,196	279,738	-1,137	279,953	-922	281,185	310	280,875
SR-52								
I-5 to Regents Rd	93,023	112,653	-3,875	112,766	-3,762	116,008	-520	116,528
Regents Rd to Genesee Ave	87,604	110,094	757	110,612	1,275	108,656	-681	109,337
Genesee Ave to I-805	97,586	121,476	2,794	120,148	1,466	120,306	1,624	118,682

UNIVERSITY YEARS 2035 SERIES 12 MODEL ALTERNATIVES COMPARISON

			Volume Comparison				
FREEWAY SEGMENT			Existing Model Volume	Alt A Model Volume (REGENTS BRIDGE + 6-LN GEN)	Alt B Model Volume (REGENTS BRIDGE + 4-LN GEN)	Alt C Model Volume (NO BRIDGE, 6-LN GEN)	Alt D Model Volume (NO BRIDGE, 4-LN GEN)
I-5	SR-52 to Gilman Dr	NB	100,629	117,845	118,292	121,200	121,918
		SB	102,410	117,407	118,386	122,336	122,762
	Gilman Dr to Nobel Dr	NB	91,126	105,984	106,271	108,317	109,460
		SB	91,677	107,593	108,542	110,567	110,797
	Nobel Dr to La Jolla Village Dr	NB	81,590	95,896	96,084	97,513	97,659
		SB	82,805	95,336	96,202	97,292	97,029
	La Jolla Village Dr to Genesee Ave	NB	101,251	111,705	111,550	111,129	112,127
		NB HOV	-	7,211	7,202	7,231	6,911
		SB	95,682	103,021	103,122	102,758	102,700
		SB HOV	-	4,999	5,034	5,026	5,007
I-805	SR-52 to Governor Dr	NB	135,370	141,469	142,938	142,964	144,684
		NB HOV	-	28,951	29,212	29,588	29,921
		SB	132,351	140,777	140,813	142,503	142,945
		SB HOV	-	28,549	28,557	29,087	29,124
	Governor Dr to Nobel Dr	NB	131,553	137,979	138,693	139,713	140,662
		NB HOV	-	28,951	29,212	29,588	29,921
		SB	128,373	137,952	137,953	139,926	140,279
		SB HOV	-	28,549	28,557	29,087	29,124
	Nobel Dr to La Jolla Village Dr	NB	118,234	120,400	120,150	121,176	121,808
		NB HOV	-	24,508	24,700	24,713	25,032
		SB	111,700	113,964	114,035	115,747	115,601
		SB HOV	-	26,523	26,533	26,774	26,801
	La Jolla Village Dr to Mira Mesa Blvd	NB	111,707	115,259	115,437	115,923	115,266
		NB HOV	-	24,508	24,700	24,713	25,032
		SB	113,489	113,448	113,283	113,775	113,776
		SB HOV	-	26,523	26,533	26,774	26,801
SR-52	I-5 to Regents Rd	EB	44,099	54,125	54,274	56,111	56,174
		WB	48,924	58,528	58,492	59,897	60,354
	Regents Rd to Genesee Ave	EB	42,541	53,666	53,799	52,877	52,954
		WB	45,063	56,428	56,813	55,779	56,383
	Genesee Ave to I-805	EB	48,463	58,273	58,376	57,333	57,482
		WB	49,123	63,203	61,772	62,973	61,200

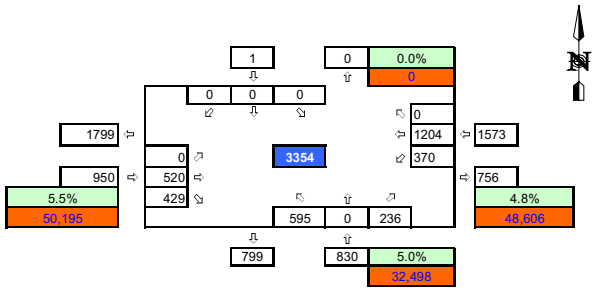
Int 1 AM Peak Volumes

Scenario:	Existing Conditions
N/S Street:	N. Torrey Pines Road
E/W Street:	Genesee Avenue
Intersection #:	1
Project # (last 6)	



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	Horizon Year Conditions
N/S Street:	N. Torrey Pines Road
E/W Street:	Genesee Avenue

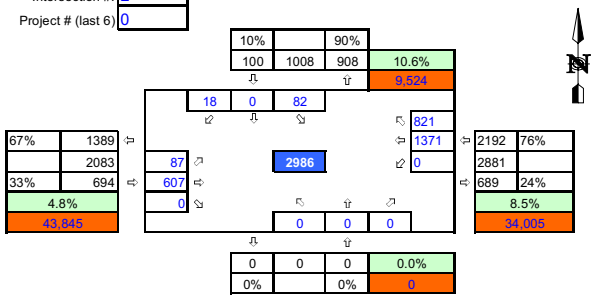


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

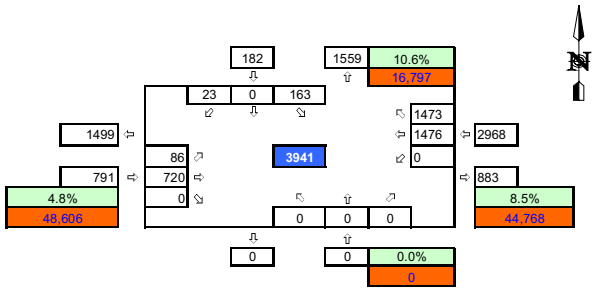
Int 2 AM Peak Volumes

Scenario:	Existing Conditions
N/S Street:	John Hopkins Drive (S)
E/W Street:	Genesee Avenue
Intersection #:	2
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	Horizon Year Conditions
N/S Street:	John Hopkins Drive (S)
E/W Street:	Genesee Avenue

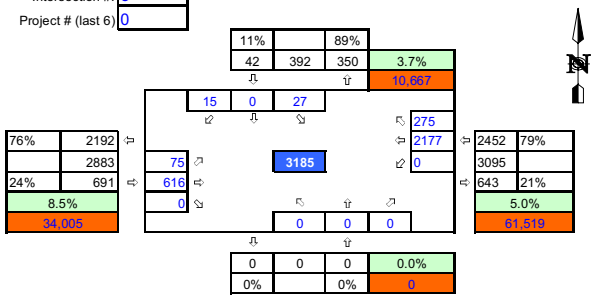


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

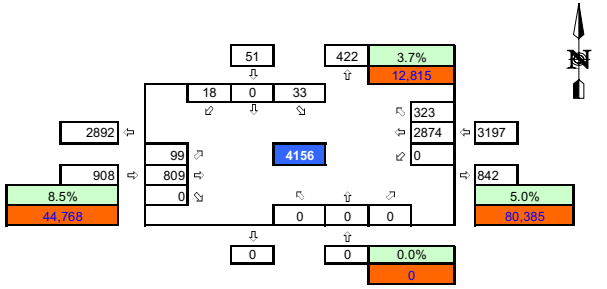
Int 3 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Science Center Drive**
E/W Street: **Genesee Avenue**
Intersection #: 3
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Science Center Drive**
E/W Street: **Genesee Avenue**



LEGEND

Existing K-Factor	xx%
ADT Volume	xx

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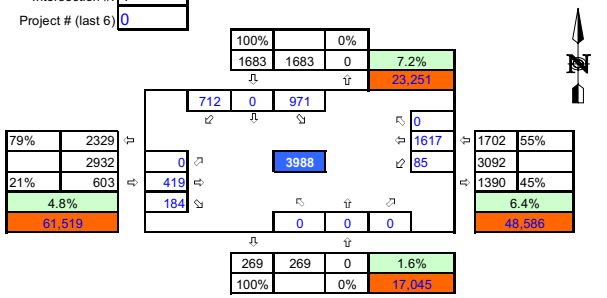
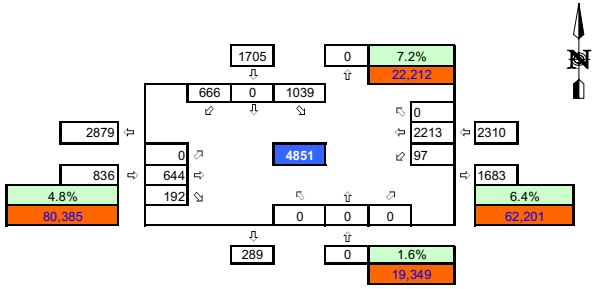
Int 4 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **I-5 SB Ramps**
E/W Street: **Genesee Avenue**
Intersection #: 4
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **I-5 SB Ramps**
E/W Street: **Genesee Avenue**



LEGEND

Existing K-Factor	xx%
ADT Volume	xx

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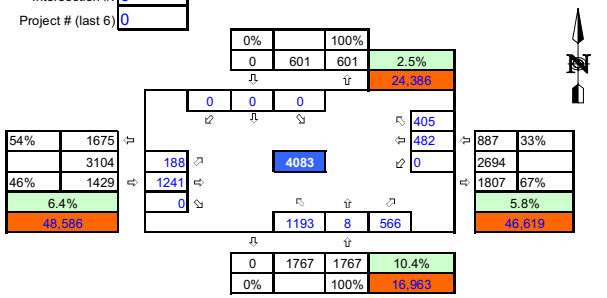
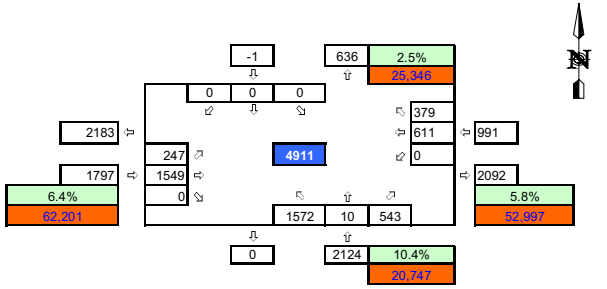
Int 5 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **I-5 NB Ramps**
E/W Street: **Genesee Avenue**
Intersection #: 5
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **I-5 NB Ramps**
E/W Street: **Genesee Avenue**

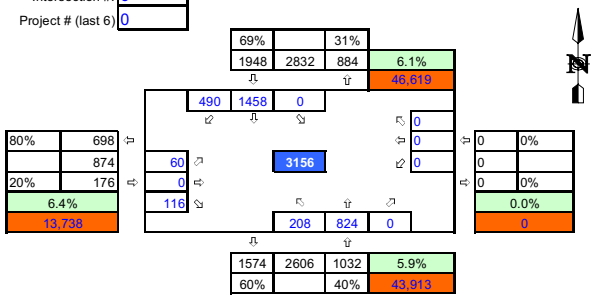


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

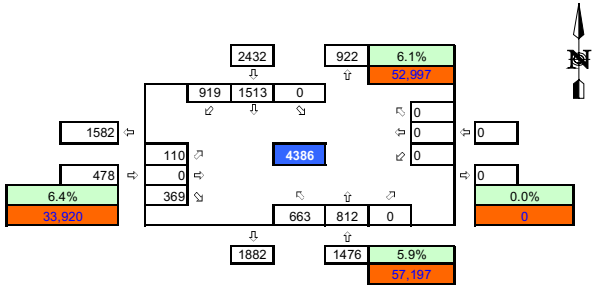
Int 6 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Scripps Hospital**
Intersection #: 6
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Scripps Hospital**

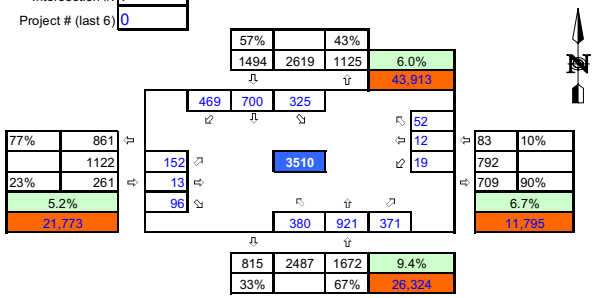


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

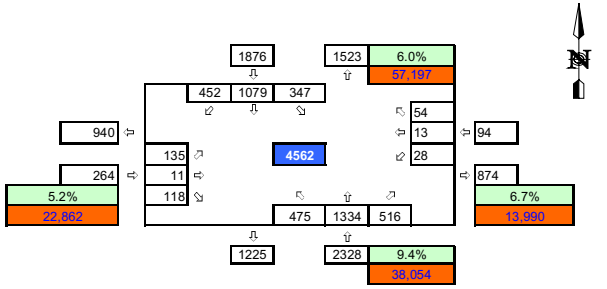
Int 7 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Campus Point Drive**
Intersection #: 7
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Campus Point Drive**

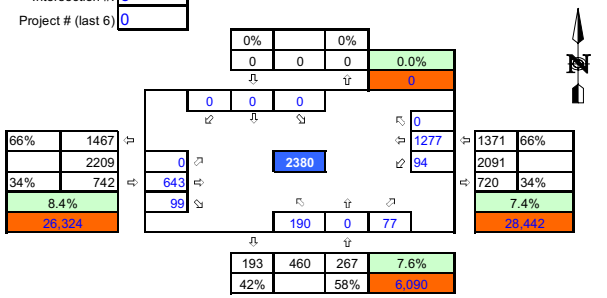


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

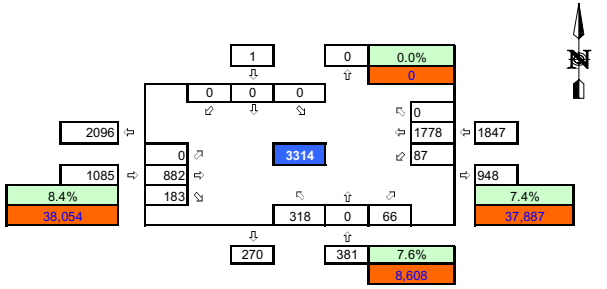
Int 8 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Regents Road**
E/W Street: **Genesee Avenue**
Intersection #: 8
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Regents Road**
E/W Street: **Genesee Avenue**

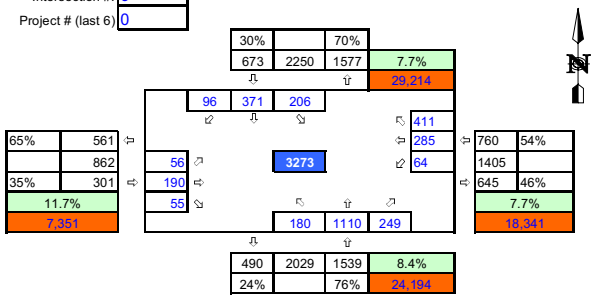


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

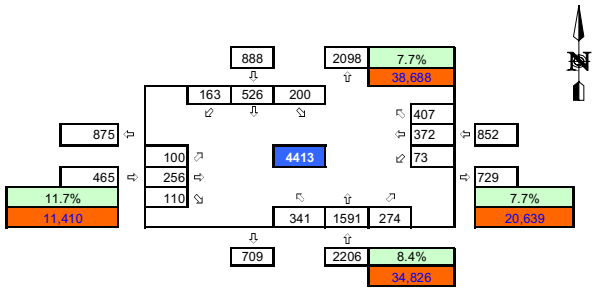
Int 9 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**Eastgate Mall**
Intersection #:	9
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**Eastgate Mall**



LEGEND

Existing K-Factor	xx%
ADT Volume	xx

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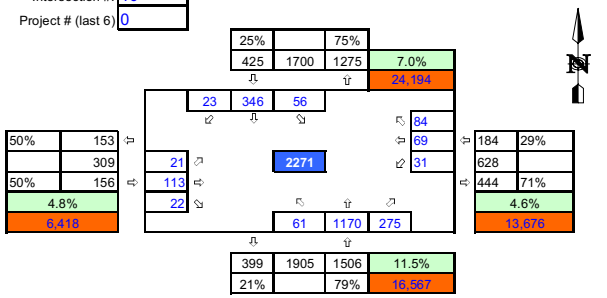
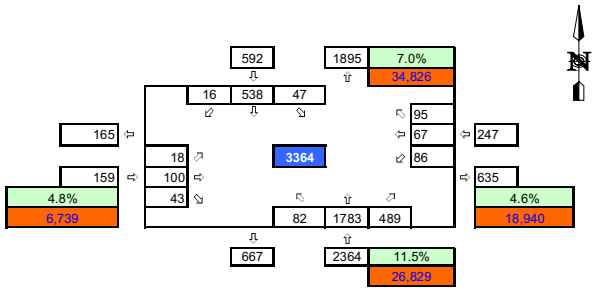
Int 10 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**Executive Drive**
Intersection #:	10
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**Executive Drive**



LEGEND

Existing K-Factor	xx%
ADT Volume	xx

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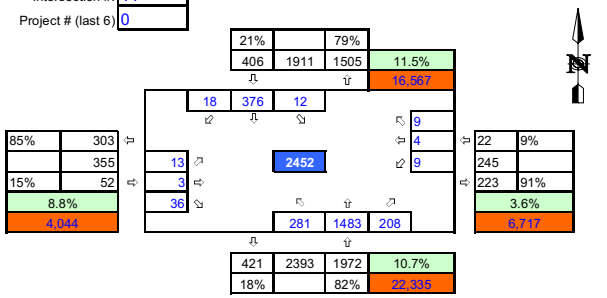
Int 11 AM Peak Volumes

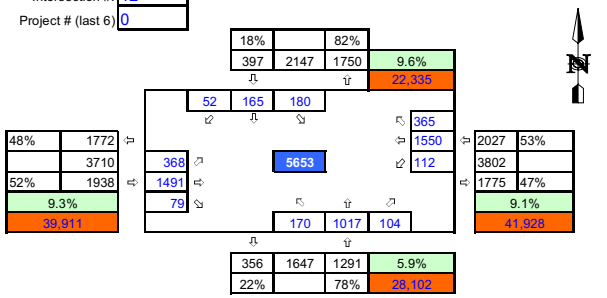
Scenario: **Existing Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Executive Square**
Intersection #: 11
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

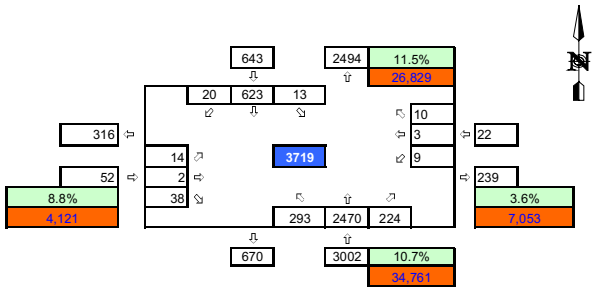
Int 12 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **La Jolla Village Drive**
Intersection #: 12
Project # (last 6): 0

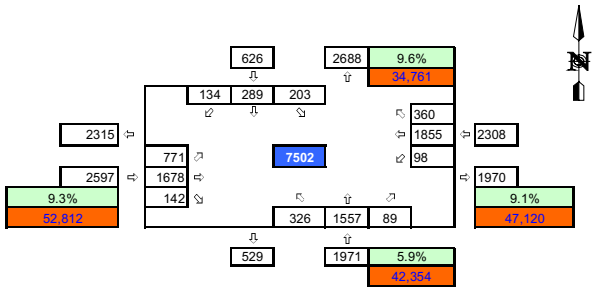


Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Executive Square**



Scenario: **Horizon Year Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **La Jolla Village Drive**



LEGEND

Existing K-Factor	xx%
ADT Volume	xx

LEGEND

Existing K-Factor	xx%
ADT Volume	xx

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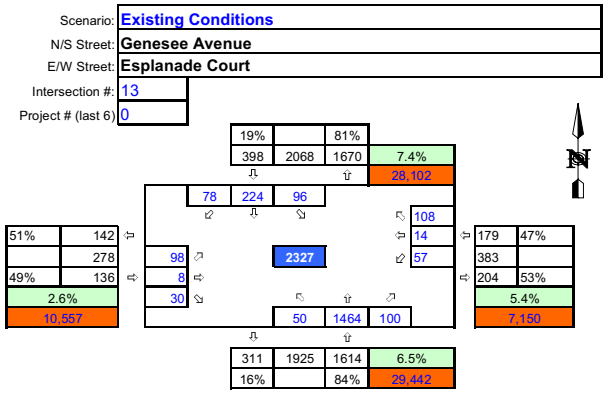
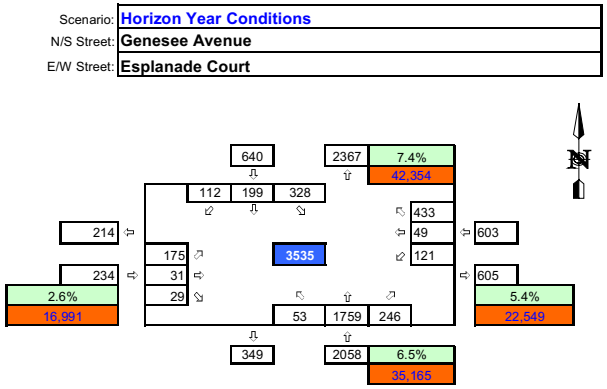
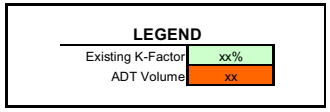
Int 13 AM Peak Volumes

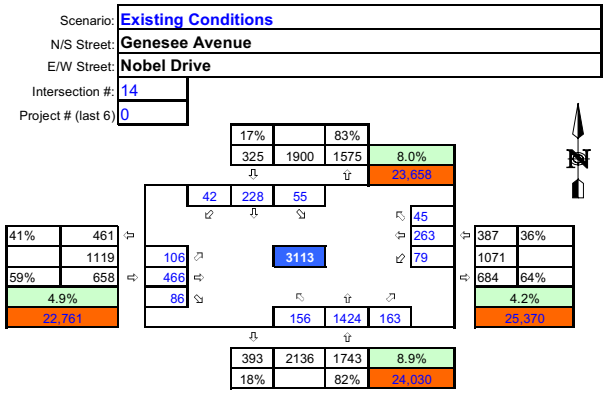


Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

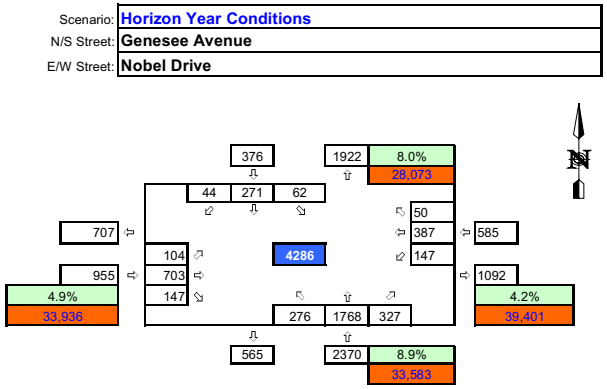


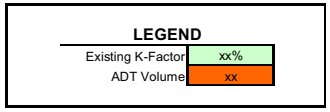


Int 14 AM Peak Volumes



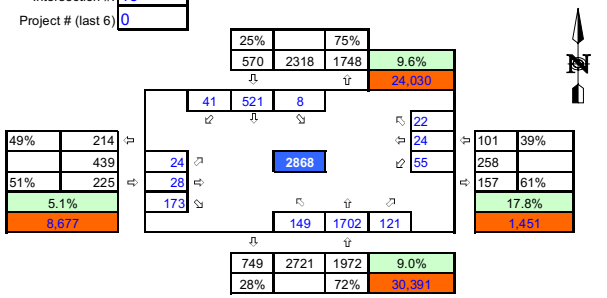
Note: Traffic volumes were collected by Accurate Video Counts during May 2015.





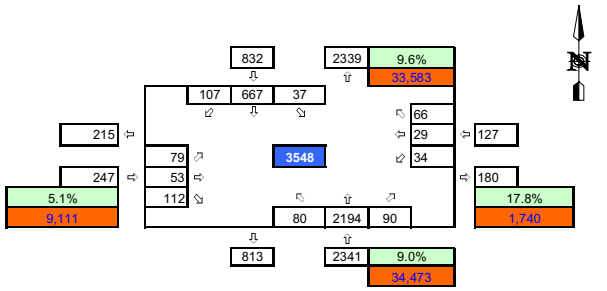
Int 15 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**Decoro Street**
Intersection #:	15
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

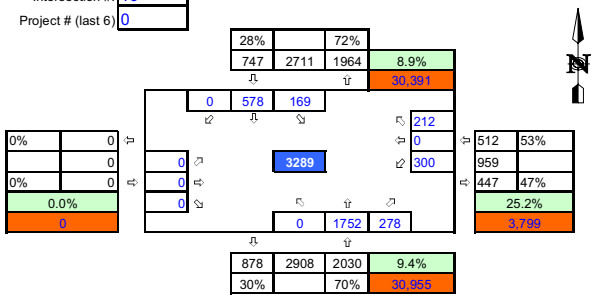
Scenario:	**Horizon Year Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**Decoro Street**



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

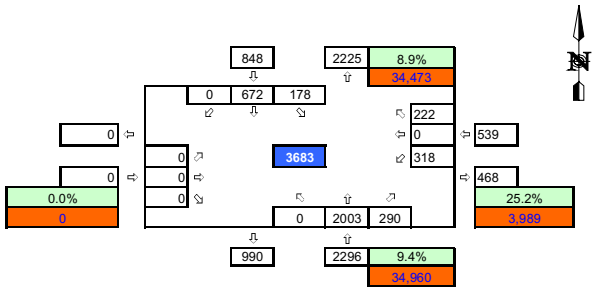
Int 16 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**Centurion Square**
Intersection #:	16
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

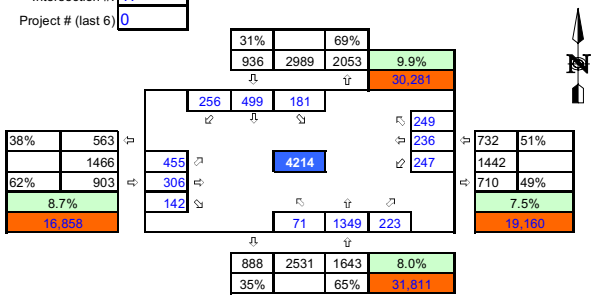
Scenario:	**Horizon Year Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**Centurion Square**



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

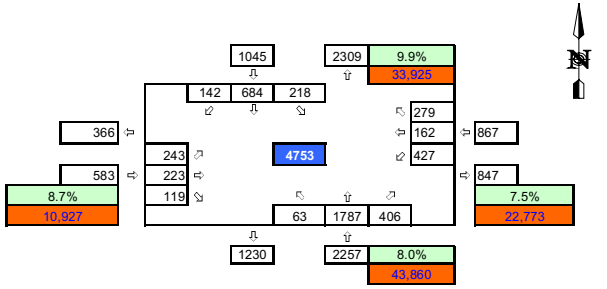
Int 17 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Governor Drive**
Intersection #: 17
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Governor Drive**

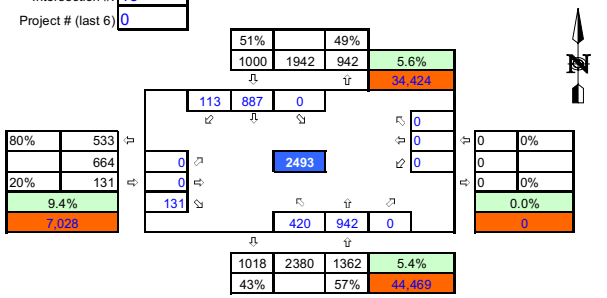


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

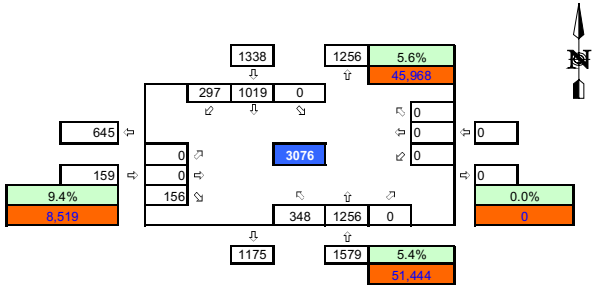
Int 18 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **SR-52 WB Ramps**
Intersection #: 18
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **SR-52 WB Ramps**

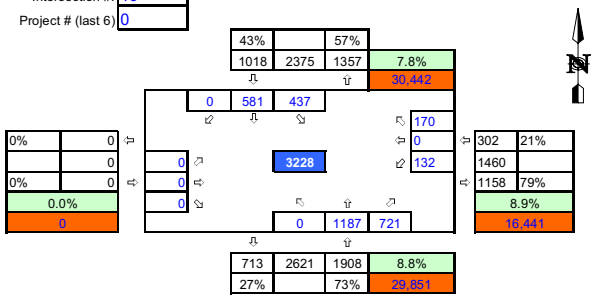


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

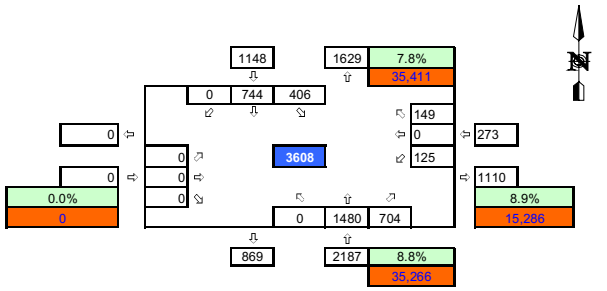
Int 19 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**SR-52 EB Ramps**
Intersection #:	19
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**SR-52 EB Ramps**

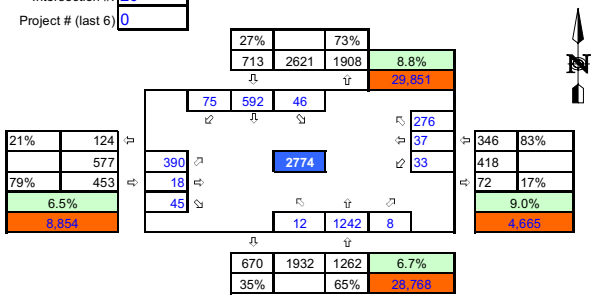


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

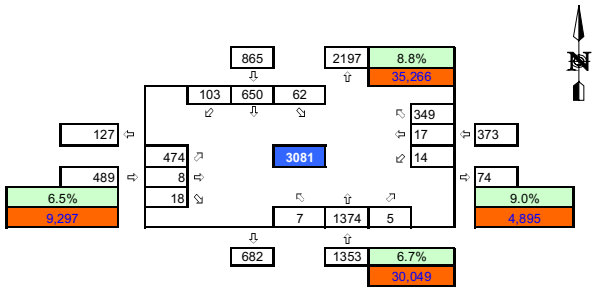
Int 20 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**Lehrer Drive / Appleton Street**
Intersection #:	20
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**Lehrer Drive / Appleton Street**

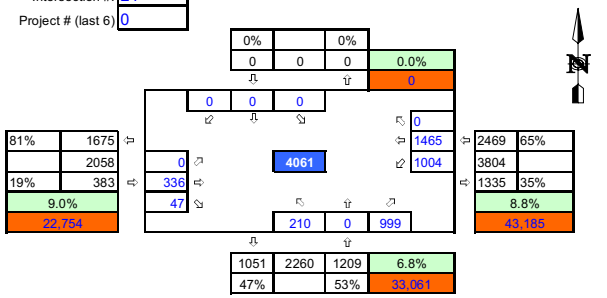


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

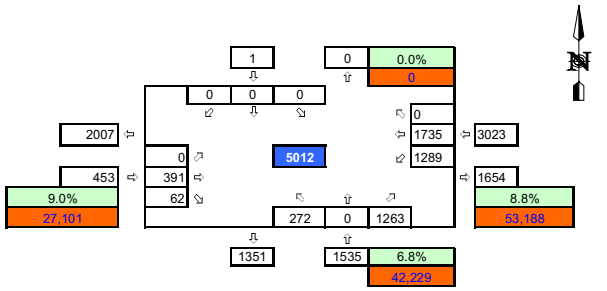
Int 21 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Torrey Pines Road**
E/W Street: **La Jolla Village Drive**
Intersection #: 21
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Torrey Pines Road**
E/W Street: **La Jolla Village Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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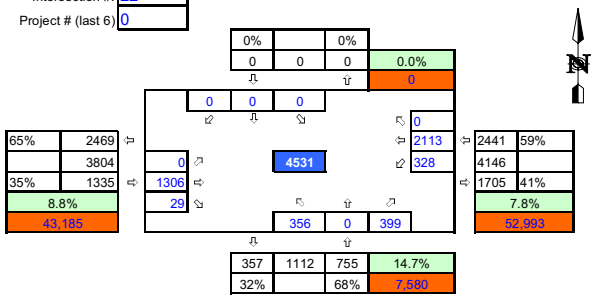
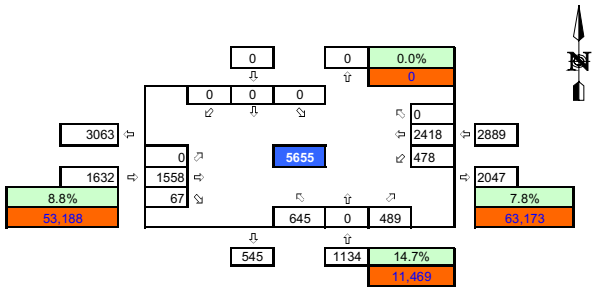
Int 22 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **La Jolla Scenic Drive**
E/W Street: **La Jolla Village Drive**
Intersection #: 22
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **La Jolla Scenic Drive**
E/W Street: **La Jolla Village Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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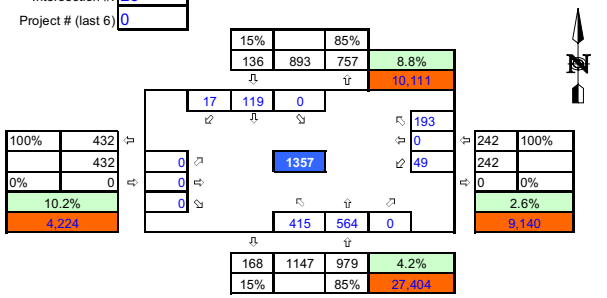
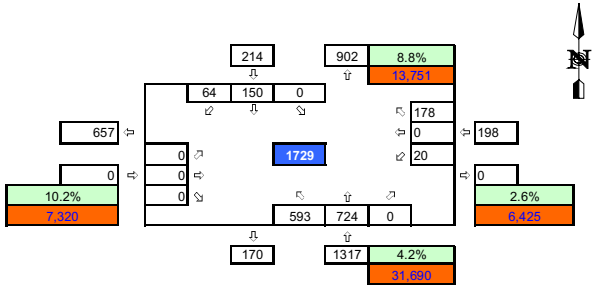
Int 23 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Gillman Drive**
E/W Street:	**La Jolla Village Drive WB**
Intersection #:	23
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

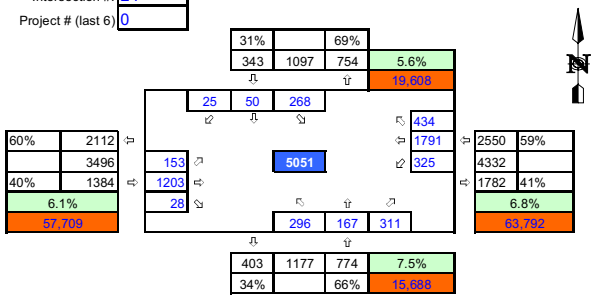
Scenario:	**Horizon Year Conditions**
N/S Street:	**Gillman Drive**
E/W Street:	**La Jolla Village Drive WB**



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

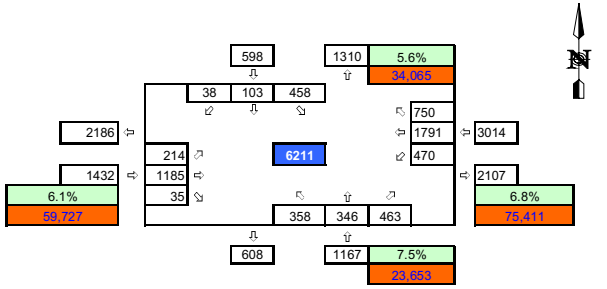
Int 24 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Villa La Jolla Drive**
E/W Street:	**La Jolla Village Drive**
Intersection #:	24
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

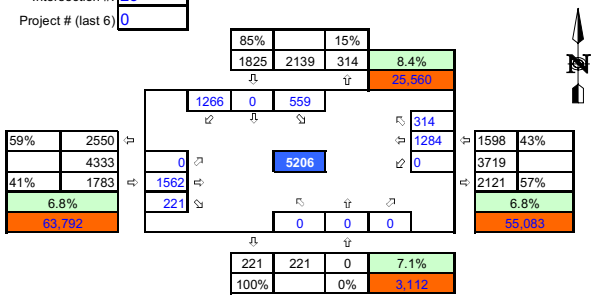
Scenario:	**Horizon Year Conditions**
N/S Street:	**Villa La Jolla Drive**
E/W Street:	**La Jolla Village Drive**



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

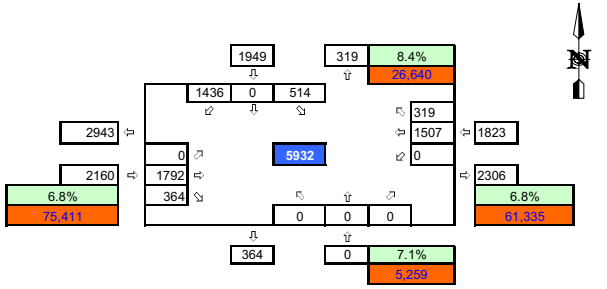
Int 25 AM Peak Volumes

Scenario:	Existing Conditions
N/S Street:	I-5 SB Off-Ramps
E/W Street:	La Jolla Village Drive
Intersection #:	25
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	Horizon Year Conditions
N/S Street:	I-5 SB Off-Ramps
E/W Street:	La Jolla Village Drive

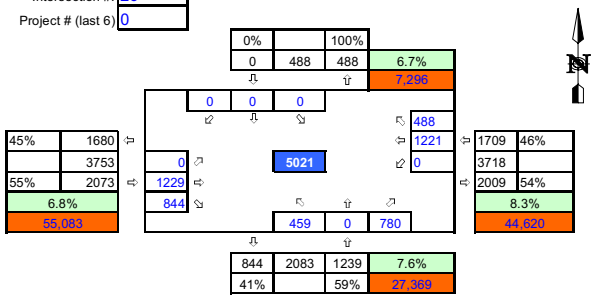


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

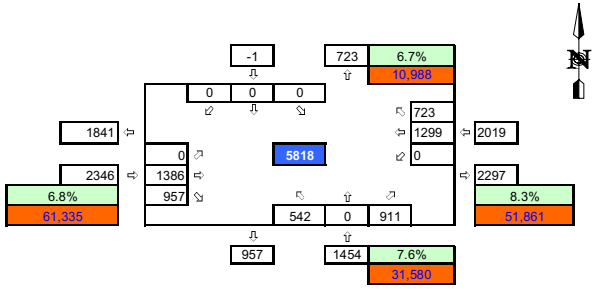
Int 26 AM Peak Volumes

Scenario:	Existing Conditions
N/S Street:	I-5 NB Off-Ramps
E/W Street:	La Jolla Village Drive
Intersection #:	26
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

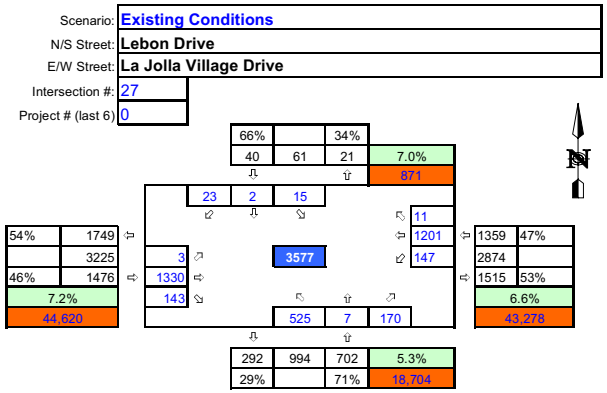
Scenario:	Horizon Year Conditions
N/S Street:	I-5 NB Off-Ramps
E/W Street:	La Jolla Village Drive



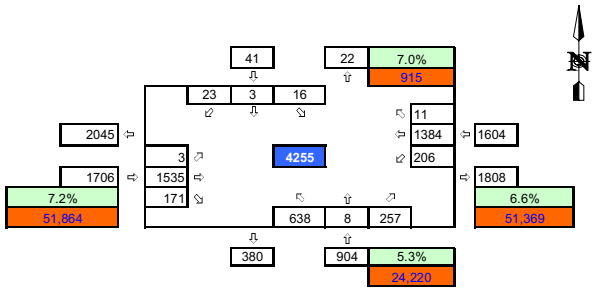
LEGEND

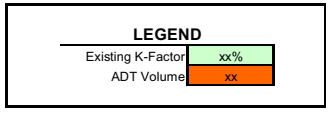
Existing K-Factor	xx%
ADT Volume	xx

Int 27 AM Peak Volumes

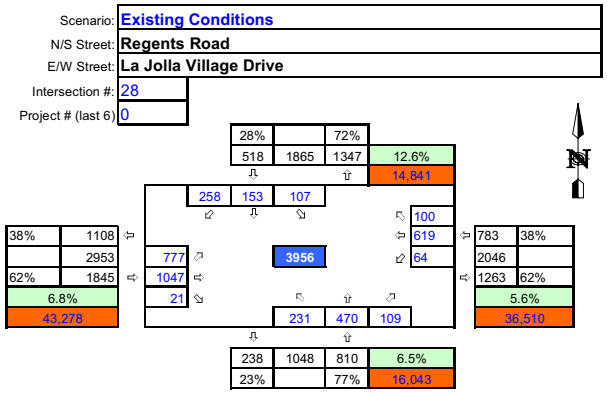


Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

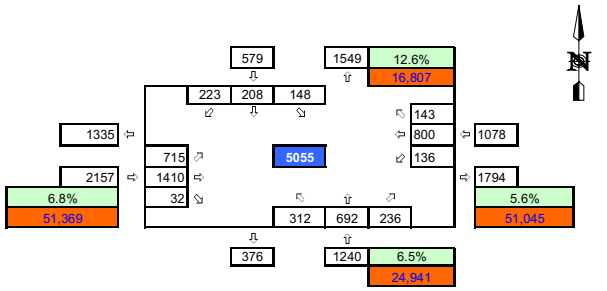


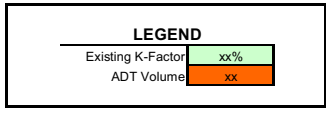


Int 28 AM Peak Volumes



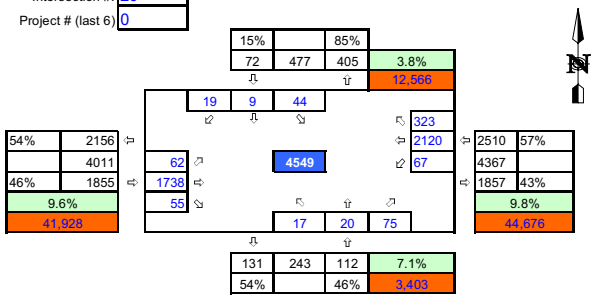
Note: Traffic volumes were collected by Accurate Video Counts during May 2015.





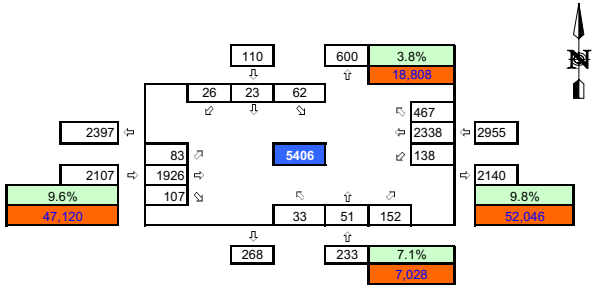
Int 29 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Executive Way**
E/W Street: **La Jolla Village Drive**
Intersection #: 29
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Executive Way**
E/W Street: **La Jolla Village Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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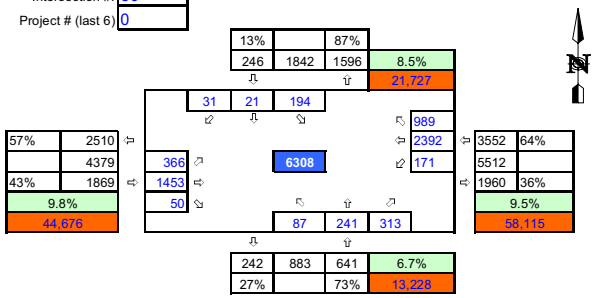
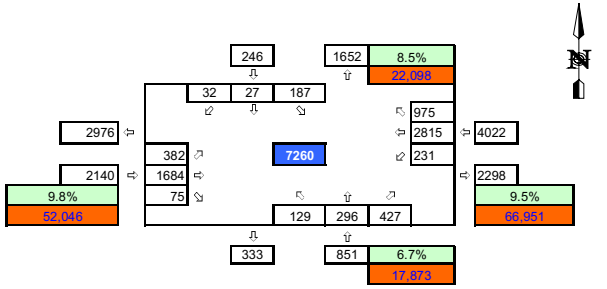
Int 30 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Towne Center Drive**
E/W Street: **La Jolla Village Drive**
Intersection #: 30
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Towne Center Drive**
E/W Street: **La Jolla Village Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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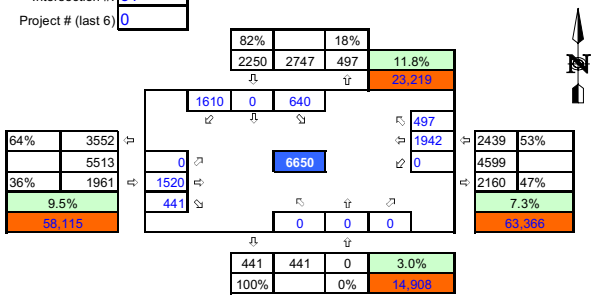
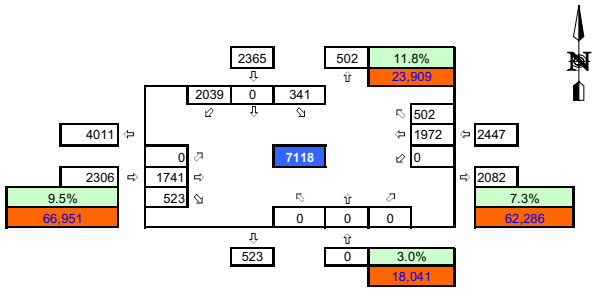
Int 31 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**I-805 SB Ramps**
E/W Street:	**La Jolla Village Drive**
Intersection #:	31
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**I-805 SB Ramps**
E/W Street:	**La Jolla Village Drive**

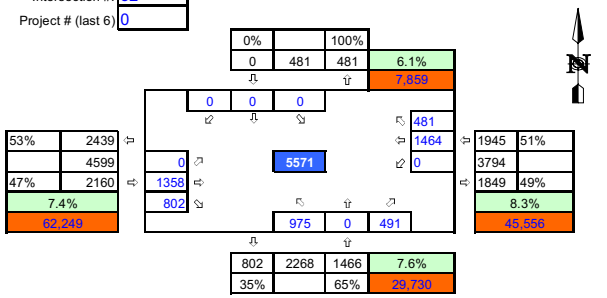


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

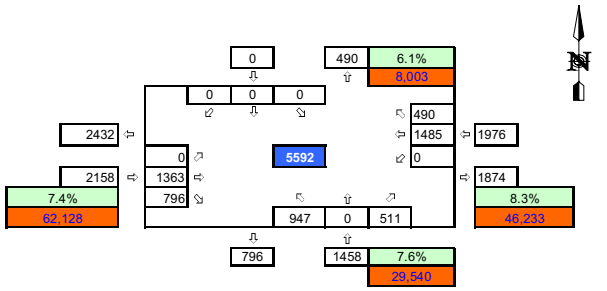
Int 32 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**I-805 NB Ramps**
E/W Street:	**La Jolla Village Drive**
Intersection #:	32
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**I-805 NB Ramps**
E/W Street:	**La Jolla Village Drive**

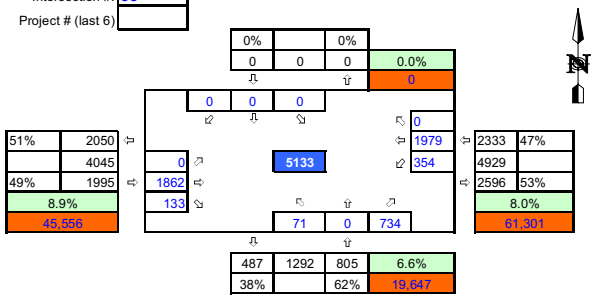


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

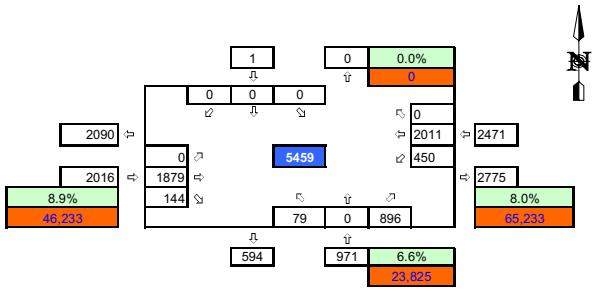
Int 33 AM Peak Volumes

Scenario:	Existing Conditions
N/S Street:	Noble Drive
E/W Street:	Miramar Road
Intersection #:	33
Project # (last 6)	



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	Horizon Year Conditions
N/S Street:	Noble Drive
E/W Street:	Miramar Road

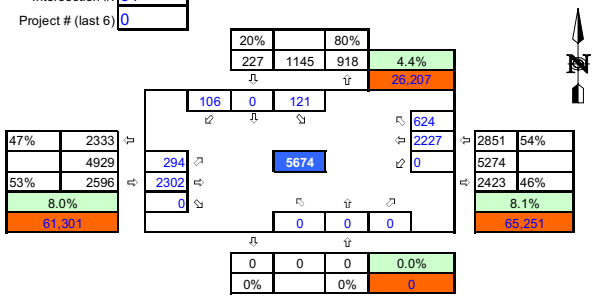


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

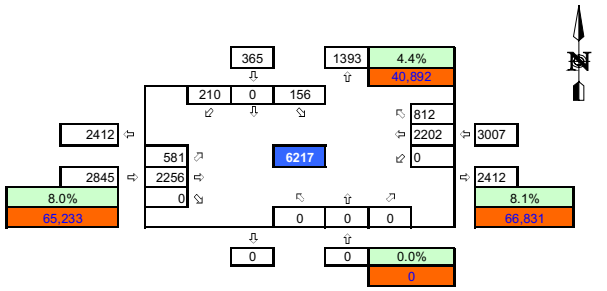
Int 34 AM Peak Volumes

Scenario:	Existing Conditions
N/S Street:	Eastgate Mall
E/W Street:	Miramar Road
Intersection #:	34
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	Horizon Year Conditions
N/S Street:	Eastgate Mall
E/W Street:	Miramar Road

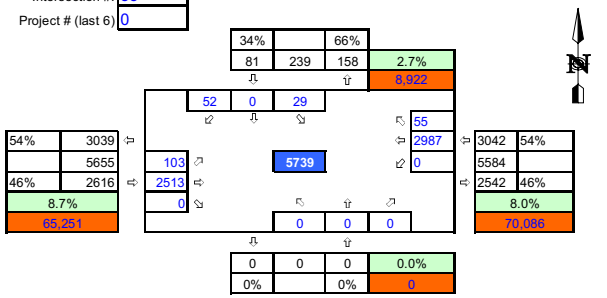


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

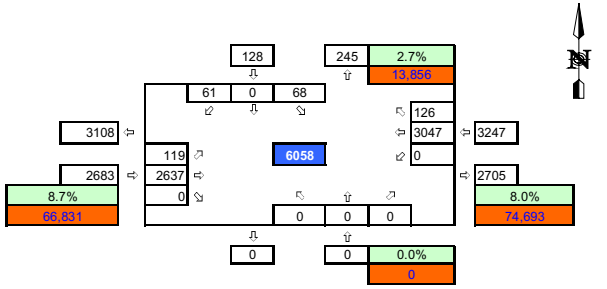
Int 35 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Miramar Mall**
E/W Street:	**Miramar Road**
Intersection #:	35
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

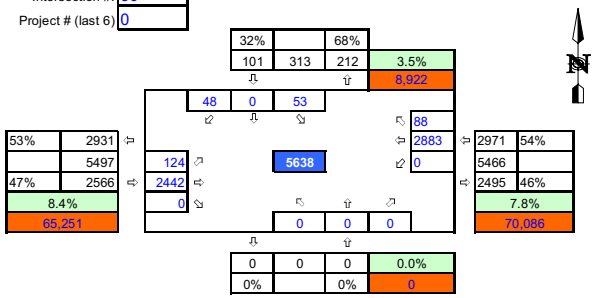
Scenario:	**Horizon Year Conditions**
N/S Street:	**Miramar Mall**
E/W Street:	**Miramar Road**



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

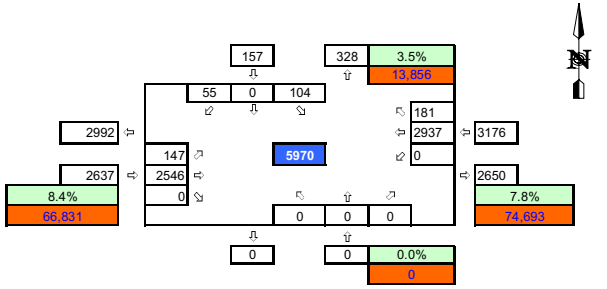
Int 36 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Miramar Place**
E/W Street:	**Miramar Road**
Intersection #:	36
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

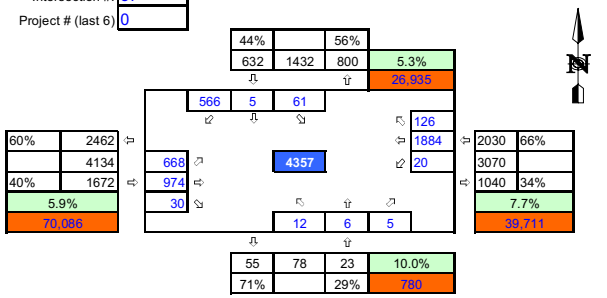
Scenario:	**Horizon Year Conditions**
N/S Street:	**Miramar Place**
E/W Street:	**Miramar Road**



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

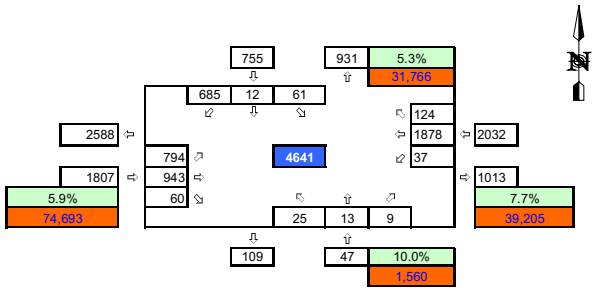
Int 37 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Camino Santa Fe**
E/W Street: **Miramar Road**
Intersection #: 37
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Camino Santa Fe**
E/W Street: **Miramar Road**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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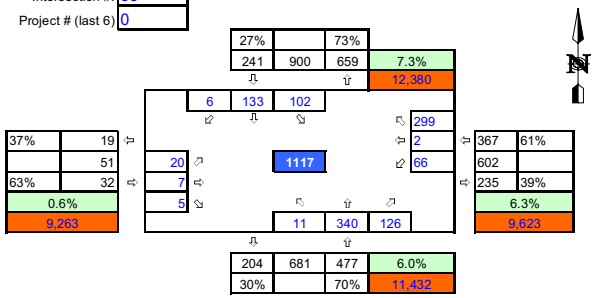
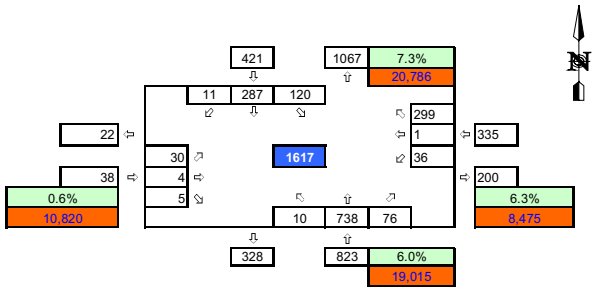
Int 38 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Villa La Jolla Drive**
E/W Street: **Nobel Drive**
Intersection #: 38
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Villa La Jolla Drive**
E/W Street: **Nobel Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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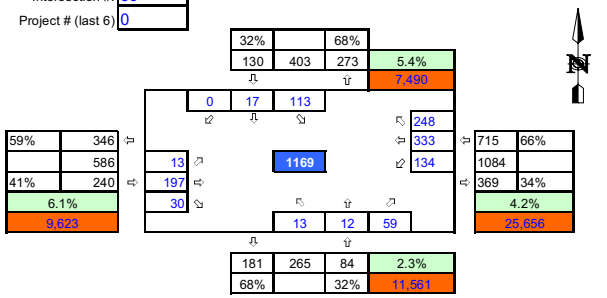
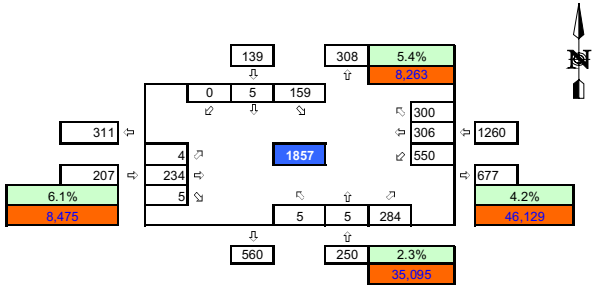
Int 39 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **La Jolla Village Square Driveway**
E/W Street: **Nobel Drive**
Intersection #: 39
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **La Jolla Village Square Driveway**
E/W Street: **Nobel Drive**

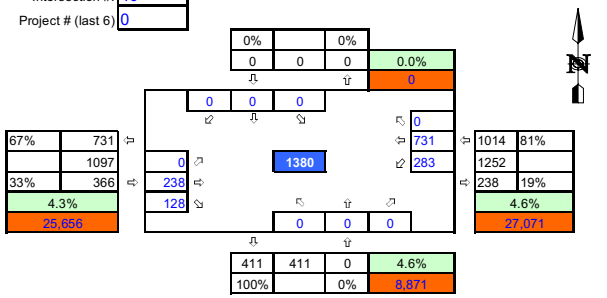


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

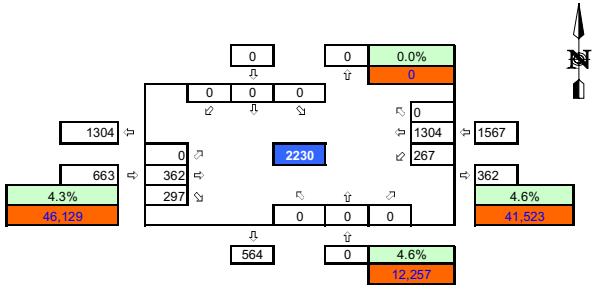
Int 40 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **I-5 SB On**
E/W Street: **Nobel Drive**
Intersection #: 40
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **I-5 SB On**
E/W Street: **Nobel Drive**

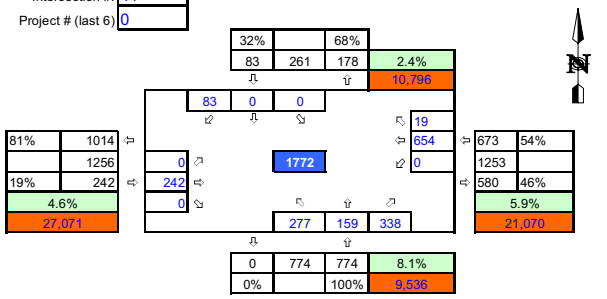


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

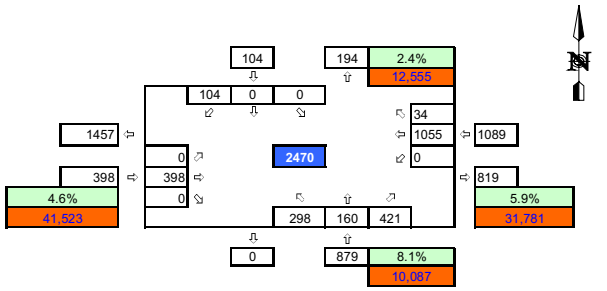
Int 41 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **University Center Lane/I-5 NB Off**
E/W Street: **Nobel Drive**
Intersection #: 41
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **University Center Lane/I-5 NB Off**
E/W Street: **Nobel Drive**

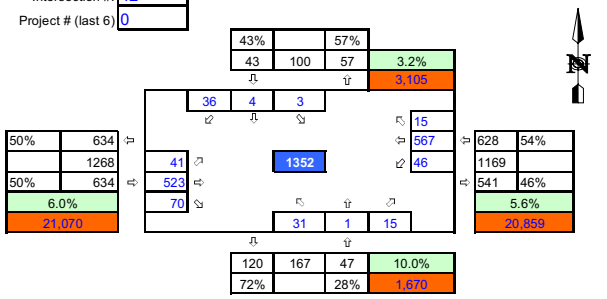


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

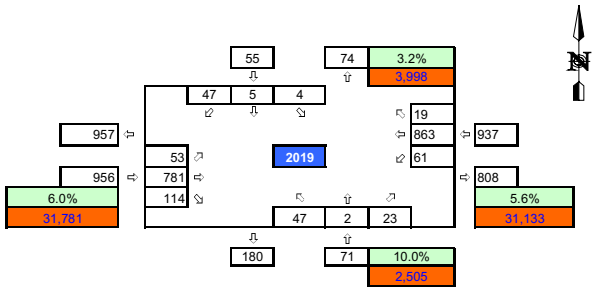
Int 42 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Caminito Plaza Centro**
E/W Street: **Nobel Drive**
Intersection #: 42
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Caminito Plaza Centro**
E/W Street: **Nobel Drive**

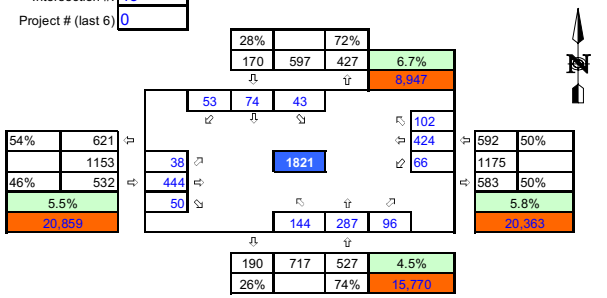


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

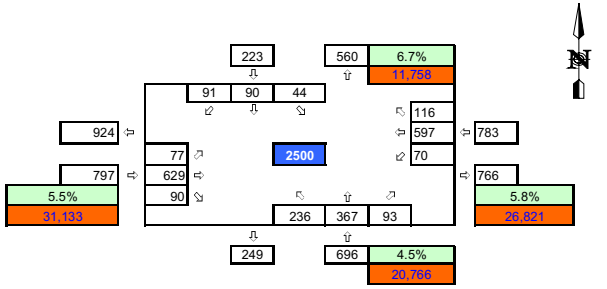
Int 43 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Lebon Drive**
E/W Street:	**Nobel Drive**
Intersection #:	43
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

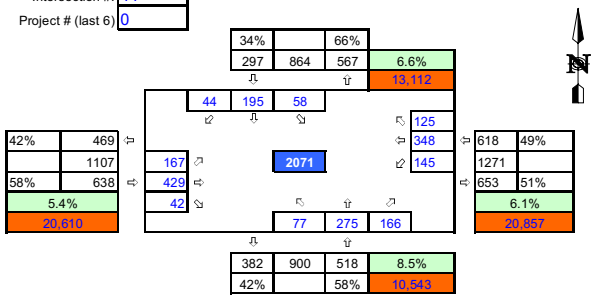
Scenario:	**Horizon Year Conditions**
N/S Street:	**Lebon Drive**
E/W Street:	**Nobel Drive**



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

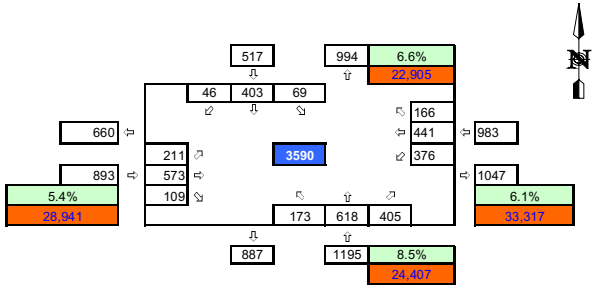
Int 44 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Regents Road**
E/W Street:	**Nobel Drive**
Intersection #:	44
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

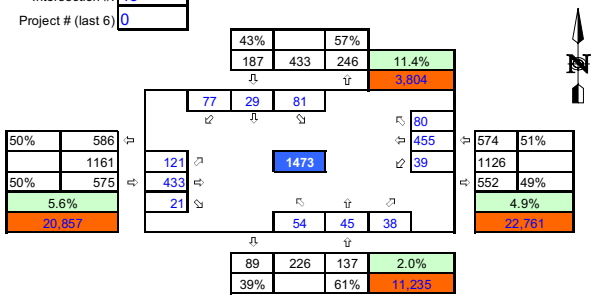
Scenario:	**Horizon Year Conditions**
N/S Street:	**Regents Road**
E/W Street:	**Nobel Drive**



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

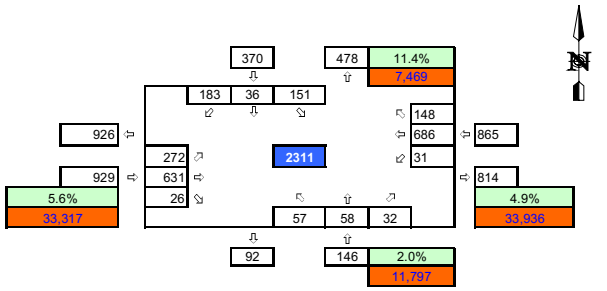
Int 45 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Costa Verde Boulevard/Cargill Ave**
E/W Street: **Cargill Ave / Nobel Drive**
Intersection #: 45
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Costa Verde Boulevard/Cargill Ave**
E/W Street: **Cargill Ave / Nobel Drive**

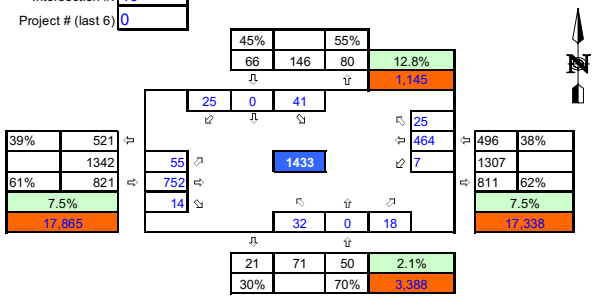


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

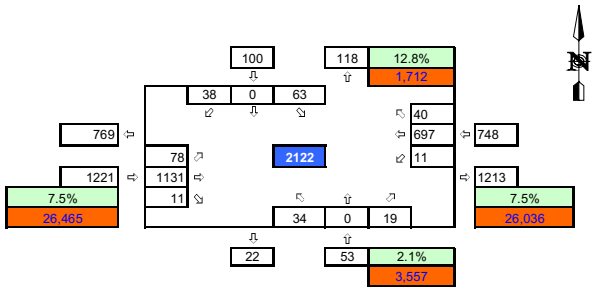
Int 46 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Lombard Place**
E/W Street: **Nobel Drive**
Intersection #: 46
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Lombard Place**
E/W Street: **Nobel Drive**

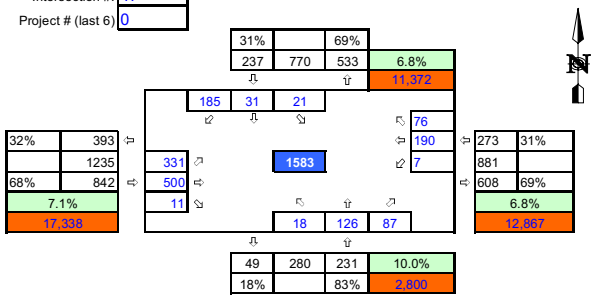


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

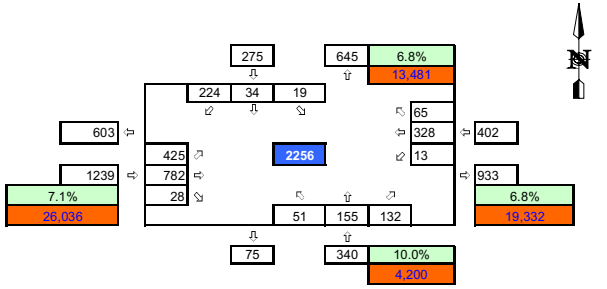
Int 47 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Towne Center Drive**
E/W Street:	**Nobel Drive**
Intersection #:	47
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Towne Center Drive**
E/W Street:	**Nobel Drive**

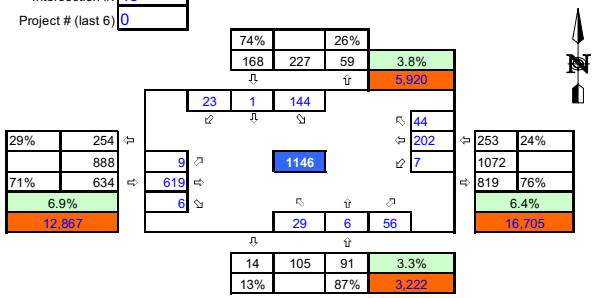


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

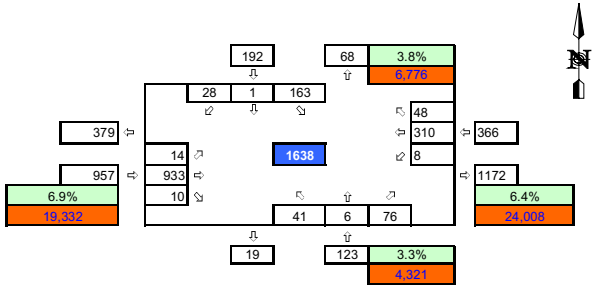
Int 48 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Shoreline Drive**
E/W Street:	**Nobel Drive**
Intersection #:	48
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Shoreline Drive**
E/W Street:	**Nobel Drive**

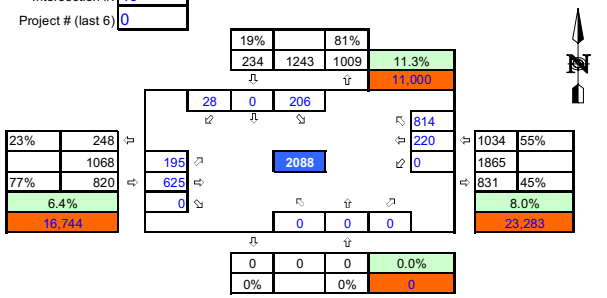


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

Int 49 AM Peak Volumes

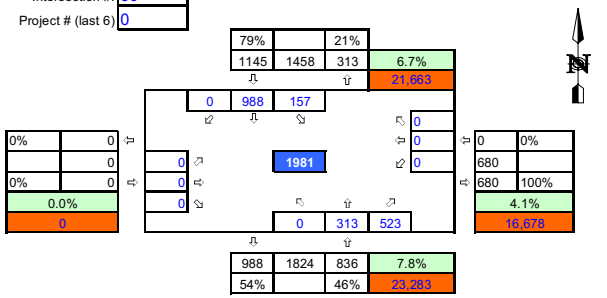
Scenario:	**Existing Conditions**
N/S Street:	**Judicial Drive**
E/W Street:	**Nobel Drive**
Intersection #:	49
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

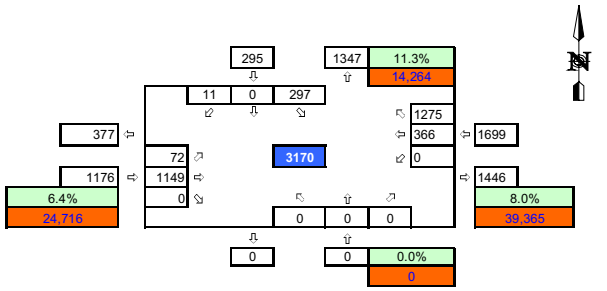
Int 50 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Nobel Drive**
E/W Street:	**I-805 SB On-Ramp**
Intersection #:	50
Project # (last 6)	0

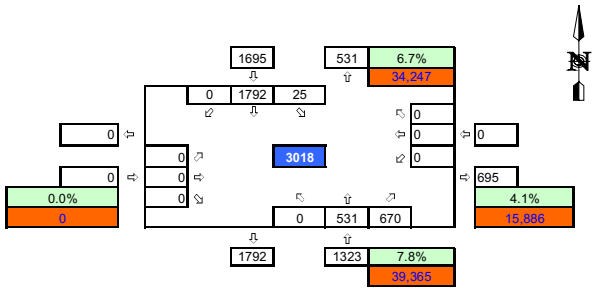


Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Judicial Drive**
E/W Street:	**Nobel Drive**



Scenario:	**Horizon Year Conditions**
N/S Street:	**Nobel Drive**
E/W Street:	**I-805 SB On-Ramp**



LEGEND

Existing K-Factor	xx%
ADT Volume	xx

LEGEND

Existing K-Factor	xx%
ADT Volume	xx

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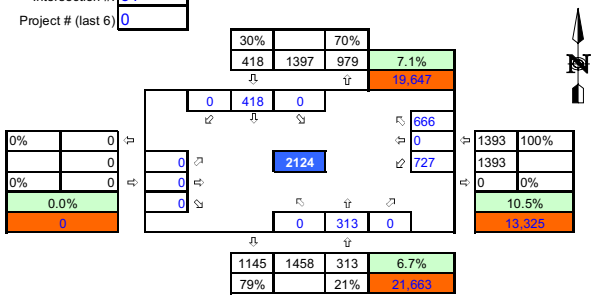
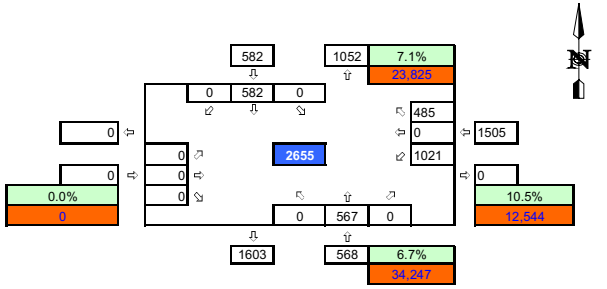
Int 51 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Nobel Drive**
E/W Street: **I-805 N Off-Ramp**
Intersection #: 51
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Nobel Drive**
E/W Street: **I-805 N Off-Ramp**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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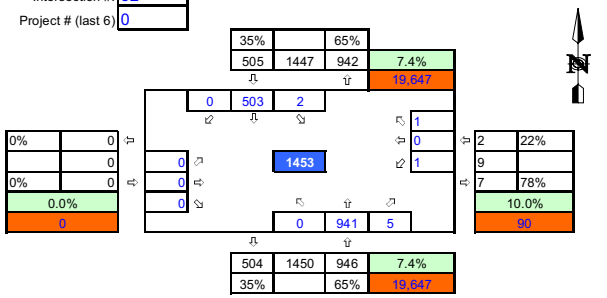
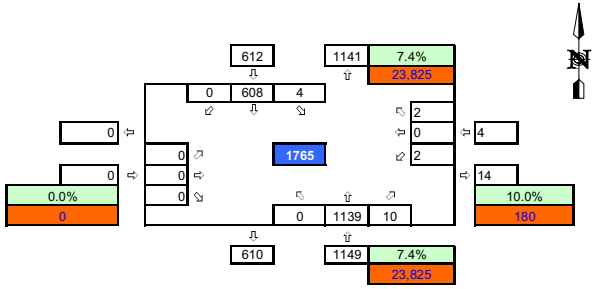
Int 52 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Nobel Drive**
E/W Street: **Avenue of Flags**
Intersection #: 52
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Nobel Drive**
E/W Street: **Avenue of Flags**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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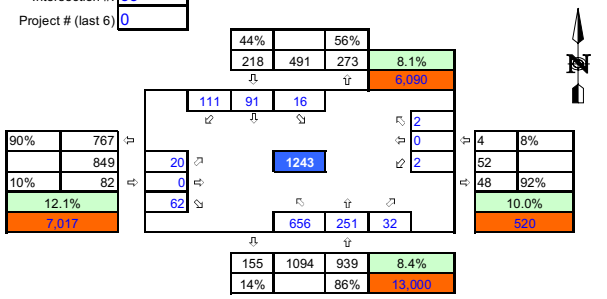
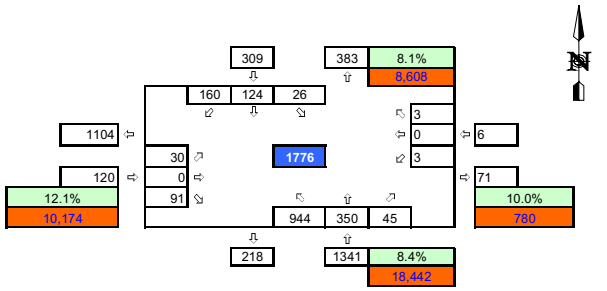
Int 53 AM Peak Volumes

Scenario:	Existing Conditions
N/S Street:	Regents Road
E/W Street:	Health Science Drive / County Day Ln
Intersection #:	53
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

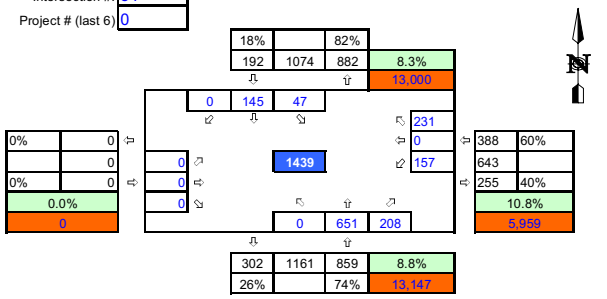
Scenario:	Horizon Year Conditions
N/S Street:	Regents Road
E/W Street:	Health Science Drive / County Day Ln



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

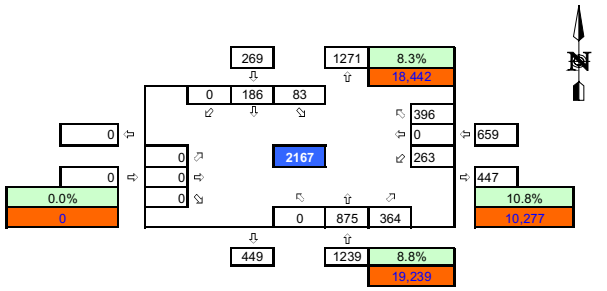
Int 54 AM Peak Volumes

Scenario:	Existing Conditions
N/S Street:	Regents Road
E/W Street:	Eastgate Mall
Intersection #:	54
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

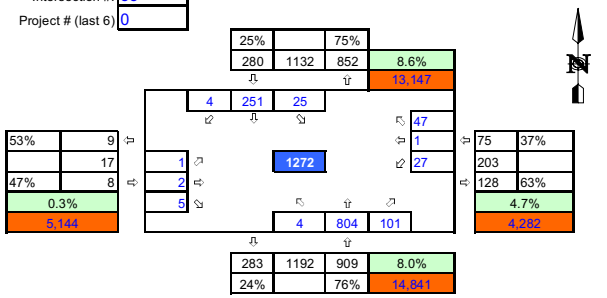
Scenario:	Horizon Year Conditions
N/S Street:	Regents Road
E/W Street:	Eastgate Mall



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

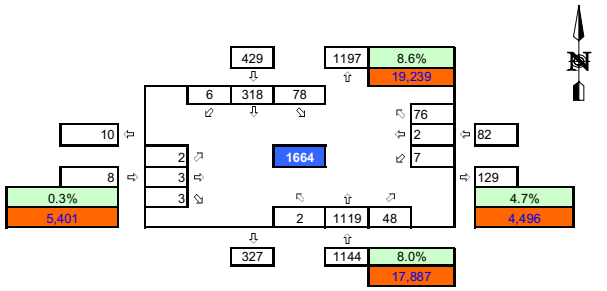
Int 55 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Regents Road**
E/W Street:	**Executive Drive**
Intersection #:	55
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Regents Road**
E/W Street:	**Executive Drive**

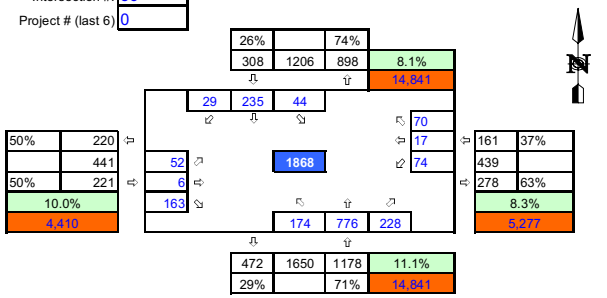


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

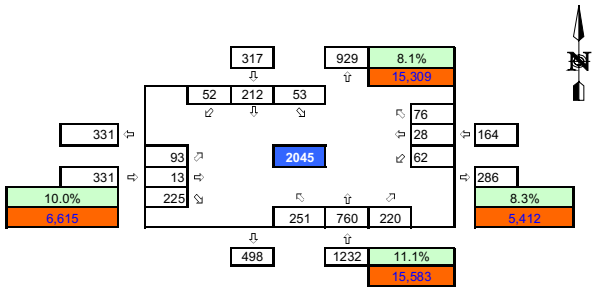
Int 56 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Regents Road**
E/W Street:	**Miramar Street / Regents Park Row**
Intersection #:	56
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Regents Road**
E/W Street:	**Miramar Street / Regents Park Row**

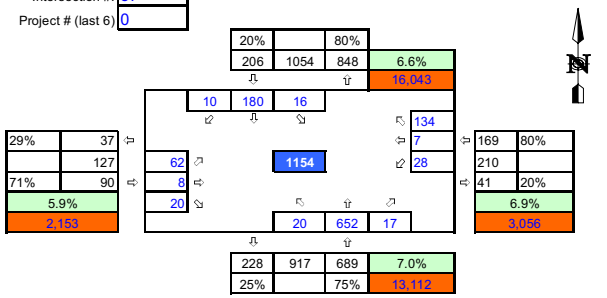


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

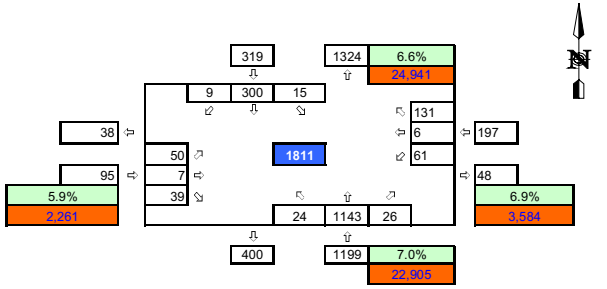
Int 57 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Regents Road**
E/W Street:	**Plaza De Palmas**
Intersection #:	57
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

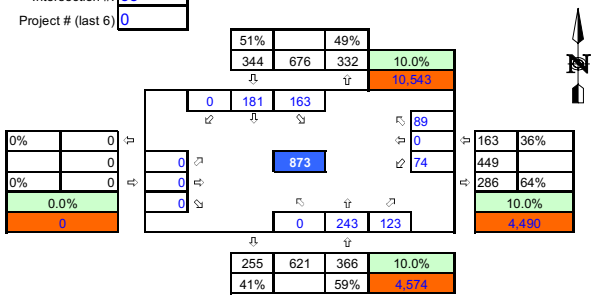
Scenario:	**Horizon Year Conditions**
N/S Street:	**Regents Road**
E/W Street:	**Plaza De Palmas**



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

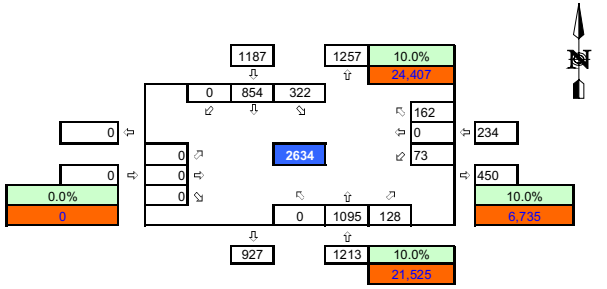
Int 58 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Regents Road**
E/W Street:	**Berino Court**
Intersection #:	58
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

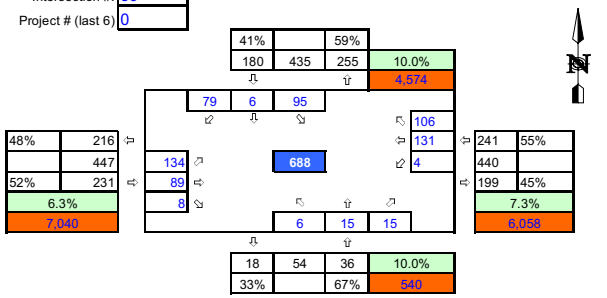
Scenario:	**Horizon Year Conditions**
N/S Street:	**Regents Road**
E/W Street:	**Berino Court**



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

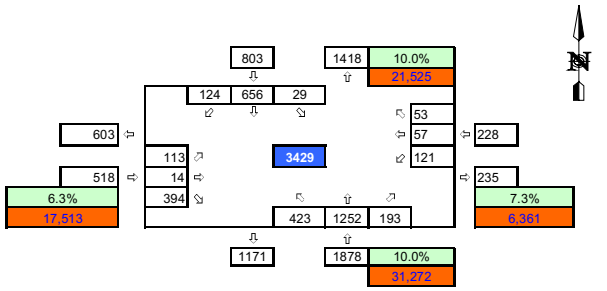
Int 59 AM Peak Volumes

Scenario:	Existing Conditions
N/S Street:	Regents Road
E/W Street:	Arriba Street
Intersection #:	59
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

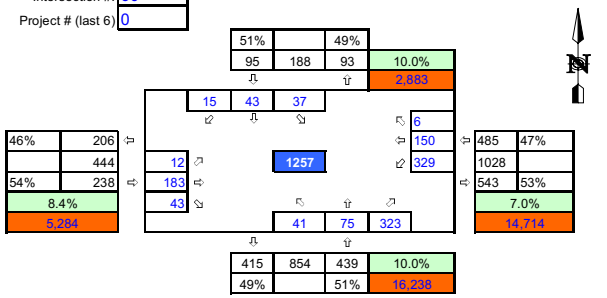
Scenario:	Horizon Year Conditions
N/S Street:	Regents Road
E/W Street:	Arriba Street



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

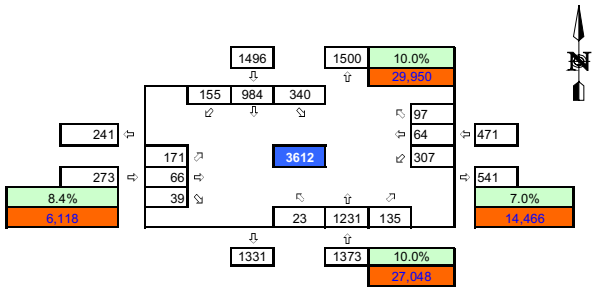
Int 60 AM Peak Volumes

Scenario:	Existing Conditions
N/S Street:	Regents Road
E/W Street:	Governor Drive
Intersection #:	60
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

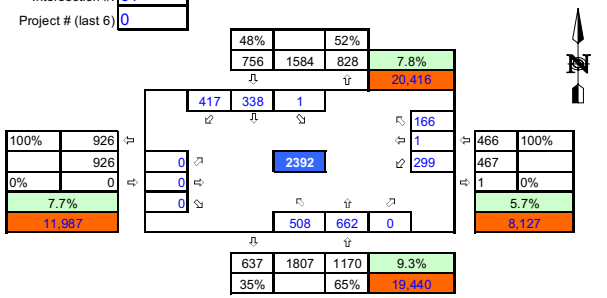
Scenario:	Horizon Year Conditions
N/S Street:	Regents Road
E/W Street:	Governor Drive



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

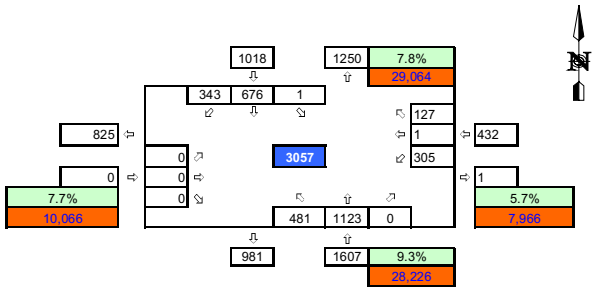
Int 61 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Regents Road**
E/W Street:	**SR-52 WB Ramps**
Intersection #:	61
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Regents Road**
E/W Street:	**SR-52 WB Ramps**



LEGEND

Existing K-Factor	xx%
ADT Volume	xx

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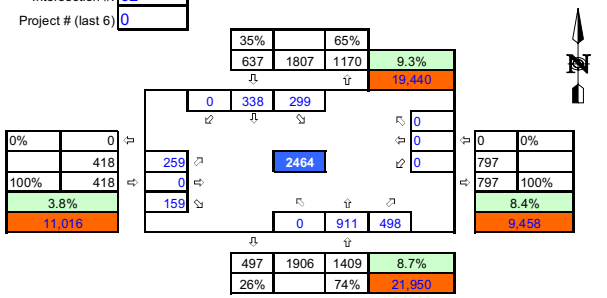
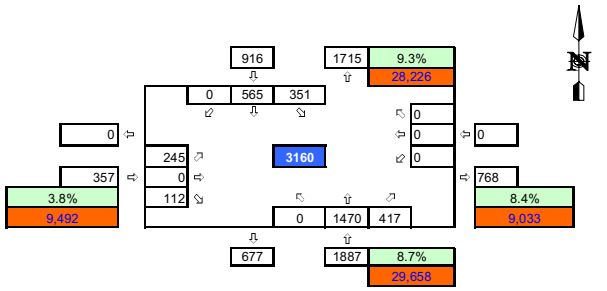
Int 62 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Regents Road**
E/W Street:	**SR-52 EB Ramps**
Intersection #:	62
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Regents Road**
E/W Street:	**SR-52 EB Ramps**



LEGEND

Existing K-Factor	xx%
ADT Volume	xx

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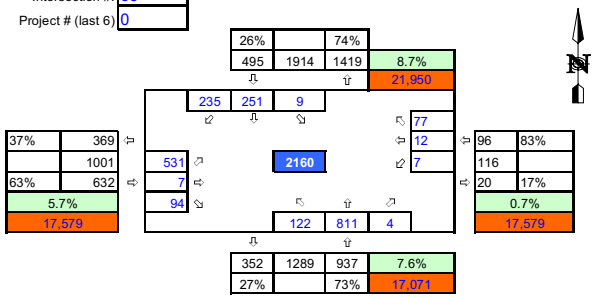
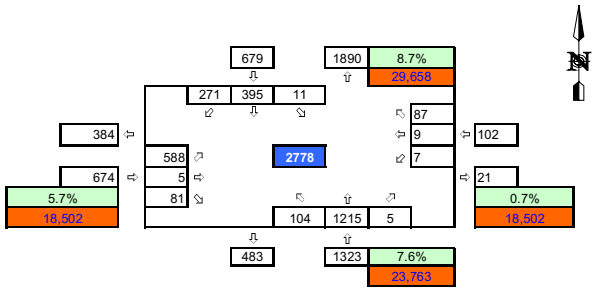
Int 63 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Regents Road / Clairemont Mesa Blvd**
E/W Street: **Luna Avenue**
Intersection #: 63
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

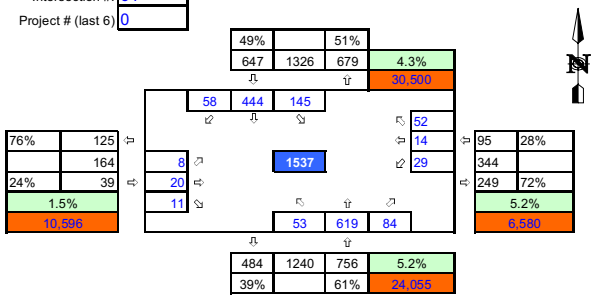
Scenario: **Horizon Year Conditions**
N/S Street: **Regents Road / Clairemont Mesa Blvd**
E/W Street: **Luna Avenue**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

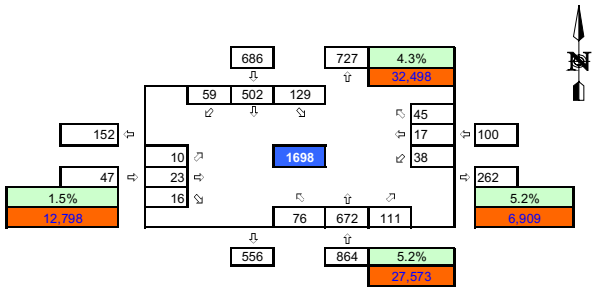
Int 64 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **N. Torrey Pines Road**
E/W Street: **UCSD Northpoint Driveway**
Intersection #: 64
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

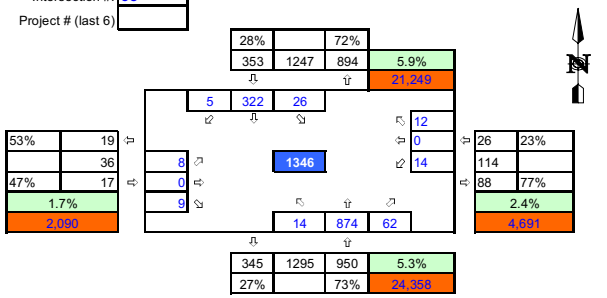
Scenario: **Horizon Year Conditions**
N/S Street: **N. Torrey Pines Road**
E/W Street: **UCSD Northpoint Driveway**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

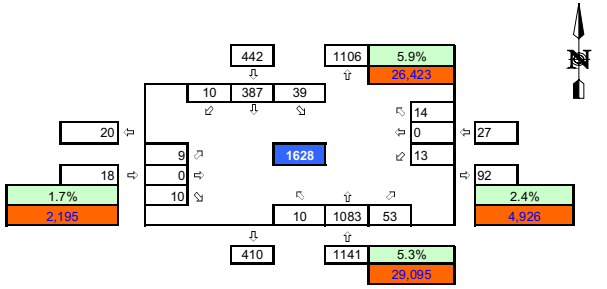
Int 65 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**N. Torrey Pines Road**
E/W Street:	**Pangea Drive**
Intersection #:	65
Project # (last 6)	



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

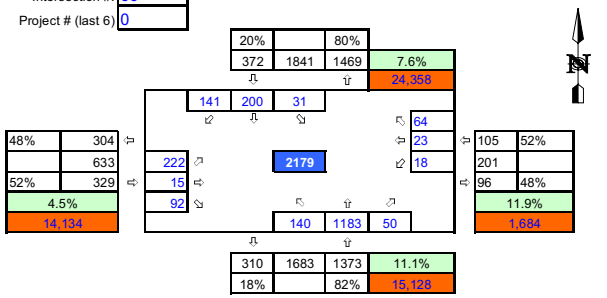
Scenario:	**Horizon Year Conditions**
N/S Street:	**N. Torrey Pines Road**
E/W Street:	**Pangea Drive**



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

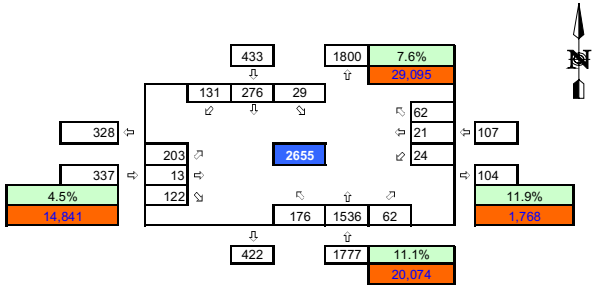
Int 66 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**N. Torrey Pines Road**
E/W Street:	**La Jolla Shores Drive**
Intersection #:	66
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

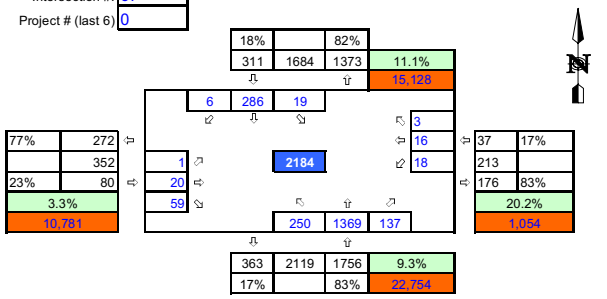
Scenario:	**Horizon Year Conditions**
N/S Street:	**N. Torrey Pines Road**
E/W Street:	**La Jolla Shores Drive**



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

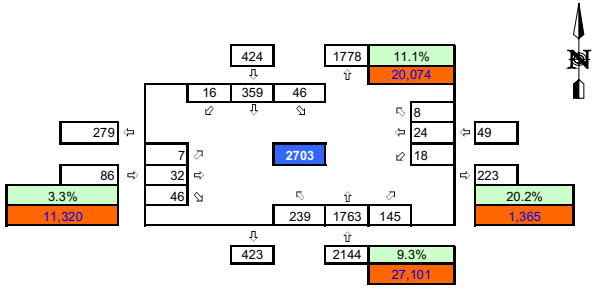
Int 67 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **N. Torrey Pines Road**
E/W Street: **Expedition Way / Revelle College Drive**
Intersection #: 67
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **N. Torrey Pines Road**
E/W Street: **Expedition Way / Revelle College Drive**



LEGEND

Existing K-Factor	xx%
ADT Volume	xx

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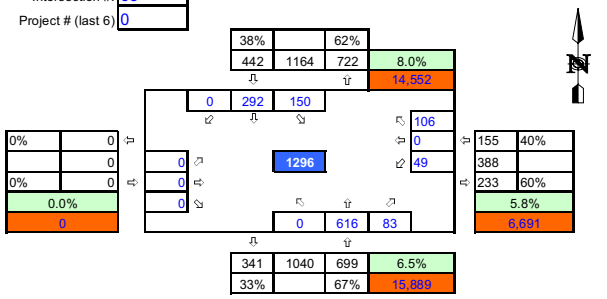
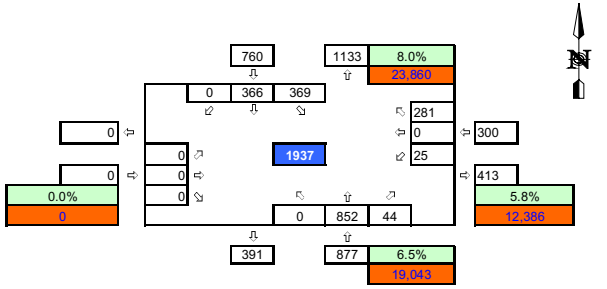
Int 68 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Gilman Drive**
E/W Street: **Villa La Jolla Drive**
Intersection #: 68
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Gilman Drive**
E/W Street: **Villa La Jolla Drive**



LEGEND

Existing K-Factor	xx%
ADT Volume	xx

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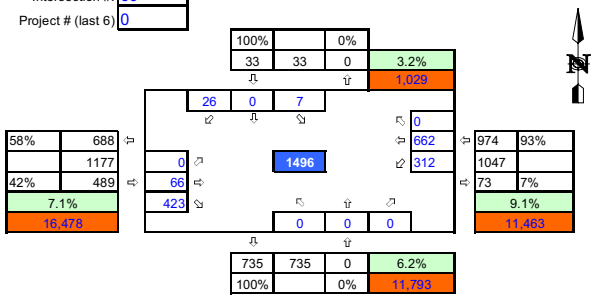
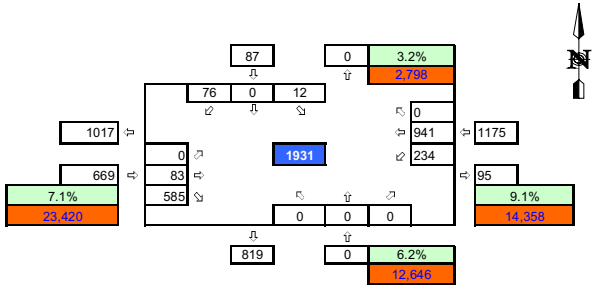
Int 69 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **I-5 SB Ramps**
E/W Street: **Gillman Drive**
Intersection #: 69
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **I-5 SB Ramps**
E/W Street: **Gillman Drive**

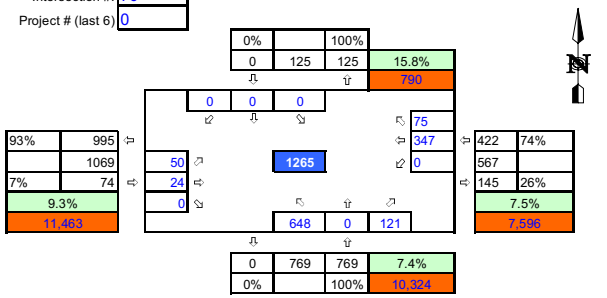


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

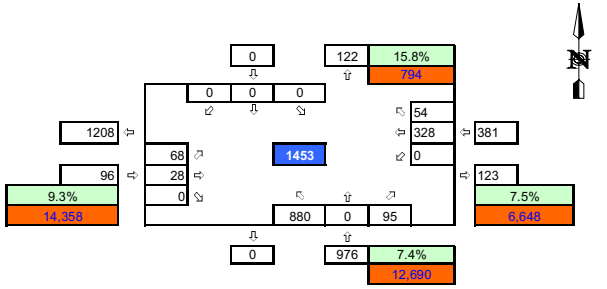
Int 70 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **I-5 NB Ramps**
E/W Street: **Gillman Drive**
Intersection #: 70
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **I-5 NB Ramps**
E/W Street: **Gillman Drive**

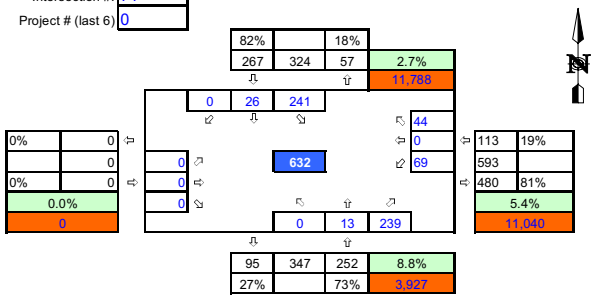


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

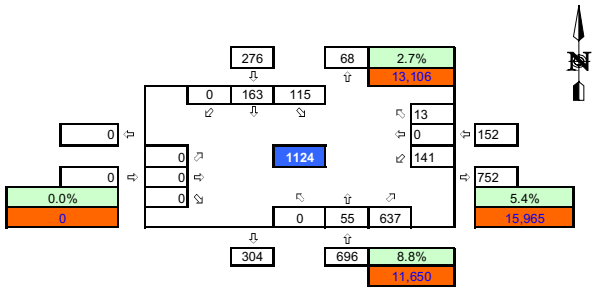
Int 71 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Charmant Drive / Palmilla Drive**
E/W Street: **Lebon Drive**
Intersection #: 71
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Charmant Drive / Palmilla Drive**
E/W Street: **Lebon Drive**

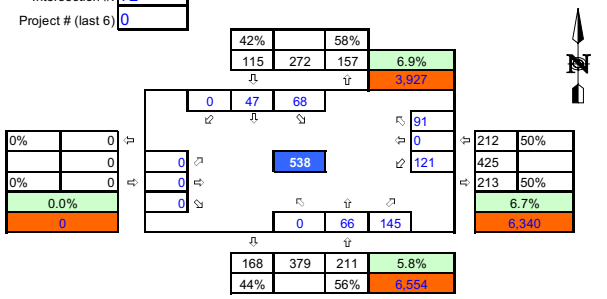


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

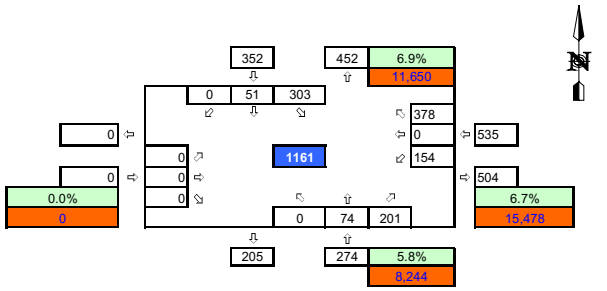
Int 72 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Palmilla Drive**
E/W Street: **Ariba Street**
Intersection #: 72
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Palmilla Drive**
E/W Street: **Ariba Street**

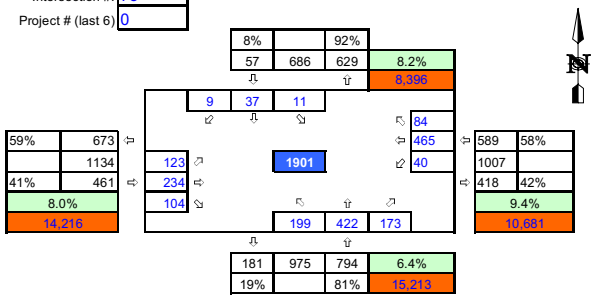


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

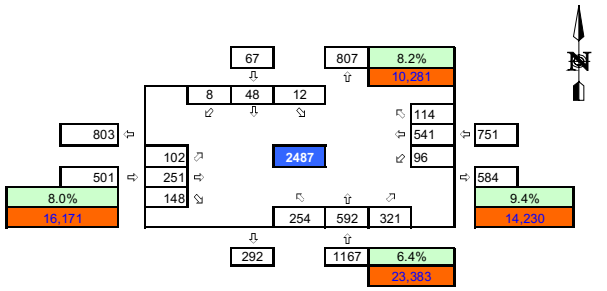
Int 73 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Towne Center Drive**
E/W Street: **Eastgate Mall**
Intersection #: 73
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Towne Center Drive**
E/W Street: **Eastgate Mall**



LEGEND

Existing K-Factor	xx%
ADT Volume	xx

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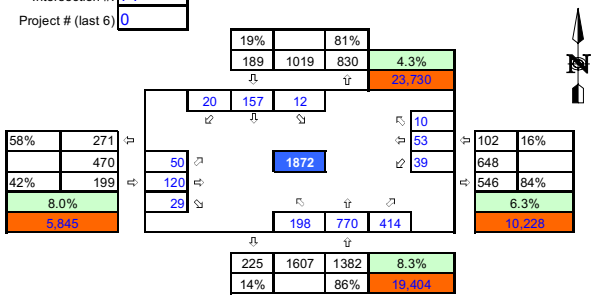
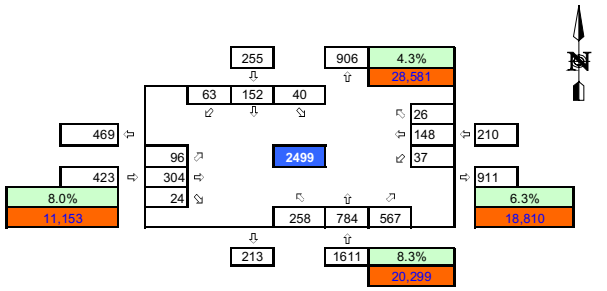
Int 74 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Towne Center Drive**
E/W Street: **Executive Drive**
Intersection #: 74
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Towne Center Drive**
E/W Street: **Executive Drive**



LEGEND

Existing K-Factor	xx%
ADT Volume	xx

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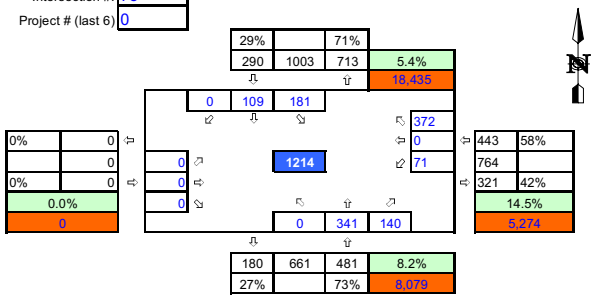
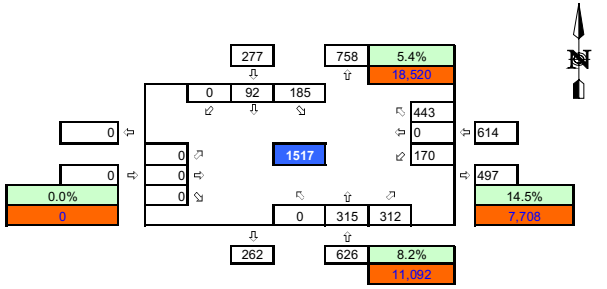
Int 75 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Towne Center Drive**
E/W Street:	**Golden Haven Drive**
Intersection #:	75
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Towne Center Drive**
E/W Street:	**Golden Haven Drive**



LEGEND

Existing K-Factor	xx%
ADT Volume	xx

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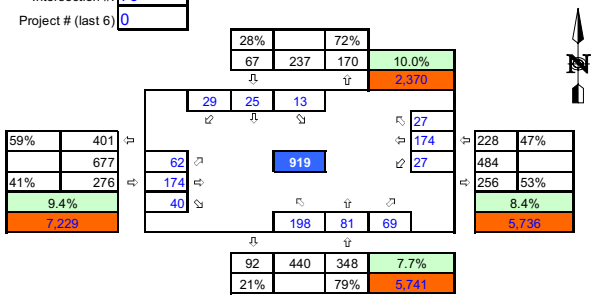
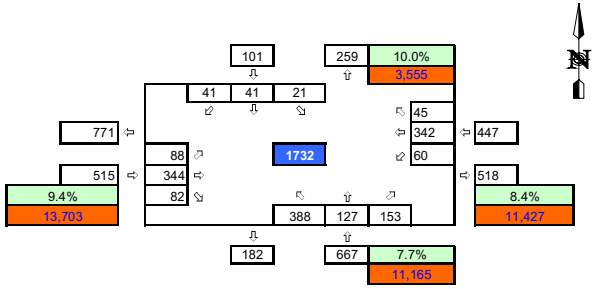
Int 76 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Executive Way**
E/W Street:	**Executive Drive**
Intersection #:	76
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Executive Way**
E/W Street:	**Executive Drive**



LEGEND

Existing K-Factor	xx%
ADT Volume	xx

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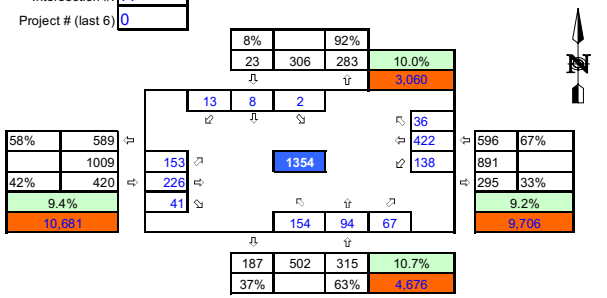
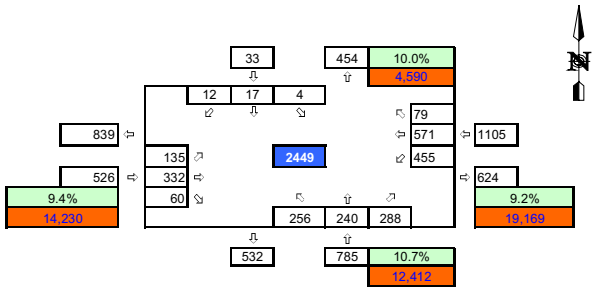
Int 77 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Judicial Drive**
E/W Street:	**Eastgate Mall**
Intersection #:	77
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

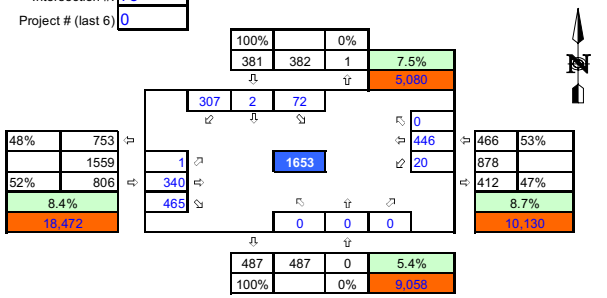
Scenario:	**Horizon Year Conditions**
N/S Street:	**Judicial Drive**
E/W Street:	**Eastgate Mall**



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

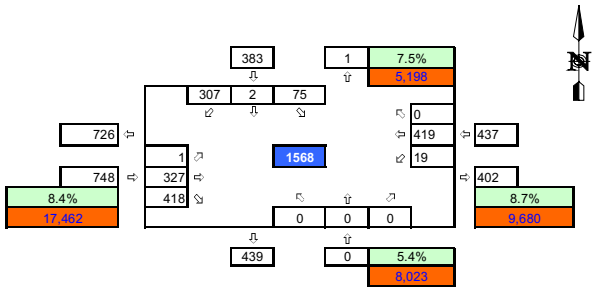
Int 78 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**I-805 SB Ramps**
E/W Street:	**Governor Drive**
Intersection #:	78
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

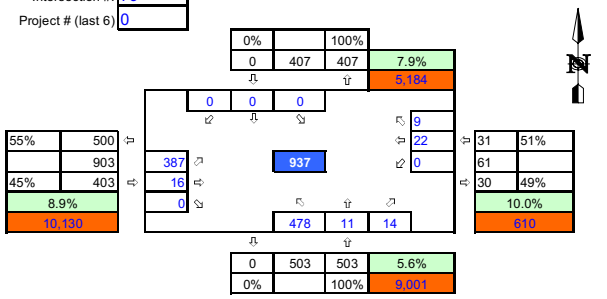
Scenario:	**Horizon Year Conditions**
N/S Street:	**I-805 SB Ramps**
E/W Street:	**Governor Drive**



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

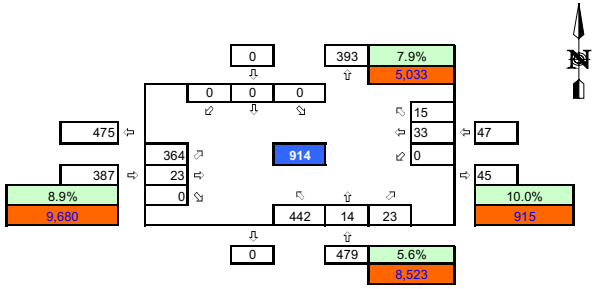
Int 79 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **I-805 NB Ramps**
E/W Street: **Governor Drive**
Intersection #: 79
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **I-805 NB Ramps**
E/W Street: **Governor Drive**

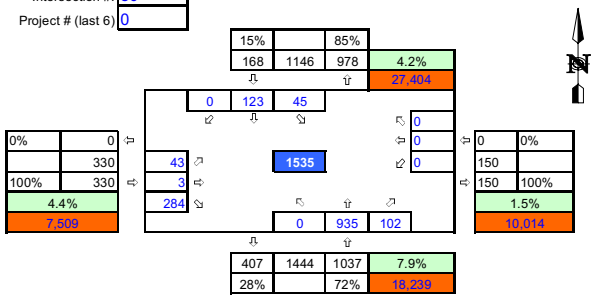


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

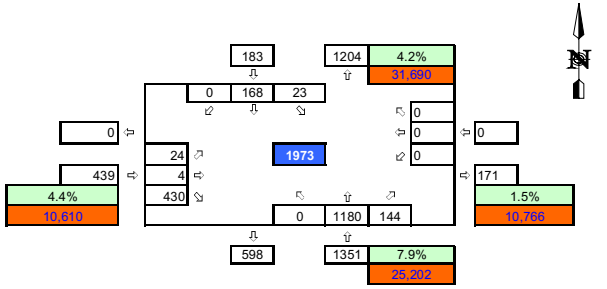
Int 80 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Gilman Drive**
E/W Street: **La Jolla Village Drive EB**
Intersection #: 80
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Gilman Drive**
E/W Street: **La Jolla Village Drive EB**

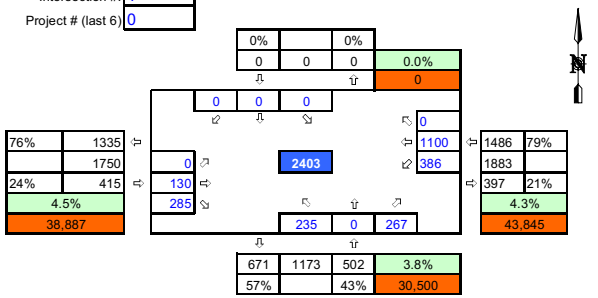


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

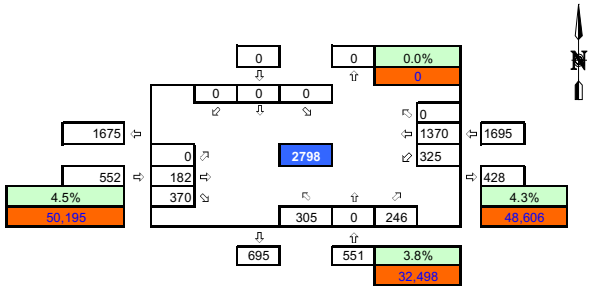
Int 1 MID Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**N. Torrey Pines Road**
E/W Street:	**Genesee Avenue**
Intersection #:	1
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**N. Torrey Pines Road**
E/W Street:	**Genesee Avenue**

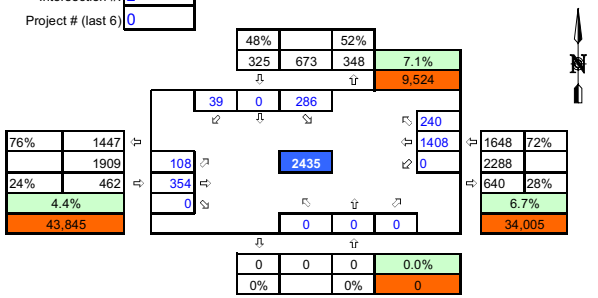


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

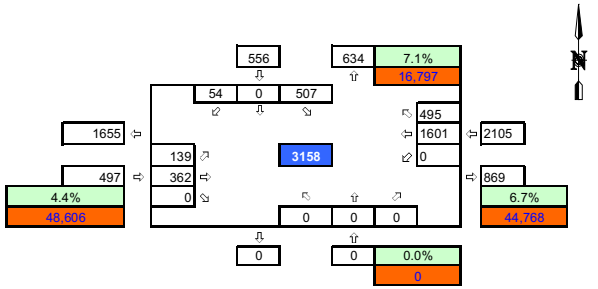
Int 2 MID Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**John Hopkins Drive (S)**
E/W Street:	**Genesee Avenue**
Intersection #:	2
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

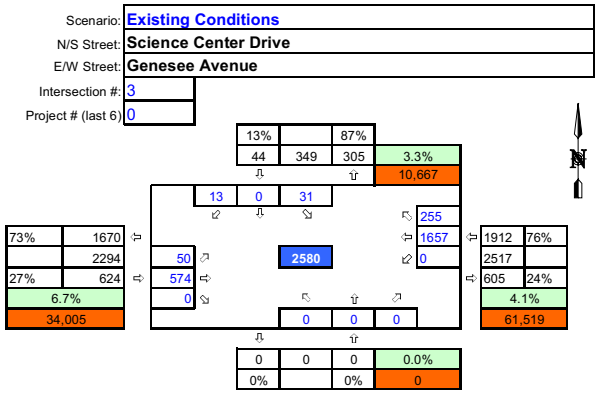
Scenario:	**Horizon Year Conditions**
N/S Street:	**John Hopkins Drive (S)**
E/W Street:	**Genesee Avenue**



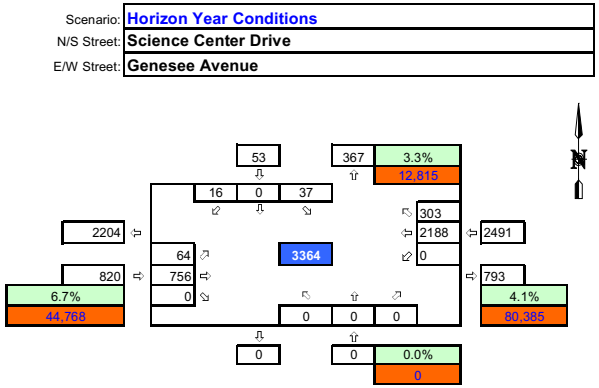
LEGEND

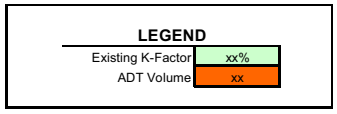
Existing K-Factor	xx%
ADT Volume	xx

Int 3 MID Peak Volumes

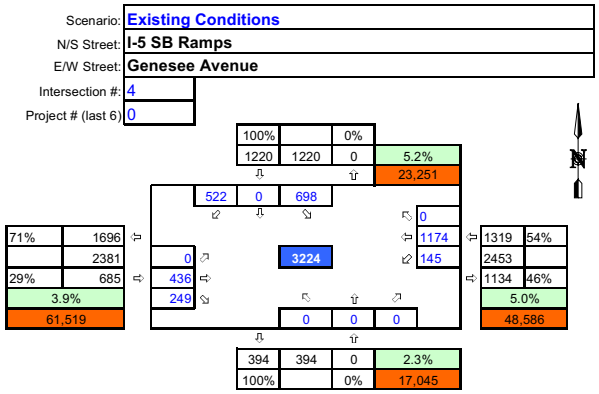


Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

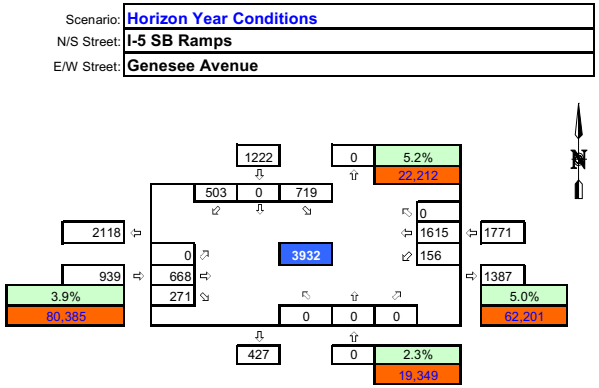


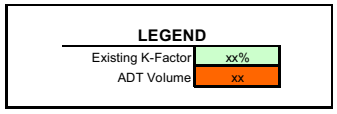


Int 4 MID Peak Volumes



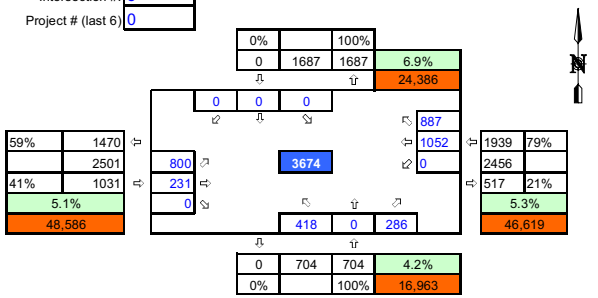
Note: Traffic volumes were collected by Accurate Video Counts during May 2015.





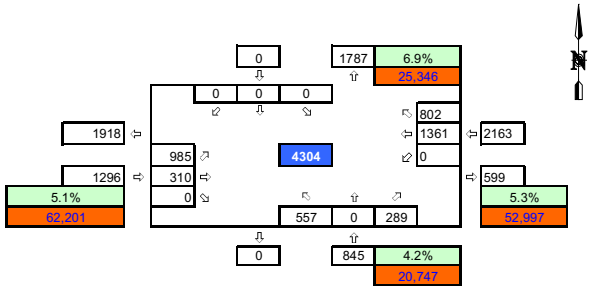
Int 5 MID Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**I-5 NB Ramps**
E/W Street:	**Genesee Avenue**
Intersection #:	5
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**I-5 NB Ramps**
E/W Street:	**Genesee Avenue**

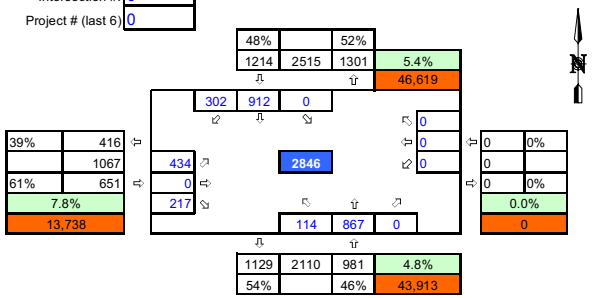


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

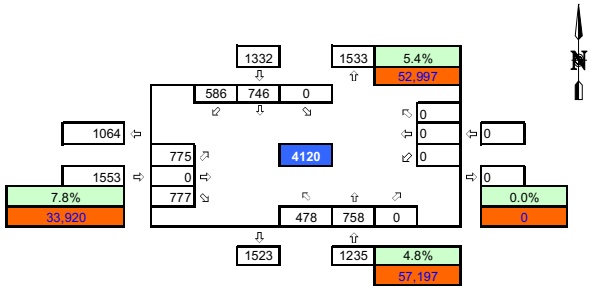
Int 6 MID Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**Scripps Hospital**
Intersection #:	6
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

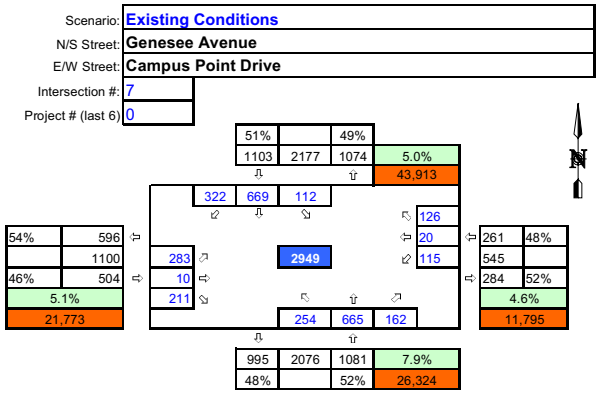
Scenario:	**Horizon Year Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**Scripps Hospital**



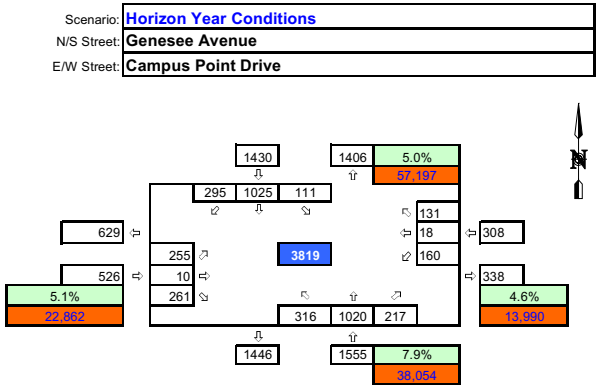
LEGEND

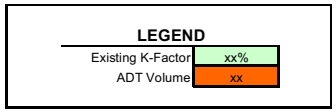
Existing K-Factor	xx%
ADT Volume	xx

Int 7 MID Peak Volumes

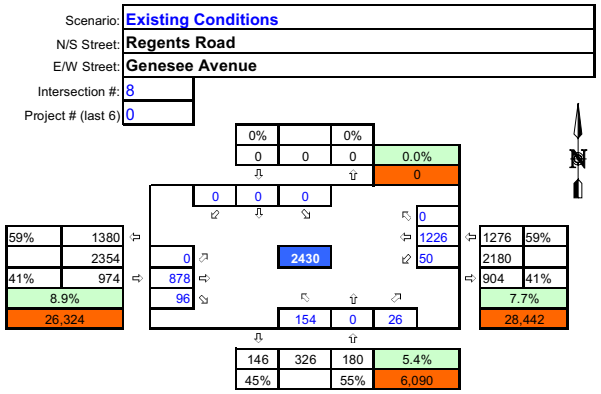


Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

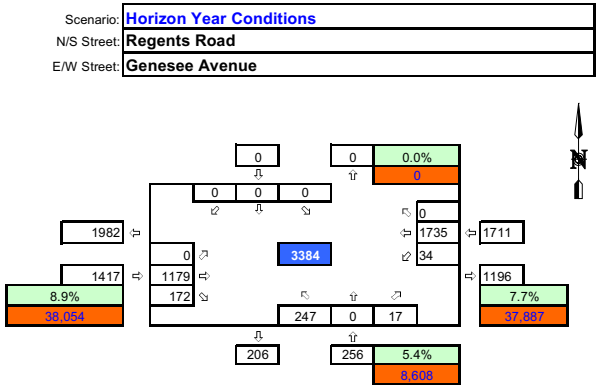


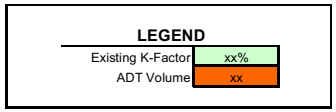


Int 8 MID Peak Volumes



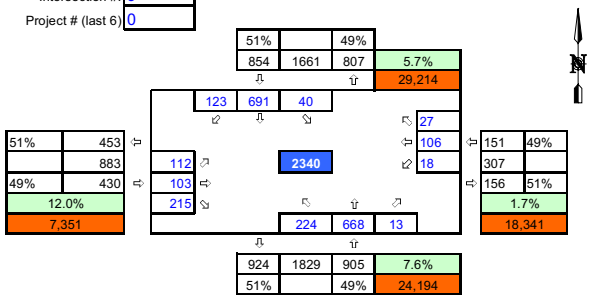
Note: Traffic volumes were collected by Accurate Video Counts during May 2015.





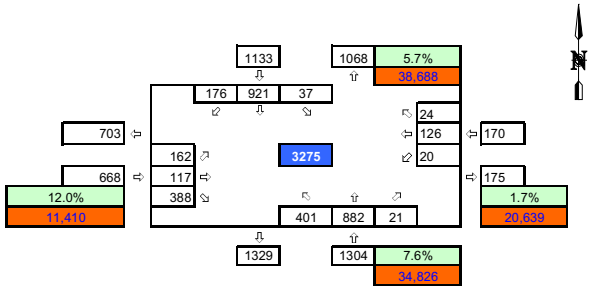
Int 9 MID Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Eastgate Mall**
Intersection #: 9
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Eastgate Mall**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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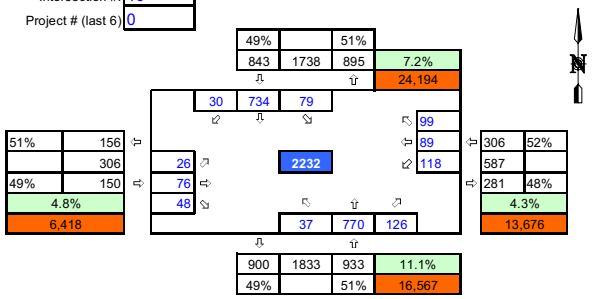
Int 9 MID

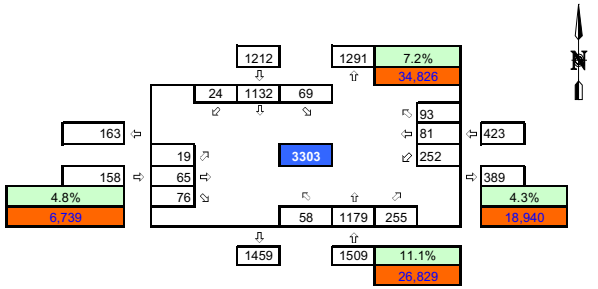
Int 10 MID Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Executive Drive**
Intersection #: 10
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Executive Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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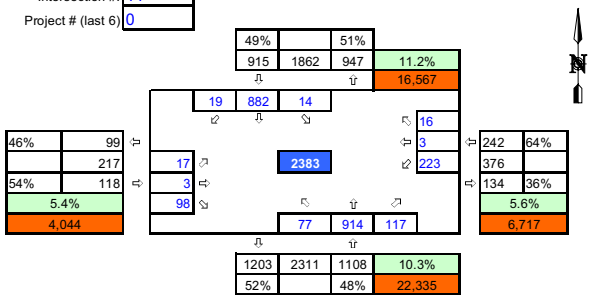
Int 10 MID

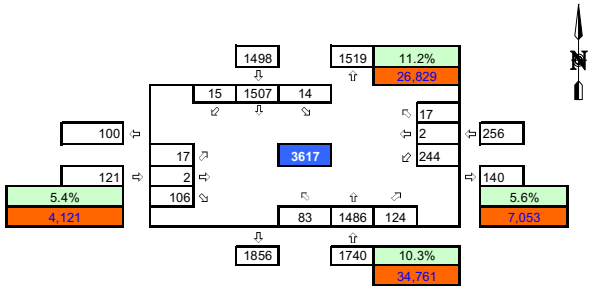
Int 11 MID Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**Executive Square**
Intersection #:	11
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**Executive Square**

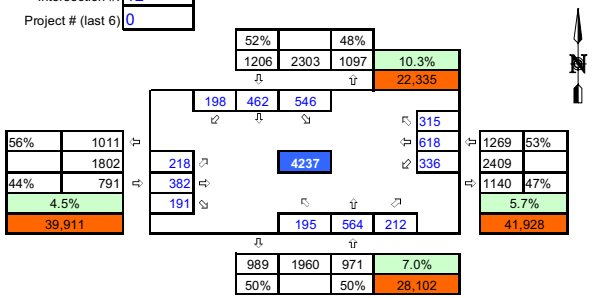


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

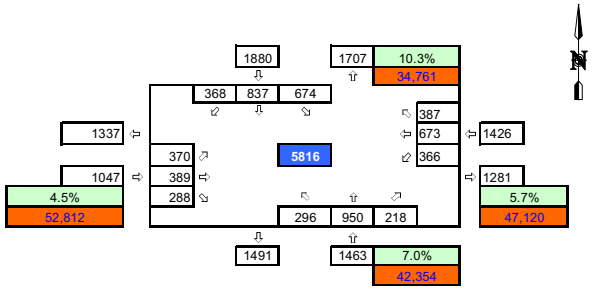
Int 12 MID Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**La Jolla Village Drive**
Intersection #:	12
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**La Jolla Village Drive**

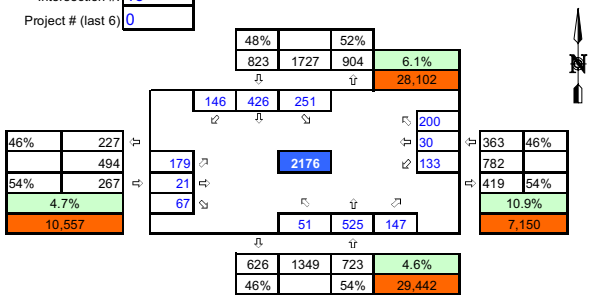


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

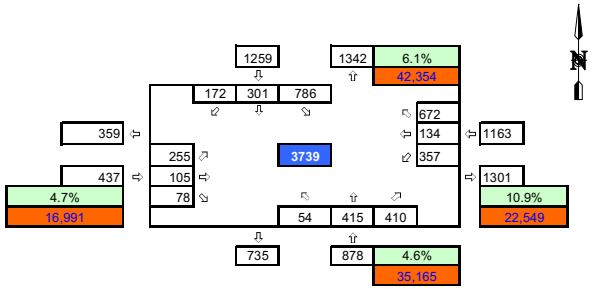
Int 13 MID Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Esplanade Court**
Intersection #: 13
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Esplanade Court**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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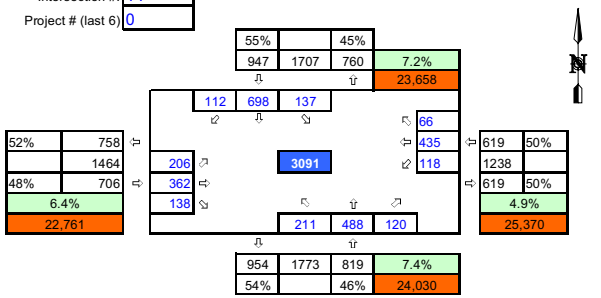
Int 13 MID

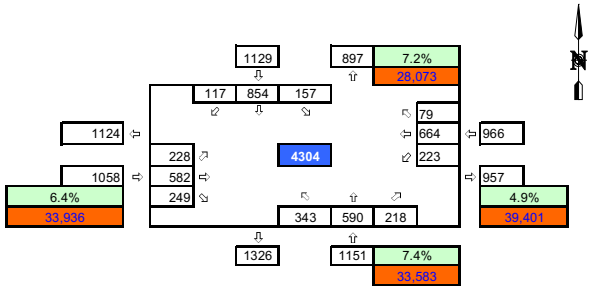
Int 14 MID Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Nobel Drive**
Intersection #: 14
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Nobel Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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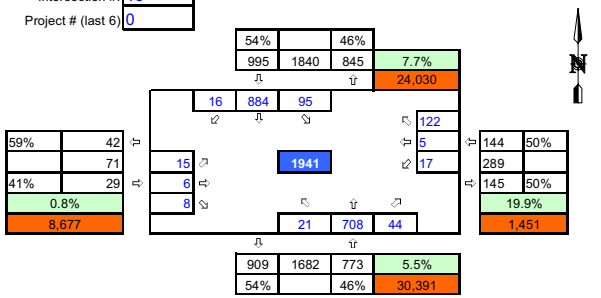
Int 14 MID

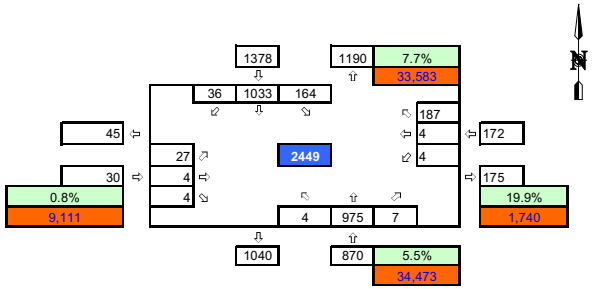
Int 15 MID Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**Decoro Street**
Intersection #:	15
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**Decoro Street**

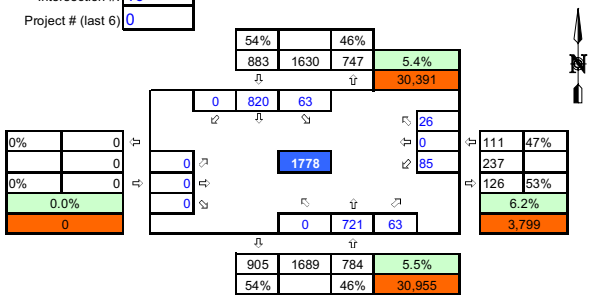


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

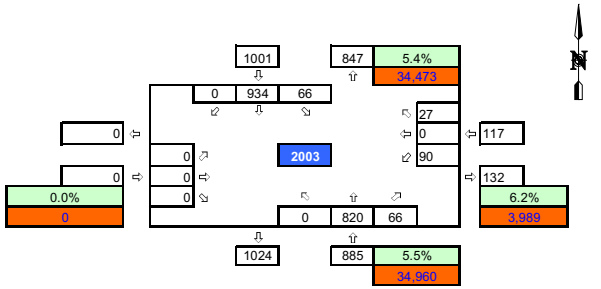
Int 16 MID Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**Centurion Square**
Intersection #:	16
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**Centurion Square**

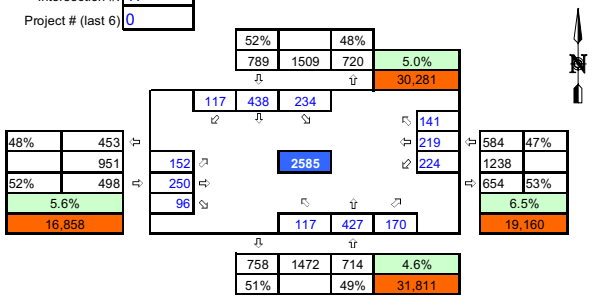


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

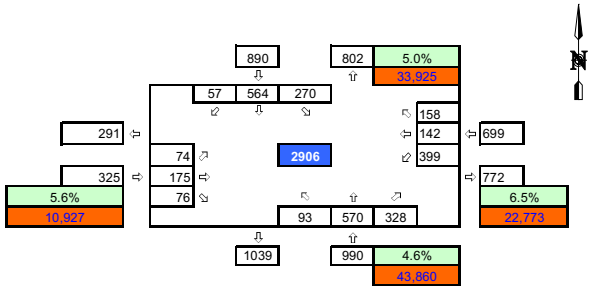
Int 17 MID Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Governor Drive**
Intersection #: 17
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Governor Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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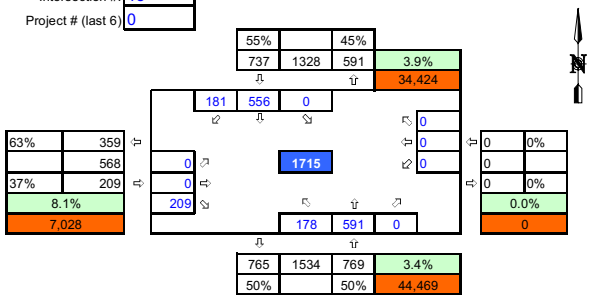
Int 17 MID

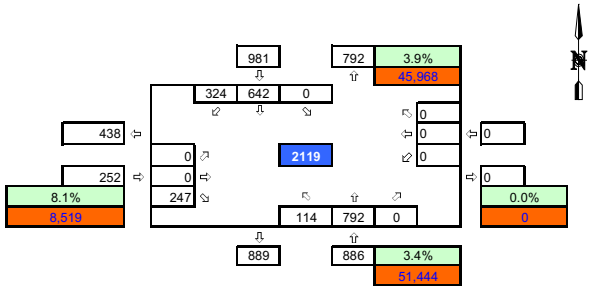
Int 18 MID Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **SR-52 WB Ramps**
Intersection #: 18
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **SR-52 WB Ramps**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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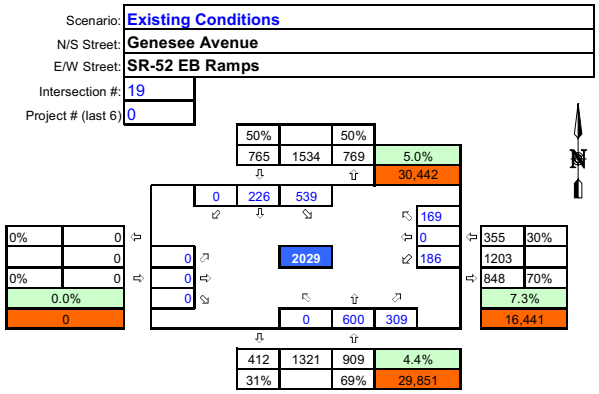
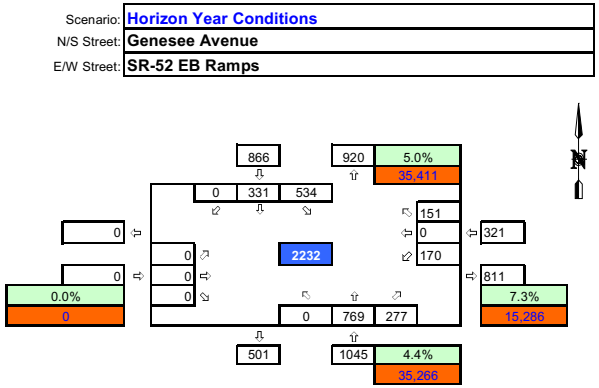
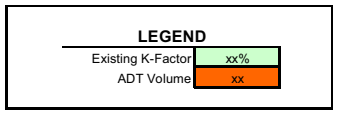
Int 18 MID

Int 19 MID Peak Volumes

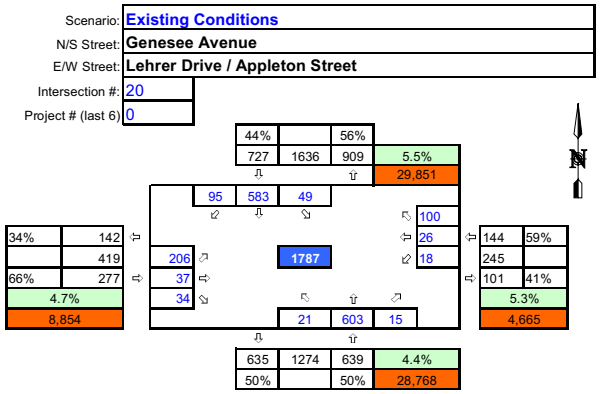


Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

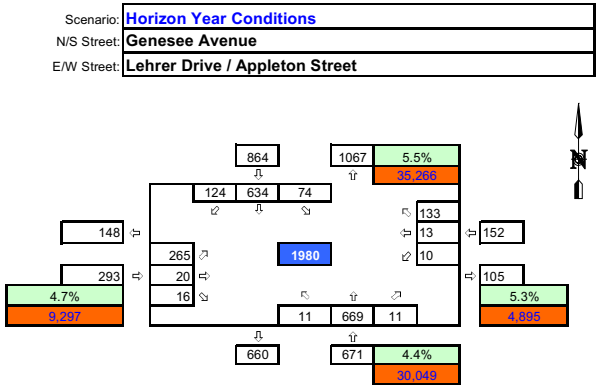


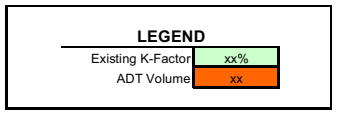


Int 20 MID Peak Volumes



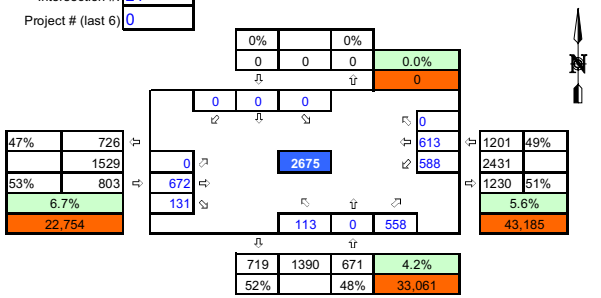
Note: Traffic volumes were collected by Accurate Video Counts during May 2015.





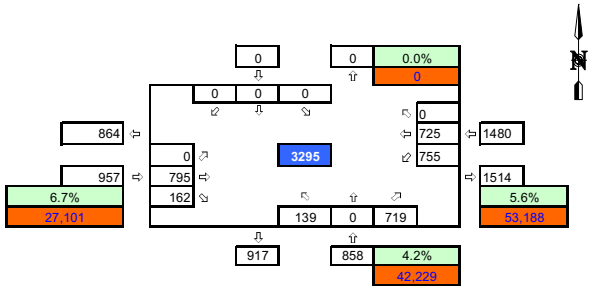
Int 21 MID Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Torrey Pines Road**
E/W Street: **La Jolla Village Drive**
Intersection #: 21
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Torrey Pines Road**
E/W Street: **La Jolla Village Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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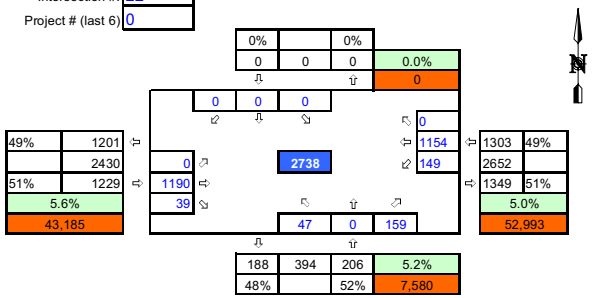
Int 21 MID

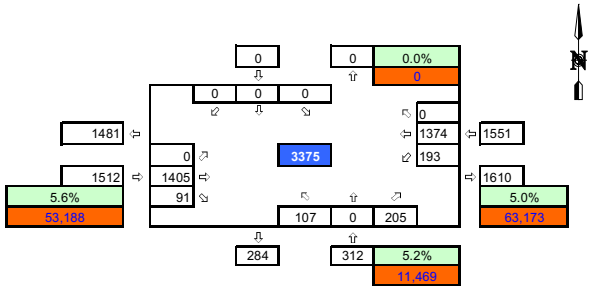
Int 22 MID Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **La Jolla Scenic Drive**
E/W Street: **La Jolla Village Drive**
Intersection #: 22
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **La Jolla Scenic Drive**
E/W Street: **La Jolla Village Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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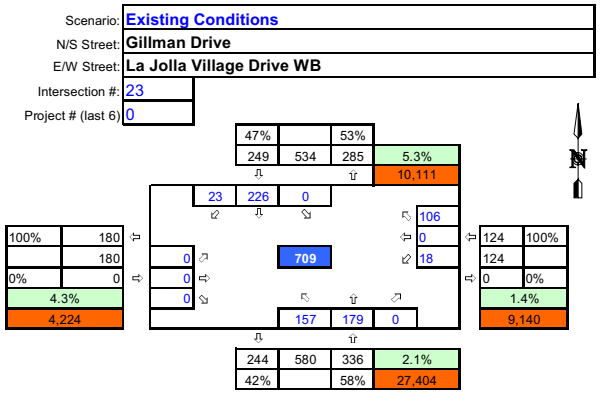
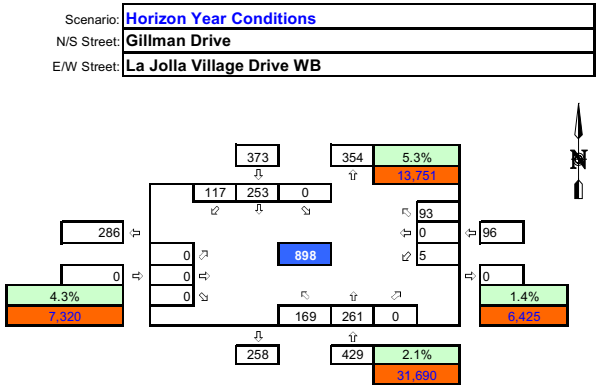
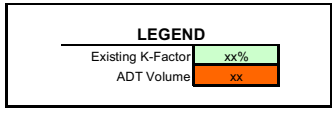
Int 22 MID

Int 23 MID Peak Volumes

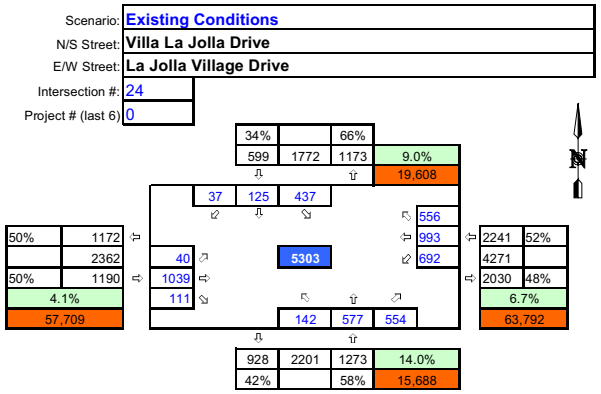


Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

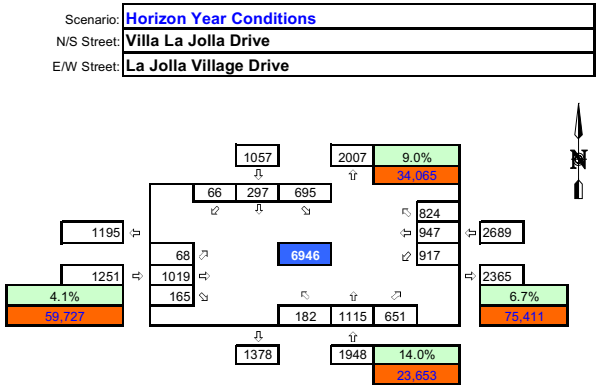


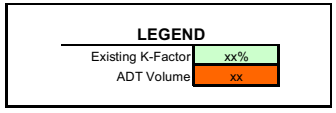


Int 24 MID Peak Volumes



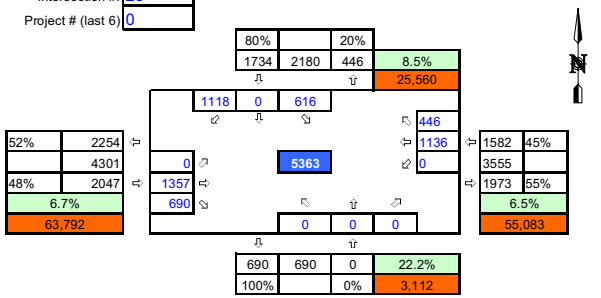
Note: Traffic volumes were collected by Accurate Video Counts during May 2015.





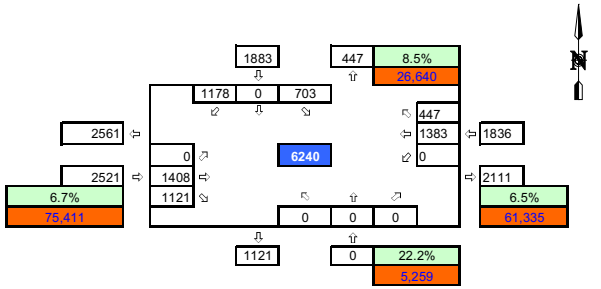
Int 25 MID Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**I-5 SB Off-Ramps**
E/W Street:	**La Jolla Village Drive**
Intersection #:	25
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**I-5 SB Off-Ramps**
E/W Street:	**La Jolla Village Drive**

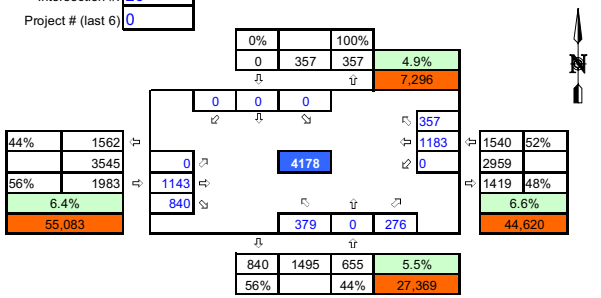


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

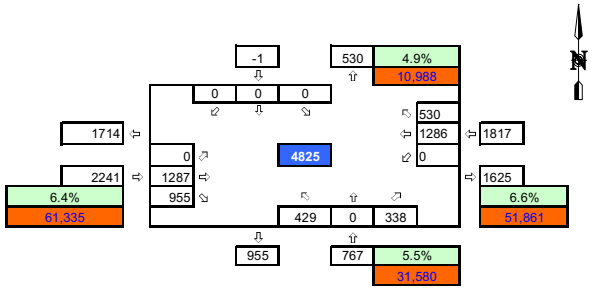
Int 26 MID Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**I-5 NB Off-Ramps**
E/W Street:	**La Jolla Village Drive**
Intersection #:	26
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

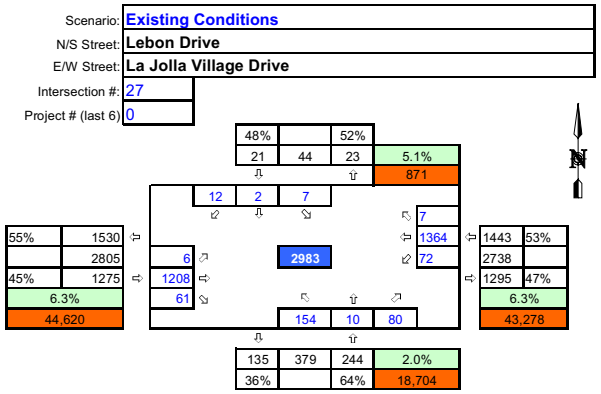
Scenario:	**Horizon Year Conditions**
N/S Street:	**I-5 NB Off-Ramps**
E/W Street:	**La Jolla Village Drive**



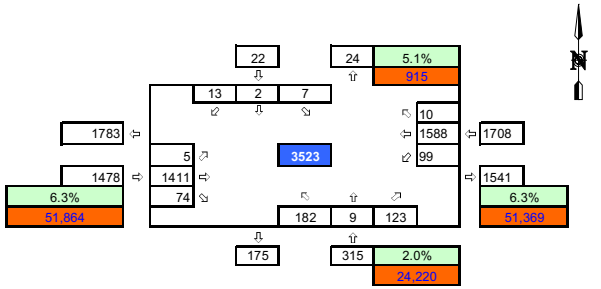
LEGEND

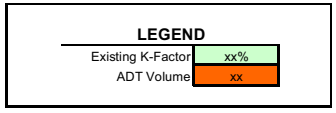
Existing K-Factor	xx%
ADT Volume	xx

Int 27 MID Peak Volumes



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.





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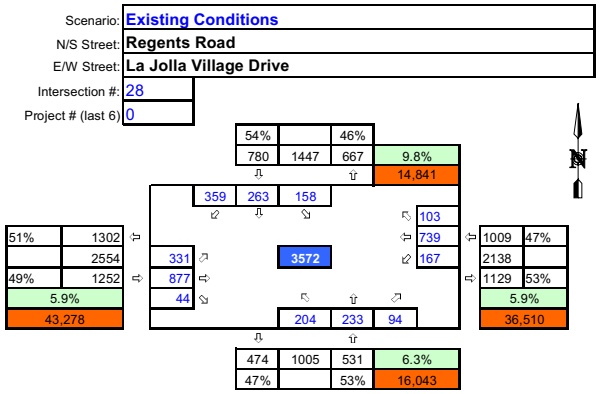
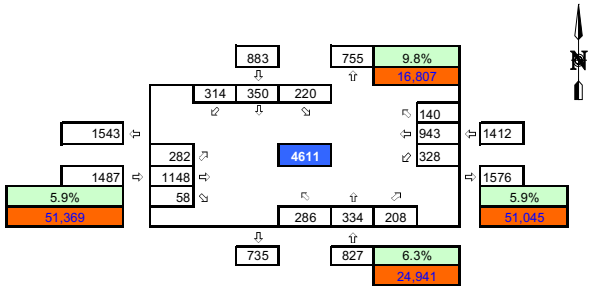
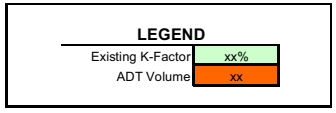
Int 27 MID

Int 28 MID Peak Volumes



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.





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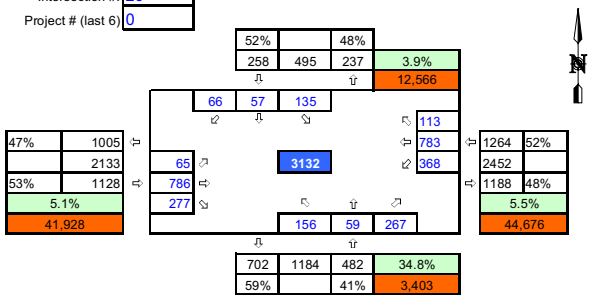
Int 28 MID

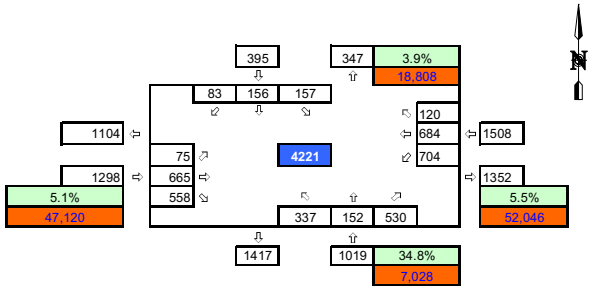
Int 29 MID Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Executive Way**
E/W Street: **La Jolla Village Drive**
Intersection #: 29
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Executive Way**
E/W Street: **La Jolla Village Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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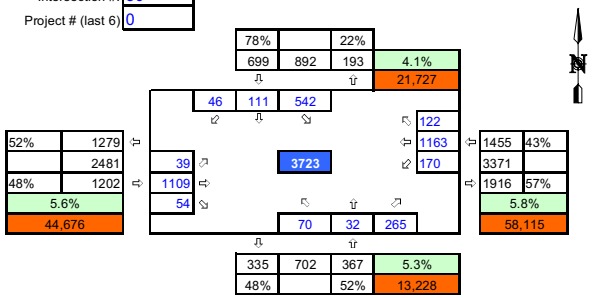
Int 29 MID

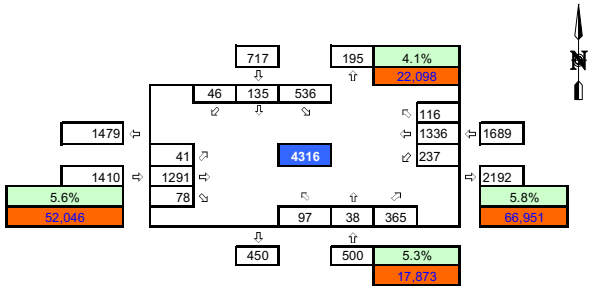
Int 30 MID Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Towne Center Drive**
E/W Street: **La Jolla Village Drive**
Intersection #: 30
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Towne Center Drive**
E/W Street: **La Jolla Village Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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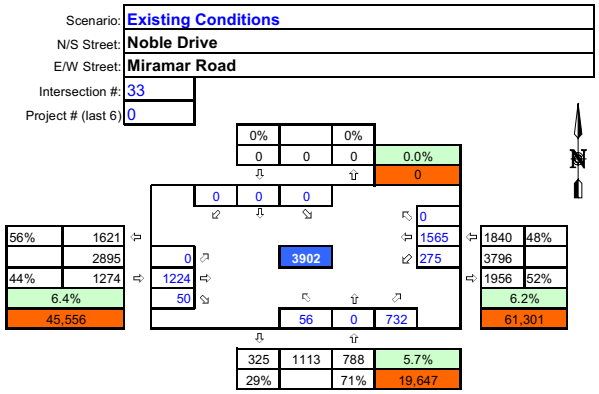
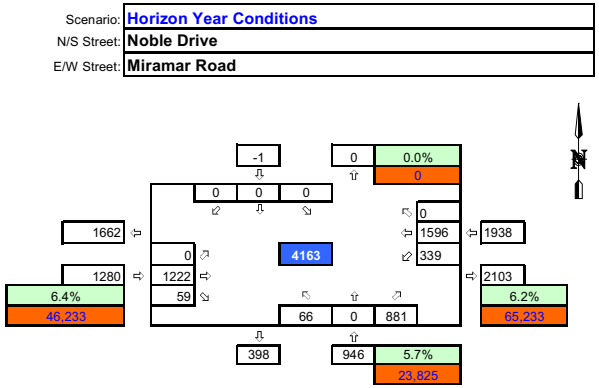
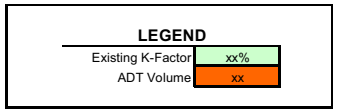
Int 30 MID

Int 33 MID Peak Volumes

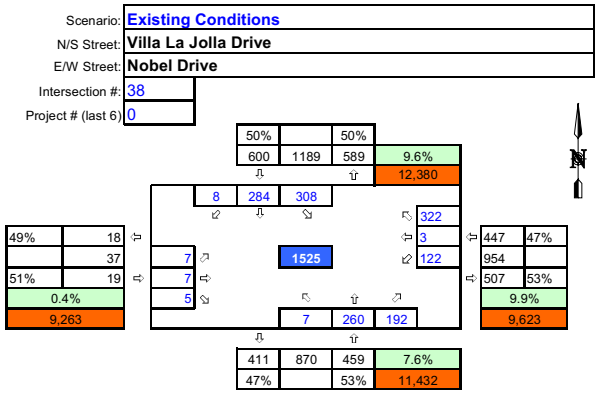


Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

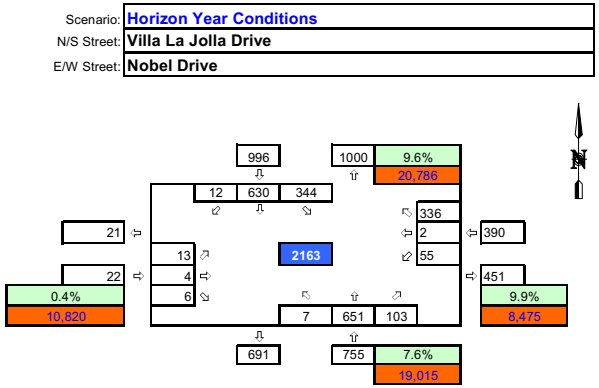


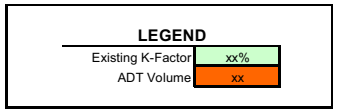


Int 38 MID Peak Volumes

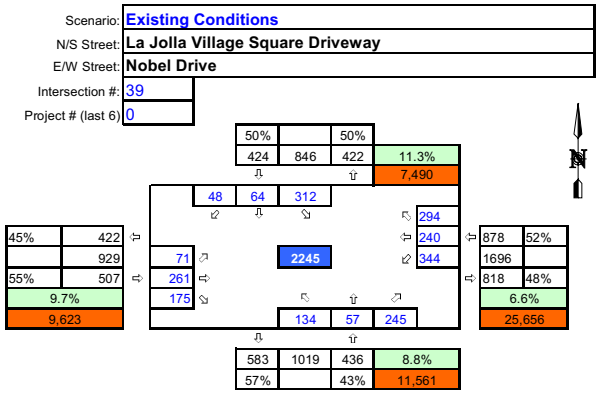


Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

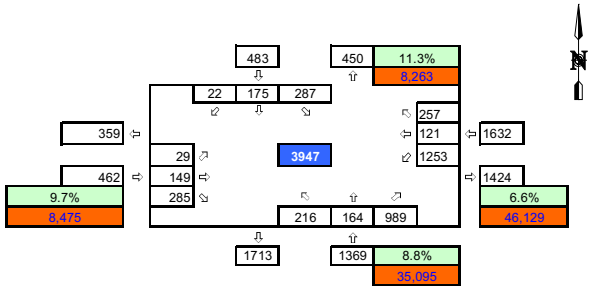


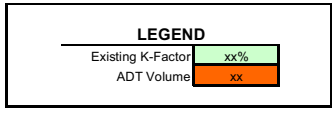


Int 39 MID Peak Volumes

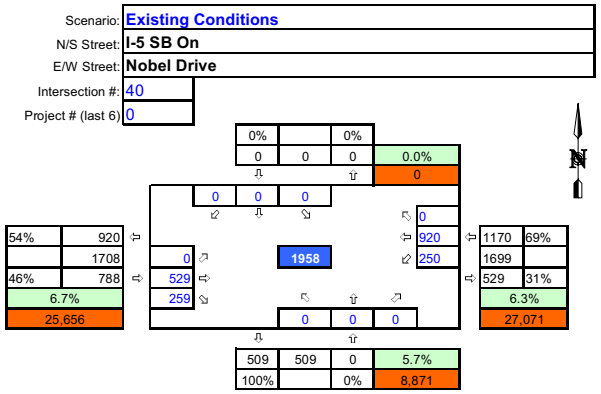


Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

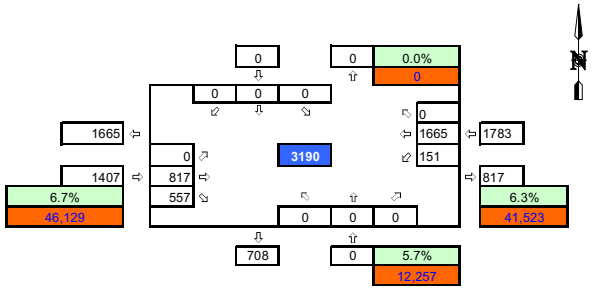


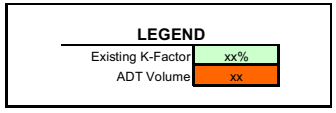


Int 40 MID Peak Volumes



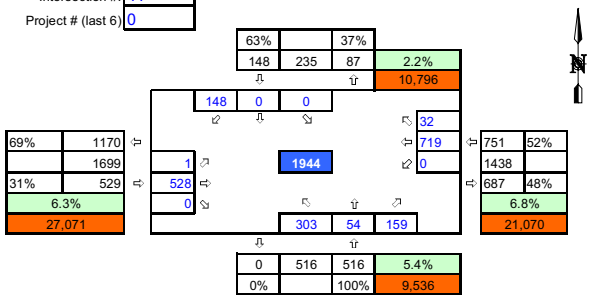
Note: Traffic volumes were collected by Accurate Video Counts during May 2015.





Int 41 MID Peak Volumes

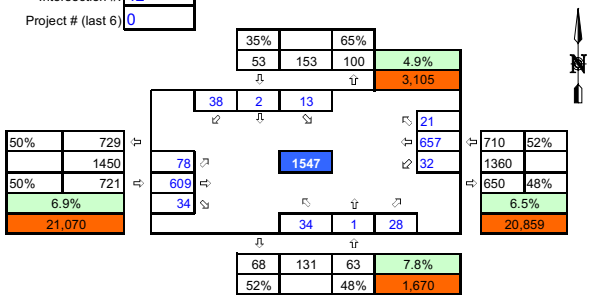
Scenario:	**Existing Conditions**
N/S Street:	**University Center Lane/I-5 NB Off**
E/W Street:	**Nobel Drive**
Intersection #:	41
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

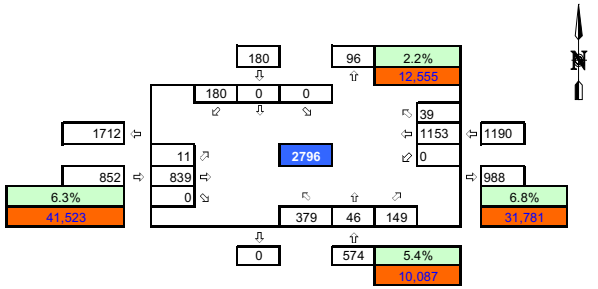
Int 42 MID Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Caminito Plaza Centro**
E/W Street:	**Nobel Drive**
Intersection #:	42
Project # (last 6)	0

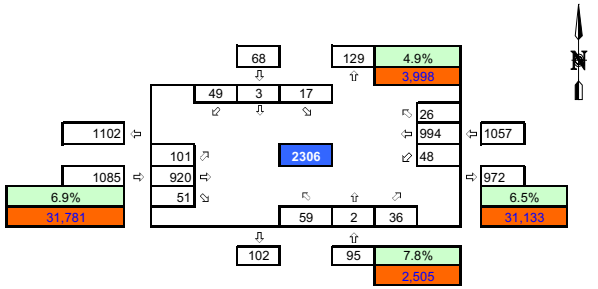


Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**University Center Lane/I-5 NB Off**
E/W Street:	**Nobel Drive**



Scenario:	**Horizon Year Conditions**
N/S Street:	**Caminito Plaza Centro**
E/W Street:	**Nobel Drive**

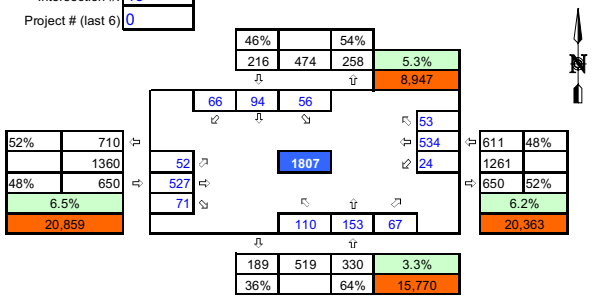


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

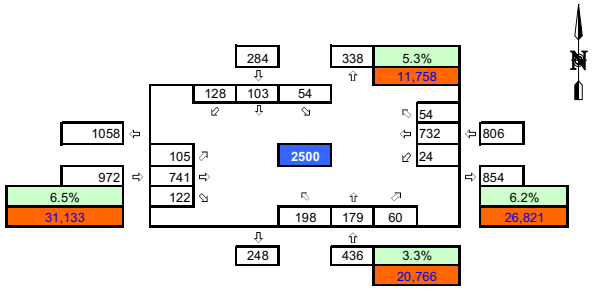
Int 43 MID Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Lebon Drive**
E/W Street: **Nobel Drive**
Intersection #: 43
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Lebon Drive**
E/W Street: **Nobel Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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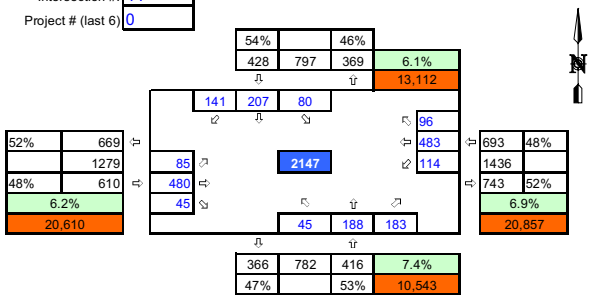
Int 43 MID

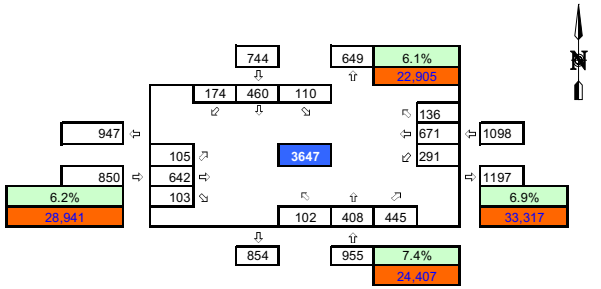
Int 44 MID Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Regents Road**
E/W Street: **Nobel Drive**
Intersection #: 44
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Regents Road**
E/W Street: **Nobel Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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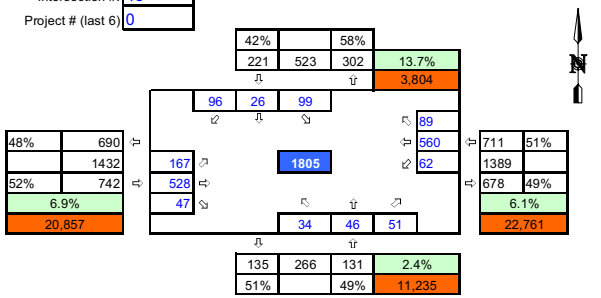
Int 44 MID

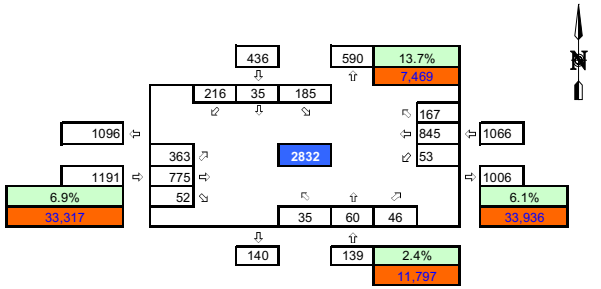
Int 45 MID Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Costa Verde Boulevard/Cargill Ave**
E/W Street: **Cargill Ave / Nobel Drive**
Intersection #: 45
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Costa Verde Boulevard/Cargill Ave**
E/W Street: **Cargill Ave / Nobel Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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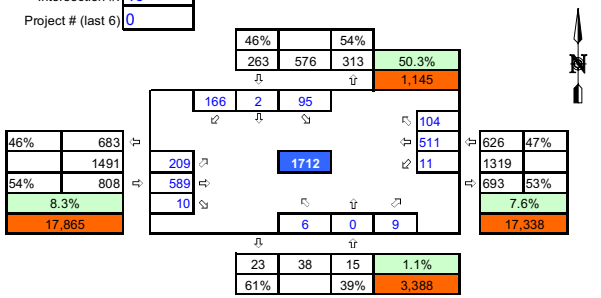
Int 45 MID

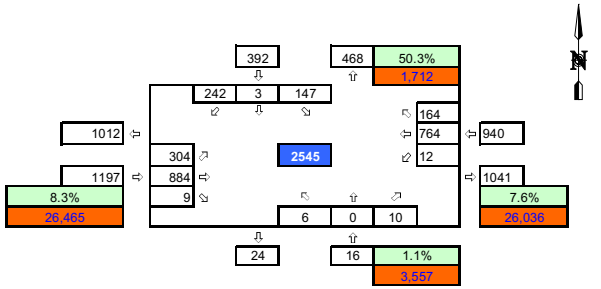
Int 46 MID Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Lombard Place**
E/W Street: **Nobel Drive**
Intersection #: 46
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Lombard Place**
E/W Street: **Nobel Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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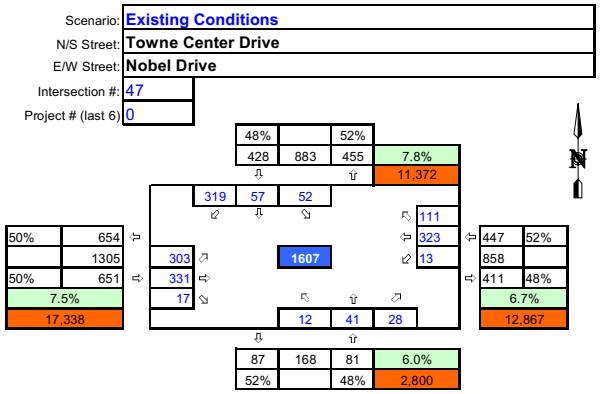
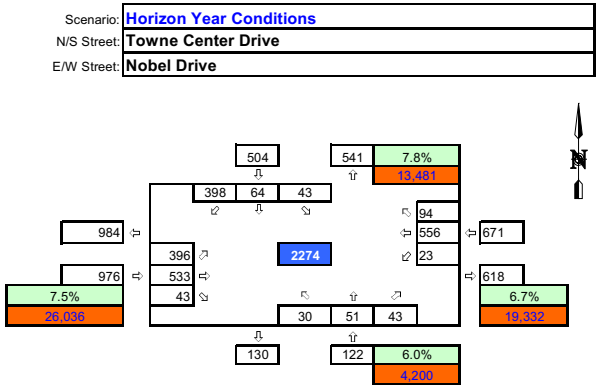
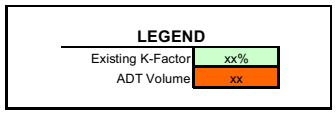
Int 46 MID

Int 47 MID Peak Volumes

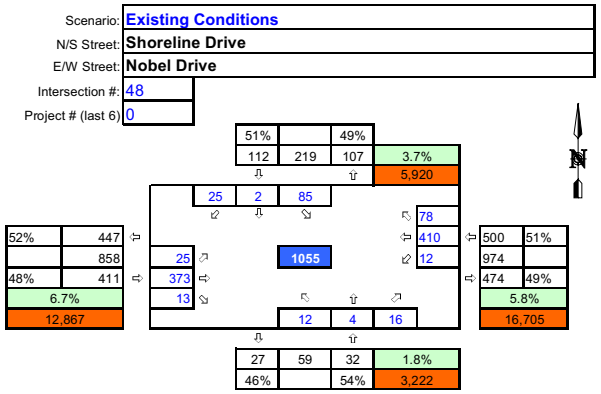


Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

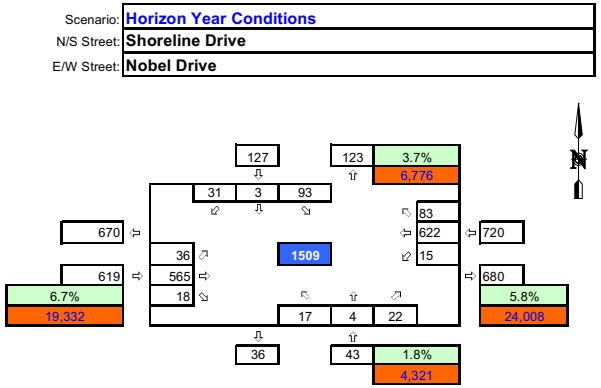


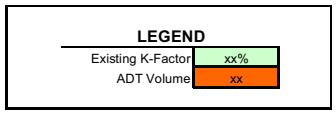


Int 48 MID Peak Volumes



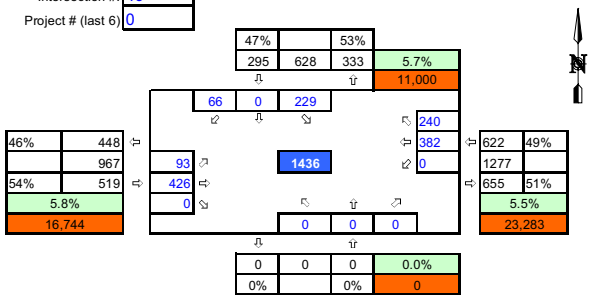
Note: Traffic volumes were collected by Accurate Video Counts during May 2015.





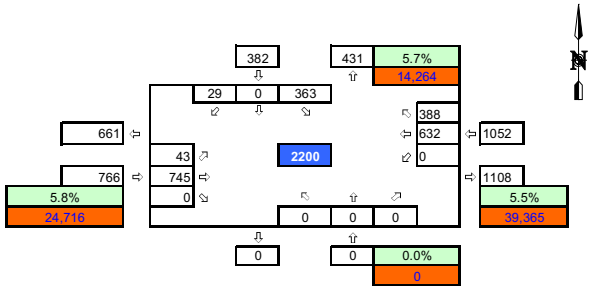
Int 49 MID Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Judicial Drive**
E/W Street:	**Nobel Drive**
Intersection #:	49
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Judicial Drive**
E/W Street:	**Nobel Drive**

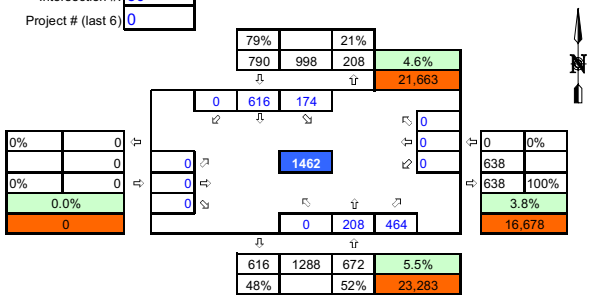


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

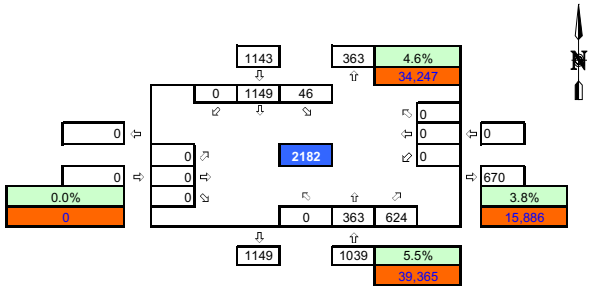
Int 50 MID Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Nobel Drive**
E/W Street:	**I-805 SB On-Ramp**
Intersection #:	50
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

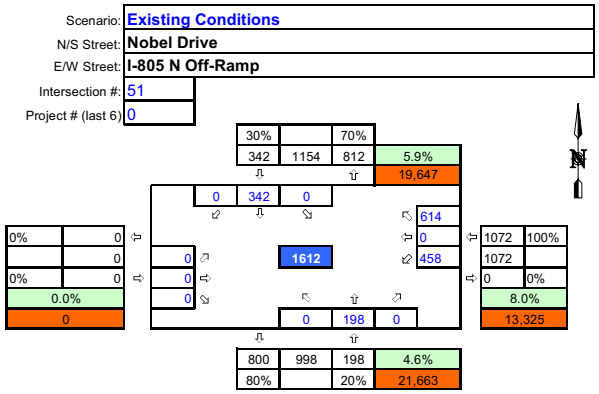
Scenario:	**Horizon Year Conditions**
N/S Street:	**Nobel Drive**
E/W Street:	**I-805 SB On-Ramp**



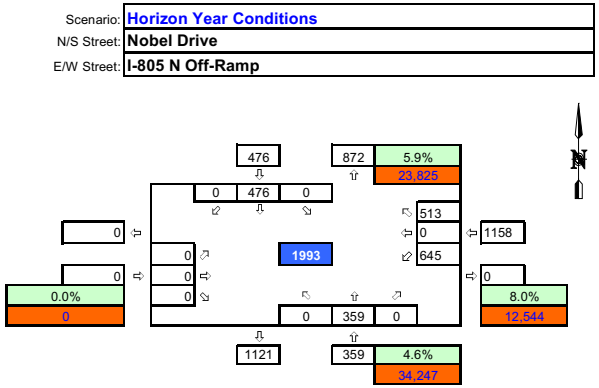
LEGEND

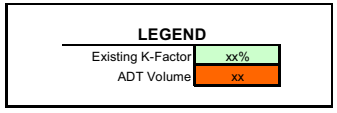
Existing K-Factor	xx%
ADT Volume	xx

Int 51 MID Peak Volumes

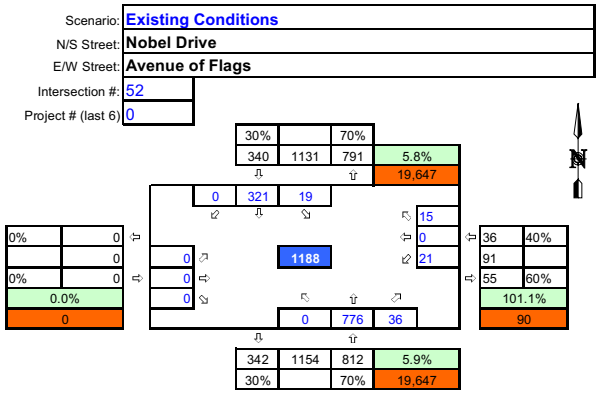


Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

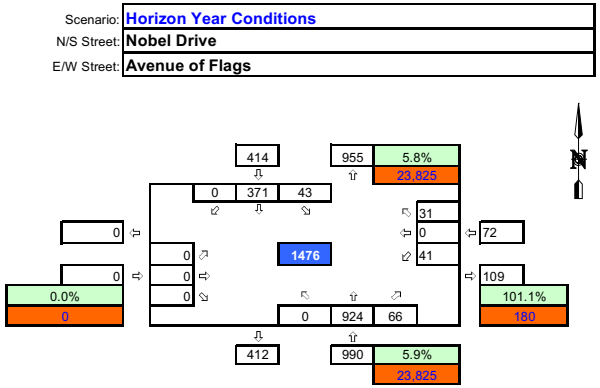


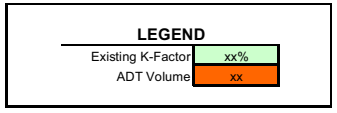


Int 52 MID Peak Volumes



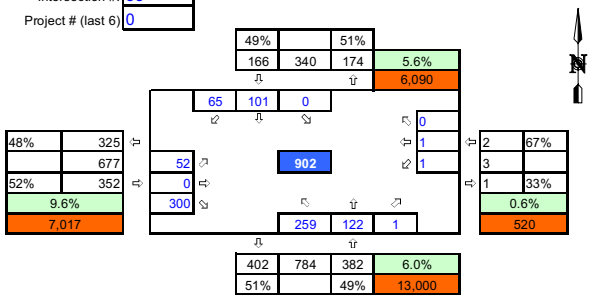
Note: Traffic volumes were collected by Accurate Video Counts during May 2015.





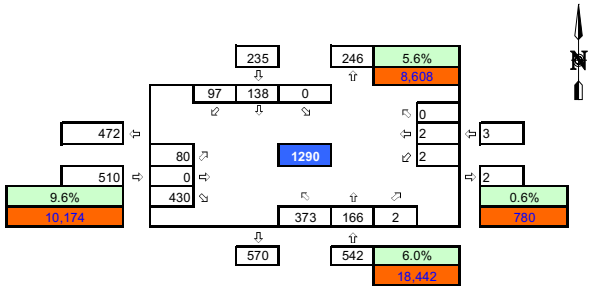
Int 53 MID Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Regents Road**
E/W Street: **Health Science Drive / County Day Ln**
Intersection #: 53
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Regents Road**
E/W Street: **Health Science Drive / County Day Ln**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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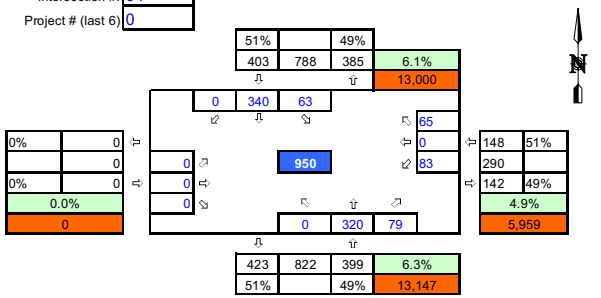
Int 53 MID

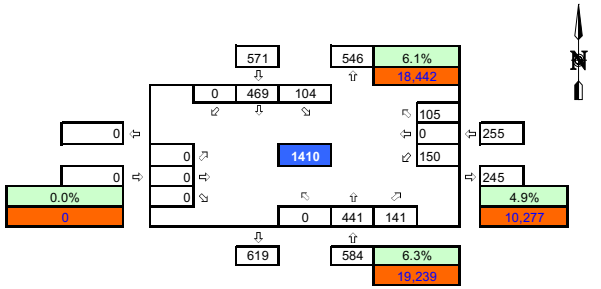
Int 54 MID Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Regents Road**
E/W Street: **Eastgate Mall**
Intersection #: 54
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Regents Road**
E/W Street: **Eastgate Mall**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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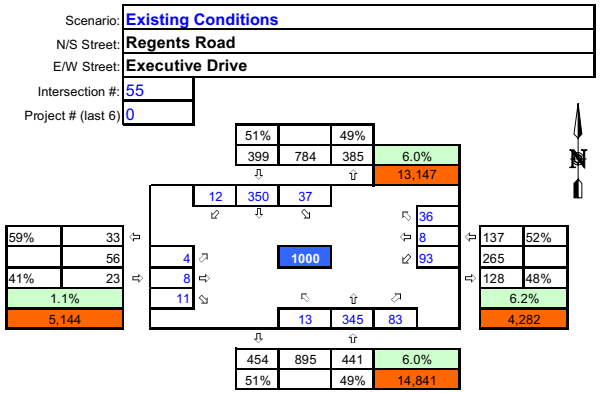
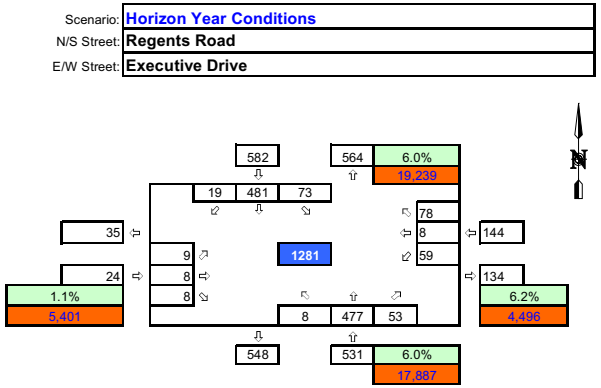
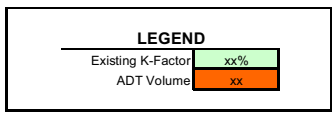
Int 54 MID

Int 55 MID Peak Volumes

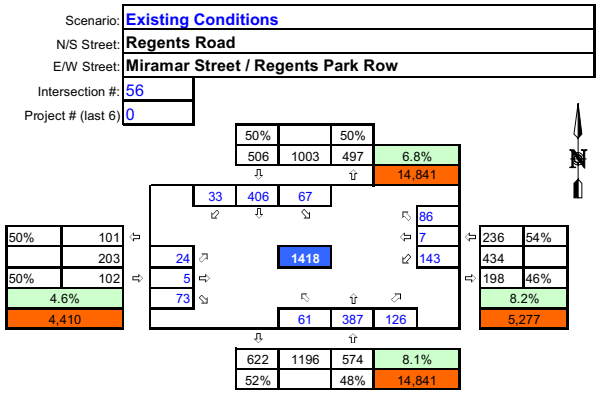


Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

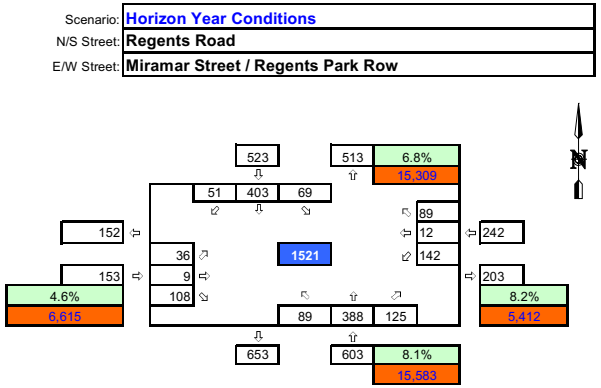


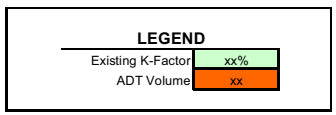


Int 56 MID Peak Volumes



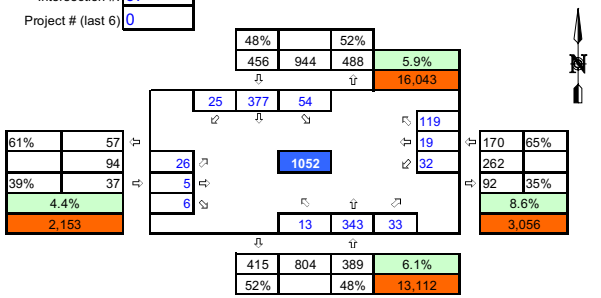
Note: Traffic volumes were collected by Accurate Video Counts during May 2015.





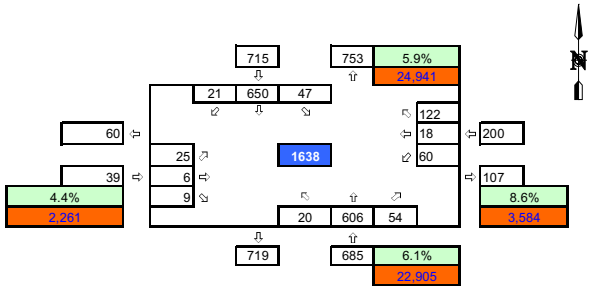
Int 57 MID Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Regents Road**
E/W Street: **Plaza De Palmas**
Intersection #: 57
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Regents Road**
E/W Street: **Plaza De Palmas**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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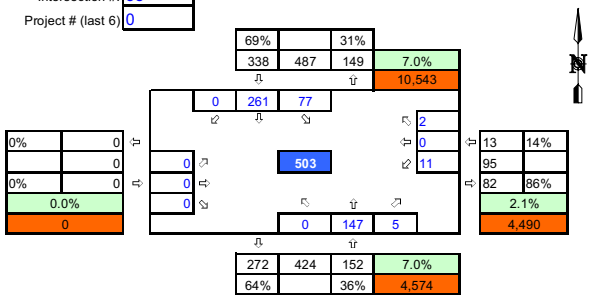
Int 57 MID

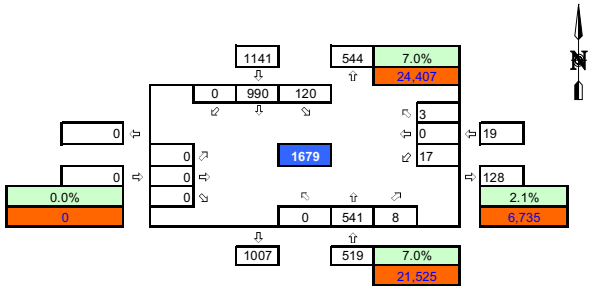
Int 58 MID Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Regents Road**
E/W Street: **Berino Court**
Intersection #: 58
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Regents Road**
E/W Street: **Berino Court**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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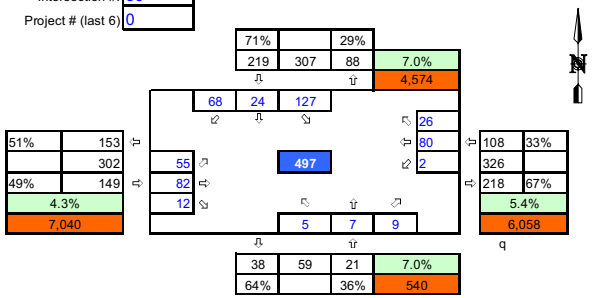
Int 58 MID

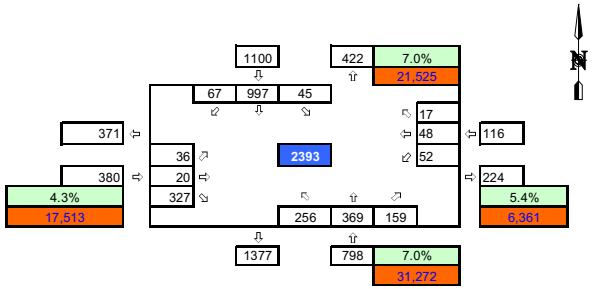
Int 59 MID Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Regents Road**
E/W Street: **Arriba Street**
Intersection #: 59
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Regents Road**
E/W Street: **Arriba Street**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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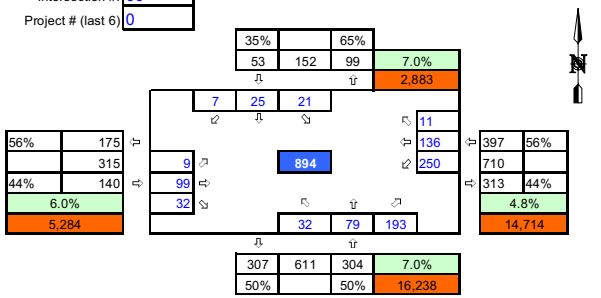
Int 59 MID

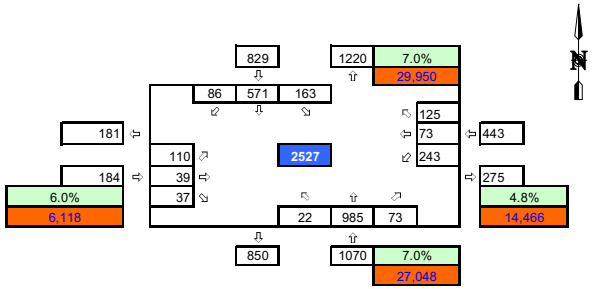
Int 60 MID Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Regents Road**
E/W Street: **Governor Drive**
Intersection #: 60
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Regents Road**
E/W Street: **Governor Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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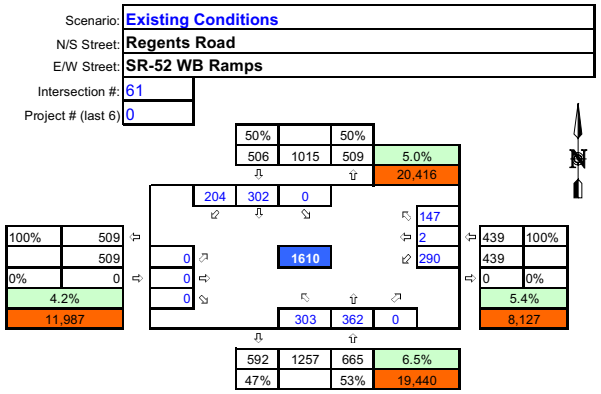
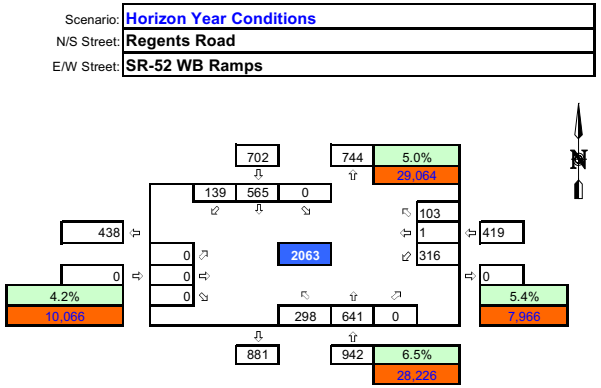
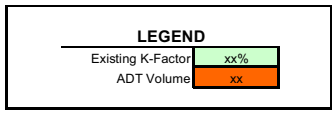
Int 60 MID

Int 61 MID Peak Volumes

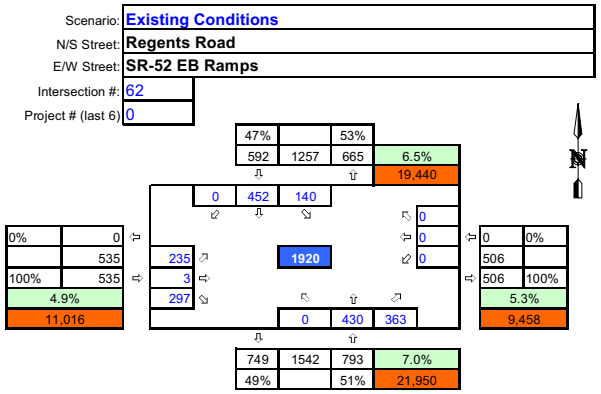


Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

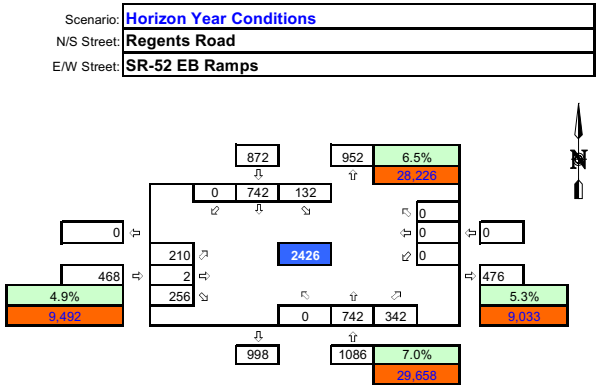


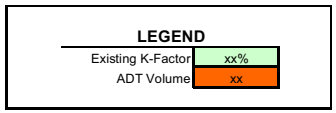


Int 62 MID Peak Volumes



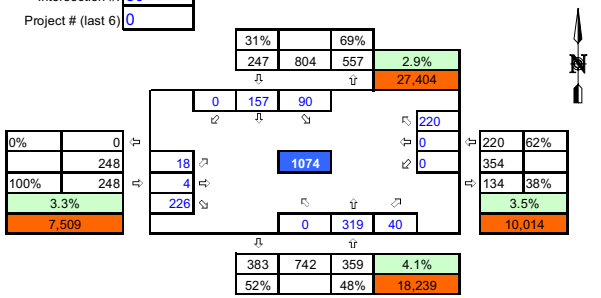
Note: Traffic volumes were collected by Accurate Video Counts during May 2015.





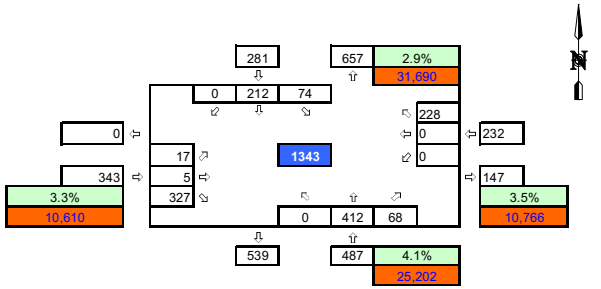
Int 80 MID Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Gilman Drive**
E/W Street:	**La Jolla Village Drive EB**
Intersection #:	80
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Gilman Drive**
E/W Street:	**La Jolla Village Drive EB**

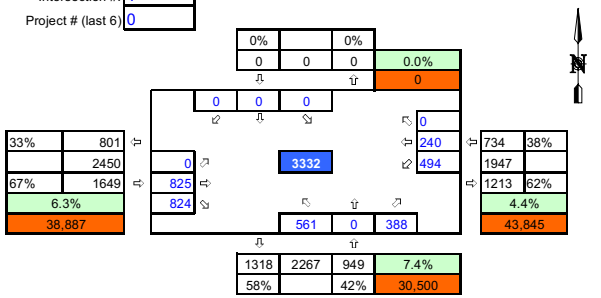


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

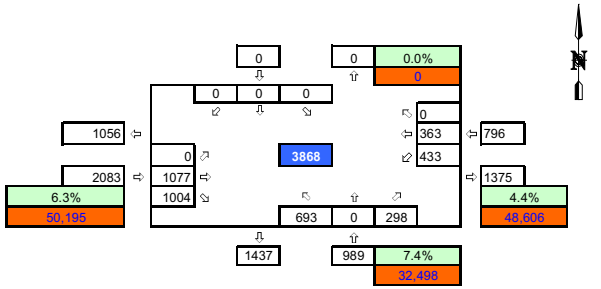
Int 1 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**N. Torrey Pines Road**
E/W Street:	**Genesee Avenue**
Intersection #:	1
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**N. Torrey Pines Road**
E/W Street:	**Genesee Avenue**

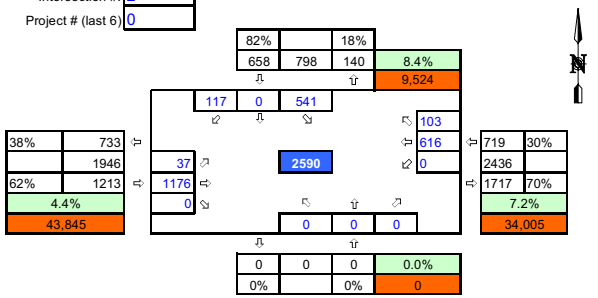


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

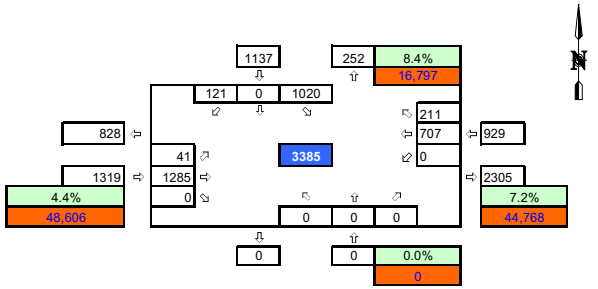
Int 2 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**John Hopkins Drive (S)**
E/W Street:	**Genesee Avenue**
Intersection #:	2
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**John Hopkins Drive (S)**
E/W Street:	**Genesee Avenue**



LEGEND

Existing K-Factor	xx%
ADT Volume	xx

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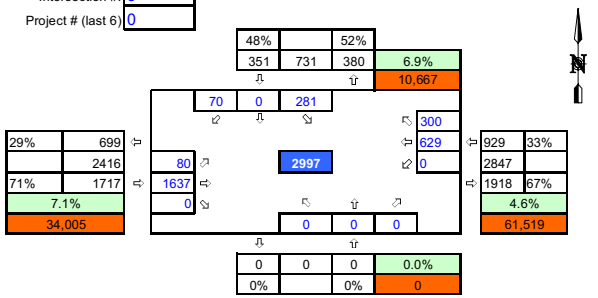
Int 2 PM

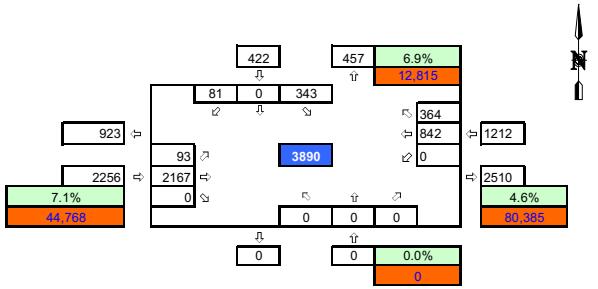
Int 3 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Science Center Drive**
E/W Street:	**Genesee Avenue**
Intersection #:	3
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Science Center Drive**
E/W Street:	**Genesee Avenue**



LEGEND

Existing K-Factor	xx%
ADT Volume	xx

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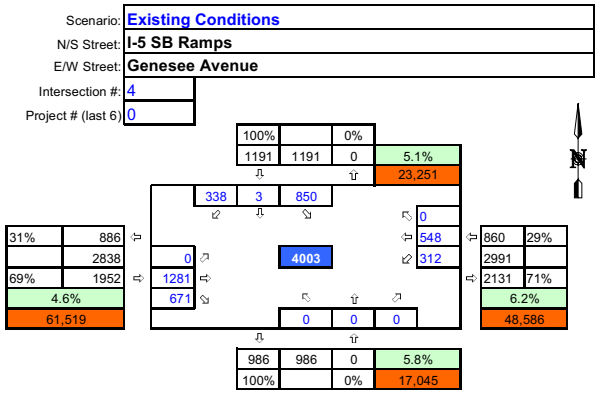
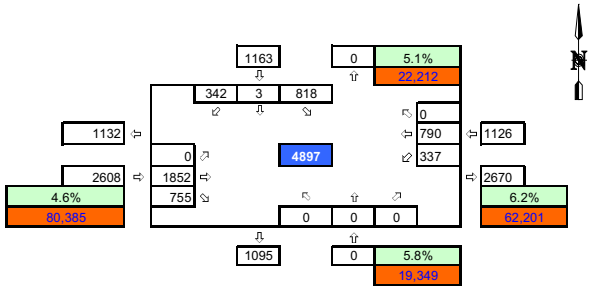
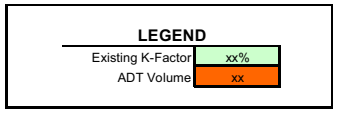
Int 3 PM

Int 4 PM Peak Volumes



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.





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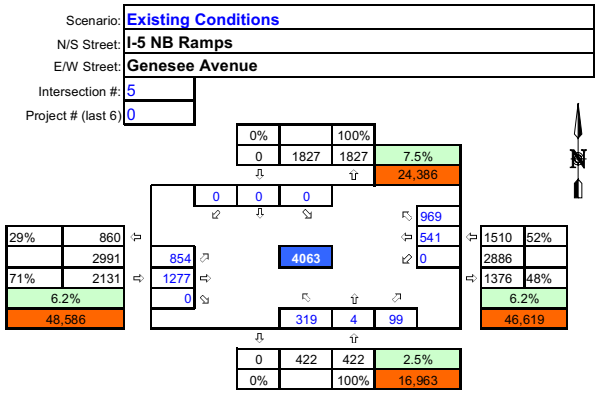
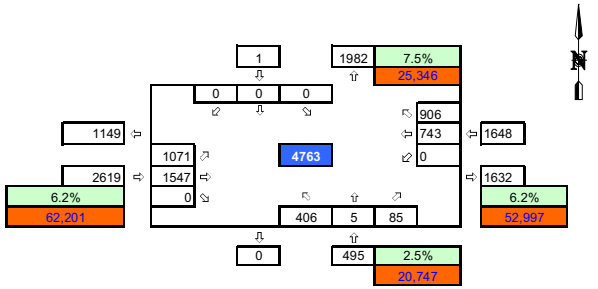
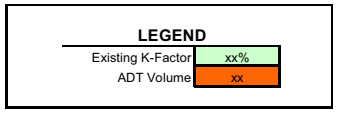
Int 4 PM

Int 5 PM Peak Volumes



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.





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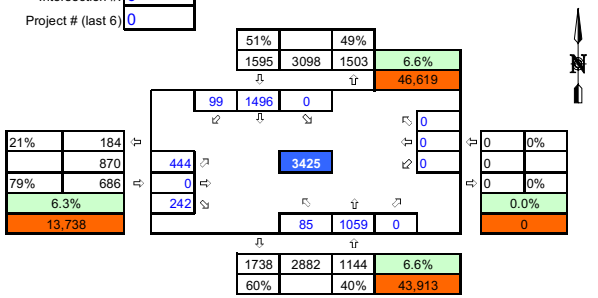
Int 5 PM

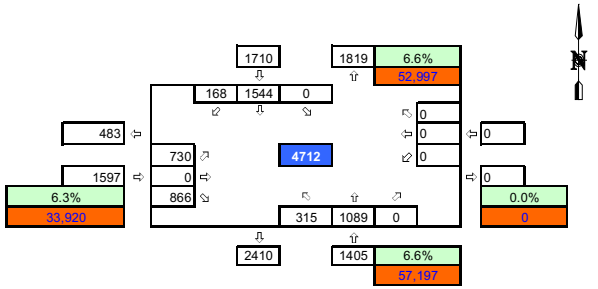
Int 6 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**Scripps Hospital**
Intersection #:	6
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**Scripps Hospital**

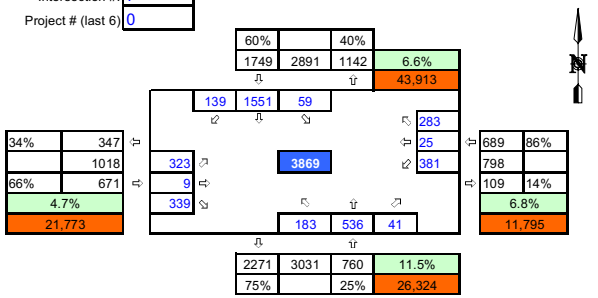


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

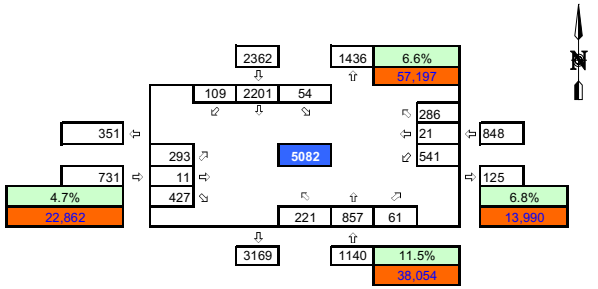
Int 7 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**Campus Point Drive**
Intersection #:	7
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**Campus Point Drive**

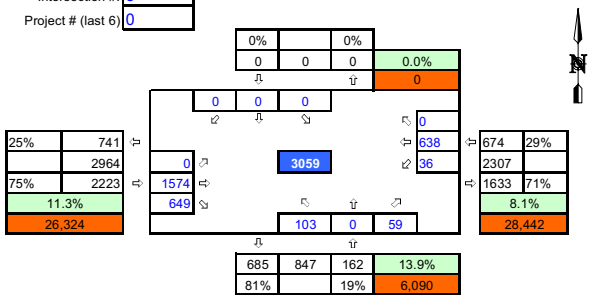


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

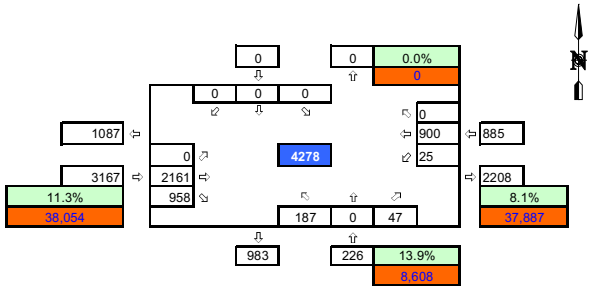
Int 8 PM Peak Volumes

Scenario:	Existing Conditions
N/S Street:	Regents Road
E/W Street:	Genesee Avenue
Intersection #:	8
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	Horizon Year Conditions
N/S Street:	Regents Road
E/W Street:	Genesee Avenue

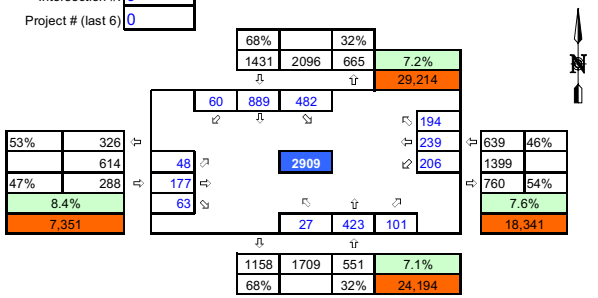


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

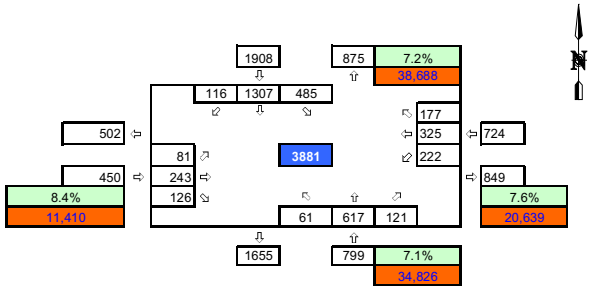
Int 9 PM Peak Volumes

Scenario:	Existing Conditions
N/S Street:	Genesee Avenue
E/W Street:	Eastgate Mall
Intersection #:	9
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	Horizon Year Conditions
N/S Street:	Genesee Avenue
E/W Street:	Eastgate Mall

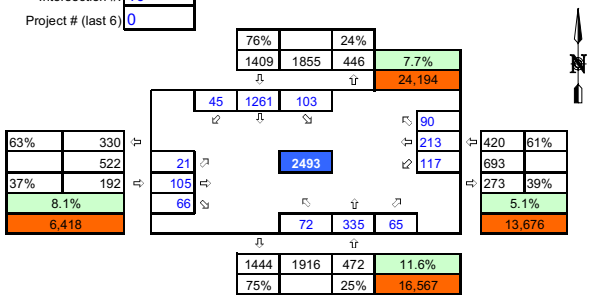


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

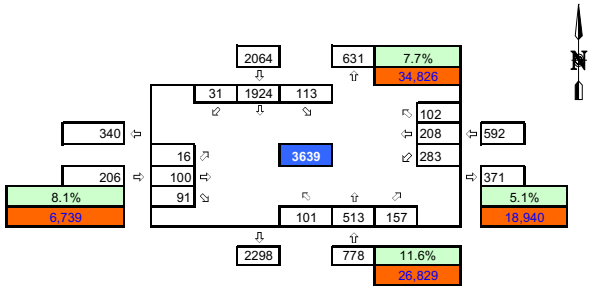
Int 10 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Executive Drive**
Intersection #: 10
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Executive Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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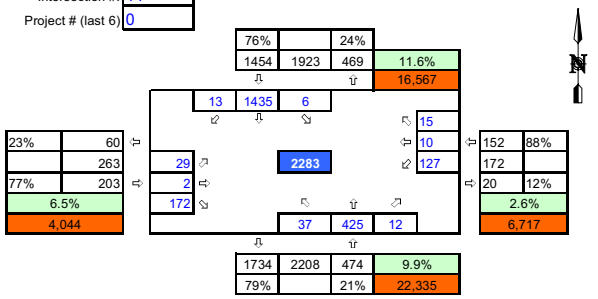
Int 10 PM

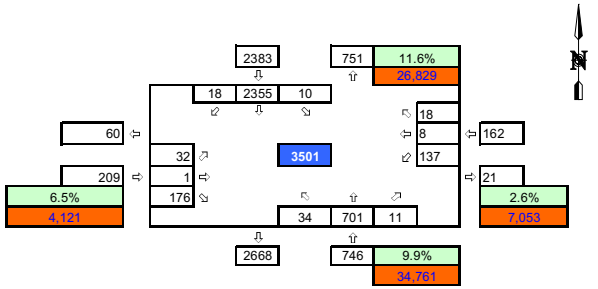
Int 11 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Executive Square**
Intersection #: 11
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Executive Square**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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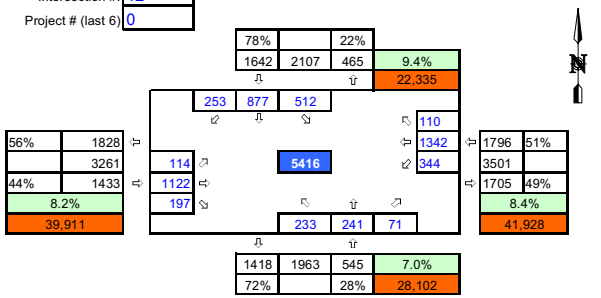
Int 11 PM

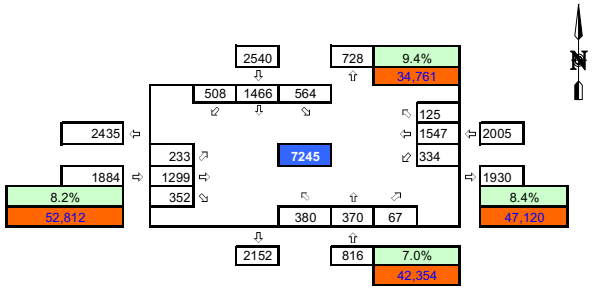
Int 12 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **La Jolla Village Drive**
Intersection #: 12
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

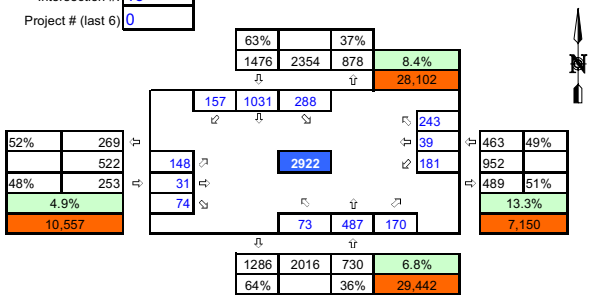
Scenario: **Horizon Year Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **La Jolla Village Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

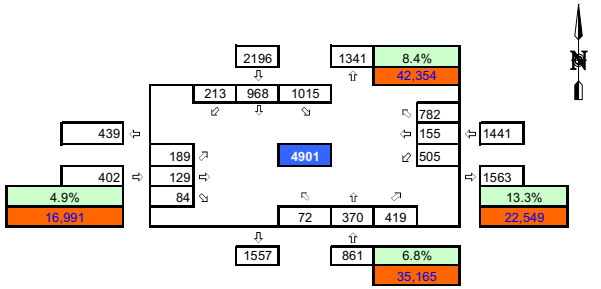
Int 13 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Esplanade Court**
Intersection #: 13
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

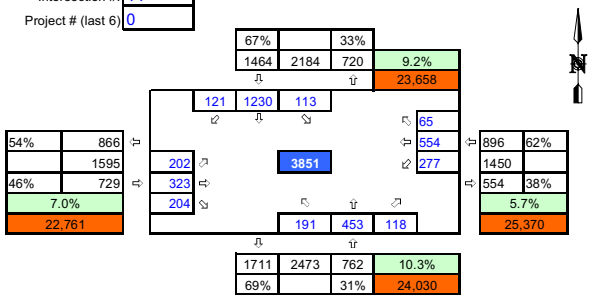
Scenario: **Horizon Year Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Esplanade Court**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

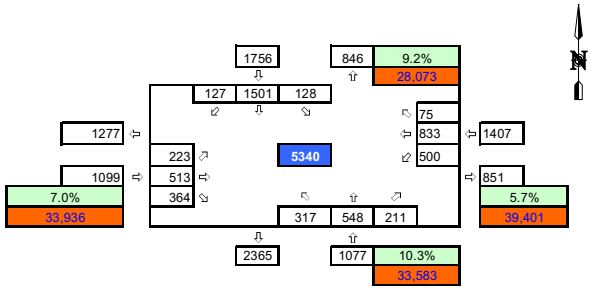
Int 14 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Nobel Drive**
Intersection #: 14
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Nobel Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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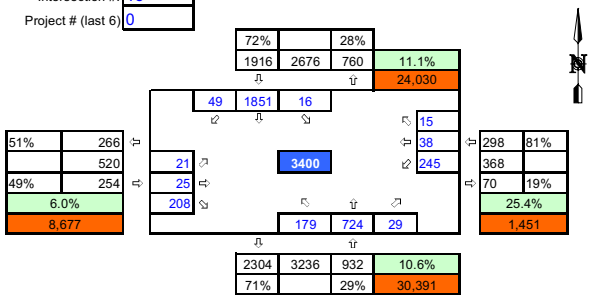
Int 14 PM

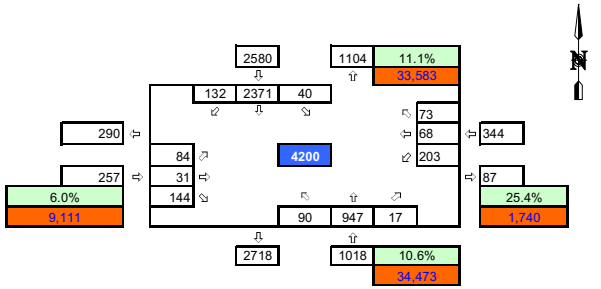
Int 15 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Decoro Street**
Intersection #: 15
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Decoro Street**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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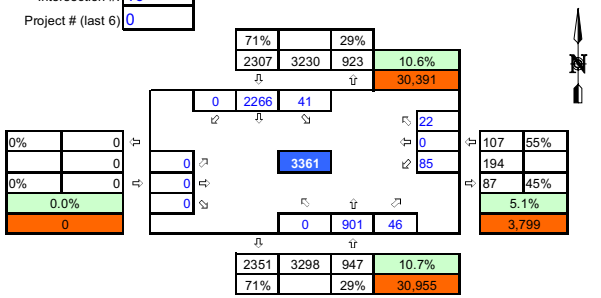
Int 15 PM

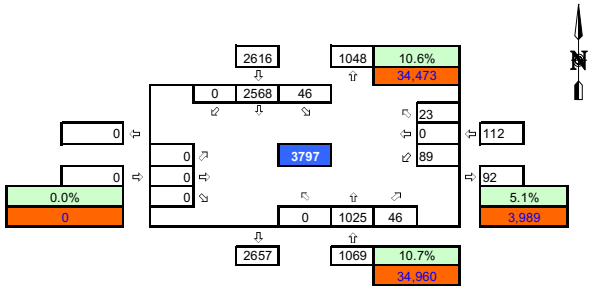
Int 16 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**Centurion Square**
Intersection #:	16
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**Centurion Square**

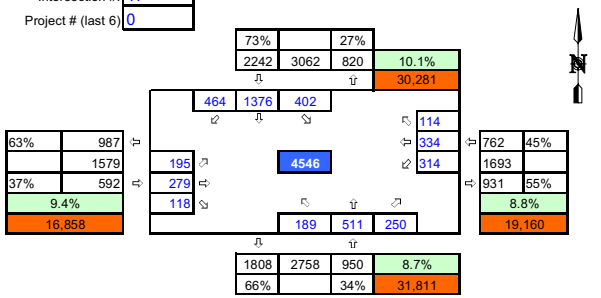


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

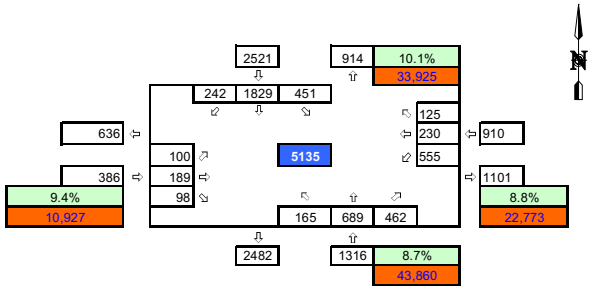
Int 17 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**Governor Drive**
Intersection #:	17
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**Governor Drive**

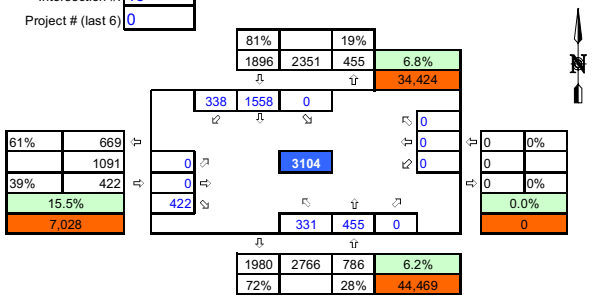


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

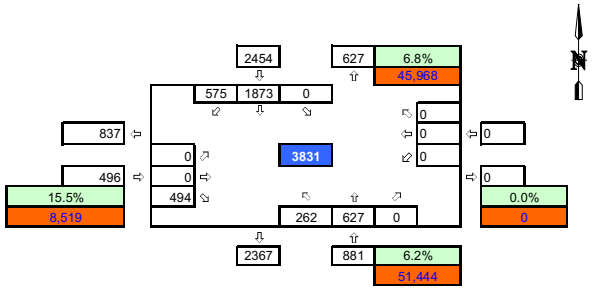
Int 18 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**SR-52 WB Ramps**
Intersection #:	18
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**SR-52 WB Ramps**



LEGEND

Existing K-Factor	xx%
ADT Volume	xx

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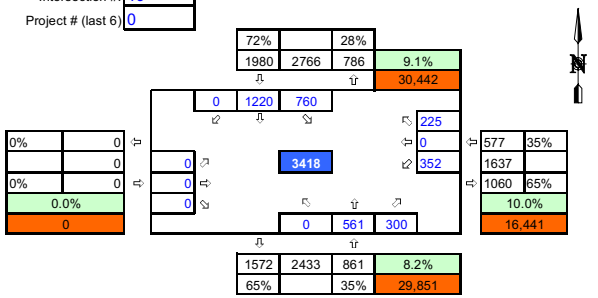
Int 18 PM

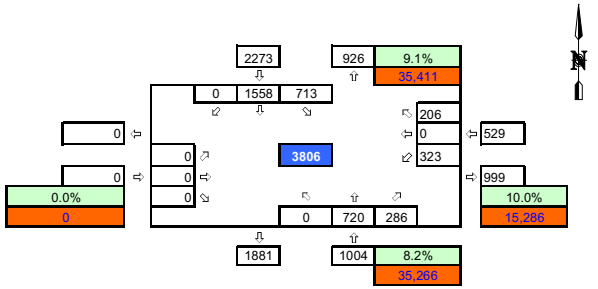
Int 19 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**SR-52 EB Ramps**
Intersection #:	19
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**SR-52 EB Ramps**



LEGEND

Existing K-Factor	xx%
ADT Volume	xx

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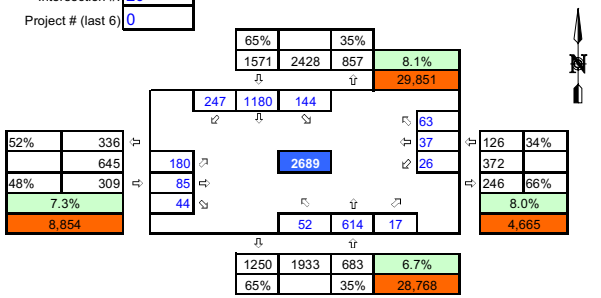
Int 19 PM

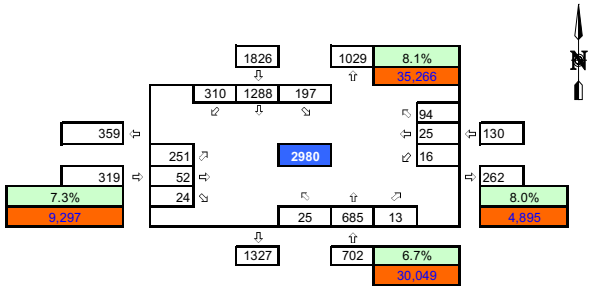
Int 20 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**Lehrer Drive / Appleton Street**
Intersection #:	20
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**Lehrer Drive / Appleton Street**

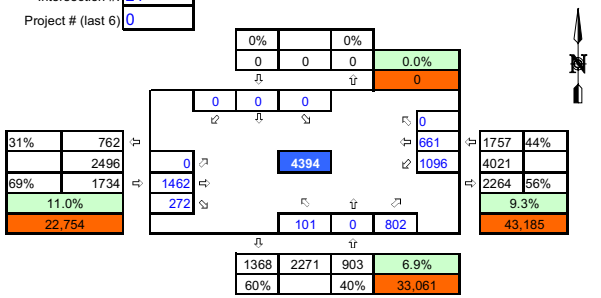


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

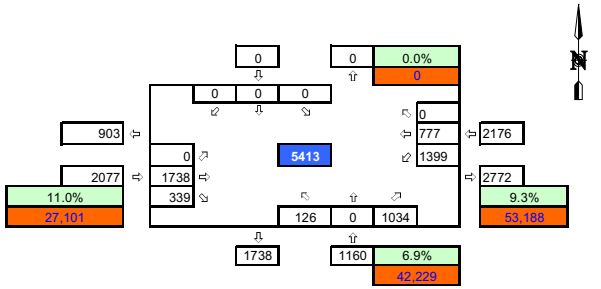
Int 21 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Torrey Pines Road**
E/W Street:	**La Jolla Village Drive**
Intersection #:	21
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Torrey Pines Road**
E/W Street:	**La Jolla Village Drive**

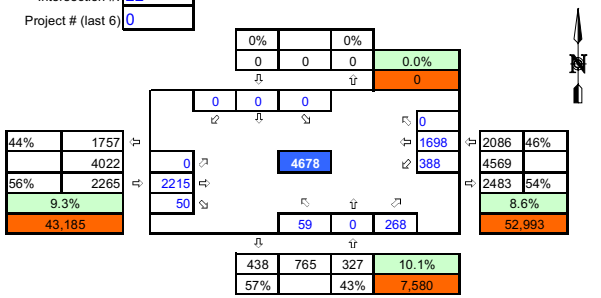


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

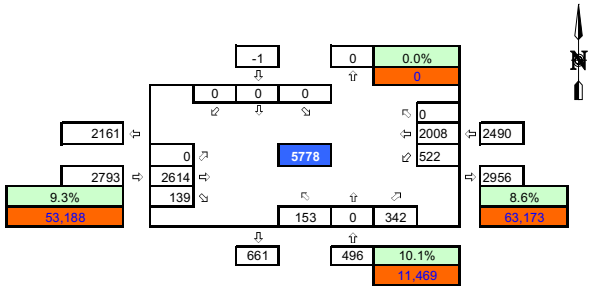
Int 22 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**La Jolla Scenic Drive**
E/W Street:	**La Jolla Village Drive**
Intersection #:	22
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**La Jolla Scenic Drive**
E/W Street:	**La Jolla Village Drive**

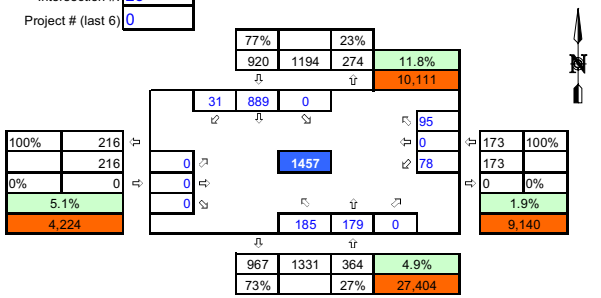


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

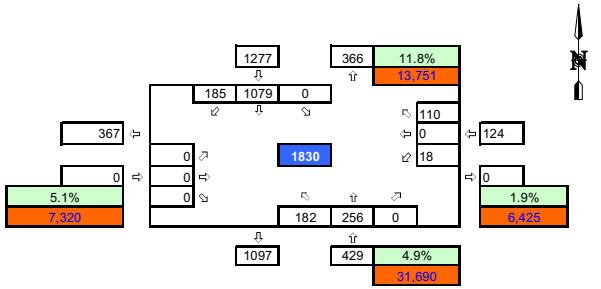
Int 23 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Gillman Drive**
E/W Street:	**La Jolla Village Drive WB**
Intersection #:	23
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Gillman Drive**
E/W Street:	**La Jolla Village Drive WB**

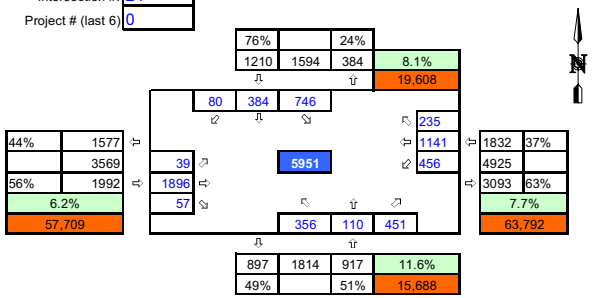


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

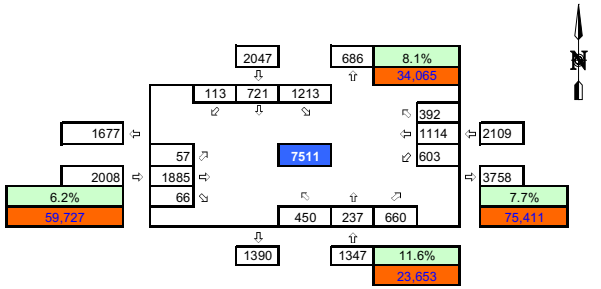
Int 24 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Villa La Jolla Drive**
E/W Street: **La Jolla Village Drive**
Intersection #: 24
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Villa La Jolla Drive**
E/W Street: **La Jolla Village Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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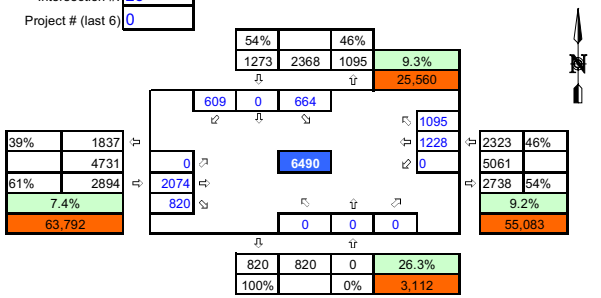
Int 24 PM

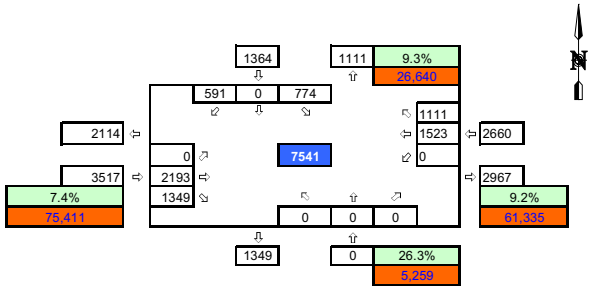
Int 25 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **I-5 SB Off-Ramps**
E/W Street: **La Jolla Village Drive**
Intersection #: 25
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **I-5 SB Off-Ramps**
E/W Street: **La Jolla Village Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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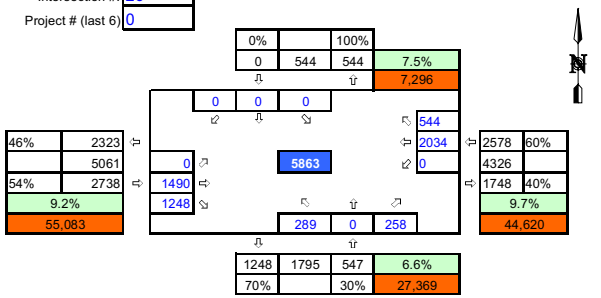
Int 25 PM

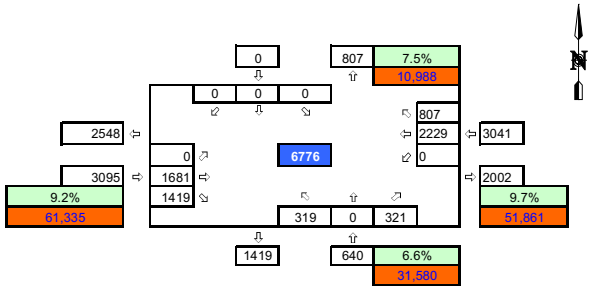
Int 26 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**I-5 NB Off-Ramps**
E/W Street:	**La Jolla Village Drive**
Intersection #:	26
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**I-5 NB Off-Ramps**
E/W Street:	**La Jolla Village Drive**

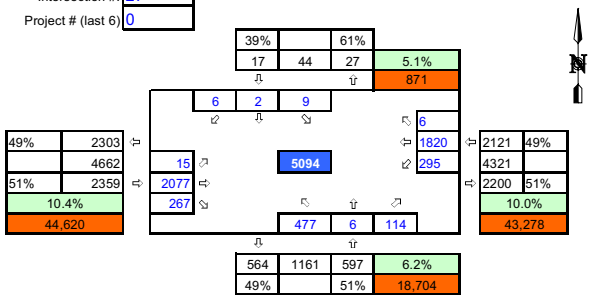


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

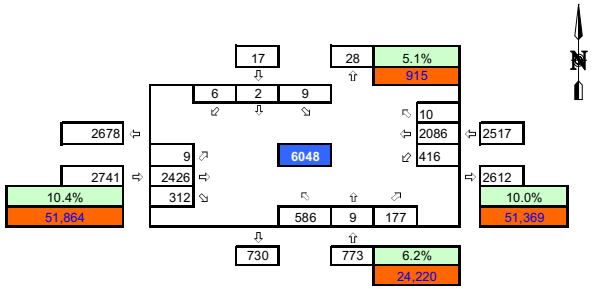
Int 27 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Lebon Drive**
E/W Street:	**La Jolla Village Drive**
Intersection #:	27
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Lebon Drive**
E/W Street:	**La Jolla Village Drive**

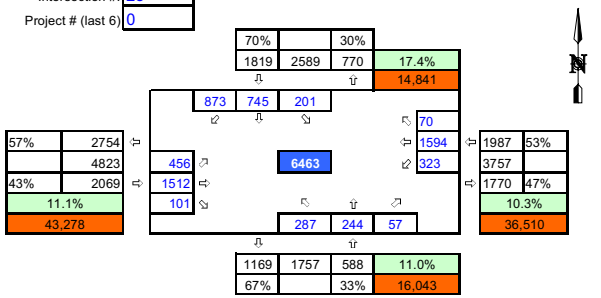


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

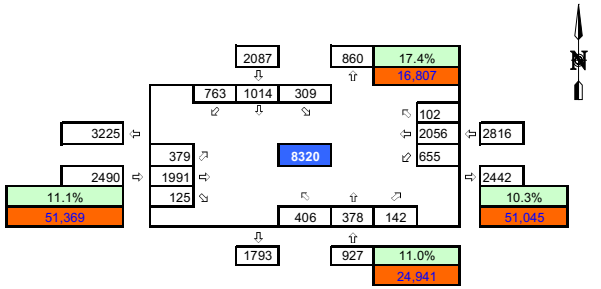
Int 28 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Regents Road**
E/W Street:	**La Jolla Village Drive**
Intersection #:	28
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Regents Road**
E/W Street:	**La Jolla Village Drive**

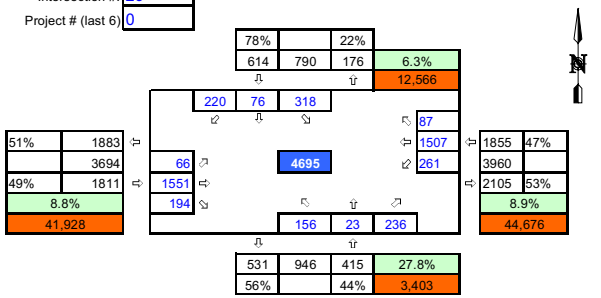


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

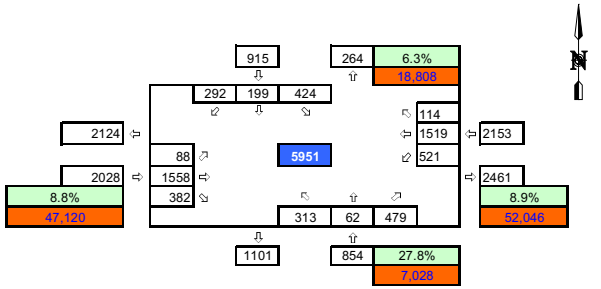
Int 29 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Executive Way**
E/W Street:	**La Jolla Village Drive**
Intersection #:	29
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Executive Way**
E/W Street:	**La Jolla Village Drive**

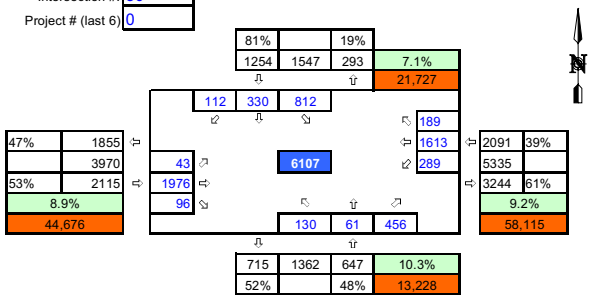


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

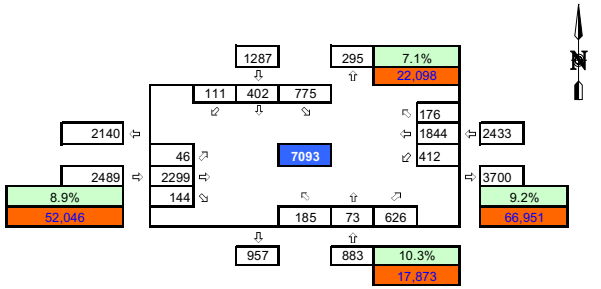
Int 30 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Towne Center Drive**
E/W Street: **La Jolla Village Drive**
Intersection #: 30
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Towne Center Drive**
E/W Street: **La Jolla Village Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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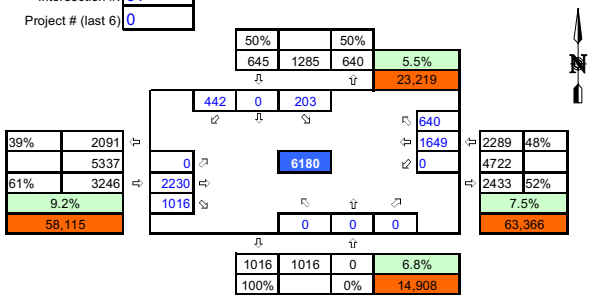
Int 30 PM

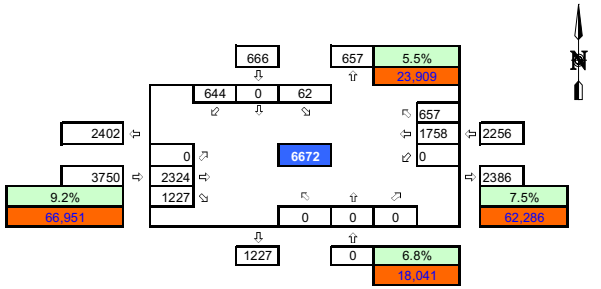
Int 31 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **I-805 SB Ramps**
E/W Street: **La Jolla Village Drive**
Intersection #: 31
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **I-805 SB Ramps**
E/W Street: **La Jolla Village Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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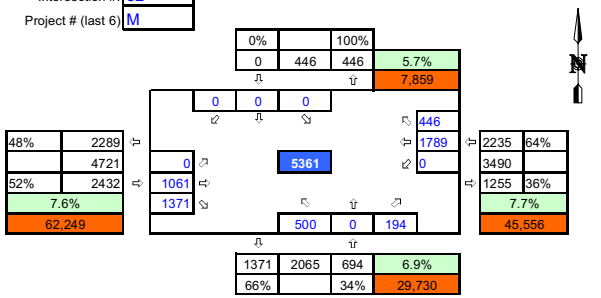
Int 31 PM

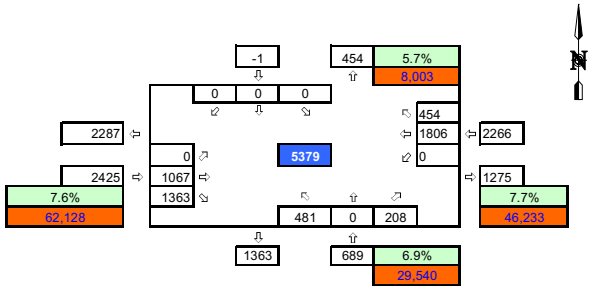
Int 32 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **I-805 NB Ramps**
E/W Street: **La Jolla Village Drive**
Intersection #: 32
Project # (last 6): M



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **I-805 NB Ramps**
E/W Street: **La Jolla Village Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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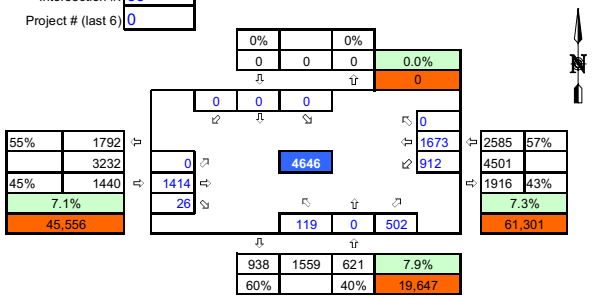
Int 32 PM

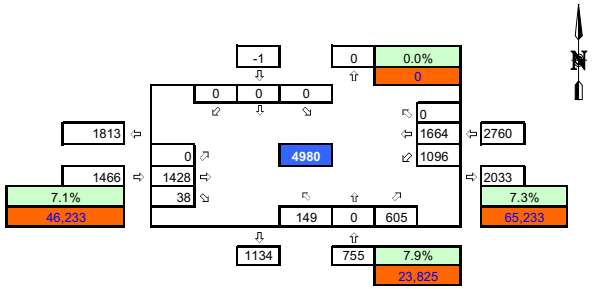
Int 33 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Noble Drive**
E/W Street: **Miramar Road**
Intersection #: 33
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Noble Drive**
E/W Street: **Miramar Road**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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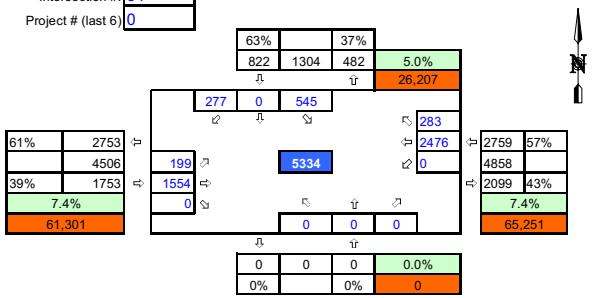
Int 33 PM

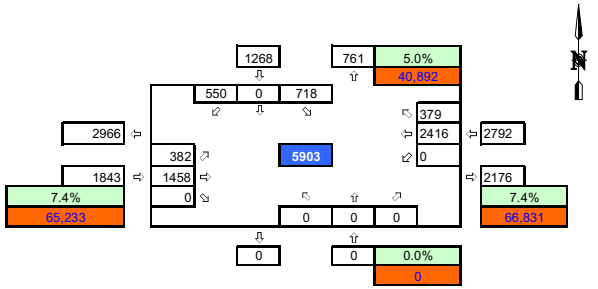
Int 34 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Eastgate Mall**
E/W Street: **Miramar Road**
Intersection #: 34
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Eastgate Mall**
E/W Street: **Miramar Road**



LEGEND

Existing K-Factor	xx%
ADT Volume	xx

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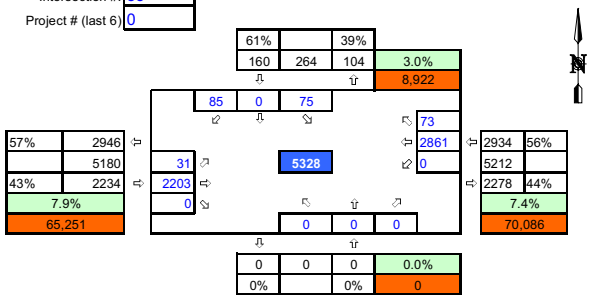
Int 34 PM

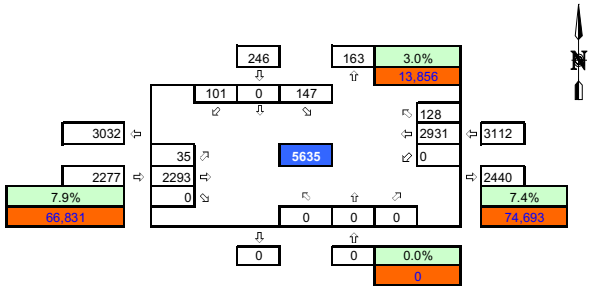
Int 35 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Miramar Mall**
E/W Street: **Miramar Road**
Intersection #: 35
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Miramar Mall**
E/W Street: **Miramar Road**



LEGEND

Existing K-Factor	xx%
ADT Volume	xx

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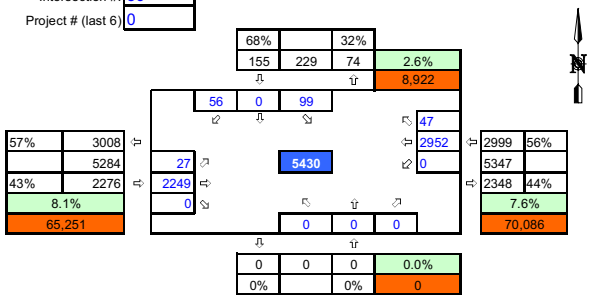
Int 35 PM

Int 36 PM Peak Volumes

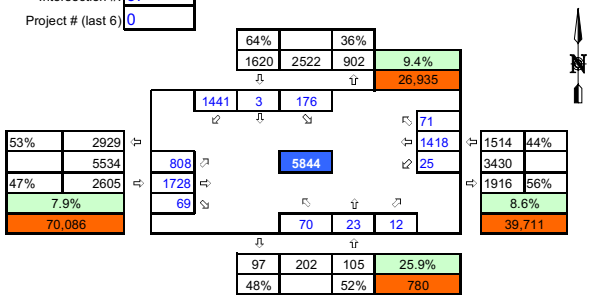
Scenario:	**Existing Conditions**
N/S Street:	**Miramar Place**
E/W Street:	**Miramar Road**
Intersection #:	36
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

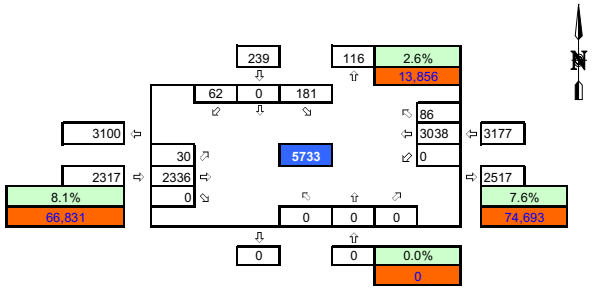
Int 37 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Camino Santa Fe**
E/W Street:	**Miramar Road**
Intersection #:	37
Project # (last 6)	0

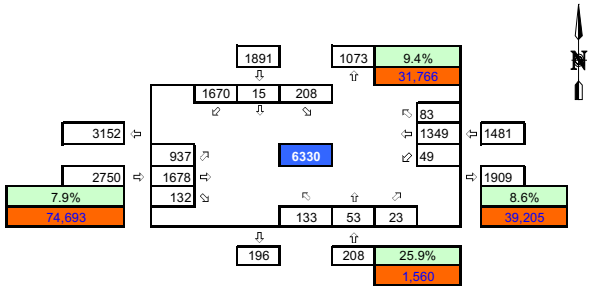


Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Miramar Place**
E/W Street:	**Miramar Road**



Scenario:	**Horizon Year Conditions**
N/S Street:	**Camino Santa Fe**
E/W Street:	**Miramar Road**

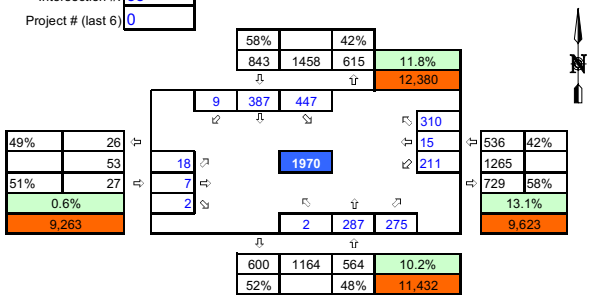


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

Int 38 PM Peak Volumes

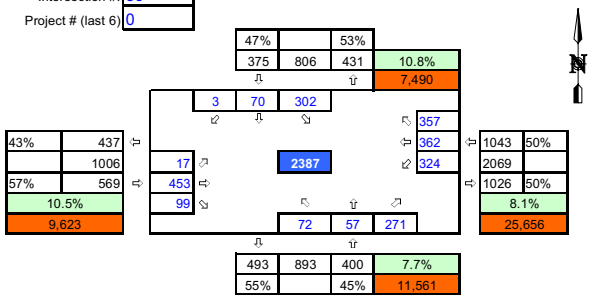
Scenario:	**Existing Conditions**
N/S Street:	**Villa La Jolla Drive**
E/W Street:	**Nobel Drive**
Intersection #:	38
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

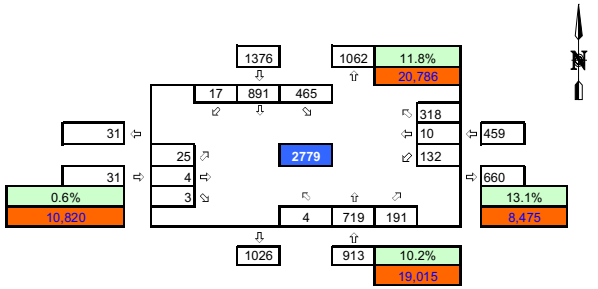
Int 39 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**La Jolla Village Square Driveway**
E/W Street:	**Nobel Drive**
Intersection #:	39
Project # (last 6)	0

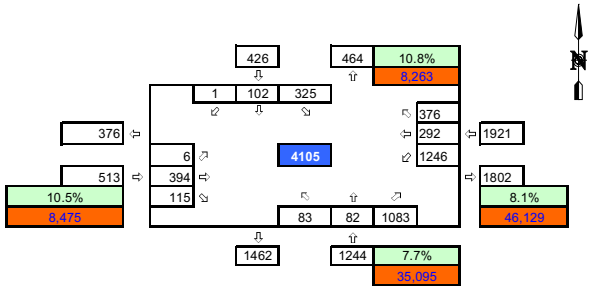


Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Villa La Jolla Drive**
E/W Street:	**Nobel Drive**



Scenario:	**Horizon Year Conditions**
N/S Street:	**La Jolla Village Square Driveway**
E/W Street:	**Nobel Drive**

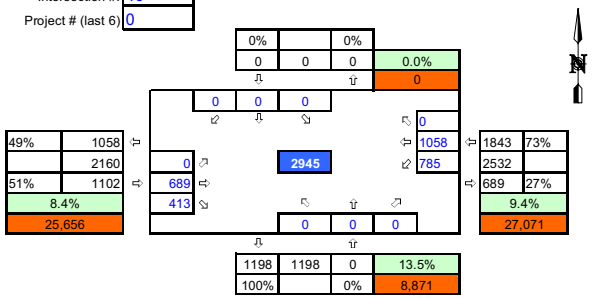


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

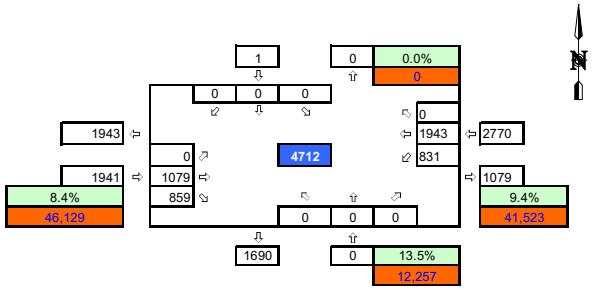
Int 40 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**I-5 SB On**
E/W Street:	**Nobel Drive**
Intersection #:	40
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**I-5 SB On**
E/W Street:	**Nobel Drive**

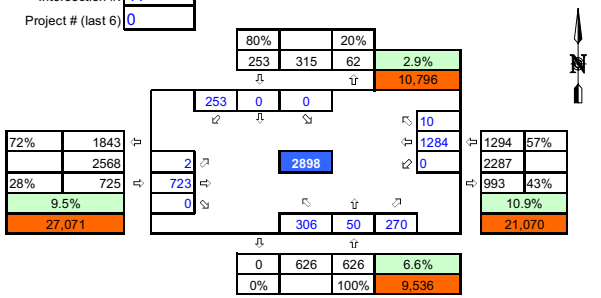


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

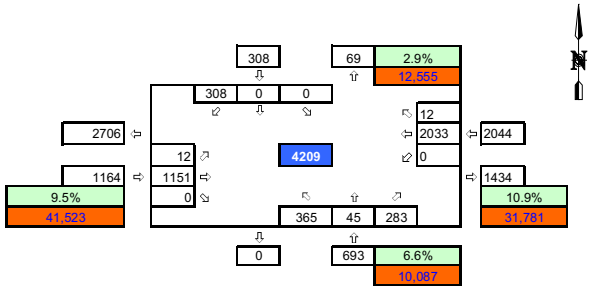
Int 41 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**University Center Lane/I-5 NB Off**
E/W Street:	**Nobel Drive**
Intersection #:	41
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**University Center Lane/I-5 NB Off**
E/W Street:	**Nobel Drive**

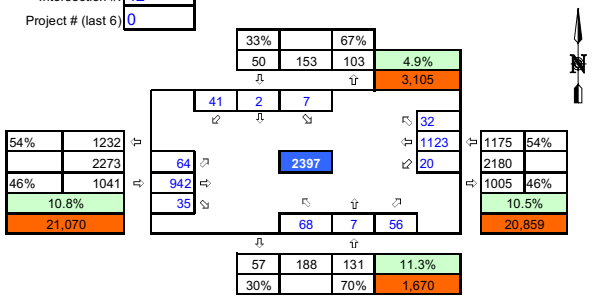


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

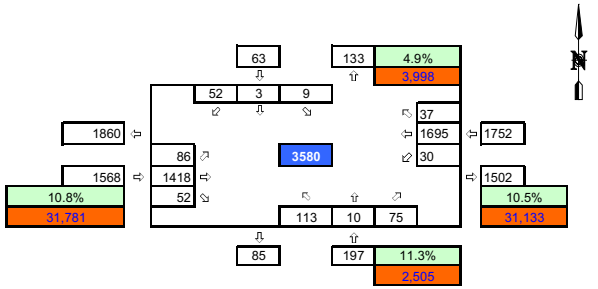
Int 42 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Caminito Plaza Centro**
E/W Street:	**Nobel Drive**
Intersection #:	42
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Caminito Plaza Centro**
E/W Street:	**Nobel Drive**



LEGEND

Existing K-Factor	xx%
ADT Volume	xx

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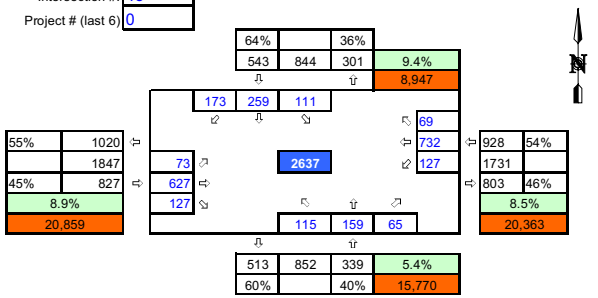
Int 42 PM

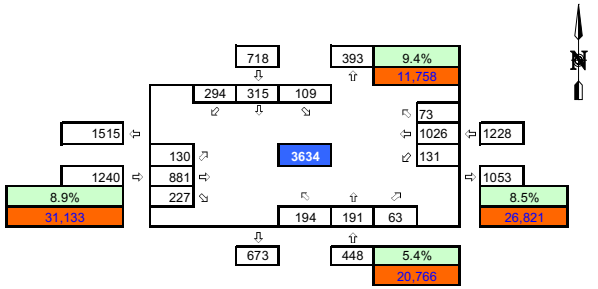
Int 43 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Lebon Drive**
E/W Street:	**Nobel Drive**
Intersection #:	43
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Lebon Drive**
E/W Street:	**Nobel Drive**



LEGEND

Existing K-Factor	xx%
ADT Volume	xx

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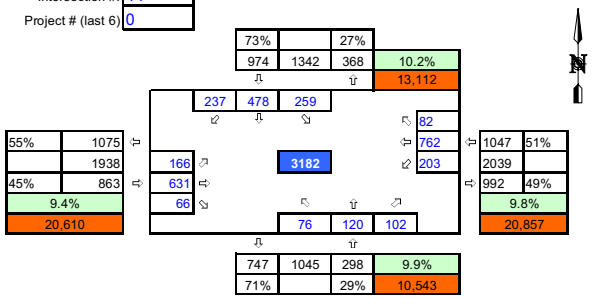
Int 43 PM

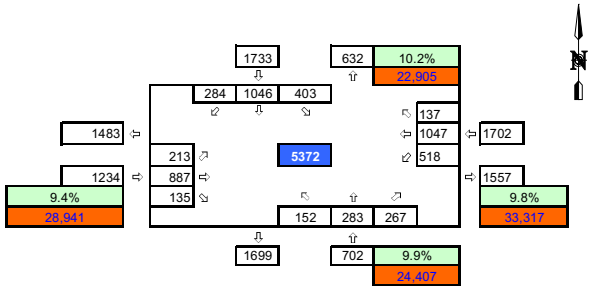
Int 44 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Regents Road**
E/W Street: **Nobel Drive**
Intersection #: 44
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Regents Road**
E/W Street: **Nobel Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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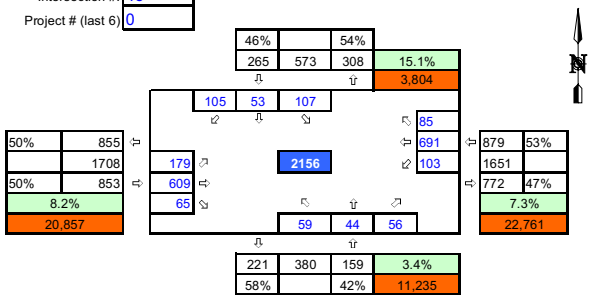
Int 44 PM

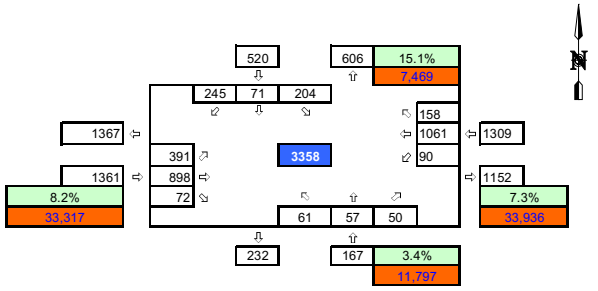
Int 45 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Costa Verde Boulevard/Cargill Ave**
E/W Street: **Cargill Ave / Nobel Drive**
Intersection #: 45
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Costa Verde Boulevard/Cargill Ave**
E/W Street: **Cargill Ave / Nobel Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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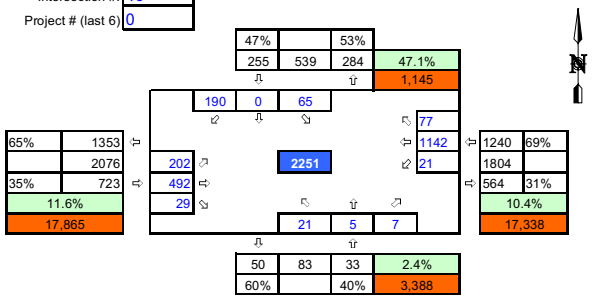
Int 45 PM

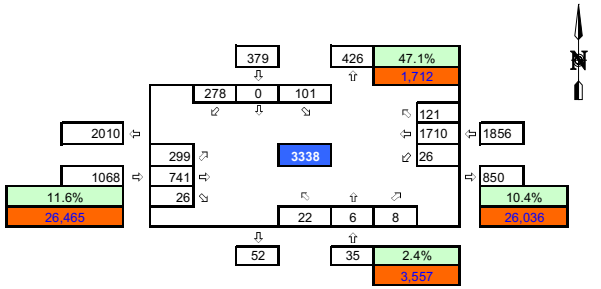
Int 46 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Lombard Place**
E/W Street: **Nobel Drive**
Intersection #: 46
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Lombard Place**
E/W Street: **Nobel Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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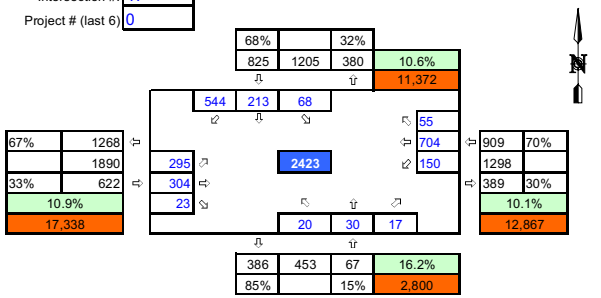
Int 46 PM

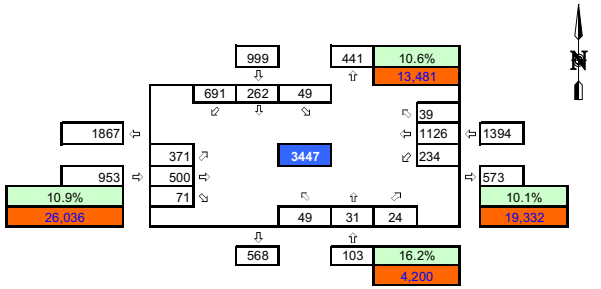
Int 47 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Towne Center Drive**
E/W Street: **Nobel Drive**
Intersection #: 47
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Towne Center Drive**
E/W Street: **Nobel Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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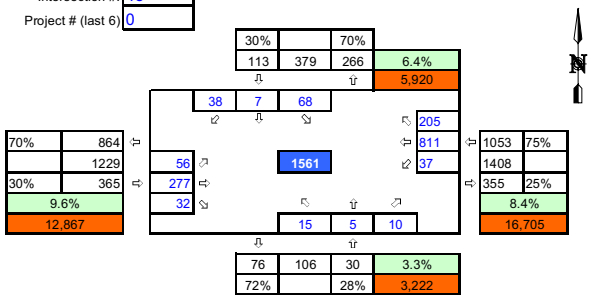
Int 47 PM

Int 48 PM Peak Volumes

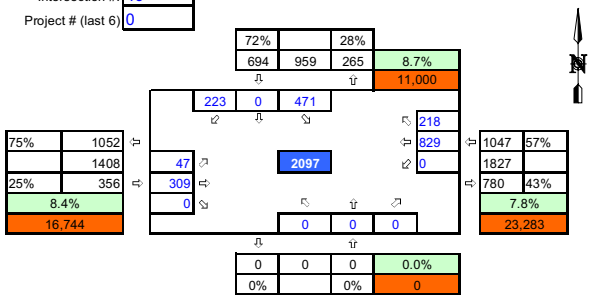
Scenario:	**Existing Conditions**
N/S Street:	**Shoreline Drive**
E/W Street:	**Nobel Drive**
Intersection #:	48
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

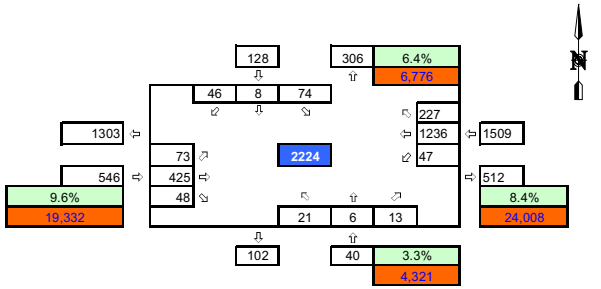
Int 49 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Judicial Drive**
E/W Street:	**Nobel Drive**
Intersection #:	49
Project # (last 6)	0

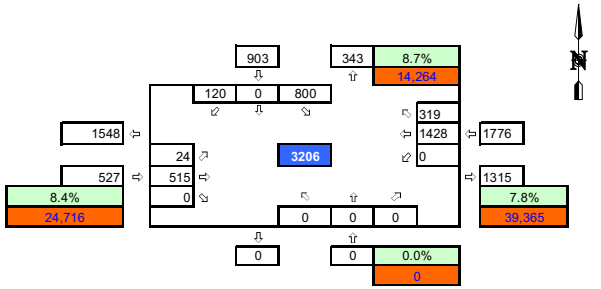


Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Shoreline Drive**
E/W Street:	**Nobel Drive**



Scenario:	**Horizon Year Conditions**
N/S Street:	**Judicial Drive**
E/W Street:	**Nobel Drive**



LEGEND

Existing K-Factor	xx%
ADT Volume	xx

Int 50 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Nobel Drive**
E/W Street: **I-805 SB On-Ramp**
Intersection #: 50
Project # (last 6) 0

North leg:

77%		23%		
1260	1629	369	7.5%	
⇩		⇧	21,663	

Southbound approach (R / T / L): 0 | 974 | 286

Westbound approach: ⇖ 0 | ⇦ 0 | ⇙ 0

Eastbound approach: ⇗ 0 | ⇨ 0 | ⇘ 0

Intersection total: **2014**

Northbound approach (L / T / R): 0 | 369 | 385

West leg:

0%	0 ⇦
	0
0%	0 ⇨
0.0%	
0	

East leg:

⇦ 0	0%
671	
⇨ 671	100%
4.0%	
16,678	

South leg:

⇩		⇧	
974	1728	754	7.4%
56%		44%	23,283

Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Nobel Drive**
E/W Street: **I-805 SB On-Ramp**

North leg: 1870 ⇩ | 623 ⇧ | 7.5% | 34,247

Southbound approach (R / T / L): 0 | 1761 | 138

Westbound approach: ⇖ 0 | ⇦ 0 | ⇙ 0

Eastbound approach: ⇗ 0 | ⇨ 0 | ⇘ 0

Intersection total: **3067**

Northbound approach (L / T / R): 0 | 623 | 545

West leg: 0 ⇦ | 0 ⇨ | 0.0% | 0

East leg: ⇦ 0 | ⇨ 683 | 4.0% | 15,886

South leg: ⇩ 1761 | ⇧ 1197 | 7.4% | 39,365

LEGEND

Existing K-Factor	xx%
ADT Volume	xx

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Int 50 PM

Int 51 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Nobel Drive**
E/W Street: **I-805 N Off-Ramp**
Intersection #: 51
Project # (last 6) 0

North leg:

47%		53%		
708	1513	805	7.7%	
⇩		⇧	19,647	

Southbound approach (R / T / L): 0 | 708 | 0

Westbound approach: ⇖ 436 | ⇦ 0 | ⇙ 552

Eastbound approach: ⇗ 0 | ⇨ 0 | ⇘ 0

Intersection total: **2065**

Northbound approach (L / T / R): 0 | 369 | 0

West leg:

0%	0 ⇦
	0
0%	0 ⇨
0.0%	
0	

East leg:

⇦ 988	100%
988	
⇨ 0	0%
7.4%	
13,325	

South leg:

⇩		⇧	
1260	1629	369	7.5%
77%		23%	21,663

Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Nobel Drive**
E/W Street: **I-805 N Off-Ramp**

North leg: 967 ⇩ | 878 ⇧ | 7.7% | 23,825

Southbound approach (R / T / L): 0 | 970 | 0

Westbound approach: ⇖ 227 | ⇦ 0 | ⇙ 822

Eastbound approach: ⇗ 0 | ⇨ 0 | ⇘ 0

Intersection total: **2670**

Northbound approach (L / T / R): 0 | 651 | 0

West leg: 0 ⇦ | 0 ⇨ | 0.0% | 0

East leg: ⇦ 1047 | ⇨ 0 | 7.4% | 12,544

South leg: ⇩ 1792 | ⇧ 656 | 7.5% | 34,247

LEGEND

Existing K-Factor	xx%
ADT Volume	xx

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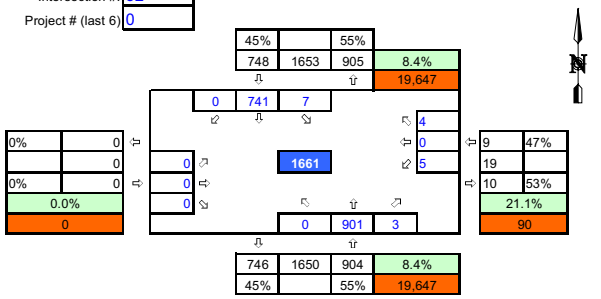
Int 51 PM

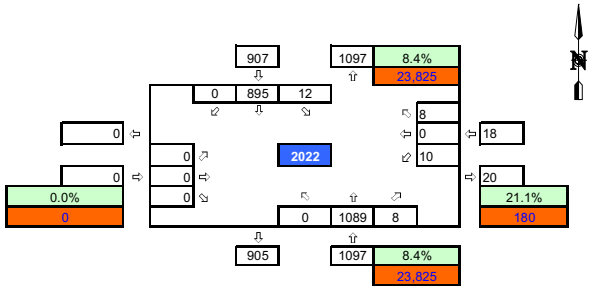
Int 52 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Nobel Drive**
E/W Street: **Avenue of Flags**
Intersection #: 52
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Nobel Drive**
E/W Street: **Avenue of Flags**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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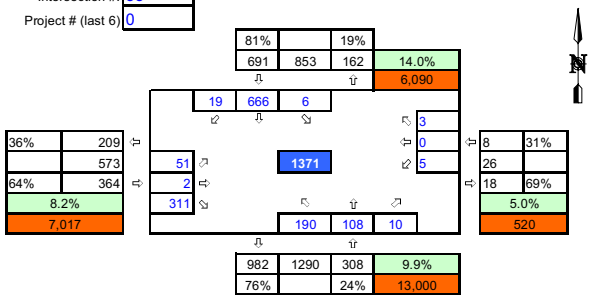
Int 52 PM

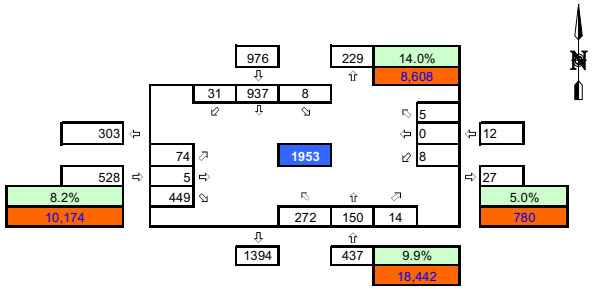
Int 53 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Regents Road**
E/W Street: **Health Science Drive / County Day Ln**
Intersection #: 53
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Regents Road**
E/W Street: **Health Science Drive / County Day Ln**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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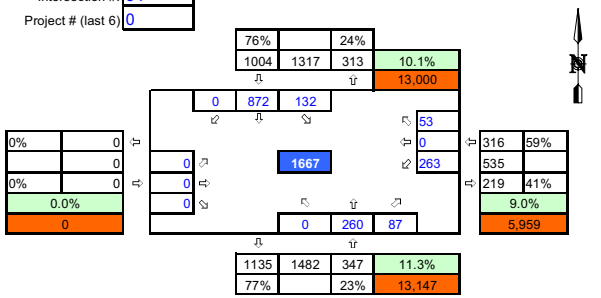
Int 53 PM

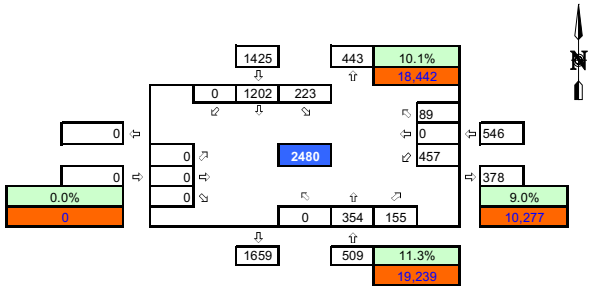
Int 54 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Regents Road**
E/W Street: **Eastgate Mall**
Intersection #: 54
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Regents Road**
E/W Street: **Eastgate Mall**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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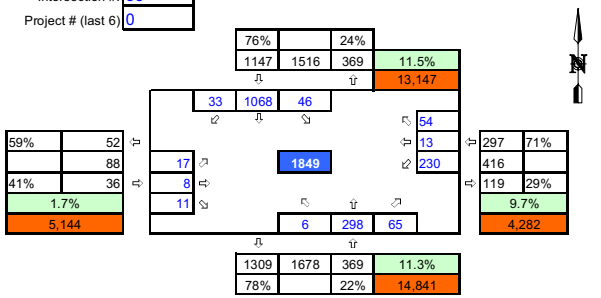
Int 54 PM

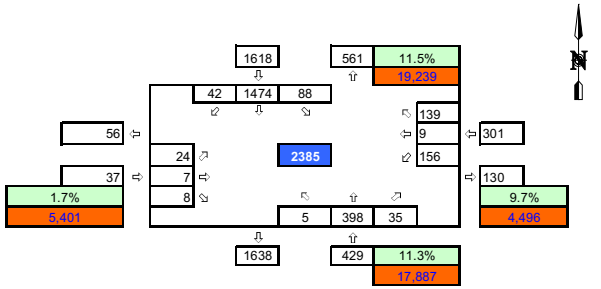
Int 55 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Regents Road**
E/W Street: **Executive Drive**
Intersection #: 55
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Regents Road**
E/W Street: **Executive Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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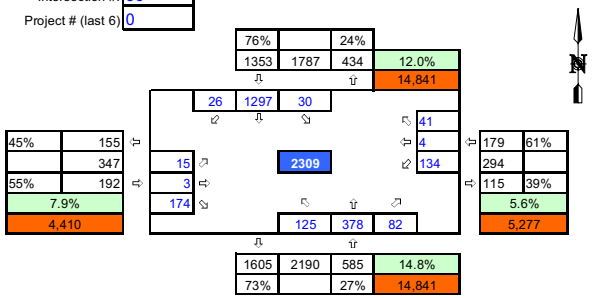
Int 55 PM

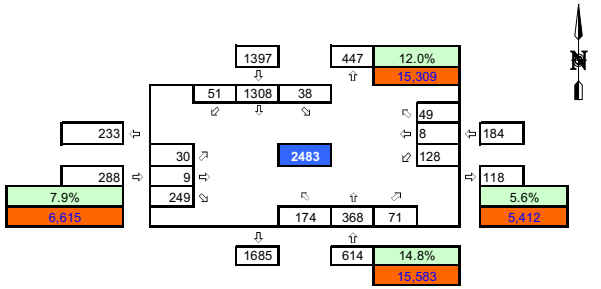
Int 56 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Regents Road**
E/W Street:	**Miramar Street / Regents Park Row**
Intersection #:	56
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Regents Road**
E/W Street:	**Miramar Street / Regents Park Row**

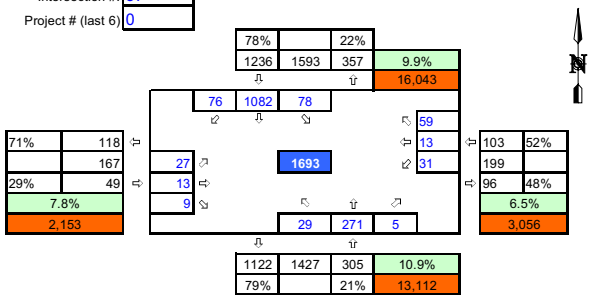


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

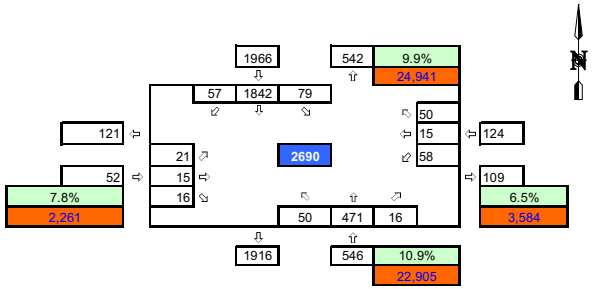
Int 57 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Regents Road**
E/W Street:	**Plaza De Palmas**
Intersection #:	57
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Regents Road**
E/W Street:	**Plaza De Palmas**

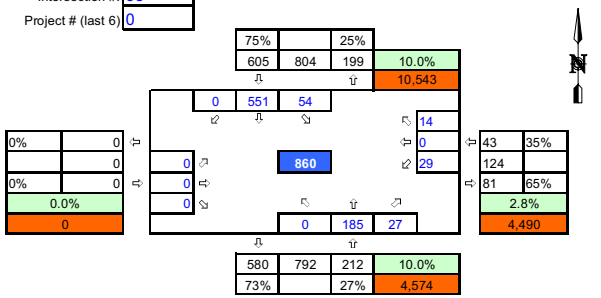


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

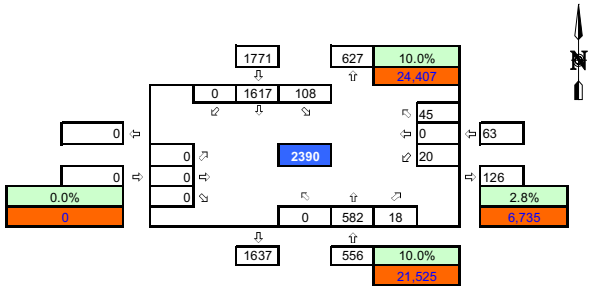
Int 58 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Regents Road**
E/W Street: **Berino Court**
Intersection #: 58
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Regents Road**
E/W Street: **Berino Court**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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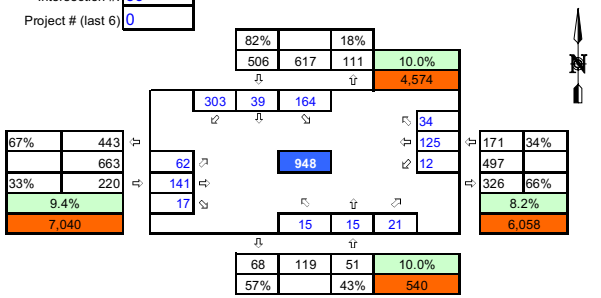
Int 58 PM

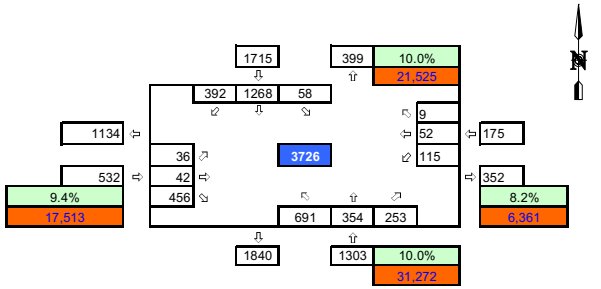
Int 59 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Regents Road**
E/W Street: **Arriba Street**
Intersection #: 59
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Regents Road**
E/W Street: **Arriba Street**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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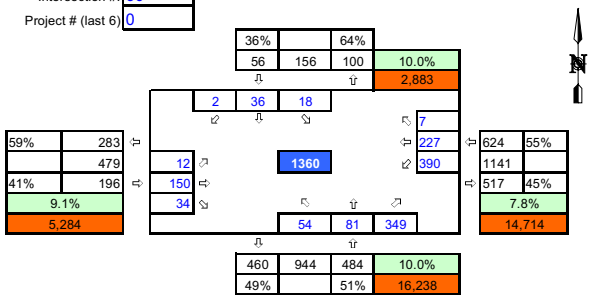
Int 59 PM

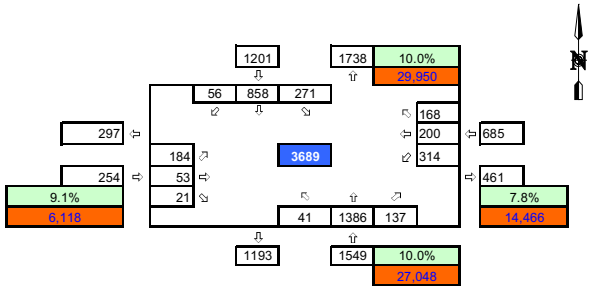
Int 60 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Regents Road**
E/W Street: **Governor Drive**
Intersection #: 60
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Regents Road**
E/W Street: **Governor Drive**

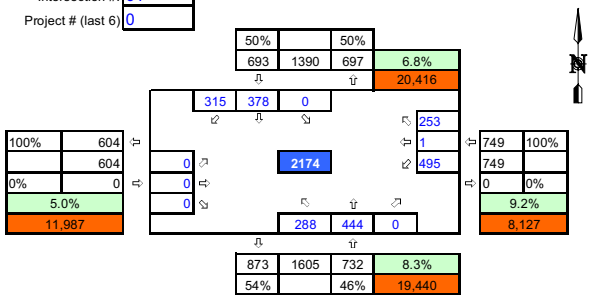


LEGEND
Existing K-Factor: xx%
ADT Volume: xx

K:\SND_TPTO\095240101 - University CPA\Excel\Horizon Year Conditions\Alternative A\Turn32_Alt A.xlsx
Int 60 PM

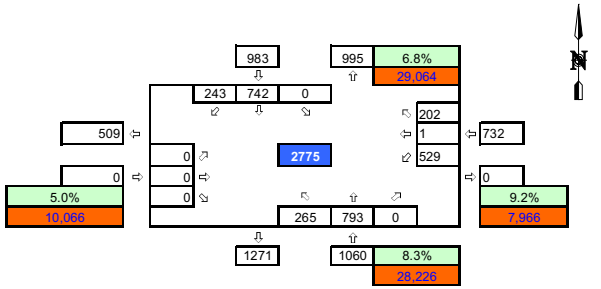
Int 61 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Regents Road**
E/W Street: **SR-52 WB Ramps**
Intersection #: 61
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Regents Road**
E/W Street: **SR-52 WB Ramps**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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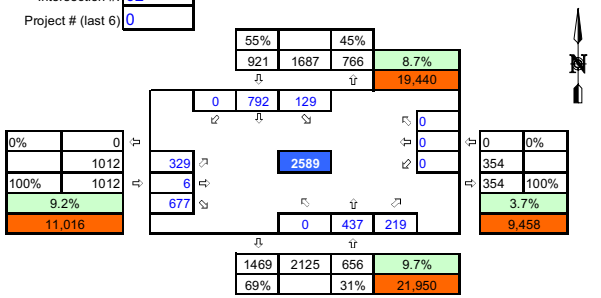
Int 61 PM

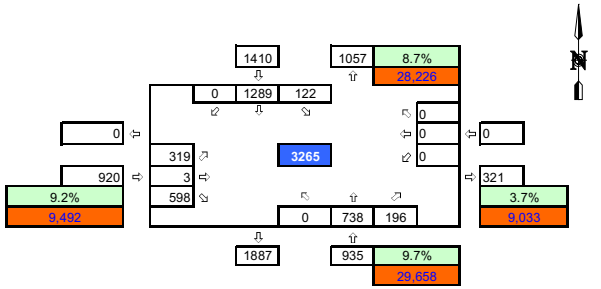
Int 62 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Regents Road**
E/W Street:	**SR-52 EB Ramps**
Intersection #:	62
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Regents Road**
E/W Street:	**SR-52 EB Ramps**

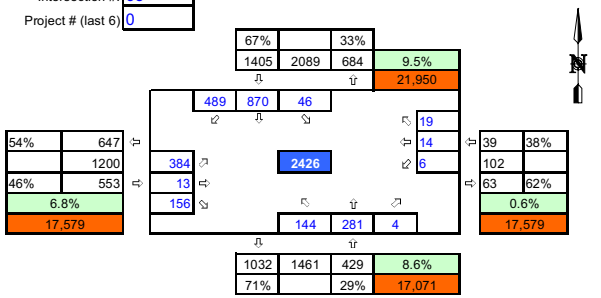


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

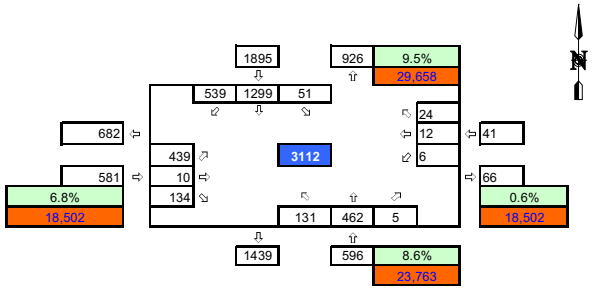
Int 63 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Regents Road / Clairemont Mesa Blvd**
E/W Street:	**Luna Avenue**
Intersection #:	63
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Regents Road / Clairemont Mesa Blvd**
E/W Street:	**Luna Avenue**

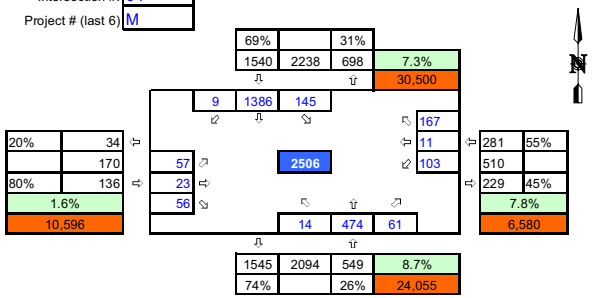


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

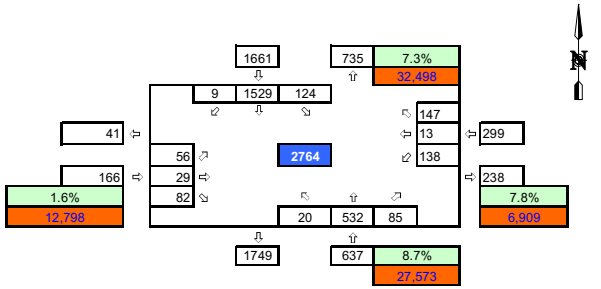
Int 64 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **N. Torrey Pines Road**
E/W Street: **UCSD Northpoint Driveway**
Intersection #: 64
Project # (last 6): M



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **N. Torrey Pines Road**
E/W Street: **UCSD Northpoint Driveway**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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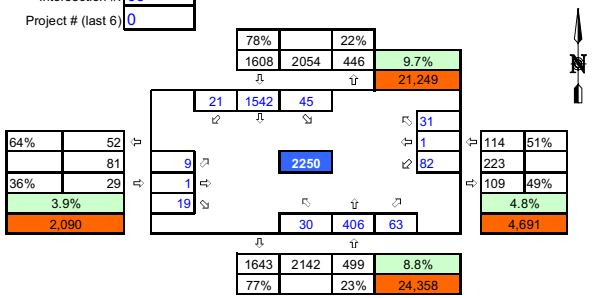
Int 64 PM

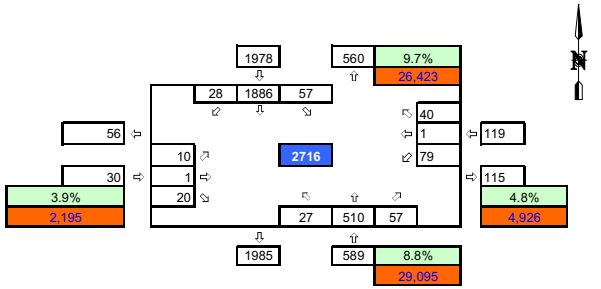
Int 65 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **N. Torrey Pines Road**
E/W Street: **Pangea Drive**
Intersection #: 65
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **N. Torrey Pines Road**
E/W Street: **Pangea Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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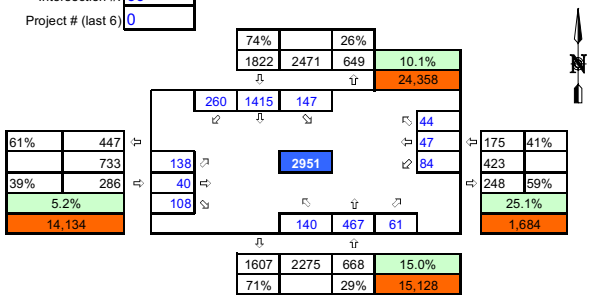
Int 65 PM

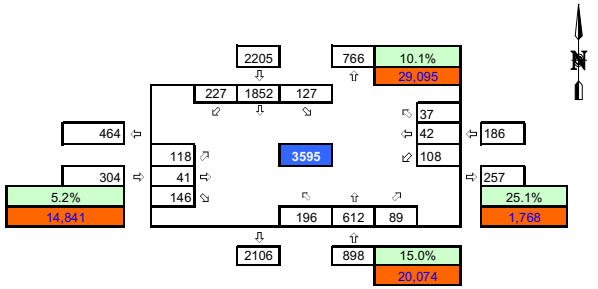
Int 66 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**N. Torrey Pines Road**
E/W Street:	**La Jolla Shores Drive**
Intersection #:	66
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**N. Torrey Pines Road**
E/W Street:	**La Jolla Shores Drive**



LEGEND

Existing K-Factor	xx%
ADT Volume	xx

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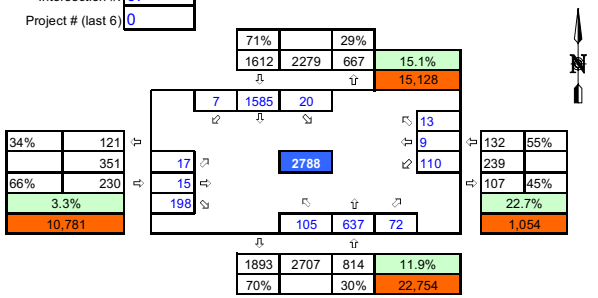
Int 66 PM

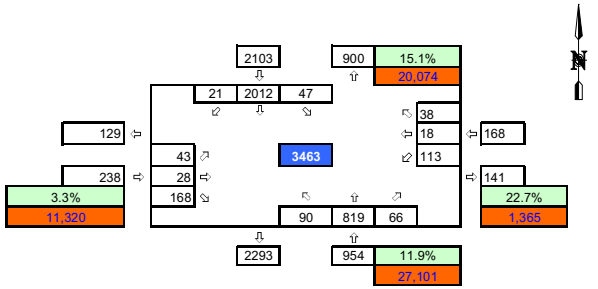
Int 67 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**N. Torrey Pines Road**
E/W Street:	**Expedition Way / Revelle College Drive**
Intersection #:	67
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**N. Torrey Pines Road**
E/W Street:	**Expedition Way / Revelle College Drive**



LEGEND

Existing K-Factor	xx%
ADT Volume	xx

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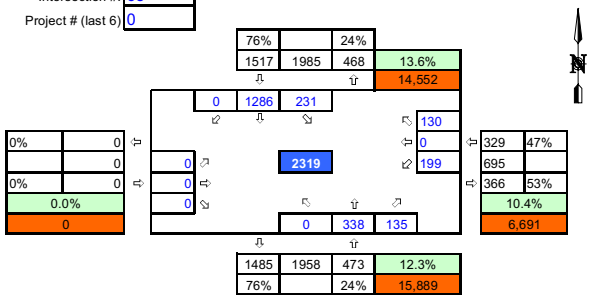
Int 67 PM

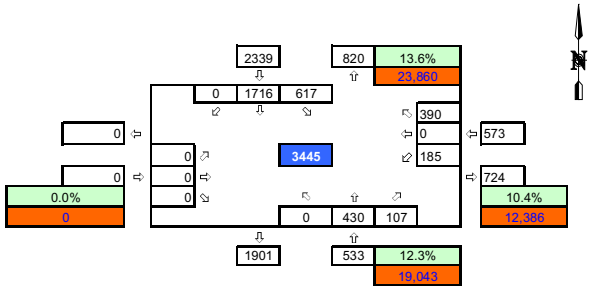
Int 68 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Gilman Drive**
E/W Street: **Villa La Jolla Drive**
Intersection #: 68
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Gilman Drive**
E/W Street: **Villa La Jolla Drive**



LEGEND
Existing K-Factor xx%
ADT Volume xx

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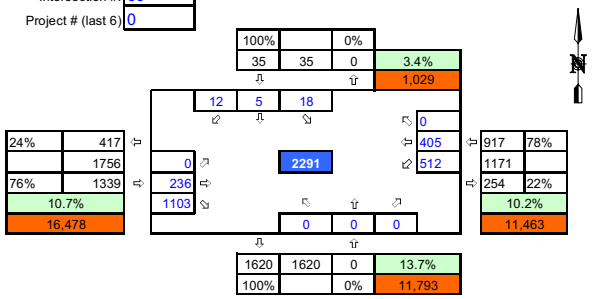
Int 68 PM

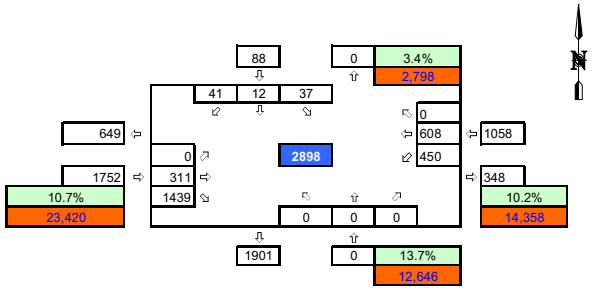
Int 69 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **I-5 SB Ramps**
E/W Street: **Gillman Drive**
Intersection #: 69
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **I-5 SB Ramps**
E/W Street: **Gillman Drive**



LEGEND
Existing K-Factor xx%
ADT Volume xx

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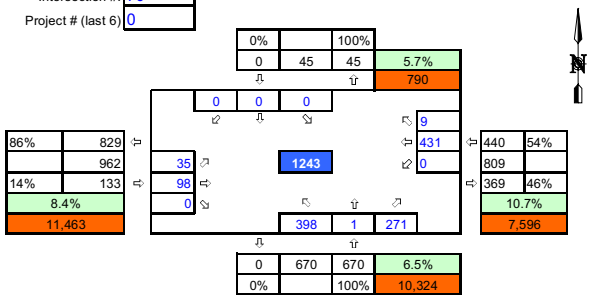
Int 69 PM

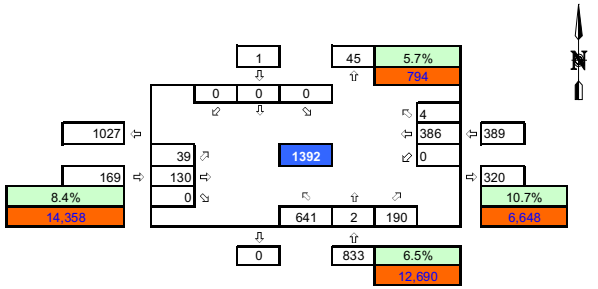
Int 70 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**I-5 NB Ramps**
E/W Street:	**Gillman Drive**
Intersection #:	70
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**I-5 NB Ramps**
E/W Street:	**Gillman Drive**



LEGEND

Existing K-Factor	xx%
ADT Volume	xx

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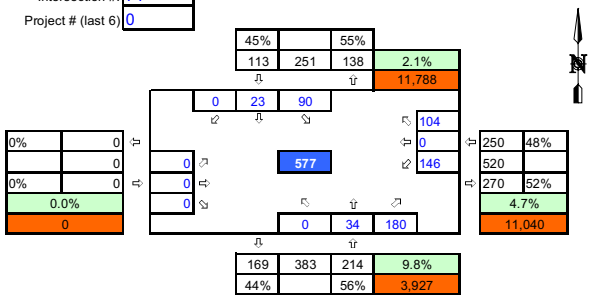
Int 70 PM

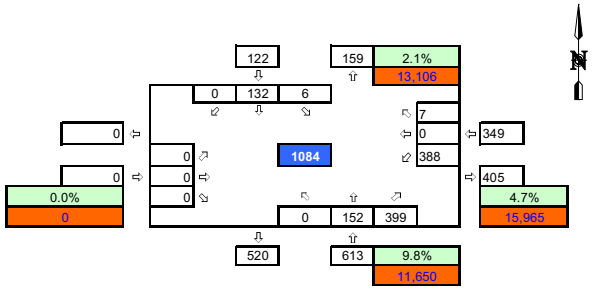
Int 71 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Charmant Drive / Palmilla Drive**
E/W Street:	**Lebon Drive**
Intersection #:	71
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Charmant Drive / Palmilla Drive**
E/W Street:	**Lebon Drive**



LEGEND

Existing K-Factor	xx%
ADT Volume	xx

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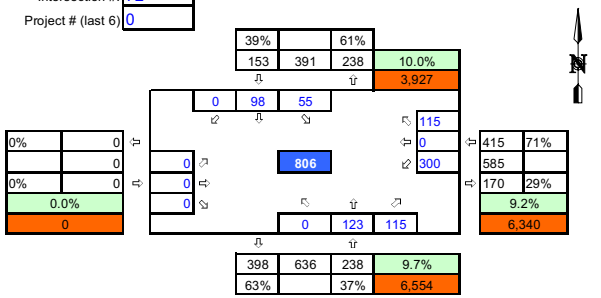
Int 71 PM

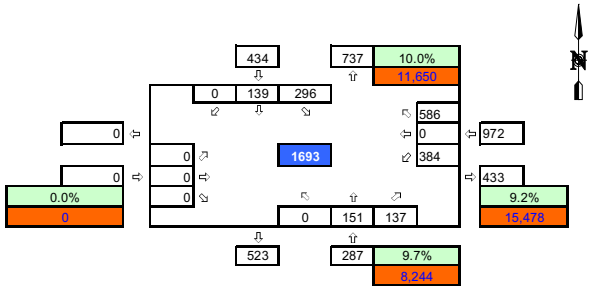
Int 72 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Palmilla Drive**
E/W Street: **Ariba Street**
Intersection #: 72
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Palmilla Drive**
E/W Street: **Ariba Street**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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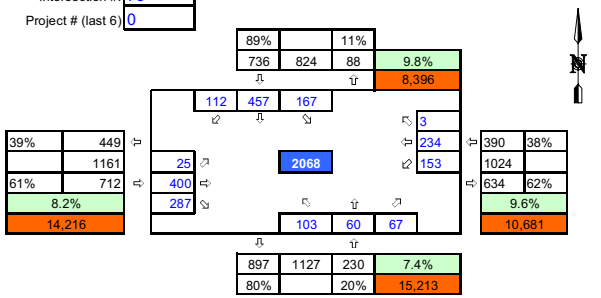
Int 72 PM

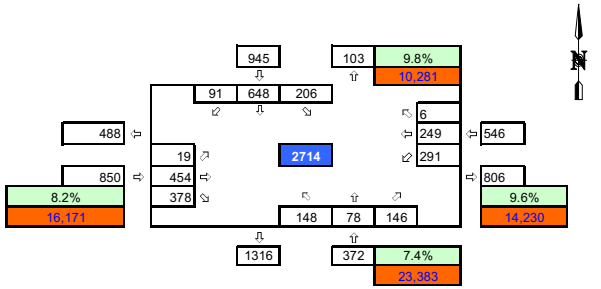
Int 73 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Towne Center Drive**
E/W Street: **Eastgate Mall**
Intersection #: 73
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Towne Center Drive**
E/W Street: **Eastgate Mall**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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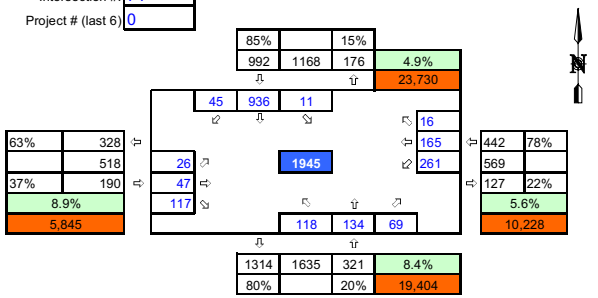
Int 73 PM

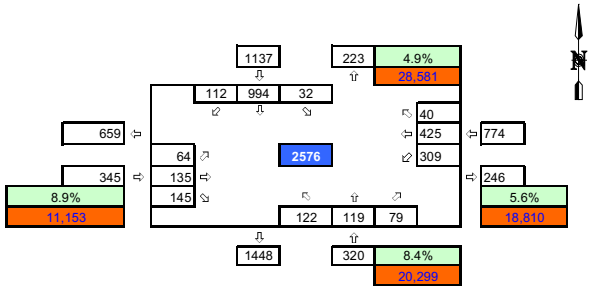
Int 74 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Towne Center Drive**
E/W Street: **Executive Drive**
Intersection #: 74
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Towne Center Drive**
E/W Street: **Executive Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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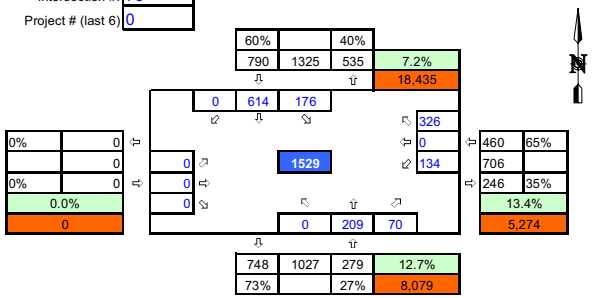
Int 74 PM

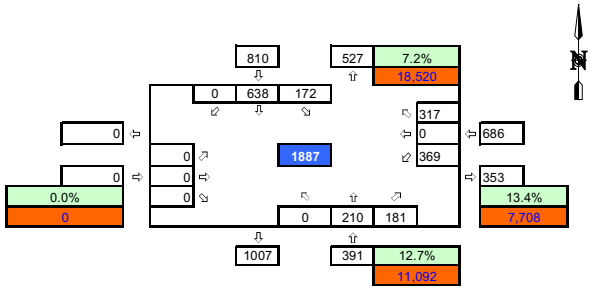
Int 75 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Towne Center Drive**
E/W Street: **Golden Haven Drive**
Intersection #: 75
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Towne Center Drive**
E/W Street: **Golden Haven Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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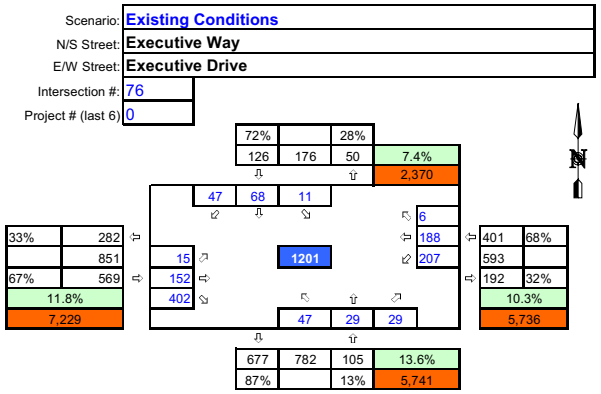
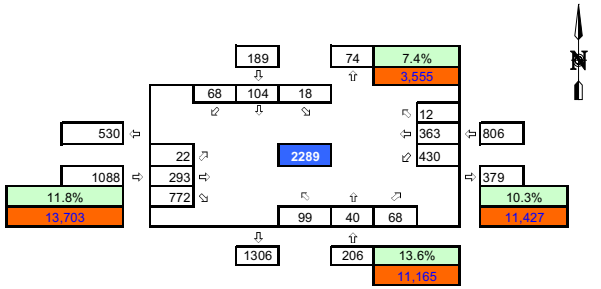
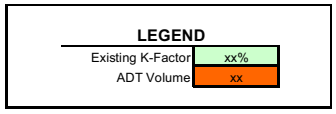
Int 75 PM

Int 76 PM Peak Volumes

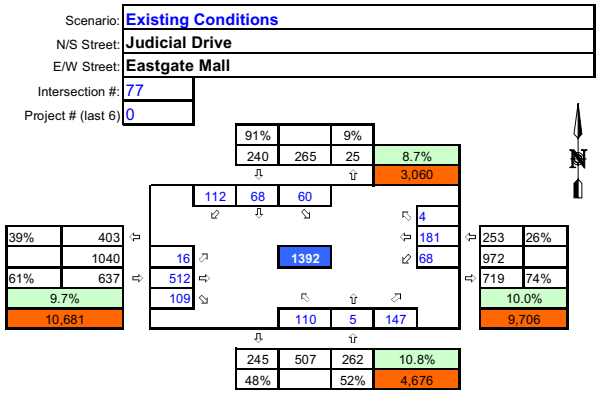


Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

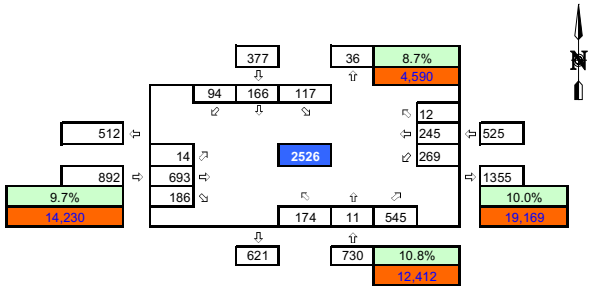


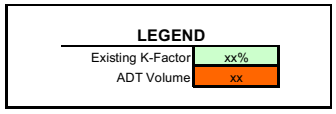


Int 77 PM Peak Volumes



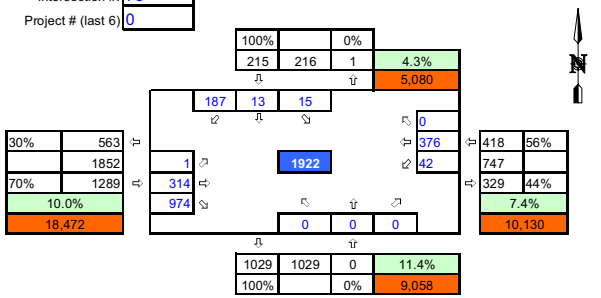
Note: Traffic volumes were collected by Accurate Video Counts during May 2015.





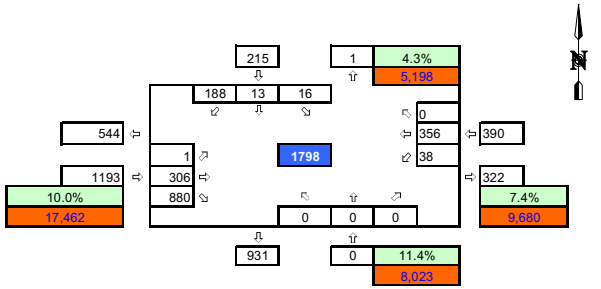
Int 78 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **I-805 SB Ramps**
E/W Street: **Governor Drive**
Intersection #: 78
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **I-805 SB Ramps**
E/W Street: **Governor Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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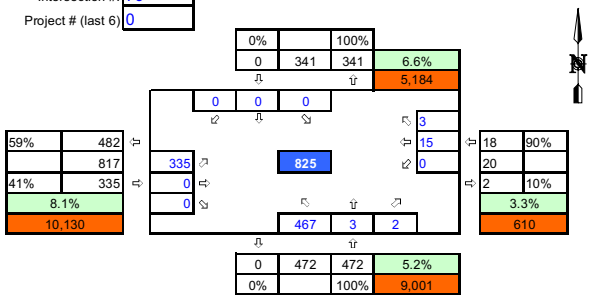
Int 78 PM

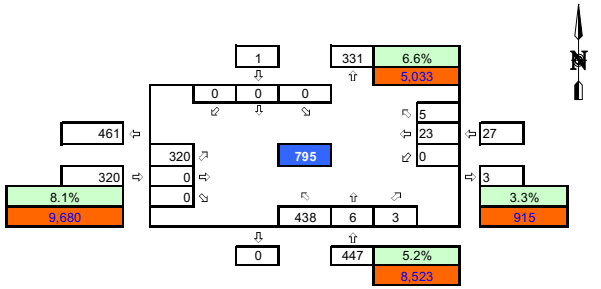
Int 79 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **I-805 NB Ramps**
E/W Street: **Governor Drive**
Intersection #: 79
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **I-805 NB Ramps**
E/W Street: **Governor Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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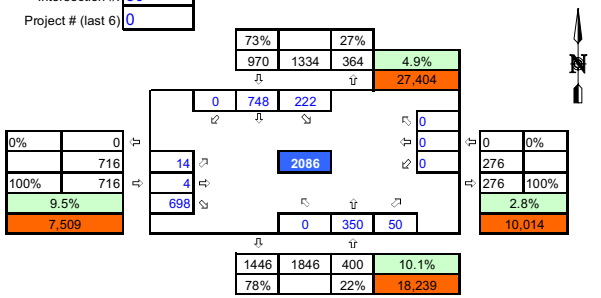
Int 79 PM

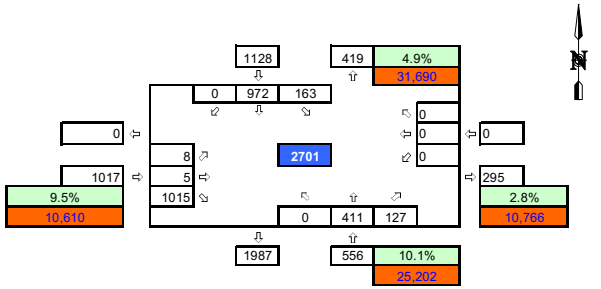
Int 80 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Gilman Drive**
E/W Street:	**La Jolla Village Drive EB**
Intersection #:	80
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Gilman Drive**
E/W Street:	**La Jolla Village Drive EB**



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

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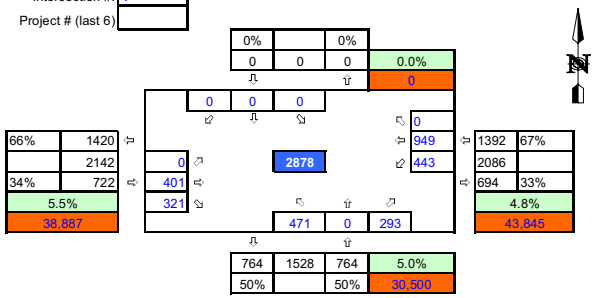
Int 80 PM

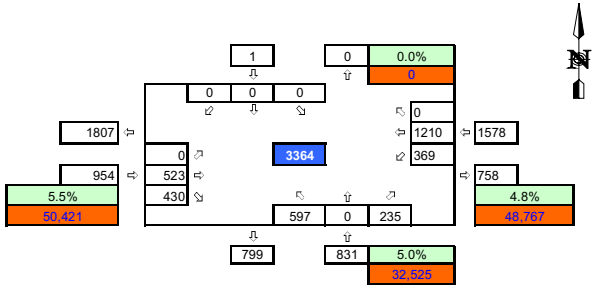
Int 1 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**N. Torrey Pines Road**
E/W Street:	**Genesee Avenue**
Intersection #:	1
Project # (last 6)	



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**N. Torrey Pines Road**
E/W Street:	**Genesee Avenue**



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

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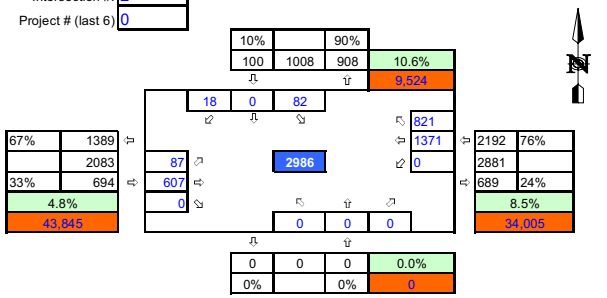
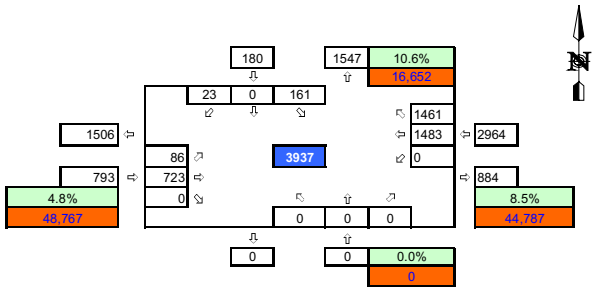
Int 2 AM Peak Volumes

Scenario:	Existing Conditions
N/S Street:	John Hopkins Drive (S)
E/W Street:	Genesee Avenue
Intersection #:	2
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

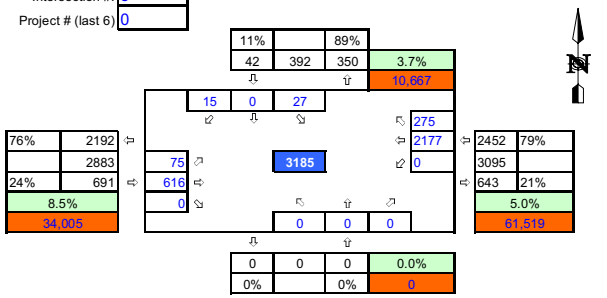
Scenario:	Horizon Year Conditions
N/S Street:	John Hopkins Drive (S)
E/W Street:	Genesee Avenue



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

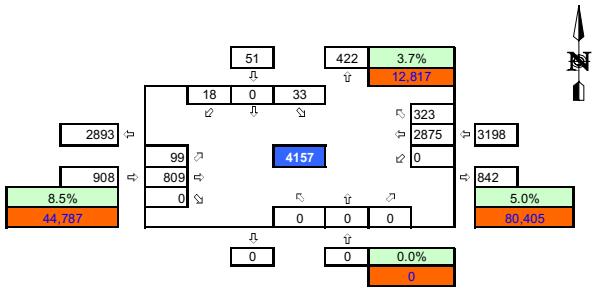
Int 3 AM Peak Volumes

Scenario:	Existing Conditions
N/S Street:	Science Center Drive
E/W Street:	Genesee Avenue
Intersection #:	3
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

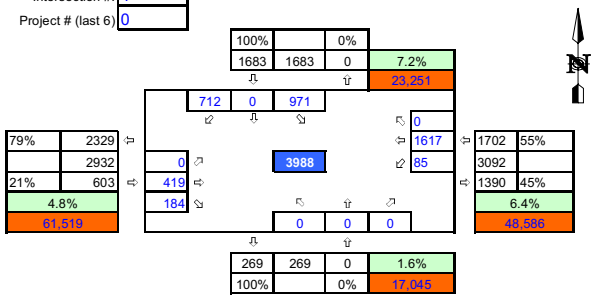
Scenario:	Horizon Year Conditions
N/S Street:	Science Center Drive
E/W Street:	Genesee Avenue



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

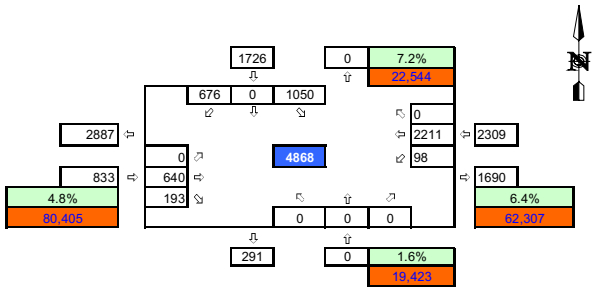
Int 4 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **I-5 SB Ramps**
E/W Street: **Genesee Avenue**
Intersection #: 4
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **I-5 SB Ramps**
E/W Street: **Genesee Avenue**



LEGEND

Existing K-Factor	xx%
ADT Volume	xx

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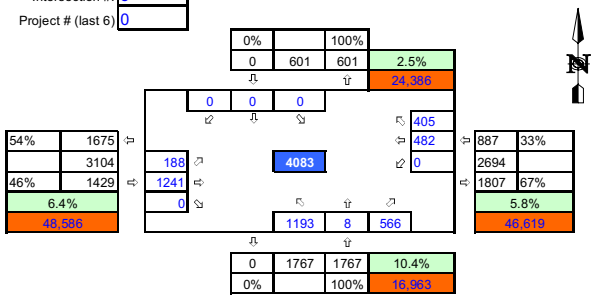
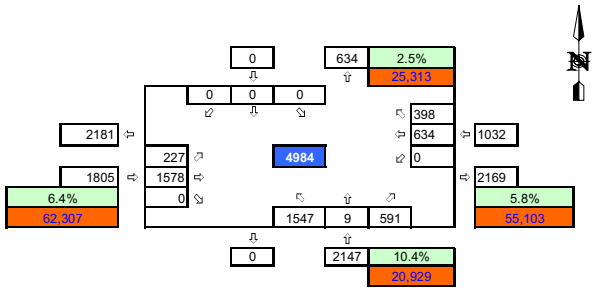
Int 5 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **I-5 NB Ramps**
E/W Street: **Genesee Avenue**
Intersection #: 5
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **I-5 NB Ramps**
E/W Street: **Genesee Avenue**

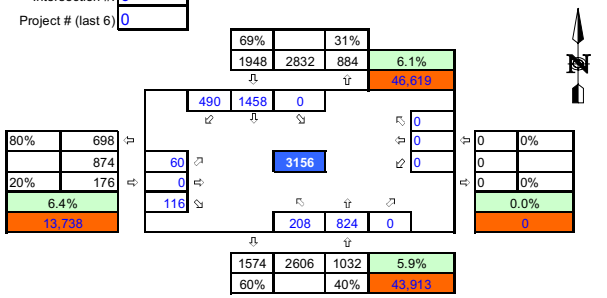


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

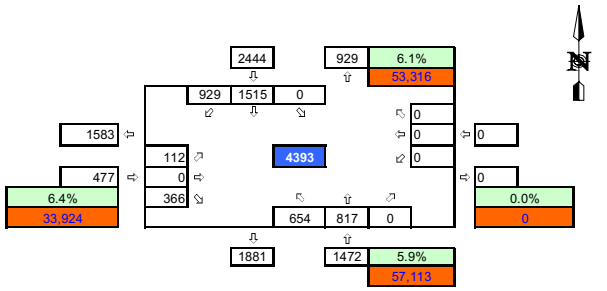
Int 6 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Scripps Hospital**
Intersection #: 6
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Scripps Hospital**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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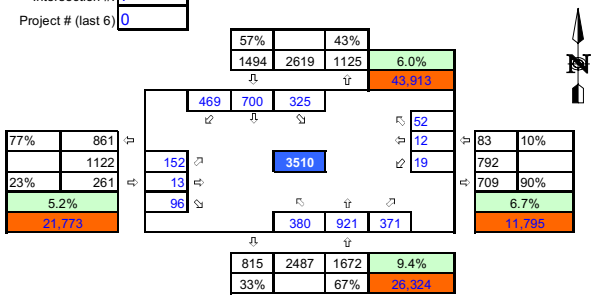
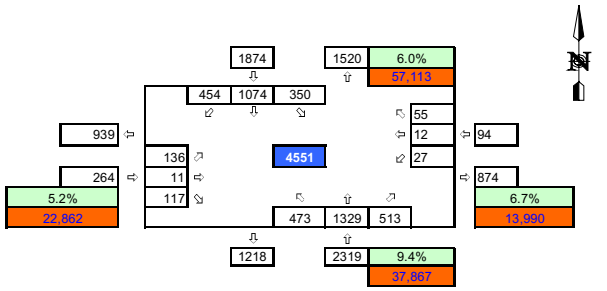
Int 7 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Campus Point Drive**
Intersection #: 7
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Campus Point Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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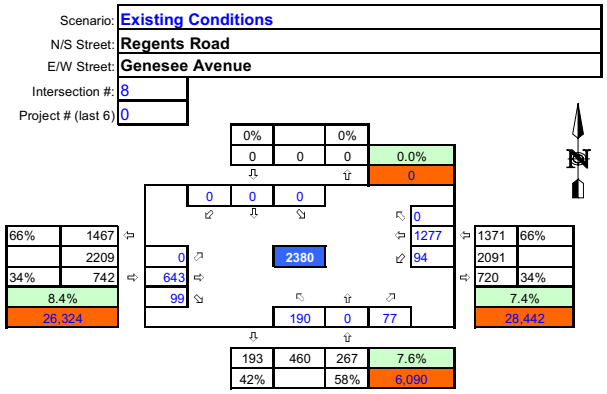
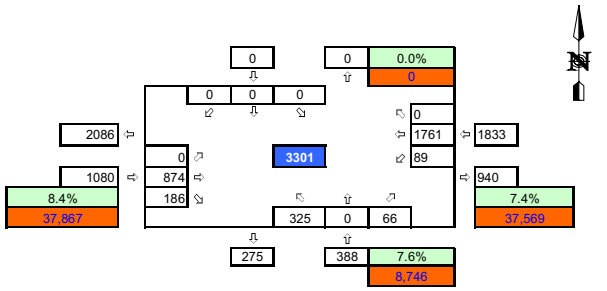
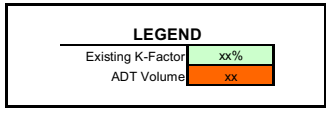
Int 8 AM Peak Volumes

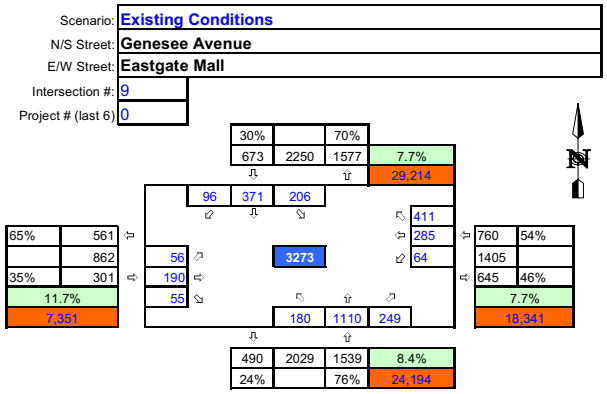


Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

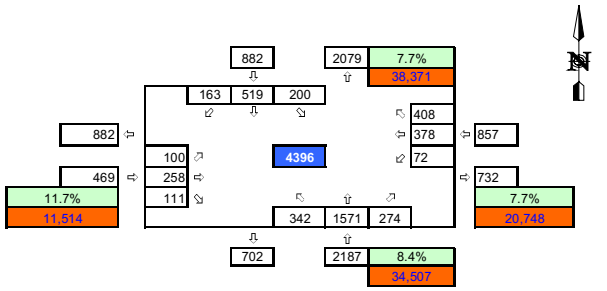


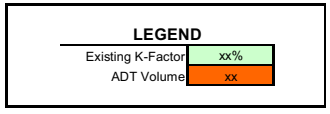


Int 9 AM Peak Volumes



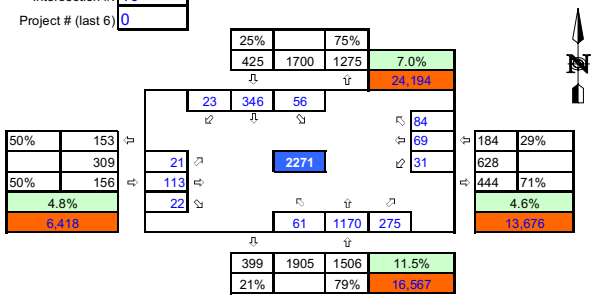
Note: Traffic volumes were collected by Accurate Video Counts during May 2015.





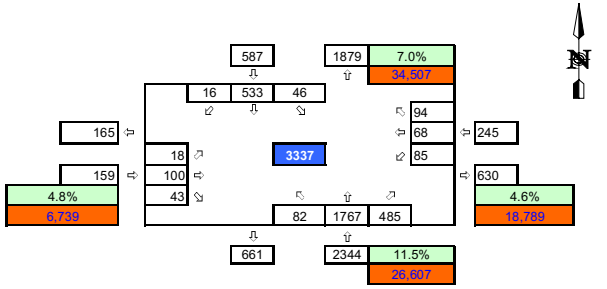
Int 10 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Executive Drive**
Intersection #: 10
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

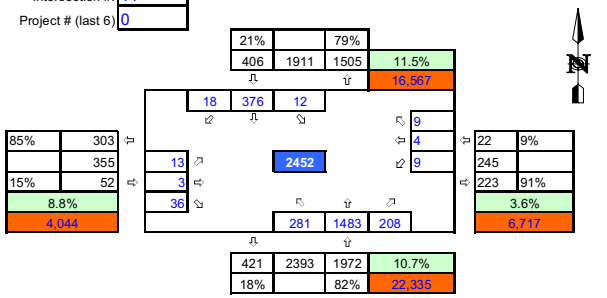
Scenario: **Horizon Year Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Executive Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

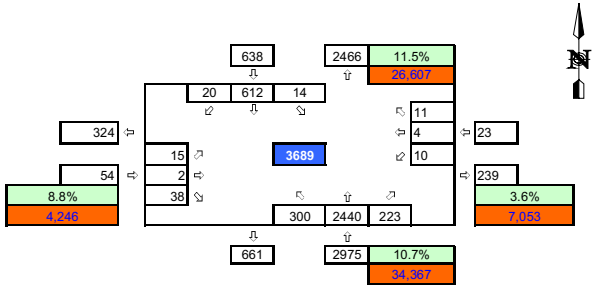
Int 11 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Executive Square**
Intersection #: 11
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

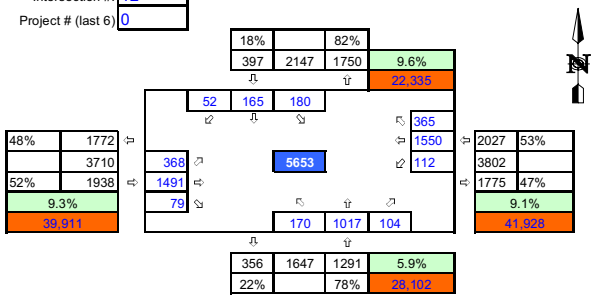
Scenario: **Horizon Year Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Executive Square**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

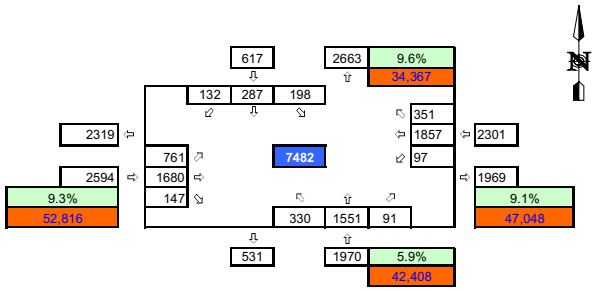
Int 12 AM Peak Volumes

Scenario:	Existing Conditions
N/S Street:	Genesee Avenue
E/W Street:	La Jolla Village Drive
Intersection #:	12
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

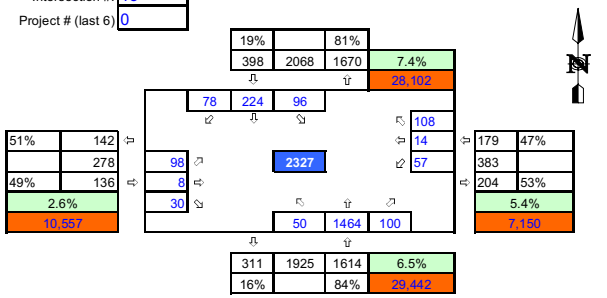
Scenario:	Horizon Year Conditions
N/S Street:	Genesee Avenue
E/W Street:	La Jolla Village Drive



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

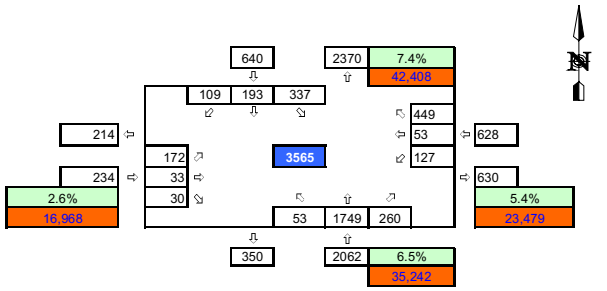
Int 13 AM Peak Volumes

Scenario:	Existing Conditions
N/S Street:	Genesee Avenue
E/W Street:	Esplanade Court
Intersection #:	13
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

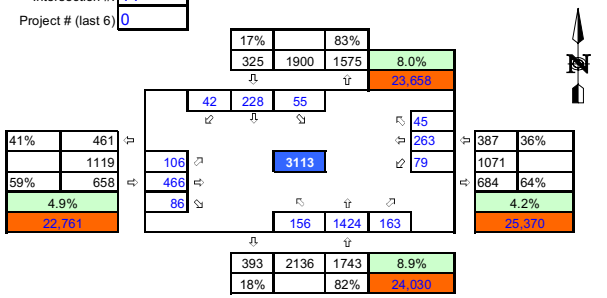
Scenario:	Horizon Year Conditions
N/S Street:	Genesee Avenue
E/W Street:	Esplanade Court



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

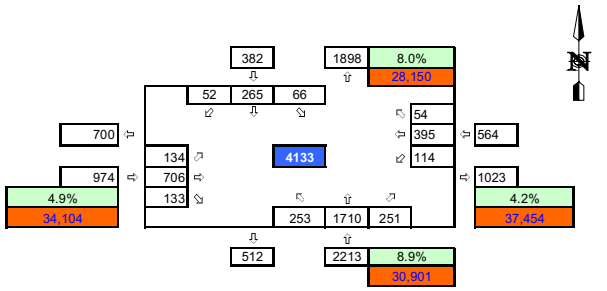
Int 14 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Nobel Drive**
Intersection #: 14
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Nobel Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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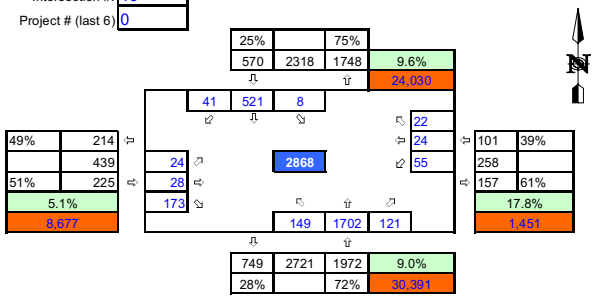
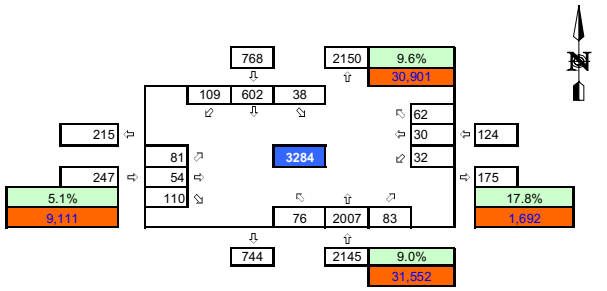
Int 15 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Decoro Street**
Intersection #: 15
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Decoro Street**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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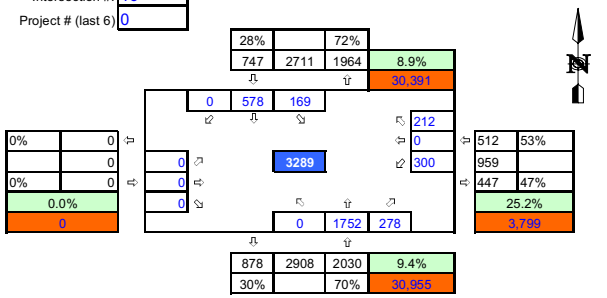
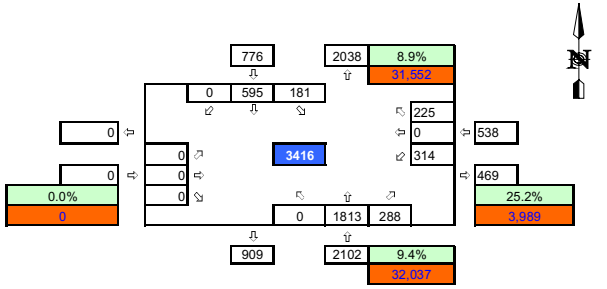
Int 16 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Centurion Square**
Intersection #: 16
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Centurion Square**

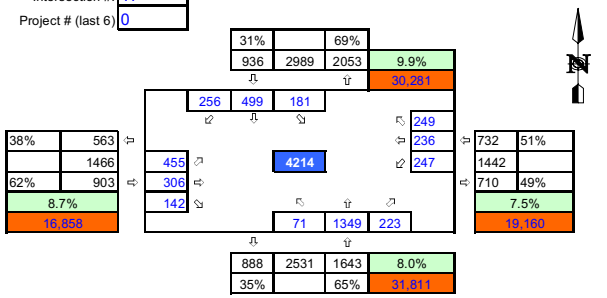


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

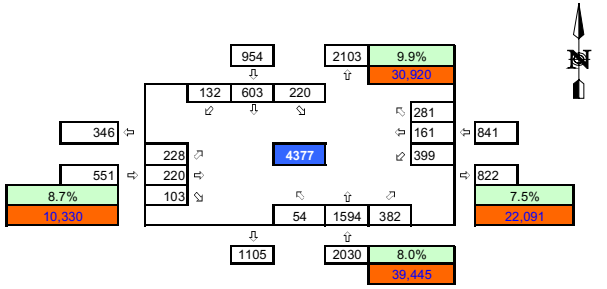
Int 17 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Governor Drive**
Intersection #: 17
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Governor Drive**

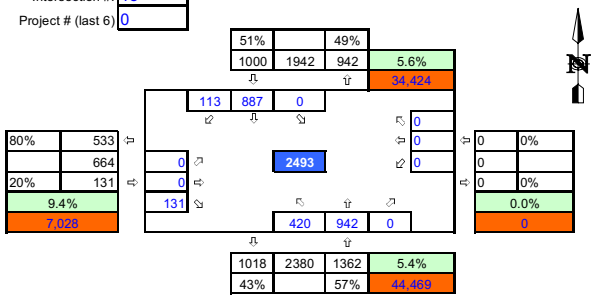


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

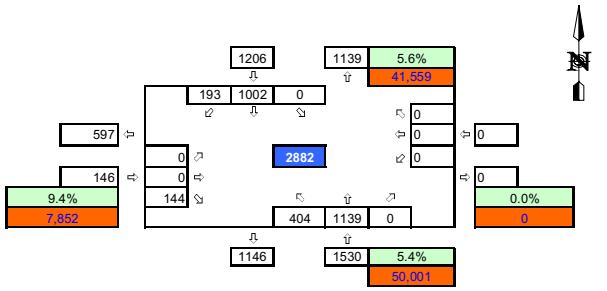
Int 18 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **SR-52 WB Ramps**
Intersection #: 18
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **SR-52 WB Ramps**

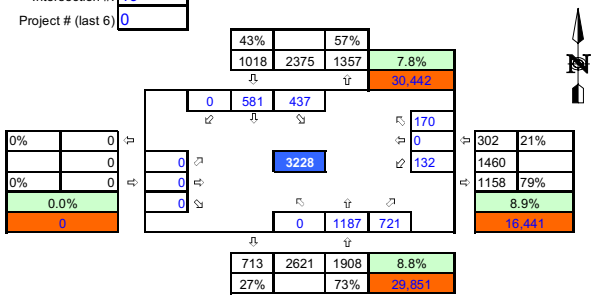


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

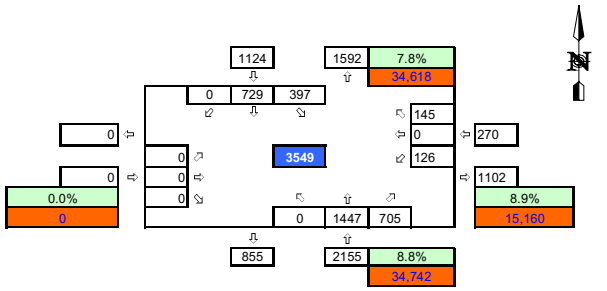
Int 19 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **SR-52 EB Ramps**
Intersection #: 19
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **SR-52 EB Ramps**

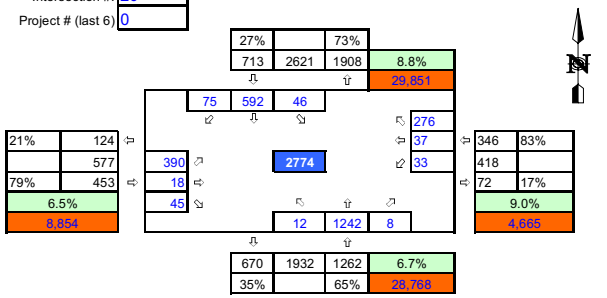


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

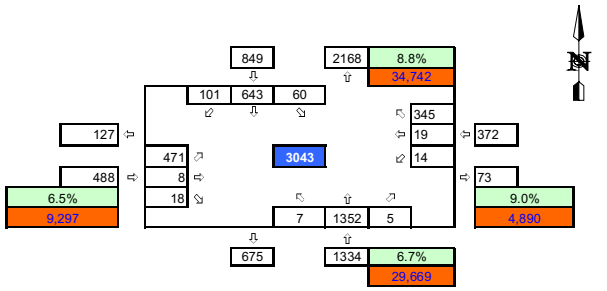
Int 20 AM Peak Volumes

Scenario:	Existing Conditions
N/S Street:	Genesee Avenue
E/W Street:	Lehrer Drive / Appleton Street
Intersection #:	20
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	Horizon Year Conditions
N/S Street:	Genesee Avenue
E/W Street:	Lehrer Drive / Appleton Street

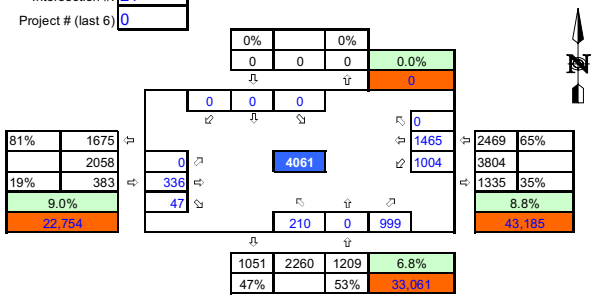


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

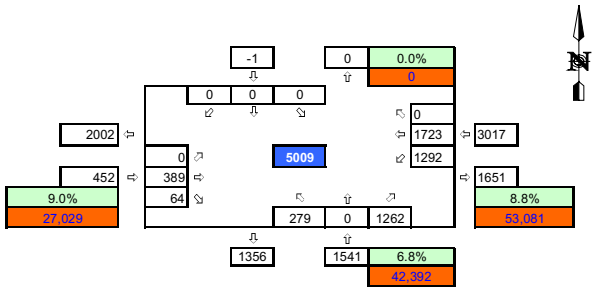
Int 21 AM Peak Volumes

Scenario:	Existing Conditions
N/S Street:	Torrey Pines Road
E/W Street:	La Jolla Village Drive
Intersection #:	21
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	Horizon Year Conditions
N/S Street:	Torrey Pines Road
E/W Street:	La Jolla Village Drive

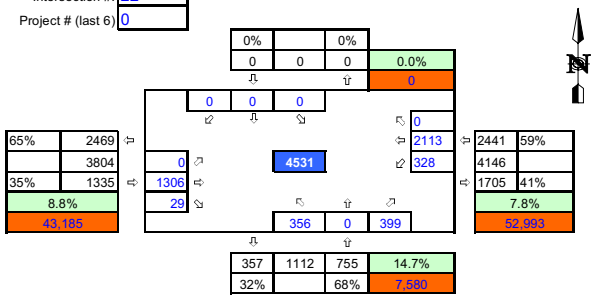


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

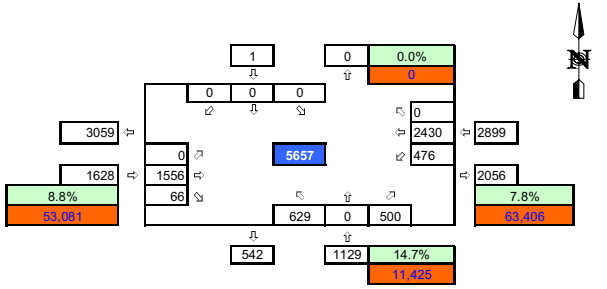
Int 22 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**La Jolla Scenic Drive**
E/W Street:	**La Jolla Village Drive**
Intersection #:	22
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**La Jolla Scenic Drive**
E/W Street:	**La Jolla Village Drive**

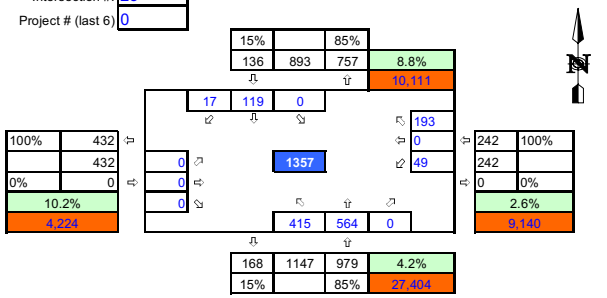


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

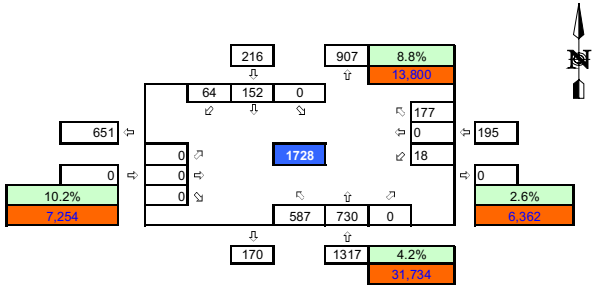
Int 23 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Gillman Drive**
E/W Street:	**La Jolla Village Drive WB**
Intersection #:	23
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Gillman Drive**
E/W Street:	**La Jolla Village Drive WB**

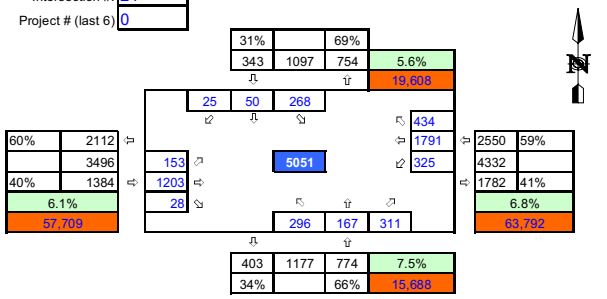


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

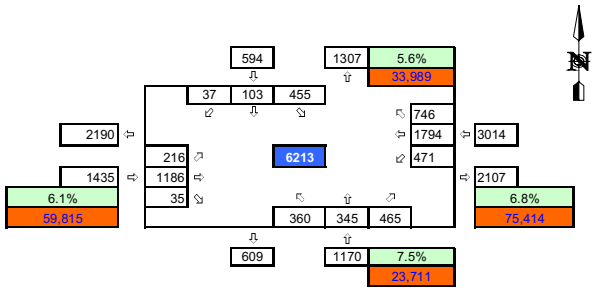
Int 24 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Villa La Jolla Drive**
E/W Street: **La Jolla Village Drive**
Intersection #: 24
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Villa La Jolla Drive**
E/W Street: **La Jolla Village Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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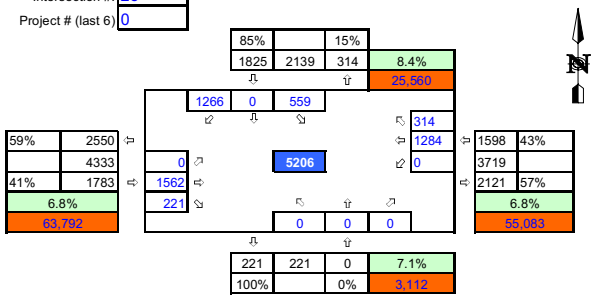
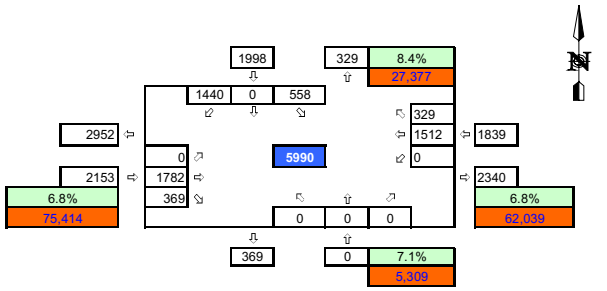
Int 25 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **I-5 SB Off-Ramps**
E/W Street: **La Jolla Village Drive**
Intersection #: 25
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **I-5 SB Off-Ramps**
E/W Street: **La Jolla Village Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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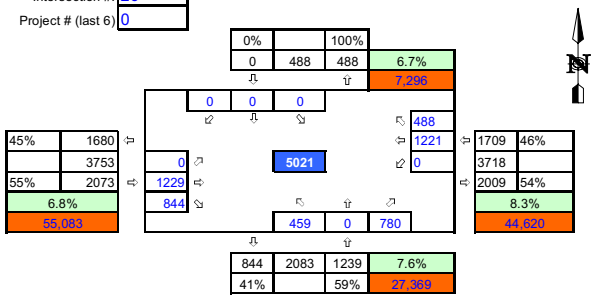
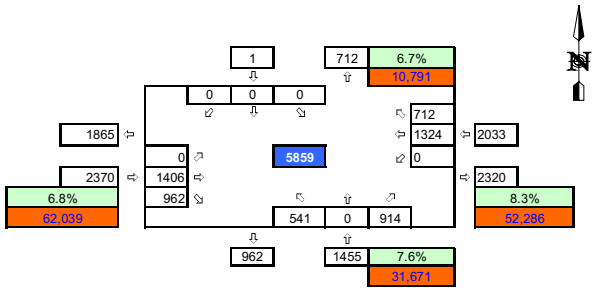
Int 26 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **I-5 NB Off-Ramps**
E/W Street: **La Jolla Village Drive**
Intersection #: 26
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **I-5 NB Off-Ramps**
E/W Street: **La Jolla Village Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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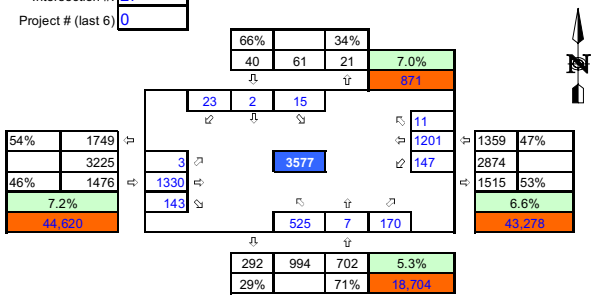
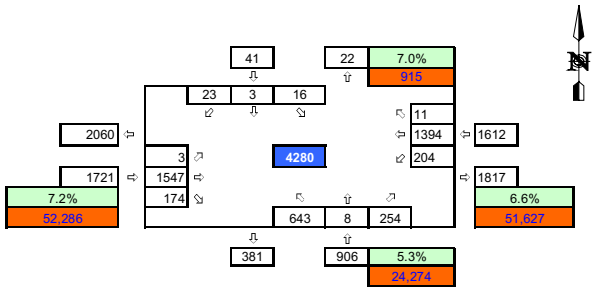
Int 27 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Lebon Drive**
E/W Street: **La Jolla Village Drive**
Intersection #: 27
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Lebon Drive**
E/W Street: **La Jolla Village Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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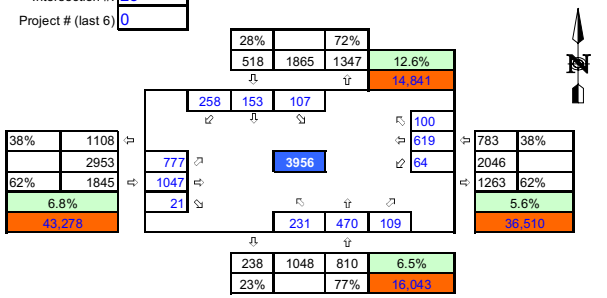
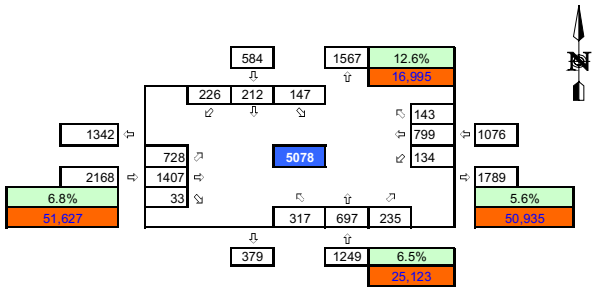
Int 28 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Regents Road**
E/W Street: **La Jolla Village Drive**
Intersection #: 28
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Regents Road**
E/W Street: **La Jolla Village Drive**

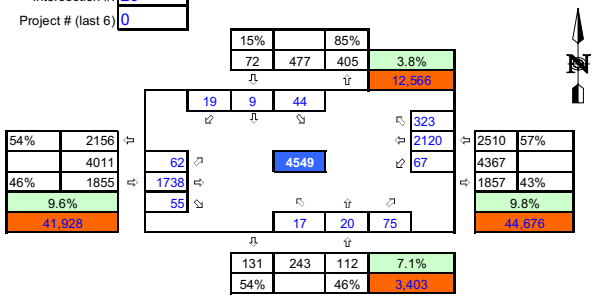


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

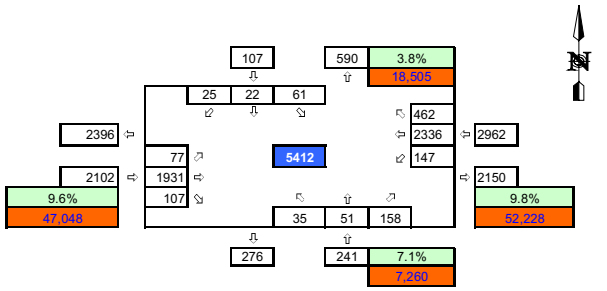
Int 29 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Executive Way**
E/W Street: **La Jolla Village Drive**
Intersection #: 29
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Executive Way**
E/W Street: **La Jolla Village Drive**

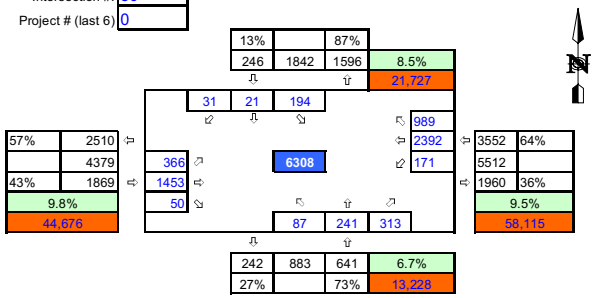


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

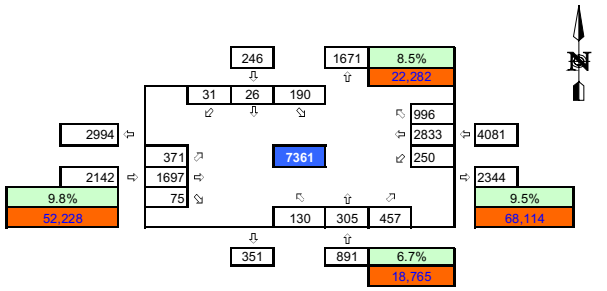
Int 30 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Towne Center Drive**
E/W Street: **La Jolla Village Drive**
Intersection #: 30
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Towne Center Drive**
E/W Street: **La Jolla Village Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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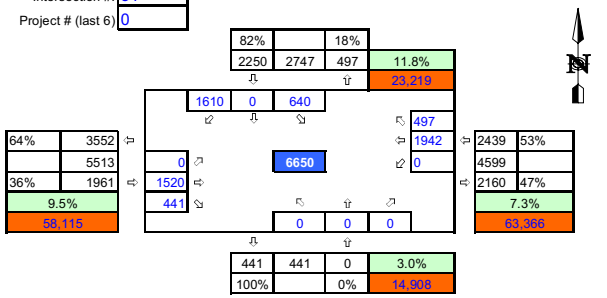
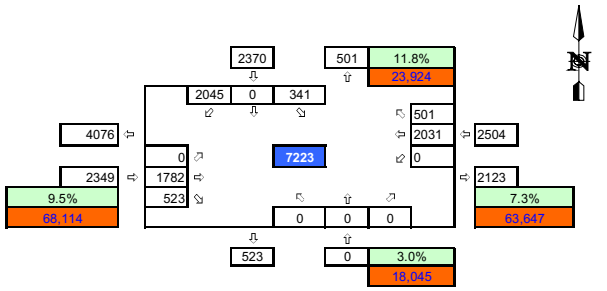
Int 31 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **I-805 SB Ramps**
E/W Street: **La Jolla Village Drive**
Intersection #: 31
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **I-805 SB Ramps**
E/W Street: **La Jolla Village Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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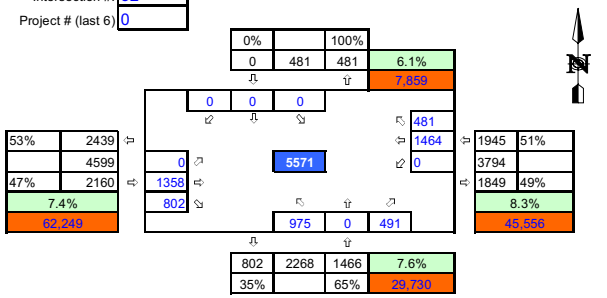
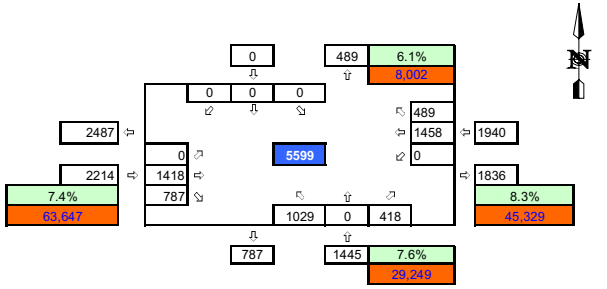
Int 32 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**I-805 NB Ramps**
E/W Street:	**La Jolla Village Drive**
Intersection #:	32
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

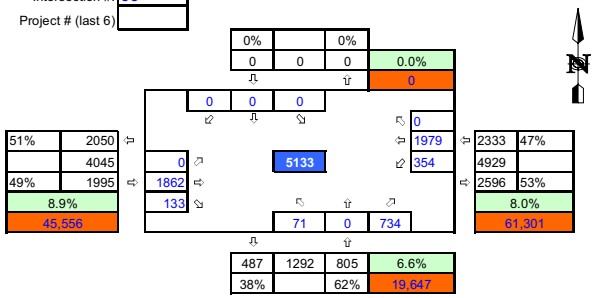
Scenario:	**Horizon Year Conditions**
N/S Street:	**I-805 NB Ramps**
E/W Street:	**La Jolla Village Drive**



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

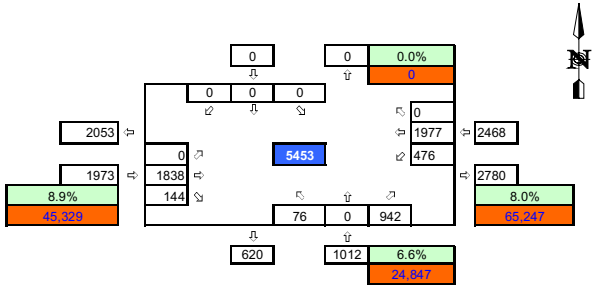
Int 33 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Noble Drive**
E/W Street:	**Miramar Road**
Intersection #:	33
Project # (last 6)	



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

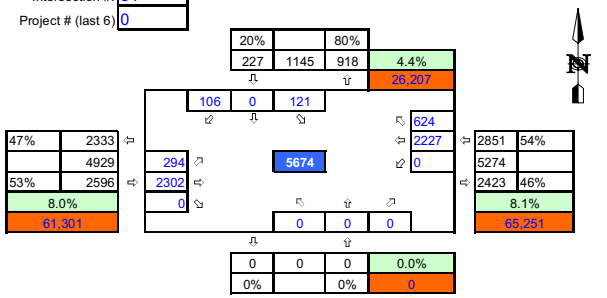
Scenario:	**Horizon Year Conditions**
N/S Street:	**Noble Drive**
E/W Street:	**Miramar Road**



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

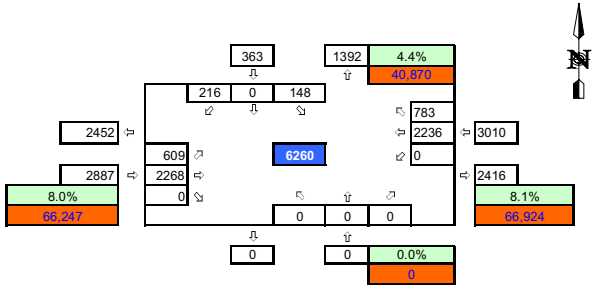
Int 34 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Eastgate Mall**
E/W Street:	**Miramar Road**
Intersection #:	34
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

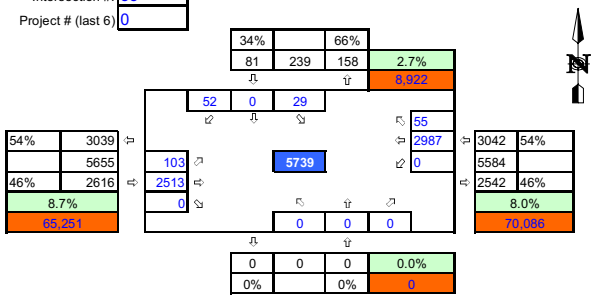
Scenario:	**Horizon Year Conditions**
N/S Street:	**Eastgate Mall**
E/W Street:	**Miramar Road**



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

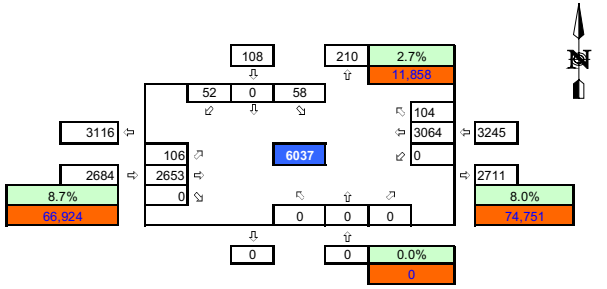
Int 35 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Miramar Mall**
E/W Street:	**Miramar Road**
Intersection #:	35
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

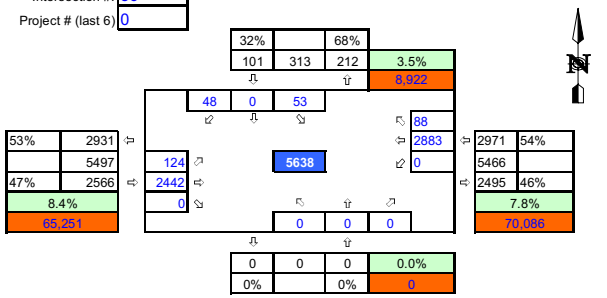
Scenario:	**Horizon Year Conditions**
N/S Street:	**Miramar Mall**
E/W Street:	**Miramar Road**



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

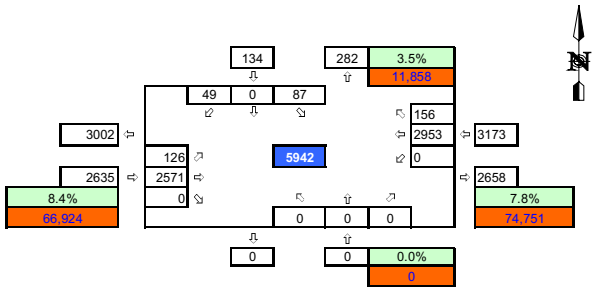
Int 36 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Miramar Place**
E/W Street:	**Miramar Road**
Intersection #:	36
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

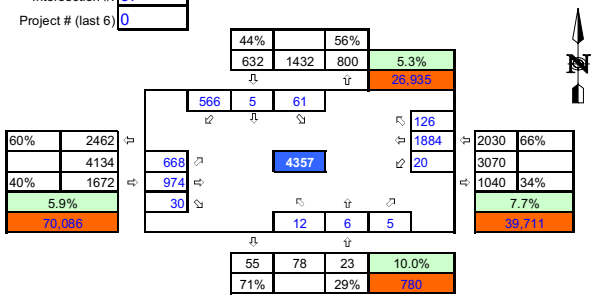
Scenario:	**Horizon Year Conditions**
N/S Street:	**Miramar Place**
E/W Street:	**Miramar Road**



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

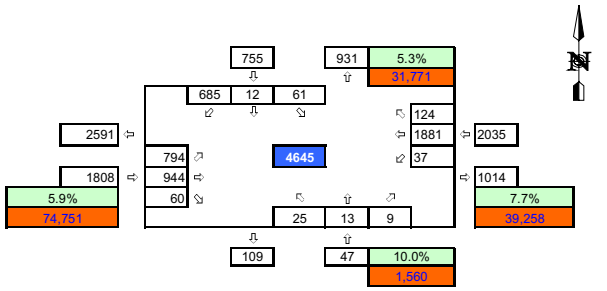
Int 37 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Camino Santa Fe**
E/W Street:	**Miramar Road**
Intersection #:	37
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

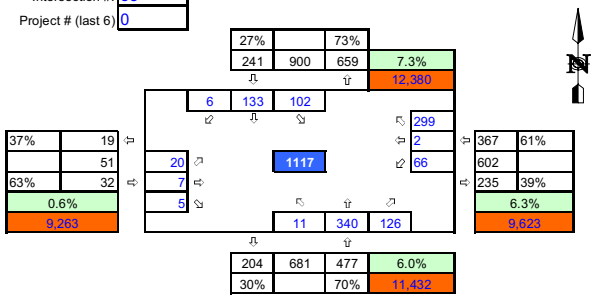
Scenario:	**Horizon Year Conditions**
N/S Street:	**Camino Santa Fe**
E/W Street:	**Miramar Road**



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

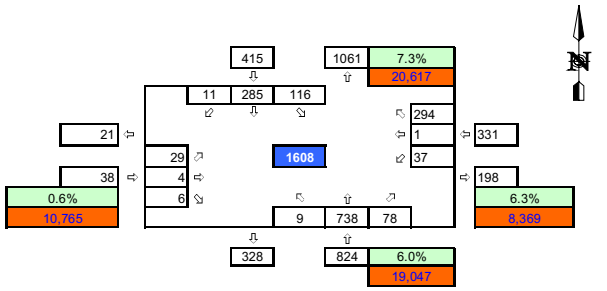
Int 38 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Villa La Jolla Drive**
E/W Street: **Nobel Drive**
Intersection #: 38
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Villa La Jolla Drive**
E/W Street: **Nobel Drive**

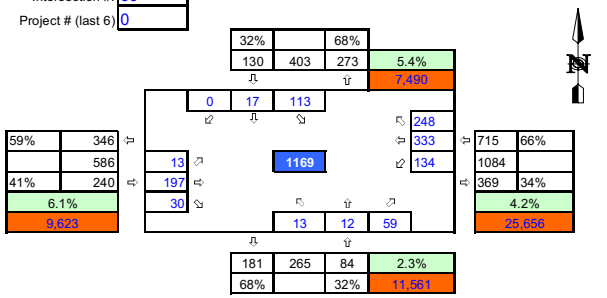


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

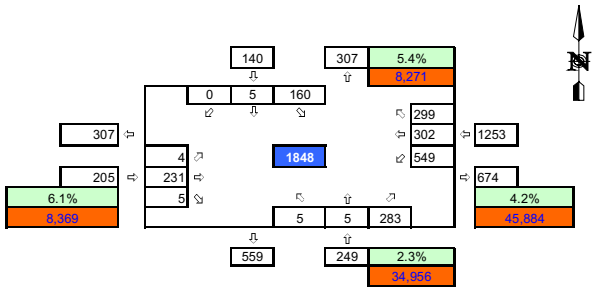
Int 39 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **La Jolla Village Square Driveway**
E/W Street: **Nobel Drive**
Intersection #: 39
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **La Jolla Village Square Driveway**
E/W Street: **Nobel Drive**

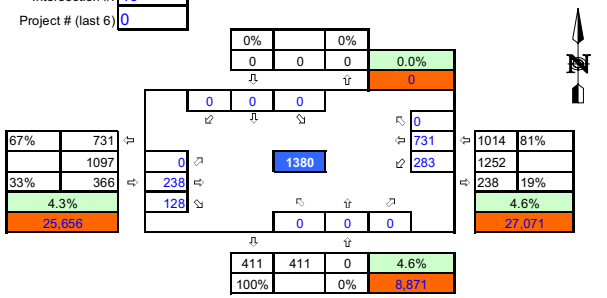


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

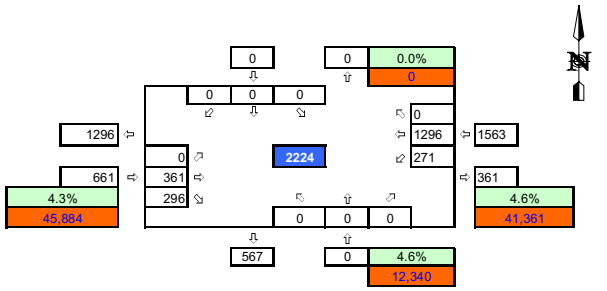
Int 40 AM Peak Volumes

Scenario:	Existing Conditions
N/S Street:	I-5 SB On
E/W Street:	Nobel Drive
Intersection #:	40
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	Horizon Year Conditions
N/S Street:	I-5 SB On
E/W Street:	Nobel Drive

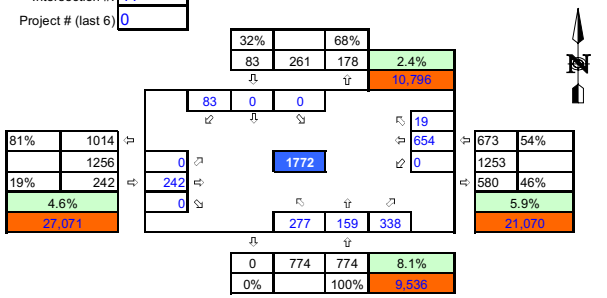


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

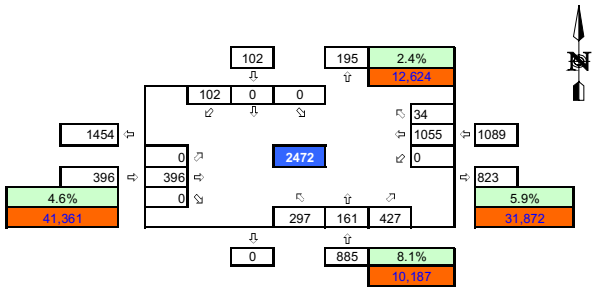
Int 41 AM Peak Volumes

Scenario:	Existing Conditions
N/S Street:	University Center Lane/I-5 NB Off
E/W Street:	Nobel Drive
Intersection #:	41
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	Horizon Year Conditions
N/S Street:	University Center Lane/I-5 NB Off
E/W Street:	Nobel Drive

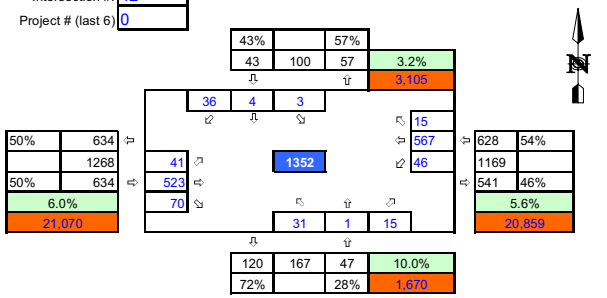


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

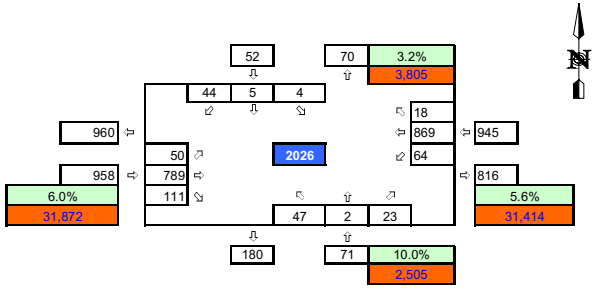
Int 42 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Caminito Plaza Centro**
E/W Street: **Nobel Drive**
Intersection #: 42
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Caminito Plaza Centro**
E/W Street: **Nobel Drive**

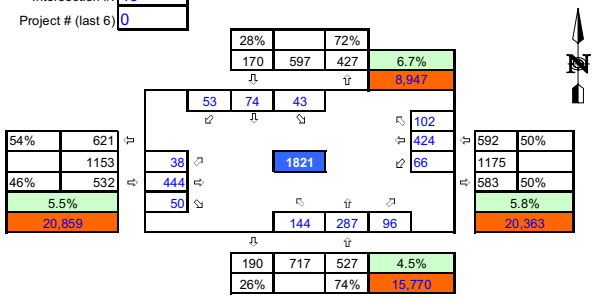


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

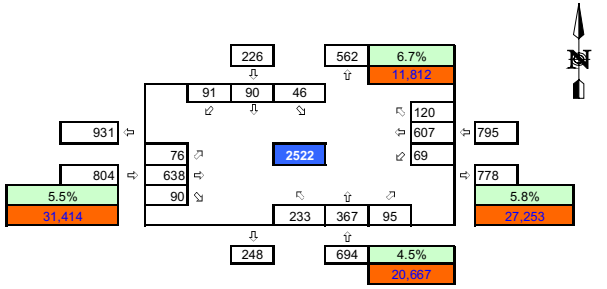
Int 43 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Lebon Drive**
E/W Street: **Nobel Drive**
Intersection #: 43
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Lebon Drive**
E/W Street: **Nobel Drive**

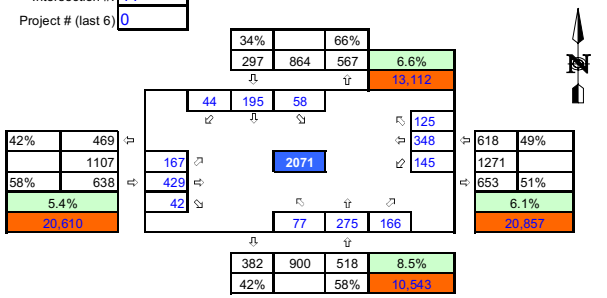


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

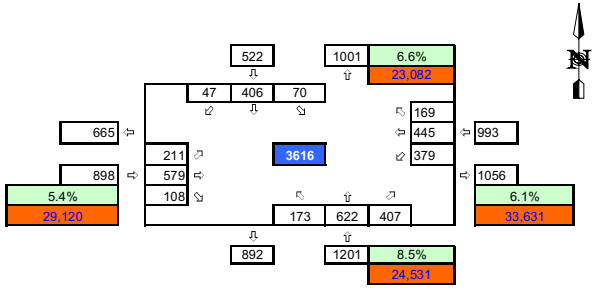
Int 44 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Regents Road**
E/W Street: **Nobel Drive**
Intersection #: 44
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Regents Road**
E/W Street: **Nobel Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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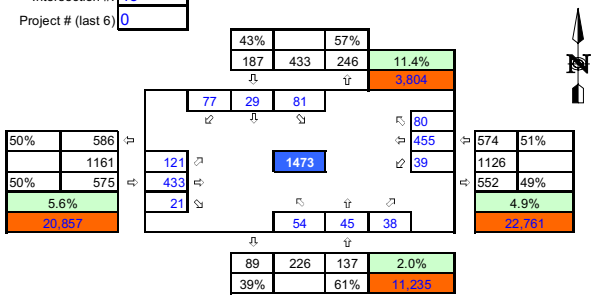
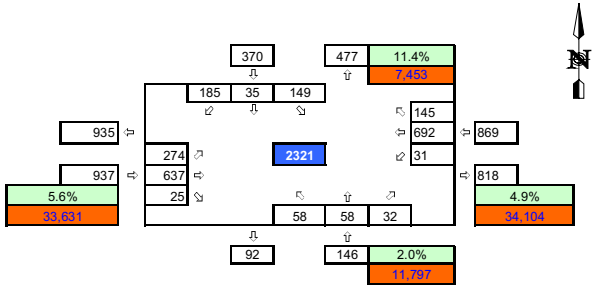
Int 45 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Costa Verde Boulevard/Cargill Ave**
E/W Street: **Cargill Ave / Nobel Drive**
Intersection #: 45
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Costa Verde Boulevard/Cargill Ave**
E/W Street: **Cargill Ave / Nobel Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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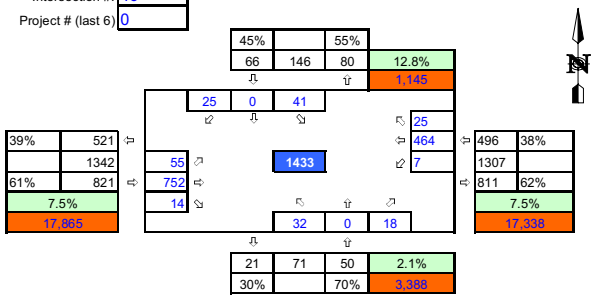
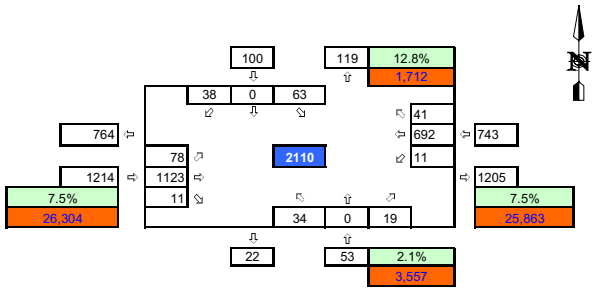
Int 46 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Lombard Place**
E/W Street:	**Nobel Drive**
Intersection #:	46
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

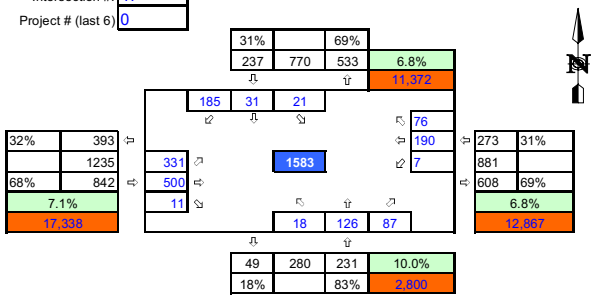
Scenario:	**Horizon Year Conditions**
N/S Street:	**Lombard Place**
E/W Street:	**Nobel Drive**



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

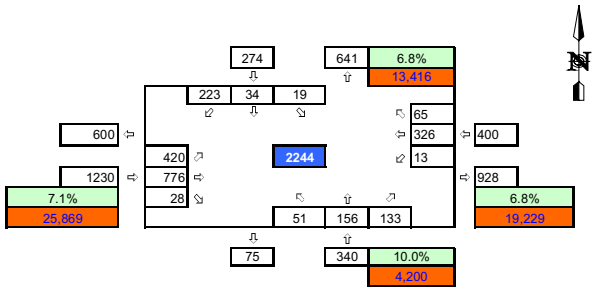
Int 47 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Towne Center Drive**
E/W Street:	**Nobel Drive**
Intersection #:	47
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

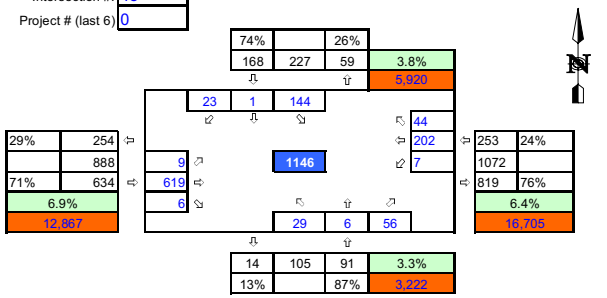
Scenario:	**Horizon Year Conditions**
N/S Street:	**Towne Center Drive**
E/W Street:	**Nobel Drive**



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

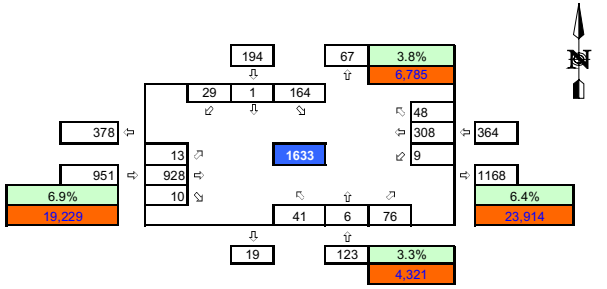
Int 48 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Shoreline Drive**
E/W Street: **Nobel Drive**
Intersection #: 48
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Shoreline Drive**
E/W Street: **Nobel Drive**

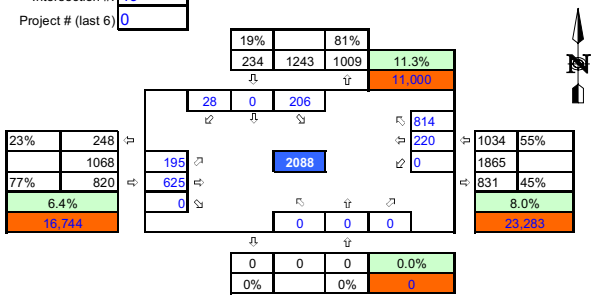


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

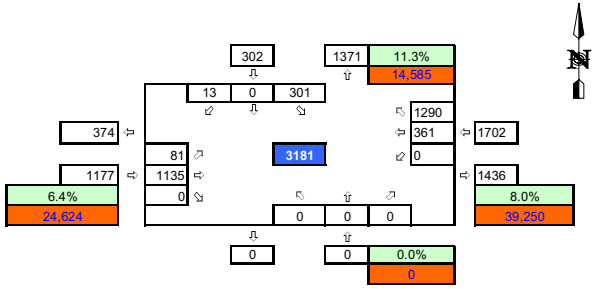
Int 49 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Judicial Drive**
E/W Street: **Nobel Drive**
Intersection #: 49
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Judicial Drive**
E/W Street: **Nobel Drive**

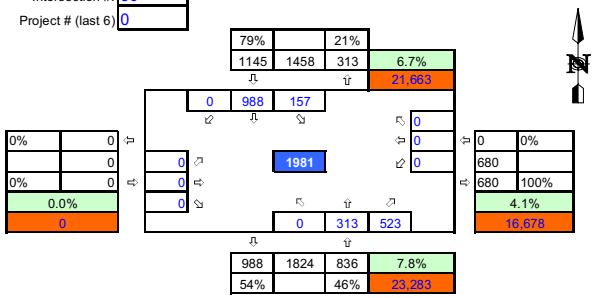


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

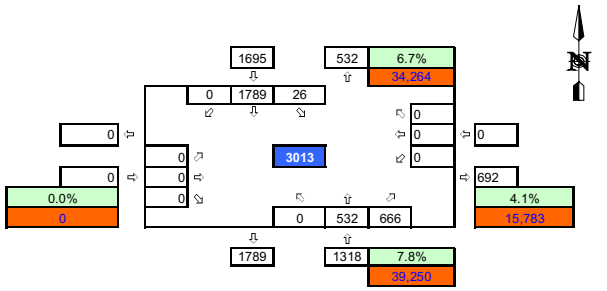
Int 50 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Nobel Drive**
E/W Street: **I-805 SB On-Ramp**
Intersection #: 50
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Nobel Drive**
E/W Street: **I-805 SB On-Ramp**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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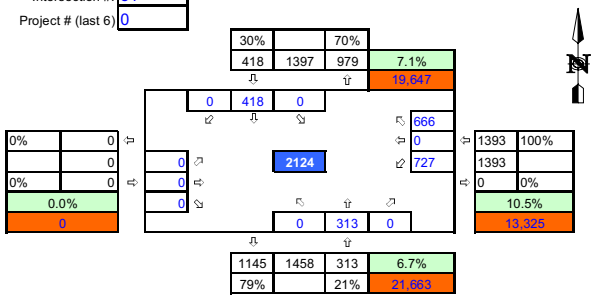
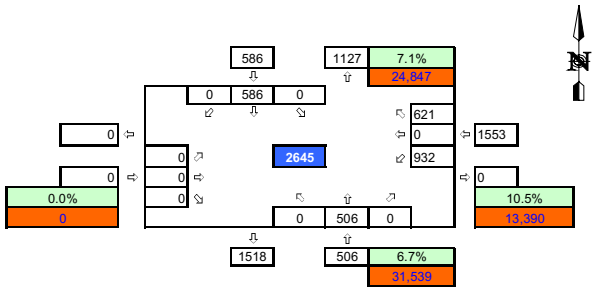
Int 51 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Nobel Drive**
E/W Street: **I-805 N Off-Ramp**
Intersection #: 51
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Nobel Drive**
E/W Street: **I-805 N Off-Ramp**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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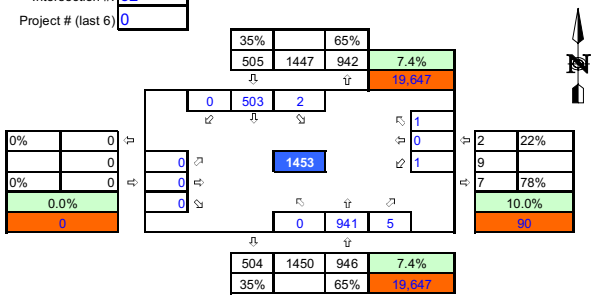
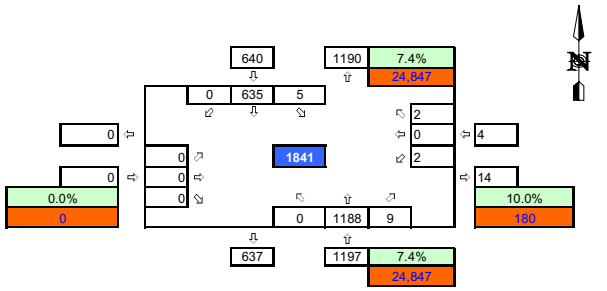
Int 52 AM Peak Volumes

Scenario:	Existing Conditions
N/S Street:	Nobel Drive
E/W Street:	Avenue of Flags
Intersection #:	52
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

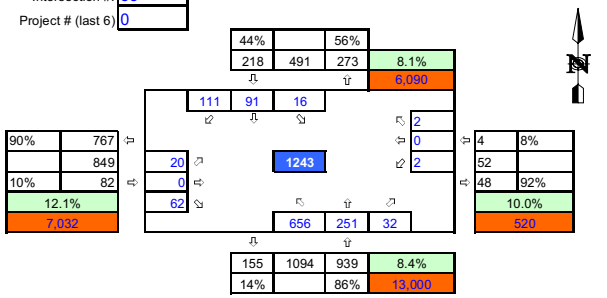
Scenario:	Horizon Year Conditions
N/S Street:	Nobel Drive
E/W Street:	Avenue of Flags



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

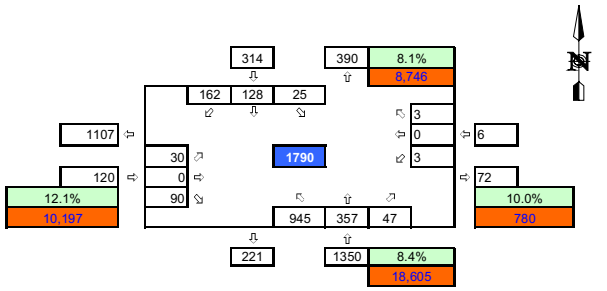
Int 53 AM Peak Volumes

Scenario:	Existing Conditions
N/S Street:	Regents Road
E/W Street:	Health Science Drive / County Day Ln
Intersection #:	53
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

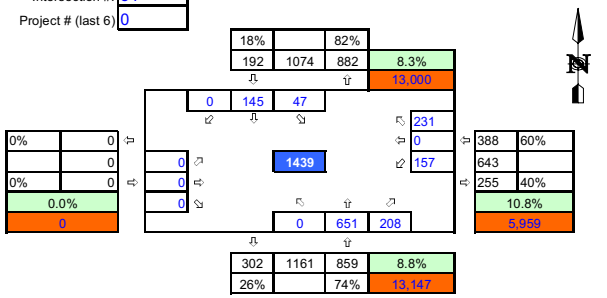
Scenario:	Horizon Year Conditions
N/S Street:	Regents Road
E/W Street:	Health Science Drive / County Day Ln



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

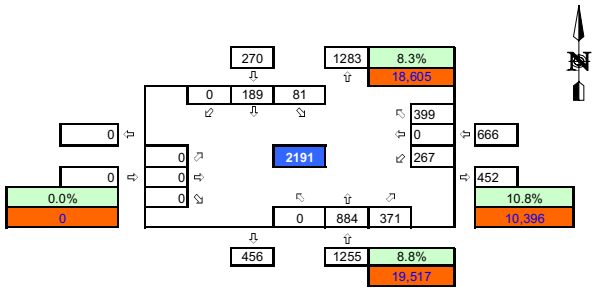
Int 54 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Regents Road**
E/W Street:	**Eastgate Mall**
Intersection #:	54
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

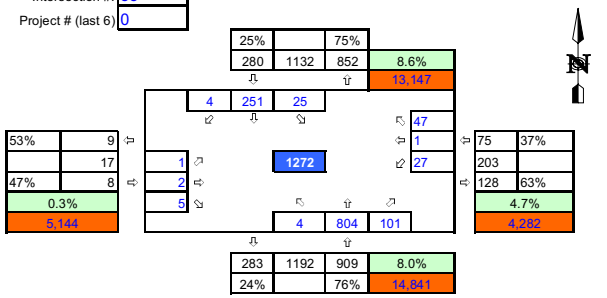
Scenario:	**Horizon Year Conditions**
N/S Street:	**Regents Road**
E/W Street:	**Eastgate Mall**



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

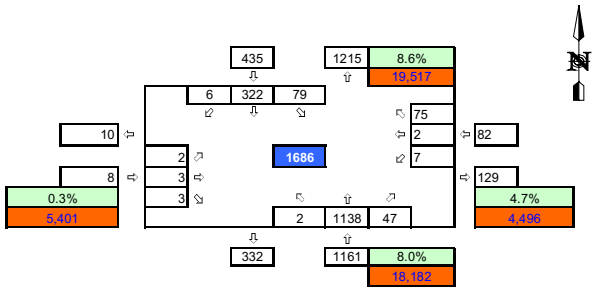
Int 55 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Regents Road**
E/W Street:	**Executive Drive**
Intersection #:	55
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

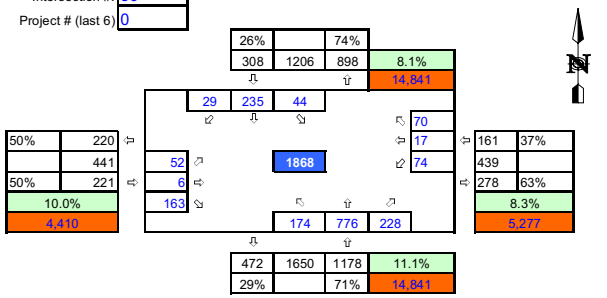
Scenario:	**Horizon Year Conditions**
N/S Street:	**Regents Road**
E/W Street:	**Executive Drive**



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

Int 56 AM Peak Volumes

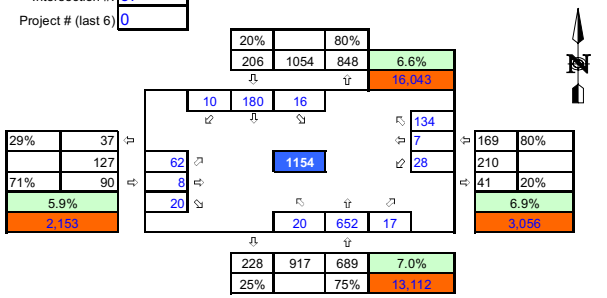
Scenario:	Existing Conditions
N/S Street:	Regents Road
E/W Street:	Miramar Street / Regents Park Row
Intersection #:	56
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

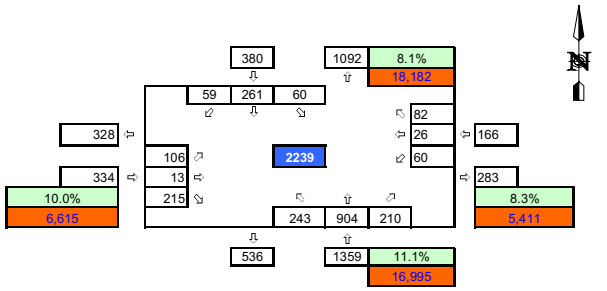
Int 57 AM Peak Volumes

Scenario:	Existing Conditions
N/S Street:	Regents Road
E/W Street:	Plaza De Palmas
Intersection #:	57
Project # (last 6)	0

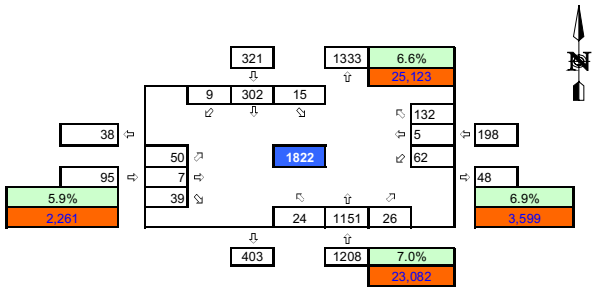


Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	Horizon Year Conditions
N/S Street:	Regents Road
E/W Street:	Miramar Street / Regents Park Row



Scenario:	Horizon Year Conditions
N/S Street:	Regents Road
E/W Street:	Plaza De Palmas



LEGEND

Existing K-Factor	xx%
ADT Volume	xx

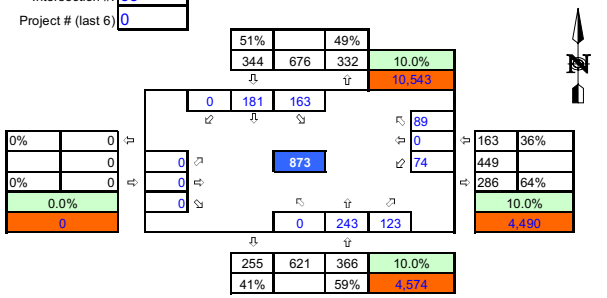
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

K:\SND_TPTO\095240101 - University CPA\Excel\Horizon Year Conditions\Alternative B\Turn32_Alt B.xlsx

Int 58 AM Peak Volumes

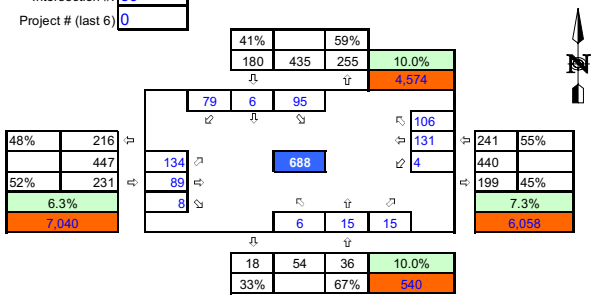
Scenario:	Existing Conditions
N/S Street:	Regents Road
E/W Street:	Berino Court
Intersection #:	58
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

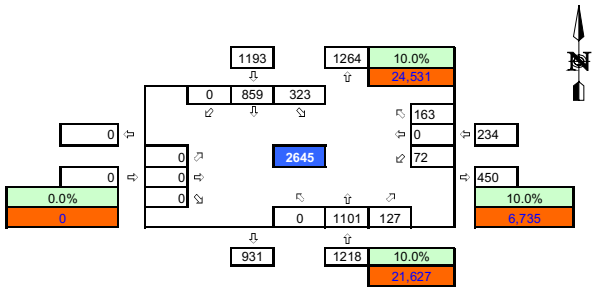
Int 59 AM Peak Volumes

Scenario:	Existing Conditions
N/S Street:	Regents Road
E/W Street:	Arriba Street
Intersection #:	59
Project # (last 6)	0

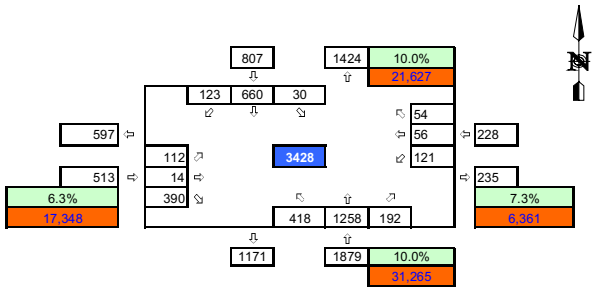


Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	Horizon Year Conditions
N/S Street:	Regents Road
E/W Street:	Berino Court



Scenario:	Horizon Year Conditions
N/S Street:	Regents Road
E/W Street:	Arriba Street



LEGEND

Existing K-Factor	xx%
ADT Volume	xx

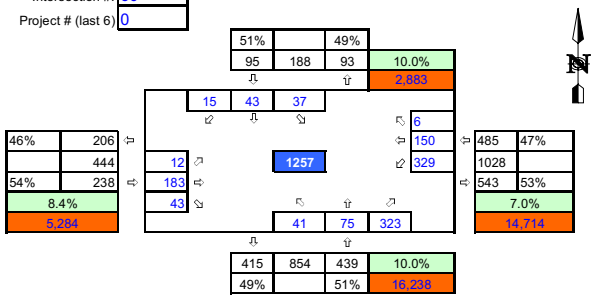
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

K:\SND_TPTO\095240101 - University CPA\Excel\Horizon Year Conditions\Alternative B\Turn32_Alt B.xlsx

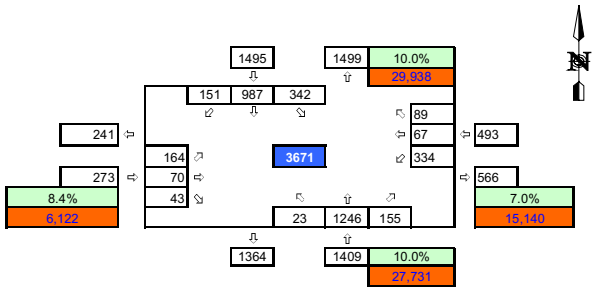
Int 60 AM Peak Volumes

Scenario:	Existing Conditions
N/S Street:	Regents Road
E/W Street:	Governor Drive
Intersection #:	60
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

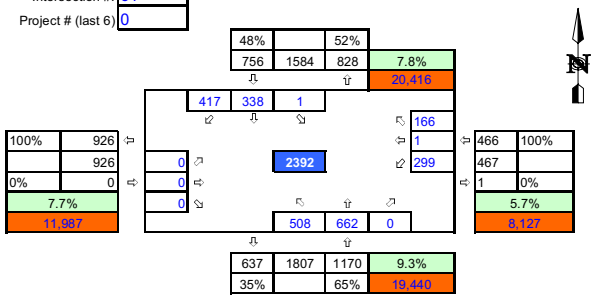
Scenario:	Horizon Year Conditions
N/S Street:	Regents Road
E/W Street:	Governor Drive



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

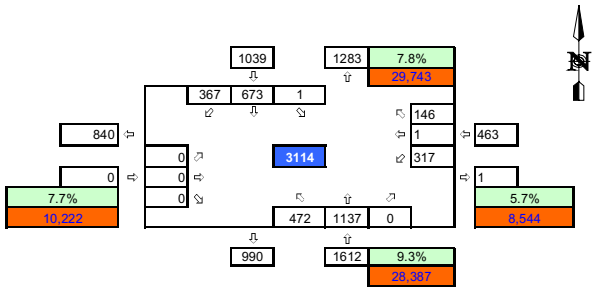
Int 61 AM Peak Volumes

Scenario:	Existing Conditions
N/S Street:	Regents Road
E/W Street:	SR-52 WB Ramps
Intersection #:	61
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

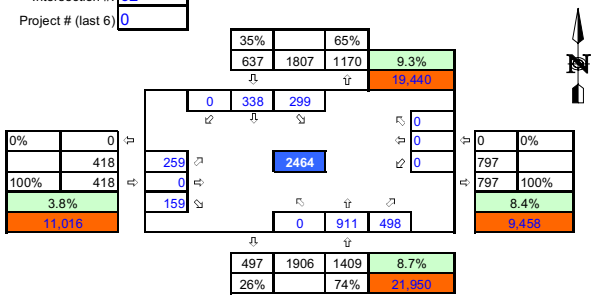
Scenario:	Horizon Year Conditions
N/S Street:	Regents Road
E/W Street:	SR-52 WB Ramps



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

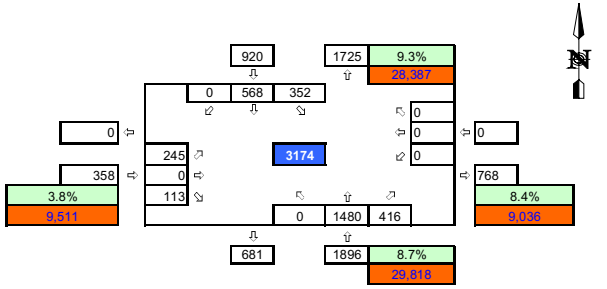
Int 62 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Regents Road**
E/W Street: **SR-52 EB Ramps**
Intersection #: 62
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Regents Road**
E/W Street: **SR-52 EB Ramps**

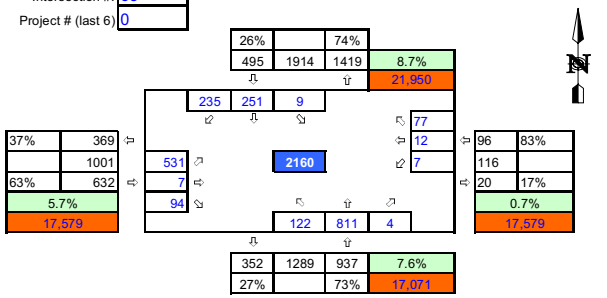


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

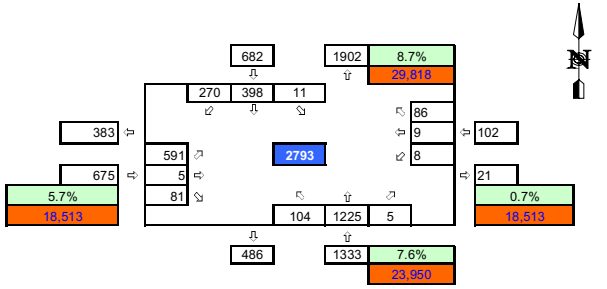
Int 63 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Regents Road / Clairemont Mesa Blvd**
E/W Street: **Luna Avenue**
Intersection #: 63
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Regents Road / Clairemont Mesa Blvd**
E/W Street: **Luna Avenue**

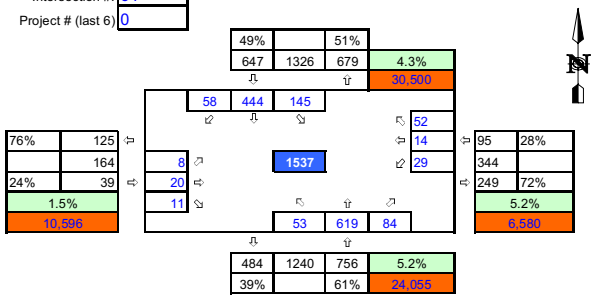


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

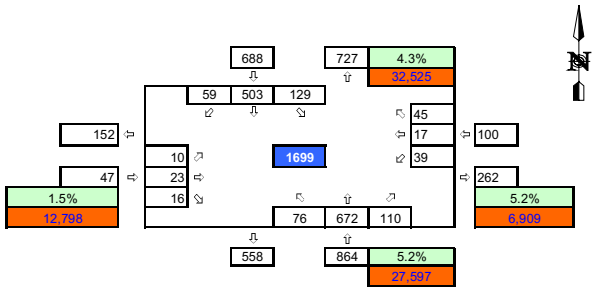
Int 64 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**N. Torrey Pines Road**
E/W Street:	**UCSD Northpoint Driveway**
Intersection #:	64
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

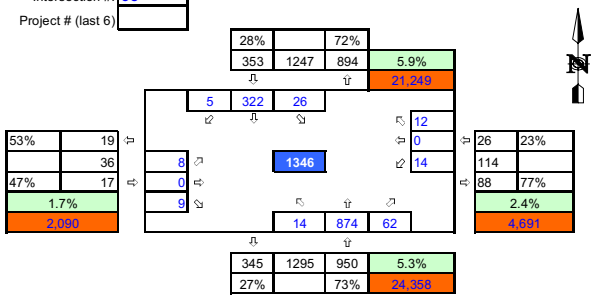
Scenario:	**Horizon Year Conditions**
N/S Street:	**N. Torrey Pines Road**
E/W Street:	**UCSD Northpoint Driveway**



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

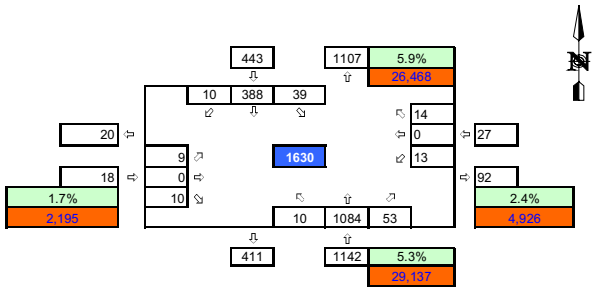
Int 65 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**N. Torrey Pines Road**
E/W Street:	**Pangea Drive**
Intersection #:	65
Project # (last 6)	



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

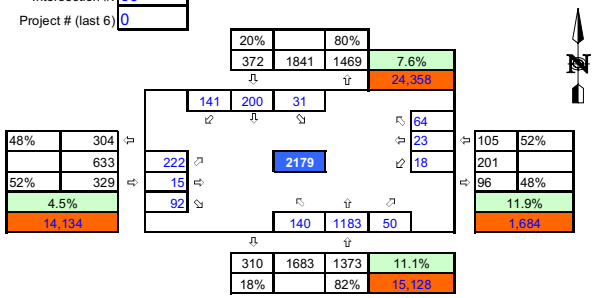
Scenario:	**Horizon Year Conditions**
N/S Street:	**N. Torrey Pines Road**
E/W Street:	**Pangea Drive**



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

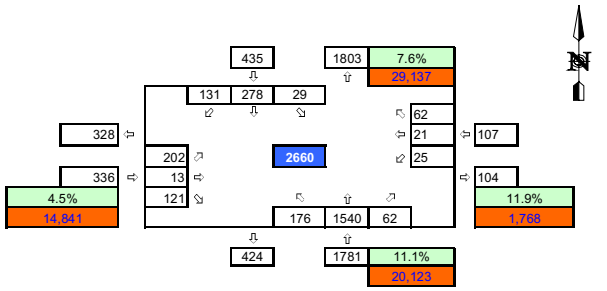
Int 66 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**N. Torrey Pines Road**
E/W Street:	**La Jolla Shores Drive**
Intersection #:	66
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**N. Torrey Pines Road**
E/W Street:	**La Jolla Shores Drive**

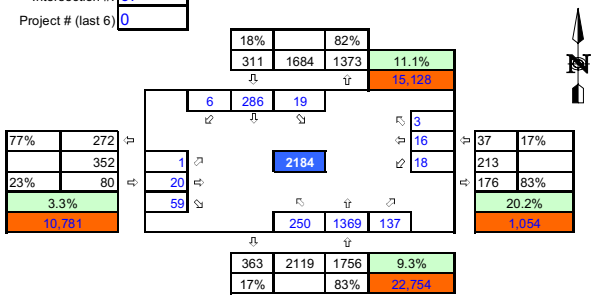


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

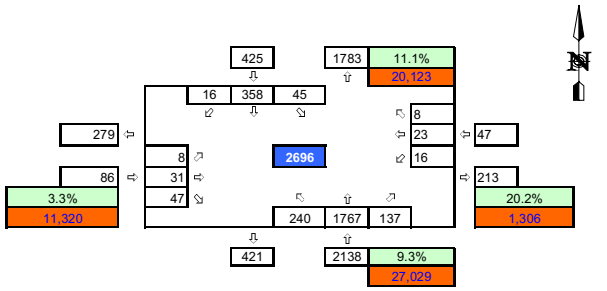
Int 67 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**N. Torrey Pines Road**
E/W Street:	**Expedition Way / Revelle College Drive**
Intersection #:	67
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**N. Torrey Pines Road**
E/W Street:	**Expedition Way / Revelle College Drive**

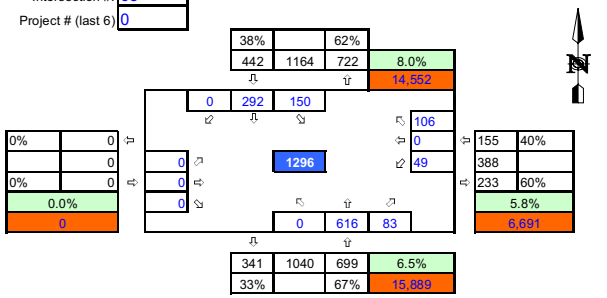


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

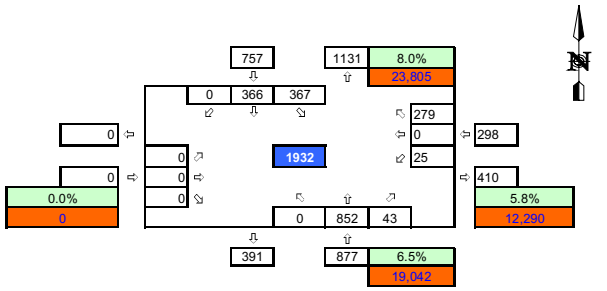
Int 68 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Gilman Drive**
E/W Street:	**Villa La Jolla Drive**
Intersection #:	68
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Gilman Drive**
E/W Street:	**Villa La Jolla Drive**

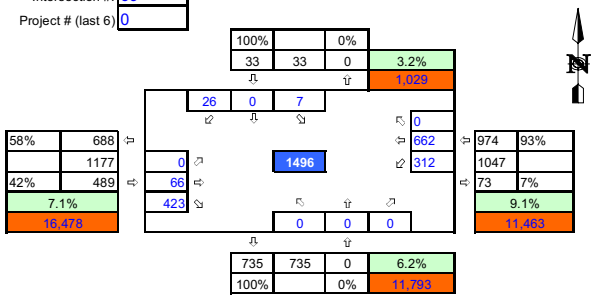


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

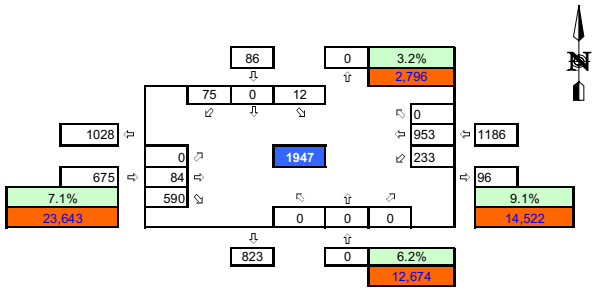
Int 69 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**I-5 SB Ramps**
E/W Street:	**Gillman Drive**
Intersection #:	69
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**I-5 SB Ramps**
E/W Street:	**Gillman Drive**

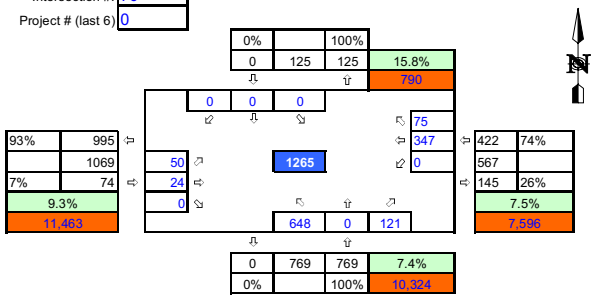


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

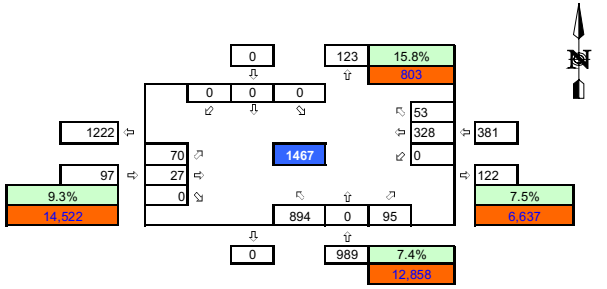
Int 70 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**I-5 NB Ramps**
E/W Street:	**Gillman Drive**
Intersection #:	70
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

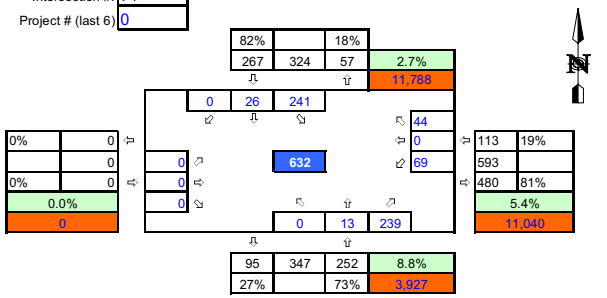
Scenario:	**Horizon Year Conditions**
N/S Street:	**I-5 NB Ramps**
E/W Street:	**Gillman Drive**



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

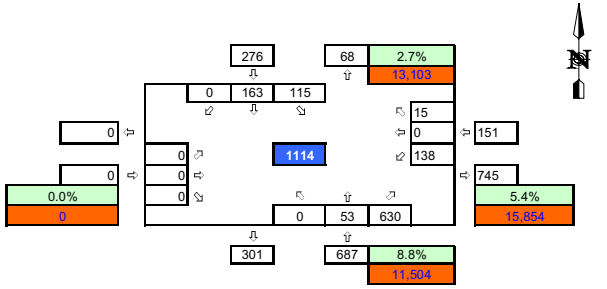
Int 71 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Charmant Drive / Palmilla Drive**
E/W Street:	**Lebon Drive**
Intersection #:	71
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

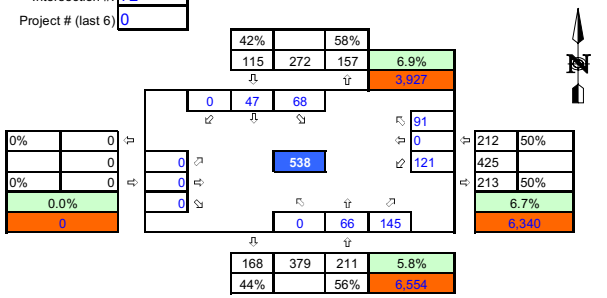
Scenario:	**Horizon Year Conditions**
N/S Street:	**Charmant Drive / Palmilla Drive**
E/W Street:	**Lebon Drive**



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

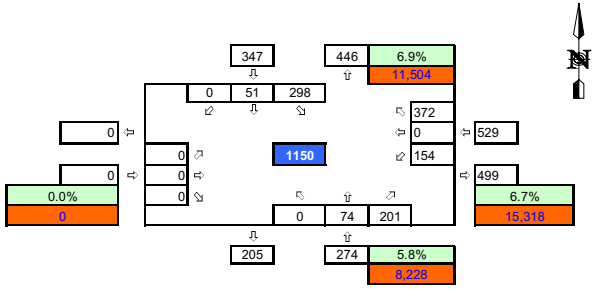
Int 72 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Palmilla Drive**
E/W Street:	**Ariba Street**
Intersection #:	72
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

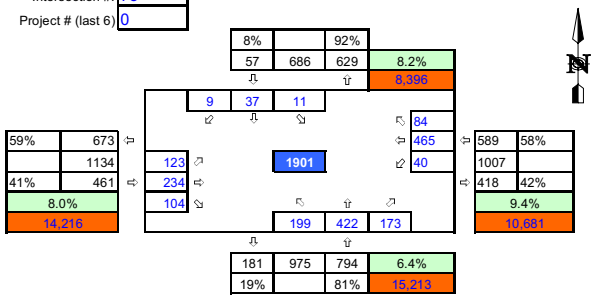
Scenario:	**Horizon Year Conditions**
N/S Street:	**Palmilla Drive**
E/W Street:	**Ariba Street**



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

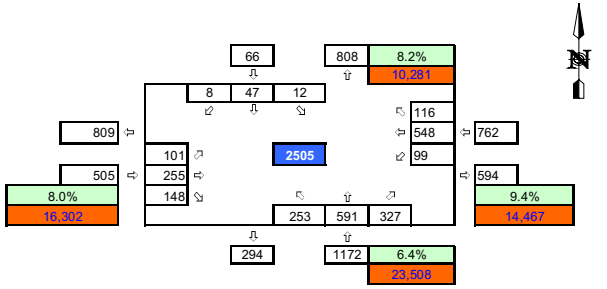
Int 73 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Towne Center Drive**
E/W Street:	**Eastgate Mall**
Intersection #:	73
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

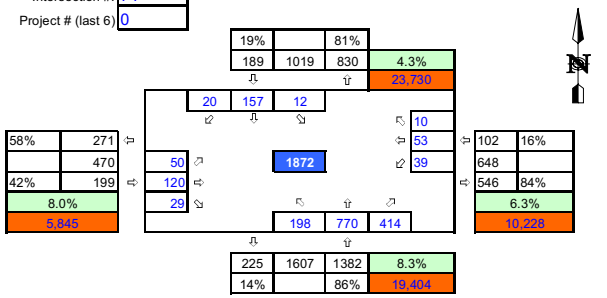
Scenario:	**Horizon Year Conditions**
N/S Street:	**Towne Center Drive**
E/W Street:	**Eastgate Mall**



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

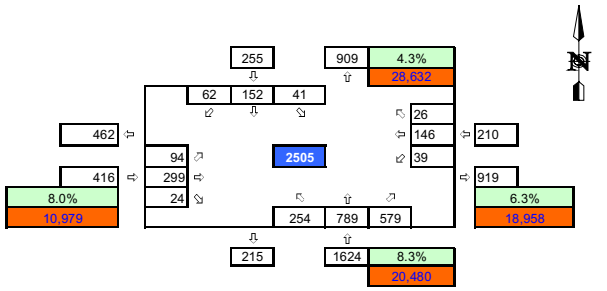
Int 74 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Towne Center Drive**
E/W Street: **Executive Drive**
Intersection #: 74
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Towne Center Drive**
E/W Street: **Executive Drive**

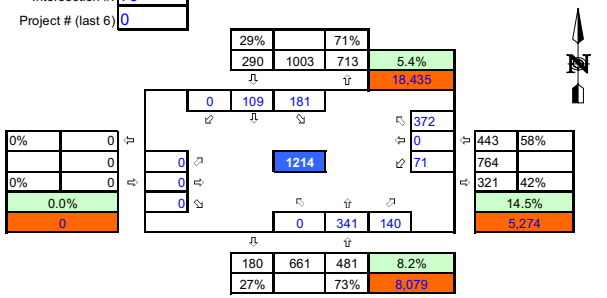


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

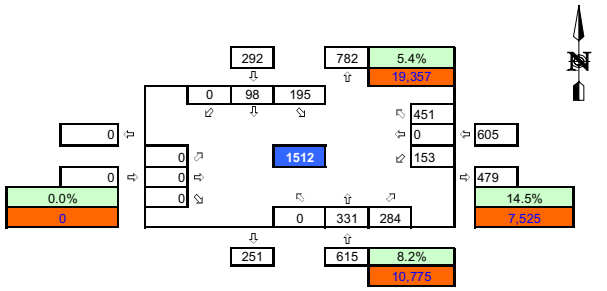
Int 75 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Towne Center Drive**
E/W Street: **Golden Haven Drive**
Intersection #: 75
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Towne Center Drive**
E/W Street: **Golden Haven Drive**

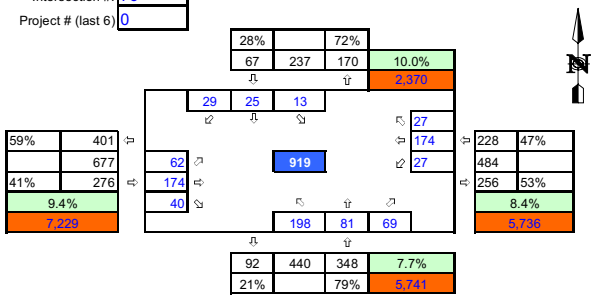


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

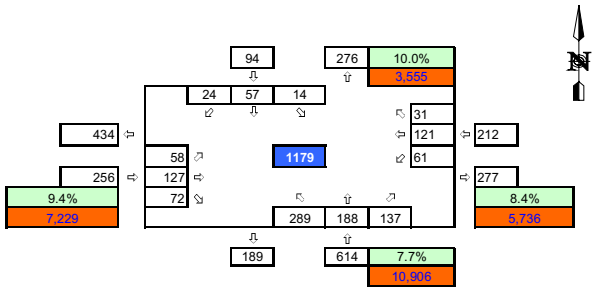
Int 76 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Executive Way**
E/W Street: **Executive Drive**
Intersection #: 76
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

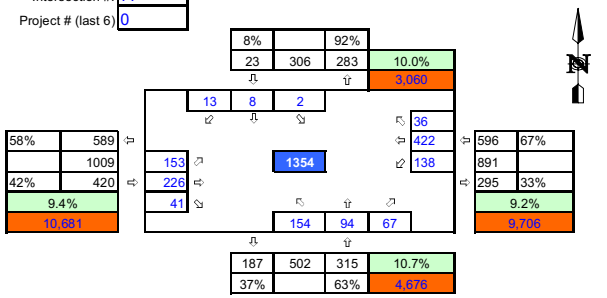
Scenario: **Horizon Year Conditions**
N/S Street: **Executive Way**
E/W Street: **Executive Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

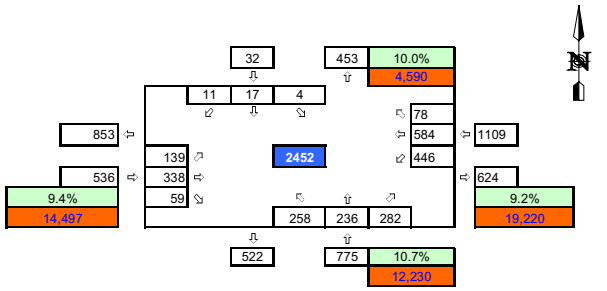
Int 77 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Judicial Drive**
E/W Street: **Eastgate Mall**
Intersection #: 77
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

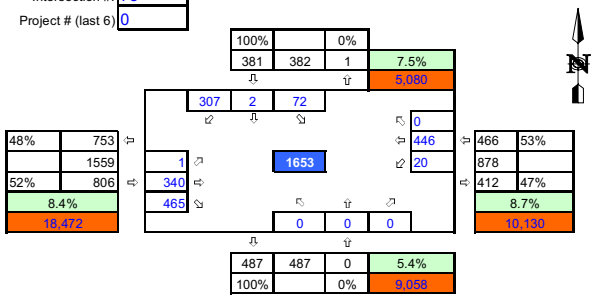
Scenario: **Horizon Year Conditions**
N/S Street: **Judicial Drive**
E/W Street: **Eastgate Mall**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

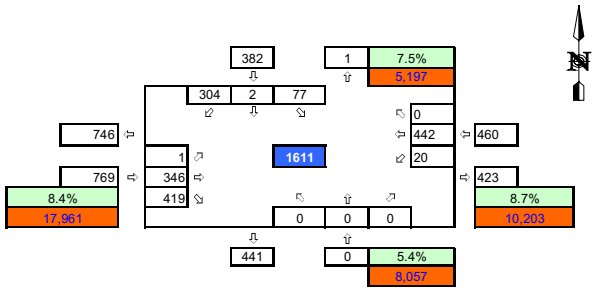
Int 78 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**I-805 SB Ramps**
E/W Street:	**Governor Drive**
Intersection #:	78
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

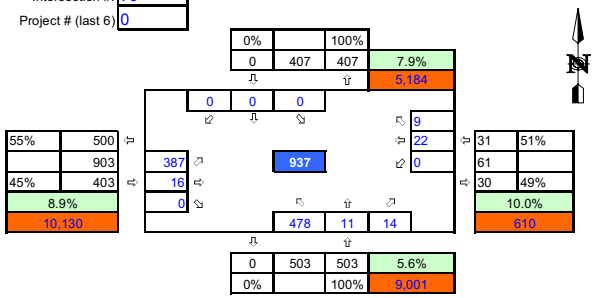
Scenario:	**Horizon Year Conditions**
N/S Street:	**I-805 SB Ramps**
E/W Street:	**Governor Drive**



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

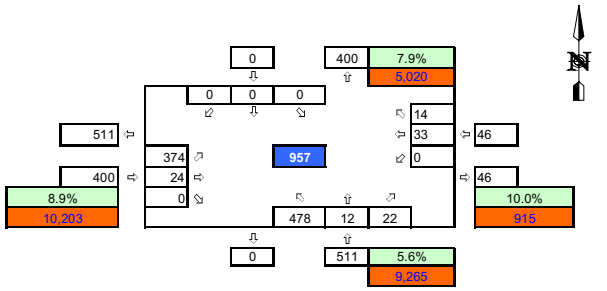
Int 79 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**I-805 NB Ramps**
E/W Street:	**Governor Drive**
Intersection #:	79
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

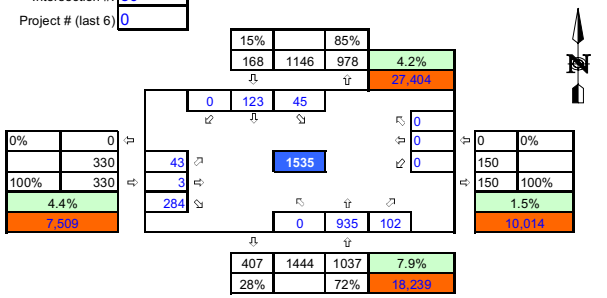
Scenario:	**Horizon Year Conditions**
N/S Street:	**I-805 NB Ramps**
E/W Street:	**Governor Drive**



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

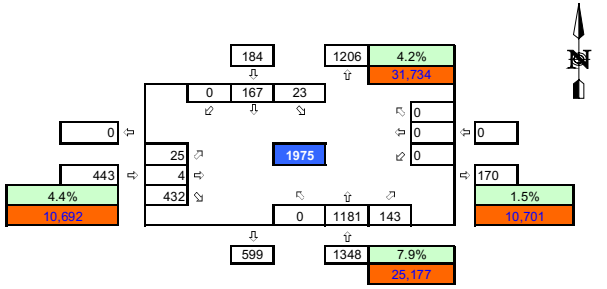
Int 80 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Gilman Drive**
E/W Street: **La Jolla Village Drive EB**
Intersection #: 80
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

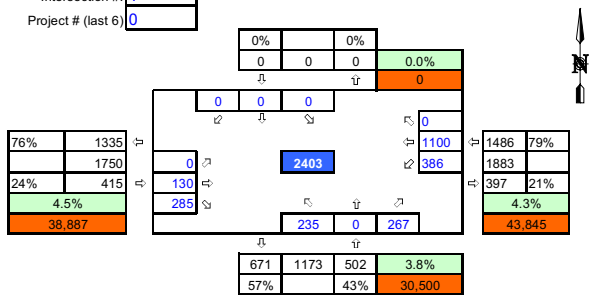
Scenario: **Horizon Year Conditions**
N/S Street: **Gilman Drive**
E/W Street: **La Jolla Village Drive EB**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

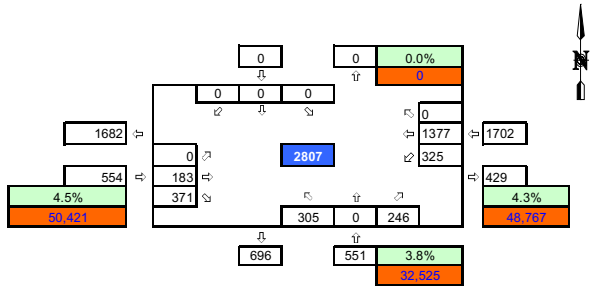
Int 1 MID Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **N. Torrey Pines Road**
E/W Street: **Genesee Avenue**
Intersection #: 1
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

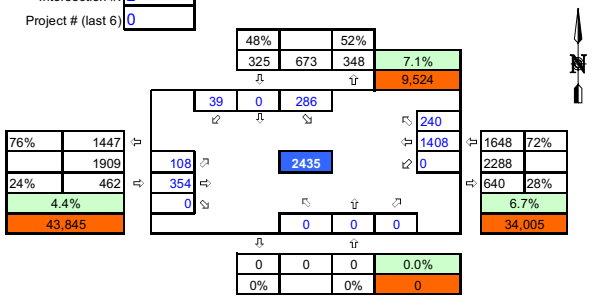
Scenario: **Horizon Year Conditions**
N/S Street: **N. Torrey Pines Road**
E/W Street: **Genesee Avenue**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

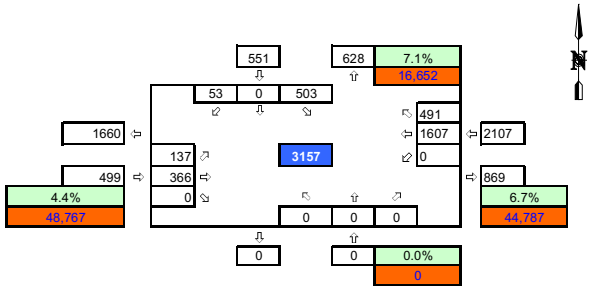
Int 2 MID Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**John Hopkins Drive (S)**
E/W Street:	**Genesee Avenue**
Intersection #:	2
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**John Hopkins Drive (S)**
E/W Street:	**Genesee Avenue**



LEGEND

Existing K-Factor	xx%
ADT Volume	xx

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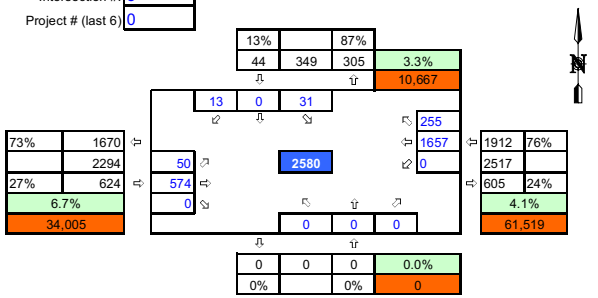
Int 2 MID

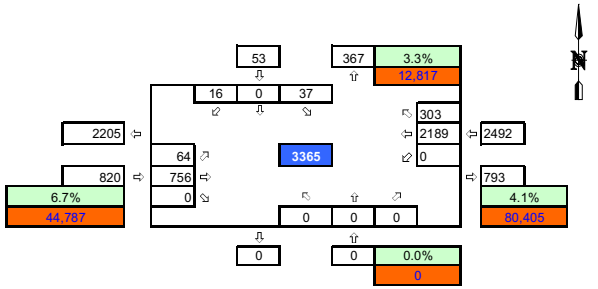
Int 3 MID Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Science Center Drive**
E/W Street:	**Genesee Avenue**
Intersection #:	3
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Science Center Drive**
E/W Street:	**Genesee Avenue**



LEGEND

Existing K-Factor	xx%
ADT Volume	xx

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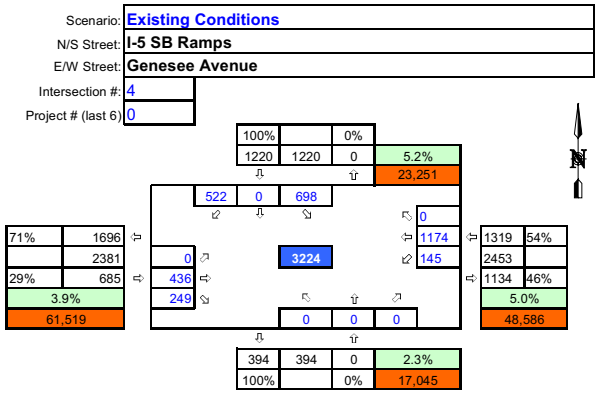
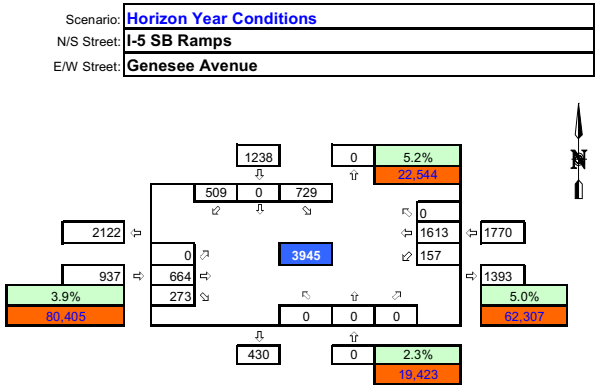
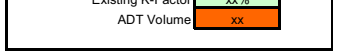
Int 3 MID

Int 4 MID Peak Volumes

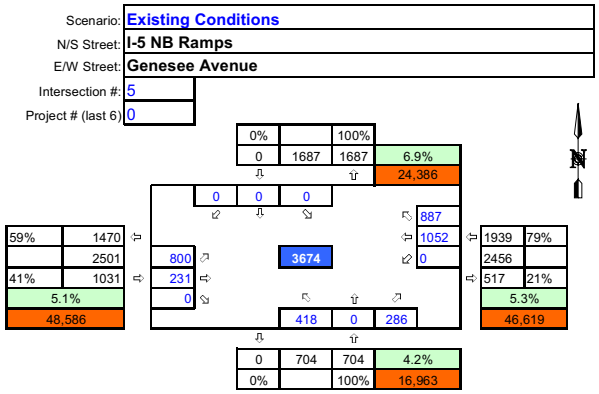


Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

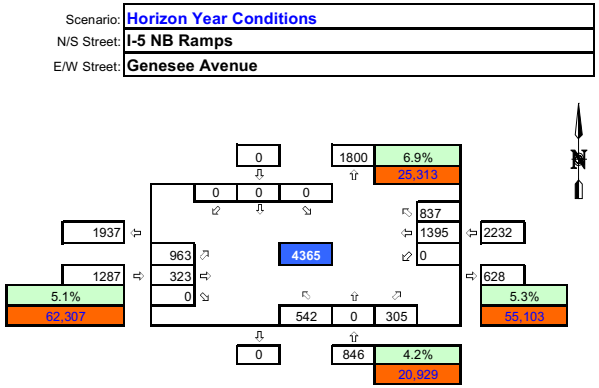


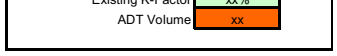


Int 5 MID Peak Volumes



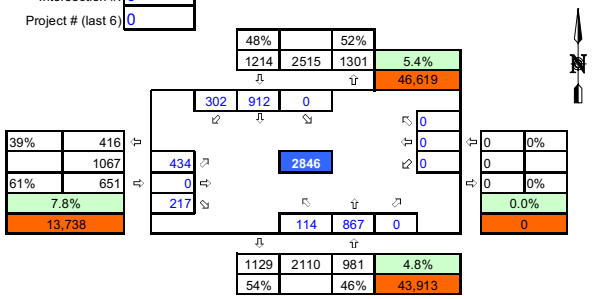
Note: Traffic volumes were collected by Accurate Video Counts during May 2015.





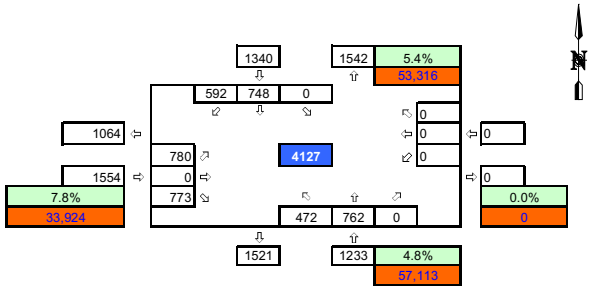
Int 6 MID Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**Scripps Hospital**
Intersection #:	6
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**Scripps Hospital**



LEGEND

Existing K-Factor	xx%
ADT Volume	xx

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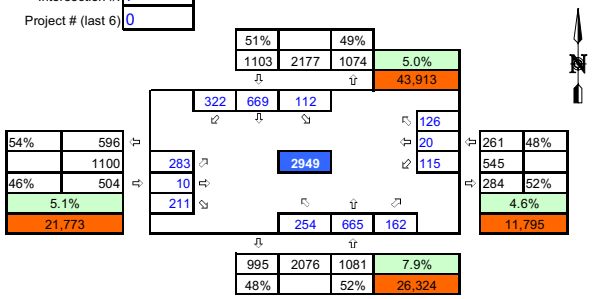
Int 6 MID

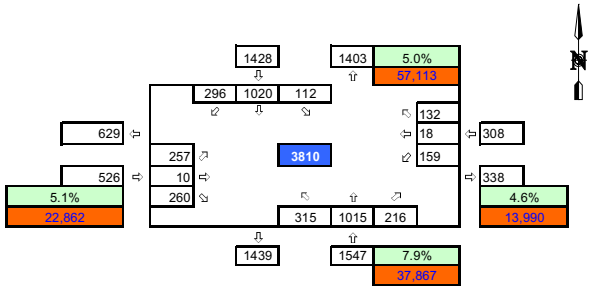
Int 7 MID Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**Campus Point Drive**
Intersection #:	7
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**Campus Point Drive**



LEGEND

Existing K-Factor	xx%
ADT Volume	xx

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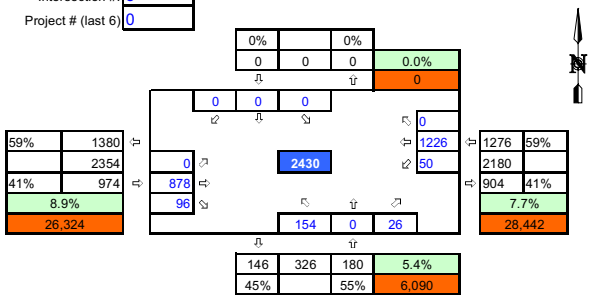
Int 7 MID

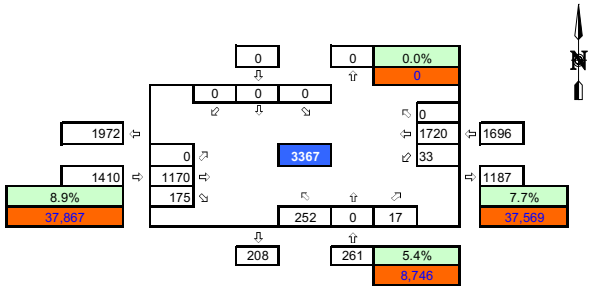
Int 8 MID Peak Volumes

Scenario:	Existing Conditions
N/S Street:	Regents Road
E/W Street:	Genesee Avenue
Intersection #:	8
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	Horizon Year Conditions
N/S Street:	Regents Road
E/W Street:	Genesee Avenue

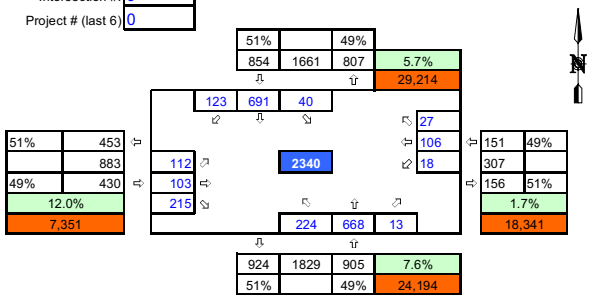


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

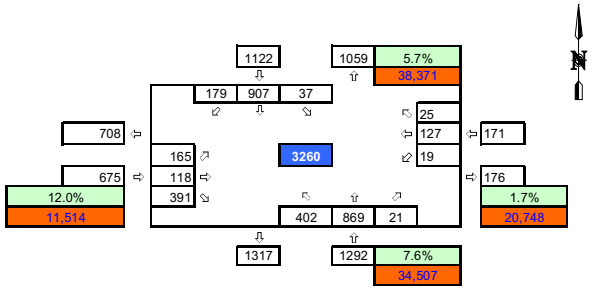
Int 9 MID Peak Volumes

Scenario:	Existing Conditions
N/S Street:	Genesee Avenue
E/W Street:	Eastgate Mall
Intersection #:	9
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	Horizon Year Conditions
N/S Street:	Genesee Avenue
E/W Street:	Eastgate Mall

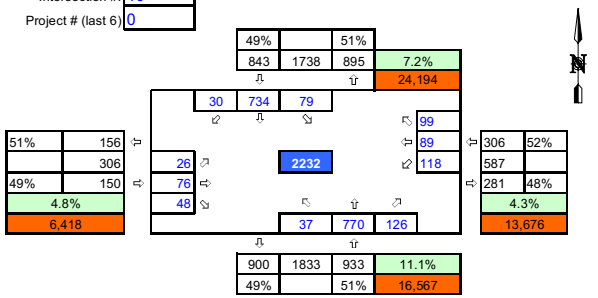


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

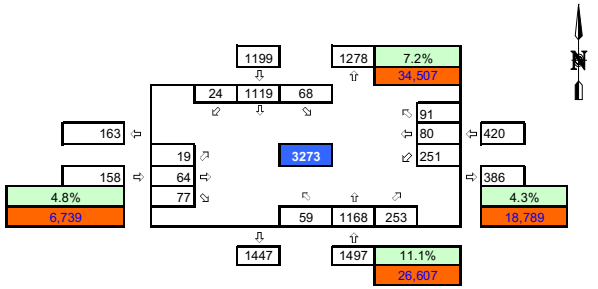
Int 10 MID Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Executive Drive**
Intersection #: 10
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Executive Drive**

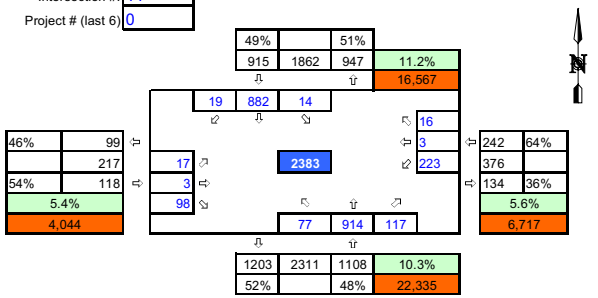


LEGEND
Existing K-Factor: xx%
ADT Volume: xx

K:\SND_TPTO\095240101 - University CPA\Excel\Horizon Year Conditions\Alternative B\Turn32_Alt B.xlsx
Int 10 MID

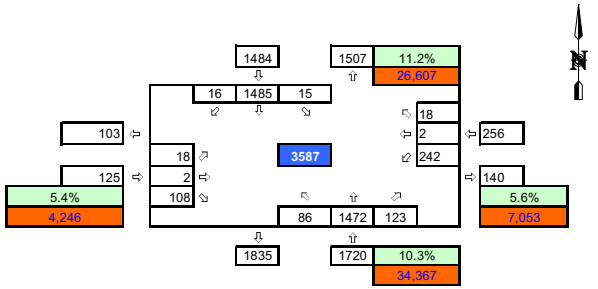
Int 11 MID Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Executive Square**
Intersection #: 11
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Executive Square**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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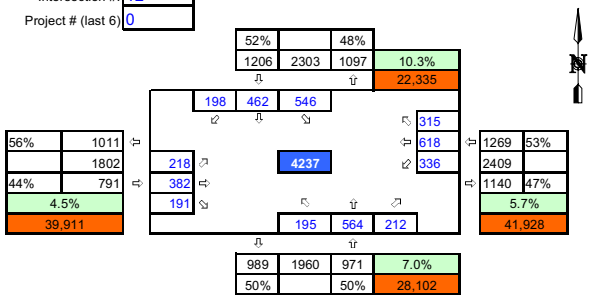
Int 11 MID

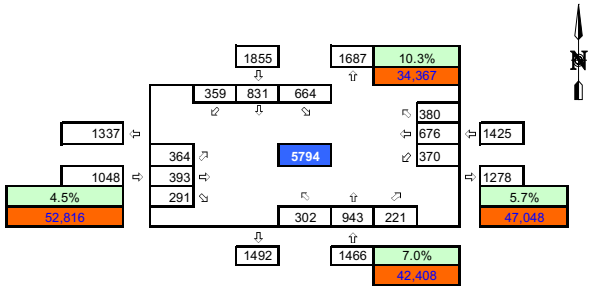
Int 12 MID Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **La Jolla Village Drive**
Intersection #: 12
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **La Jolla Village Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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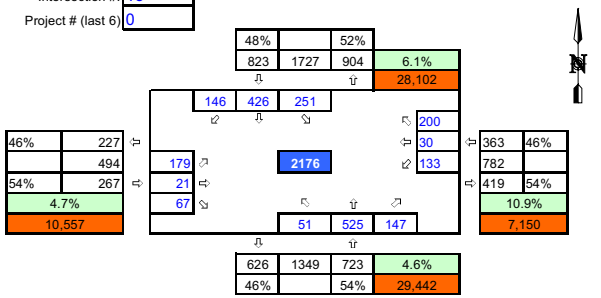
Int 12 MID

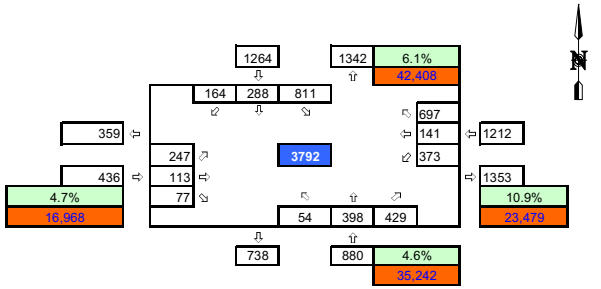
Int 13 MID Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Esplanade Court**
Intersection #: 13
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Esplanade Court**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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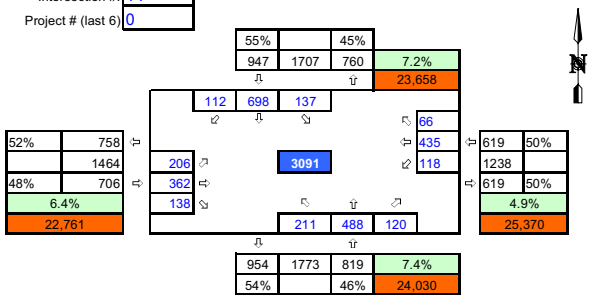
Int 13 MID

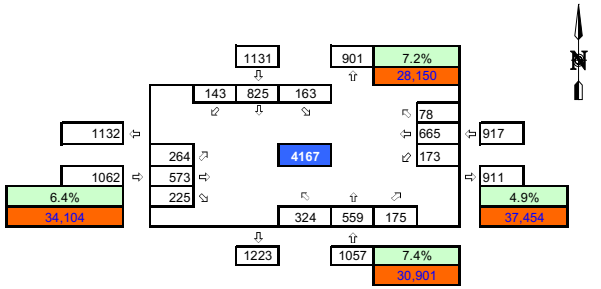
Int 14 MID Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Nobel Drive**
Intersection #: 14
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Nobel Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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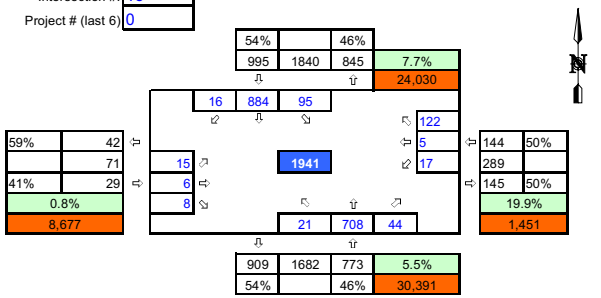
Int 14 MID

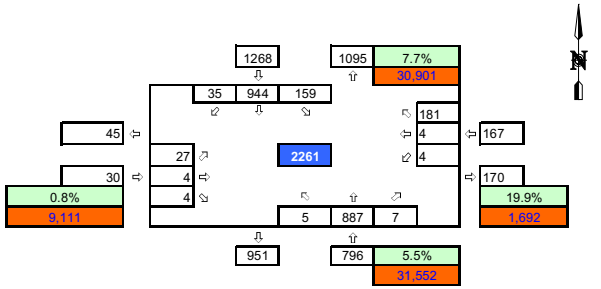
Int 15 MID Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Decoro Street**
Intersection #: 15
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Decoro Street**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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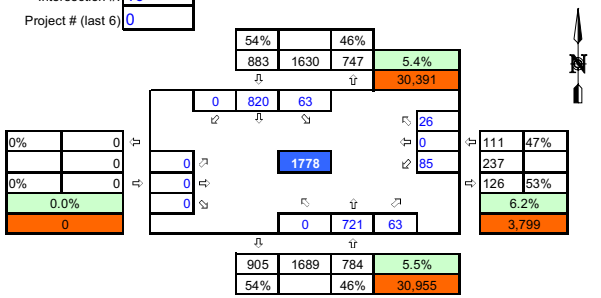
Int 15 MID

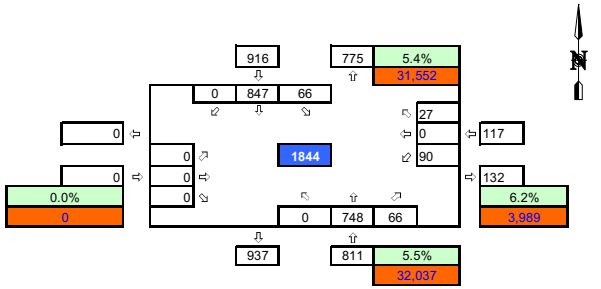
Int 16 MID Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Centurion Square**
Intersection #: 16
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Centurion Square**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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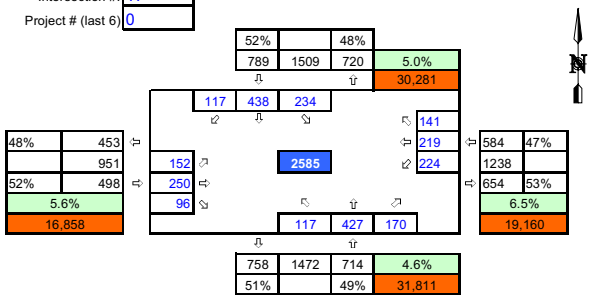
Int 16 MID

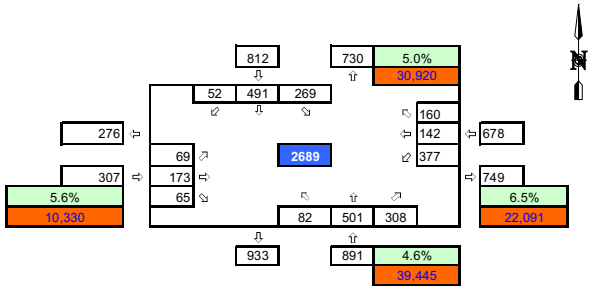
Int 17 MID Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Governor Drive**
Intersection #: 17
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Governor Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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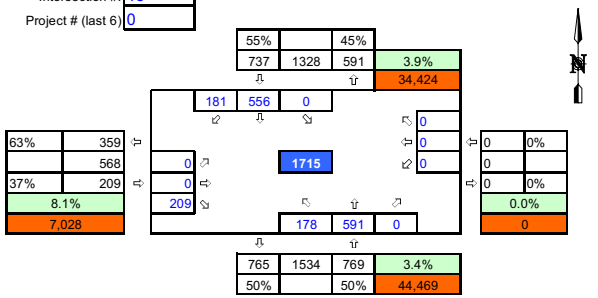
Int 17 MID

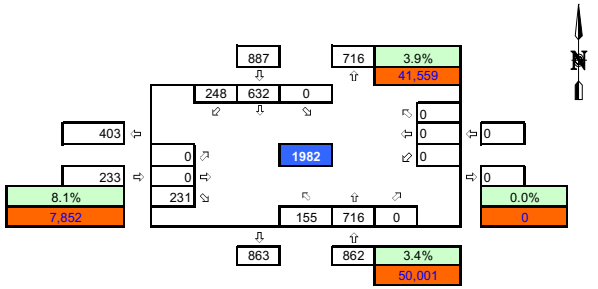
Int 18 MID Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**SR-52 WB Ramps**
Intersection #:	18
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**SR-52 WB Ramps**



LEGEND

Existing K-Factor	xx%
ADT Volume	xx

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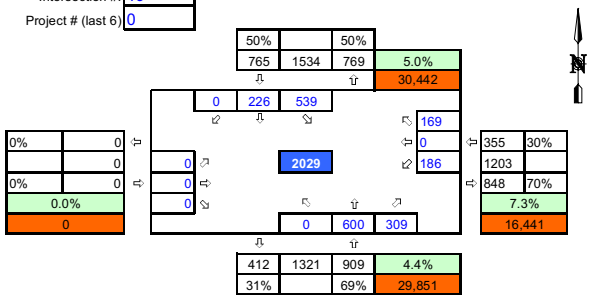
Int 18 MID

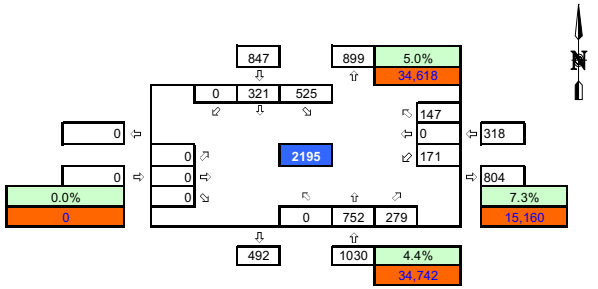
Int 19 MID Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**SR-52 EB Ramps**
Intersection #:	19
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**SR-52 EB Ramps**



LEGEND

Existing K-Factor	xx%
ADT Volume	xx

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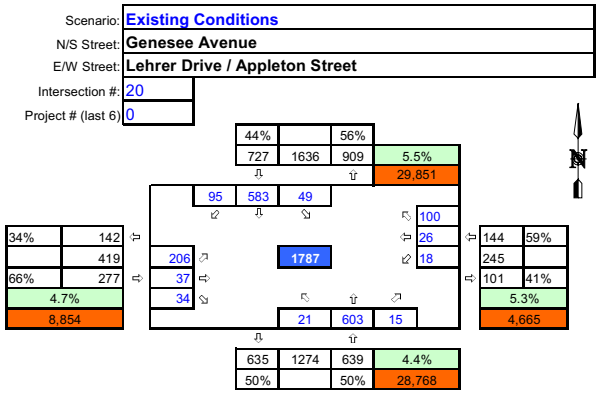
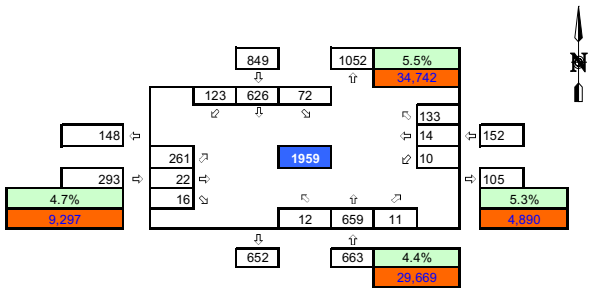
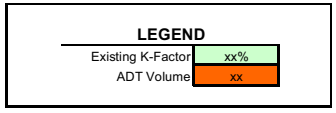
Int 19 MID

Int 20 MID Peak Volumes

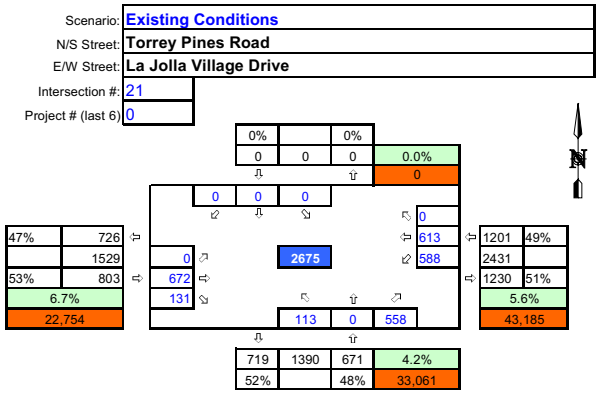


Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

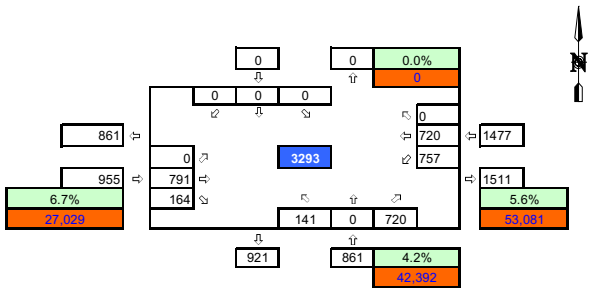


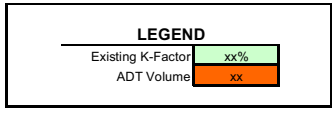


Int 21 MID Peak Volumes



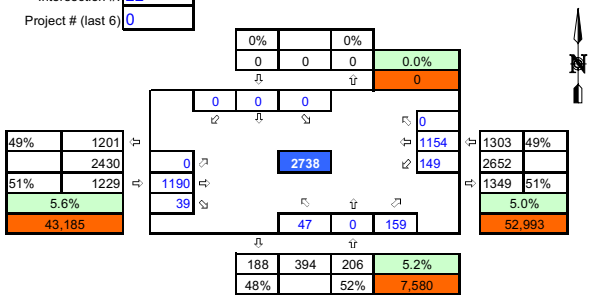
Note: Traffic volumes were collected by Accurate Video Counts during May 2015.





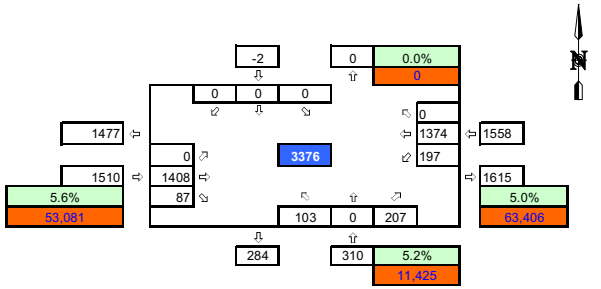
Int 22 MID Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**La Jolla Scenic Drive**
E/W Street:	**La Jolla Village Drive**
Intersection #:	22
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**La Jolla Scenic Drive**
E/W Street:	**La Jolla Village Drive**

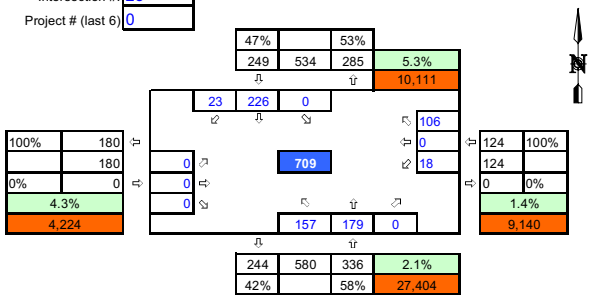


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

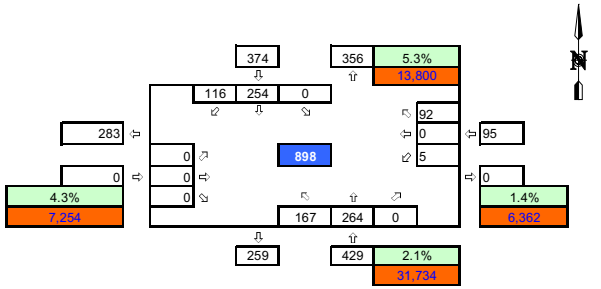
Int 23 MID Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Gillman Drive**
E/W Street:	**La Jolla Village Drive WB**
Intersection #:	23
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

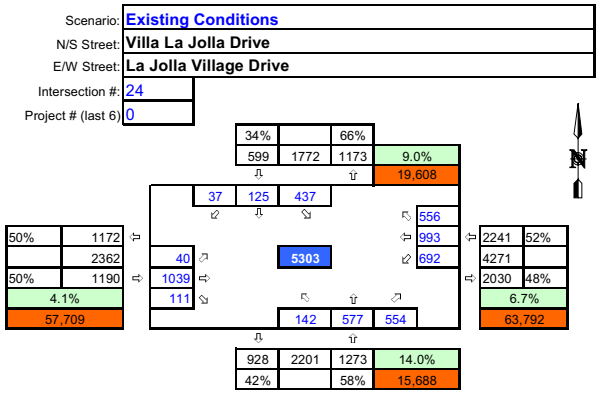
Scenario:	**Horizon Year Conditions**
N/S Street:	**Gillman Drive**
E/W Street:	**La Jolla Village Drive WB**



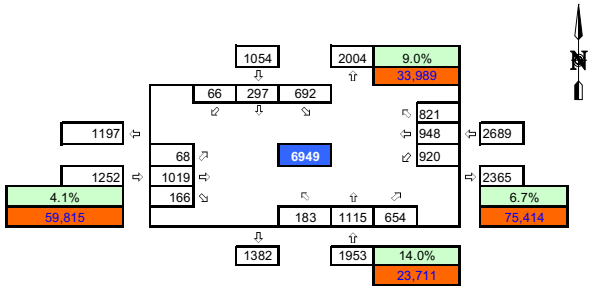
LEGEND

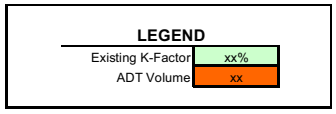
Existing K-Factor	xx%
ADT Volume	xx

Int 24 MID Peak Volumes

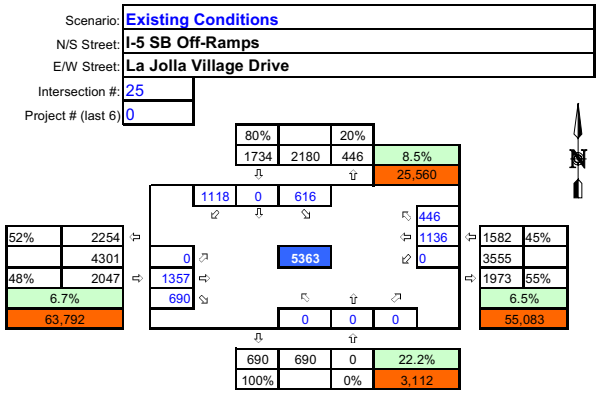


Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

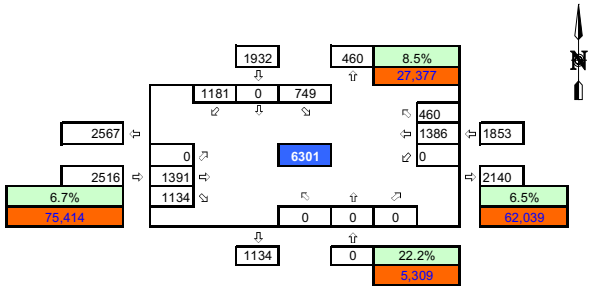


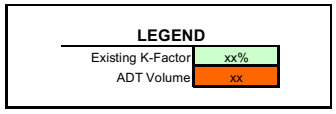


Int 25 MID Peak Volumes



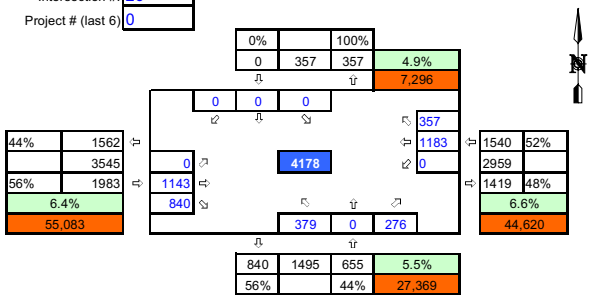
Note: Traffic volumes were collected by Accurate Video Counts during May 2015.





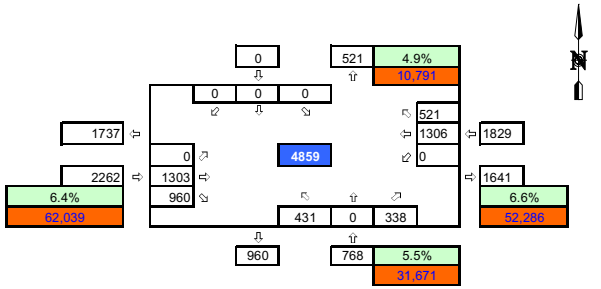
Int 26 MID Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**I-5 NB Off-Ramps**
E/W Street:	**La Jolla Village Drive**
Intersection #:	26
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**I-5 NB Off-Ramps**
E/W Street:	**La Jolla Village Drive**

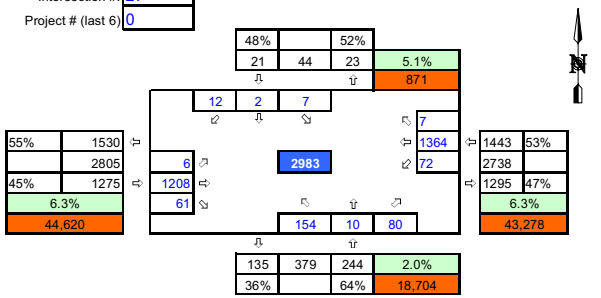


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

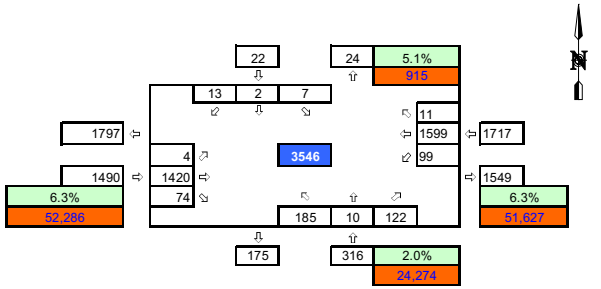
Int 27 MID Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Lebon Drive**
E/W Street:	**La Jolla Village Drive**
Intersection #:	27
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Lebon Drive**
E/W Street:	**La Jolla Village Drive**

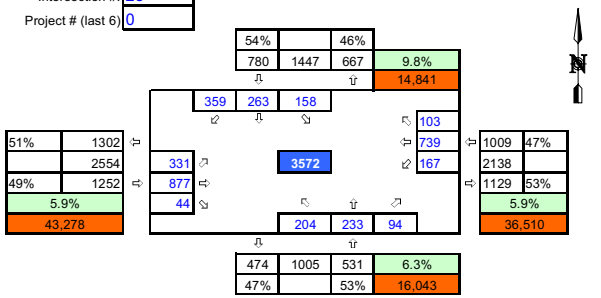


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

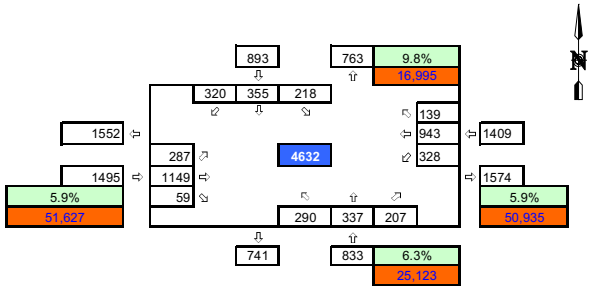
Int 28 MID Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Regents Road**
E/W Street: **La Jolla Village Drive**
Intersection #: 28
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Regents Road**
E/W Street: **La Jolla Village Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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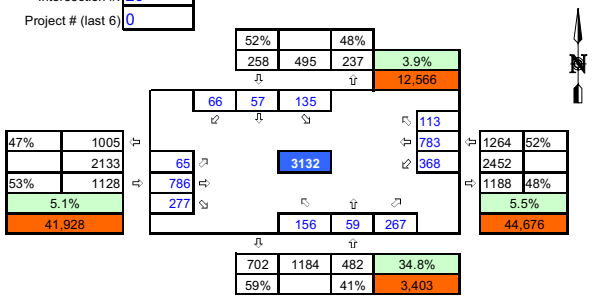
Int 28 MID

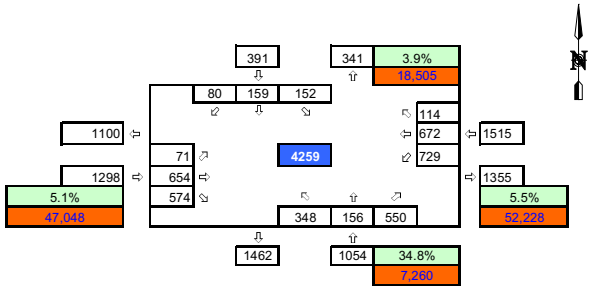
Int 29 MID Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Executive Way**
E/W Street: **La Jolla Village Drive**
Intersection #: 29
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Executive Way**
E/W Street: **La Jolla Village Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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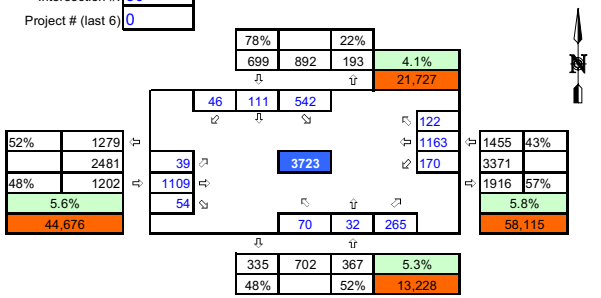
Int 29 MID

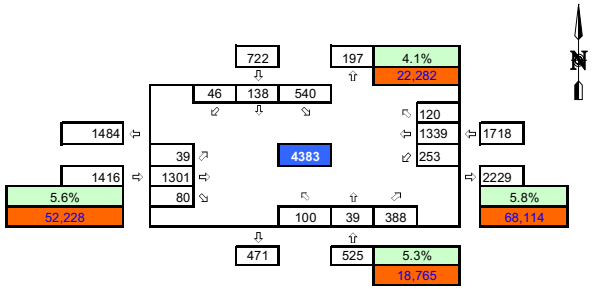
Int 30 MID Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Towne Center Drive**
E/W Street:	**La Jolla Village Drive**
Intersection #:	30
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Towne Center Drive**
E/W Street:	**La Jolla Village Drive**

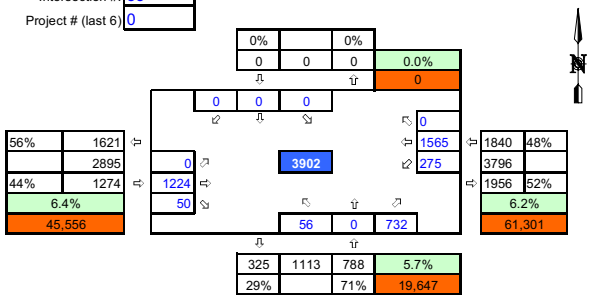


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

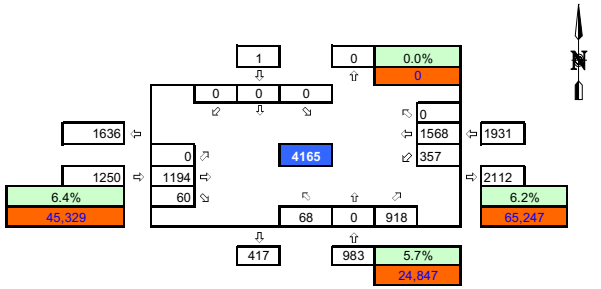
Int 33 MID Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Noble Drive**
E/W Street:	**Miramar Road**
Intersection #:	33
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Noble Drive**
E/W Street:	**Miramar Road**

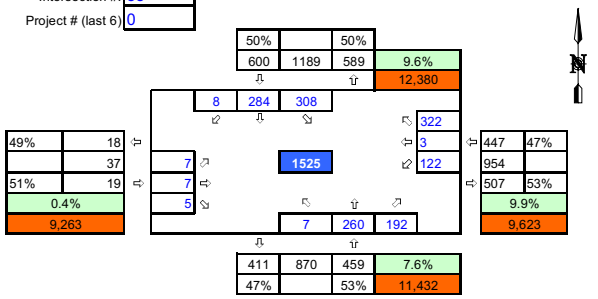


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

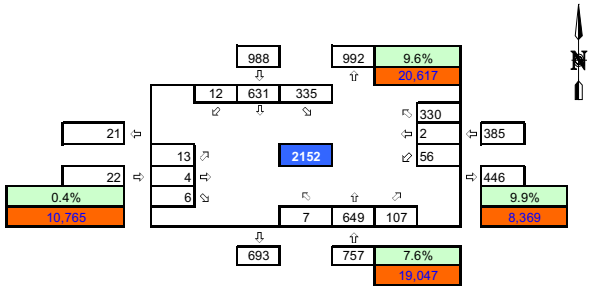
Int 38 MID Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Villa La Jolla Drive**
E/W Street: **Nobel Drive**
Intersection #: 38
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Villa La Jolla Drive**
E/W Street: **Nobel Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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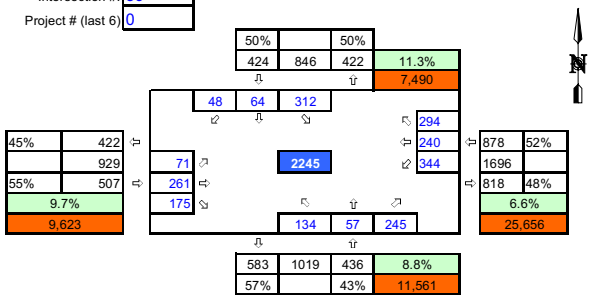
Int 38 MID

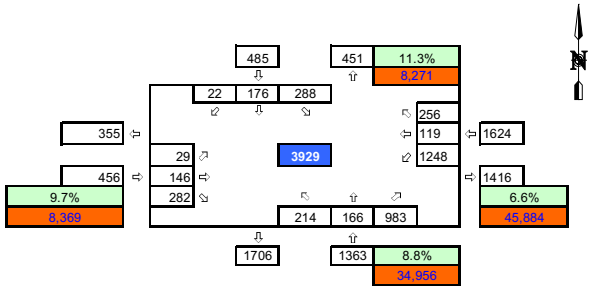
Int 39 MID Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **La Jolla Village Square Driveway**
E/W Street: **Nobel Drive**
Intersection #: 39
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **La Jolla Village Square Driveway**
E/W Street: **Nobel Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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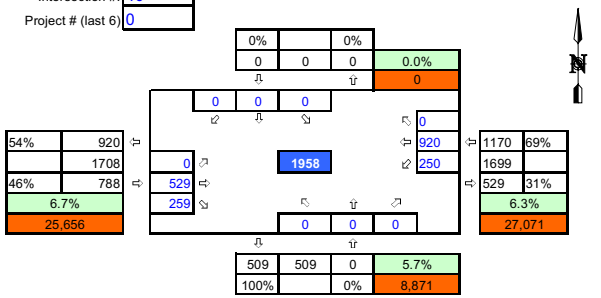
Int 39 MID

Int 40 MID Peak Volumes

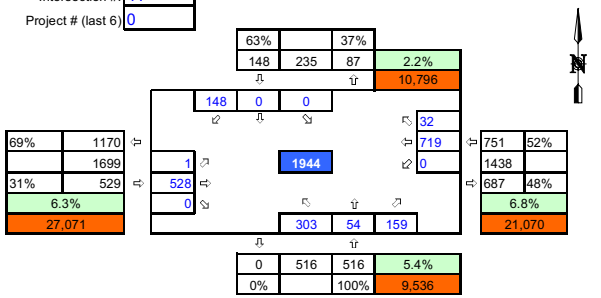
Scenario:	**Existing Conditions**
N/S Street:	**I-5 SB On**
E/W Street:	**Nobel Drive**
Intersection #:	40
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

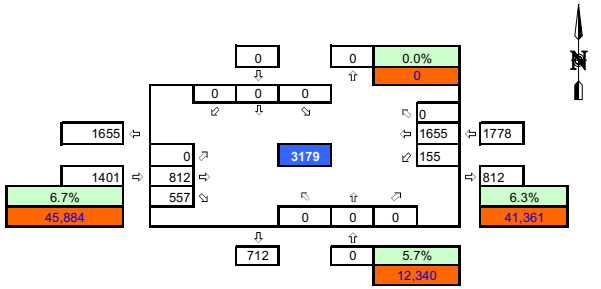
Int 41 MID Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**University Center Lane/I-5 NB Off**
E/W Street:	**Nobel Drive**
Intersection #:	41
Project # (last 6)	0

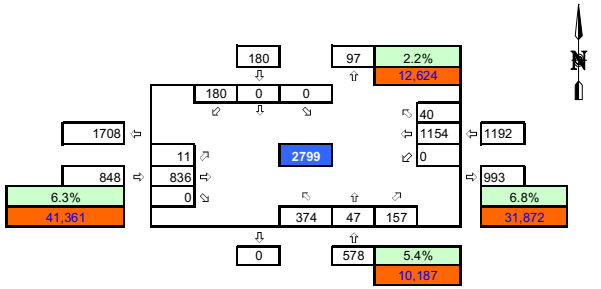


Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**I-5 SB On**
E/W Street:	**Nobel Drive**



Scenario:	**Horizon Year Conditions**
N/S Street:	**University Center Lane/I-5 NB Off**
E/W Street:	**Nobel Drive**

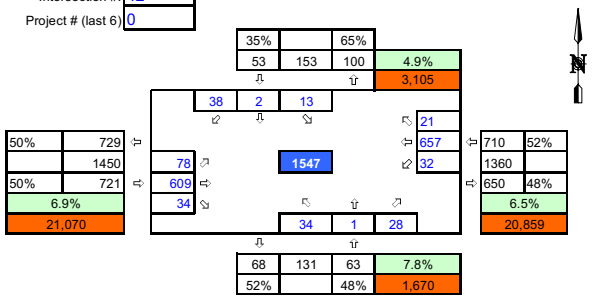


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

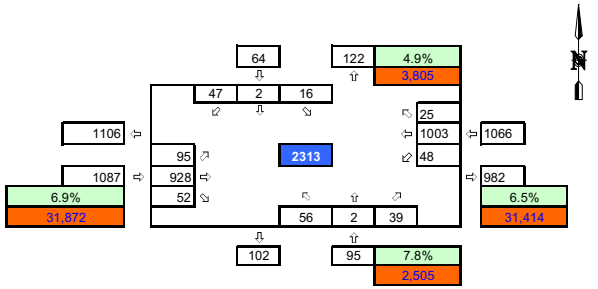
Int 42 MID Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Caminito Plaza Centro**
E/W Street: **Nobel Drive**
Intersection #: 42
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Caminito Plaza Centro**
E/W Street: **Nobel Drive**



LEGEND

Existing K-Factor	xx%
ADT Volume	xx

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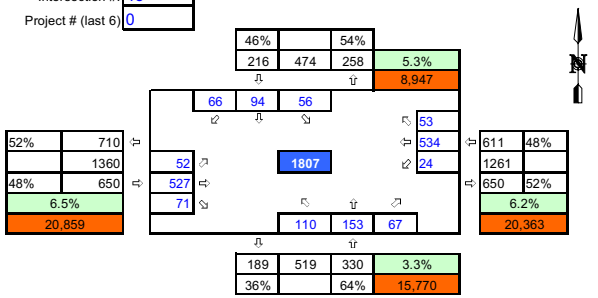
Int 42 MID

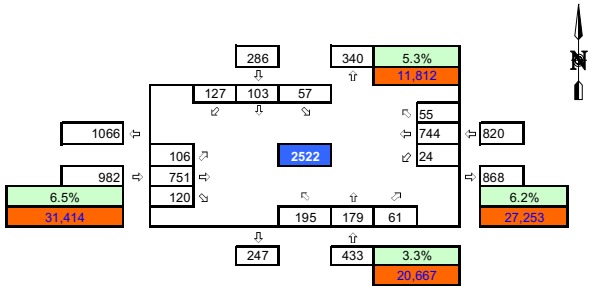
Int 43 MID Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Lebon Drive**
E/W Street: **Nobel Drive**
Intersection #: 43
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Lebon Drive**
E/W Street: **Nobel Drive**



LEGEND

Existing K-Factor	xx%
ADT Volume	xx

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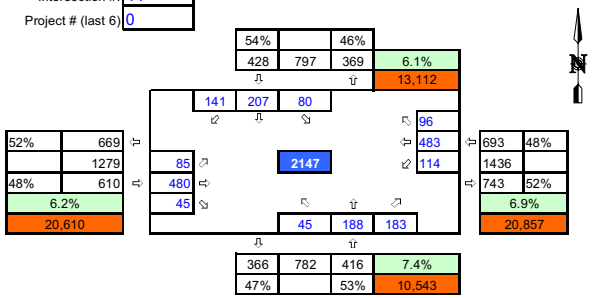
Int 43 MID

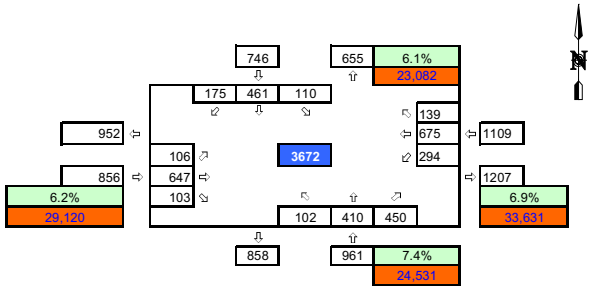
Int 44 MID Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Regents Road**
E/W Street: **Nobel Drive**
Intersection #: 44
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Regents Road**
E/W Street: **Nobel Drive**

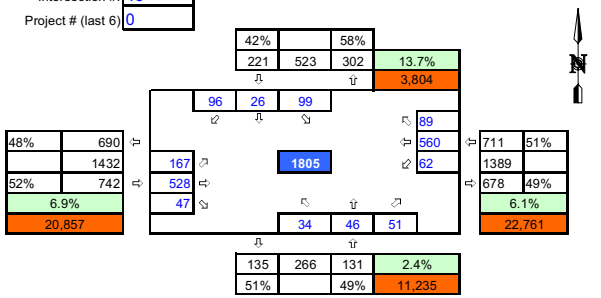


LEGEND
Existing K-Factor: xx%
ADT Volume: xx

K:\SND_TPTO\095240101 - University CPA\Excel\Horizon Year Conditions\Alternative B\Turn32_Alt B.xlsx
Int 44 MID

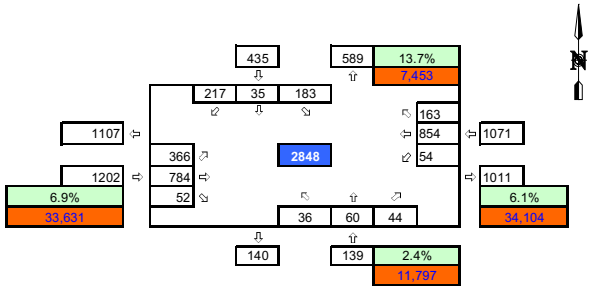
Int 45 MID Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Costa Verde Boulevard/Cargill Ave**
E/W Street: **Cargill Ave / Nobel Drive**
Intersection #: 45
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Costa Verde Boulevard/Cargill Ave**
E/W Street: **Cargill Ave / Nobel Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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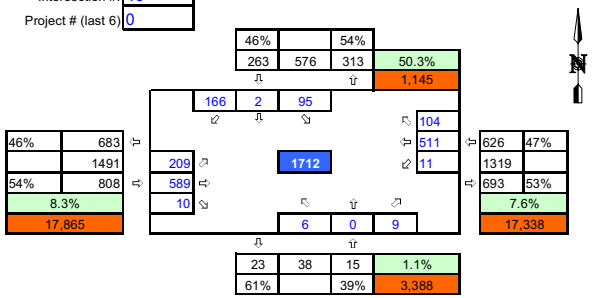
Int 45 MID

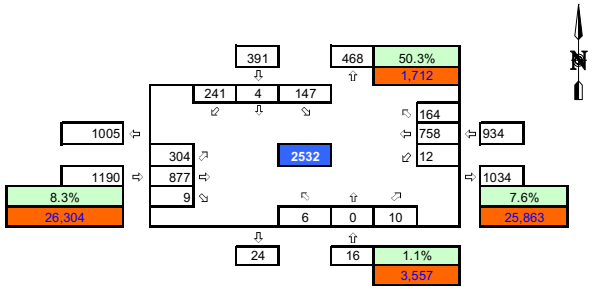
Int 46 MID Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Lombard Place**
E/W Street: **Nobel Drive**
Intersection #: 46
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Lombard Place**
E/W Street: **Nobel Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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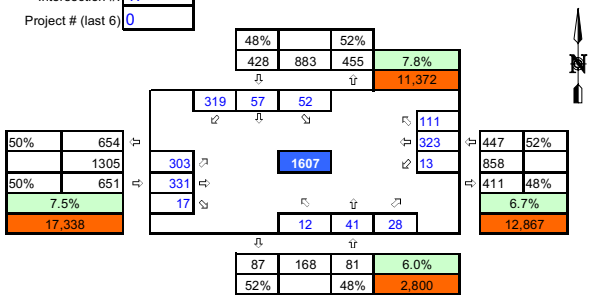
Int 46 MID

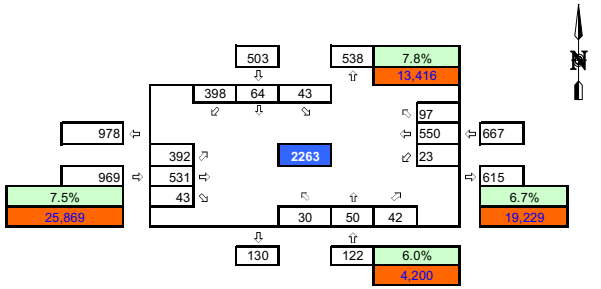
Int 47 MID Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Towne Center Drive**
E/W Street: **Nobel Drive**
Intersection #: 47
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Towne Center Drive**
E/W Street: **Nobel Drive**

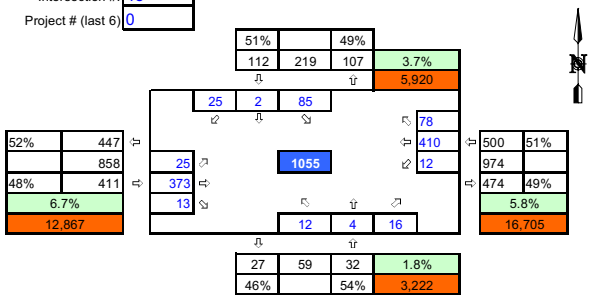


LEGEND
Existing K-Factor: xx%
ADT Volume: xx

K:\SND_TPTO\095240101 - University CPA\Excel\Horizon Year Conditions\Alternative B\Turn32_Alt B.xlsx
Int 47 MID

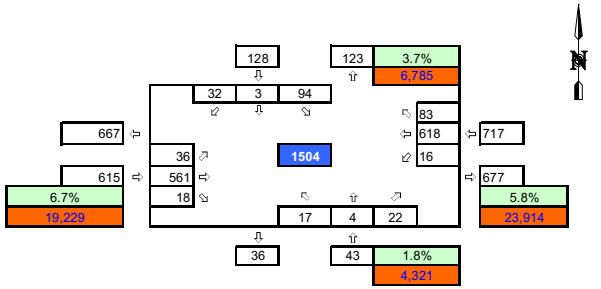
Int 48 MID Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Shoreline Drive**
E/W Street:	**Nobel Drive**
Intersection #:	48
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

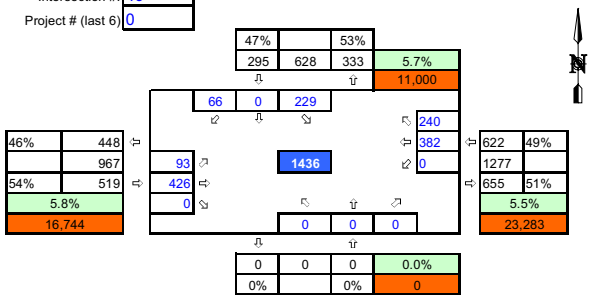
Scenario:	**Horizon Year Conditions**
N/S Street:	**Shoreline Drive**
E/W Street:	**Nobel Drive**



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

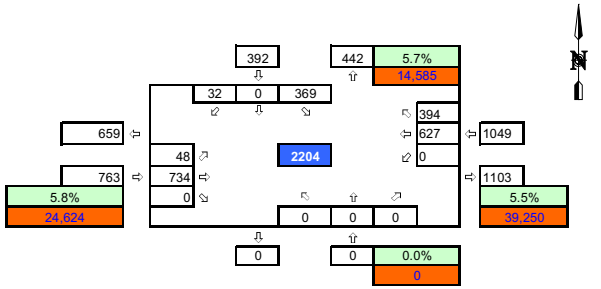
Int 49 MID Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Judicial Drive**
E/W Street:	**Nobel Drive**
Intersection #:	49
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

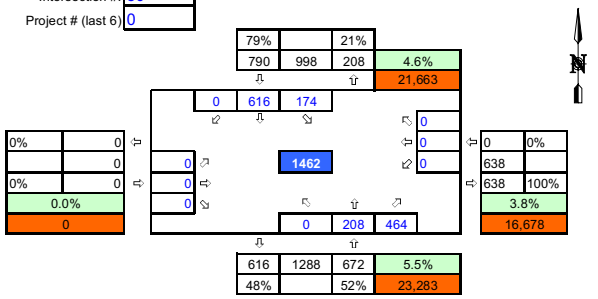
Scenario:	**Horizon Year Conditions**
N/S Street:	**Judicial Drive**
E/W Street:	**Nobel Drive**



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

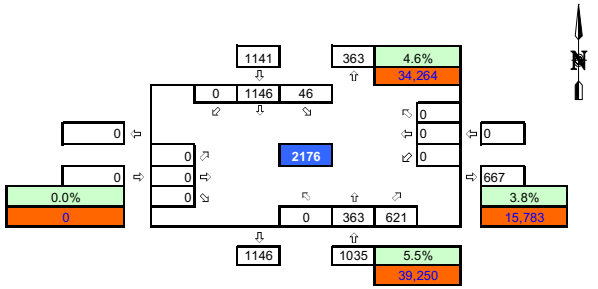
Int 50 MID Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Nobel Drive**
E/W Street:	**I-805 SB On-Ramp**
Intersection #:	50
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Nobel Drive**
E/W Street:	**I-805 SB On-Ramp**

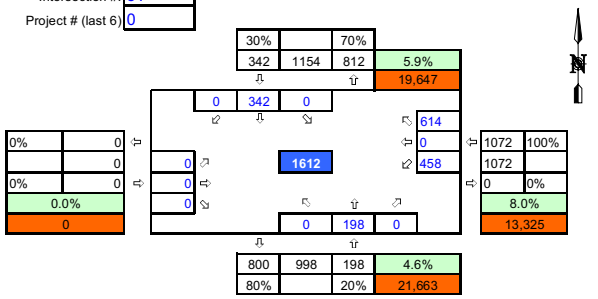


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

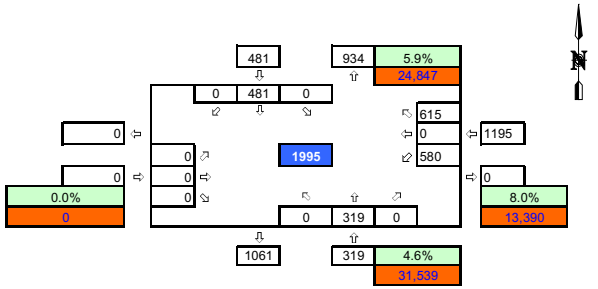
Int 51 MID Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Nobel Drive**
E/W Street:	**I-805 N Off-Ramp**
Intersection #:	51
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

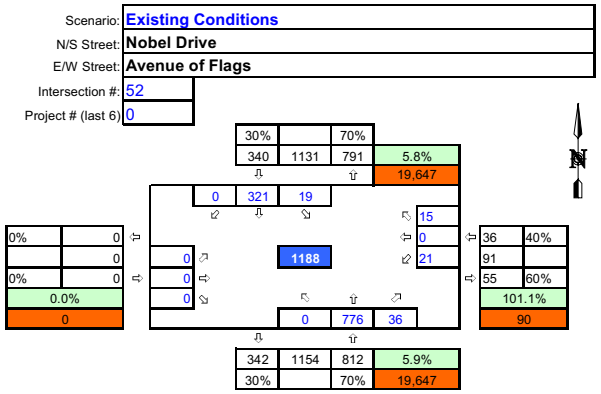
Scenario:	**Horizon Year Conditions**
N/S Street:	**Nobel Drive**
E/W Street:	**I-805 N Off-Ramp**



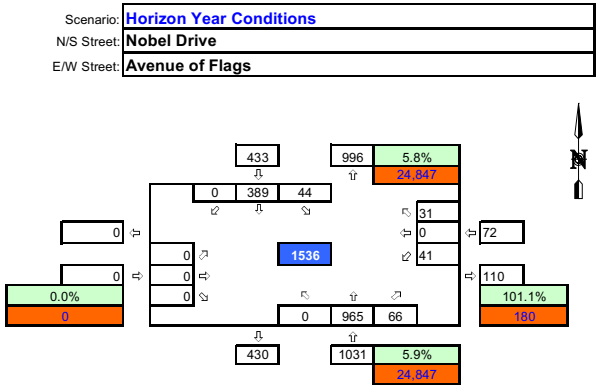
LEGEND

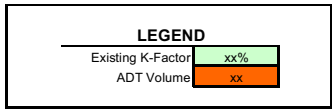
Existing K-Factor	xx%
ADT Volume	xx

Int 52 MID Peak Volumes

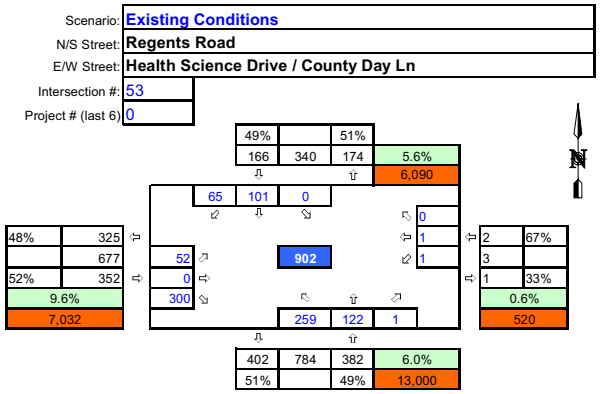


Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

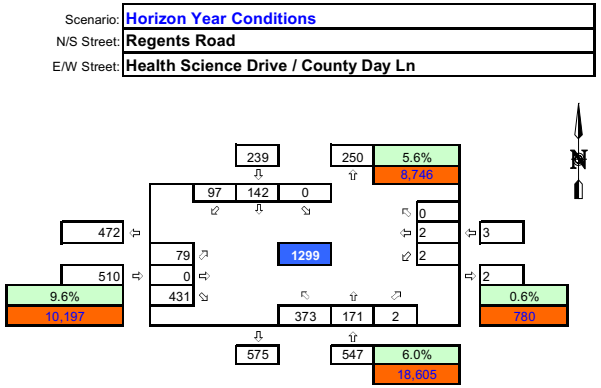


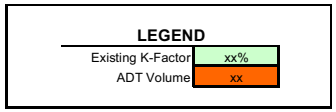


Int 53 MID Peak Volumes

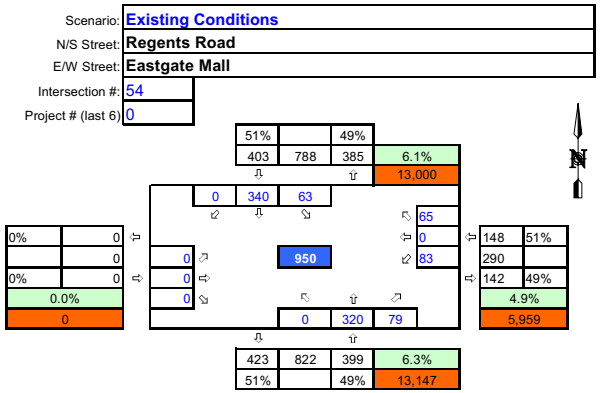


Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

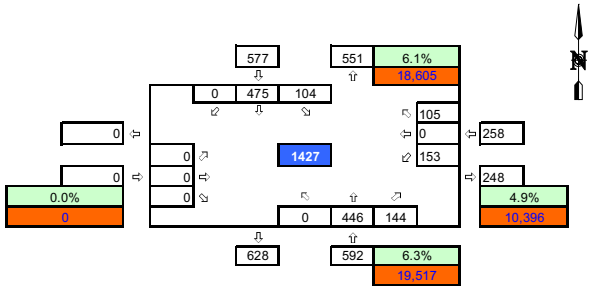


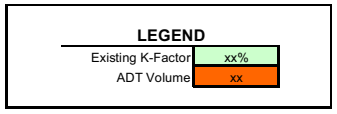


Int 54 MID Peak Volumes

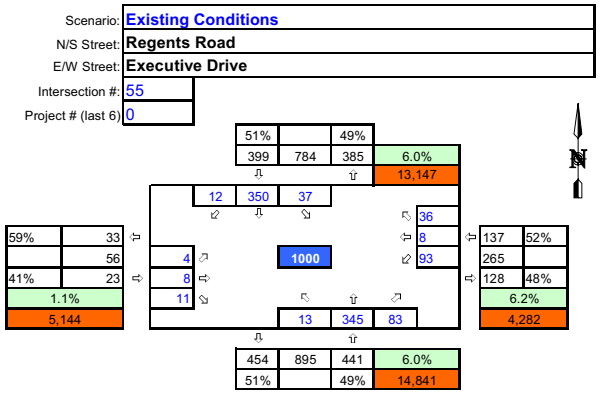


Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

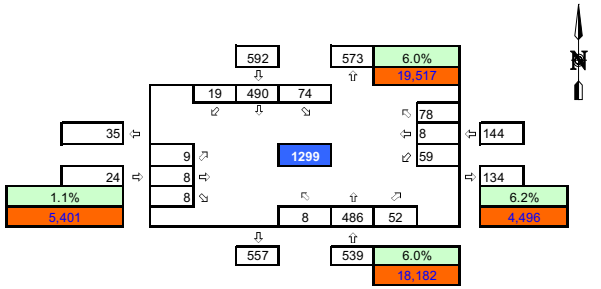


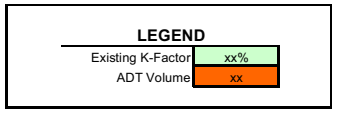


Int 55 MID Peak Volumes



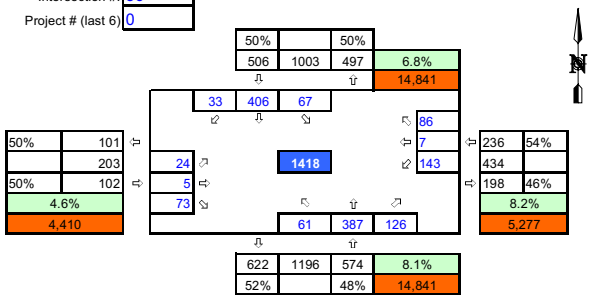
Note: Traffic volumes were collected by Accurate Video Counts during May 2015.





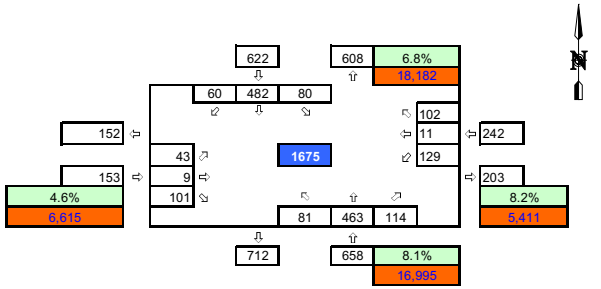
Int 56 MID Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Regents Road**
E/W Street: **Miramar Street / Regents Park Row**
Intersection #: 56
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Regents Road**
E/W Street: **Miramar Street / Regents Park Row**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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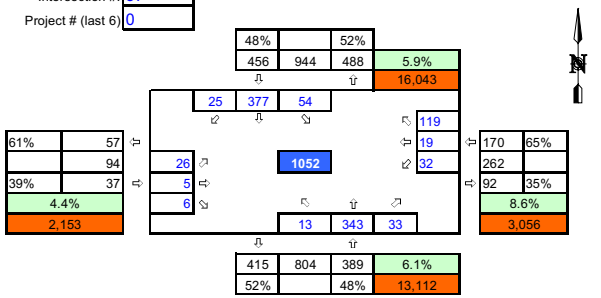
Int 56 MID

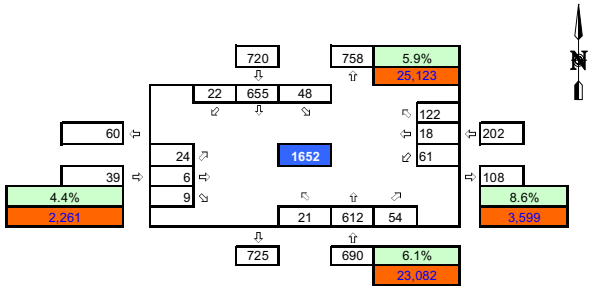
Int 57 MID Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Regents Road**
E/W Street: **Plaza De Palmas**
Intersection #: 57
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Regents Road**
E/W Street: **Plaza De Palmas**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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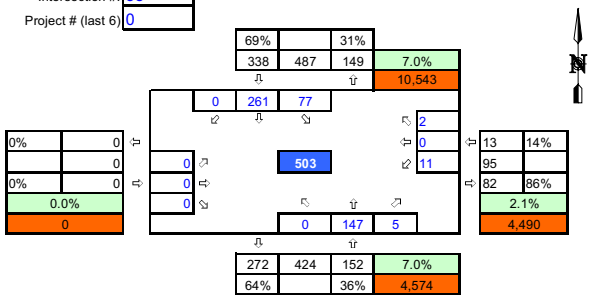
Int 57 MID

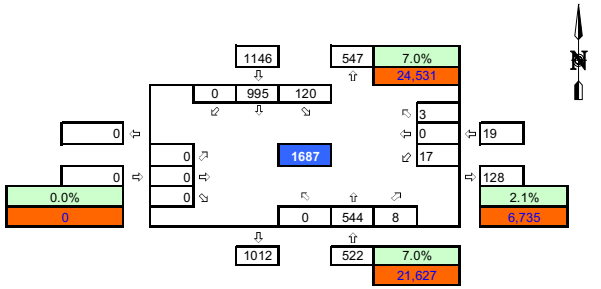
Int 58 MID Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Regents Road**
E/W Street: **Berino Court**
Intersection #: 58
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Regents Road**
E/W Street: **Berino Court**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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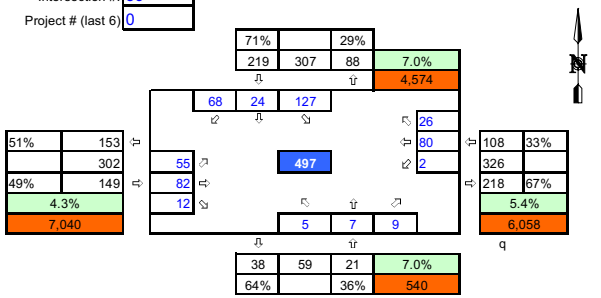
Int 58 MID

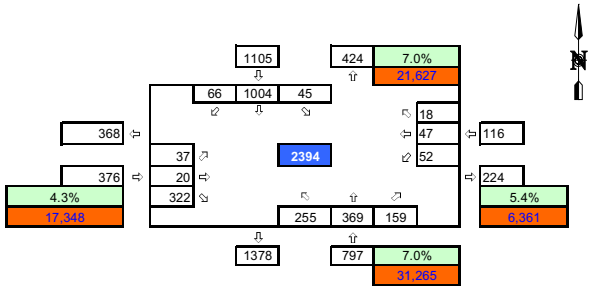
Int 59 MID Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Regents Road**
E/W Street: **Arriba Street**
Intersection #: 59
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Regents Road**
E/W Street: **Arriba Street**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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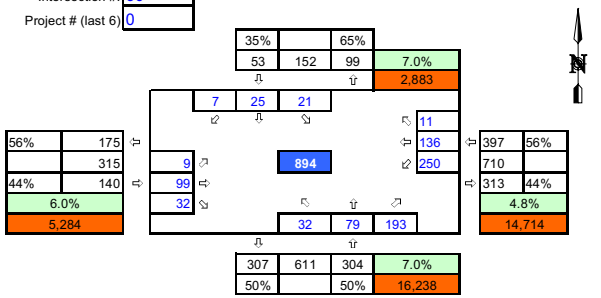
Int 59 MID

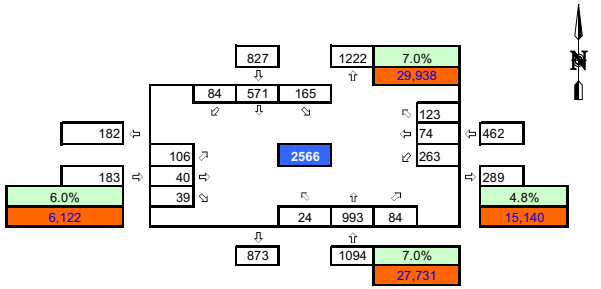
Int 60 MID Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Regents Road**
E/W Street: **Governor Drive**
Intersection #: 60
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Regents Road**
E/W Street: **Governor Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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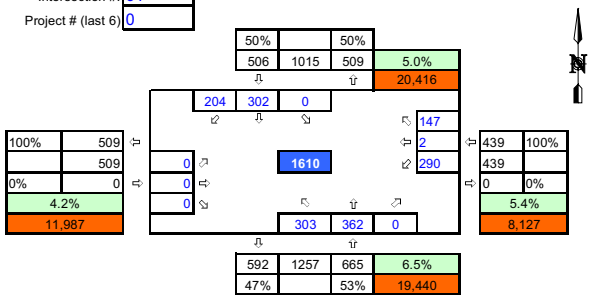
Int 60 MID

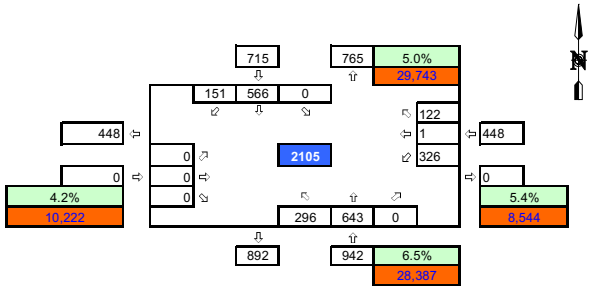
Int 61 MID Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Regents Road**
E/W Street: **SR-52 WB Ramps**
Intersection #: 61
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Regents Road**
E/W Street: **SR-52 WB Ramps**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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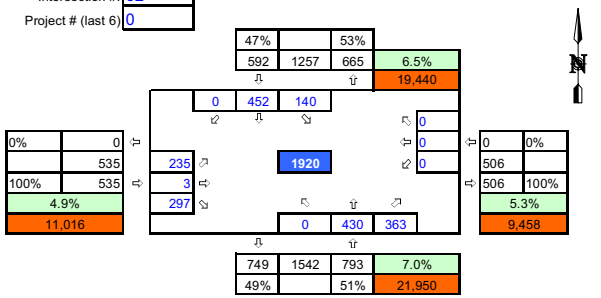
Int 61 MID

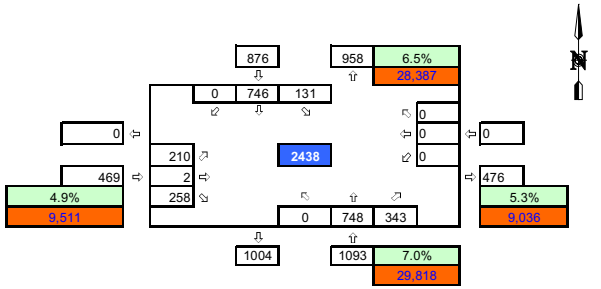
Int 62 MID Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Regents Road**
E/W Street:	**SR-52 EB Ramps**
Intersection #:	62
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

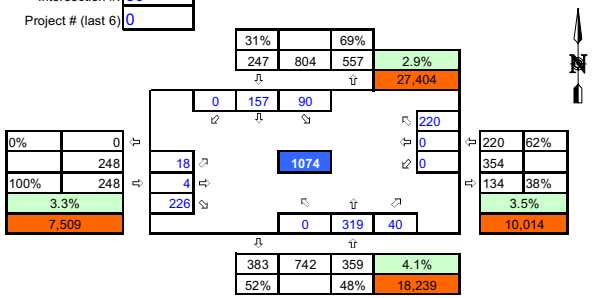
Scenario:	**Horizon Year Conditions**
N/S Street:	**Regents Road**
E/W Street:	**SR-52 EB Ramps**



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

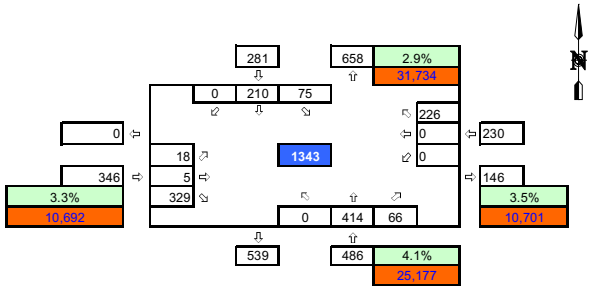
Int 80 MID Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Gilman Drive**
E/W Street:	**La Jolla Village Drive EB**
Intersection #:	80
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

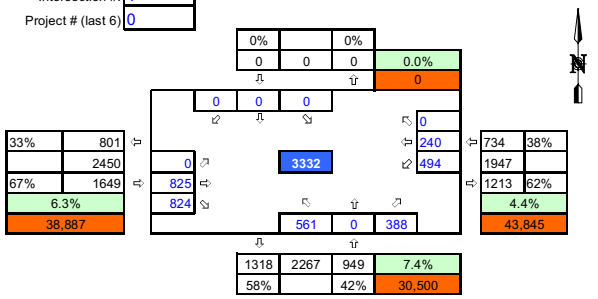
Scenario:	**Horizon Year Conditions**
N/S Street:	**Gilman Drive**
E/W Street:	**La Jolla Village Drive EB**



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

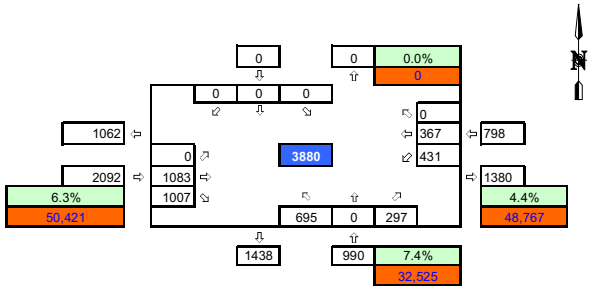
Int 1 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**N. Torrey Pines Road**
E/W Street:	**Genesee Avenue**
Intersection #:	1
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**N. Torrey Pines Road**
E/W Street:	**Genesee Avenue**



LEGEND

Existing K-Factor	xx%
ADT Volume	xx

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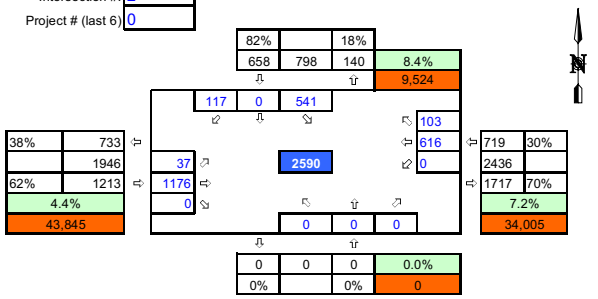
Int 1 PM

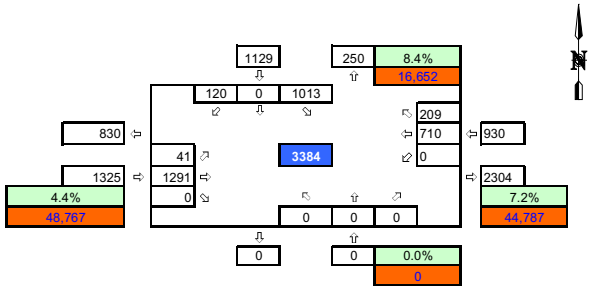
Int 2 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**John Hopkins Drive (S)**
E/W Street:	**Genesee Avenue**
Intersection #:	2
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**John Hopkins Drive (S)**
E/W Street:	**Genesee Avenue**



LEGEND

Existing K-Factor	xx%
ADT Volume	xx

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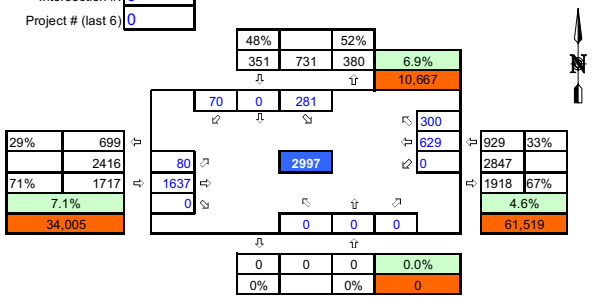
Int 2 PM

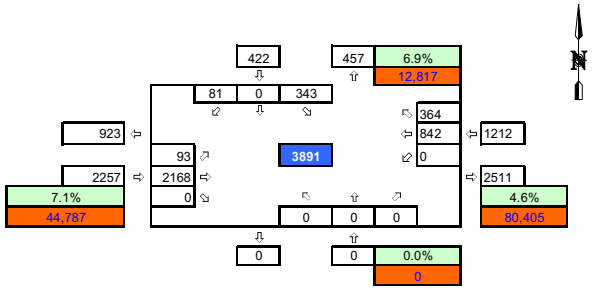
Int 3 PM Peak Volumes

Scenario:	Existing Conditions
N/S Street:	Science Center Drive
E/W Street:	Genesee Avenue
Intersection #:	3
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

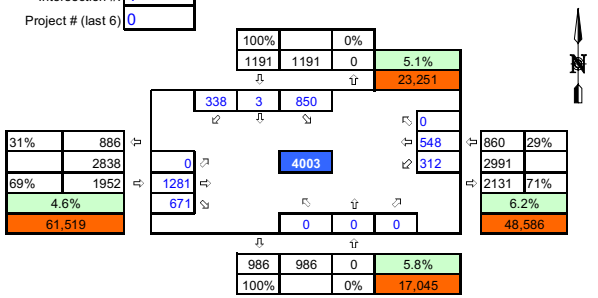
Scenario:	Horizon Year Conditions
N/S Street:	Science Center Drive
E/W Street:	Genesee Avenue



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

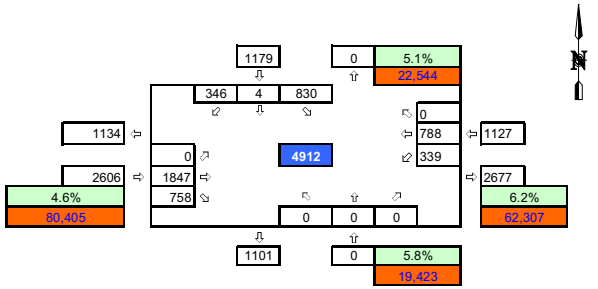
Int 4 PM Peak Volumes

Scenario:	Existing Conditions
N/S Street:	I-5 SB Ramps
E/W Street:	Genesee Avenue
Intersection #:	4
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

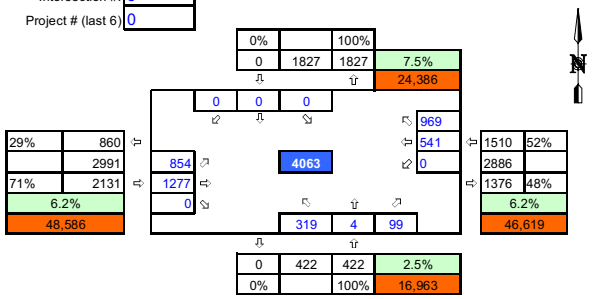
Scenario:	Horizon Year Conditions
N/S Street:	I-5 SB Ramps
E/W Street:	Genesee Avenue



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

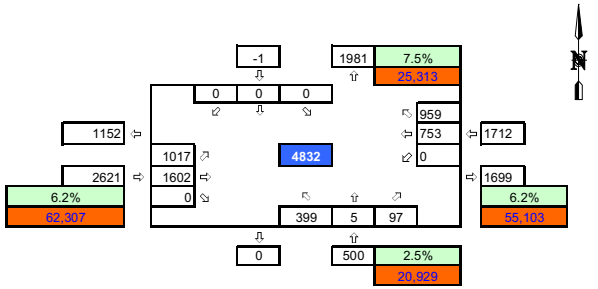
Int 5 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**I-5 NB Ramps**
E/W Street:	**Genesee Avenue**
Intersection #:	5
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**I-5 NB Ramps**
E/W Street:	**Genesee Avenue**



LEGEND

Existing K-Factor	xx%
ADT Volume	xx

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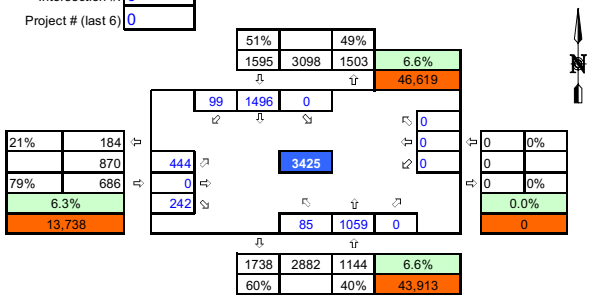
Int 5 PM

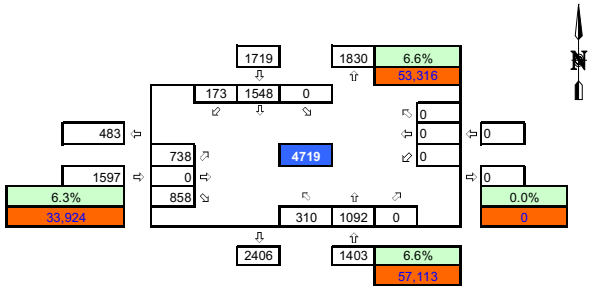
Int 6 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**Scripps Hospital**
Intersection #:	6
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**Scripps Hospital**



LEGEND

Existing K-Factor	xx%
ADT Volume	xx

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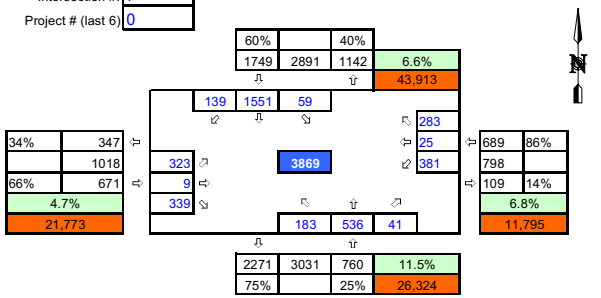
Int 6 PM

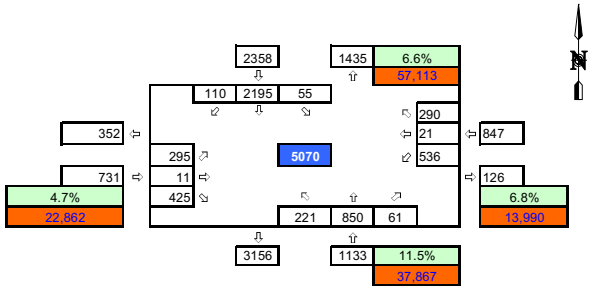
Int 7 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**Campus Point Drive**
Intersection #:	7
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**Campus Point Drive**



LEGEND

Existing K-Factor	xx%
ADT Volume	xx

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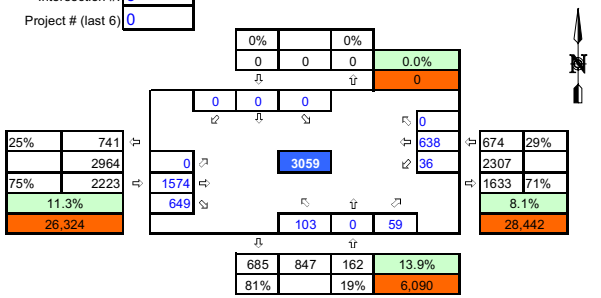
Int 7 PM

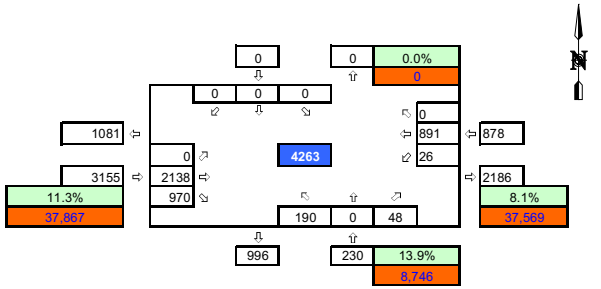
Int 8 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Regents Road**
E/W Street:	**Genesee Avenue**
Intersection #:	8
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Regents Road**
E/W Street:	**Genesee Avenue**



LEGEND

Existing K-Factor	xx%
ADT Volume	xx

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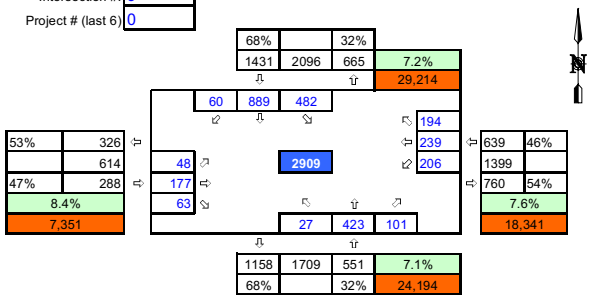
Int 8 PM

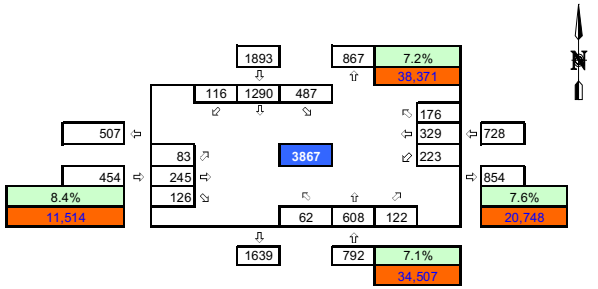
Int 9 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**Eastgate Mall**
Intersection #:	9
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**Eastgate Mall**



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

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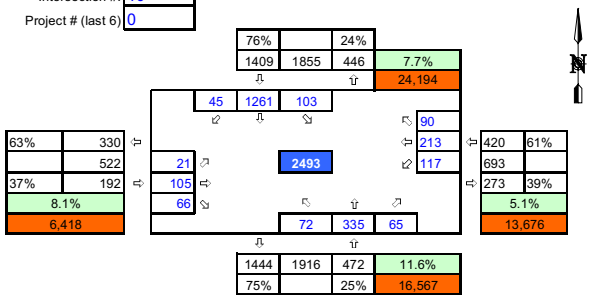
Int 9 PM

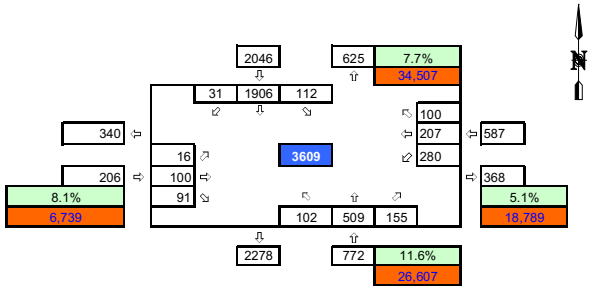
Int 10 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**Executive Drive**
Intersection #:	10
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**Executive Drive**



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

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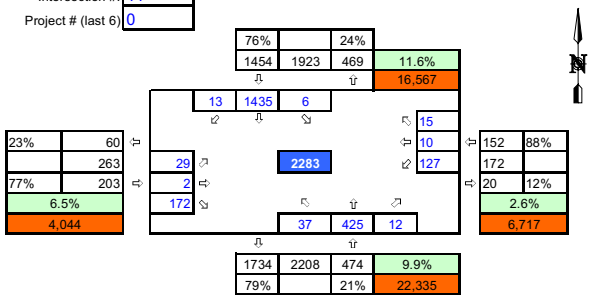
Int 10 PM

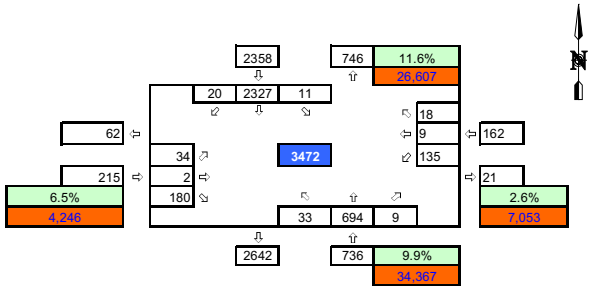
Int 11 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Executive Square**
Intersection #: 11
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Executive Square**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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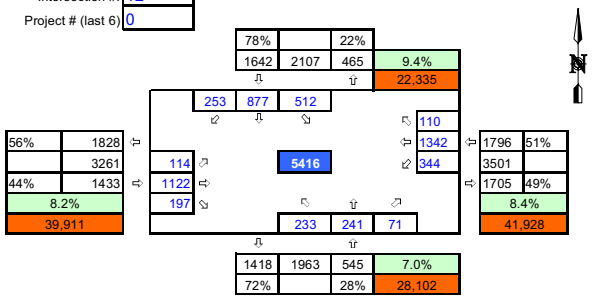
Int 11 PM

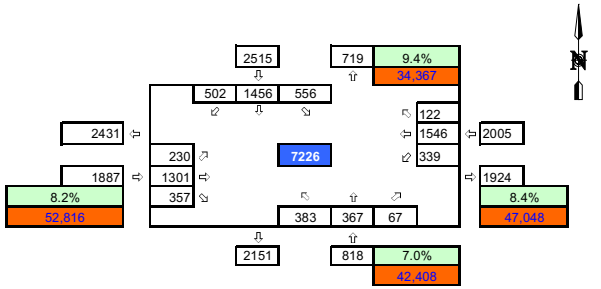
Int 12 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **La Jolla Village Drive**
Intersection #: 12
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **La Jolla Village Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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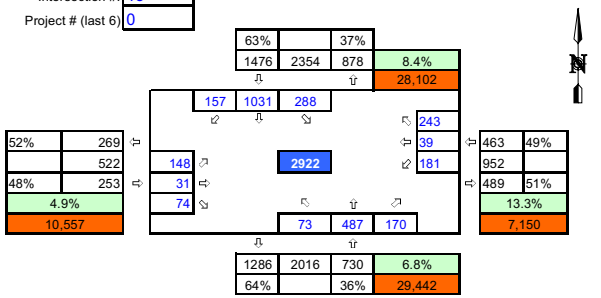
Int 12 PM

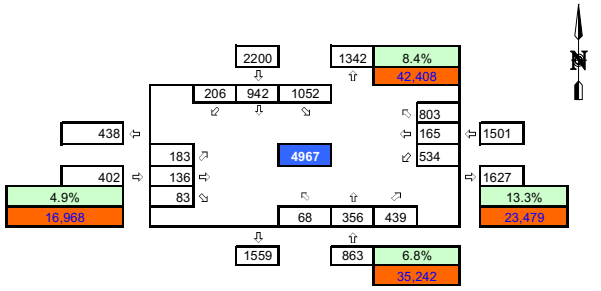
Int 13 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Esplanade Court**
Intersection #: 13
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Esplanade Court**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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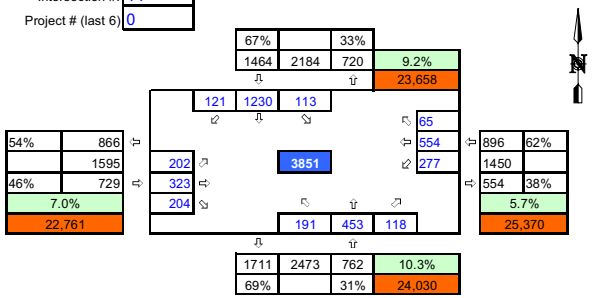
Int 13 PM

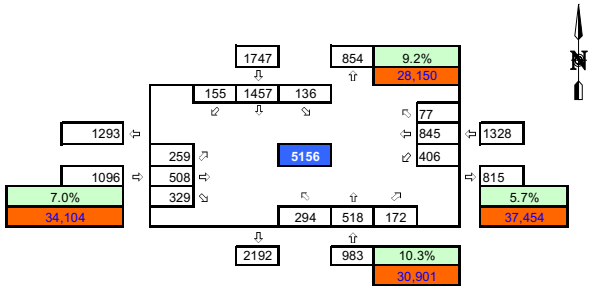
Int 14 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Nobel Drive**
Intersection #: 14
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Nobel Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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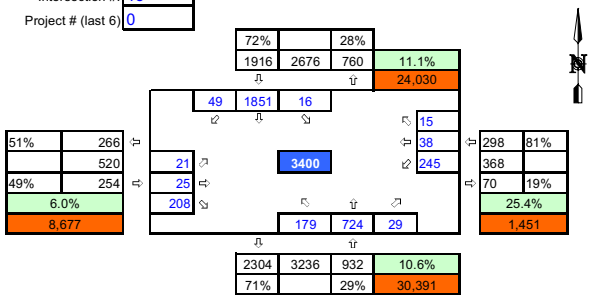
Int 14 PM

Int 15 PM Peak Volumes

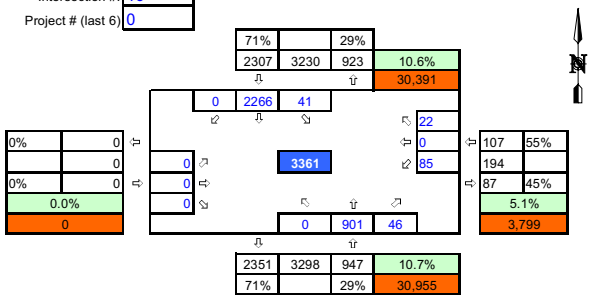
Scenario:	**Existing Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**Decoro Street**
Intersection #:	15
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

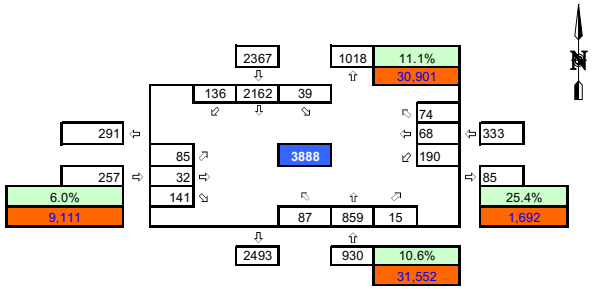
Int 16 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**Centurion Square**
Intersection #:	16
Project # (last 6)	0

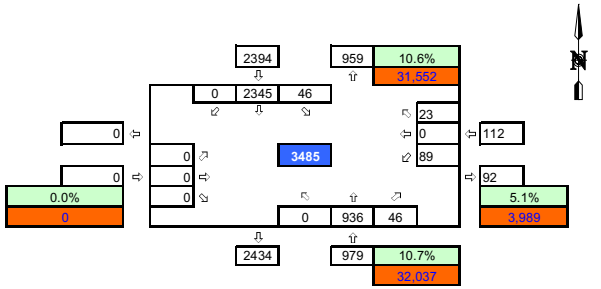


Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**Decoro Street**



Scenario:	**Horizon Year Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**Centurion Square**

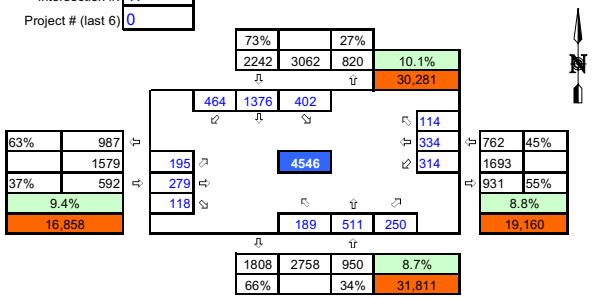


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

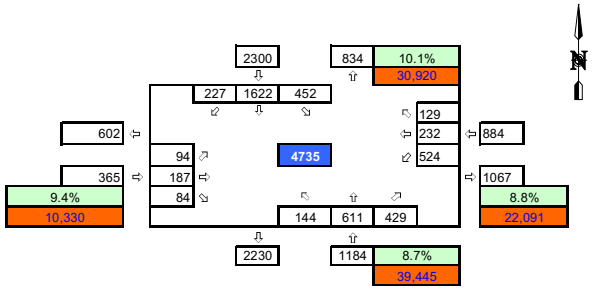
Int 17 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**Governor Drive**
Intersection #:	17
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**Governor Drive**



LEGEND

Existing K-Factor	xx%
ADT Volume	xx

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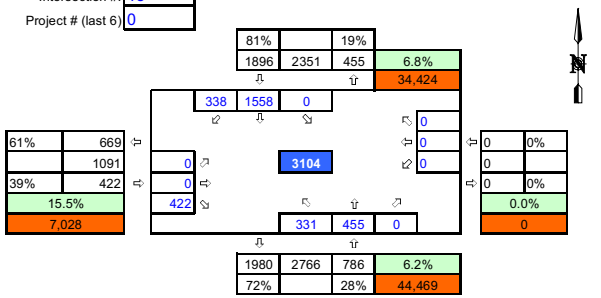
Int 17 PM

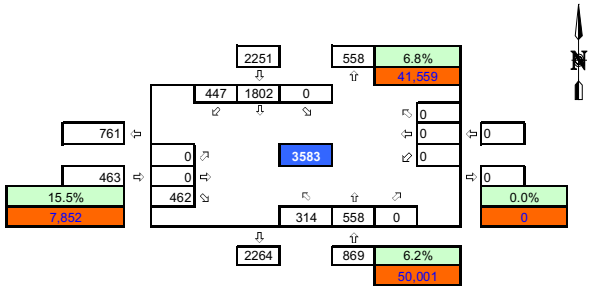
Int 18 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**SR-52 WB Ramps**
Intersection #:	18
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**SR-52 WB Ramps**



LEGEND

Existing K-Factor	xx%
ADT Volume	xx

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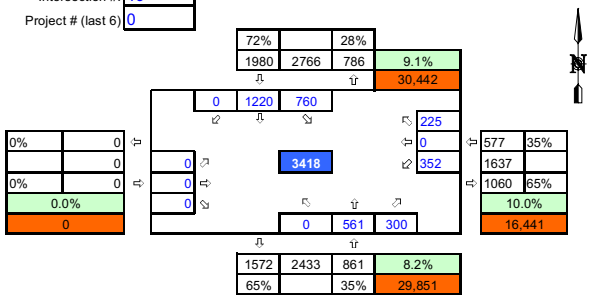
Int 18 PM

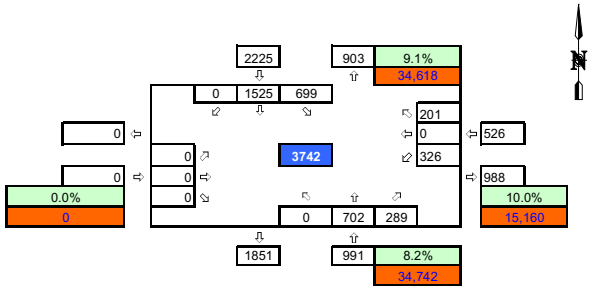
Int 19 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**SR-52 EB Ramps**
Intersection #:	19
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**SR-52 EB Ramps**

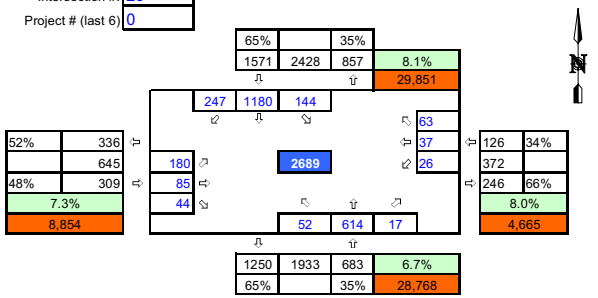


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

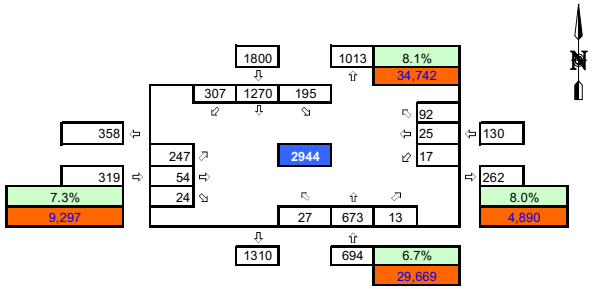
Int 20 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**Lehrer Drive / Appleton Street**
Intersection #:	20
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**Lehrer Drive / Appleton Street**

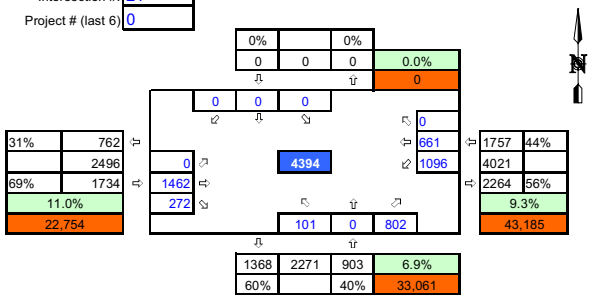


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

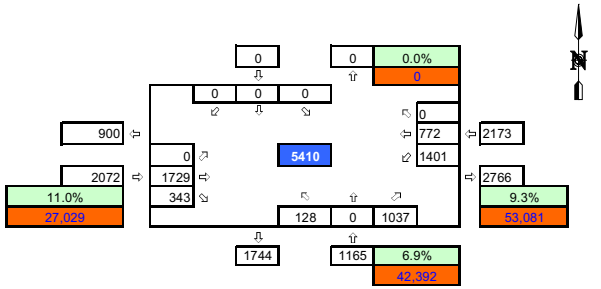
Int 21 PM Peak Volumes

Scenario:	Existing Conditions
N/S Street:	Torrey Pines Road
E/W Street:	La Jolla Village Drive
Intersection #:	21
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	Horizon Year Conditions
N/S Street:	Torrey Pines Road
E/W Street:	La Jolla Village Drive



LEGEND

Existing K-Factor	xx%
ADT Volume	xx

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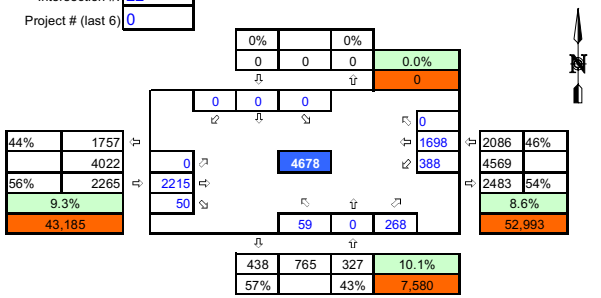
Int 21 PM

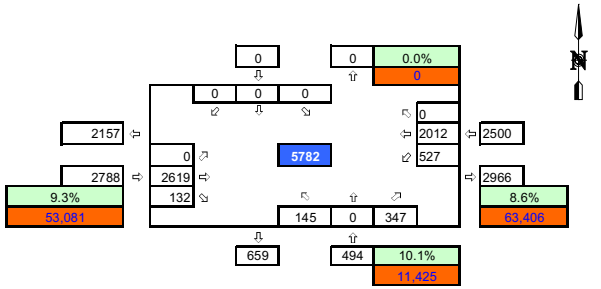
Int 22 PM Peak Volumes

Scenario:	Existing Conditions
N/S Street:	La Jolla Scenic Drive
E/W Street:	La Jolla Village Drive
Intersection #:	22
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	Horizon Year Conditions
N/S Street:	La Jolla Scenic Drive
E/W Street:	La Jolla Village Drive



LEGEND

Existing K-Factor	xx%
ADT Volume	xx

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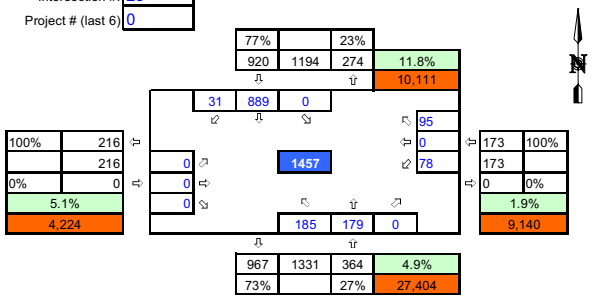
Int 22 PM

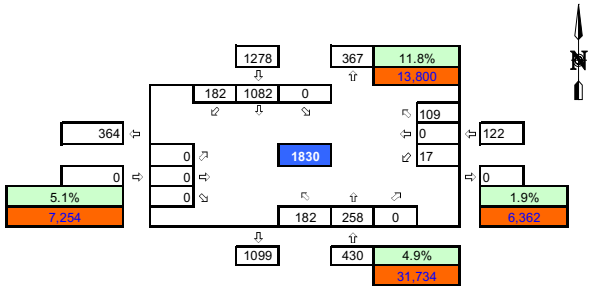
Int 23 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Gillman Drive**
E/W Street:	**La Jolla Village Drive WB**
Intersection #:	23
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Gillman Drive**
E/W Street:	**La Jolla Village Drive WB**

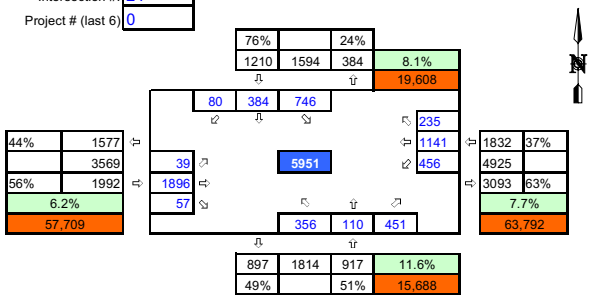


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

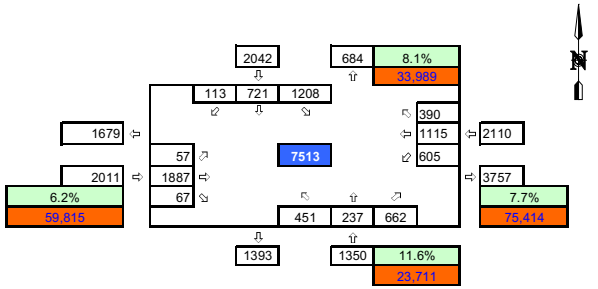
Int 24 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Villa La Jolla Drive**
E/W Street:	**La Jolla Village Drive**
Intersection #:	24
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Villa La Jolla Drive**
E/W Street:	**La Jolla Village Drive**

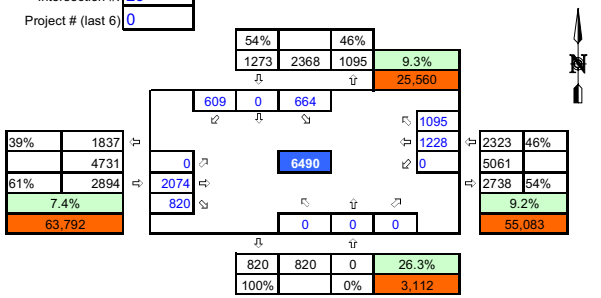


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

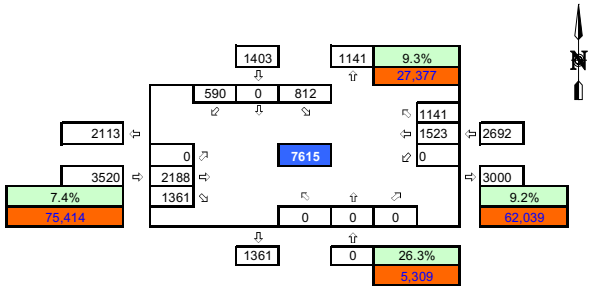
Int 25 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**I-5 SB Off-Ramps**
E/W Street:	**La Jolla Village Drive**
Intersection #:	25
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**I-5 SB Off-Ramps**
E/W Street:	**La Jolla Village Drive**

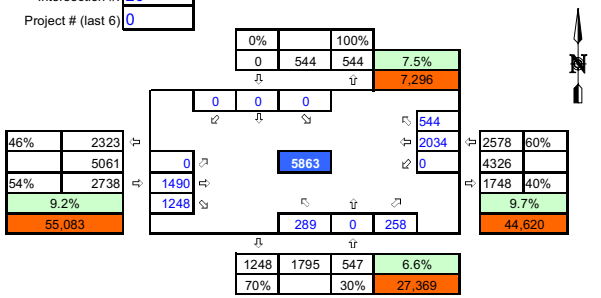


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

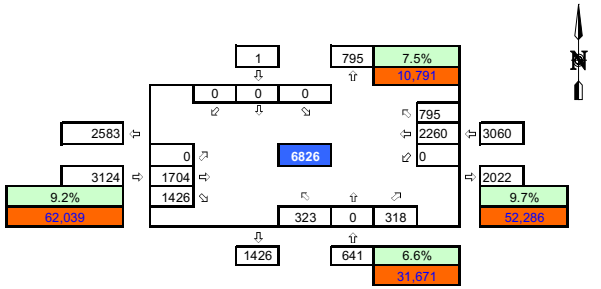
Int 26 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**I-5 NB Off-Ramps**
E/W Street:	**La Jolla Village Drive**
Intersection #:	26
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**I-5 NB Off-Ramps**
E/W Street:	**La Jolla Village Drive**

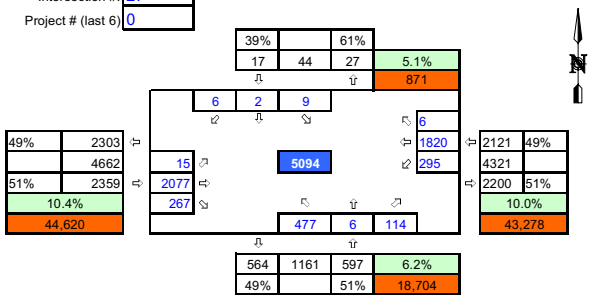


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

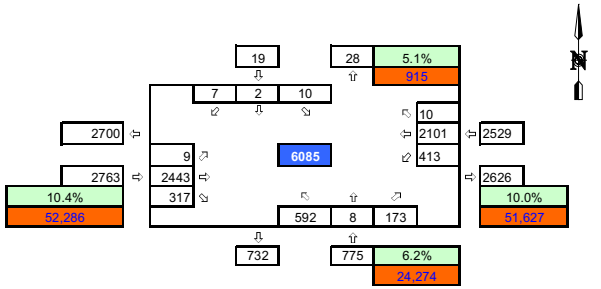
Int 27 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Lebon Drive**
E/W Street:	**La Jolla Village Drive**
Intersection #:	27
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Lebon Drive**
E/W Street:	**La Jolla Village Drive**

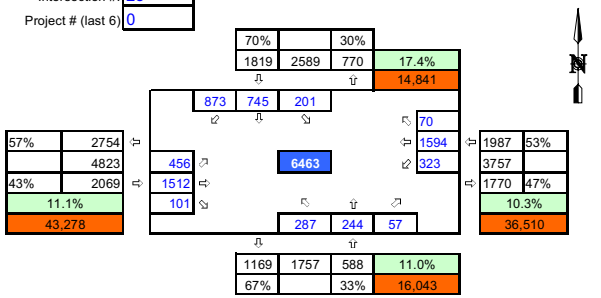


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

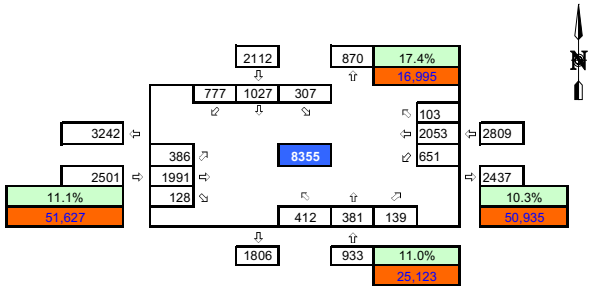
Int 28 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Regents Road**
E/W Street:	**La Jolla Village Drive**
Intersection #:	28
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Regents Road**
E/W Street:	**La Jolla Village Drive**

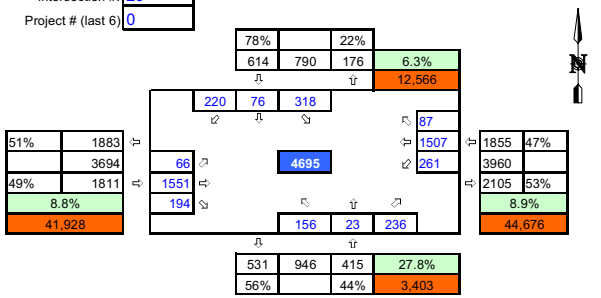


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

Int 29 PM Peak Volumes

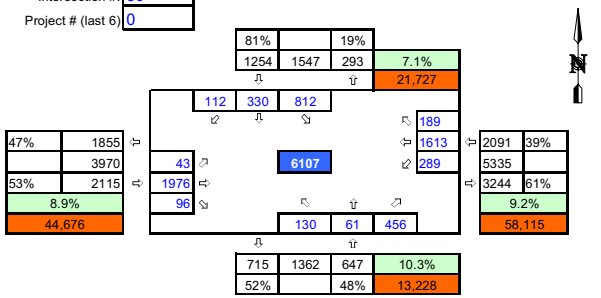
Scenario: **Existing Conditions**
N/S Street: **Executive Way**
E/W Street: **La Jolla Village Drive**
Intersection #: 29
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

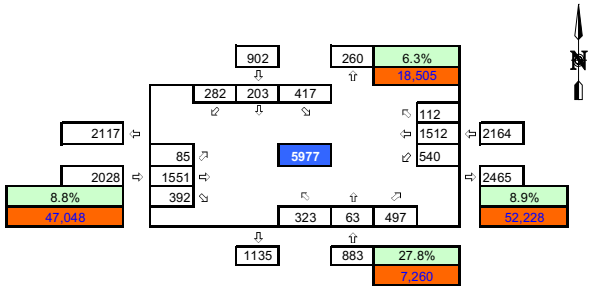
Int 30 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Towne Center Drive**
E/W Street: **La Jolla Village Drive**
Intersection #: 30
Project # (last 6): 0

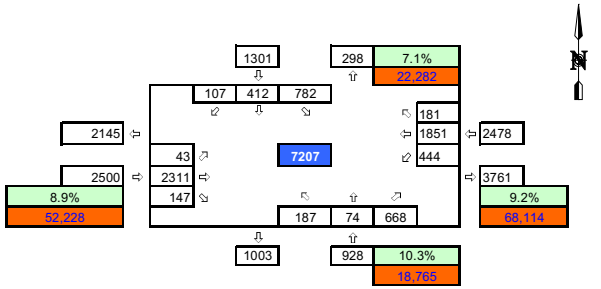


Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Executive Way**
E/W Street: **La Jolla Village Drive**



Scenario: **Horizon Year Conditions**
N/S Street: **Towne Center Drive**
E/W Street: **La Jolla Village Drive**

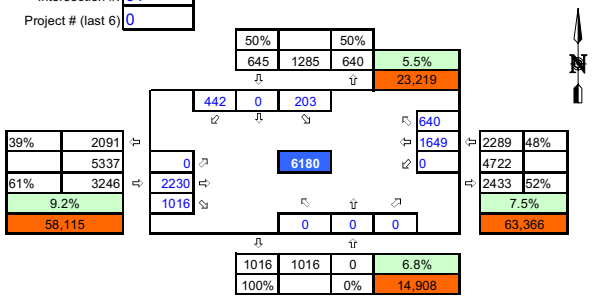


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

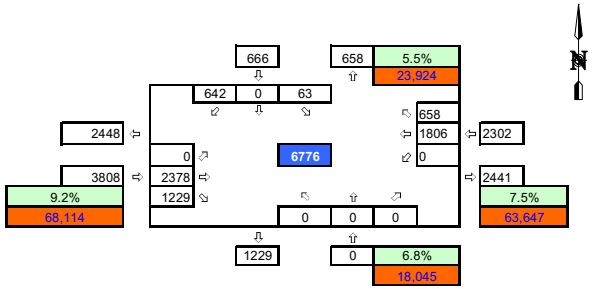
Int 31 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **I-805 SB Ramps**
E/W Street: **La Jolla Village Drive**
Intersection #: 31
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **I-805 SB Ramps**
E/W Street: **La Jolla Village Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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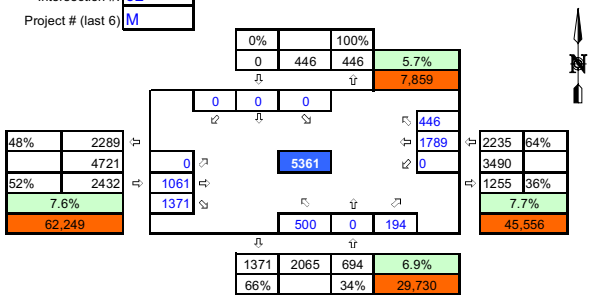
Int 31 PM

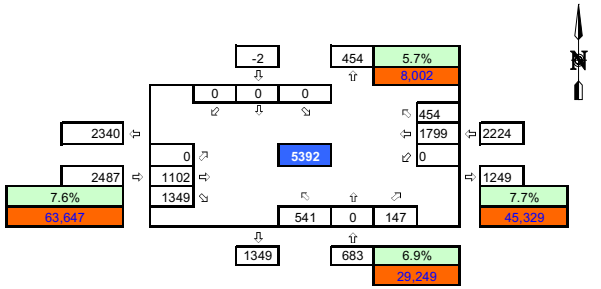
Int 32 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **I-805 NB Ramps**
E/W Street: **La Jolla Village Drive**
Intersection #: 32
Project # (last 6): M



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **I-805 NB Ramps**
E/W Street: **La Jolla Village Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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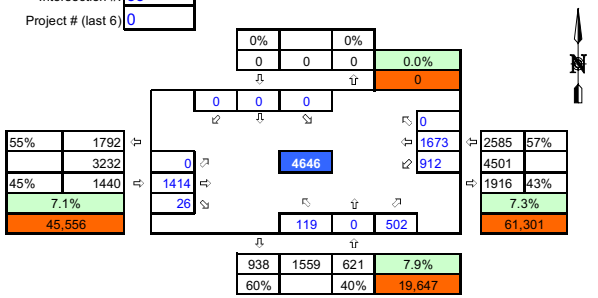
Int 32 PM

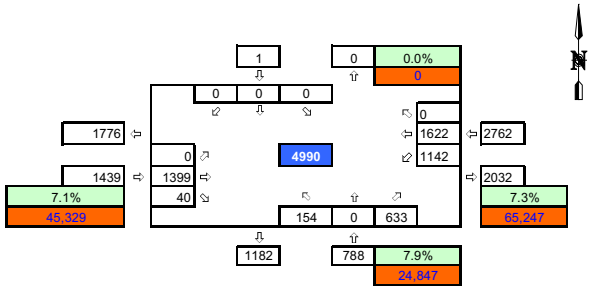
Int 33 PM Peak Volumes

Scenario:	Existing Conditions
N/S Street:	Noble Drive
E/W Street:	Miramar Road
Intersection #:	33
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	Horizon Year Conditions
N/S Street:	Noble Drive
E/W Street:	Miramar Road

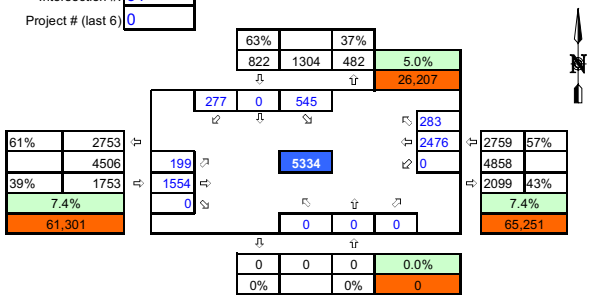


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

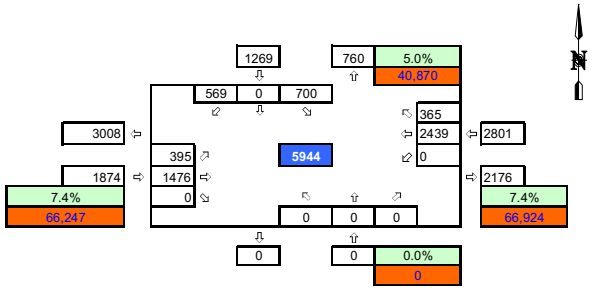
Int 34 PM Peak Volumes

Scenario:	Existing Conditions
N/S Street:	Eastgate Mall
E/W Street:	Miramar Road
Intersection #:	34
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	Horizon Year Conditions
N/S Street:	Eastgate Mall
E/W Street:	Miramar Road

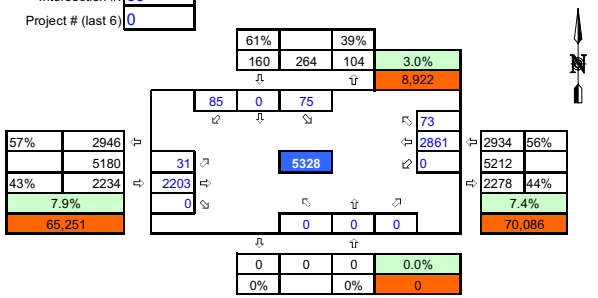


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

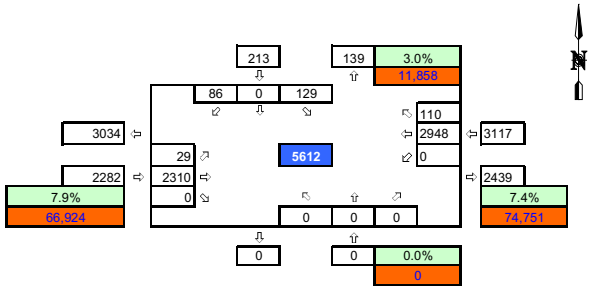
Int 35 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Miramar Mall**
E/W Street: **Miramar Road**
Intersection #: 35
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Miramar Mall**
E/W Street: **Miramar Road**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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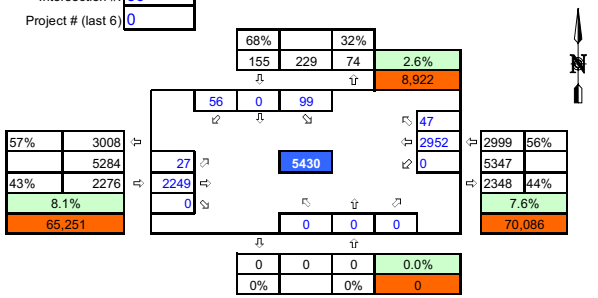
Int 35 PM

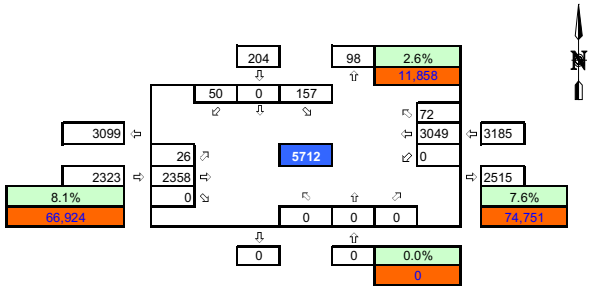
Int 36 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Miramar Place**
E/W Street: **Miramar Road**
Intersection #: 36
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Miramar Place**
E/W Street: **Miramar Road**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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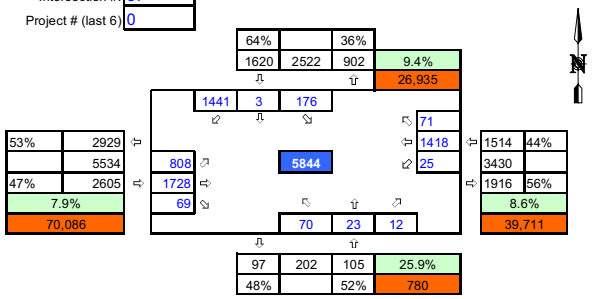
Int 36 PM

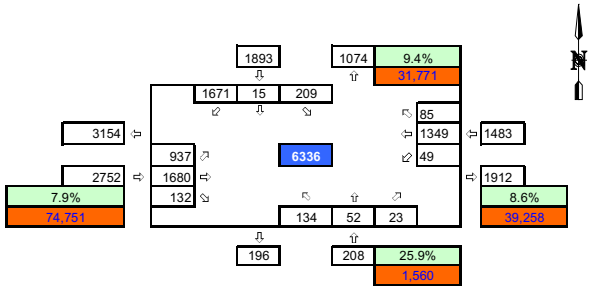
Int 37 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Camino Santa Fe**
E/W Street: **Miramar Road**
Intersection #: 37
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Camino Santa Fe**
E/W Street: **Miramar Road**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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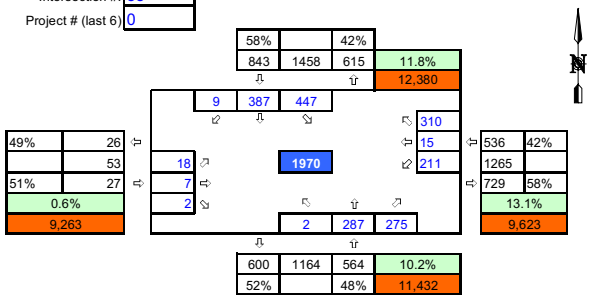
Int 37 PM

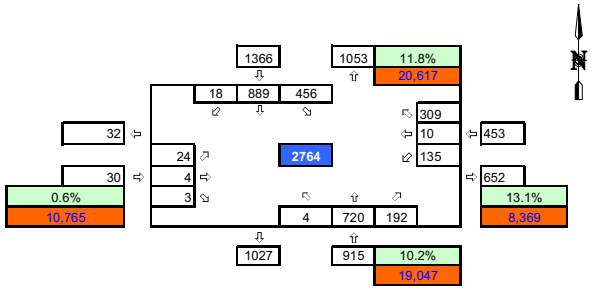
Int 38 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Villa La Jolla Drive**
E/W Street: **Nobel Drive**
Intersection #: 38
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Villa La Jolla Drive**
E/W Street: **Nobel Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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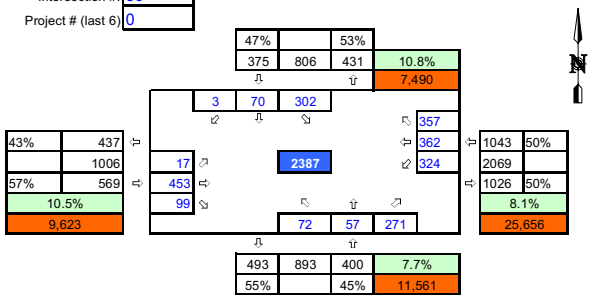
Int 38 PM

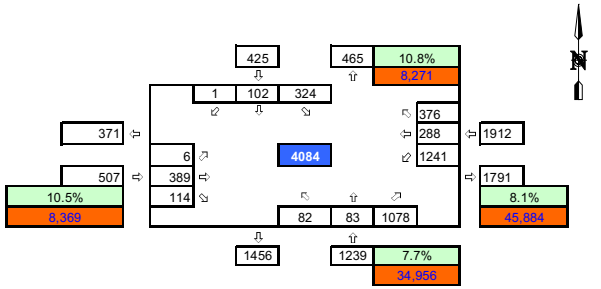
Int 39 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **La Jolla Village Square Driveway**
E/W Street: **Nobel Drive**
Intersection #: 39
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **La Jolla Village Square Driveway**
E/W Street: **Nobel Drive**

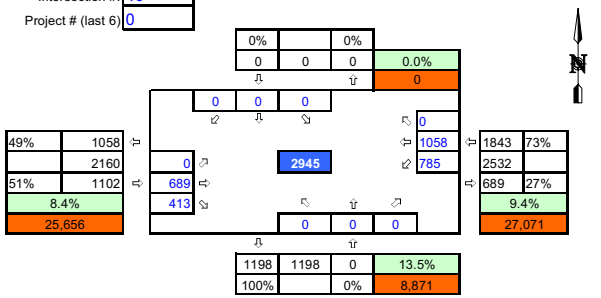


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

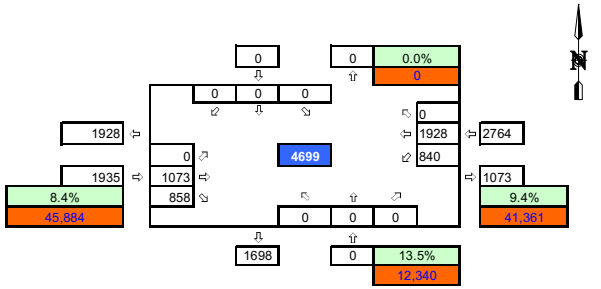
Int 40 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **I-5 SB On**
E/W Street: **Nobel Drive**
Intersection #: 40
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **I-5 SB On**
E/W Street: **Nobel Drive**

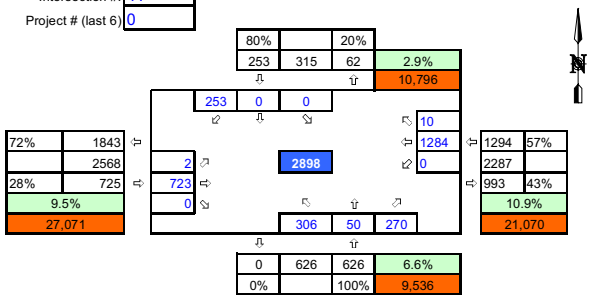


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

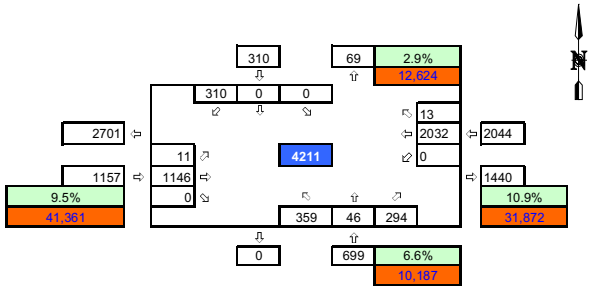
Int 41 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **University Center Lane/I-5 NB Off**
E/W Street: **Nobel Drive**
Intersection #: 41
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **University Center Lane/I-5 NB Off**
E/W Street: **Nobel Drive**

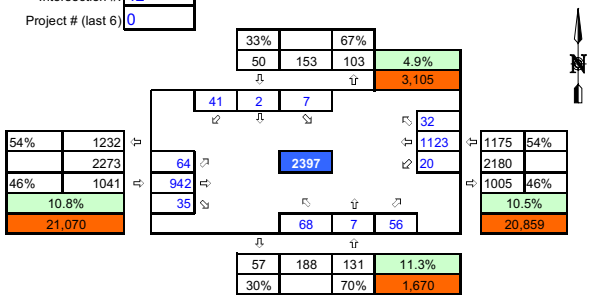


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

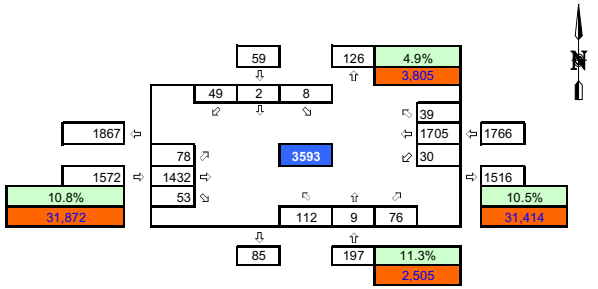
Int 42 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Caminito Plaza Centro**
E/W Street: **Nobel Drive**
Intersection #: 42
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Caminito Plaza Centro**
E/W Street: **Nobel Drive**

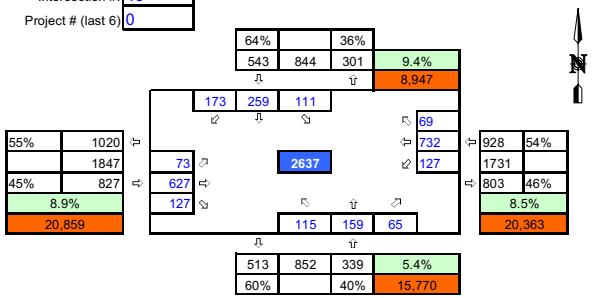


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

Int 43 PM Peak Volumes

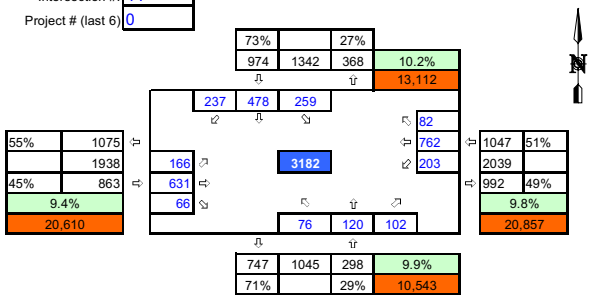
Scenario:	**Existing Conditions**
N/S Street:	**Lebon Drive**
E/W Street:	**Nobel Drive**
Intersection #:	43
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

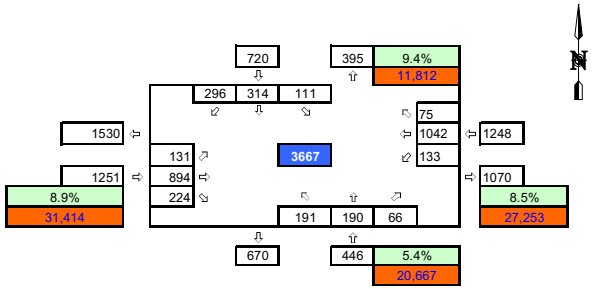
Int 44 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Regents Road**
E/W Street:	**Nobel Drive**
Intersection #:	44
Project # (last 6)	0

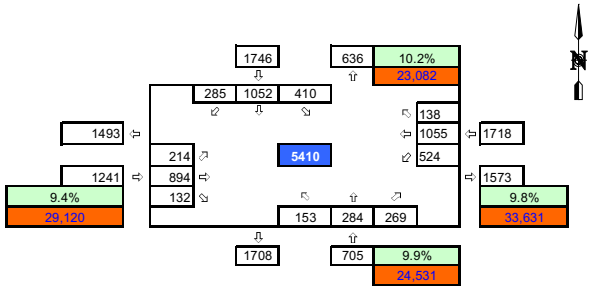


Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Lebon Drive**
E/W Street:	**Nobel Drive**



Scenario:	**Horizon Year Conditions**
N/S Street:	**Regents Road**
E/W Street:	**Nobel Drive**

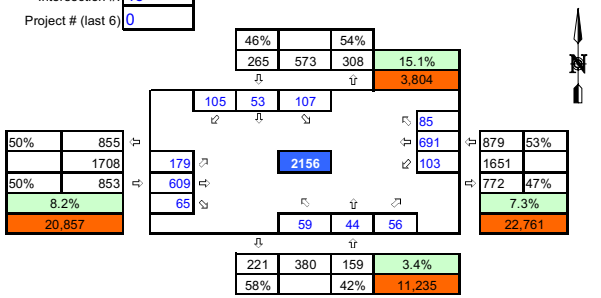


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

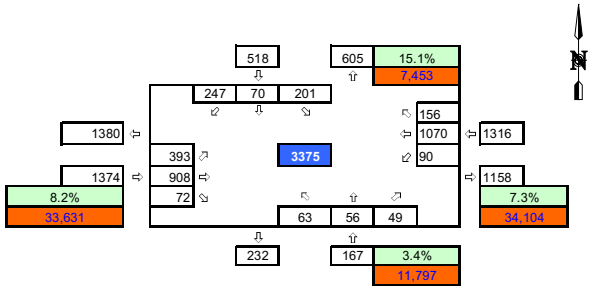
Int 45 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Costa Verde Boulevard/Cargill Ave**
E/W Street: **Cargill Ave / Nobel Drive**
Intersection #: 45
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Costa Verde Boulevard/Cargill Ave**
E/W Street: **Cargill Ave / Nobel Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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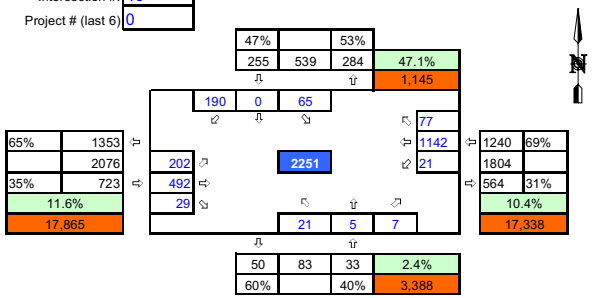
Int 45 PM

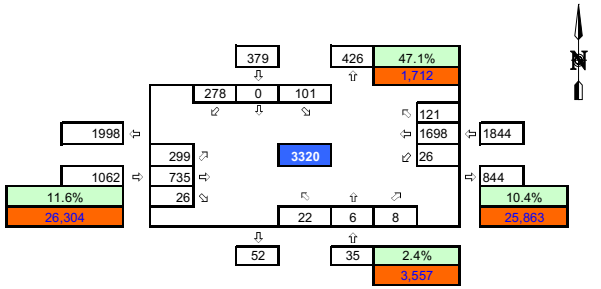
Int 46 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Lombard Place**
E/W Street: **Nobel Drive**
Intersection #: 46
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Lombard Place**
E/W Street: **Nobel Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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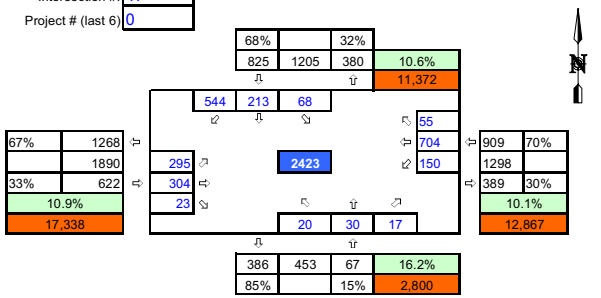
Int 46 PM

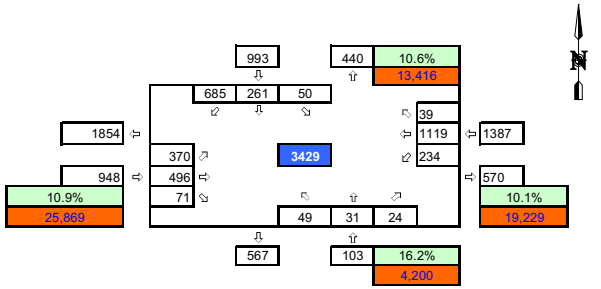
Int 47 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Towne Center Drive**
E/W Street:	**Nobel Drive**
Intersection #:	47
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Towne Center Drive**
E/W Street:	**Nobel Drive**

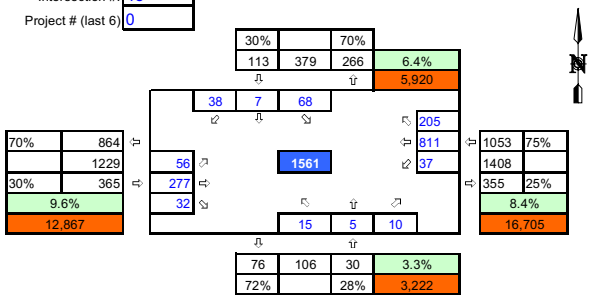


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

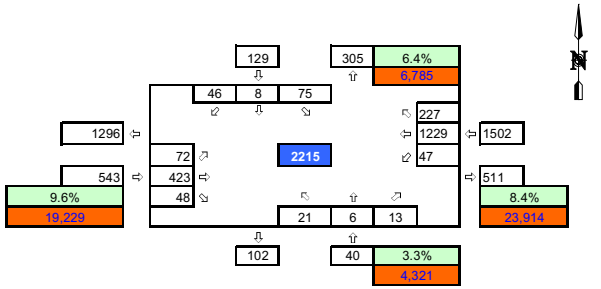
Int 48 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Shoreline Drive**
E/W Street:	**Nobel Drive**
Intersection #:	48
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Shoreline Drive**
E/W Street:	**Nobel Drive**

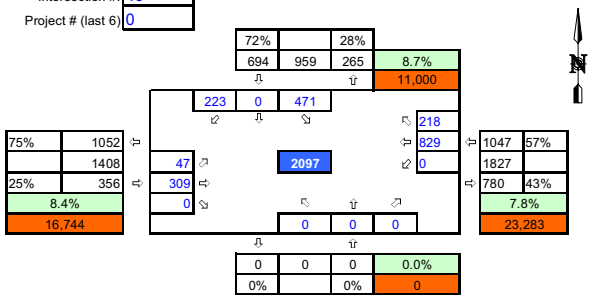


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

Int 49 PM Peak Volumes

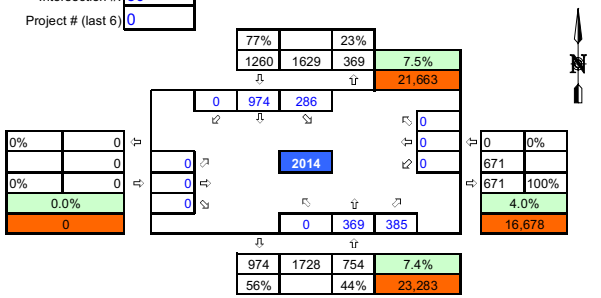
Scenario:	**Existing Conditions**
N/S Street:	**Judicial Drive**
E/W Street:	**Nobel Drive**
Intersection #:	49
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

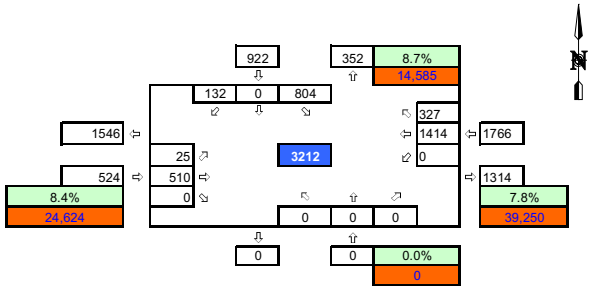
Int 50 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Nobel Drive**
E/W Street:	**I-805 SB On-Ramp**
Intersection #:	50
Project # (last 6)	0

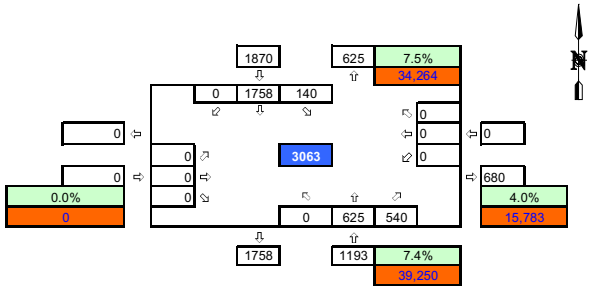


Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Judicial Drive**
E/W Street:	**Nobel Drive**



Scenario:	**Horizon Year Conditions**
N/S Street:	**Nobel Drive**
E/W Street:	**I-805 SB On-Ramp**

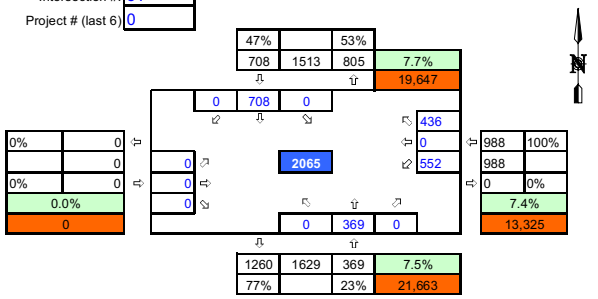


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

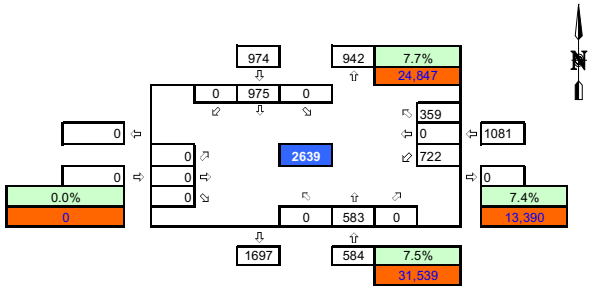
Int 51 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Nobel Drive**
E/W Street: **I-805 N Off-Ramp**
Intersection #: 51
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Nobel Drive**
E/W Street: **I-805 N Off-Ramp**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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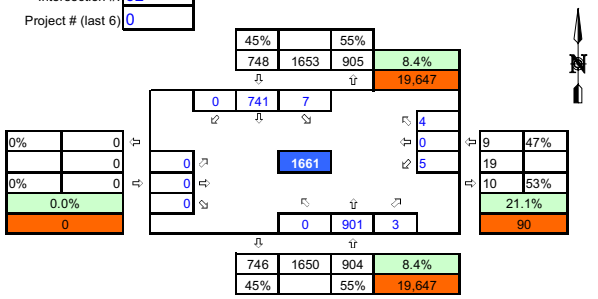
Int 51 PM

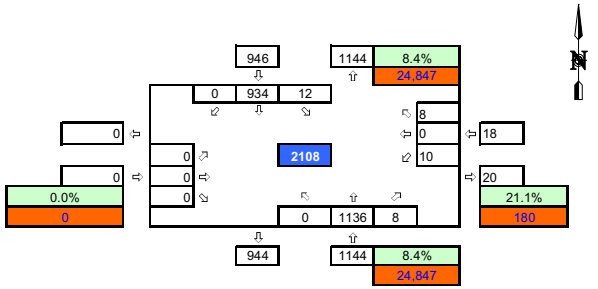
Int 52 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Nobel Drive**
E/W Street: **Avenue of Flags**
Intersection #: 52
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Nobel Drive**
E/W Street: **Avenue of Flags**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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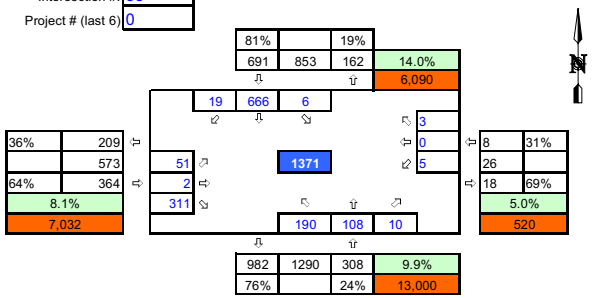
Int 52 PM

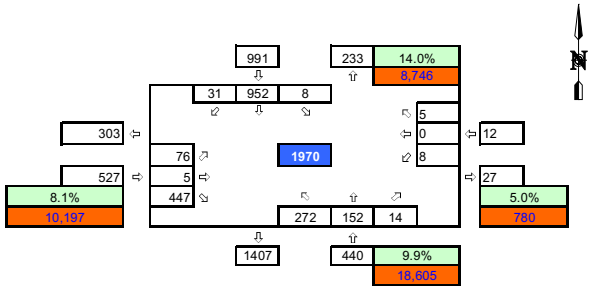
Int 53 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Regents Road**
E/W Street: **Health Science Drive / County Day Ln**
Intersection #: 53
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Regents Road**
E/W Street: **Health Science Drive / County Day Ln**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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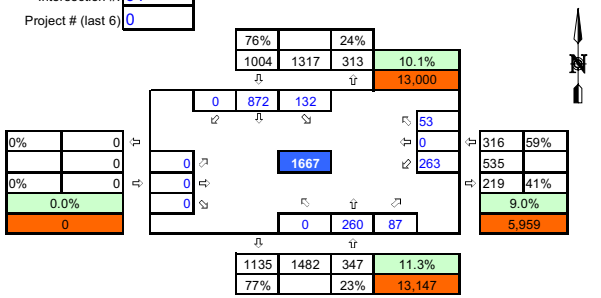
Int 53 PM

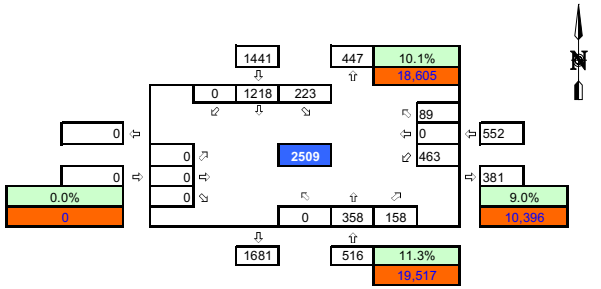
Int 54 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Regents Road**
E/W Street: **Eastgate Mall**
Intersection #: 54
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Regents Road**
E/W Street: **Eastgate Mall**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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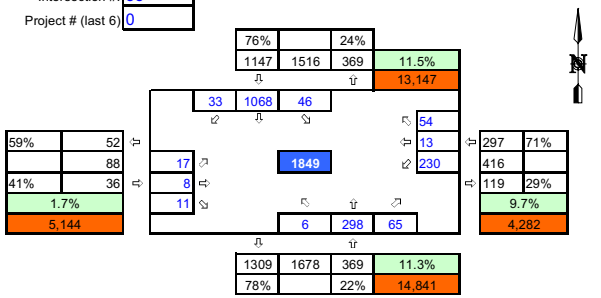
Int 54 PM

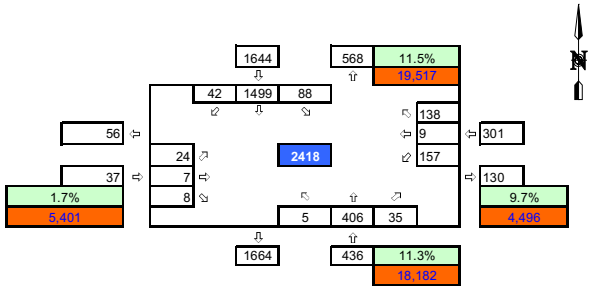
Int 55 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Regents Road**
E/W Street: **Executive Drive**
Intersection #: 55
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Regents Road**
E/W Street: **Executive Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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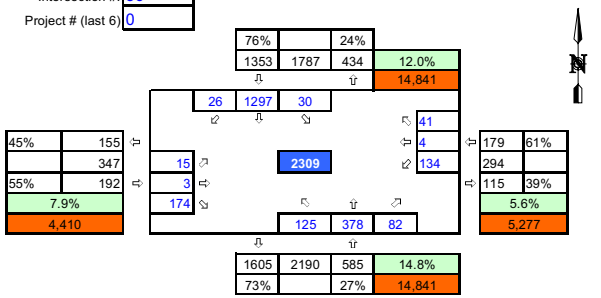
Int 55 PM

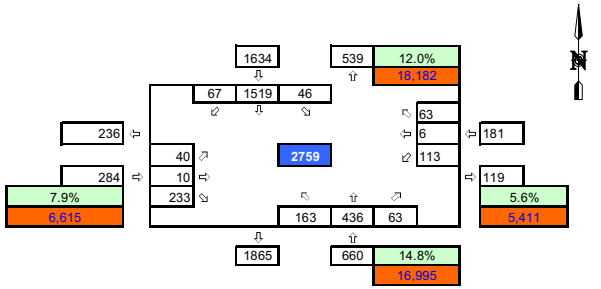
Int 56 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Regents Road**
E/W Street: **Miramar Street / Regents Park Row**
Intersection #: 56
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Regents Road**
E/W Street: **Miramar Street / Regents Park Row**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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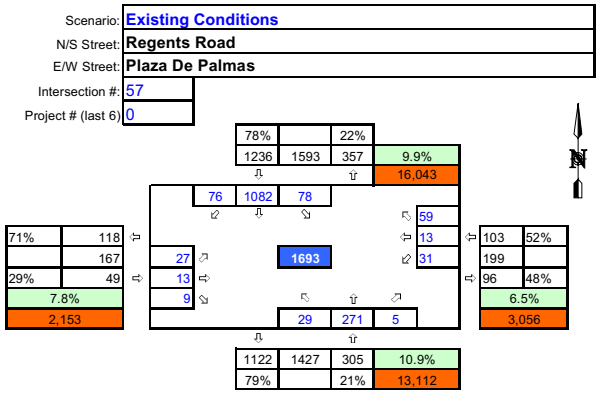
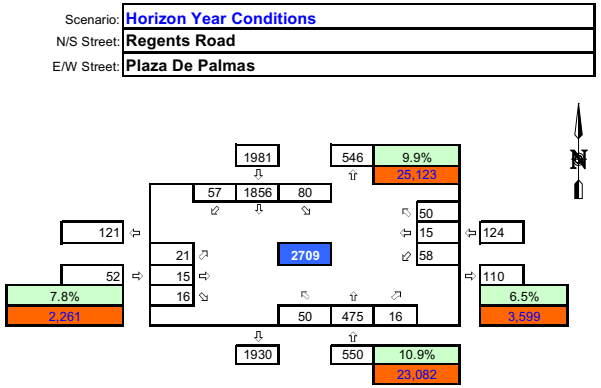
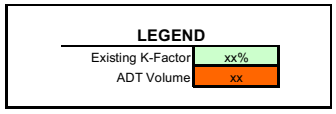
Int 56 PM

Int 57 PM Peak Volumes

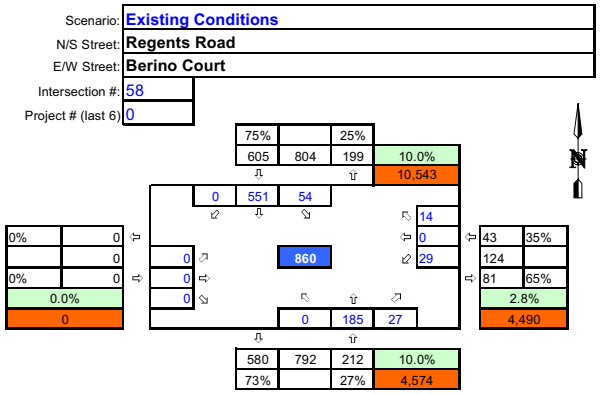


Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

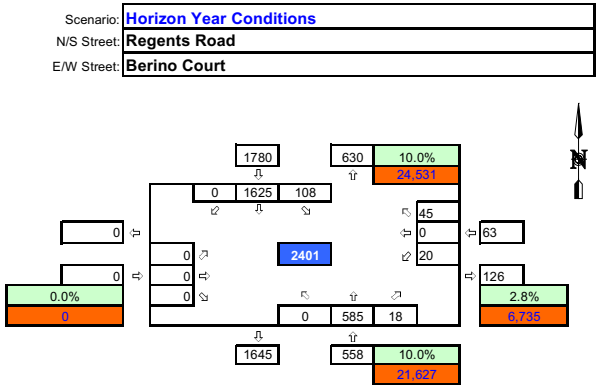


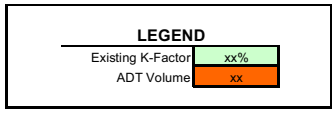


Int 58 PM Peak Volumes



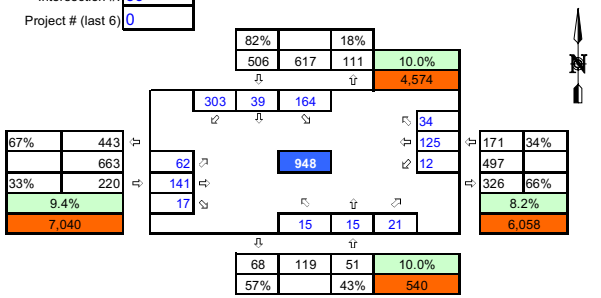
Note: Traffic volumes were collected by Accurate Video Counts during May 2015.





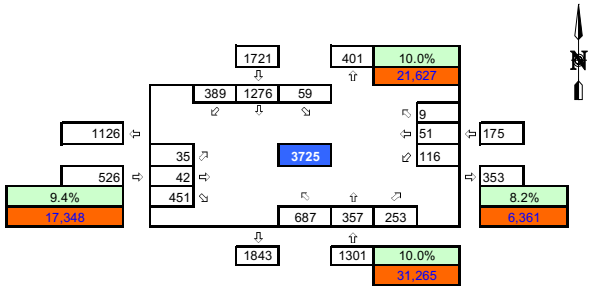
Int 59 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Regents Road**
E/W Street:	**Arriba Street**
Intersection #:	59
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Regents Road**
E/W Street:	**Arriba Street**

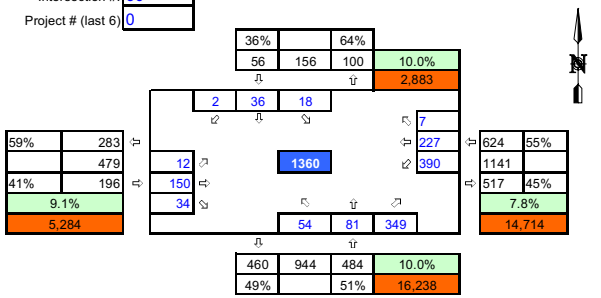


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

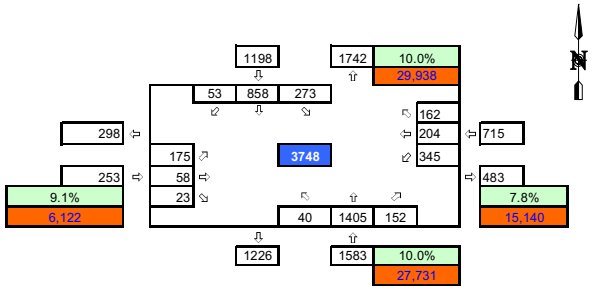
Int 60 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Regents Road**
E/W Street:	**Governor Drive**
Intersection #:	60
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Regents Road**
E/W Street:	**Governor Drive**

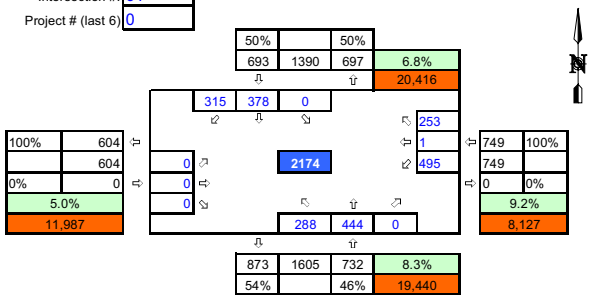


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

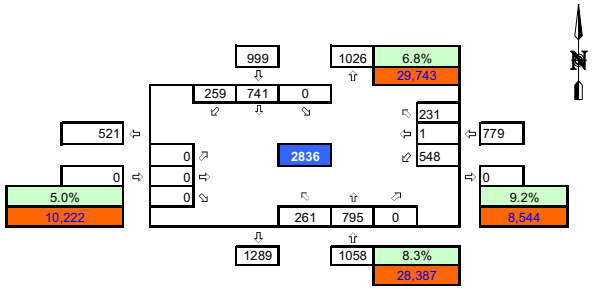
Int 61 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Regents Road**
E/W Street:	**SR-52 WB Ramps**
Intersection #:	61
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Regents Road**
E/W Street:	**SR-52 WB Ramps**

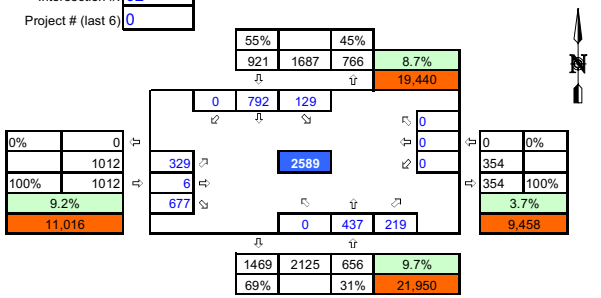


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

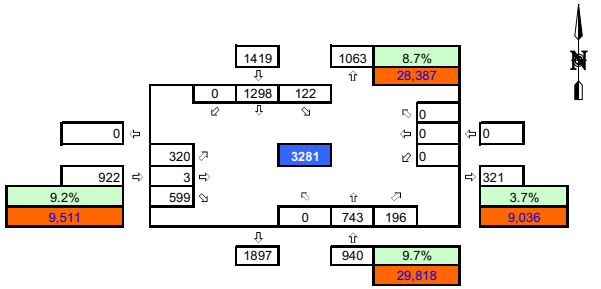
Int 62 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Regents Road**
E/W Street:	**SR-52 EB Ramps**
Intersection #:	62
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Regents Road**
E/W Street:	**SR-52 EB Ramps**

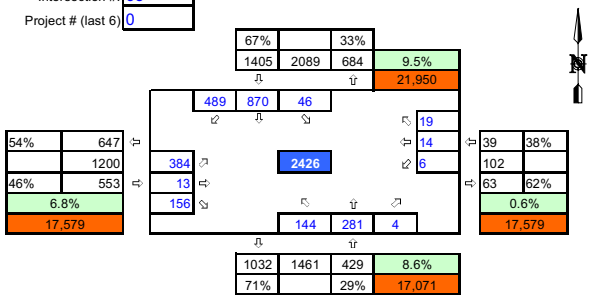


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

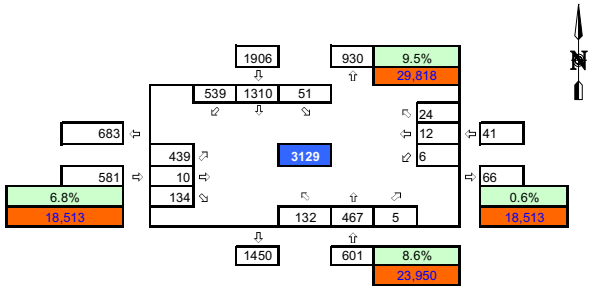
Int 63 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Regents Road / Clairemont Mesa Blvd**
E/W Street: **Luna Avenue**
Intersection #: 63
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Regents Road / Clairemont Mesa Blvd**
E/W Street: **Luna Avenue**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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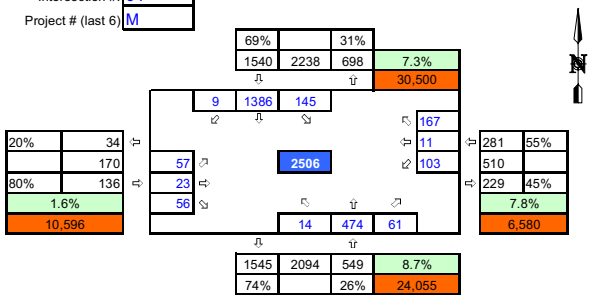
Int 63 PM

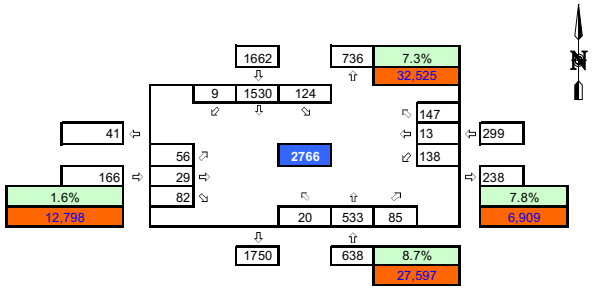
Int 64 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **N. Torrey Pines Road**
E/W Street: **UCSD Northpoint Driveway**
Intersection #: 64
Project # (last 6): M



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **N. Torrey Pines Road**
E/W Street: **UCSD Northpoint Driveway**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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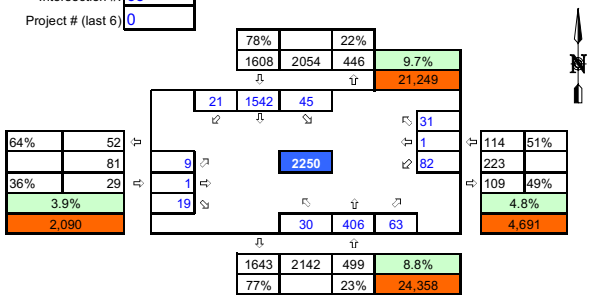
Int 64 PM

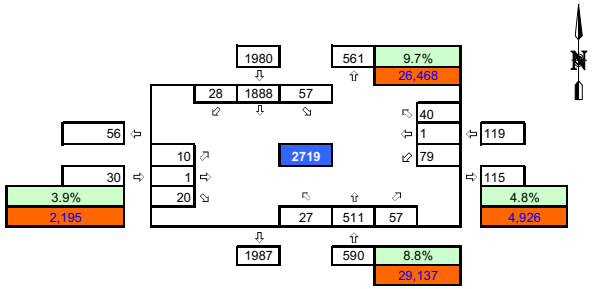
Int 65 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **N. Torrey Pines Road**
E/W Street: **Pangea Drive**
Intersection #: 65
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **N. Torrey Pines Road**
E/W Street: **Pangea Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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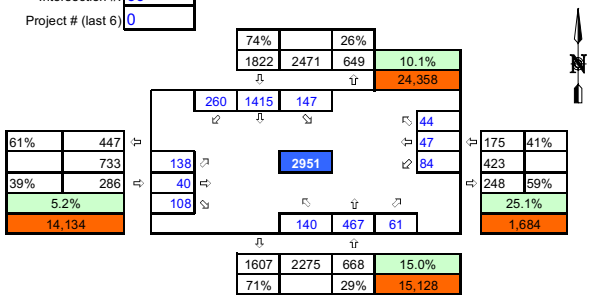
Int 65 PM

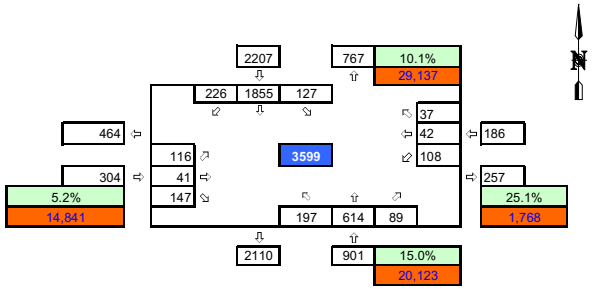
Int 66 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **N. Torrey Pines Road**
E/W Street: **La Jolla Shores Drive**
Intersection #: 66
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **N. Torrey Pines Road**
E/W Street: **La Jolla Shores Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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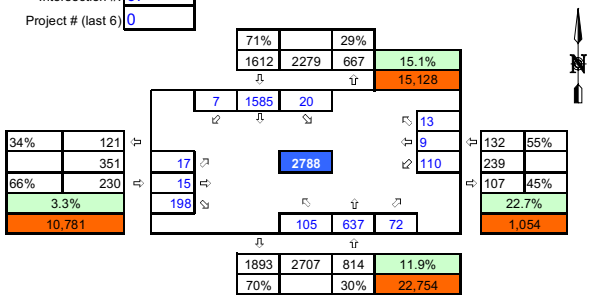
Int 66 PM

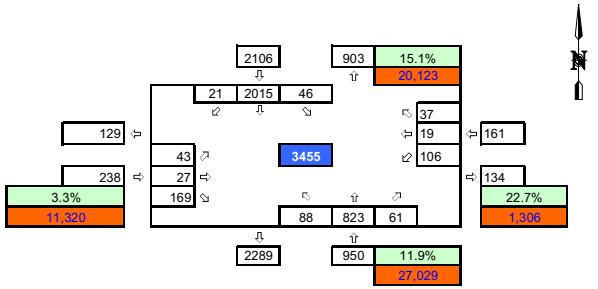
Int 67 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**N. Torrey Pines Road**
E/W Street:	**Expedition Way / Revelle College Drive**
Intersection #:	67
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

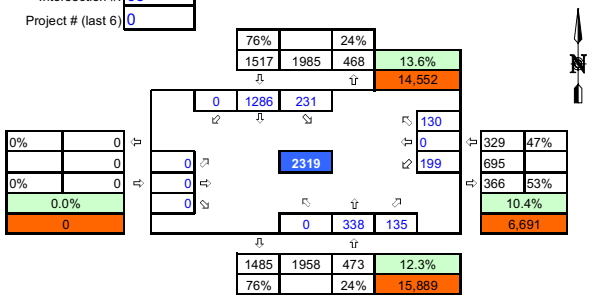
Scenario:	**Horizon Year Conditions**
N/S Street:	**N. Torrey Pines Road**
E/W Street:	**Expedition Way / Revelle College Drive**



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

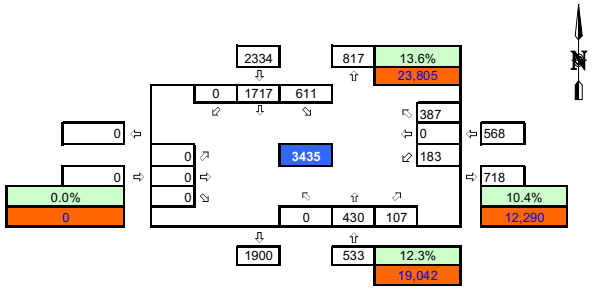
Int 68 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Gilman Drive**
E/W Street:	**Villa La Jolla Drive**
Intersection #:	68
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

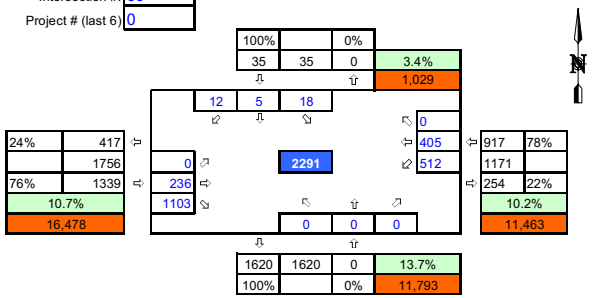
Scenario:	**Horizon Year Conditions**
N/S Street:	**Gilman Drive**
E/W Street:	**Villa La Jolla Drive**



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

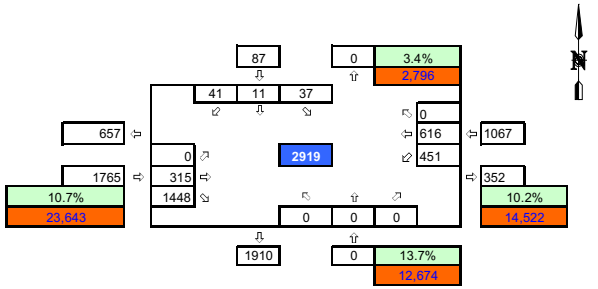
Int 69 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**I-5 SB Ramps**
E/W Street:	**Gillman Drive**
Intersection #:	69
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**I-5 SB Ramps**
E/W Street:	**Gillman Drive**

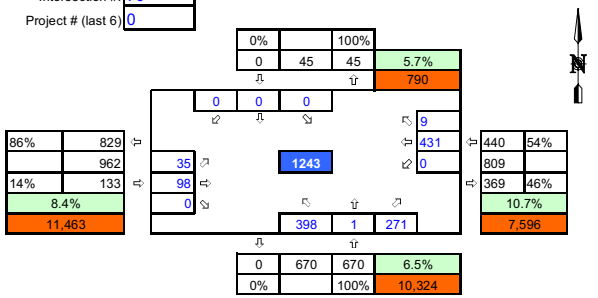


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

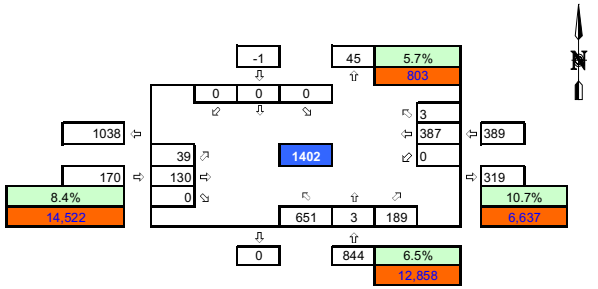
Int 70 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**I-5 NB Ramps**
E/W Street:	**Gillman Drive**
Intersection #:	70
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**I-5 NB Ramps**
E/W Street:	**Gillman Drive**

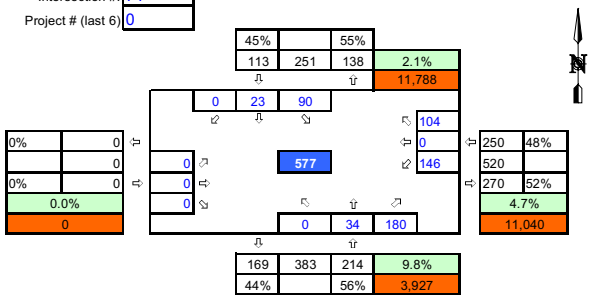


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

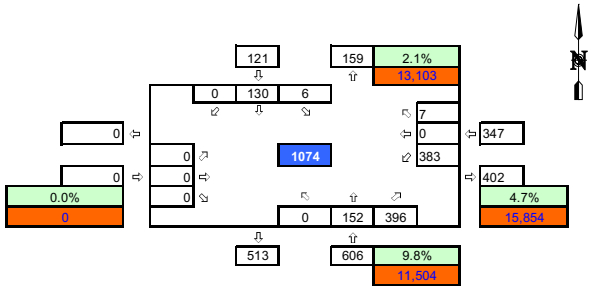
Int 71 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Charmant Drive / Palmilla Drive**
E/W Street:	**Lebon Drive**
Intersection #:	71
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Charmant Drive / Palmilla Drive**
E/W Street:	**Lebon Drive**

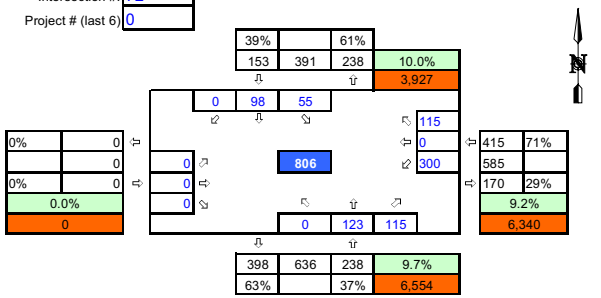


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

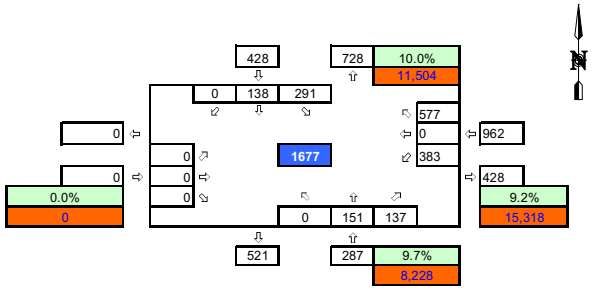
Int 72 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Palmilla Drive**
E/W Street:	**Ariba Street**
Intersection #:	72
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Palmilla Drive**
E/W Street:	**Ariba Street**

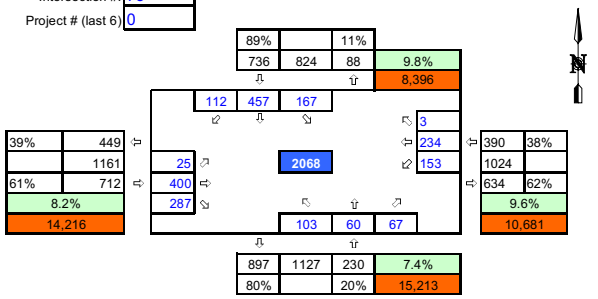


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

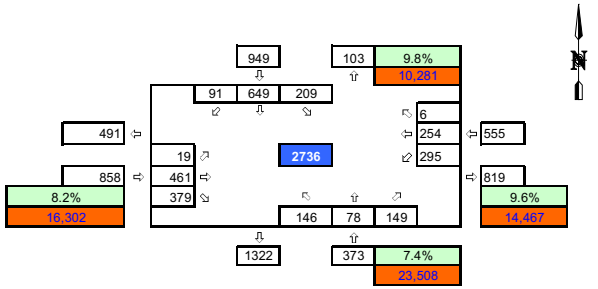
Int 73 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Towne Center Drive**
E/W Street: **Eastgate Mall**
Intersection #: 73
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Towne Center Drive**
E/W Street: **Eastgate Mall**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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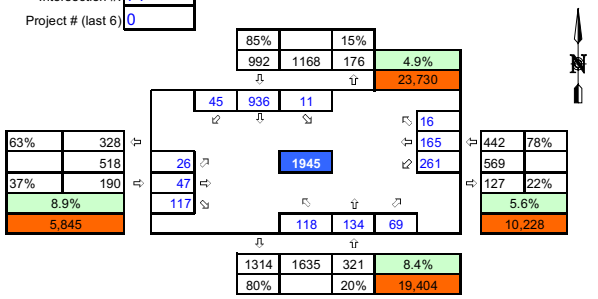
Int 73 PM

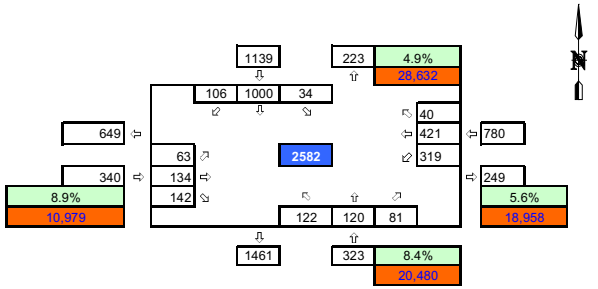
Int 74 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Towne Center Drive**
E/W Street: **Executive Drive**
Intersection #: 74
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Towne Center Drive**
E/W Street: **Executive Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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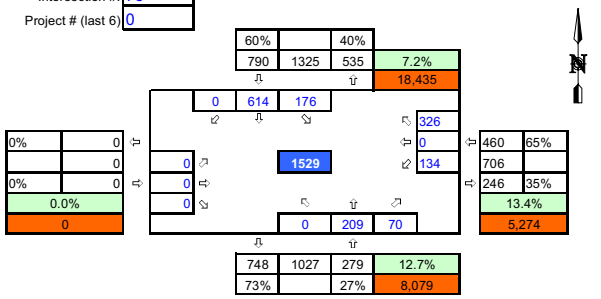
Int 74 PM

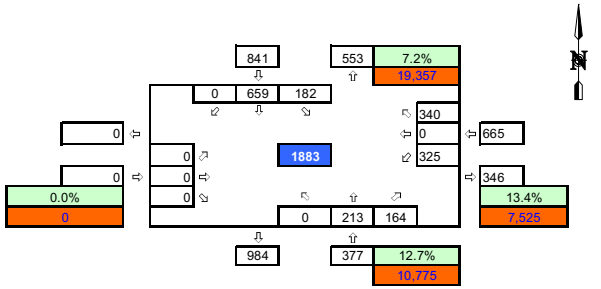
Int 75 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Towne Center Drive**
E/W Street: **Golden Haven Drive**
Intersection #: 75
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Towne Center Drive**
E/W Street: **Golden Haven Drive**



LEGEND
Existing K-Factor xx%
ADT Volume xx

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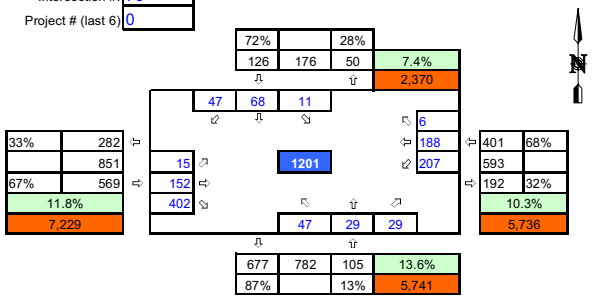
Int 75 PM

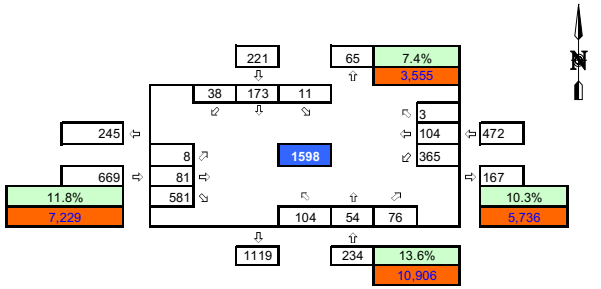
Int 76 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Executive Way**
E/W Street: **Executive Drive**
Intersection #: 76
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Executive Way**
E/W Street: **Executive Drive**



LEGEND
Existing K-Factor xx%
ADT Volume xx

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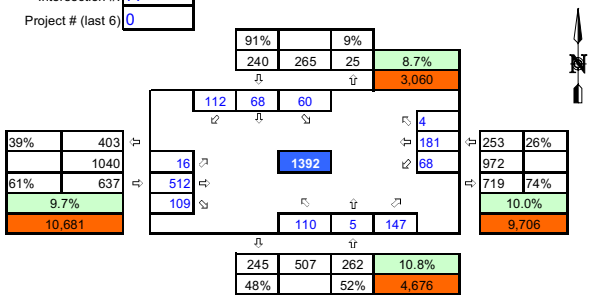
Int 76 PM

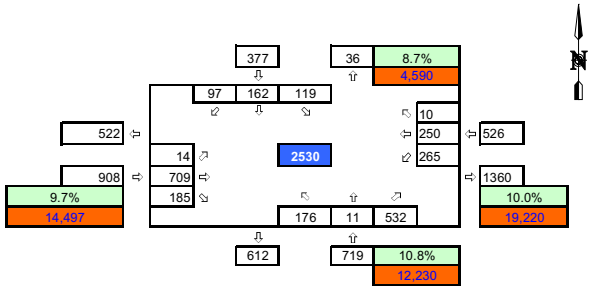
Int 77 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Judicial Drive**
E/W Street: **Eastgate Mall**
Intersection #: 77
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Judicial Drive**
E/W Street: **Eastgate Mall**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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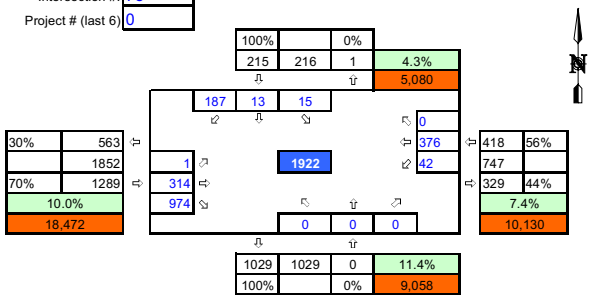
Int 77 PM

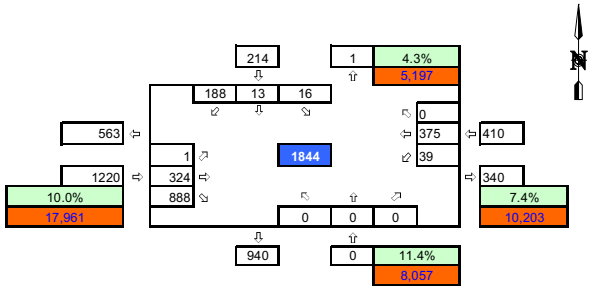
Int 78 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **I-805 SB Ramps**
E/W Street: **Governor Drive**
Intersection #: 78
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **I-805 SB Ramps**
E/W Street: **Governor Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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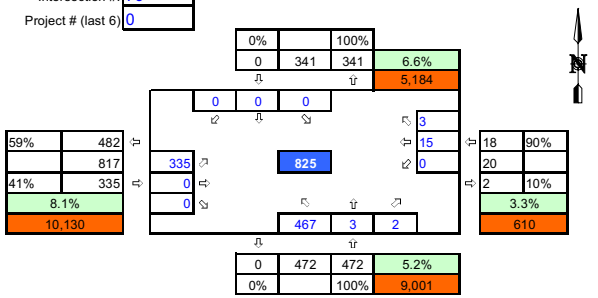
Int 78 PM

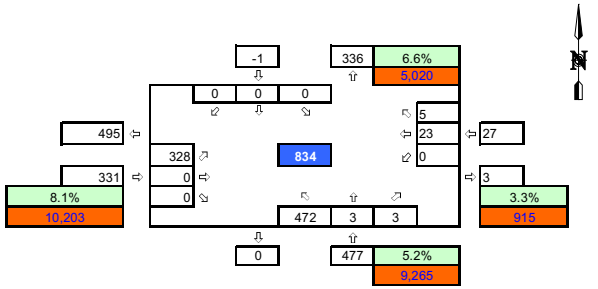
Int 79 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**I-805 NB Ramps**
E/W Street:	**Governor Drive**
Intersection #:	79
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**I-805 NB Ramps**
E/W Street:	**Governor Drive**

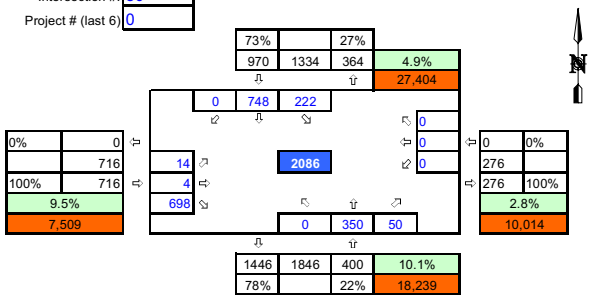


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

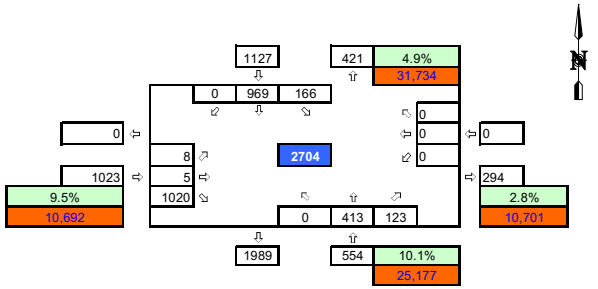
Int 80 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Gilman Drive**
E/W Street:	**La Jolla Village Drive EB**
Intersection #:	80
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Gilman Drive**
E/W Street:	**La Jolla Village Drive EB**

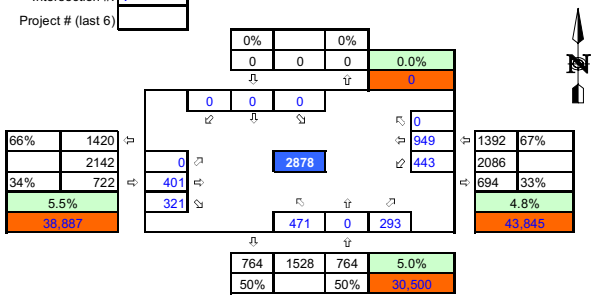


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

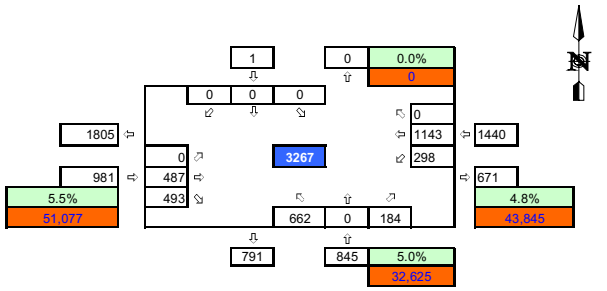
Int 1 AM Peak Volumes

Scenario:	Existing Conditions
N/S Street:	N. Torrey Pines Road
E/W Street:	Genesee Avenue
Intersection #:	1
Project # (last 6)	



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	Horizon Year Conditions
N/S Street:	N. Torrey Pines Road
E/W Street:	Genesee Avenue

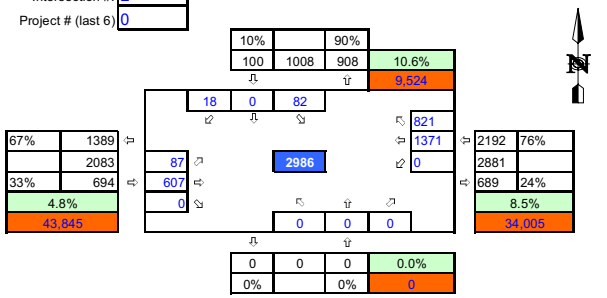


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

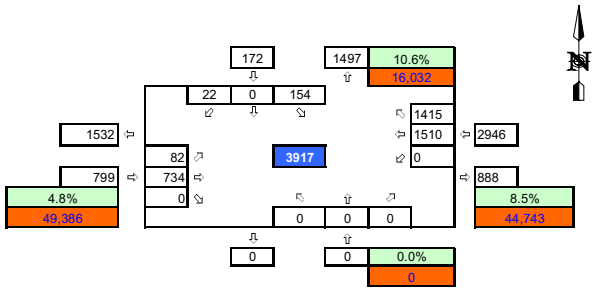
Int 2 AM Peak Volumes

Scenario:	Existing Conditions
N/S Street:	John Hopkins Drive (S)
E/W Street:	Genesee Avenue
Intersection #:	2
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	Horizon Year Conditions
N/S Street:	John Hopkins Drive (S)
E/W Street:	Genesee Avenue

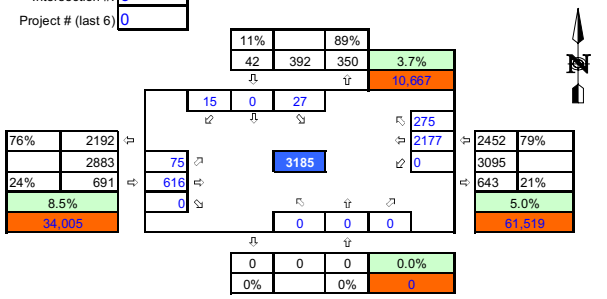


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

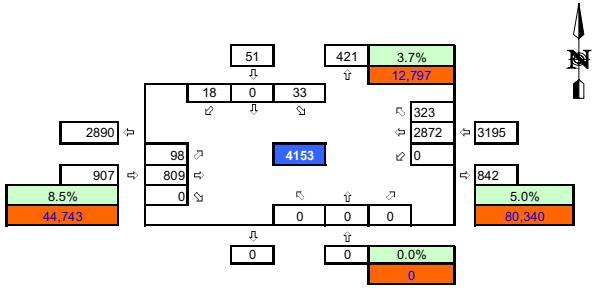
Int 3 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Science Center Drive**
E/W Street: **Genesee Avenue**
Intersection #: 3
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Science Center Drive**
E/W Street: **Genesee Avenue**



LEGEND

Existing K-Factor	xx%
ADT Volume	xx

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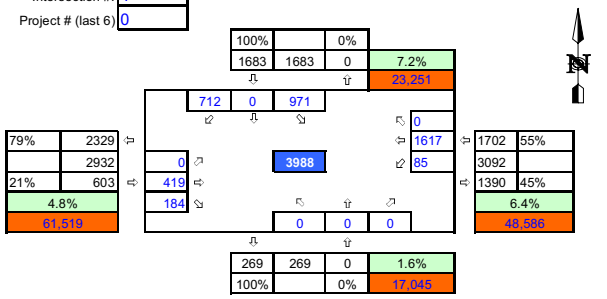
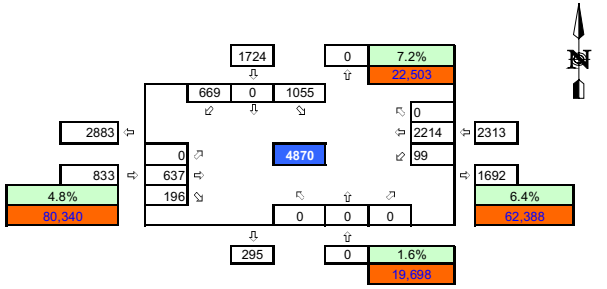
Int 4 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **I-5 SB Ramps**
E/W Street: **Genesee Avenue**
Intersection #: 4
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **I-5 SB Ramps**
E/W Street: **Genesee Avenue**



LEGEND

Existing K-Factor	xx%
ADT Volume	xx

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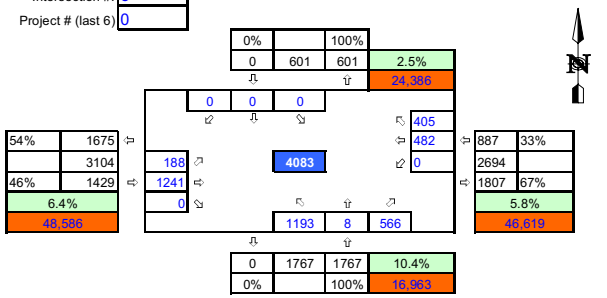
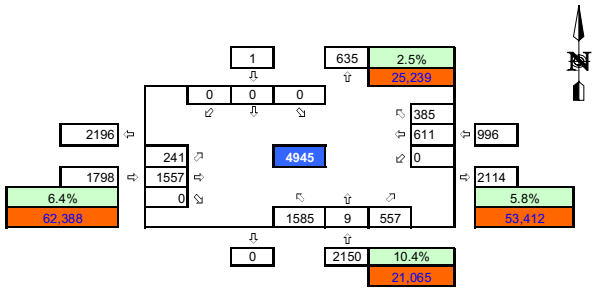
Int 5 AM Peak Volumes

Scenario:	Existing Conditions
N/S Street:	I-5 NB Ramps
E/W Street:	Genesee Avenue
Intersection #:	5
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	Horizon Year Conditions
N/S Street:	I-5 NB Ramps
E/W Street:	Genesee Avenue

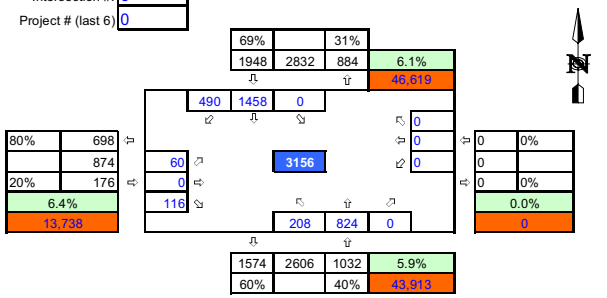


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

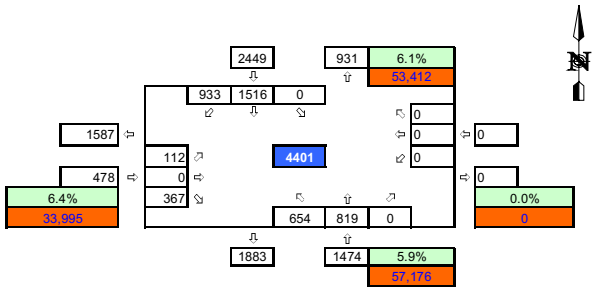
Int 6 AM Peak Volumes

Scenario:	Existing Conditions
N/S Street:	Genesee Avenue
E/W Street:	Scripps Hospital
Intersection #:	6
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	Horizon Year Conditions
N/S Street:	Genesee Avenue
E/W Street:	Scripps Hospital

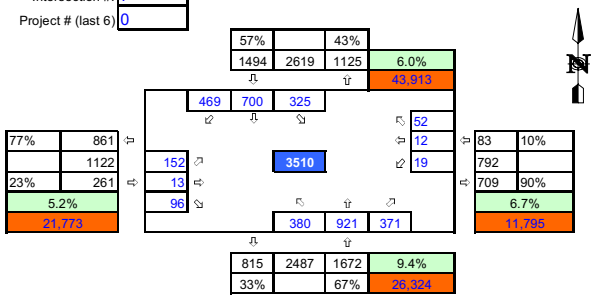


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

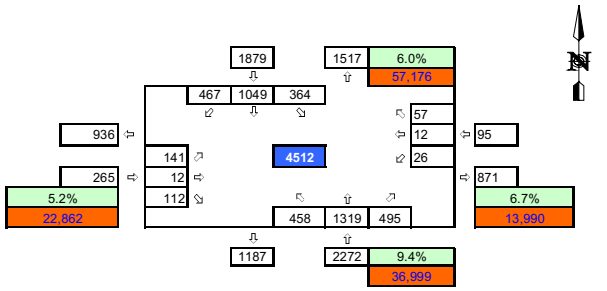
Int 7 AM Peak Volumes

Scenario:	Existing Conditions
N/S Street:	Genesee Avenue
E/W Street:	Campus Point Drive
Intersection #:	7
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	Horizon Year Conditions
N/S Street:	Genesee Avenue
E/W Street:	Campus Point Drive

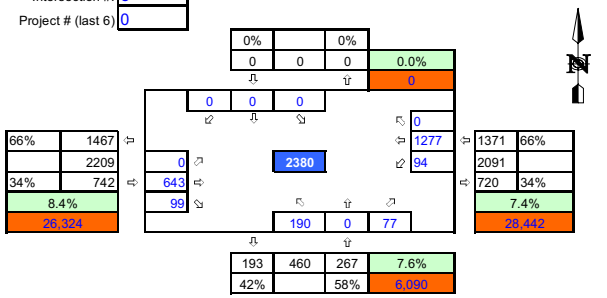


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

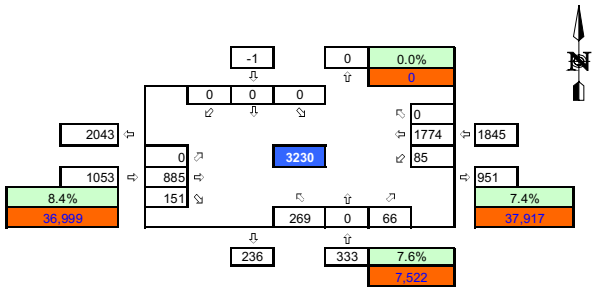
Int 8 AM Peak Volumes

Scenario:	Existing Conditions
N/S Street:	Regents Road
E/W Street:	Genesee Avenue
Intersection #:	8
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	Horizon Year Conditions
N/S Street:	Regents Road
E/W Street:	Genesee Avenue

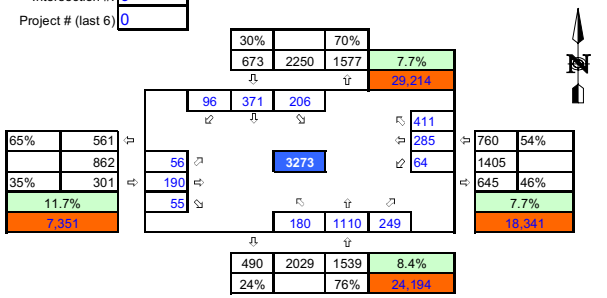


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

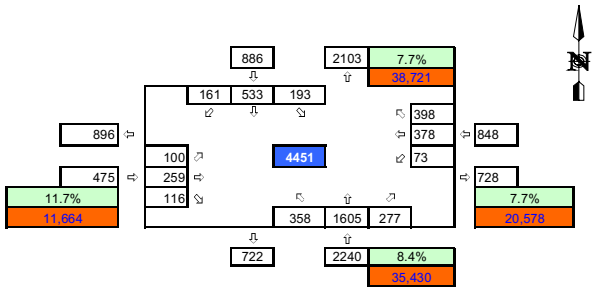
Int 9 AM Peak Volumes

Scenario:	Existing Conditions
N/S Street:	Genesee Avenue
E/W Street:	Eastgate Mall
Intersection #:	9
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	Horizon Year Conditions
N/S Street:	Genesee Avenue
E/W Street:	Eastgate Mall

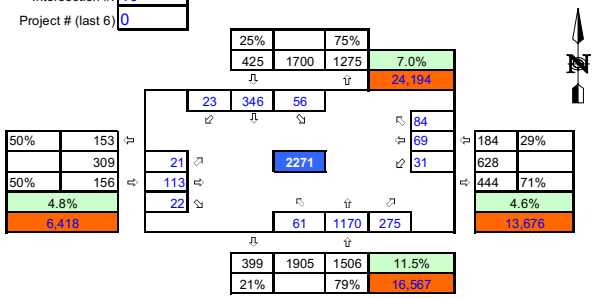


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

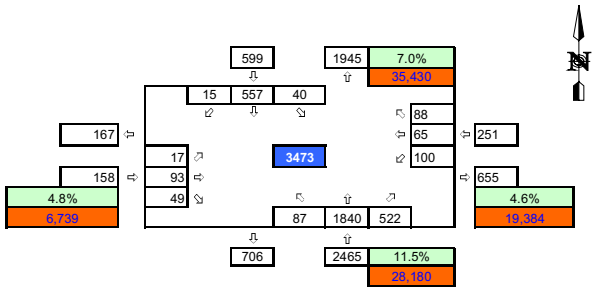
Int 10 AM Peak Volumes

Scenario:	Existing Conditions
N/S Street:	Genesee Avenue
E/W Street:	Executive Drive
Intersection #:	10
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	Horizon Year Conditions
N/S Street:	Genesee Avenue
E/W Street:	Executive Drive

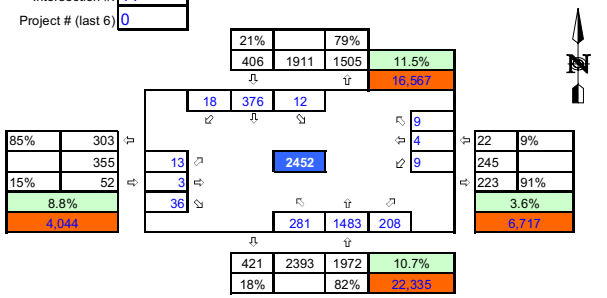


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

Int 11 AM Peak Volumes

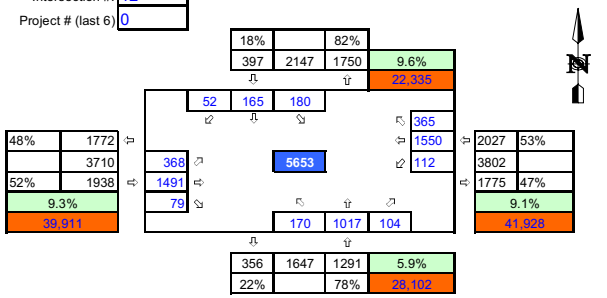
Scenario:	Existing Conditions
N/S Street:	Genesee Avenue
E/W Street:	Executive Square
Intersection #:	11
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

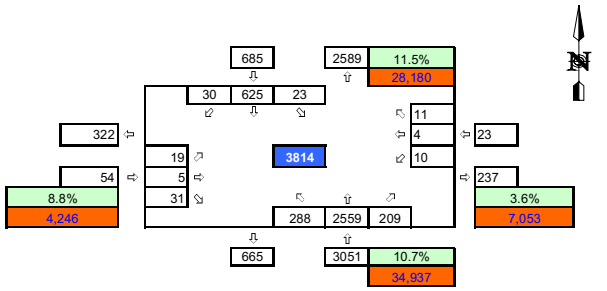
Int 12 AM Peak Volumes

Scenario:	Existing Conditions
N/S Street:	Genesee Avenue
E/W Street:	La Jolla Village Drive
Intersection #:	12
Project # (last 6)	0

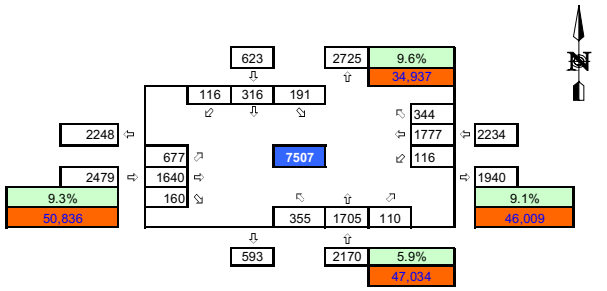


Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	Horizon Year Conditions
N/S Street:	Genesee Avenue
E/W Street:	Executive Square



Scenario:	Horizon Year Conditions
N/S Street:	Genesee Avenue
E/W Street:	La Jolla Village Drive



LEGEND

Existing K-Factor	xx%
ADT Volume	xx

LEGEND

Existing K-Factor	xx%
ADT Volume	xx

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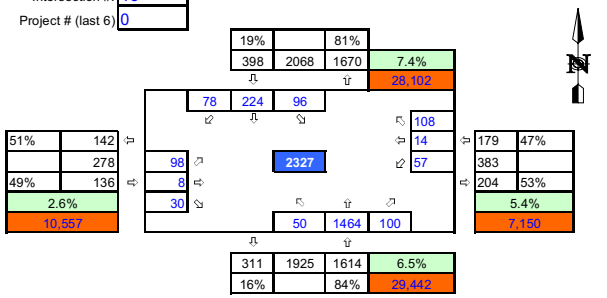
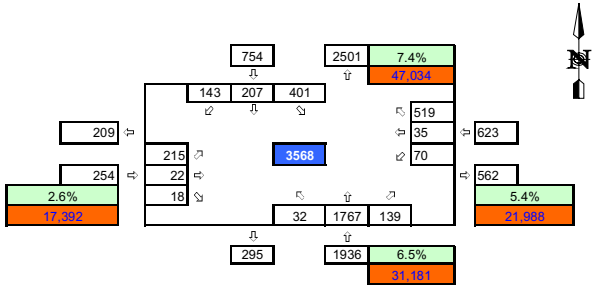
Int 13 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Esplanade Court**
Intersection #: 13
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Esplanade Court**

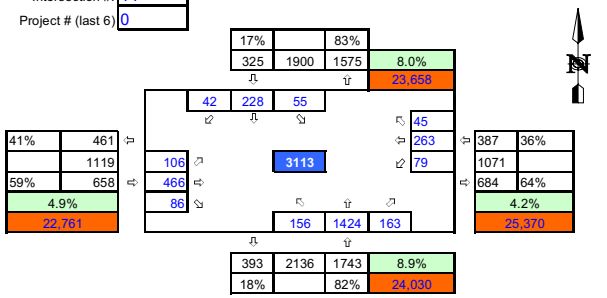


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

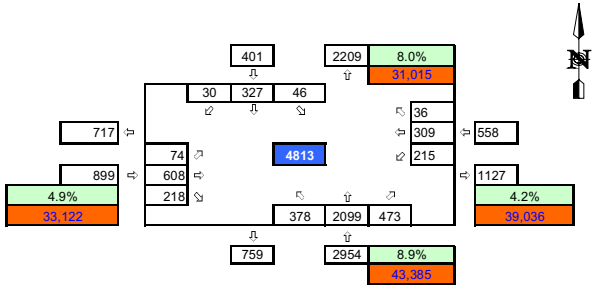
Int 14 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Nobel Drive**
Intersection #: 14
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Nobel Drive**

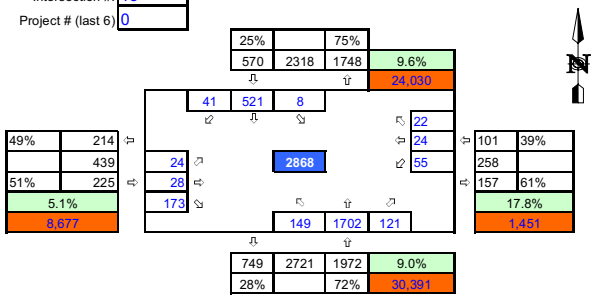


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

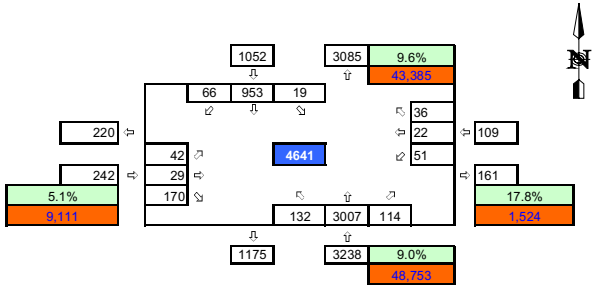
Int 15 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Decoro Street**
Intersection #: 15
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Decoro Street**

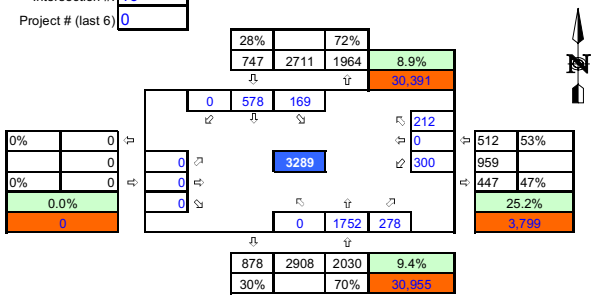


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

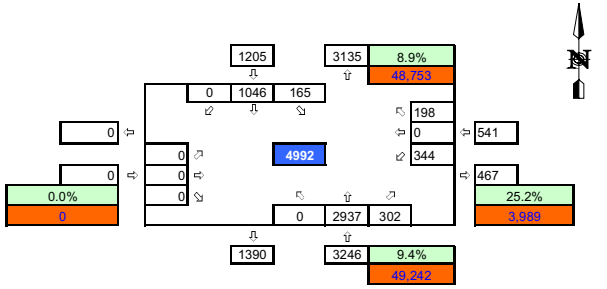
Int 16 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Centurion Square**
Intersection #: 16
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

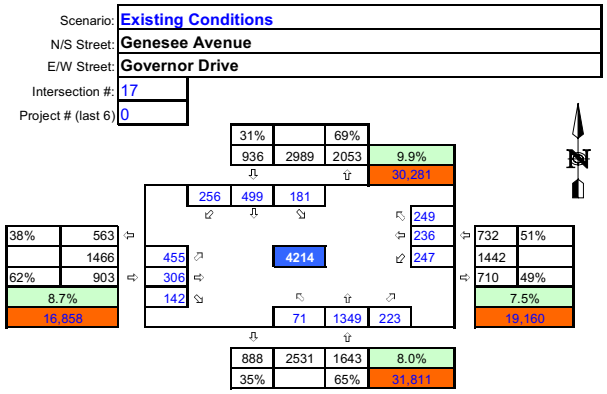
Scenario: **Horizon Year Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Centurion Square**



LEGEND

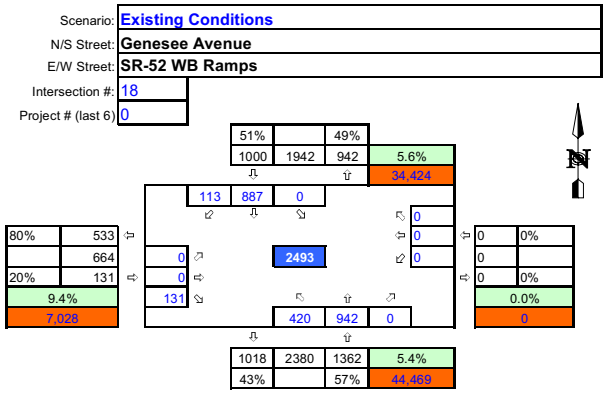
Existing K-Factor	xx%
ADT Volume	xx

Int 17 AM Peak Volumes

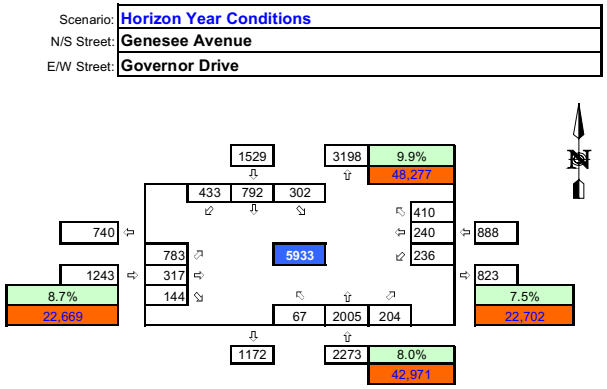


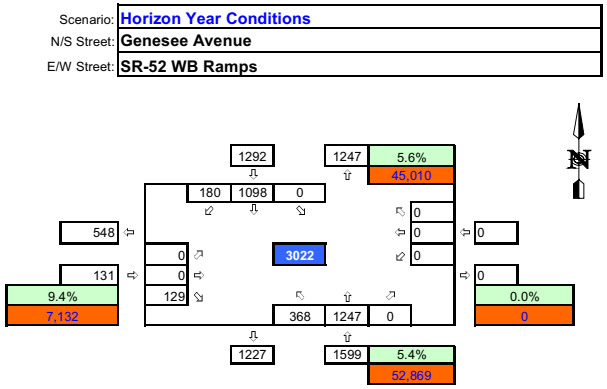
Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

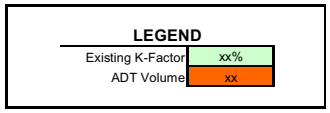
Int 18 AM Peak Volumes

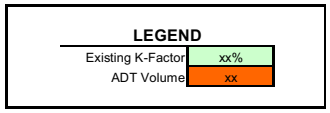


Note: Traffic volumes were collected by Accurate Video Counts during May 2015.









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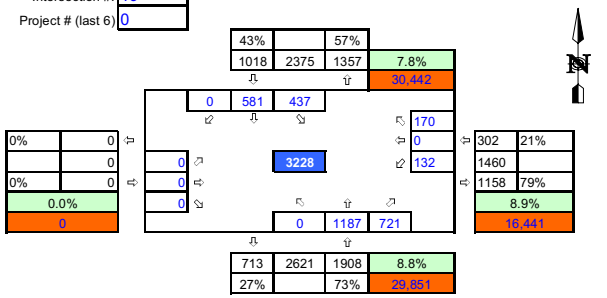
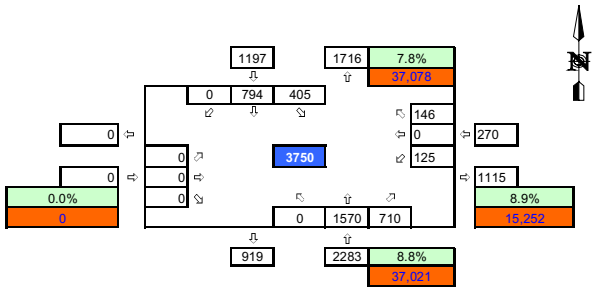
Int 19 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**SR-52 EB Ramps**
Intersection #:	19
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**SR-52 EB Ramps**

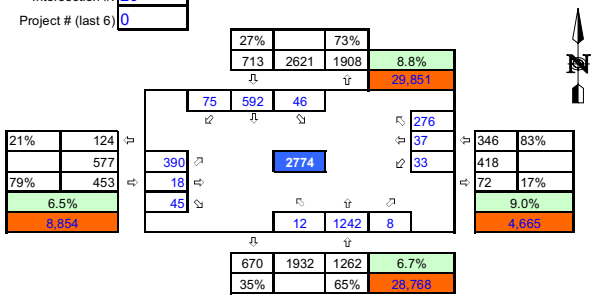


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

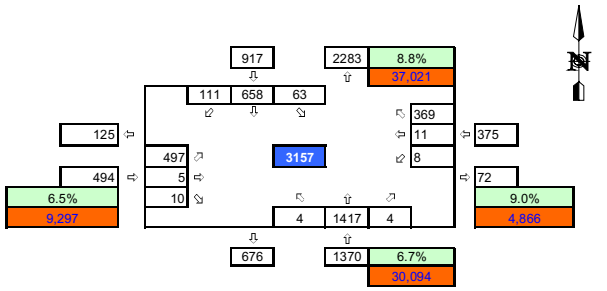
Int 20 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**Lehrer Drive / Appleton Street**
Intersection #:	20
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**Lehrer Drive / Appleton Street**

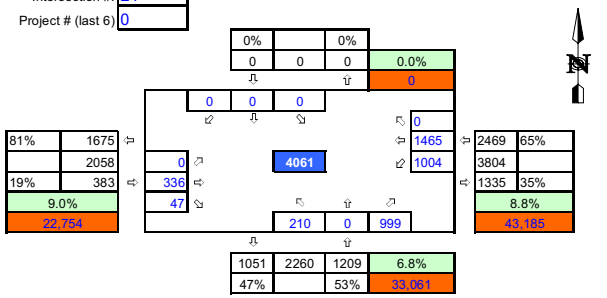


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

Int 21 AM Peak Volumes

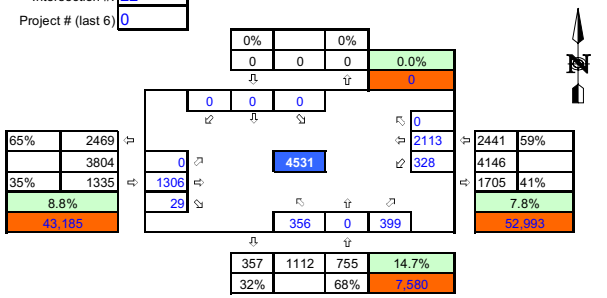
Scenario:	**Existing Conditions**
N/S Street:	**Torrey Pines Road**
E/W Street:	**La Jolla Village Drive**
Intersection #:	21
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

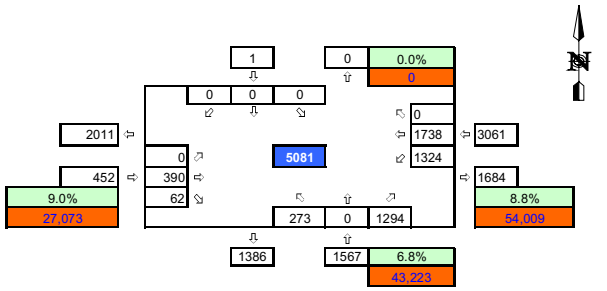
Int 22 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**La Jolla Scenic Drive**
E/W Street:	**La Jolla Village Drive**
Intersection #:	22
Project # (last 6)	0

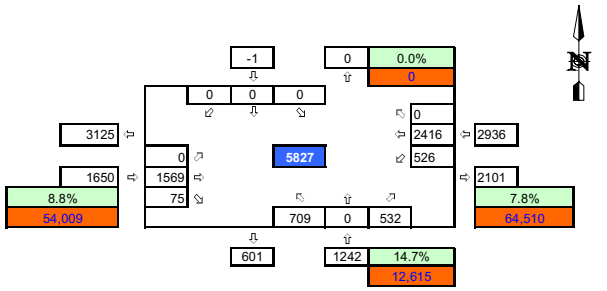


Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Torrey Pines Road**
E/W Street:	**La Jolla Village Drive**



Scenario:	**Horizon Year Conditions**
N/S Street:	**La Jolla Scenic Drive**
E/W Street:	**La Jolla Village Drive**



LEGEND

Existing K-Factor	xx%
ADT Volume	xx

LEGEND

Existing K-Factor	xx%
ADT Volume	xx

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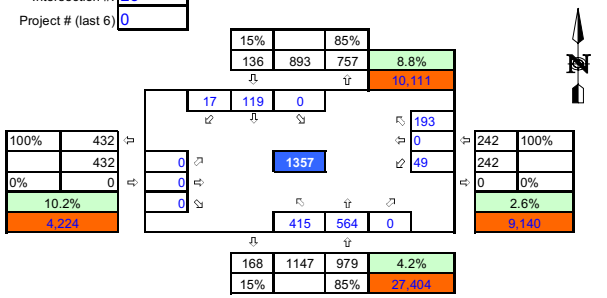
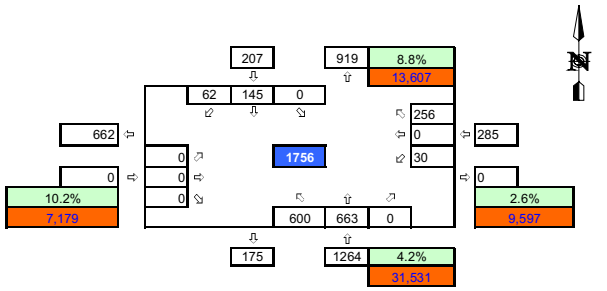
Int 23 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Gillman Drive**
E/W Street:	**La Jolla Village Drive WB**
Intersection #:	23
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

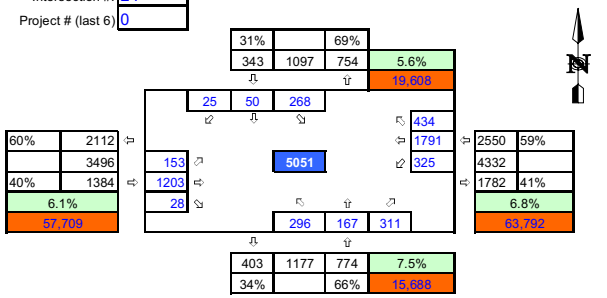
Scenario:	**Horizon Year Conditions**
N/S Street:	**Gillman Drive**
E/W Street:	**La Jolla Village Drive WB**



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

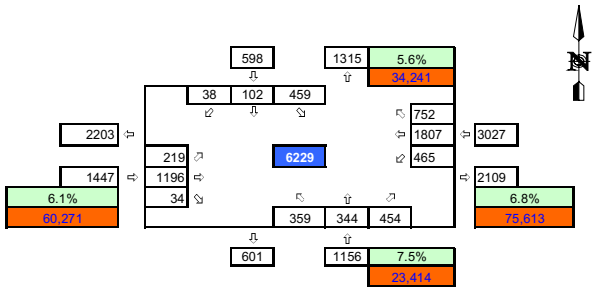
Int 24 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Villa La Jolla Drive**
E/W Street:	**La Jolla Village Drive**
Intersection #:	24
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

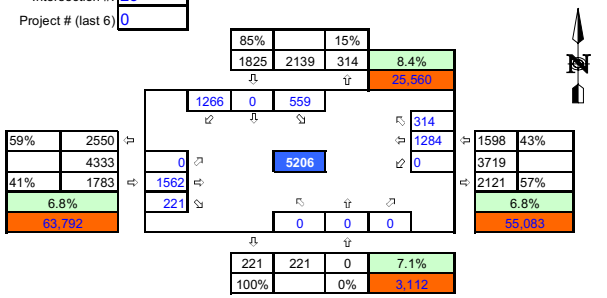
Scenario:	**Horizon Year Conditions**
N/S Street:	**Villa La Jolla Drive**
E/W Street:	**La Jolla Village Drive**



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

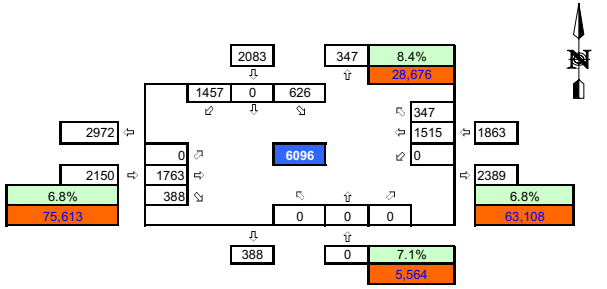
Int 25 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**I-5 SB Off-Ramps**
E/W Street:	**La Jolla Village Drive**
Intersection #:	25
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

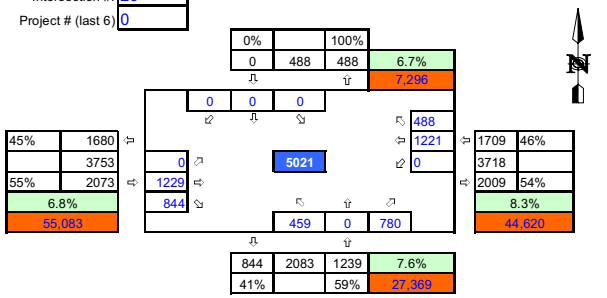
Scenario:	**Horizon Year Conditions**
N/S Street:	**I-5 SB Off-Ramps**
E/W Street:	**La Jolla Village Drive**



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

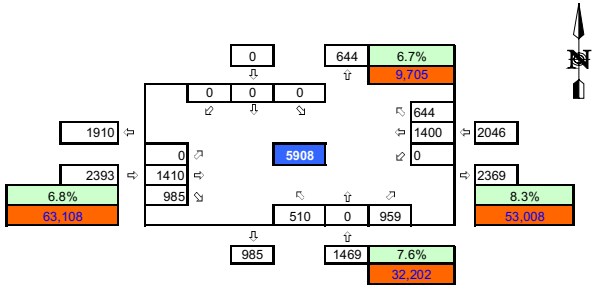
Int 26 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**I-5 NB Off-Ramps**
E/W Street:	**La Jolla Village Drive**
Intersection #:	26
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

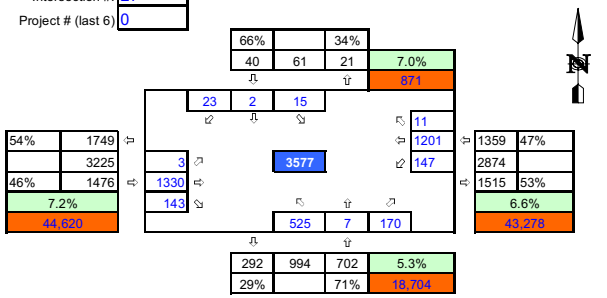
Scenario:	**Horizon Year Conditions**
N/S Street:	**I-5 NB Off-Ramps**
E/W Street:	**La Jolla Village Drive**



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

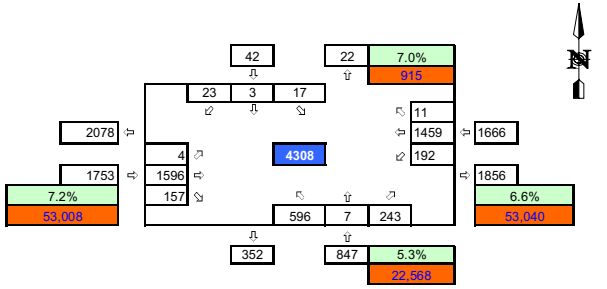
Int 27 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Lebon Drive**
E/W Street: **La Jolla Village Drive**
Intersection #: 27
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Lebon Drive**
E/W Street: **La Jolla Village Drive**



LEGEND

Existing K-Factor	xx%
ADT Volume	xx

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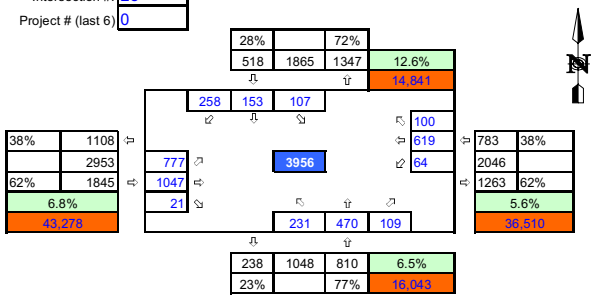
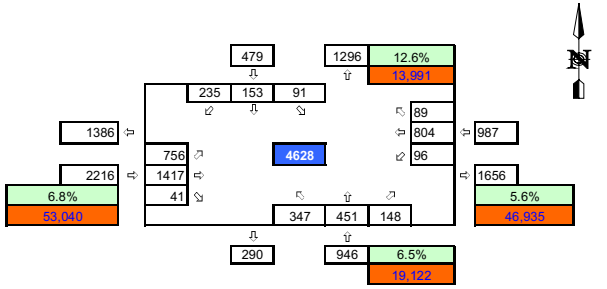
Int 28 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Regents Road**
E/W Street: **La Jolla Village Drive**
Intersection #: 28
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Regents Road**
E/W Street: **La Jolla Village Drive**



LEGEND

Existing K-Factor	xx%
ADT Volume	xx

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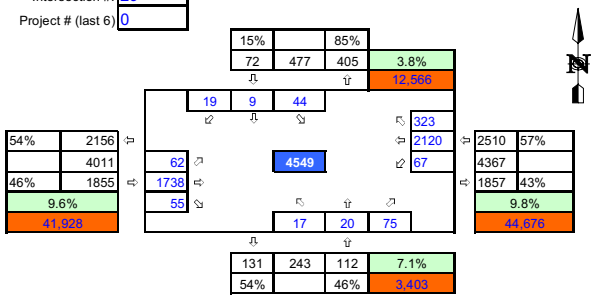
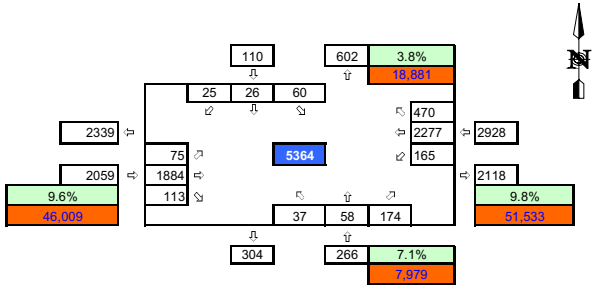
Int 29 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Executive Way**
E/W Street: **La Jolla Village Drive**
Intersection #: 29
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Executive Way**
E/W Street: **La Jolla Village Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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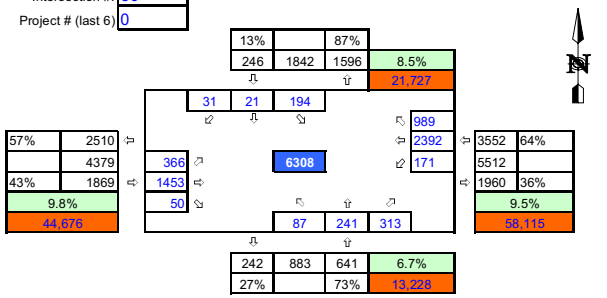
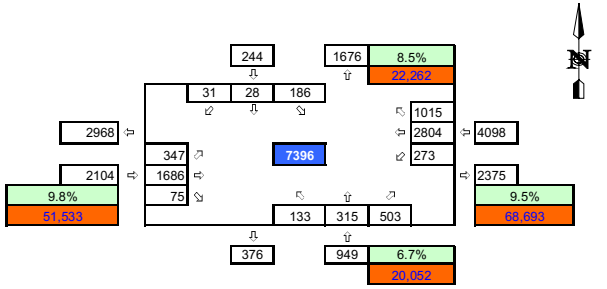
Int 30 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Towne Center Drive**
E/W Street: **La Jolla Village Drive**
Intersection #: 30
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Towne Center Drive**
E/W Street: **La Jolla Village Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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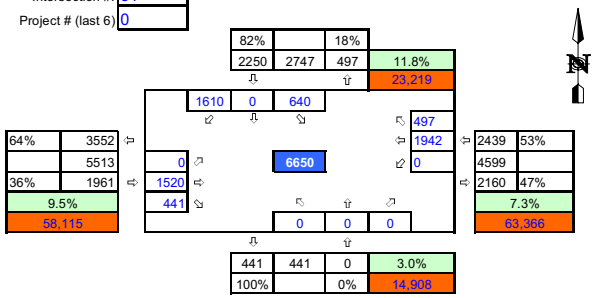
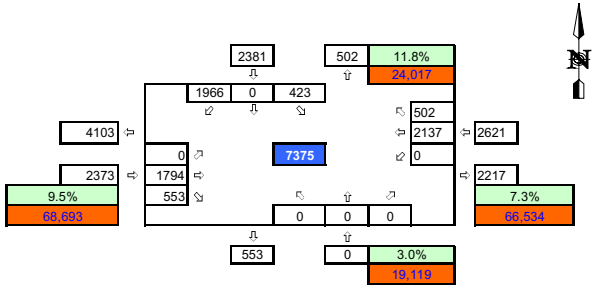
Int 31 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**I-805 SB Ramps**
E/W Street:	**La Jolla Village Drive**
Intersection #:	31
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**I-805 SB Ramps**
E/W Street:	**La Jolla Village Drive**

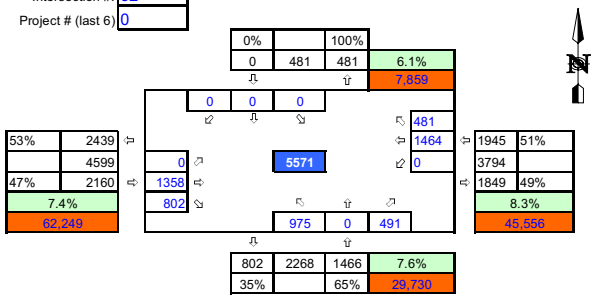


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

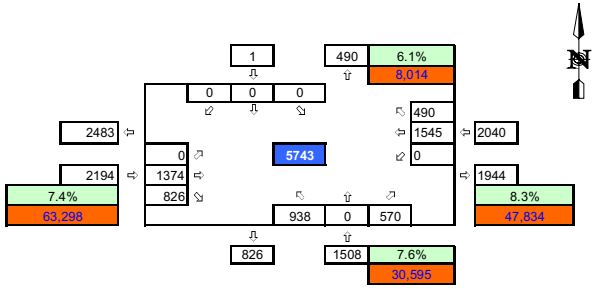
Int 32 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**I-805 NB Ramps**
E/W Street:	**La Jolla Village Drive**
Intersection #:	32
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**I-805 NB Ramps**
E/W Street:	**La Jolla Village Drive**

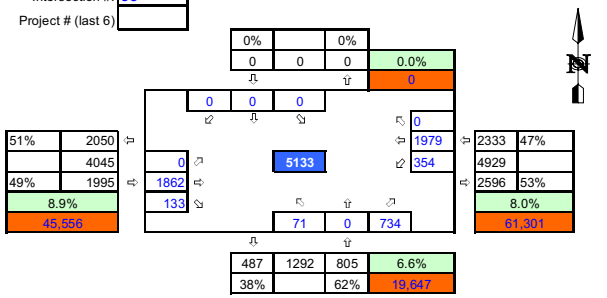


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

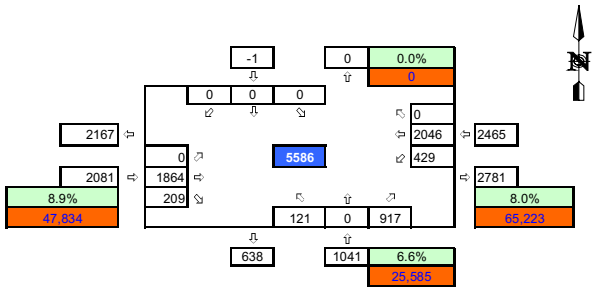
Int 33 AM Peak Volumes

Scenario:	Existing Conditions
N/S Street:	Noble Drive
E/W Street:	Miramar Road
Intersection #:	33
Project # (last 6)	



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

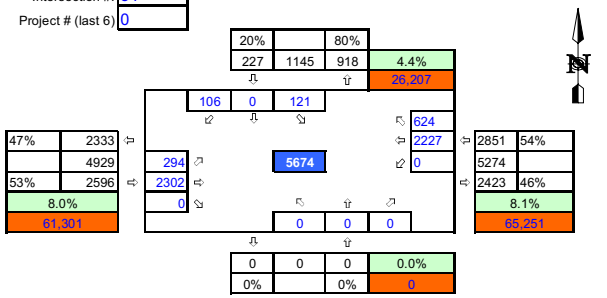
Scenario:	Horizon Year Conditions
N/S Street:	Noble Drive
E/W Street:	Miramar Road



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

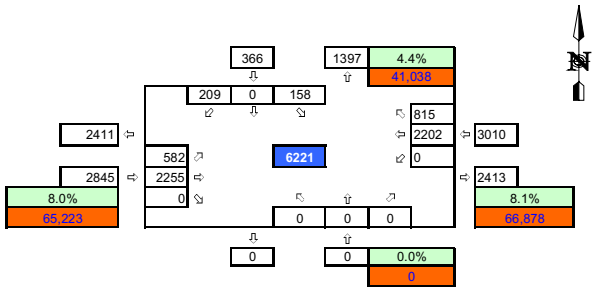
Int 34 AM Peak Volumes

Scenario:	Existing Conditions
N/S Street:	Eastgate Mall
E/W Street:	Miramar Road
Intersection #:	34
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

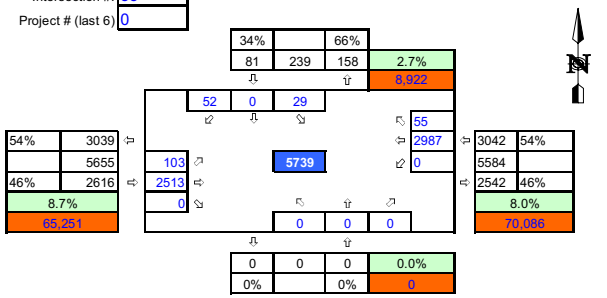
Scenario:	Horizon Year Conditions
N/S Street:	Eastgate Mall
E/W Street:	Miramar Road



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

Int 35 AM Peak Volumes

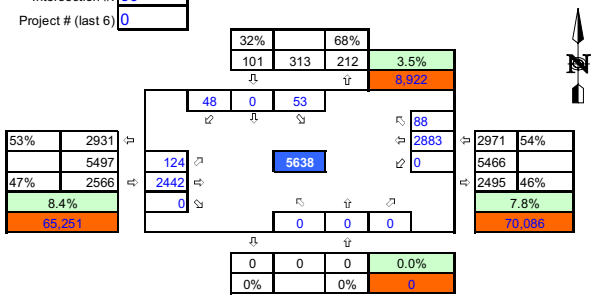
Scenario: **Existing Conditions**
N/S Street: **Miramar Mall**
E/W Street: **Miramar Road**
Intersection #: 35
Project # (last 6) 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

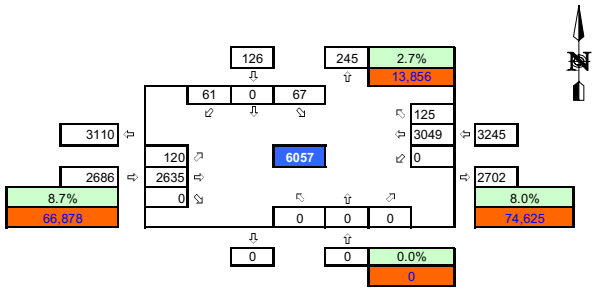
Int 36 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Miramar Place**
E/W Street: **Miramar Road**
Intersection #: 36
Project # (last 6) 0

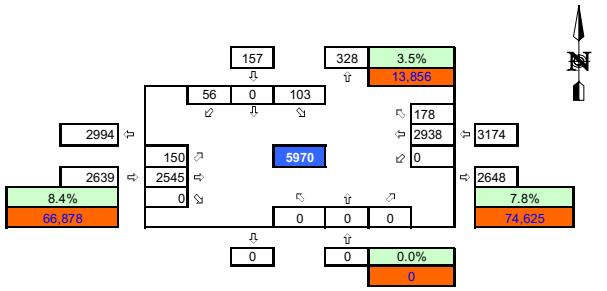


Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Miramar Mall**
E/W Street: **Miramar Road**



Scenario: **Horizon Year Conditions**
N/S Street: **Miramar Place**
E/W Street: **Miramar Road**



LEGEND

Existing K-Factor	xx%
ADT Volume	xx

LEGEND

Existing K-Factor	xx%
ADT Volume	xx

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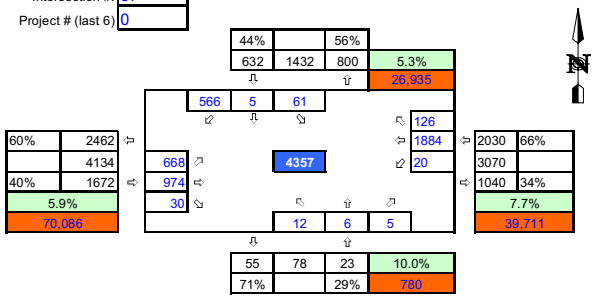
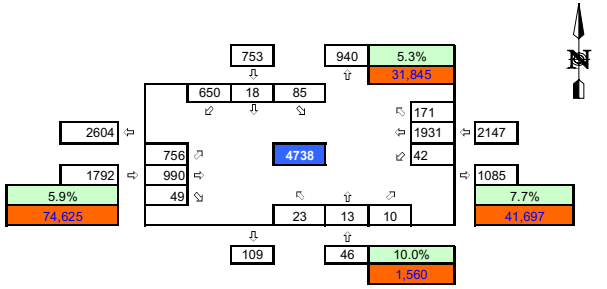
Int 37 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Camino Santa Fe**
E/W Street:	**Miramar Road**
Intersection #:	37
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Camino Santa Fe**
E/W Street:	**Miramar Road**



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

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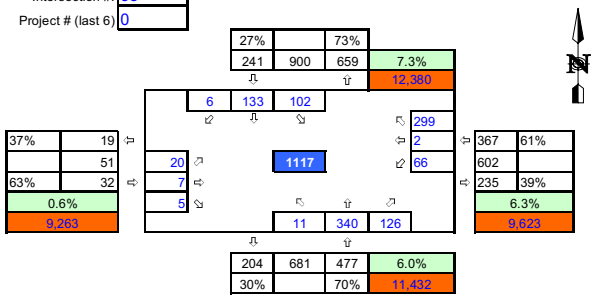
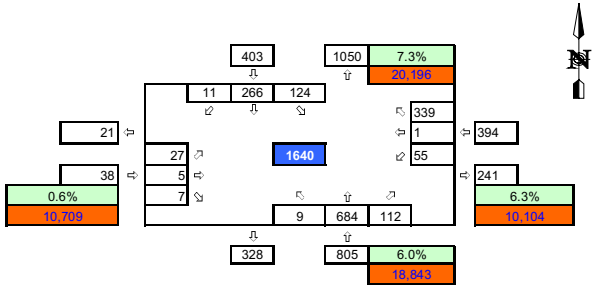
Int 38 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Villa La Jolla Drive**
E/W Street:	**Nobel Drive**
Intersection #:	38
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Villa La Jolla Drive**
E/W Street:	**Nobel Drive**



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

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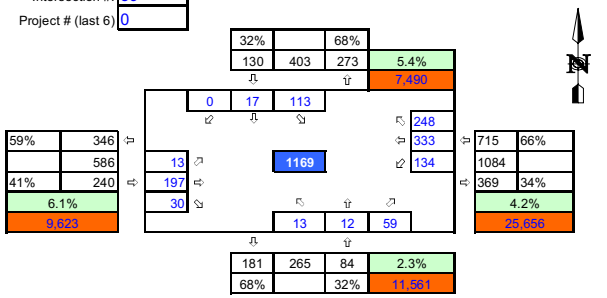
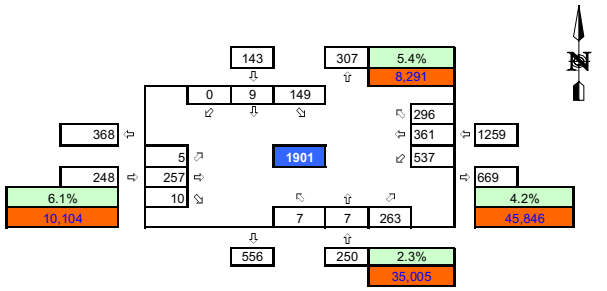
Int 39 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **La Jolla Village Square Driveway**
E/W Street: **Nobel Drive**
Intersection #: 39
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **La Jolla Village Square Driveway**
E/W Street: **Nobel Drive**

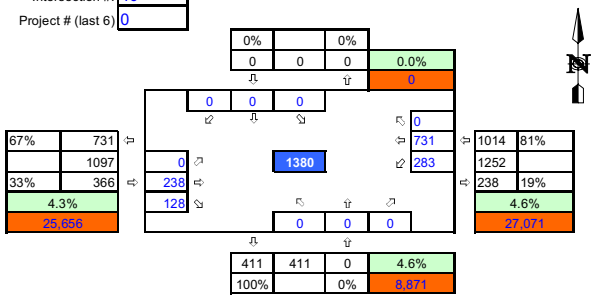


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

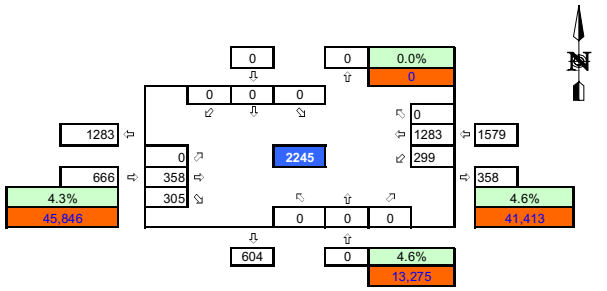
Int 40 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **I-5 SB On**
E/W Street: **Nobel Drive**
Intersection #: 40
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **I-5 SB On**
E/W Street: **Nobel Drive**

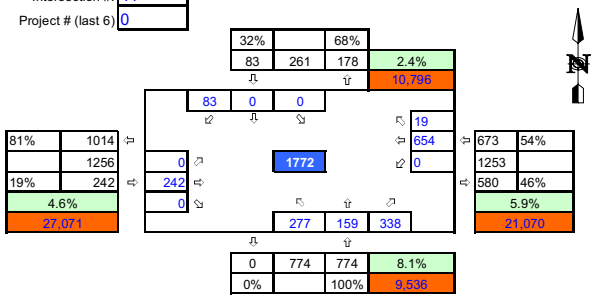


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

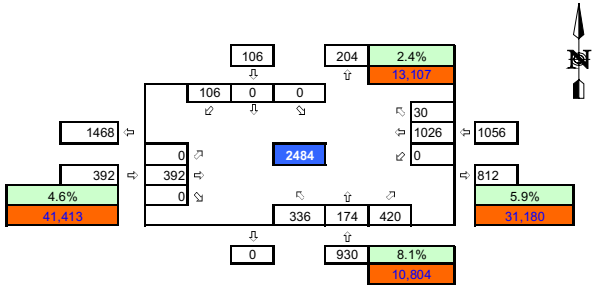
Int 41 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **University Center Lane/I-5 NB Off**
E/W Street: **Nobel Drive**
Intersection #: 41
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **University Center Lane/I-5 NB Off**
E/W Street: **Nobel Drive**

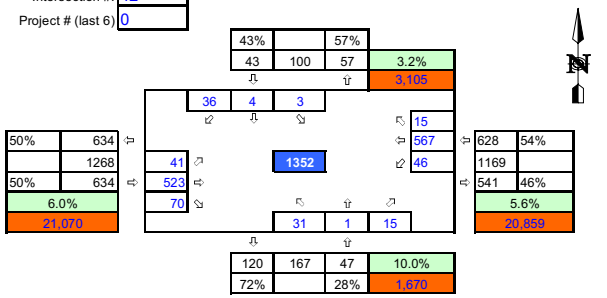


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

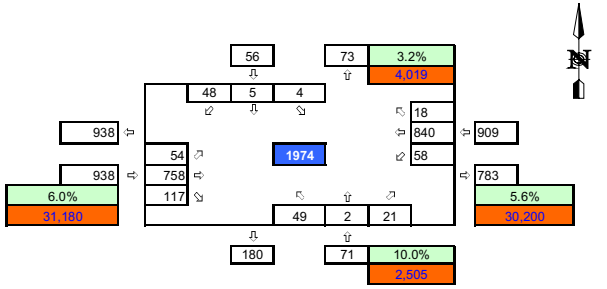
Int 42 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Caminito Plaza Centro**
E/W Street: **Nobel Drive**
Intersection #: 42
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Caminito Plaza Centro**
E/W Street: **Nobel Drive**

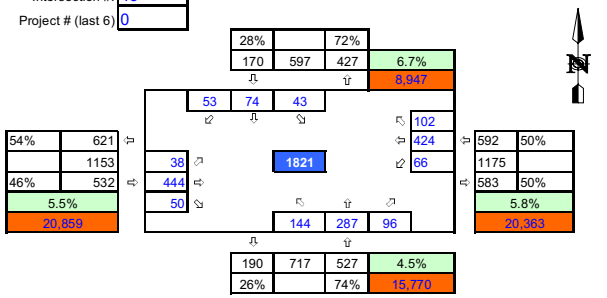


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

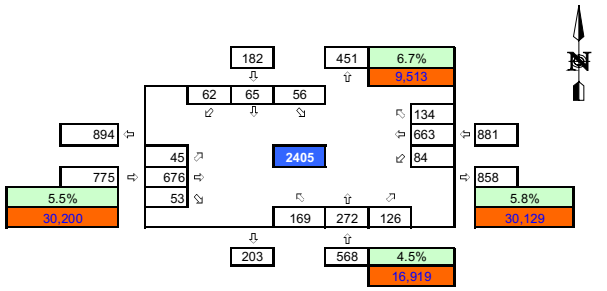
Int 43 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Lebon Drive**
E/W Street:	**Nobel Drive**
Intersection #:	43
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Lebon Drive**
E/W Street:	**Nobel Drive**

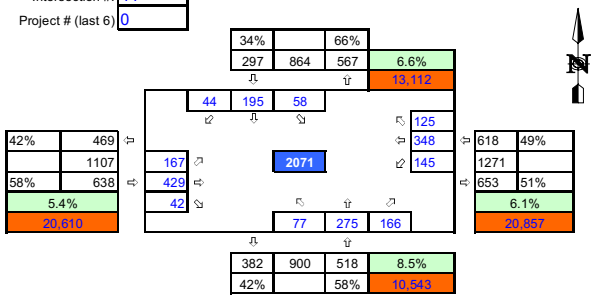


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

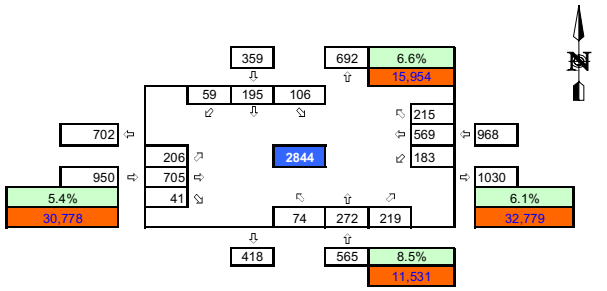
Int 44 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Regents Road**
E/W Street:	**Nobel Drive**
Intersection #:	44
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Regents Road**
E/W Street:	**Nobel Drive**

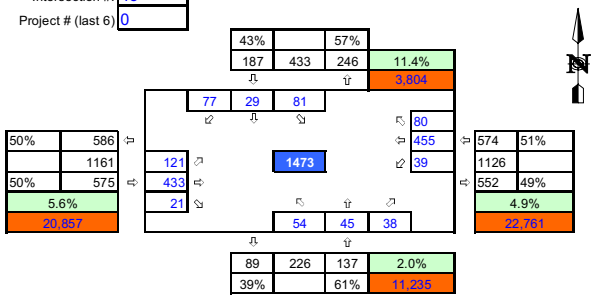


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

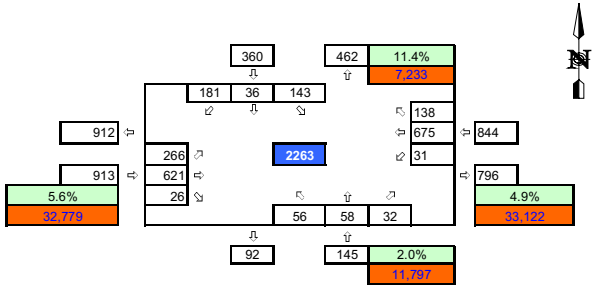
Int 45 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Costa Verde Boulevard/Cargill Ave**
E/W Street: **Cargill Ave / Nobel Drive**
Intersection #: 45
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Costa Verde Boulevard/Cargill Ave**
E/W Street: **Cargill Ave / Nobel Drive**

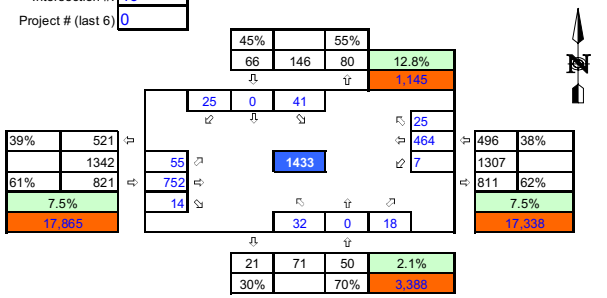


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

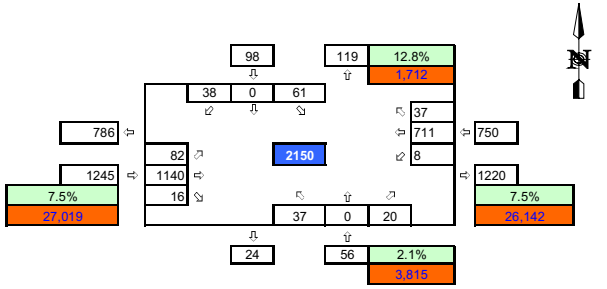
Int 46 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Lombard Place**
E/W Street: **Nobel Drive**
Intersection #: 46
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Lombard Place**
E/W Street: **Nobel Drive**

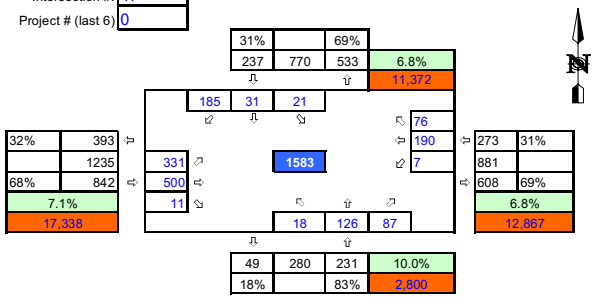


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

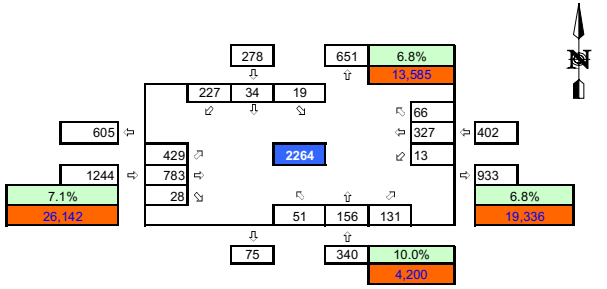
Int 47 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Towne Center Drive**
E/W Street:	**Nobel Drive**
Intersection #:	47
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

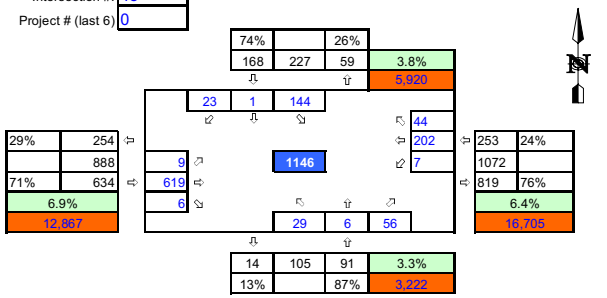
Scenario:	**Horizon Year Conditions**
N/S Street:	**Towne Center Drive**
E/W Street:	**Nobel Drive**



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

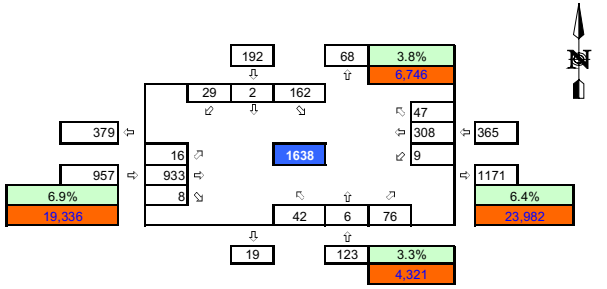
Int 48 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Shoreline Drive**
E/W Street:	**Nobel Drive**
Intersection #:	48
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

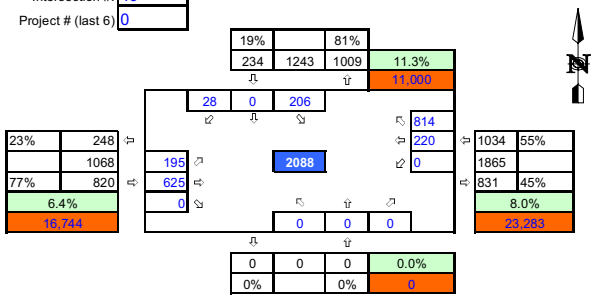
Scenario:	**Horizon Year Conditions**
N/S Street:	**Shoreline Drive**
E/W Street:	**Nobel Drive**



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

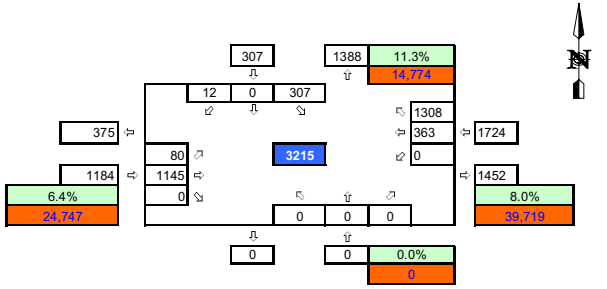
Int 49 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Judicial Drive**
E/W Street:	**Nobel Drive**
Intersection #:	49
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Judicial Drive**
E/W Street:	**Nobel Drive**



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

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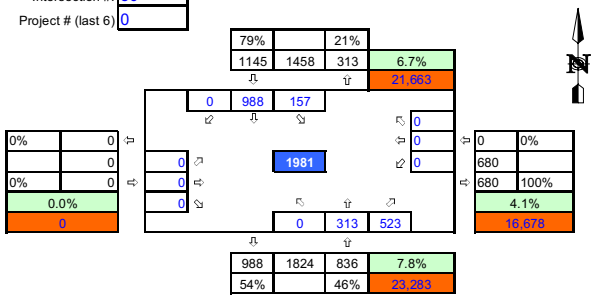
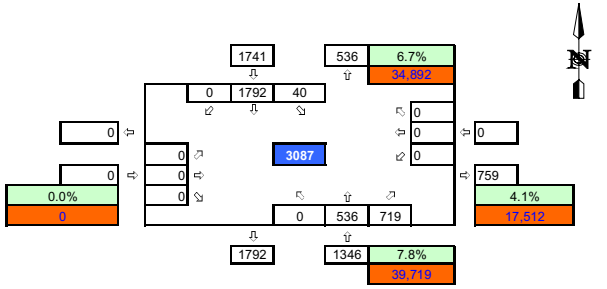
Int 50 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Nobel Drive**
E/W Street:	**I-805 SB On-Ramp**
Intersection #:	50
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Nobel Drive**
E/W Street:	**I-805 SB On-Ramp**



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

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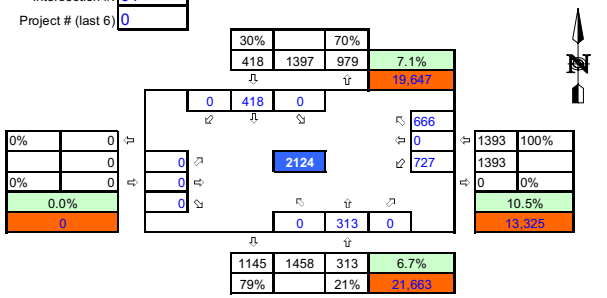
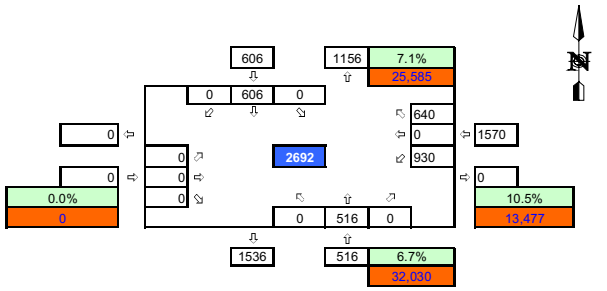
Int 51 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Nobel Drive**
E/W Street: **I-805 N Off-Ramp**
Intersection #: 51
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Nobel Drive**
E/W Street: **I-805 N Off-Ramp**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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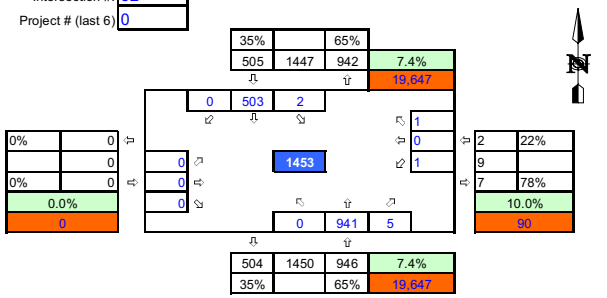
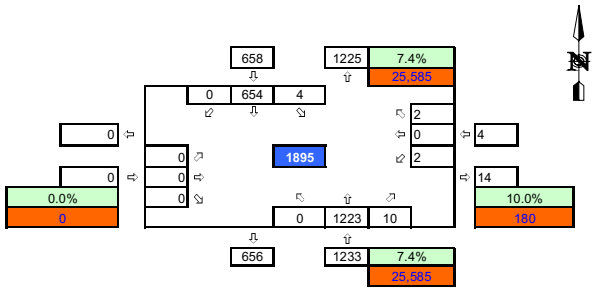
Int 52 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Nobel Drive**
E/W Street: **Avenue of Flags**
Intersection #: 52
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Nobel Drive**
E/W Street: **Avenue of Flags**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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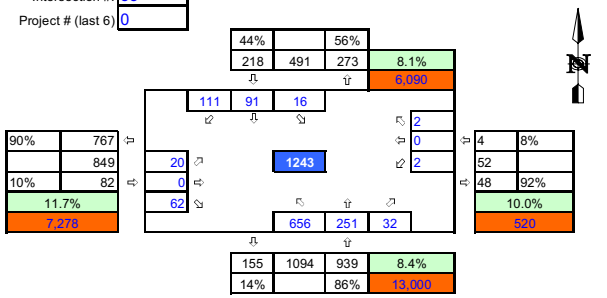
Int 53 AM Peak Volumes

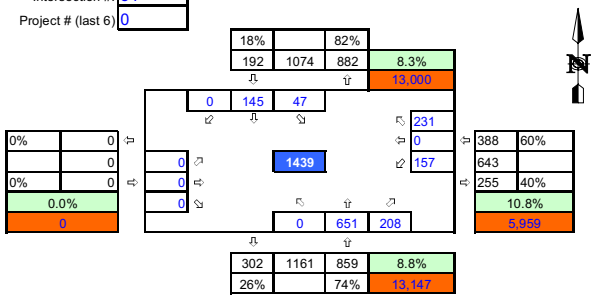
Scenario:	Existing Conditions
N/S Street:	Regents Road
E/W Street:	Health Science Drive / County Day Ln
Intersection #:	53
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

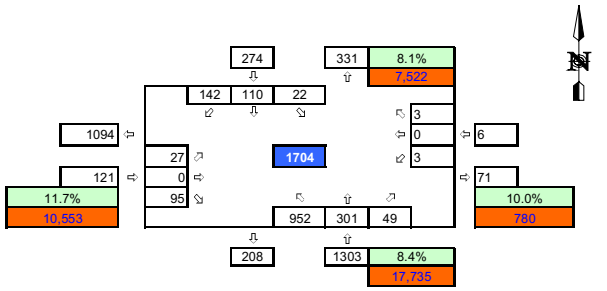
Int 54 AM Peak Volumes

Scenario:	Existing Conditions
N/S Street:	Regents Road
E/W Street:	Eastgate Mall
Intersection #:	54
Project # (last 6)	0

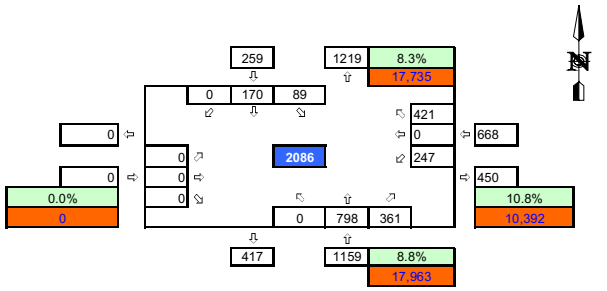


Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	Horizon Year Conditions
N/S Street:	Regents Road
E/W Street:	Health Science Drive / County Day Ln



Scenario:	Horizon Year Conditions
N/S Street:	Regents Road
E/W Street:	Eastgate Mall



LEGEND

Existing K-Factor	xx%
ADT Volume	xx

LEGEND

Existing K-Factor	xx%
ADT Volume	xx

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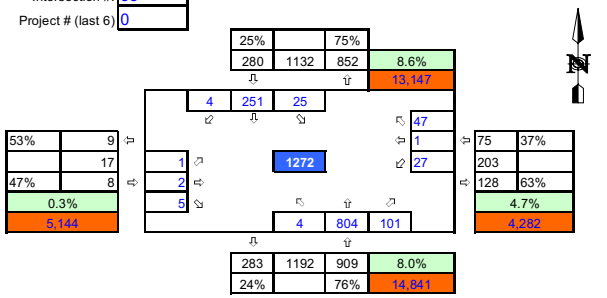
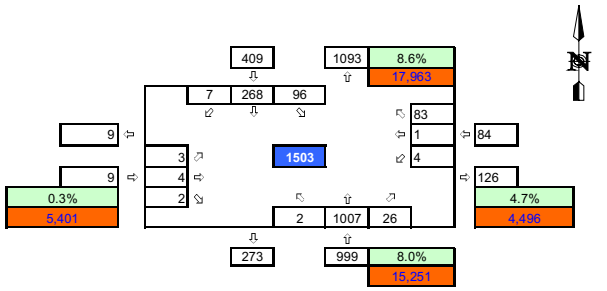
Int 55 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Regents Road**
E/W Street:	**Executive Drive**
Intersection #:	55
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

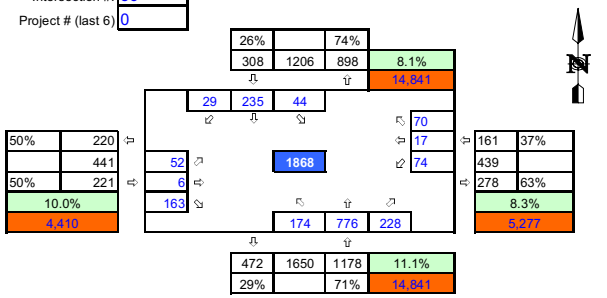
Scenario:	**Horizon Year Conditions**
N/S Street:	**Regents Road**
E/W Street:	**Executive Drive**



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

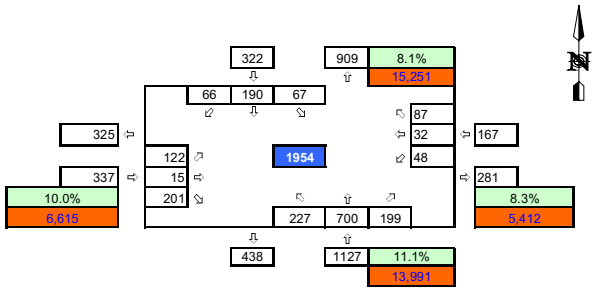
Int 56 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Regents Road**
E/W Street:	**Miramar Street / Regents Park Row**
Intersection #:	56
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

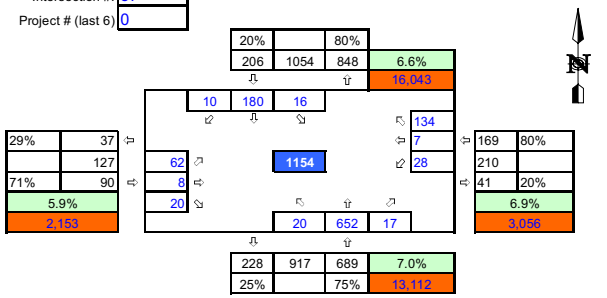
Scenario:	**Horizon Year Conditions**
N/S Street:	**Regents Road**
E/W Street:	**Miramar Street / Regents Park Row**



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

Int 57 AM Peak Volumes

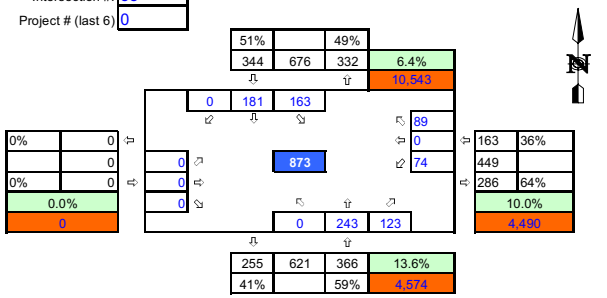
Scenario: **Existing Conditions**
N/S Street: **Regents Road**
E/W Street: **Plaza De Palmas**
Intersection #: 57
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

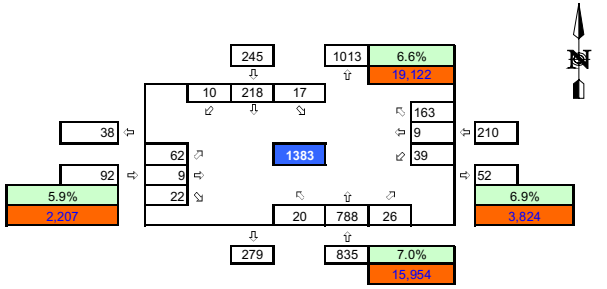
Int 58 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Regents Road**
E/W Street: **Berino Court**
Intersection #: 58
Project # (last 6): 0

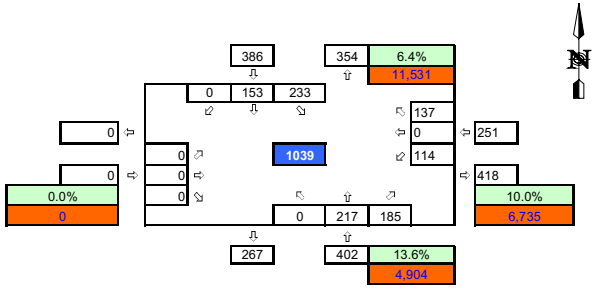


Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Regents Road**
E/W Street: **Plaza De Palmas**



Scenario: **Horizon Year Conditions**
N/S Street: **Regents Road**
E/W Street: **Berino Court**



LEGEND

Existing K-Factor	xx%
ADT Volume	xx

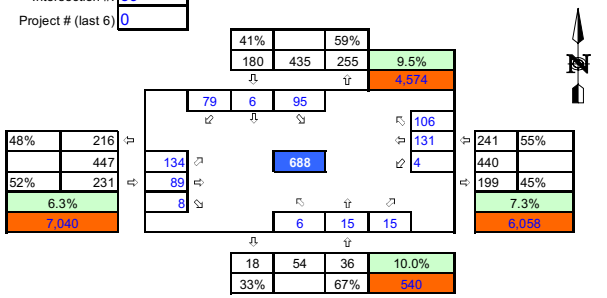
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

K:\SND_TPTO\095240101 - University CPA\Excel\Horizon Year Conditions\Alternative C\Turn32_Alt C.xlsx

Int 59 AM Peak Volumes

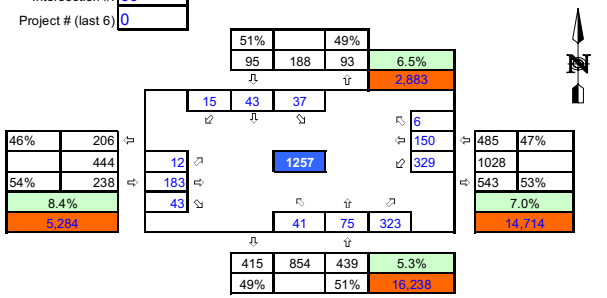
Scenario: **Existing Conditions**
N/S Street: **Regents Road**
E/W Street: **Arriba Street**
Intersection #: 59
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

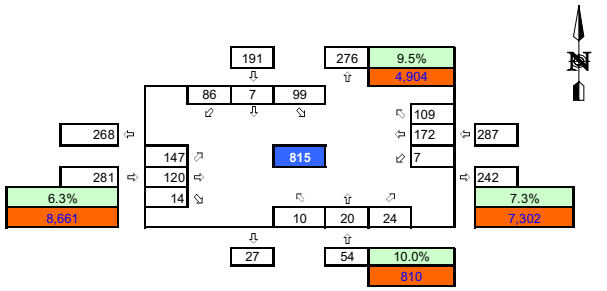
Int 60 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Regents Road**
E/W Street: **Governor Drive**
Intersection #: 60
Project # (last 6): 0

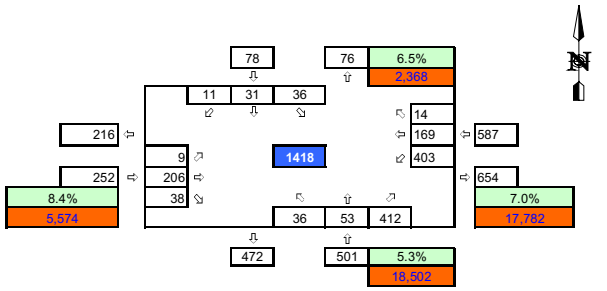


Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Regents Road**
E/W Street: **Arriba Street**



Scenario: **Horizon Year Conditions**
N/S Street: **Regents Road**
E/W Street: **Governor Drive**



LEGEND

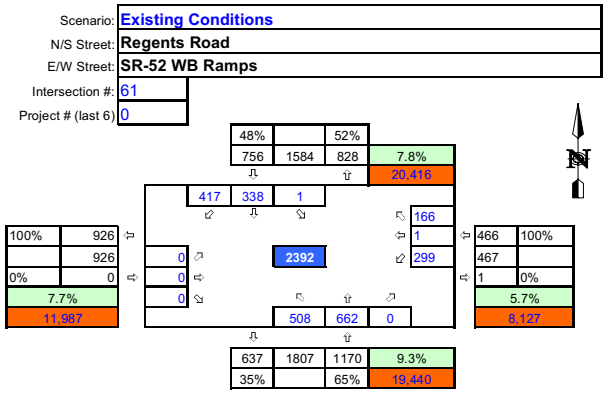
Existing K-Factor	xx%
ADT Volume	xx

LEGEND

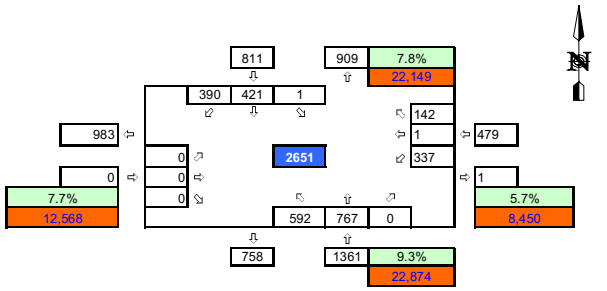
Existing K-Factor	xx%
ADT Volume	xx

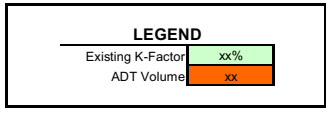
K:\SND_TPTO\095240101 - University CPA\Excel\Horizon Year Conditions\Alternative C\Turn32_Alt C.xlsx

Int 61 AM Peak Volumes

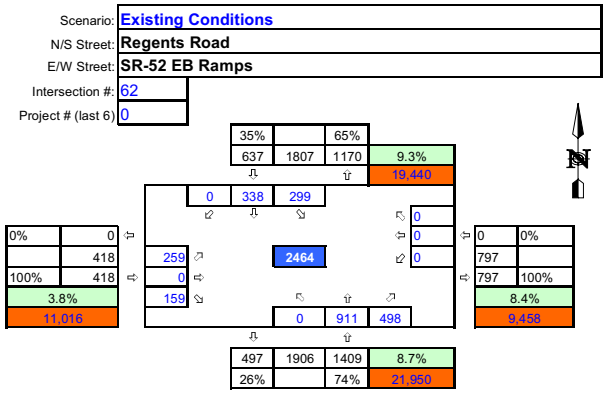


Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

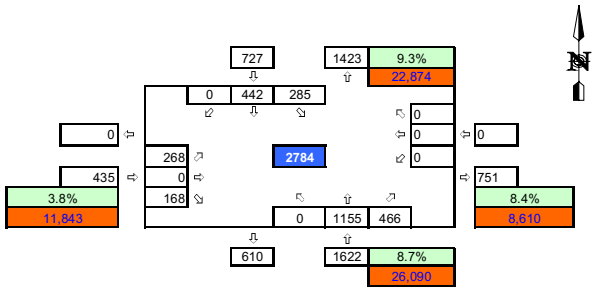


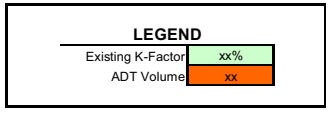


Int 62 AM Peak Volumes



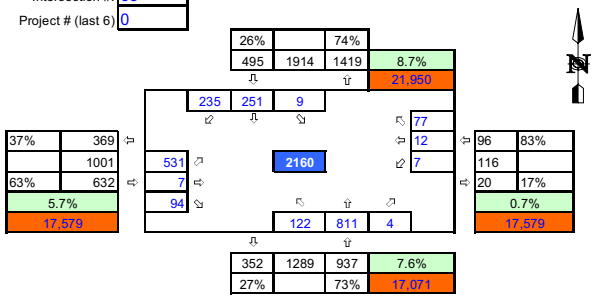
Note: Traffic volumes were collected by Accurate Video Counts during May 2015.





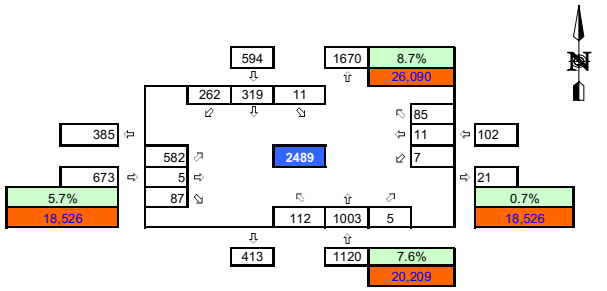
Int 63 AM Peak Volumes

Scenario:	Existing Conditions
N/S Street:	Regents Road / Clairemont Mesa Blvd
E/W Street:	Luna Avenue
Intersection #:	63
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

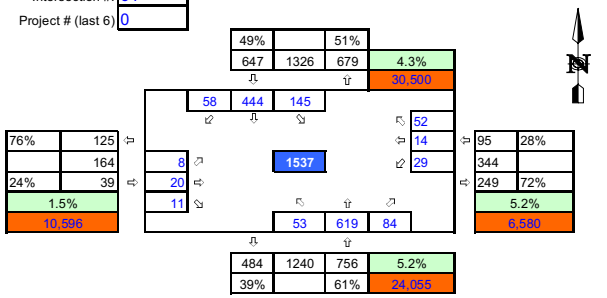
Scenario:	Horizon Year Conditions
N/S Street:	Regents Road / Clairemont Mesa Blvd
E/W Street:	Luna Avenue



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

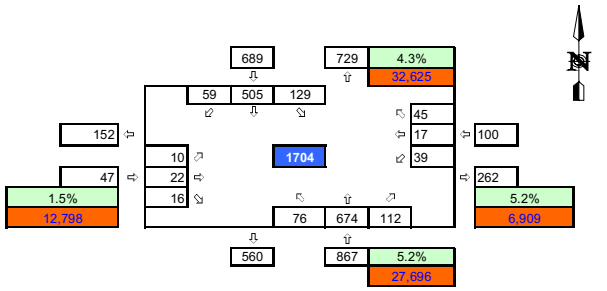
Int 64 AM Peak Volumes

Scenario:	Existing Conditions
N/S Street:	N. Torrey Pines Road
E/W Street:	UCSD Northpoint Driveway
Intersection #:	64
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

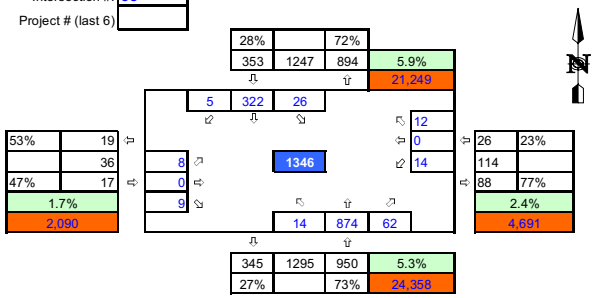
Scenario:	Horizon Year Conditions
N/S Street:	N. Torrey Pines Road
E/W Street:	UCSD Northpoint Driveway



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

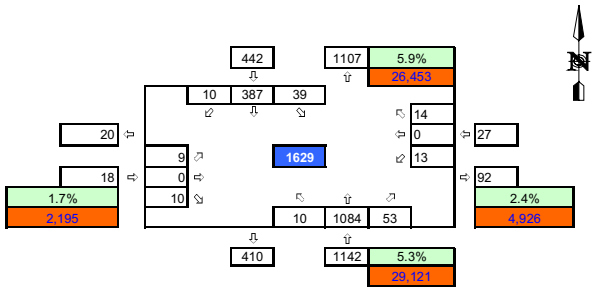
Int 65 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**N. Torrey Pines Road**
E/W Street:	**Pangea Drive**
Intersection #:	65
Project # (last 6)	



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**N. Torrey Pines Road**
E/W Street:	**Pangea Drive**

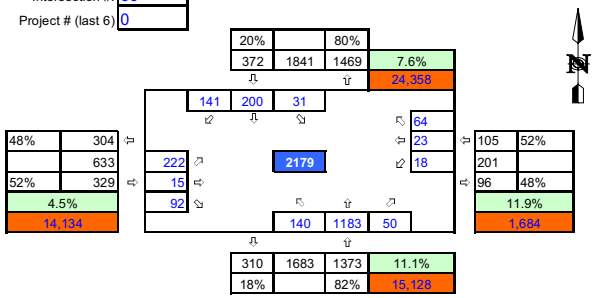


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

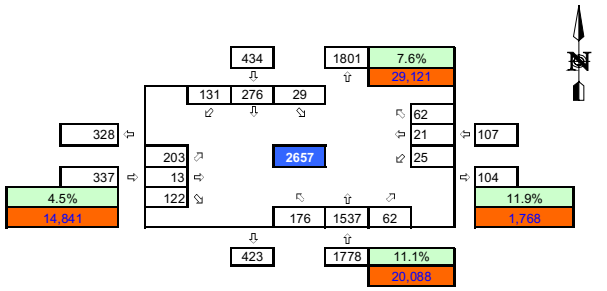
Int 66 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**N. Torrey Pines Road**
E/W Street:	**La Jolla Shores Drive**
Intersection #:	66
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**N. Torrey Pines Road**
E/W Street:	**La Jolla Shores Drive**

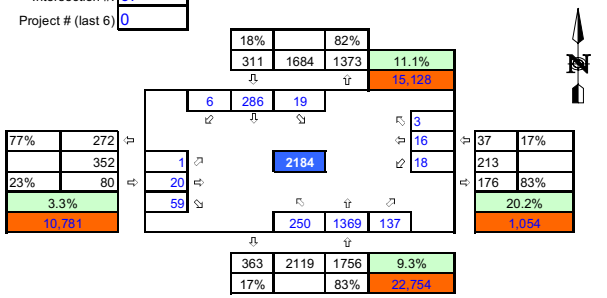


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

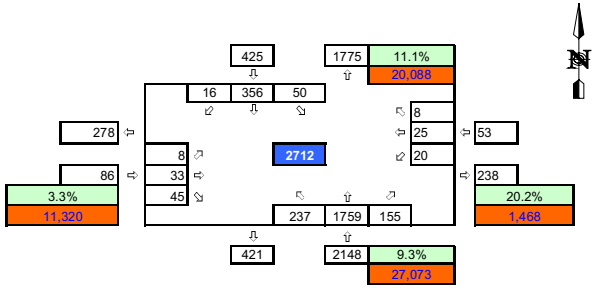
Int 67 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **N. Torrey Pines Road**
E/W Street: **Expedition Way / Revelle College Drive**
Intersection #: 67
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **N. Torrey Pines Road**
E/W Street: **Expedition Way / Revelle College Drive**

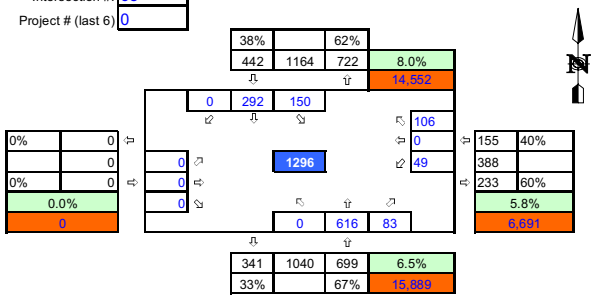


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

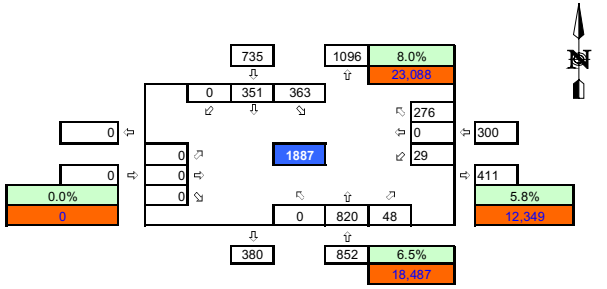
Int 68 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Gilman Drive**
E/W Street: **Villa La Jolla Drive**
Intersection #: 68
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Gilman Drive**
E/W Street: **Villa La Jolla Drive**

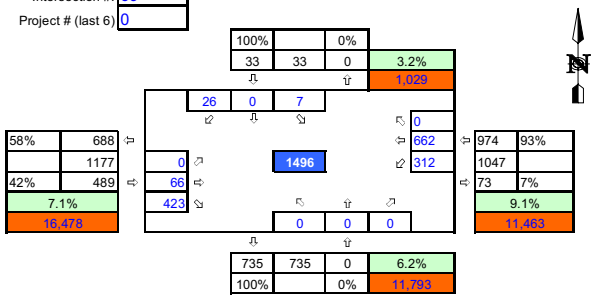


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

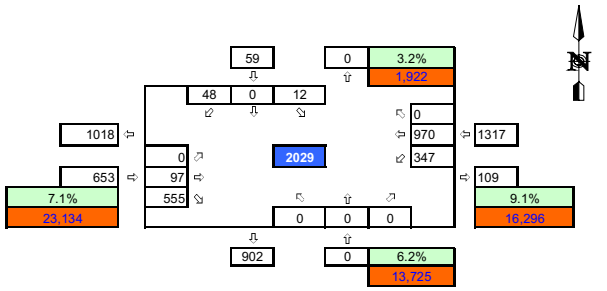
Int 69 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**I-5 SB Ramps**
E/W Street:	**Gillman Drive**
Intersection #:	69
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

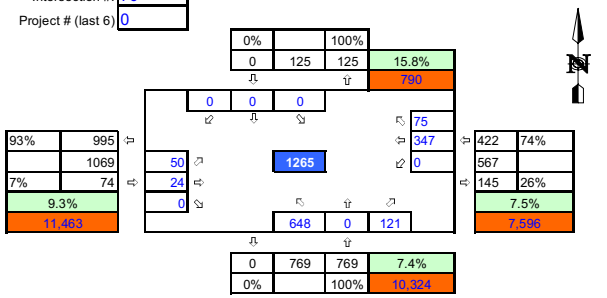
Scenario:	**Horizon Year Conditions**
N/S Street:	**I-5 SB Ramps**
E/W Street:	**Gillman Drive**



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

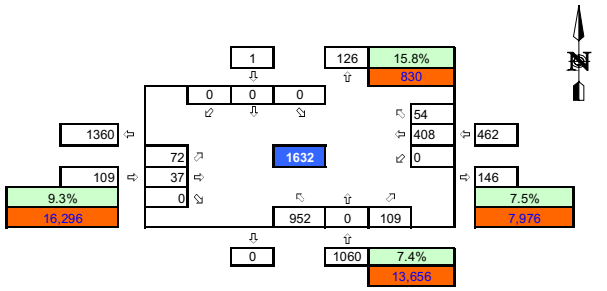
Int 70 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**I-5 NB Ramps**
E/W Street:	**Gillman Drive**
Intersection #:	70
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

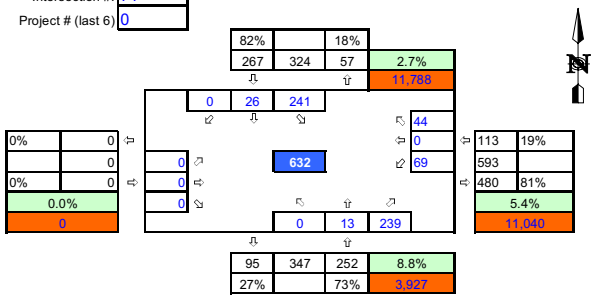
Scenario:	**Horizon Year Conditions**
N/S Street:	**I-5 NB Ramps**
E/W Street:	**Gillman Drive**



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

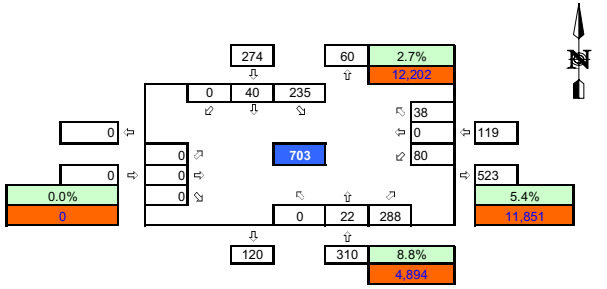
Int 71 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Charmant Drive / Palmilla Drive**
E/W Street:	**Lebon Drive**
Intersection #:	71
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

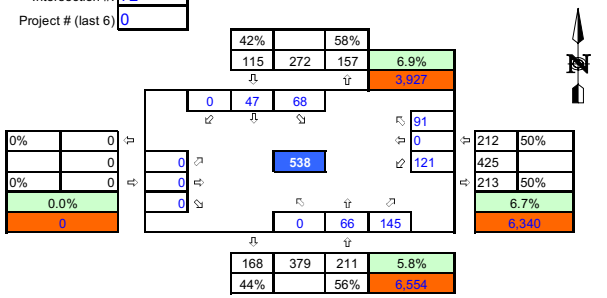
Scenario:	**Horizon Year Conditions**
N/S Street:	**Charmant Drive / Palmilla Drive**
E/W Street:	**Lebon Drive**



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

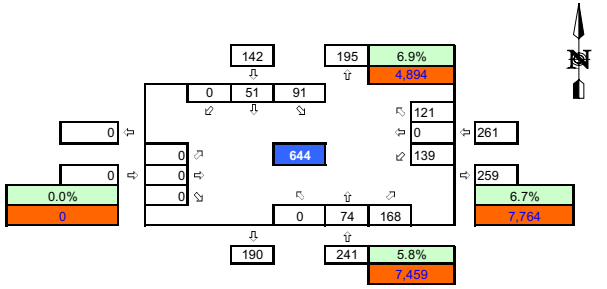
Int 72 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Palmilla Drive**
E/W Street:	**Ariba Street**
Intersection #:	72
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

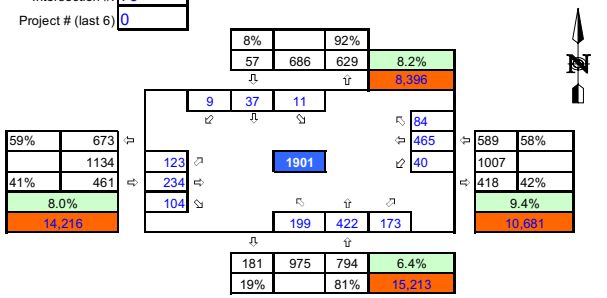
Scenario:	**Horizon Year Conditions**
N/S Street:	**Palmilla Drive**
E/W Street:	**Ariba Street**



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

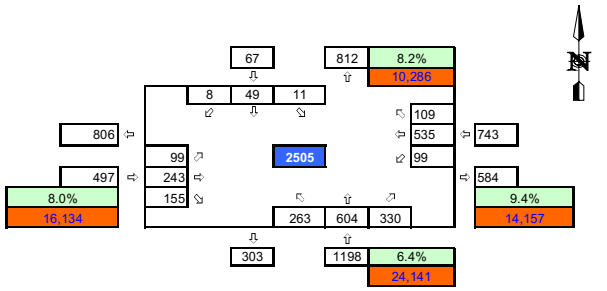
Int 73 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Towne Center Drive**
E/W Street:	**Eastgate Mall**
Intersection #:	73
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

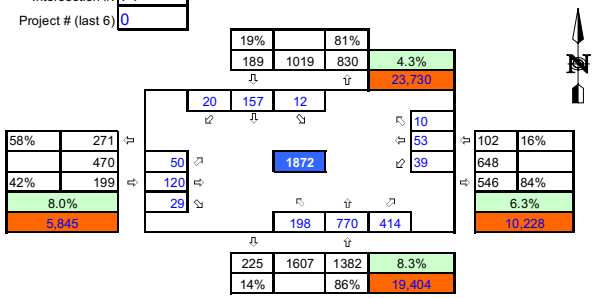
Scenario:	**Horizon Year Conditions**
N/S Street:	**Towne Center Drive**
E/W Street:	**Eastgate Mall**



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

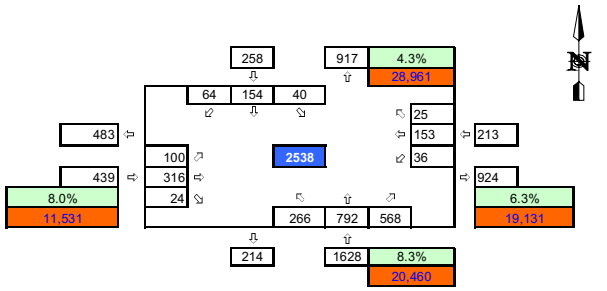
Int 74 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Towne Center Drive**
E/W Street:	**Executive Drive**
Intersection #:	74
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

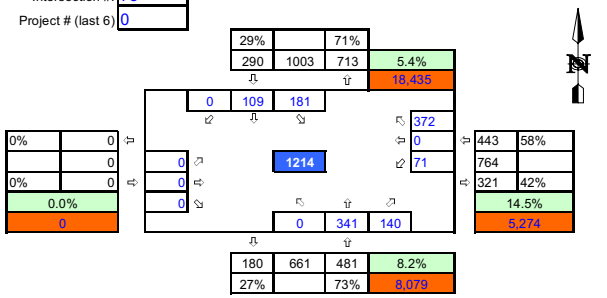
Scenario:	**Horizon Year Conditions**
N/S Street:	**Towne Center Drive**
E/W Street:	**Executive Drive**



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

Int 75 AM Peak Volumes

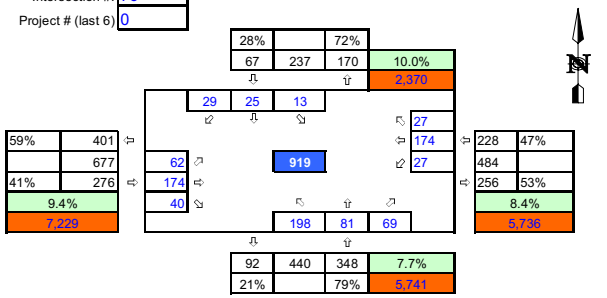
Scenario:	Existing Conditions
N/S Street:	Towne Center Drive
E/W Street:	Golden Haven Drive
Intersection #:	75
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

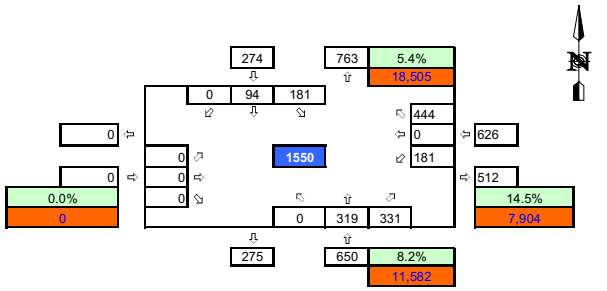
Int 76 AM Peak Volumes

Scenario:	Existing Conditions
N/S Street:	Executive Way
E/W Street:	Executive Drive
Intersection #:	76
Project # (last 6)	0

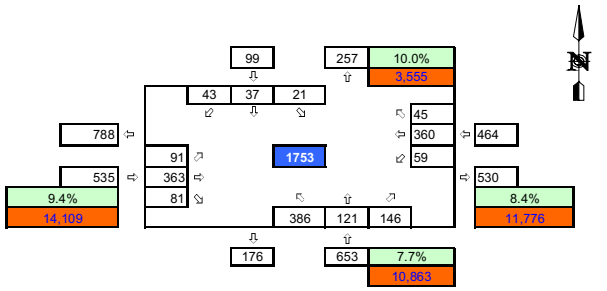


Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	Horizon Year Conditions
N/S Street:	Towne Center Drive
E/W Street:	Golden Haven Drive



Scenario:	Horizon Year Conditions
N/S Street:	Executive Way
E/W Street:	Executive Drive



LEGEND

Existing K-Factor	xx%
ADT Volume	xx

LEGEND

Existing K-Factor	xx%
ADT Volume	xx

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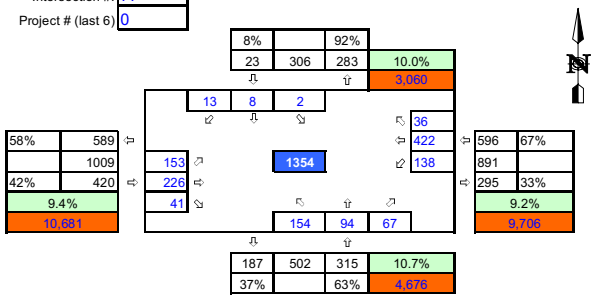
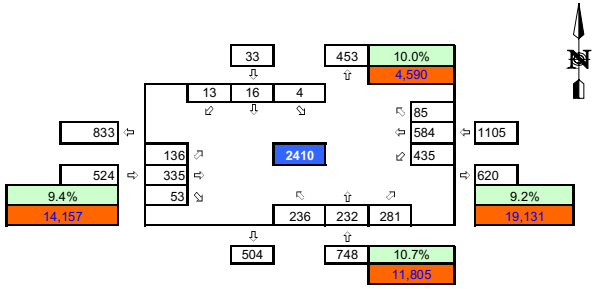
Int 77 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Judicial Drive**
E/W Street: **Eastgate Mall**
Intersection #: 77
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Judicial Drive**
E/W Street: **Eastgate Mall**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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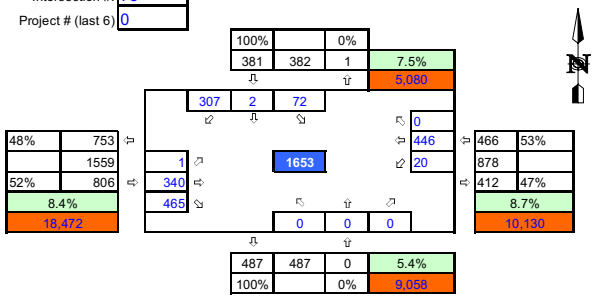
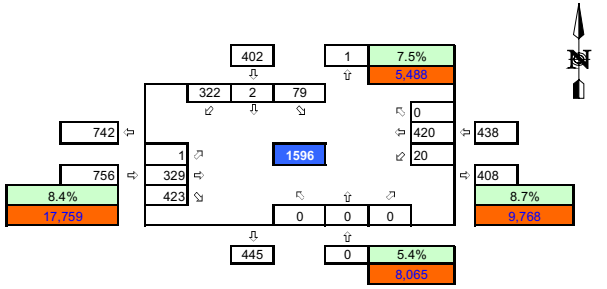
Int 78 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **I-805 SB Ramps**
E/W Street: **Governor Drive**
Intersection #: 78
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **I-805 SB Ramps**
E/W Street: **Governor Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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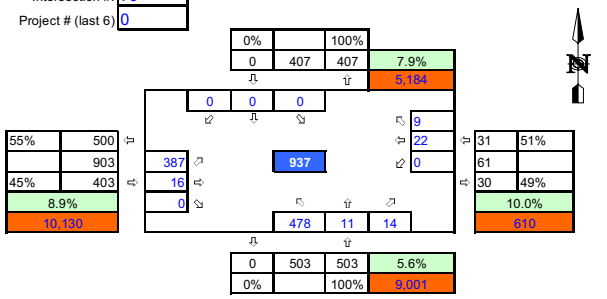
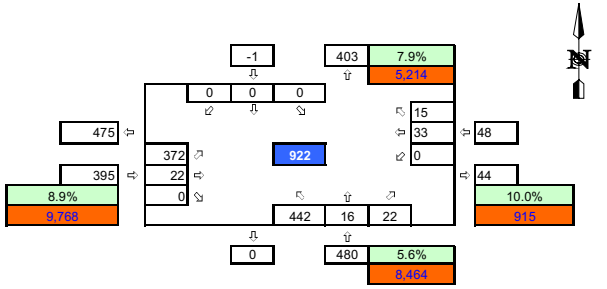
Int 79 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **I-805 NB Ramps**
E/W Street: **Governor Drive**
Intersection #: 79
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **I-805 NB Ramps**
E/W Street: **Governor Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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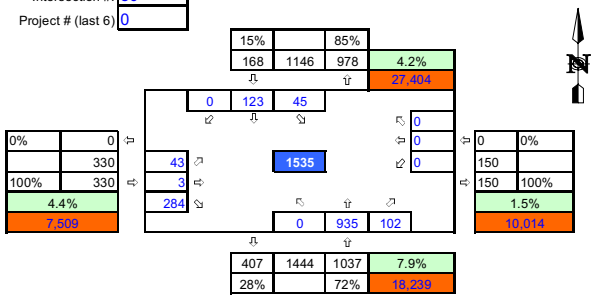
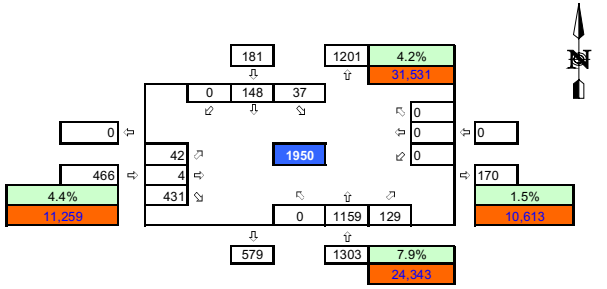
Int 80 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Gilman Drive**
E/W Street: **La Jolla Village Drive EB**
Intersection #: 80
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Gilman Drive**
E/W Street: **La Jolla Village Drive EB**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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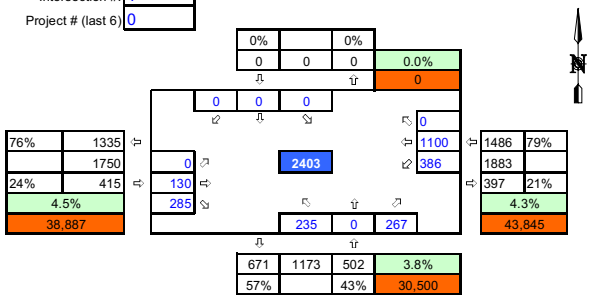
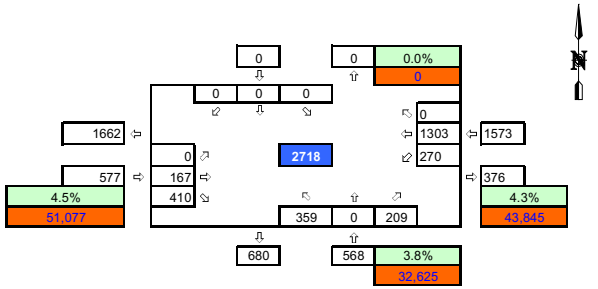
Int 1 MID Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**N. Torrey Pines Road**
E/W Street:	**Genesee Avenue**
Intersection #:	1
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**N. Torrey Pines Road**
E/W Street:	**Genesee Avenue**

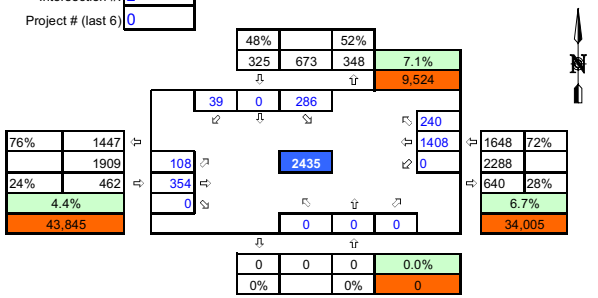


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

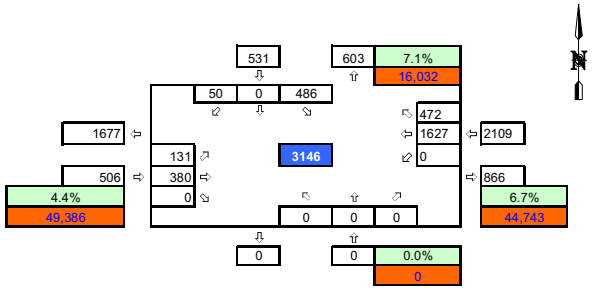
Int 2 MID Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**John Hopkins Drive (S)**
E/W Street:	**Genesee Avenue**
Intersection #:	2
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**John Hopkins Drive (S)**
E/W Street:	**Genesee Avenue**

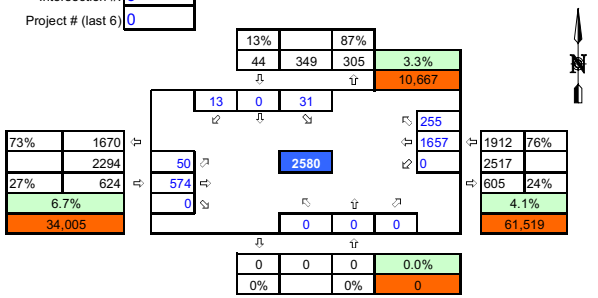


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

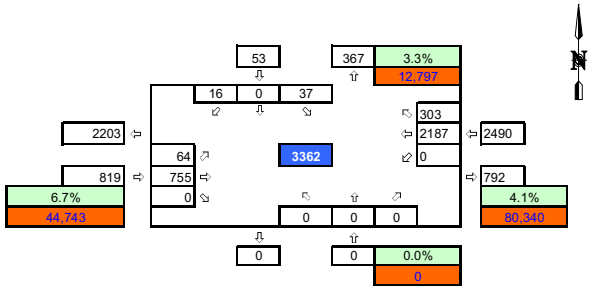
Int 3 MID Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Science Center Drive**
E/W Street: **Genesee Avenue**
Intersection #: 3
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Science Center Drive**
E/W Street: **Genesee Avenue**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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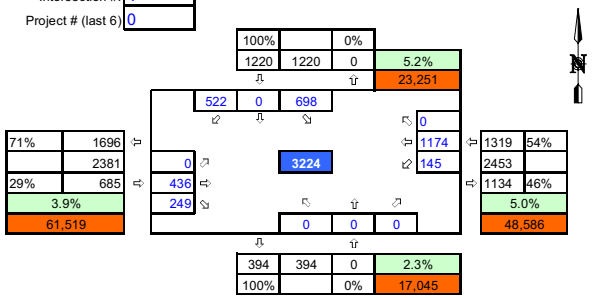
Int 3 MID

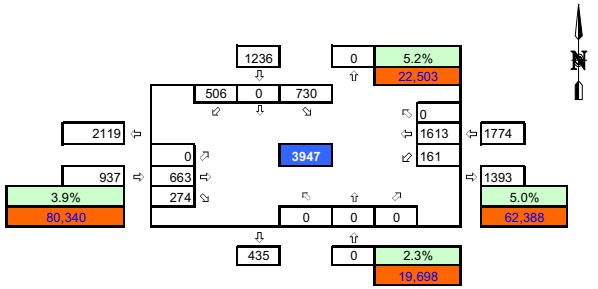
Int 4 MID Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **I-5 SB Ramps**
E/W Street: **Genesee Avenue**
Intersection #: 4
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **I-5 SB Ramps**
E/W Street: **Genesee Avenue**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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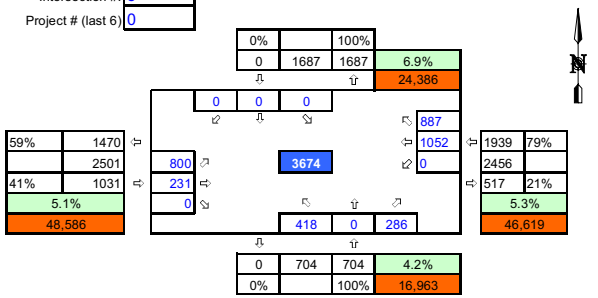
Int 4 MID

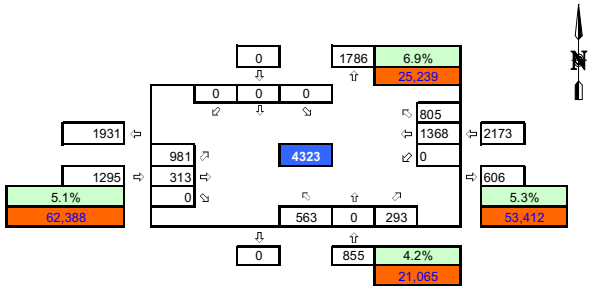
Int 5 MID Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**I-5 NB Ramps**
E/W Street:	**Genesee Avenue**
Intersection #:	5
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**I-5 NB Ramps**
E/W Street:	**Genesee Avenue**

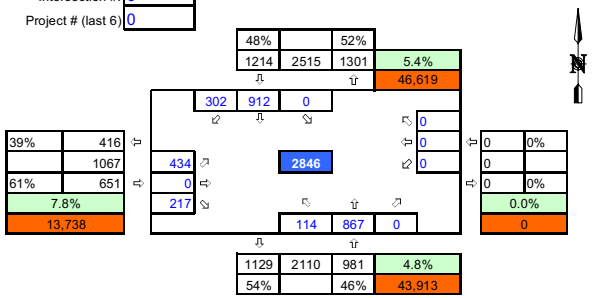


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

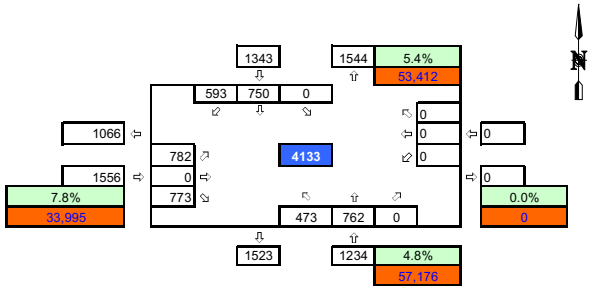
Int 6 MID Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**Scripps Hospital**
Intersection #:	6
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**Scripps Hospital**

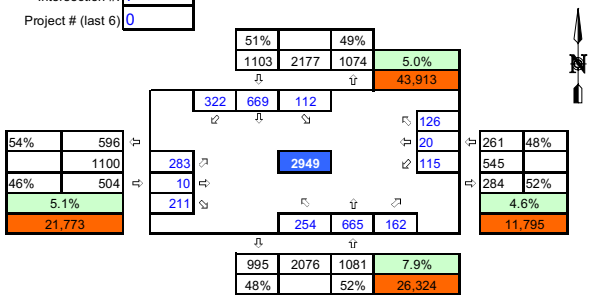


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

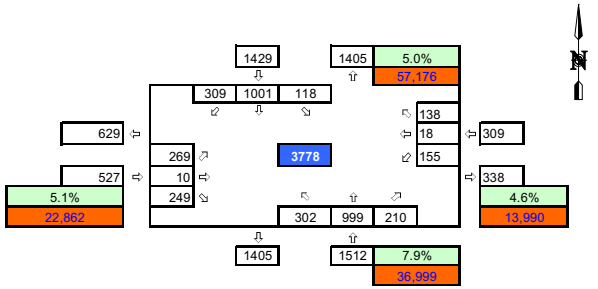
Int 7 MID Peak Volumes

Scenario:	Existing Conditions
N/S Street:	Genesee Avenue
E/W Street:	Campus Point Drive
Intersection #:	7
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	Horizon Year Conditions
N/S Street:	Genesee Avenue
E/W Street:	Campus Point Drive

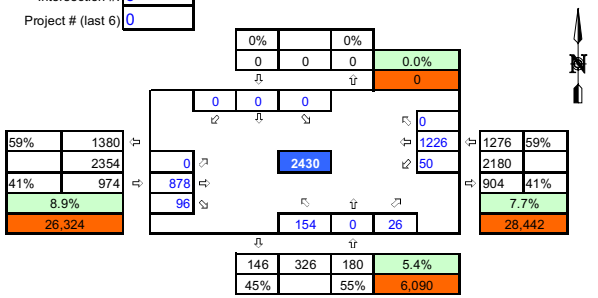


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

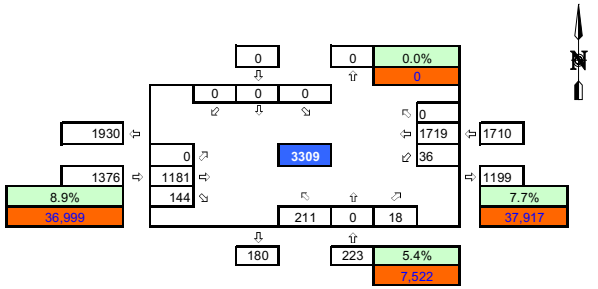
Int 8 MID Peak Volumes

Scenario:	Existing Conditions
N/S Street:	Regents Road
E/W Street:	Genesee Avenue
Intersection #:	8
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	Horizon Year Conditions
N/S Street:	Regents Road
E/W Street:	Genesee Avenue

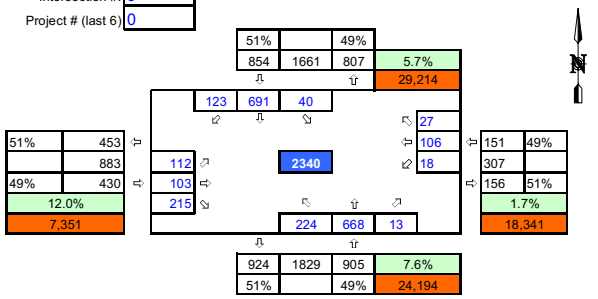


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

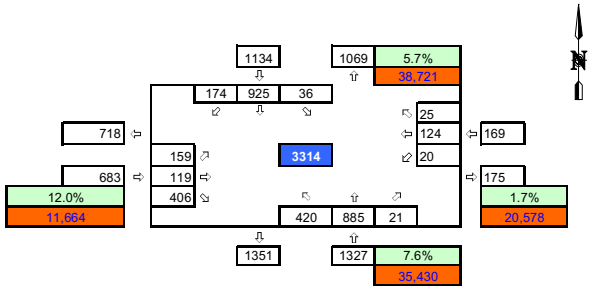
Int 9 MID Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Eastgate Mall**
Intersection #: 9
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Eastgate Mall**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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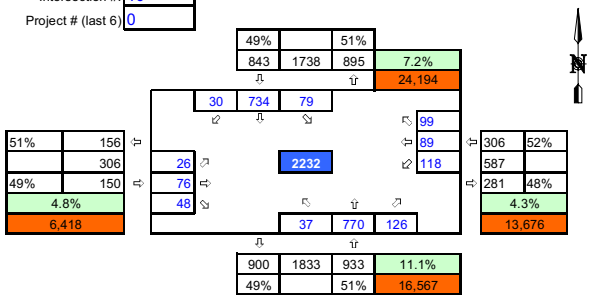
Int 9 MID

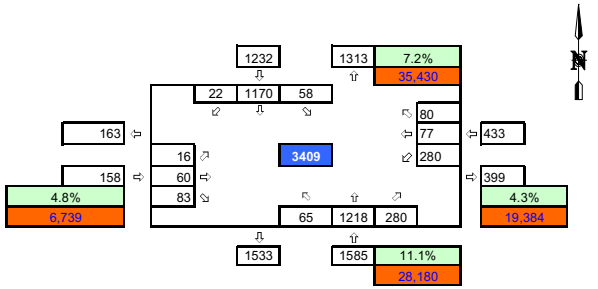
Int 10 MID Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Executive Drive**
Intersection #: 10
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Executive Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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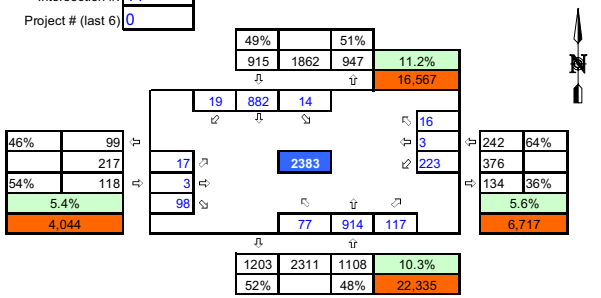
Int 10 MID

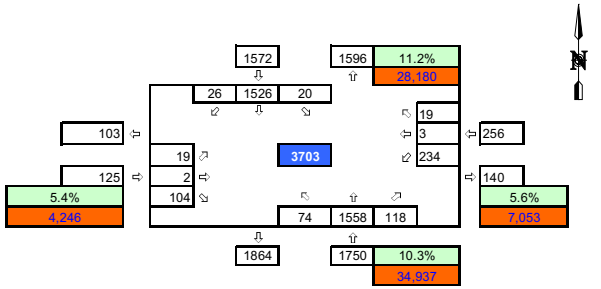
Int 11 MID Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Executive Square**
Intersection #: 11
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Executive Square**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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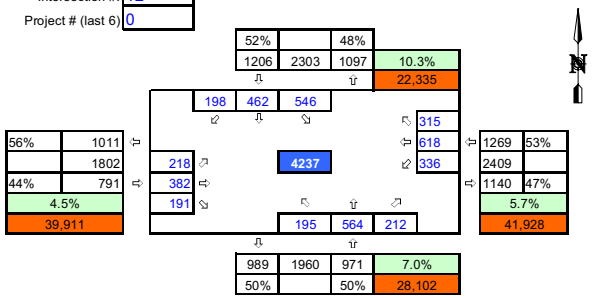
Int 11 MID

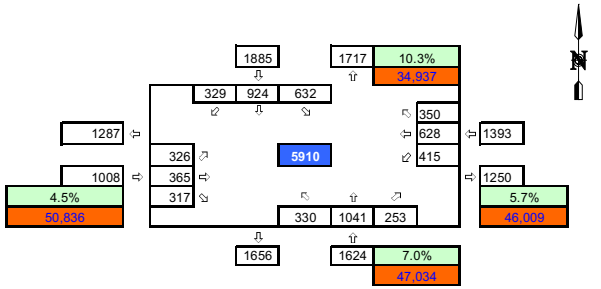
Int 12 MID Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **La Jolla Village Drive**
Intersection #: 12
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **La Jolla Village Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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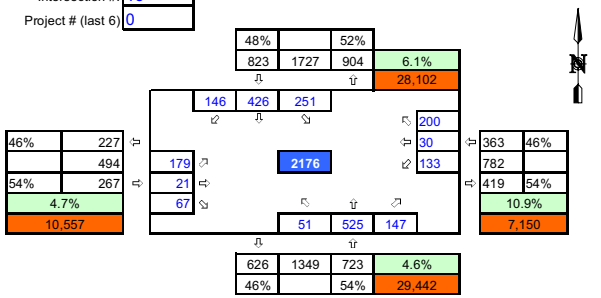
Int 12 MID

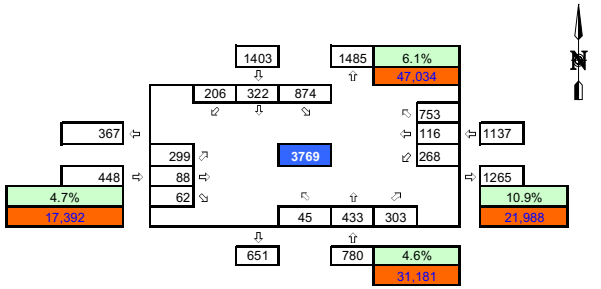
Int 13 MID Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Esplanade Court**
Intersection #: 13
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Esplanade Court**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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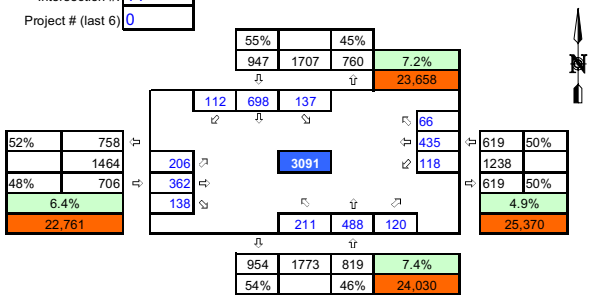
Int 13 MID

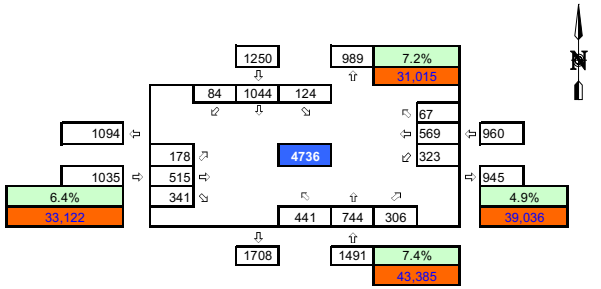
Int 14 MID Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Nobel Drive**
Intersection #: 14
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Nobel Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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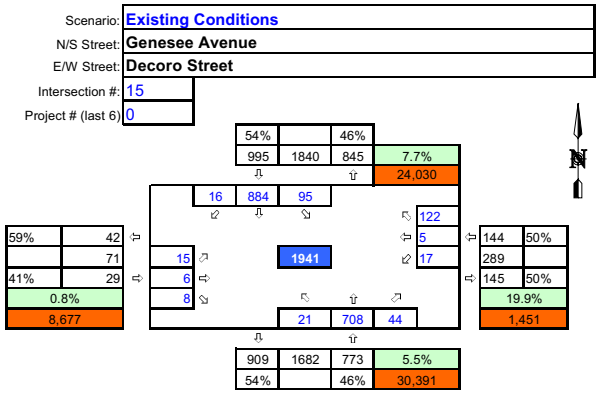
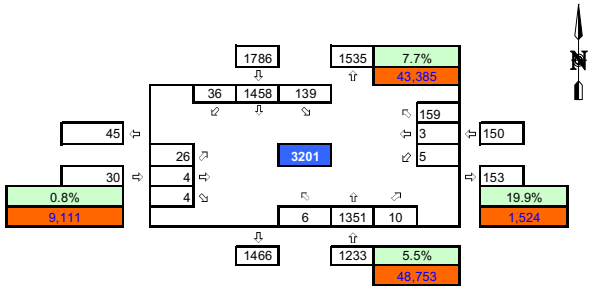
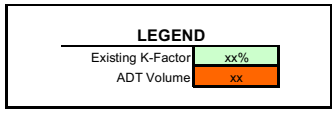
Int 14 MID

Int 15 MID Peak Volumes

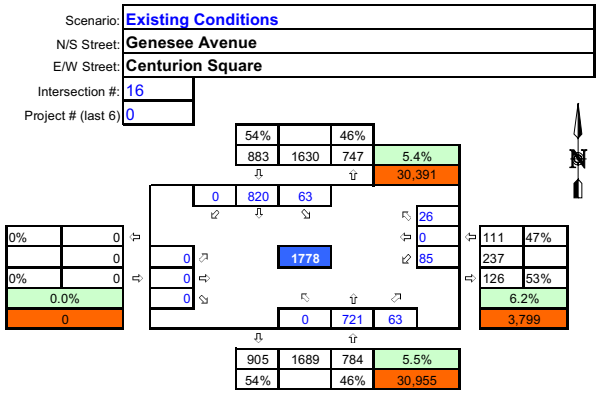


Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

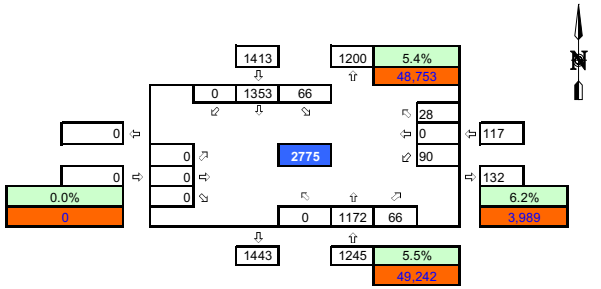


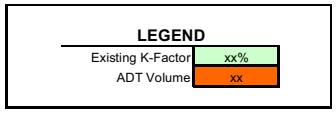


Int 16 MID Peak Volumes



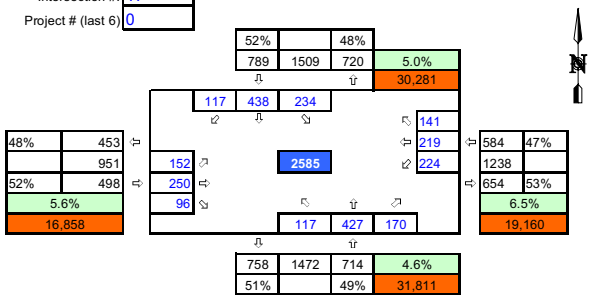
Note: Traffic volumes were collected by Accurate Video Counts during May 2015.





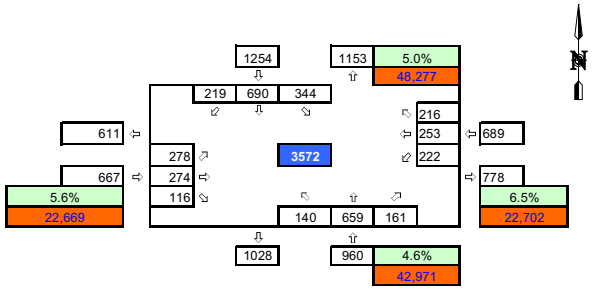
Int 17 MID Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**Governor Drive**
Intersection #:	17
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**Governor Drive**



LEGEND

Existing K-Factor	xx%
ADT Volume	xx

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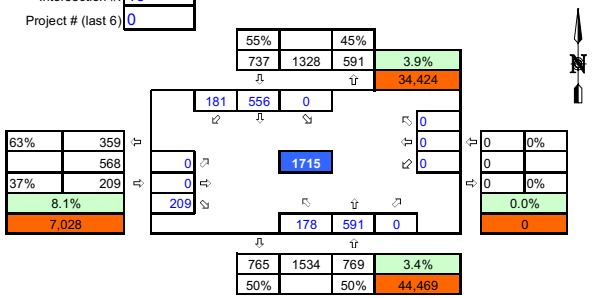
Int 17 MID

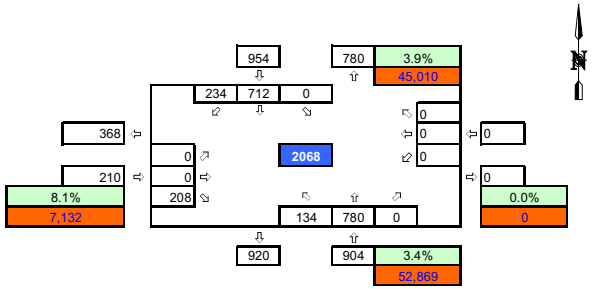
Int 18 MID Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**SR-52 WB Ramps**
Intersection #:	18
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**SR-52 WB Ramps**



LEGEND

Existing K-Factor	xx%
ADT Volume	xx

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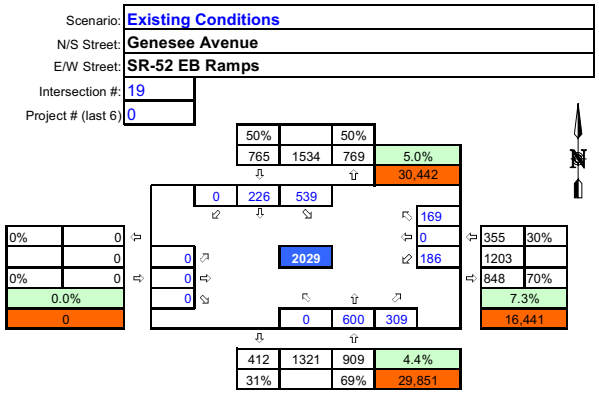
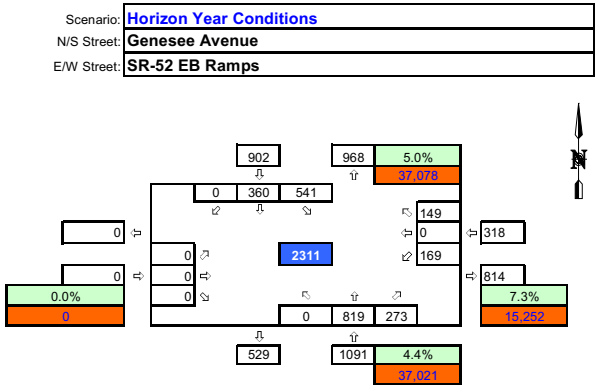
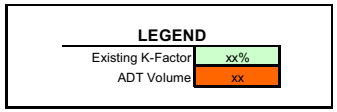
Int 18 MID

Int 19 MID Peak Volumes

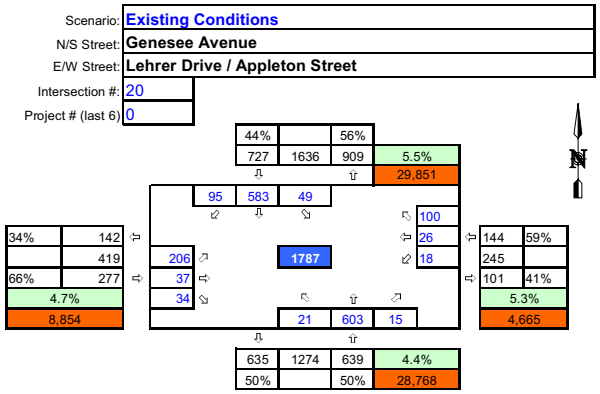


Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

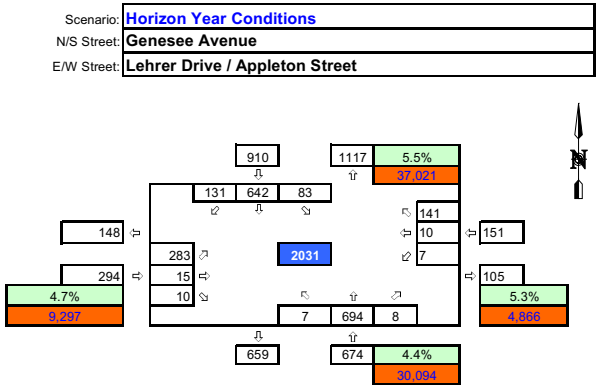


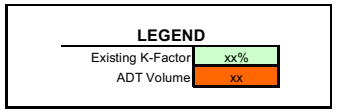


Int 20 MID Peak Volumes



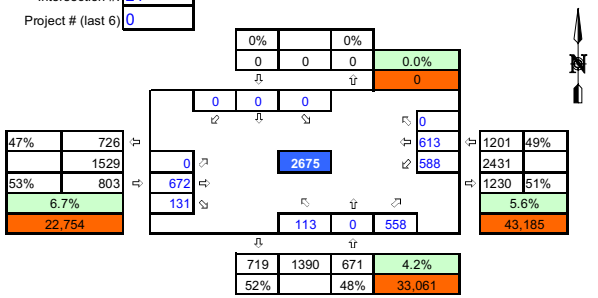
Note: Traffic volumes were collected by Accurate Video Counts during May 2015.





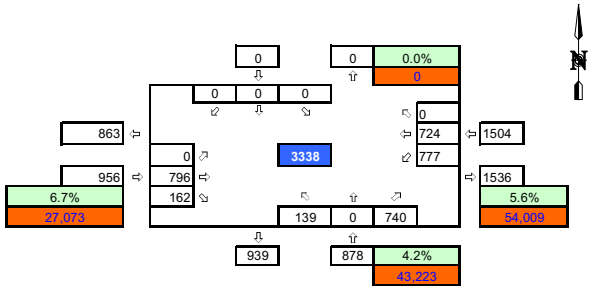
Int 21 MID Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Torrey Pines Road**
E/W Street: **La Jolla Village Drive**
Intersection #: 21
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

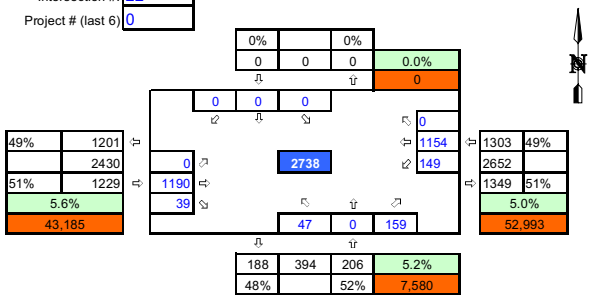
Scenario: **Horizon Year Conditions**
N/S Street: **Torrey Pines Road**
E/W Street: **La Jolla Village Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

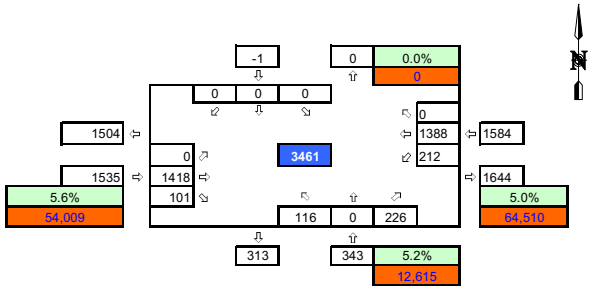
Int 22 MID Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **La Jolla Scenic Drive**
E/W Street: **La Jolla Village Drive**
Intersection #: 22
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

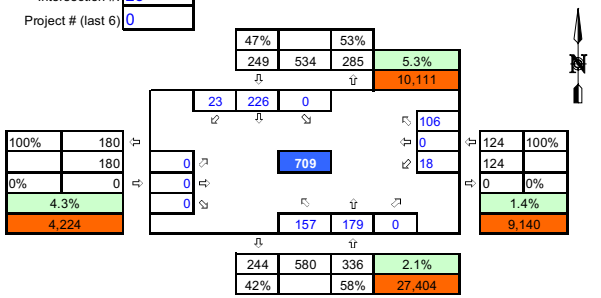
Scenario: **Horizon Year Conditions**
N/S Street: **La Jolla Scenic Drive**
E/W Street: **La Jolla Village Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

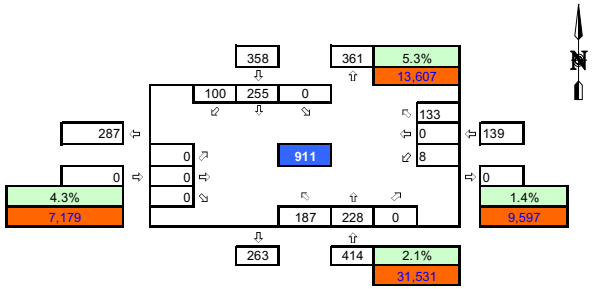
Int 23 MID Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Gillman Drive**
E/W Street:	**La Jolla Village Drive WB**
Intersection #:	23
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Gillman Drive**
E/W Street:	**La Jolla Village Drive WB**

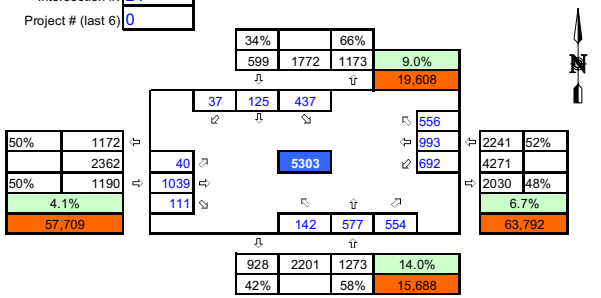


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

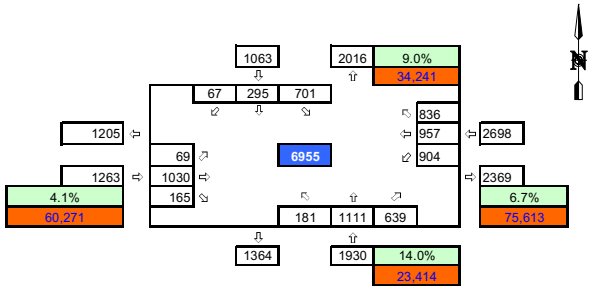
Int 24 MID Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Villa La Jolla Drive**
E/W Street:	**La Jolla Village Drive**
Intersection #:	24
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

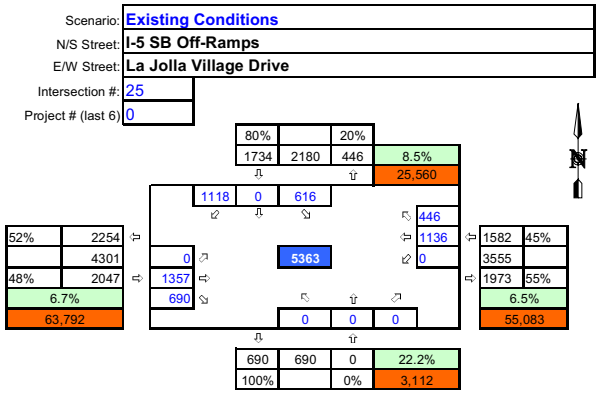
Scenario:	**Horizon Year Conditions**
N/S Street:	**Villa La Jolla Drive**
E/W Street:	**La Jolla Village Drive**



LEGEND

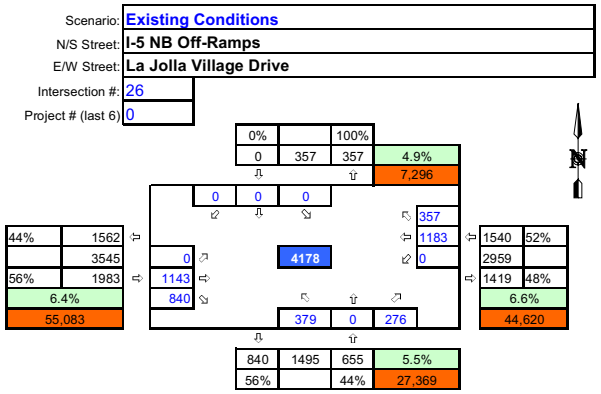
Existing K-Factor	xx%
ADT Volume	xx

Int 25 MID Peak Volumes

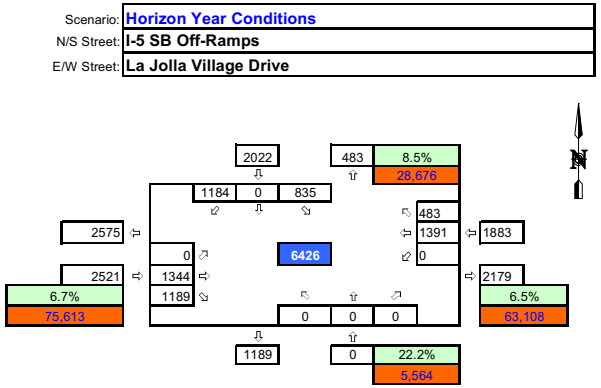


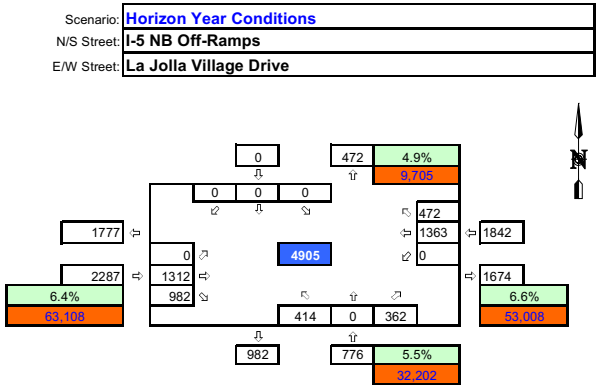
Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

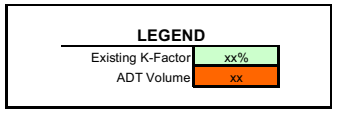
Int 26 MID Peak Volumes

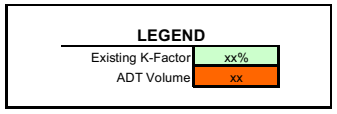


Note: Traffic volumes were collected by Accurate Video Counts during May 2015.



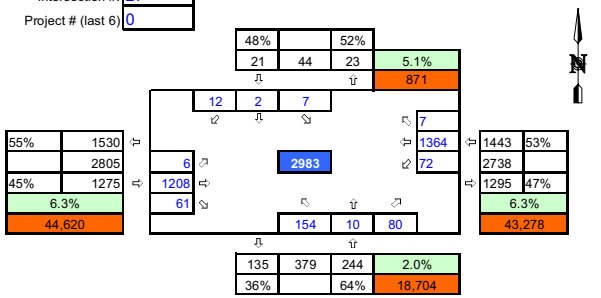






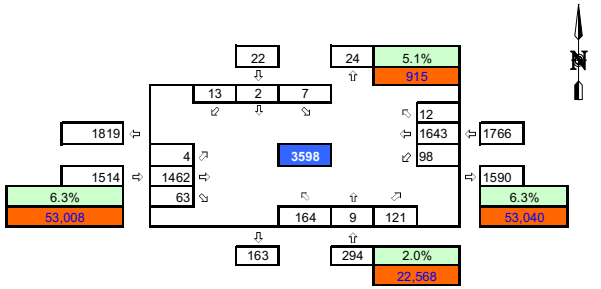
Int 27 MID Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Lebon Drive**
E/W Street: **La Jolla Village Drive**
Intersection #: 27
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Lebon Drive**
E/W Street: **La Jolla Village Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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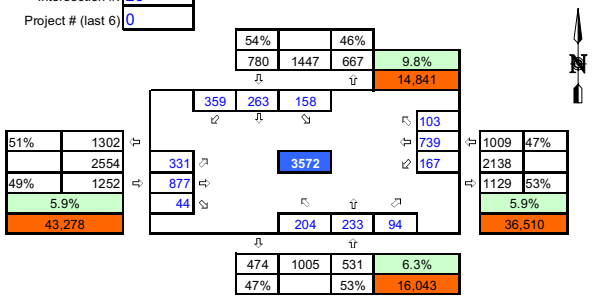
Int 27 MID

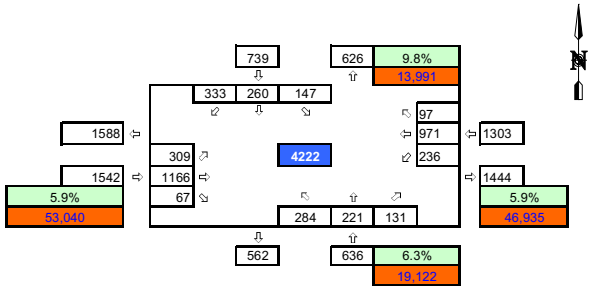
Int 28 MID Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Regents Road**
E/W Street: **La Jolla Village Drive**
Intersection #: 28
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Regents Road**
E/W Street: **La Jolla Village Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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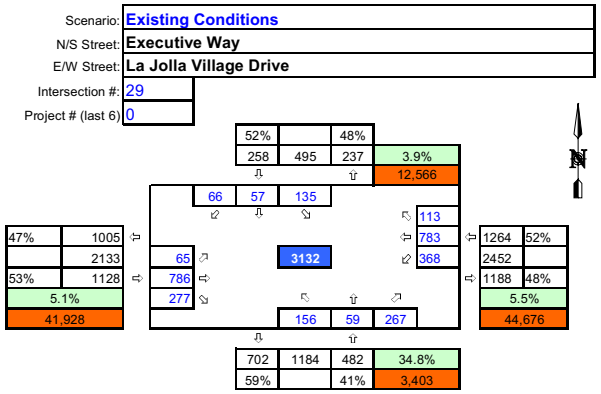
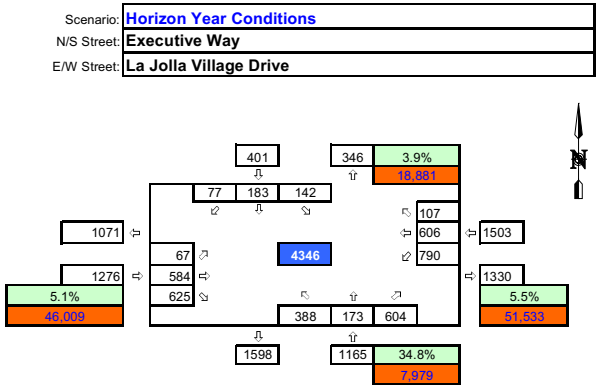
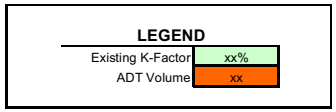
Int 28 MID

Int 29 MID Peak Volumes

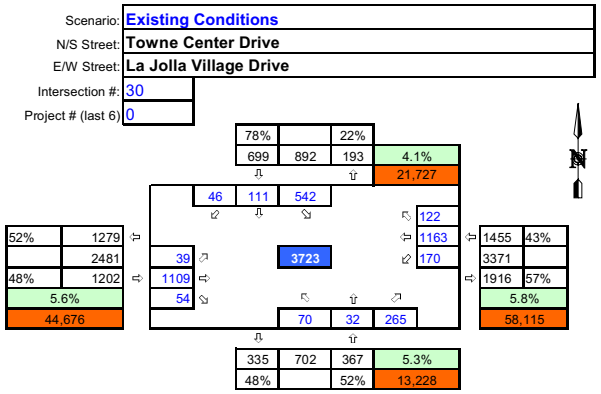


Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

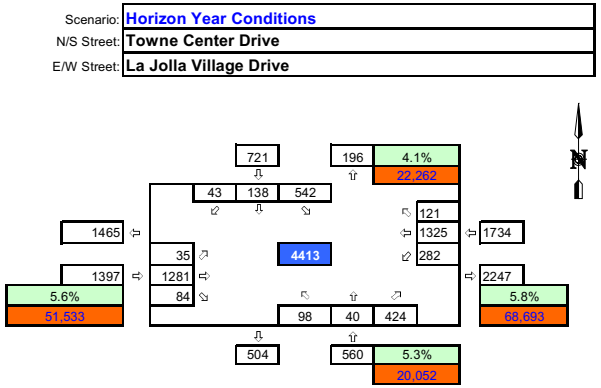


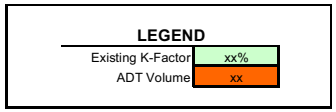


Int 30 MID Peak Volumes



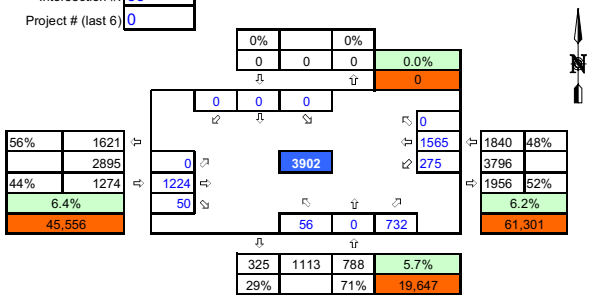
Note: Traffic volumes were collected by Accurate Video Counts during May 2015.





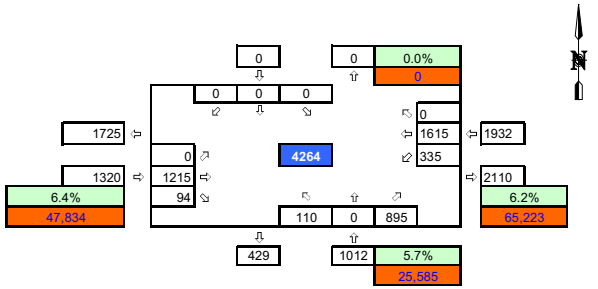
Int 33 MID Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Noble Drive**
E/W Street:	**Miramar Road**
Intersection #:	33
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Noble Drive**
E/W Street:	**Miramar Road**

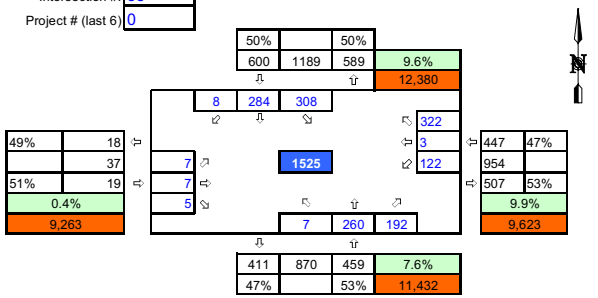


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

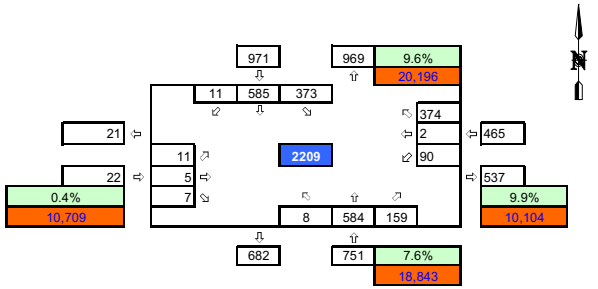
Int 38 MID Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Villa La Jolla Drive**
E/W Street:	**Nobel Drive**
Intersection #:	38
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

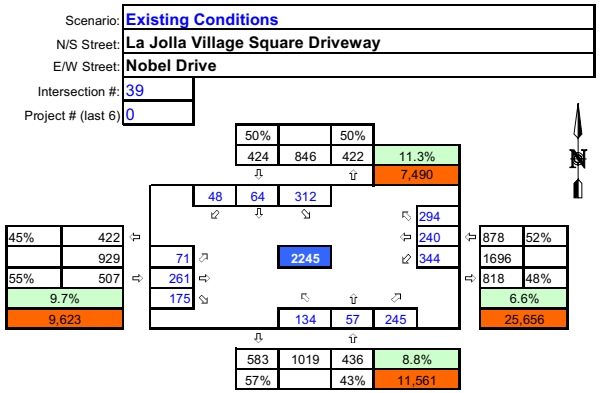
Scenario:	**Horizon Year Conditions**
N/S Street:	**Villa La Jolla Drive**
E/W Street:	**Nobel Drive**



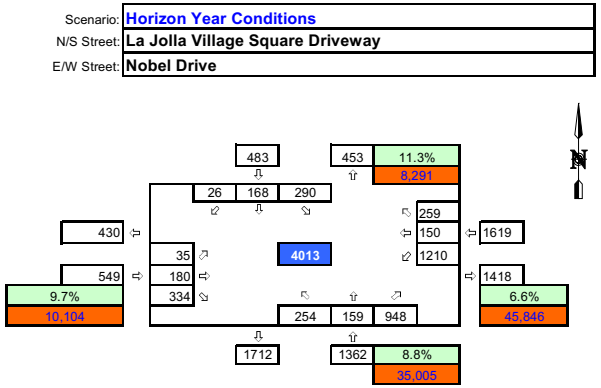
LEGEND

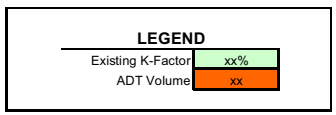
Existing K-Factor	xx%
ADT Volume	xx

Int 39 MID Peak Volumes

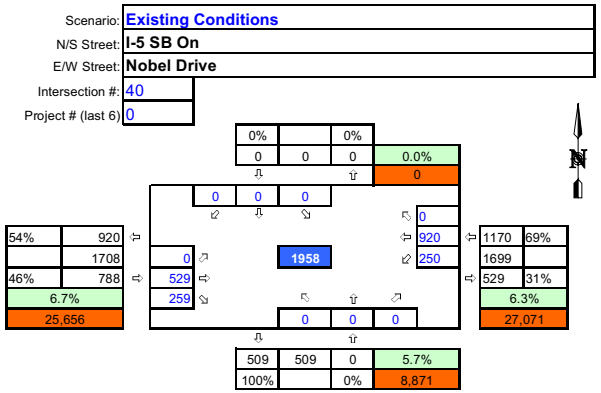


Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

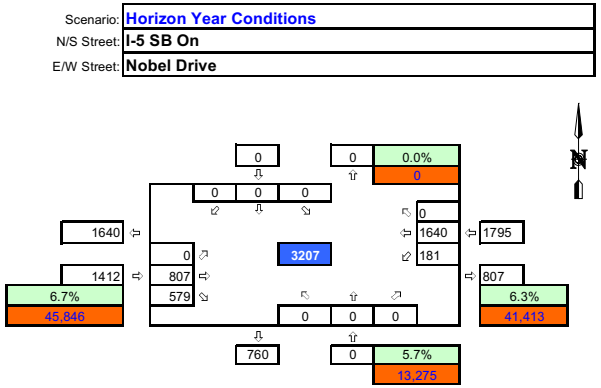


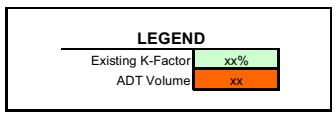


Int 40 MID Peak Volumes



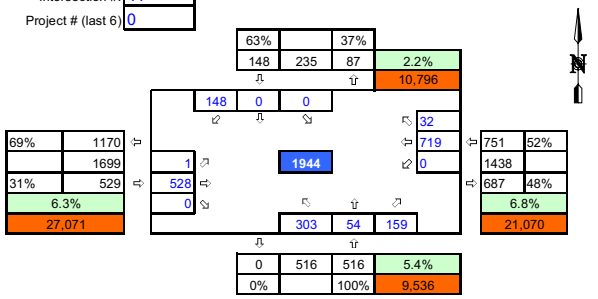
Note: Traffic volumes were collected by Accurate Video Counts during May 2015.





Int 41 MID Peak Volumes

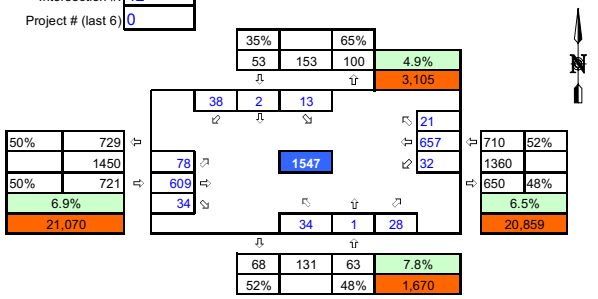
Scenario:	**Existing Conditions**
N/S Street:	**University Center Lane/I-5 NB Off**
E/W Street:	**Nobel Drive**
Intersection #:	41
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

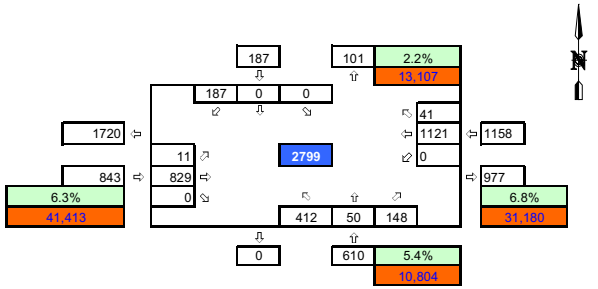
Int 42 MID Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Caminito Plaza Centro**
E/W Street:	**Nobel Drive**
Intersection #:	42
Project # (last 6)	0

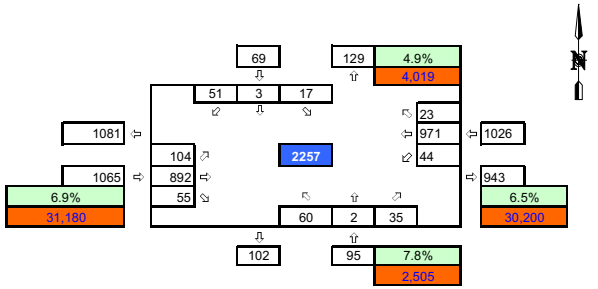


Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**University Center Lane/I-5 NB Off**
E/W Street:	**Nobel Drive**



Scenario:	**Horizon Year Conditions**
N/S Street:	**Caminito Plaza Centro**
E/W Street:	**Nobel Drive**

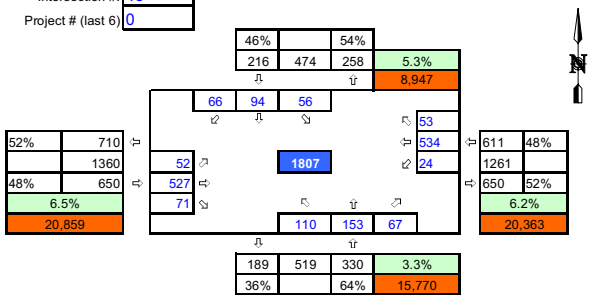


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

Int 43 MID Peak Volumes

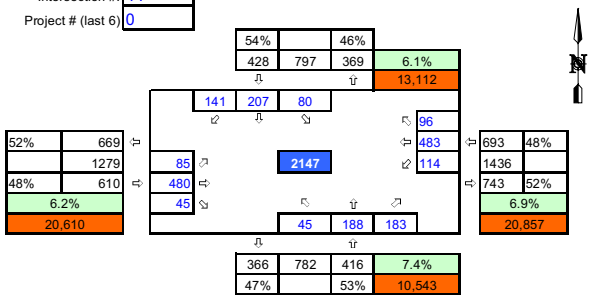
Scenario: **Existing Conditions**
N/S Street: **Lebon Drive**
E/W Street: **Nobel Drive**
Intersection #: 43
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

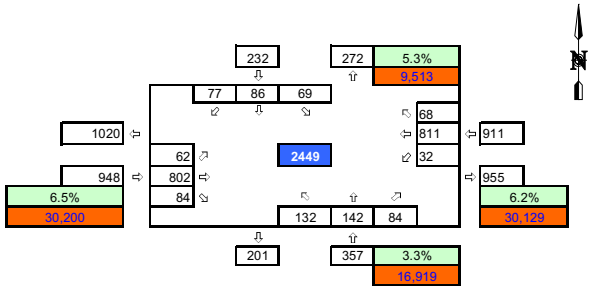
Int 44 MID Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Regents Road**
E/W Street: **Nobel Drive**
Intersection #: 44
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

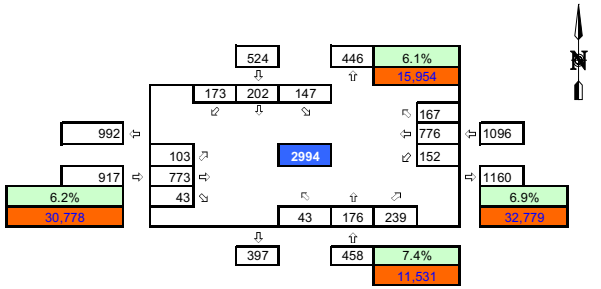
Scenario: **Horizon Year Conditions**
N/S Street: **Lebon Drive**
E/W Street: **Nobel Drive**



LEGEND

Existing K-Factor	xx%
ADT Volume	xx

Scenario: **Horizon Year Conditions**
N/S Street: **Regents Road**
E/W Street: **Nobel Drive**

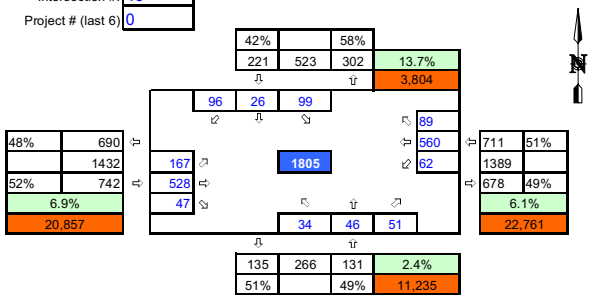


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

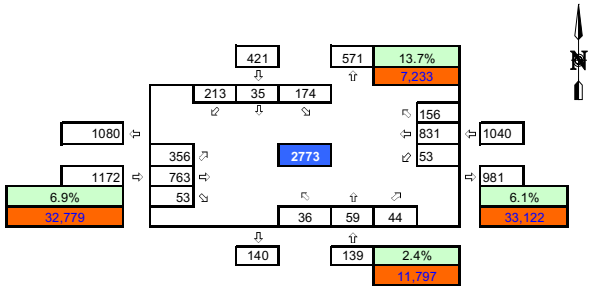
Int 45 MID Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Costa Verde Boulevard/Cargill Ave**
E/W Street: **Cargill Ave / Nobel Drive**
Intersection #: 45
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Costa Verde Boulevard/Cargill Ave**
E/W Street: **Cargill Ave / Nobel Drive**

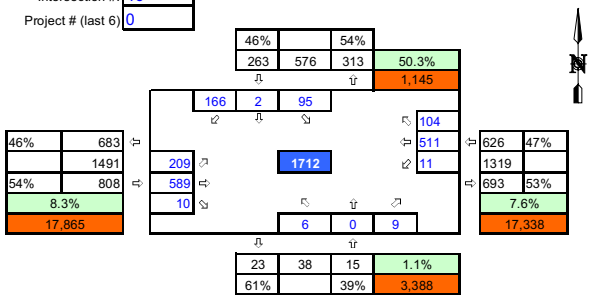


LEGEND
Existing K-Factor: xx%
ADT Volume: xx

K:\SND_TPTO\095240101 - University CPA\Excel\Horizon Year Conditions\Alternative C\Turn32_Alt C.xlsx
Int 45 MID

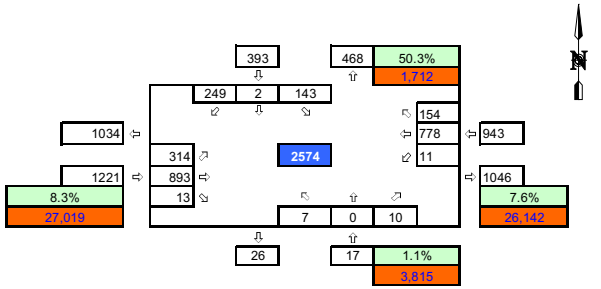
Int 46 MID Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Lombard Place**
E/W Street: **Nobel Drive**
Intersection #: 46
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Lombard Place**
E/W Street: **Nobel Drive**

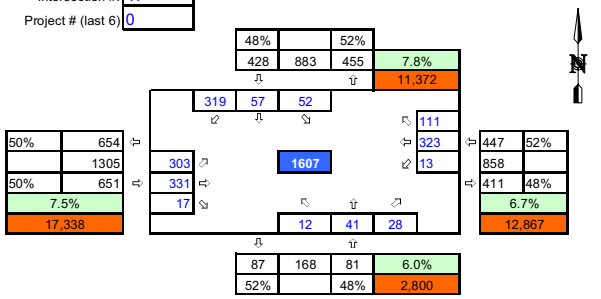


LEGEND
Existing K-Factor: xx%
ADT Volume: xx

K:\SND_TPTO\095240101 - University CPA\Excel\Horizon Year Conditions\Alternative C\Turn32_Alt C.xlsx
Int 46 MID

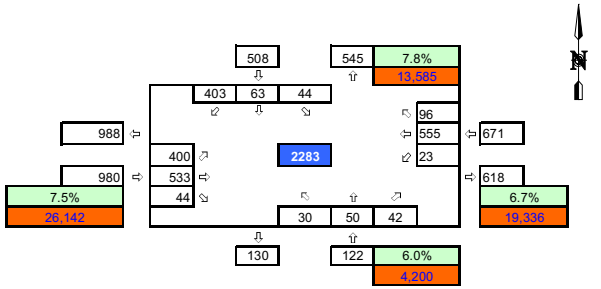
Int 47 MID Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Towne Center Drive**
E/W Street: **Nobel Drive**
Intersection #: 47
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Towne Center Drive**
E/W Street: **Nobel Drive**

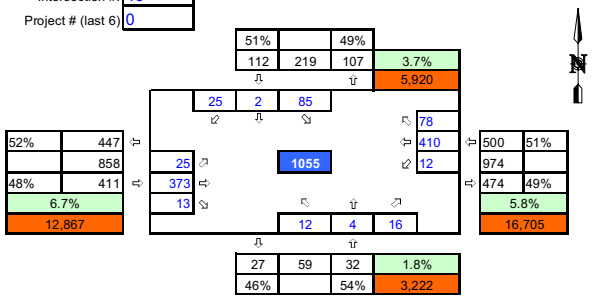


LEGEND
Existing K-Factor: xx%
ADT Volume: xx

K:\SND_TPTO\095240101 - University CPA\Excel\Horizon Year Conditions\Alternative C\Turn32_Alt C.xlsx
Int 47 MID

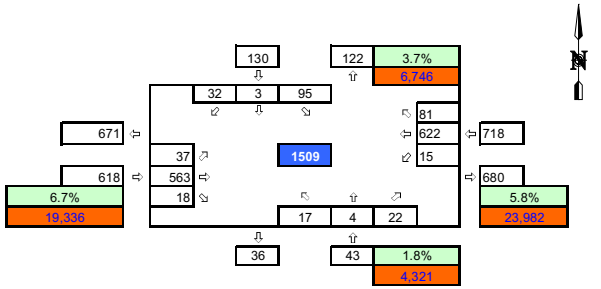
Int 48 MID Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Shoreline Drive**
E/W Street: **Nobel Drive**
Intersection #: 48
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Shoreline Drive**
E/W Street: **Nobel Drive**

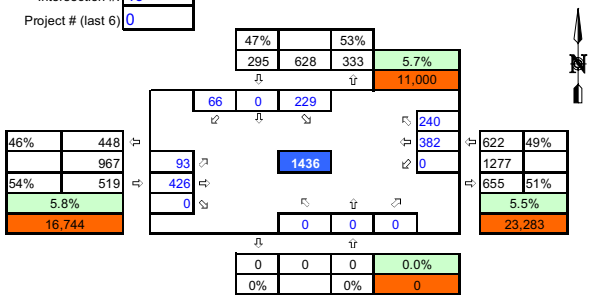


LEGEND
Existing K-Factor: xx%
ADT Volume: xx

K:\SND_TPTO\095240101 - University CPA\Excel\Horizon Year Conditions\Alternative C\Turn32_Alt C.xlsx
Int 48 MID

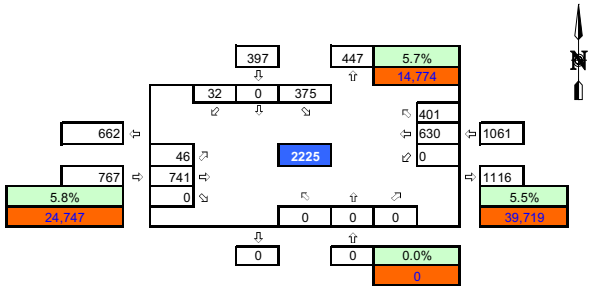
Int 49 MID Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Judicial Drive**
E/W Street:	**Nobel Drive**
Intersection #:	49
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Judicial Drive**
E/W Street:	**Nobel Drive**

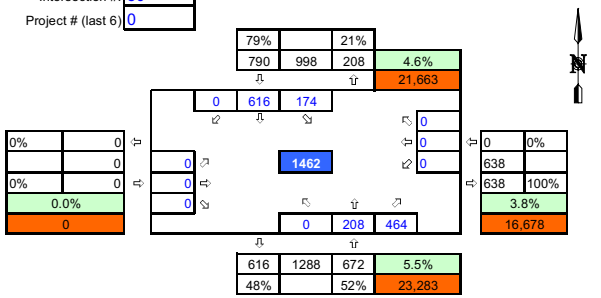


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

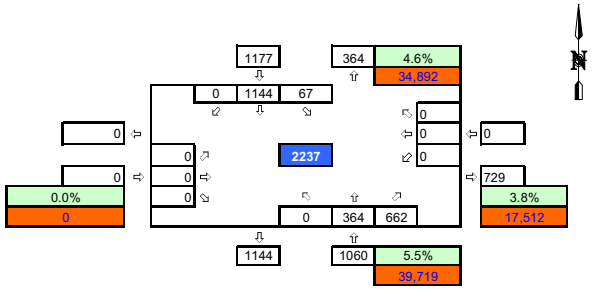
Int 50 MID Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Nobel Drive**
E/W Street:	**I-805 SB On-Ramp**
Intersection #:	50
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

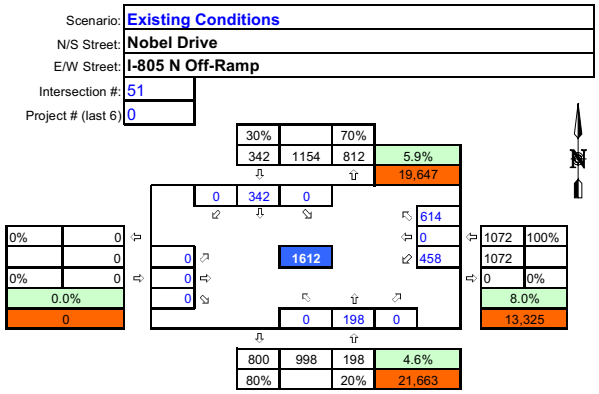
Scenario:	**Horizon Year Conditions**
N/S Street:	**Nobel Drive**
E/W Street:	**I-805 SB On-Ramp**



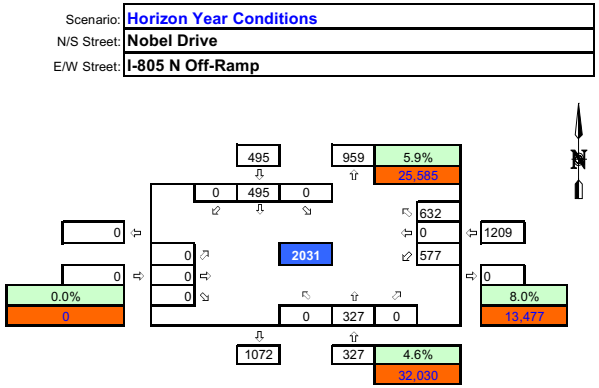
LEGEND

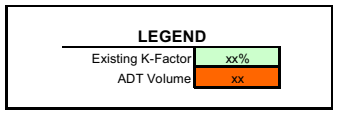
Existing K-Factor	xx%
ADT Volume	xx

Int 51 MID Peak Volumes

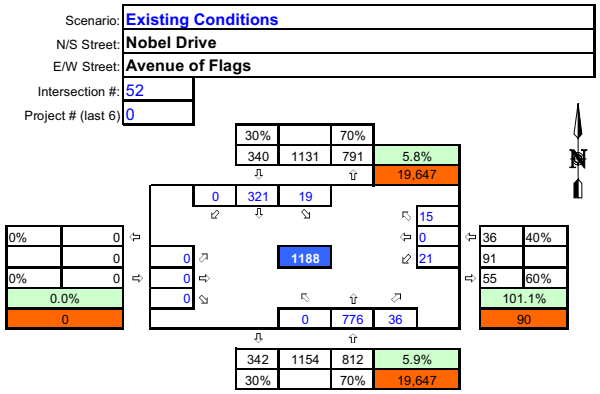


Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

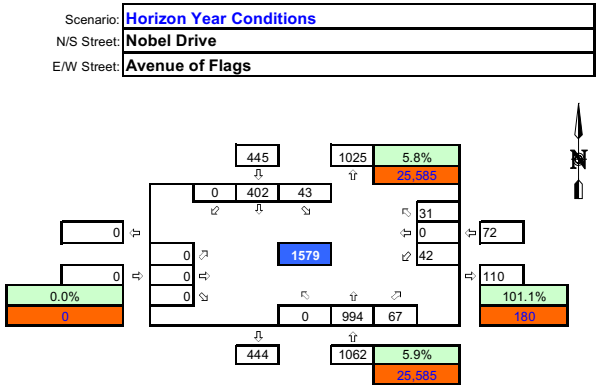


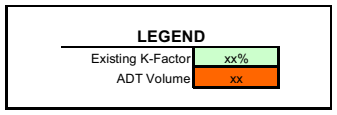


Int 52 MID Peak Volumes



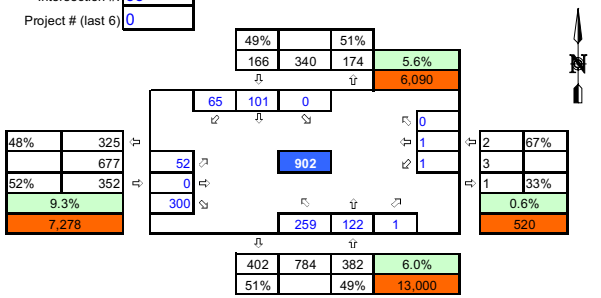
Note: Traffic volumes were collected by Accurate Video Counts during May 2015.





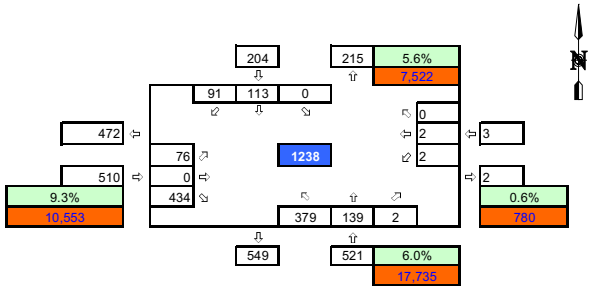
Int 53 MID Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Regents Road**
E/W Street: **Health Science Drive / County Day Ln**
Intersection #: 53
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Regents Road**
E/W Street: **Health Science Drive / County Day Ln**

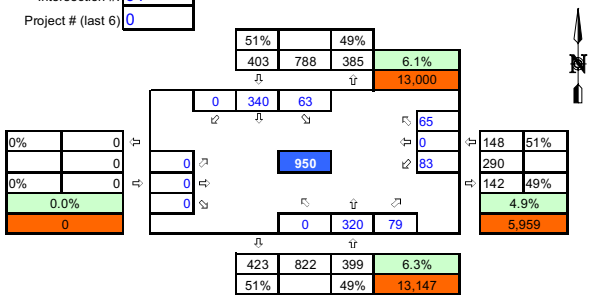


LEGEND
Existing K-Factor: xx%
ADT Volume: xx

K:\SND_TPTO\095240101 - University CPA\Excel\Horizon Year Conditions\Alternative C\Turn32_Alt C.xlsx
Int 53 MID

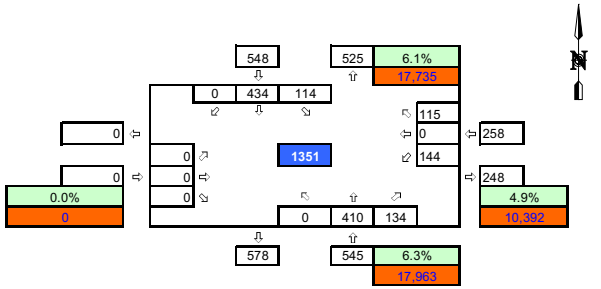
Int 54 MID Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Regents Road**
E/W Street: **Eastgate Mall**
Intersection #: 54
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Regents Road**
E/W Street: **Eastgate Mall**

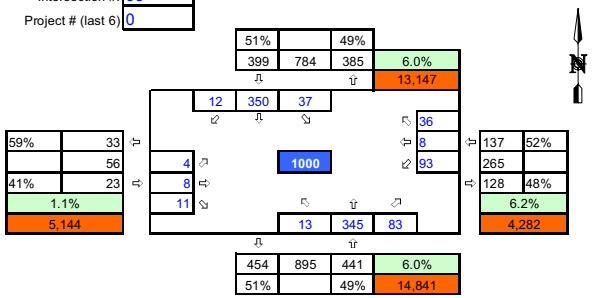


LEGEND
Existing K-Factor: xx%
ADT Volume: xx

K:\SND_TPTO\095240101 - University CPA\Excel\Horizon Year Conditions\Alternative C\Turn32_Alt C.xlsx
Int 54 MID

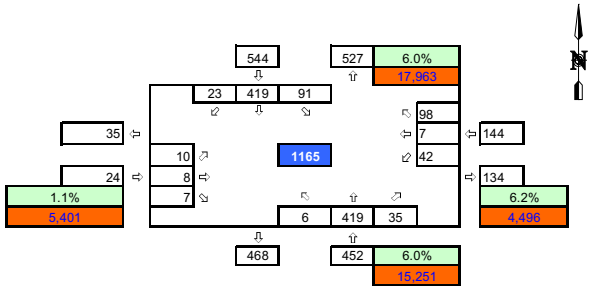
Int 55 MID Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Regents Road**
E/W Street: **Executive Drive**
Intersection #: 55
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Regents Road**
E/W Street: **Executive Drive**

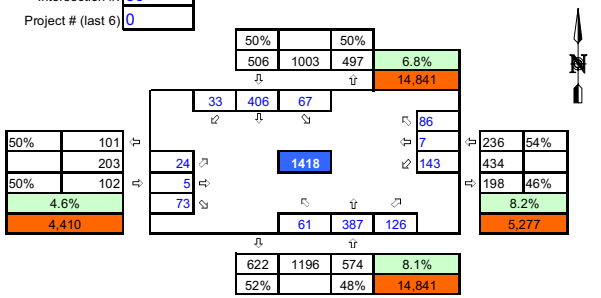


LEGEND
Existing K-Factor: xx%
ADT Volume: xx

K:\SND_TPTO\095240101 - University CPA\Excel\Horizon Year Conditions\Alternative C\Turn32_Alt C.xlsx
Int 55 MID

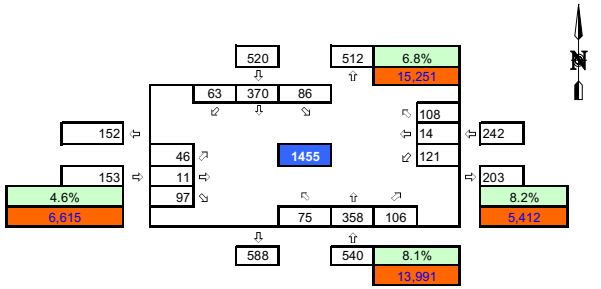
Int 56 MID Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Regents Road**
E/W Street: **Miramar Street / Regents Park Row**
Intersection #: 56
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Regents Road**
E/W Street: **Miramar Street / Regents Park Row**

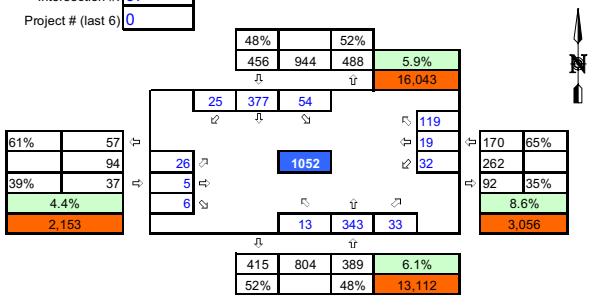


LEGEND
Existing K-Factor: xx%
ADT Volume: xx

K:\SND_TPTO\095240101 - University CPA\Excel\Horizon Year Conditions\Alternative C\Turn32_Alt C.xlsx
Int 56 MID

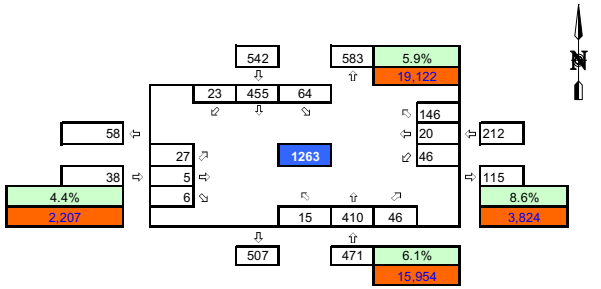
Int 57 MID Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Regents Road**
E/W Street: **Plaza De Palmas**
Intersection #: 57
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Regents Road**
E/W Street: **Plaza De Palmas**

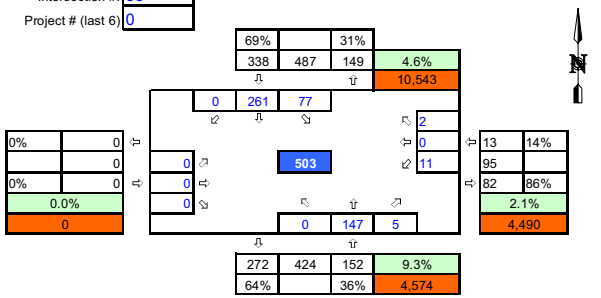


LEGEND
Existing K-Factor: xx%
ADT Volume: xx

K:\SND_TPTO\095240101 - University CPA\Excel\Horizon Year Conditions\Alternative C\Turn32_Alt C.xlsx
Int 57 MID

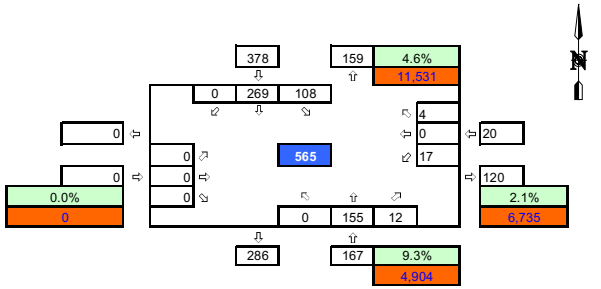
Int 58 MID Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Regents Road**
E/W Street: **Berino Court**
Intersection #: 58
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

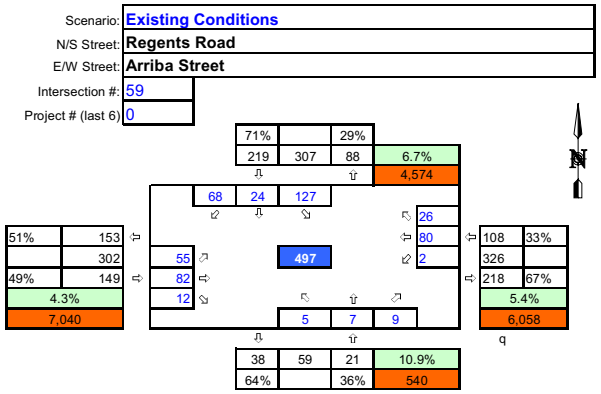
Scenario: **Horizon Year Conditions**
N/S Street: **Regents Road**
E/W Street: **Berino Court**



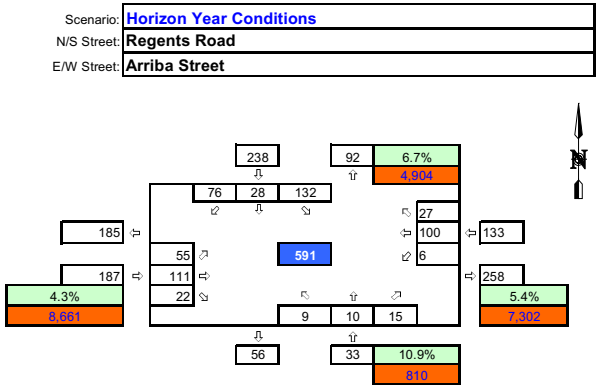
LEGEND
Existing K-Factor: xx%
ADT Volume: xx

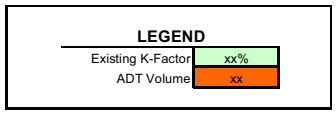
K:\SND_TPTO\095240101 - University CPA\Excel\Horizon Year Conditions\Alternative C\Turn32_Alt C.xlsx
Int 58 MID

Int 59 MID Peak Volumes

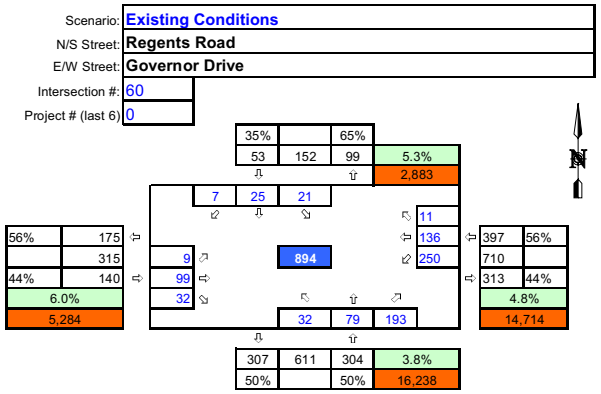


Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

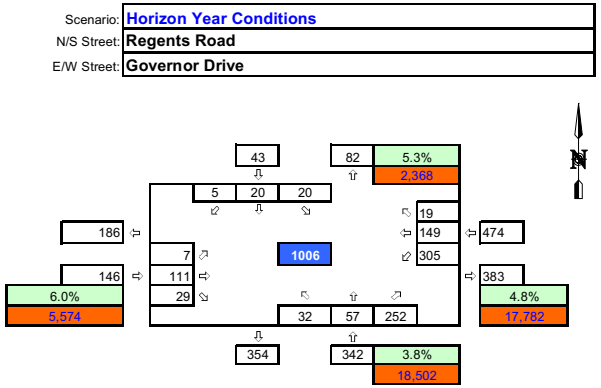


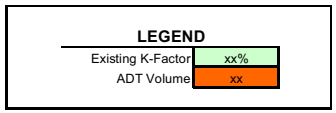


Int 60 MID Peak Volumes

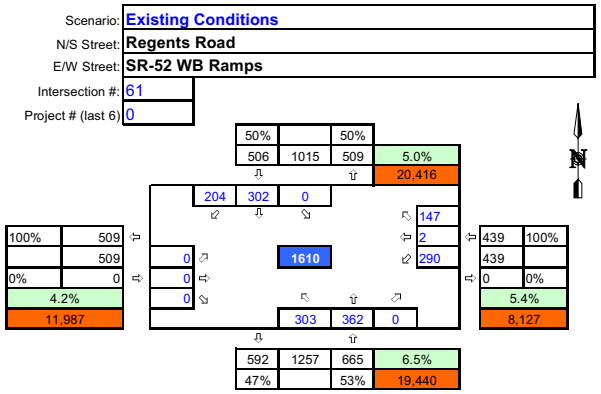


Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

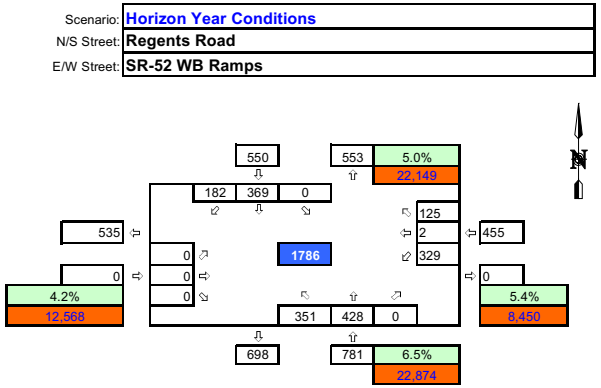


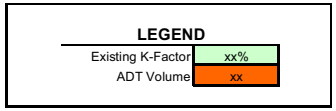


Int 61 MID Peak Volumes

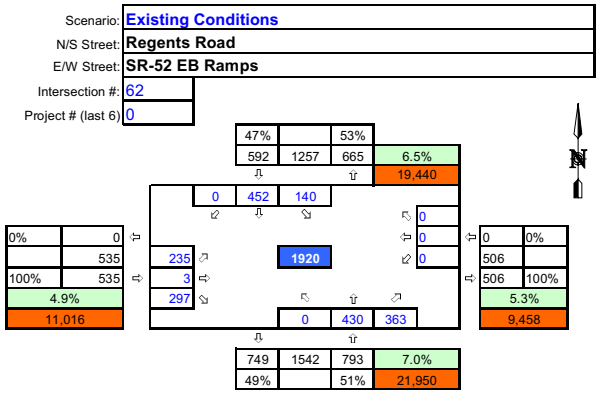


Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

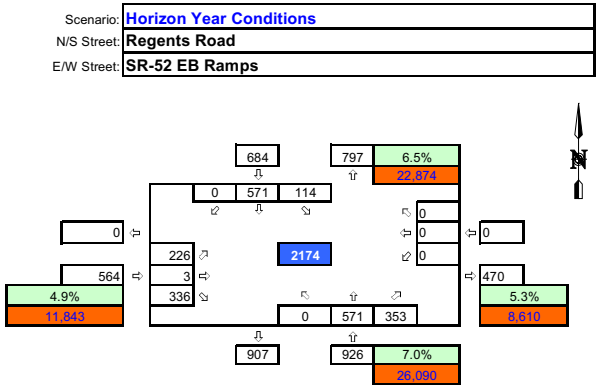


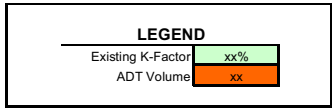


Int 62 MID Peak Volumes



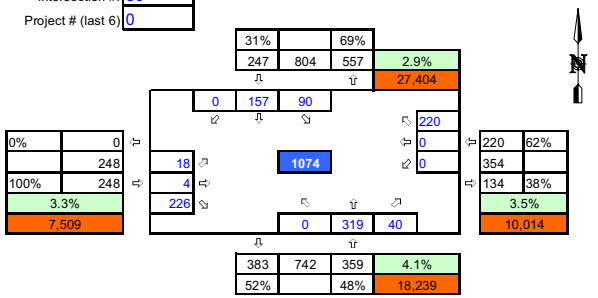
Note: Traffic volumes were collected by Accurate Video Counts during May 2015.





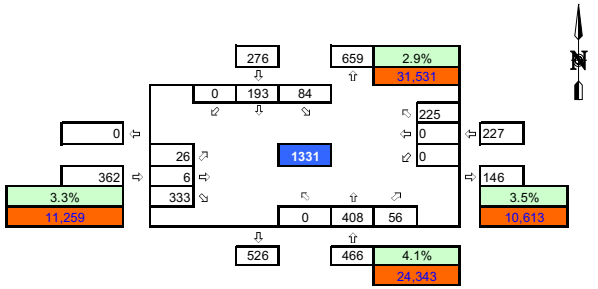
Int 80 MID Peak Volumes

Scenario:	Existing Conditions
N/S Street:	Gilman Drive
E/W Street:	La Jolla Village Drive EB
Intersection #:	80
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

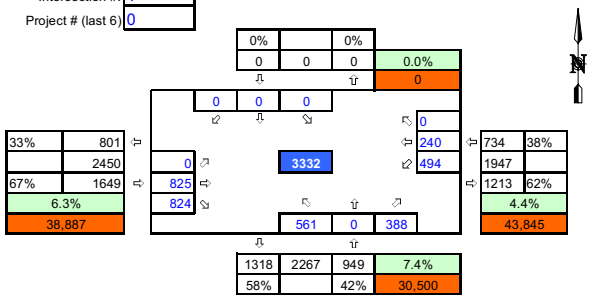
Scenario:	Horizon Year Conditions
N/S Street:	Gilman Drive
E/W Street:	La Jolla Village Drive EB



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

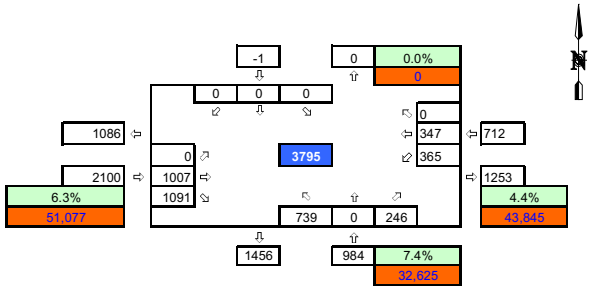
Int 1 PM Peak Volumes

Scenario:	Existing Conditions
N/S Street:	N. Torrey Pines Road
E/W Street:	Genesee Avenue
Intersection #:	1
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

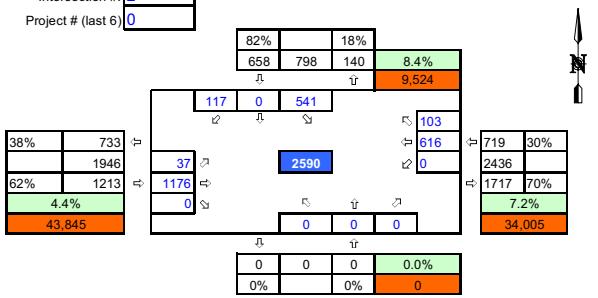
Scenario:	Horizon Year Conditions
N/S Street:	N. Torrey Pines Road
E/W Street:	Genesee Avenue



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

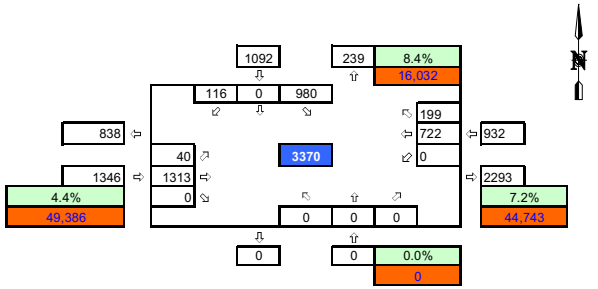
Int 2 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**John Hopkins Drive (S)**
E/W Street:	**Genesee Avenue**
Intersection #:	2
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**John Hopkins Drive (S)**
E/W Street:	**Genesee Avenue**

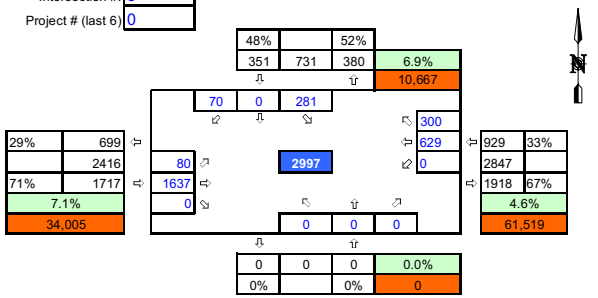


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

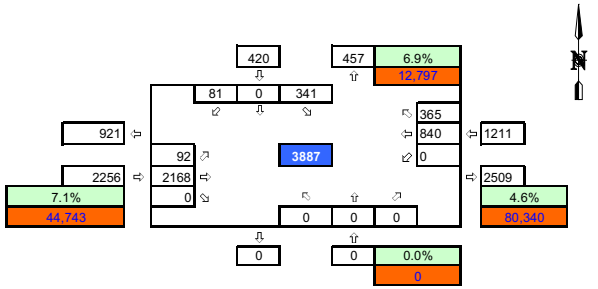
Int 3 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Science Center Drive**
E/W Street:	**Genesee Avenue**
Intersection #:	3
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Science Center Drive**
E/W Street:	**Genesee Avenue**

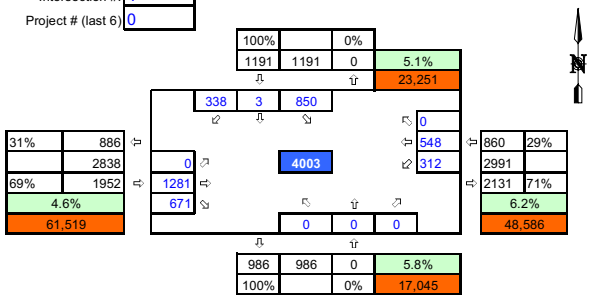


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

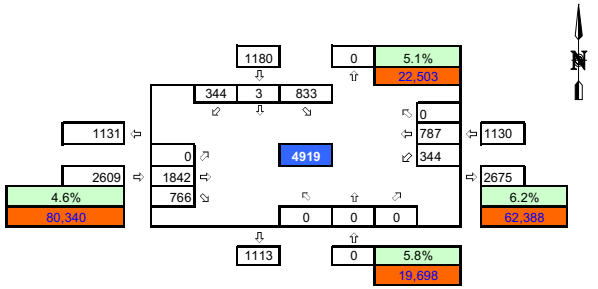
Int 4 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**I-5 SB Ramps**
E/W Street:	**Genesee Avenue**
Intersection #:	4
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**I-5 SB Ramps**
E/W Street:	**Genesee Avenue**

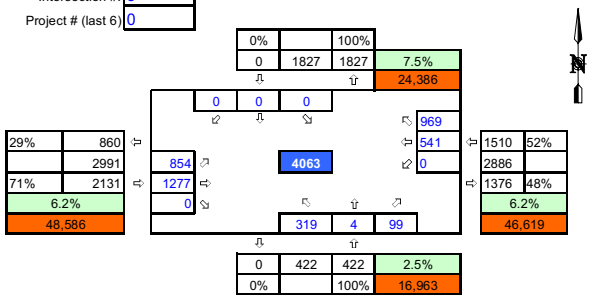


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

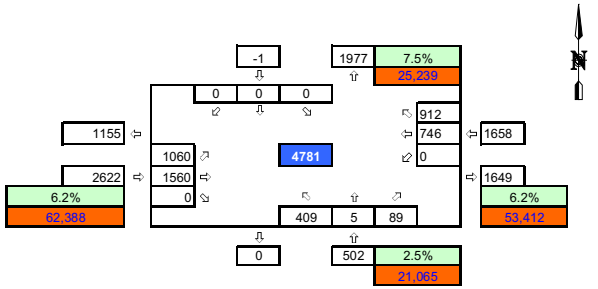
Int 5 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**I-5 NB Ramps**
E/W Street:	**Genesee Avenue**
Intersection #:	5
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**I-5 NB Ramps**
E/W Street:	**Genesee Avenue**

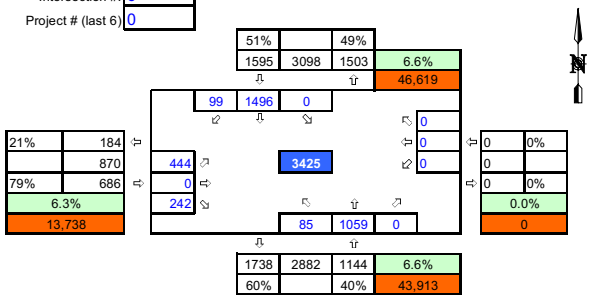


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

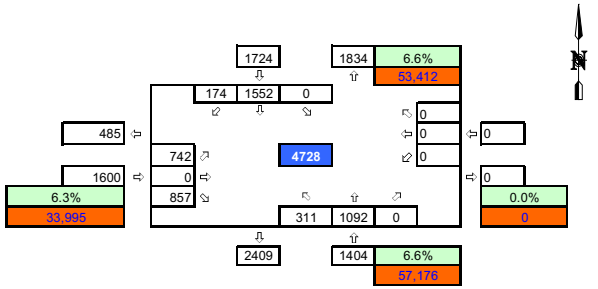
Int 6 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**Scripps Hospital**
Intersection #:	6
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**Scripps Hospital**

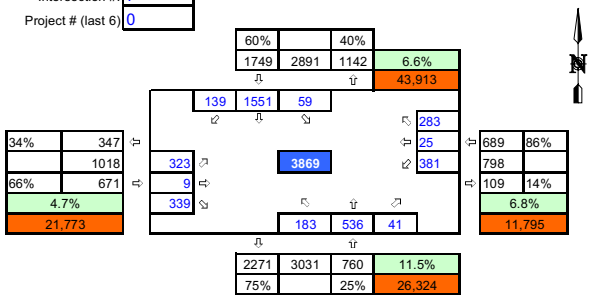


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

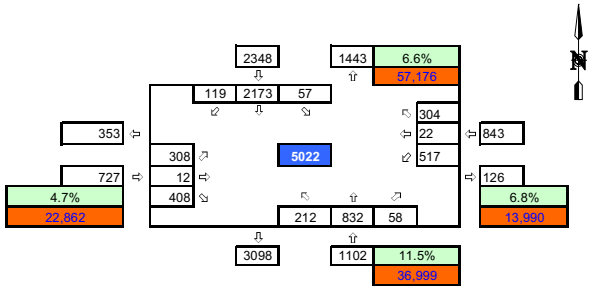
Int 7 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**Campus Point Drive**
Intersection #:	7
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**Campus Point Drive**

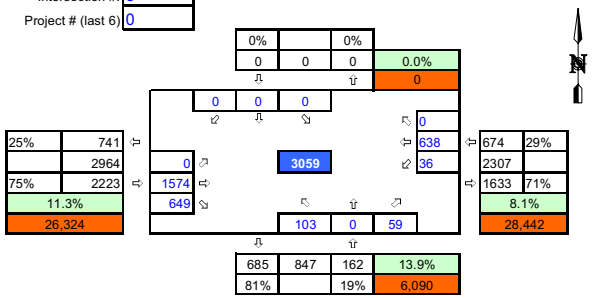


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

Int 8 PM Peak Volumes

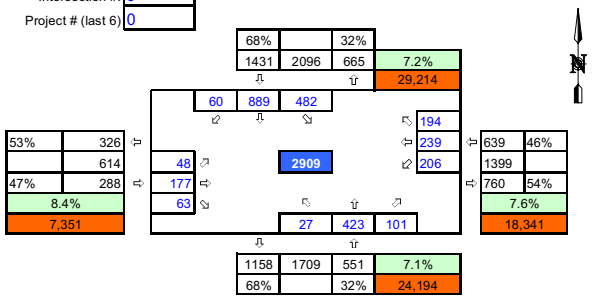
Scenario:	Existing Conditions
N/S Street:	Regents Road
E/W Street:	Genesee Avenue
Intersection #:	8
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

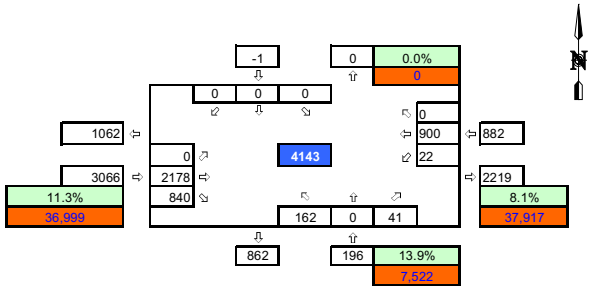
Int 9 PM Peak Volumes

Scenario:	Existing Conditions
N/S Street:	Genesee Avenue
E/W Street:	Eastgate Mall
Intersection #:	9
Project # (last 6)	0

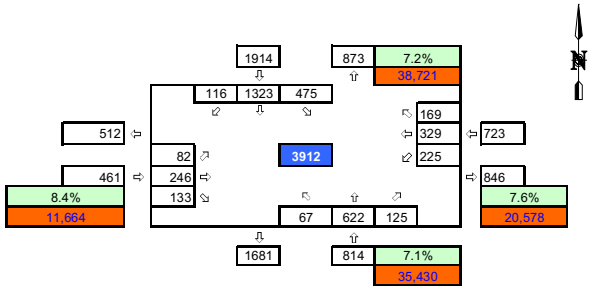


Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	Horizon Year Conditions
N/S Street:	Regents Road
E/W Street:	Genesee Avenue



Scenario:	Horizon Year Conditions
N/S Street:	Genesee Avenue
E/W Street:	Eastgate Mall

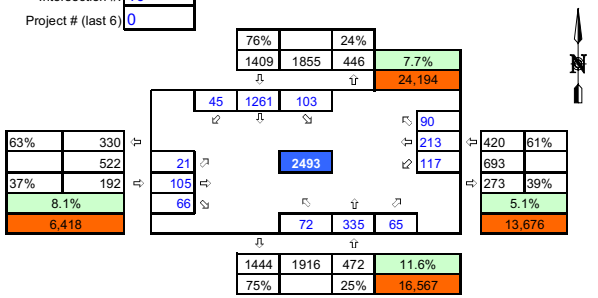


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

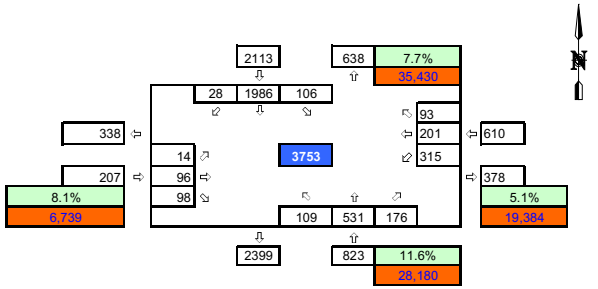
Int 10 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Executive Drive**
Intersection #: 10
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Executive Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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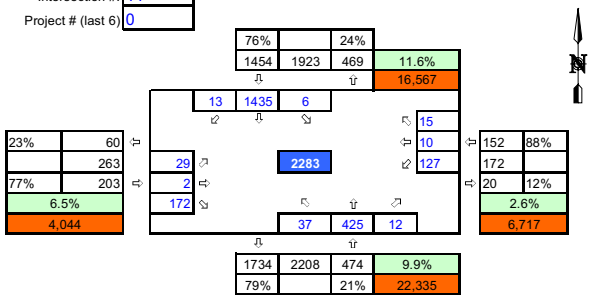
Int 10 PM

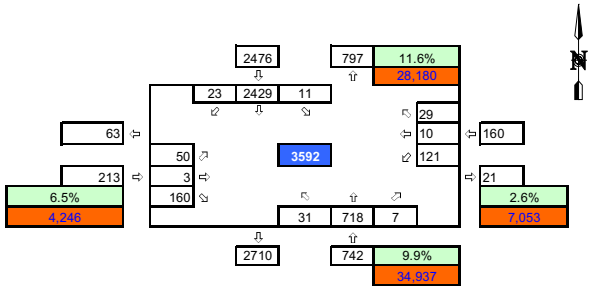
Int 11 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Executive Square**
Intersection #: 11
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Executive Square**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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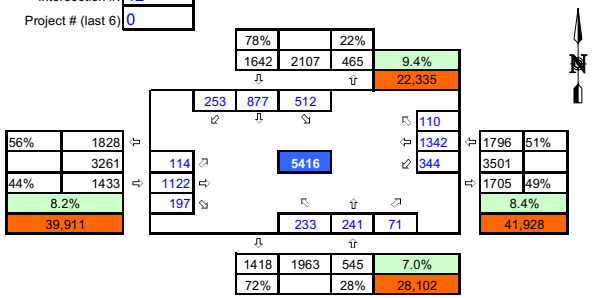
Int 11 PM

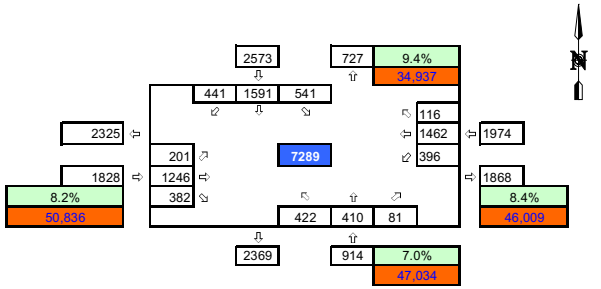
Int 12 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **La Jolla Village Drive**
Intersection #: 12
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **La Jolla Village Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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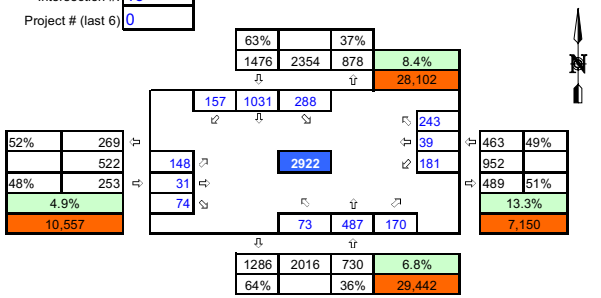
Int 12 PM

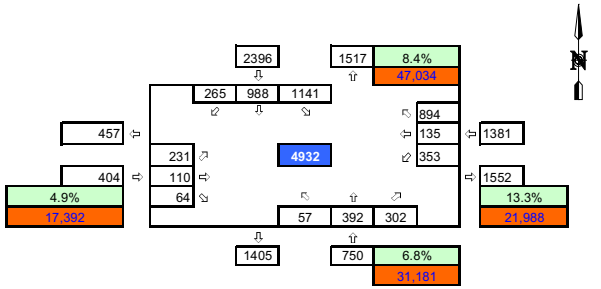
Int 13 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Esplanade Court**
Intersection #: 13
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Esplanade Court**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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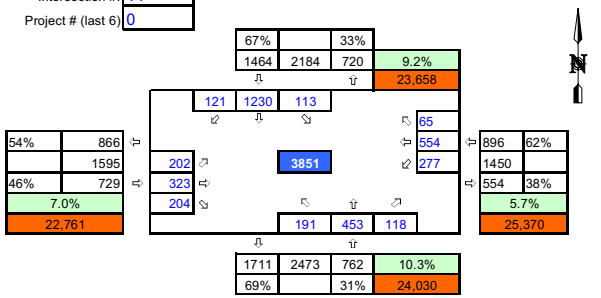
Int 13 PM

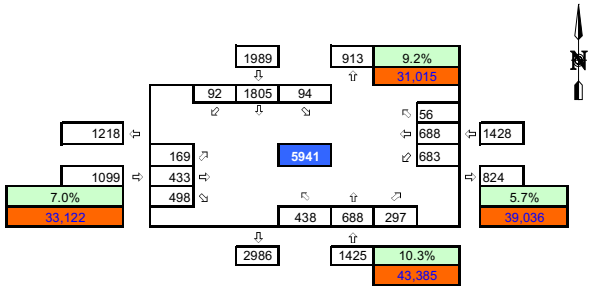
Int 14 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**Nobel Drive**
Intersection #:	14
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

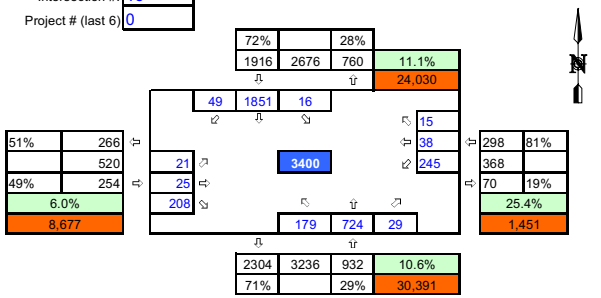
Scenario:	**Horizon Year Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**Nobel Drive**



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

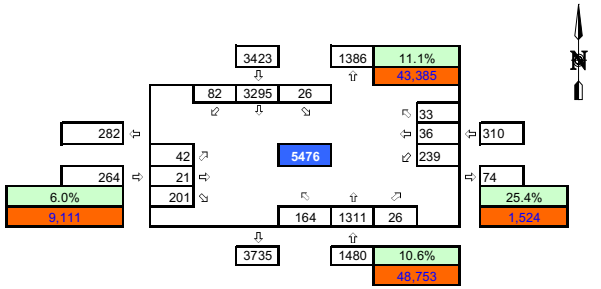
Int 15 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**Decoro Street**
Intersection #:	15
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

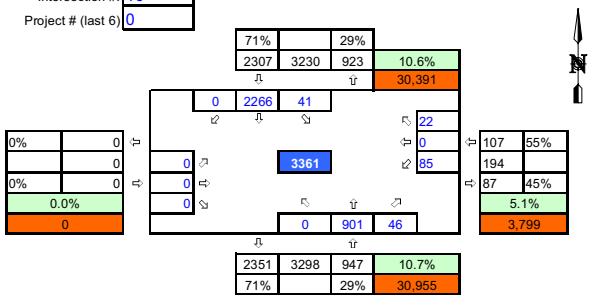
Scenario:	**Horizon Year Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**Decoro Street**



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

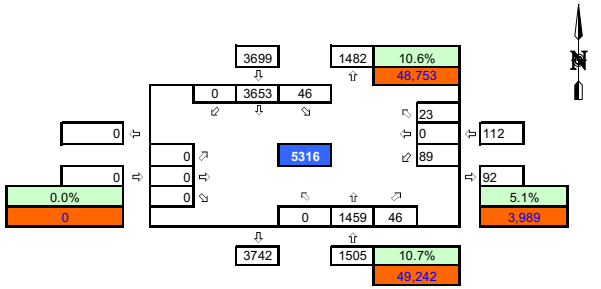
Int 16 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Centurion Square**
Intersection #: 16
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Centurion Square**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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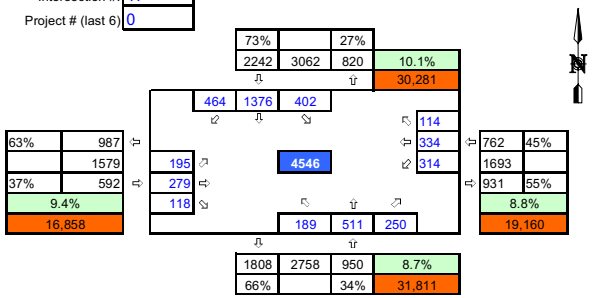
Int 16 PM

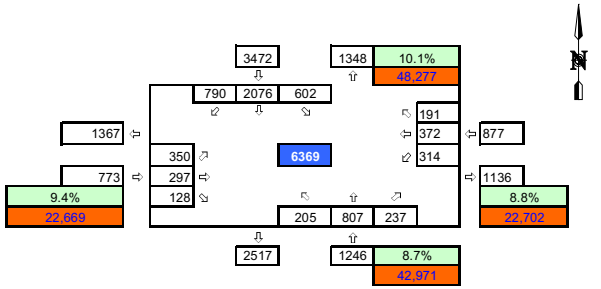
Int 17 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Governor Drive**
Intersection #: 17
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Governor Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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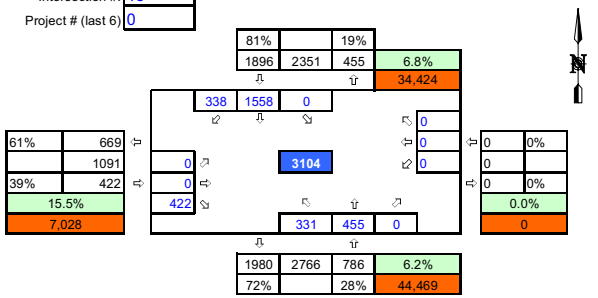
Int 17 PM

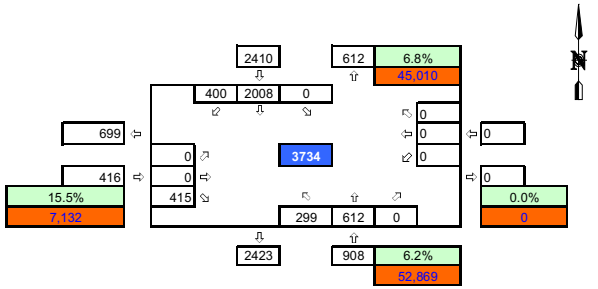
Int 18 PM Peak Volumes

Scenario:	Existing Conditions
N/S Street:	Genesee Avenue
E/W Street:	SR-52 WB Ramps
Intersection #:	18
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	Horizon Year Conditions
N/S Street:	Genesee Avenue
E/W Street:	SR-52 WB Ramps

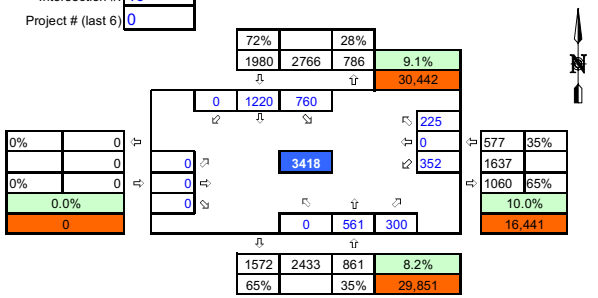


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

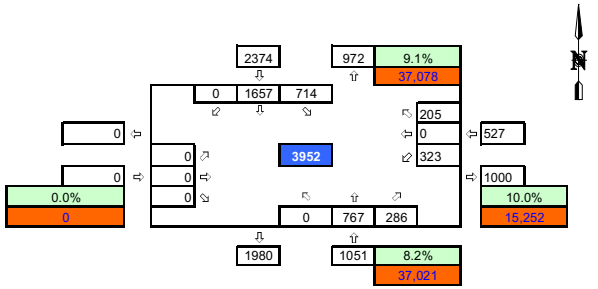
Int 19 PM Peak Volumes

Scenario:	Existing Conditions
N/S Street:	Genesee Avenue
E/W Street:	SR-52 EB Ramps
Intersection #:	19
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	Horizon Year Conditions
N/S Street:	Genesee Avenue
E/W Street:	SR-52 EB Ramps

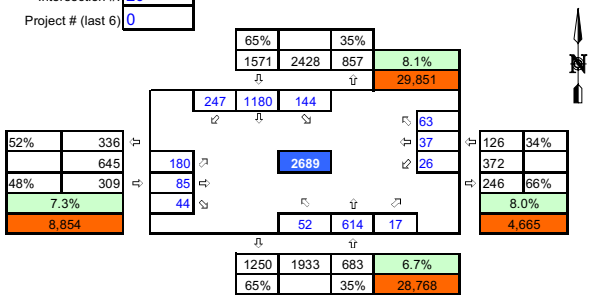


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

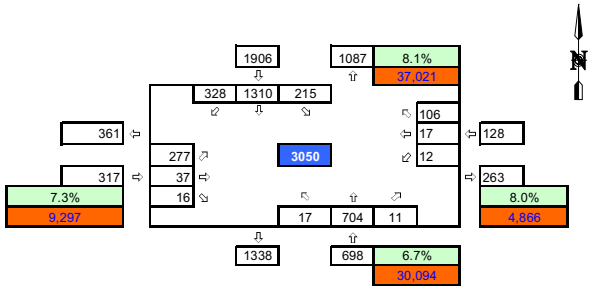
Int 20 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**Lehrer Drive / Appleton Street**
Intersection #:	20
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

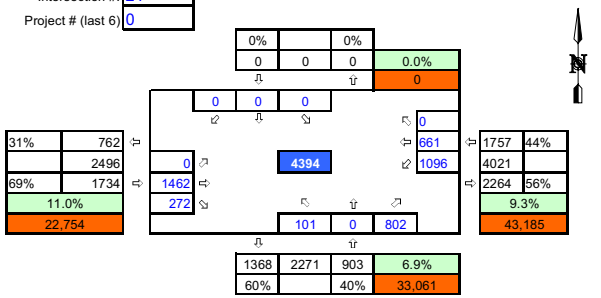
Scenario:	**Horizon Year Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**Lehrer Drive / Appleton Street**



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

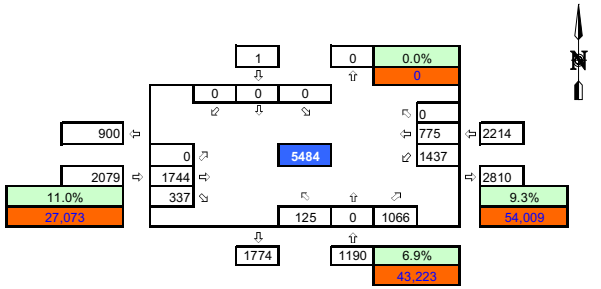
Int 21 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Torrey Pines Road**
E/W Street:	**La Jolla Village Drive**
Intersection #:	21
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

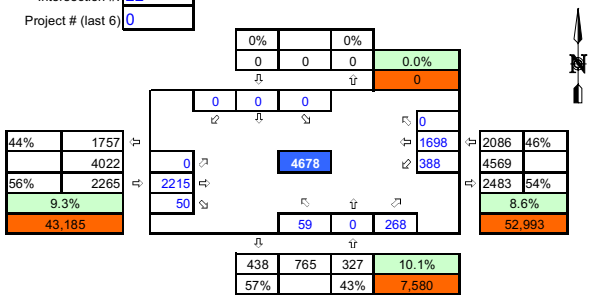
Scenario:	**Horizon Year Conditions**
N/S Street:	**Torrey Pines Road**
E/W Street:	**La Jolla Village Drive**



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

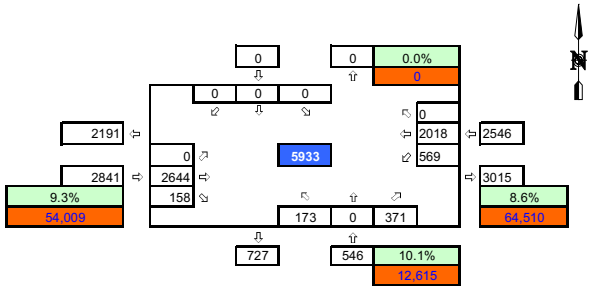
Int 22 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **La Jolla Scenic Drive**
E/W Street: **La Jolla Village Drive**
Intersection #: 22
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

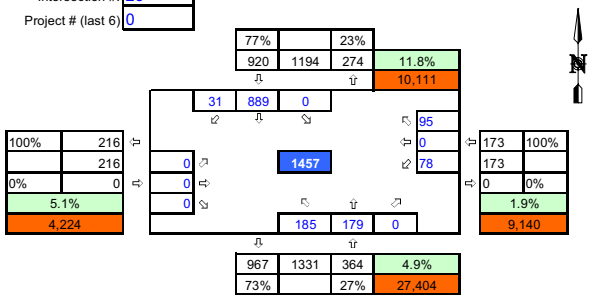
Scenario: **Horizon Year Conditions**
N/S Street: **La Jolla Scenic Drive**
E/W Street: **La Jolla Village Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

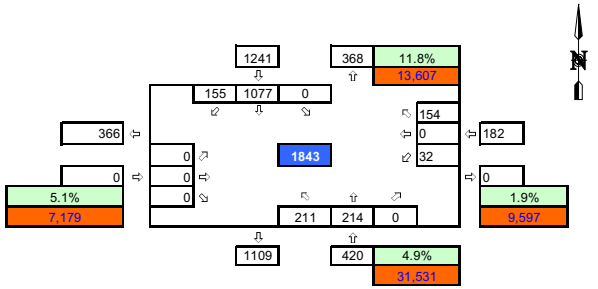
Int 23 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Gillman Drive**
E/W Street: **La Jolla Village Drive WB**
Intersection #: 23
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

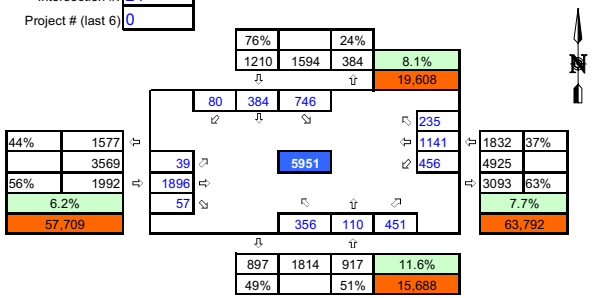
Scenario: **Horizon Year Conditions**
N/S Street: **Gillman Drive**
E/W Street: **La Jolla Village Drive WB**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

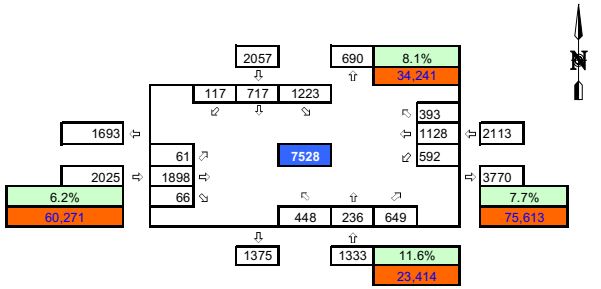
Int 24 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Villa La Jolla Drive**
E/W Street:	**La Jolla Village Drive**
Intersection #:	24
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Villa La Jolla Drive**
E/W Street:	**La Jolla Village Drive**

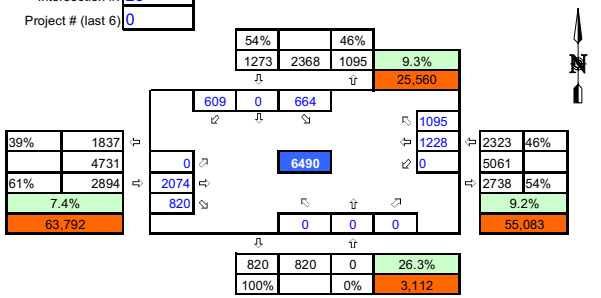


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

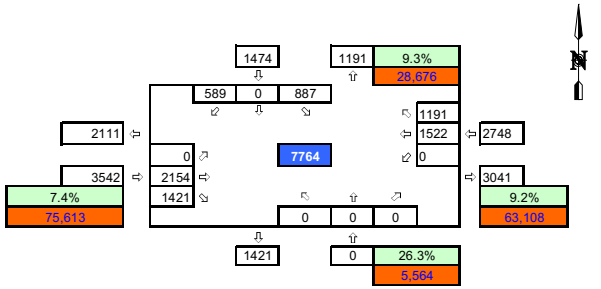
Int 25 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**I-5 SB Off-Ramps**
E/W Street:	**La Jolla Village Drive**
Intersection #:	25
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**I-5 SB Off-Ramps**
E/W Street:	**La Jolla Village Drive**

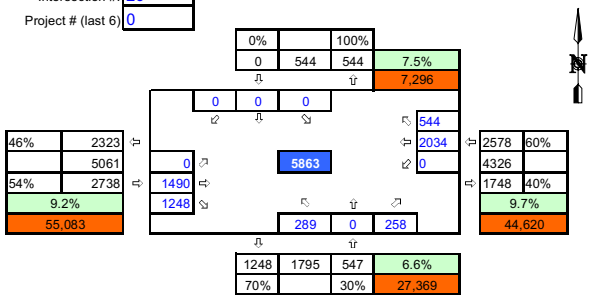


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

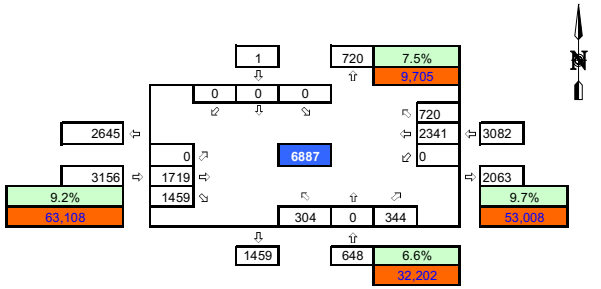
Int 26 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**I-5 NB Off-Ramps**
E/W Street:	**La Jolla Village Drive**
Intersection #:	26
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**I-5 NB Off-Ramps**
E/W Street:	**La Jolla Village Drive**



LEGEND

Existing K-Factor	xx%
ADT Volume	xx

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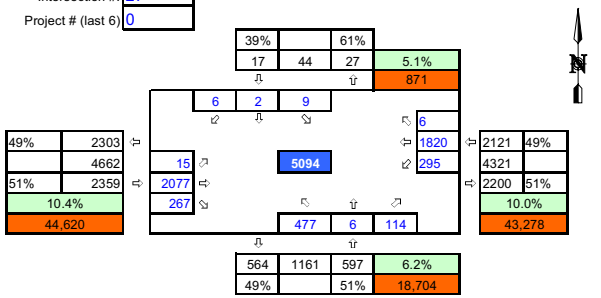
Int 26 PM

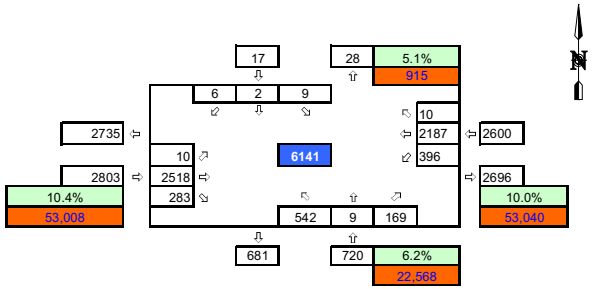
Int 27 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Lebon Drive**
E/W Street:	**La Jolla Village Drive**
Intersection #:	27
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Lebon Drive**
E/W Street:	**La Jolla Village Drive**



LEGEND

Existing K-Factor	xx%
ADT Volume	xx

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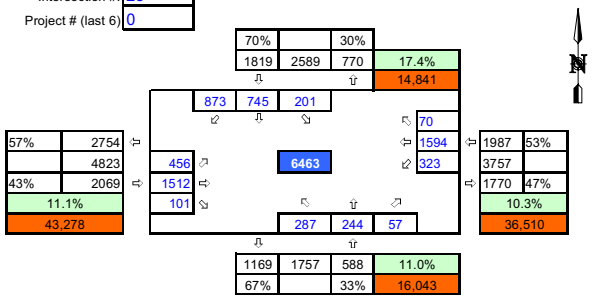
Int 27 PM

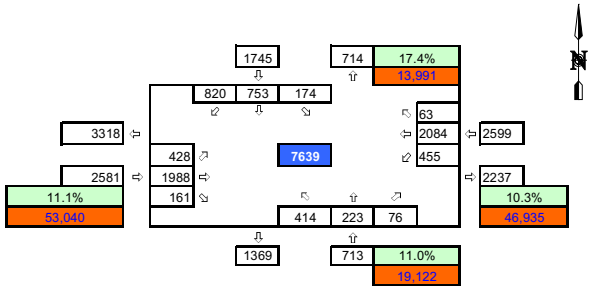
Int 28 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Regents Road**
E/W Street:	**La Jolla Village Drive**
Intersection #:	28
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Regents Road**
E/W Street:	**La Jolla Village Drive**

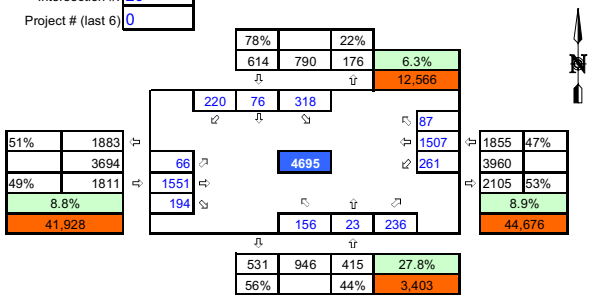


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

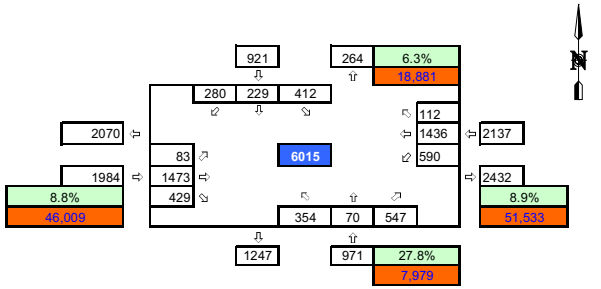
Int 29 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Executive Way**
E/W Street:	**La Jolla Village Drive**
Intersection #:	29
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Executive Way**
E/W Street:	**La Jolla Village Drive**

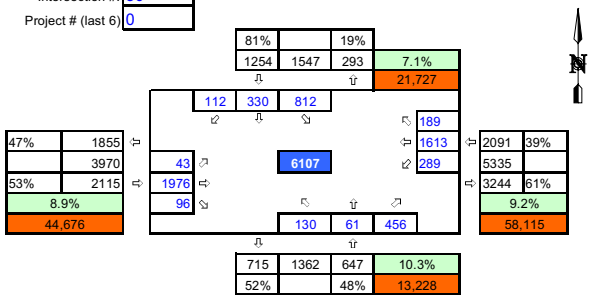


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

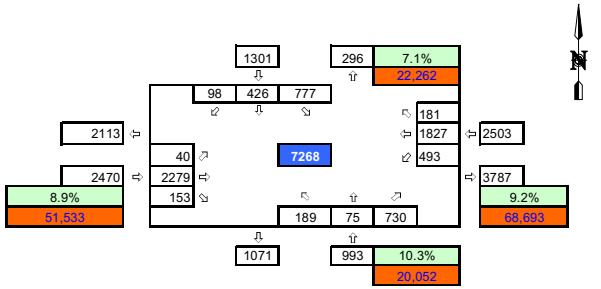
Int 30 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Towne Center Drive**
E/W Street: **La Jolla Village Drive**
Intersection #: 30
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Towne Center Drive**
E/W Street: **La Jolla Village Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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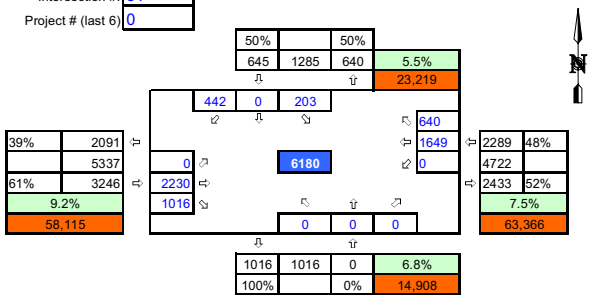
Int 30 PM

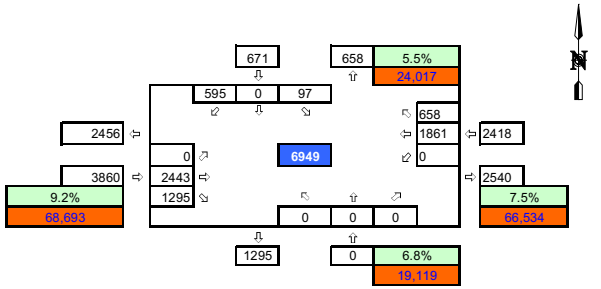
Int 31 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **I-805 SB Ramps**
E/W Street: **La Jolla Village Drive**
Intersection #: 31
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **I-805 SB Ramps**
E/W Street: **La Jolla Village Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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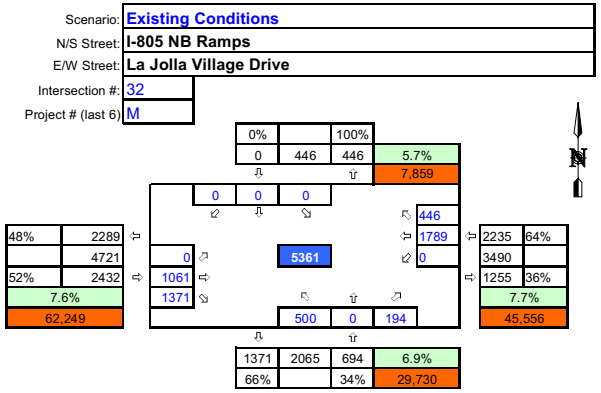
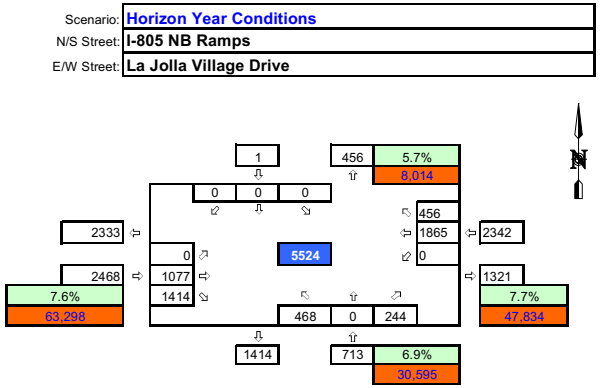
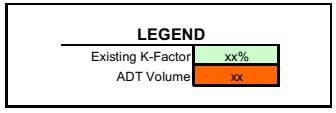
Int 31 PM

Int 32 PM Peak Volumes

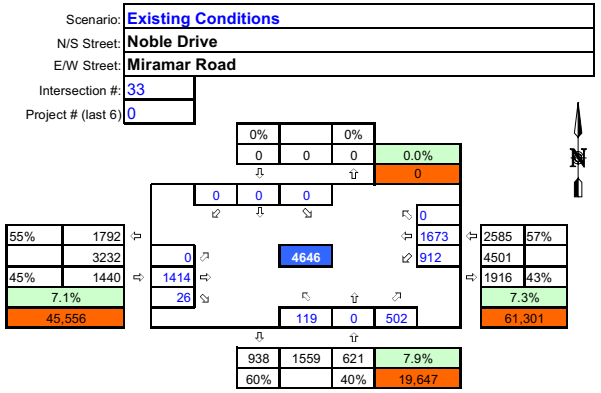


Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

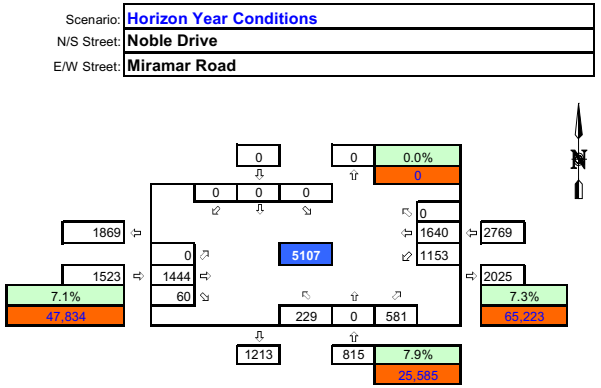


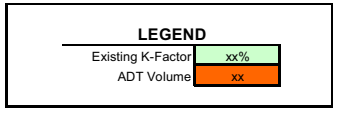


Int 33 PM Peak Volumes



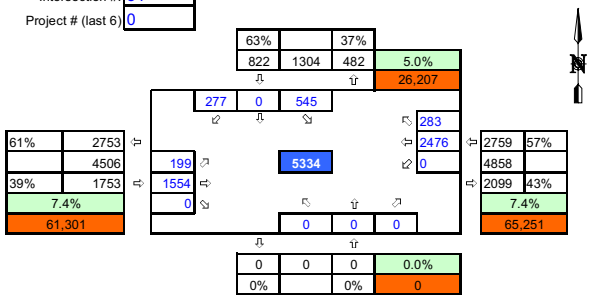
Note: Traffic volumes were collected by Accurate Video Counts during May 2015.





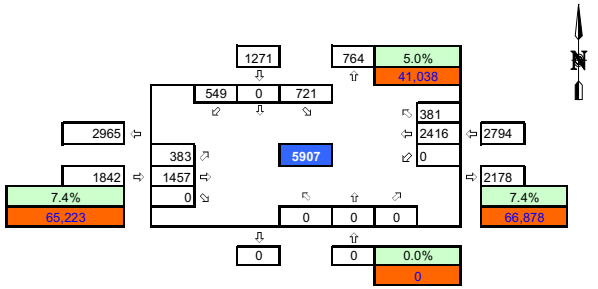
Int 34 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Eastgate Mall**
E/W Street:	**Miramar Road**
Intersection #:	34
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Eastgate Mall**
E/W Street:	**Miramar Road**



LEGEND

Existing K-Factor	xx%
ADT Volume	xx

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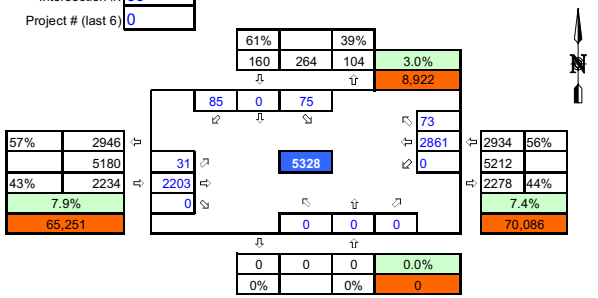
Int 34 PM

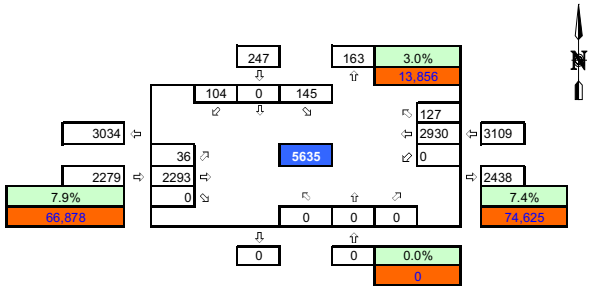
Int 35 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Miramar Mall**
E/W Street:	**Miramar Road**
Intersection #:	35
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Miramar Mall**
E/W Street:	**Miramar Road**



LEGEND

Existing K-Factor	xx%
ADT Volume	xx

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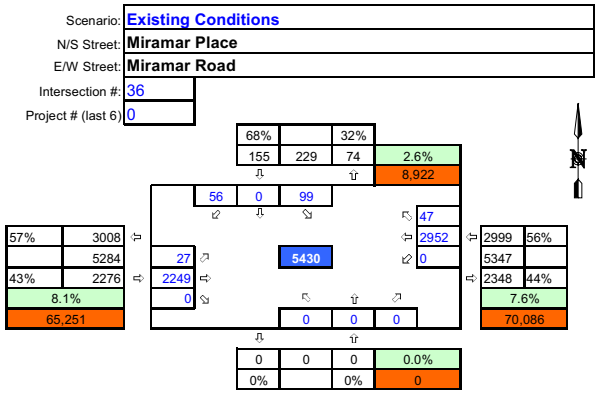
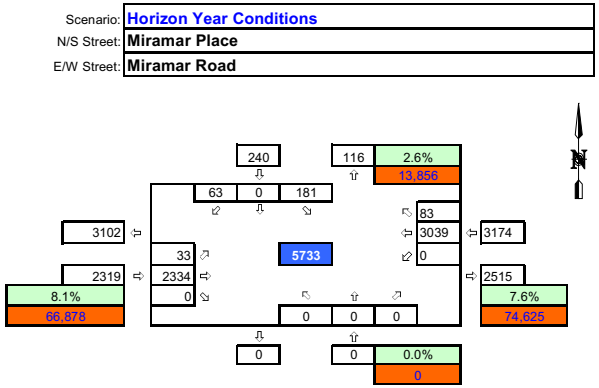
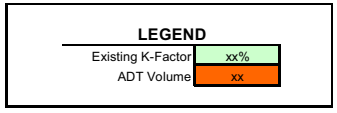
Int 35 PM

Int 36 PM Peak Volumes

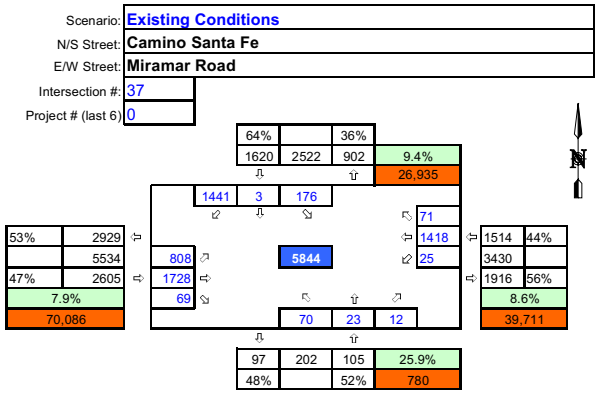


Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

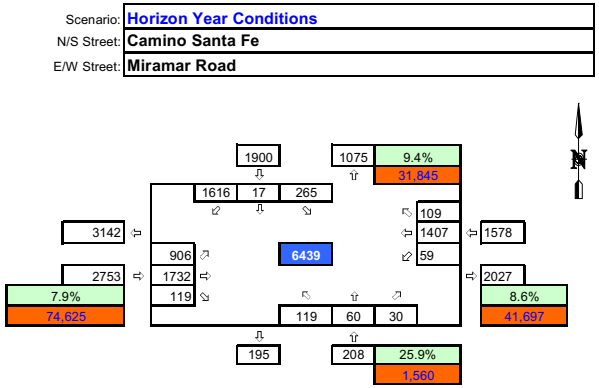


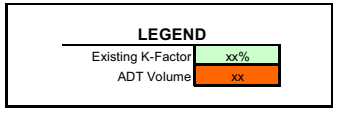


Int 37 PM Peak Volumes

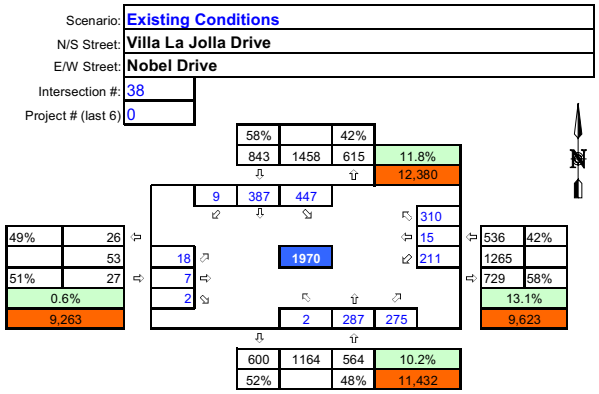


Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

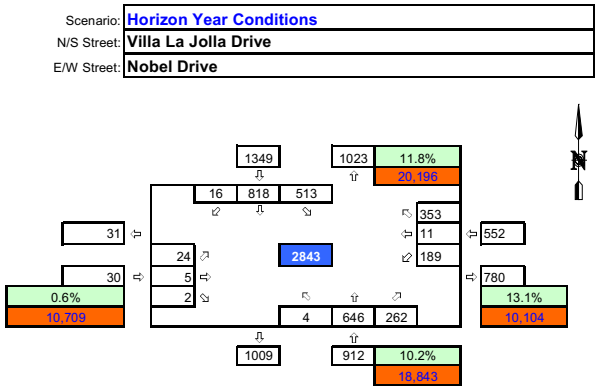


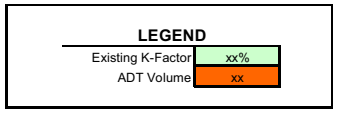


Int 38 PM Peak Volumes

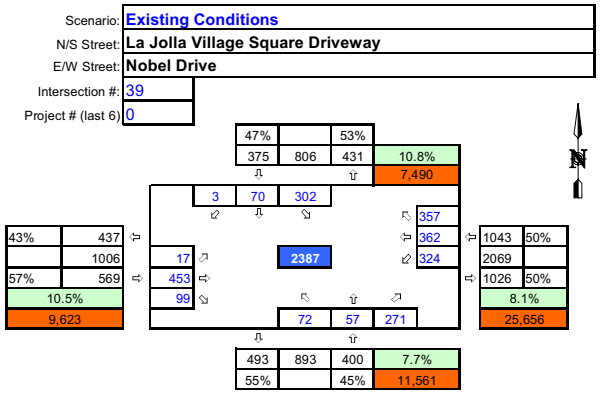


Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

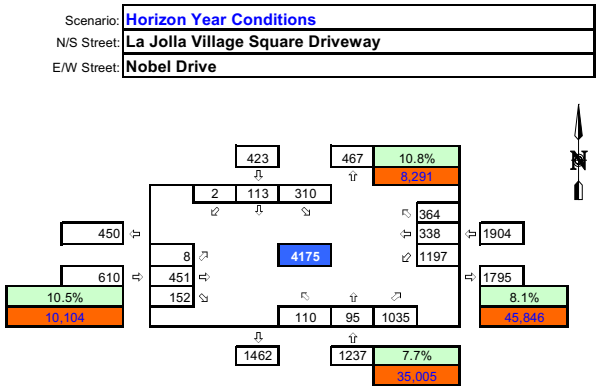


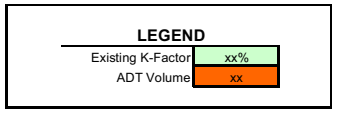


Int 39 PM Peak Volumes



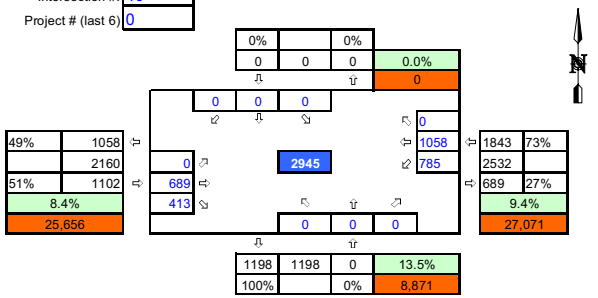
Note: Traffic volumes were collected by Accurate Video Counts during May 2015.





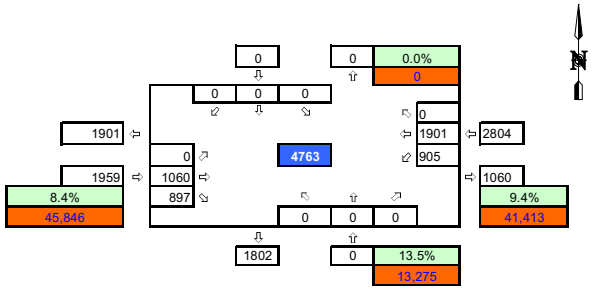
Int 40 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**I-5 SB On**
E/W Street:	**Nobel Drive**
Intersection #:	40
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**I-5 SB On**
E/W Street:	**Nobel Drive**



LEGEND

Existing K-Factor	xx%
ADT Volume	xx

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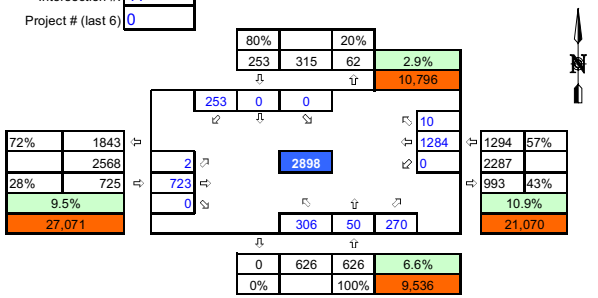
Int 40 PM

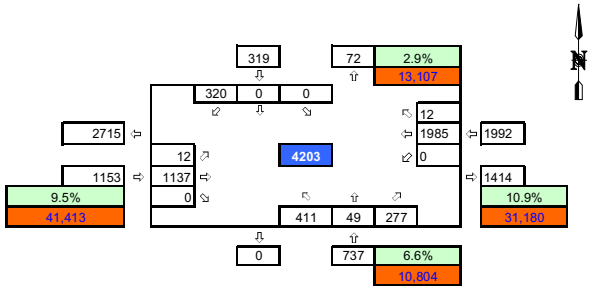
Int 41 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**University Center Lane/I-5 NB Off**
E/W Street:	**Nobel Drive**
Intersection #:	41
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**University Center Lane/I-5 NB Off**
E/W Street:	**Nobel Drive**



LEGEND

Existing K-Factor	xx%
ADT Volume	xx

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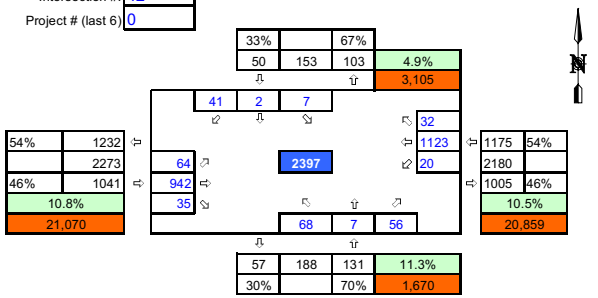
Int 41 PM

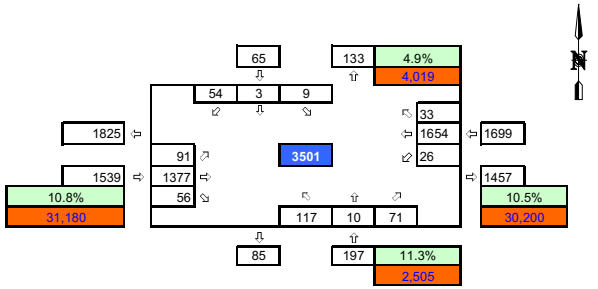
Int 42 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Caminito Plaza Centro**
E/W Street:	**Nobel Drive**
Intersection #:	42
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Caminito Plaza Centro**
E/W Street:	**Nobel Drive**



LEGEND

Existing K-Factor	xx%
ADT Volume	xx

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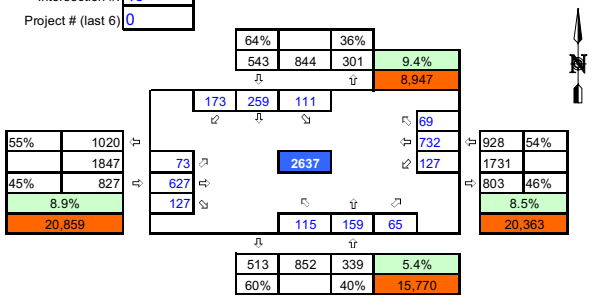
Int 42 PM

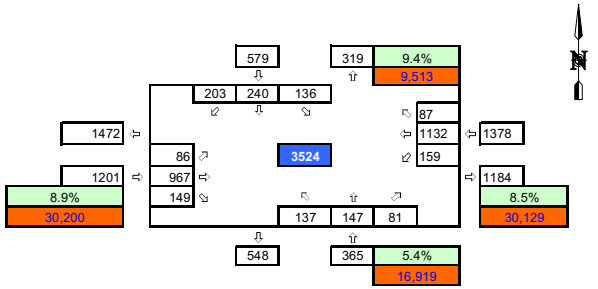
Int 43 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Lebon Drive**
E/W Street:	**Nobel Drive**
Intersection #:	43
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Lebon Drive**
E/W Street:	**Nobel Drive**



LEGEND

Existing K-Factor	xx%
ADT Volume	xx

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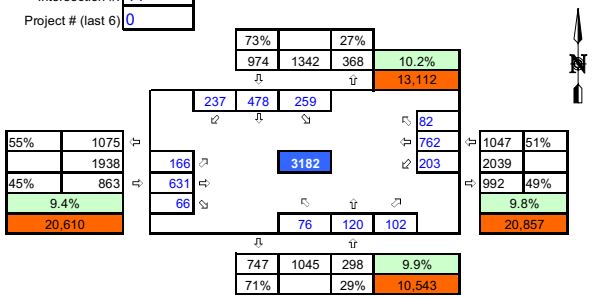
Int 43 PM

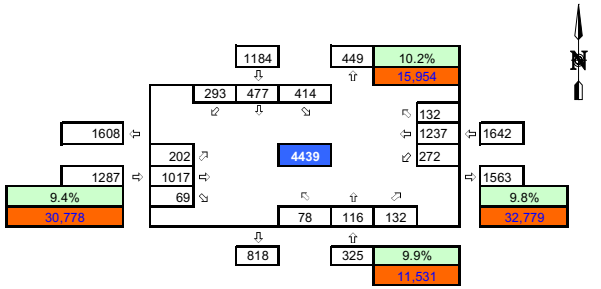
Int 44 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Regents Road**
E/W Street:	**Nobel Drive**
Intersection #:	44
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Regents Road**
E/W Street:	**Nobel Drive**

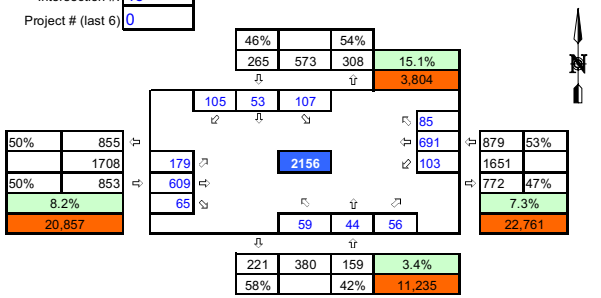


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

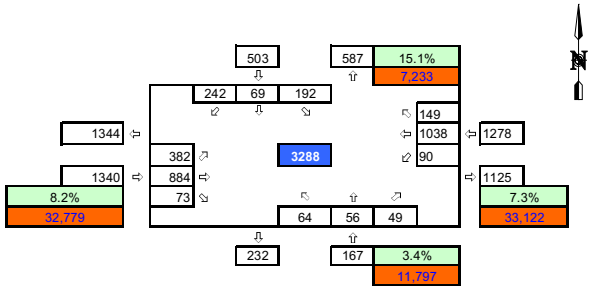
Int 45 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Costa Verde Boulevard/Cargill Ave**
E/W Street:	**Cargill Ave / Nobel Drive**
Intersection #:	45
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Costa Verde Boulevard/Cargill Ave**
E/W Street:	**Cargill Ave / Nobel Drive**

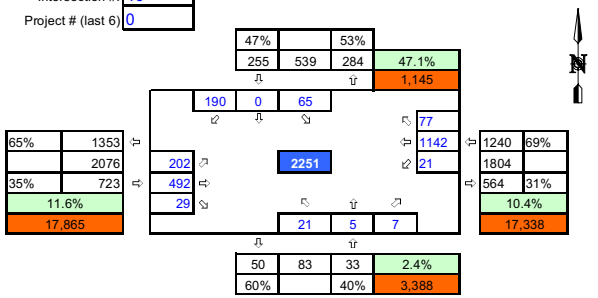


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

Int 46 PM Peak Volumes

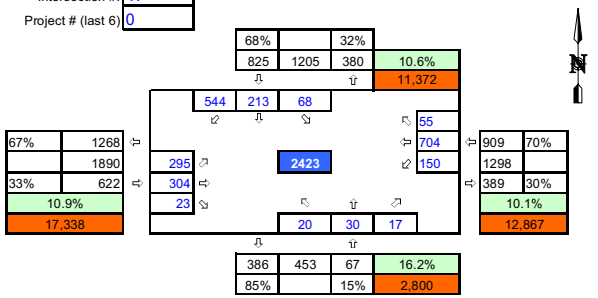
Scenario:	**Existing Conditions**
N/S Street:	**Lombard Place**
E/W Street:	**Nobel Drive**
Intersection #:	46
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

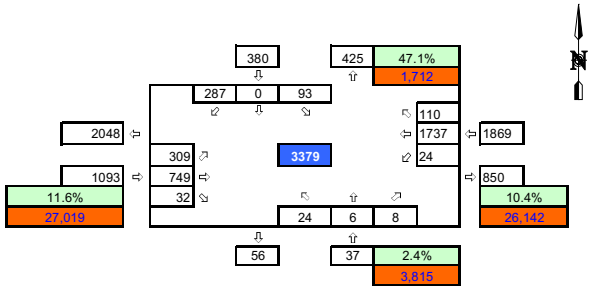
Int 47 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Towne Center Drive**
E/W Street:	**Nobel Drive**
Intersection #:	47
Project # (last 6)	0

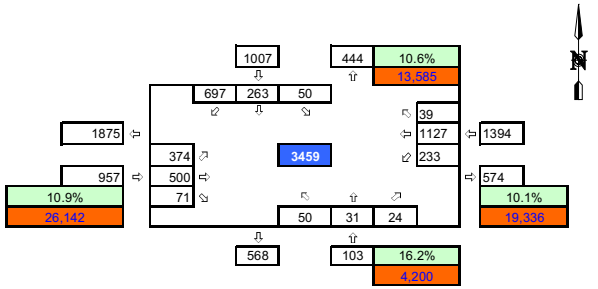


Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Lombard Place**
E/W Street:	**Nobel Drive**



Scenario:	**Horizon Year Conditions**
N/S Street:	**Towne Center Drive**
E/W Street:	**Nobel Drive**

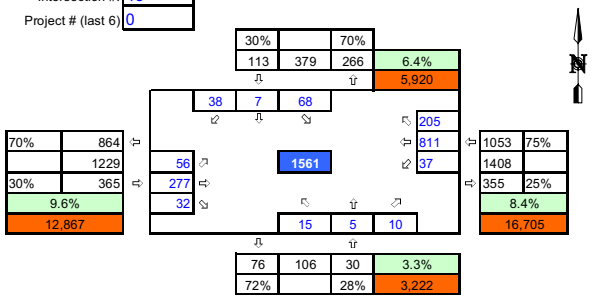


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

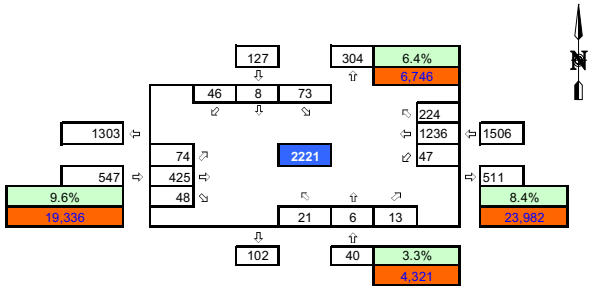
Int 48 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Shoreline Drive**
E/W Street: **Nobel Drive**
Intersection #: 48
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Shoreline Drive**
E/W Street: **Nobel Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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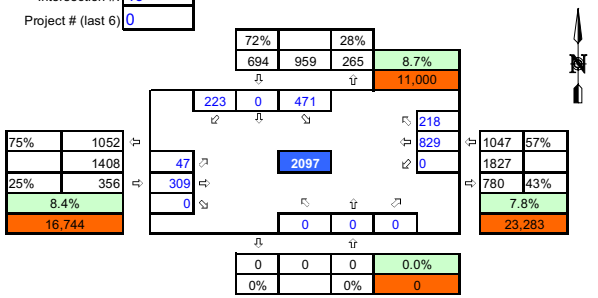
Int 48 PM

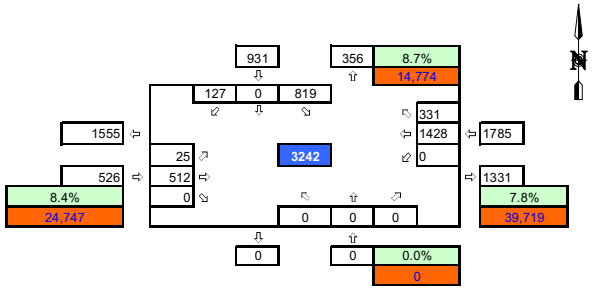
Int 49 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Judicial Drive**
E/W Street: **Nobel Drive**
Intersection #: 49
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Judicial Drive**
E/W Street: **Nobel Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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Int 49 PM

Int 50 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Nobel Drive**
E/W Street:	**I-805 SB On-Ramp**
Intersection #:	50
Project # (last 6)	0

North leg: 77% | | 23%
1260 | 1629 | 369 | 7.5% | 21,663

Southbound: 0 | 974 | 286
Westbound: 0 | 0 | 0
East leg: 0 | 0%; 671; 671 | 100%; 4.0%; 16,678
West leg: 0% | 0; 0; 0% | 0; 0.0%; 0
Eastbound: 0 | 0 | 0
Total: 2014
Northbound: 0 | 369 | 385

South leg: 974 | 1728 | 754 | 7.4%
56% | | 44% | 23,283

Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Nobel Drive**
E/W Street:	**I-805 SB On-Ramp**

North leg: 1920 | 630 | 7.5% | 34,892
Southbound: 0 | 1761 | 178
Westbound: 0 | 0 | 0
East leg: 0; 747; 4.0%; 17,512
West leg: 0; 0; 0.0%; 0
Eastbound: 0 | 0 | 0
Total: 3138
Northbound: 0 | 630 | 569
South leg: 1761 | 1218 | 7.4% | 39,719

LEGEND

Existing K-Factor	xx%
ADT Volume	xx

Int 51 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Nobel Drive**
E/W Street:	**I-805 N Off-Ramp**
Intersection #:	51
Project # (last 6)	0

North leg: 47% | | 53%
708 | 1513 | 805 | 7.7% | 19,647

Southbound: 0 | 708 | 0
Westbound: 436 | 0 | 552
East leg: 988 | 100%; 988; 0 | 0%; 7.4%; 13,325
West leg: 0% | 0; 0; 0% | 0; 0.0%; 0
Eastbound: 0 | 0 | 0
Total: 2065
Northbound: 0 | 369 | 0

South leg: 1260 | 1629 | 369 | 7.5%
77% | | 23% | 21,663

Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Nobel Drive**
E/W Street:	**I-805 N Off-Ramp**

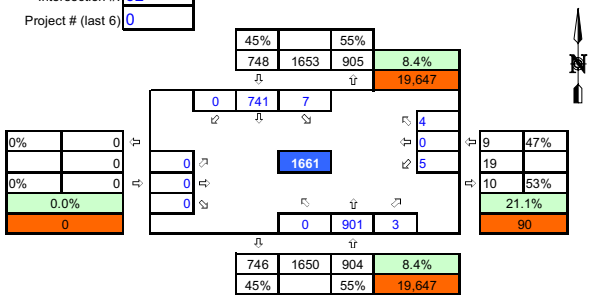
North leg: 1005 | 968 | 7.7% | 25,585
Southbound: 0 | 1006 | 0
Westbound: 374 | 0 | 715
East leg: 1089; 0; 7.4%; 13,477
West leg: 0; 0; 0.0%; 0
Eastbound: 0 | 0 | 0
Total: 2689
Northbound: 0 | 594 | 0
South leg: 1721 | 595 | 7.5% | 32,030

LEGEND

Existing K-Factor	xx%
ADT Volume	xx

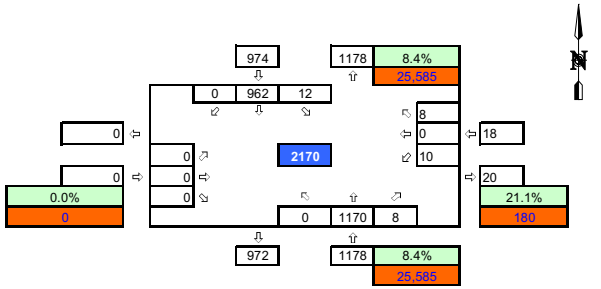
Int 52 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Nobel Drive**
E/W Street:	**Avenue of Flags**
Intersection #:	52
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Nobel Drive**
E/W Street:	**Avenue of Flags**



LEGEND

Existing K-Factor	xx%
ADT Volume	xx

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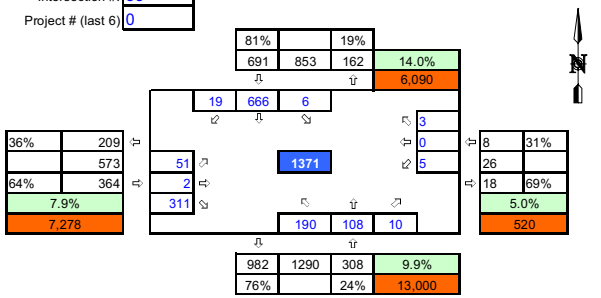
Int 52 PM

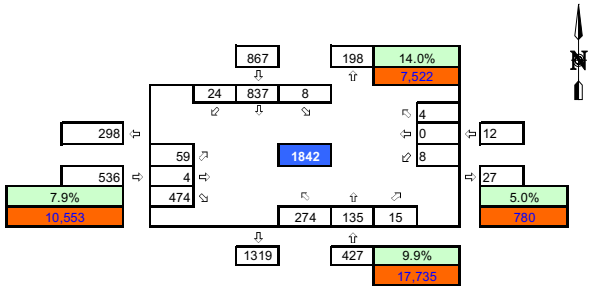
Int 53 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Regents Road**
E/W Street:	**Health Science Drive / County Day Ln**
Intersection #:	53
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Regents Road**
E/W Street:	**Health Science Drive / County Day Ln**



LEGEND

Existing K-Factor	xx%
ADT Volume	xx

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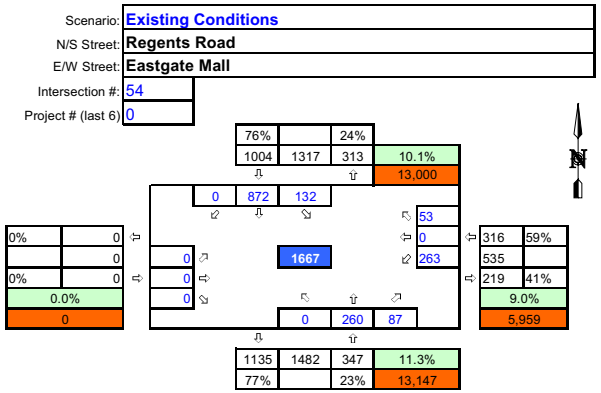
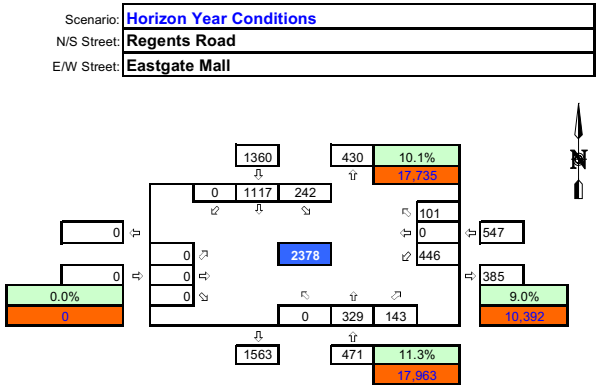
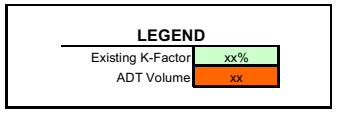
Int 53 PM

Int 54 PM Peak Volumes

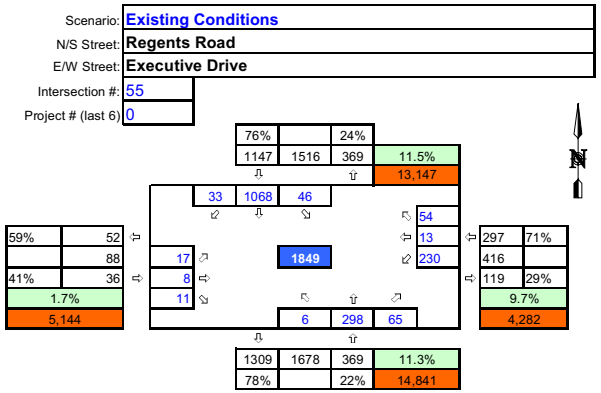


Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

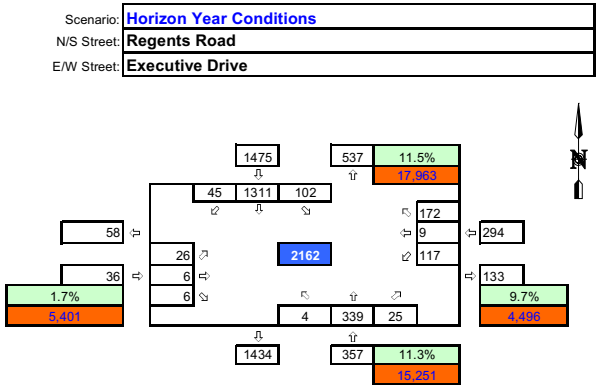


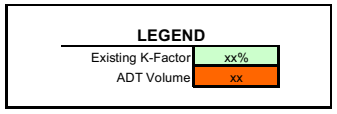


Int 55 PM Peak Volumes



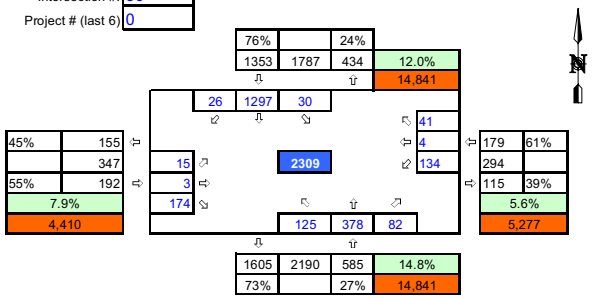
Note: Traffic volumes were collected by Accurate Video Counts during May 2015.





Int 56 PM Peak Volumes

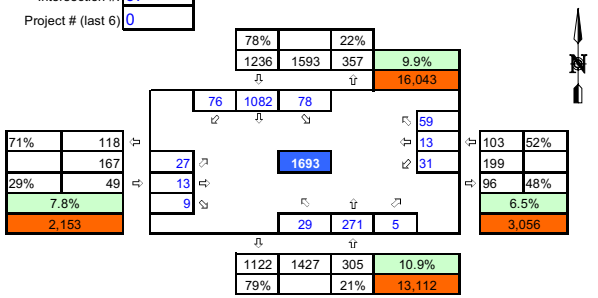
Scenario:	**Existing Conditions**
N/S Street:	**Regents Road**
E/W Street:	**Miramar Street / Regents Park Row**
Intersection #:	56
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

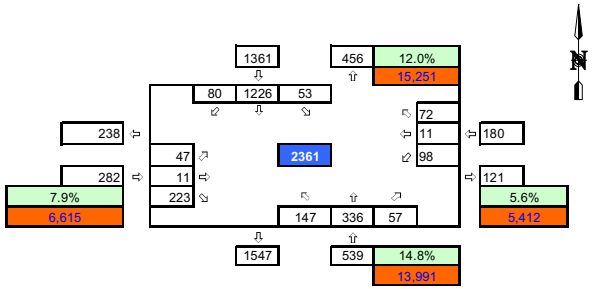
Int 57 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Regents Road**
E/W Street:	**Plaza De Palmas**
Intersection #:	57
Project # (last 6)	0

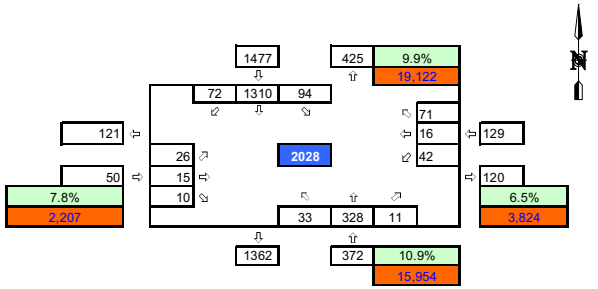


Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Regents Road**
E/W Street:	**Miramar Street / Regents Park Row**



Scenario:	**Horizon Year Conditions**
N/S Street:	**Regents Road**
E/W Street:	**Plaza De Palmas**

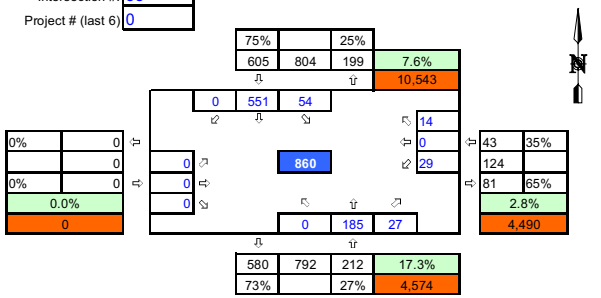


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

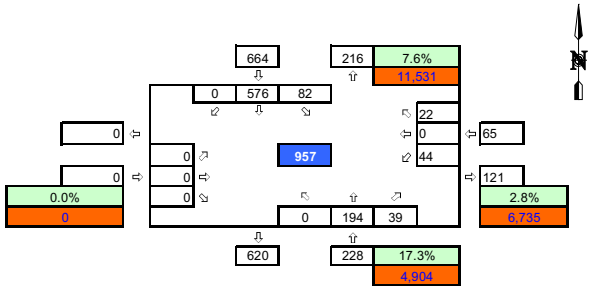
Int 58 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Regents Road**
E/W Street: **Berino Court**
Intersection #: 58
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Regents Road**
E/W Street: **Berino Court**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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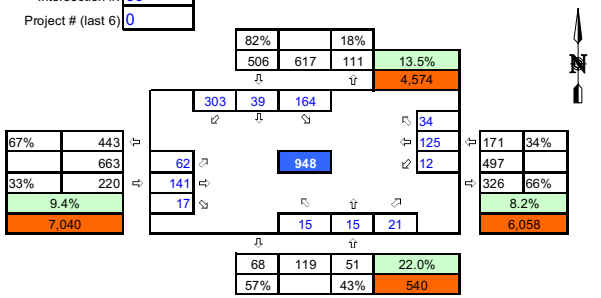
Int 58 PM

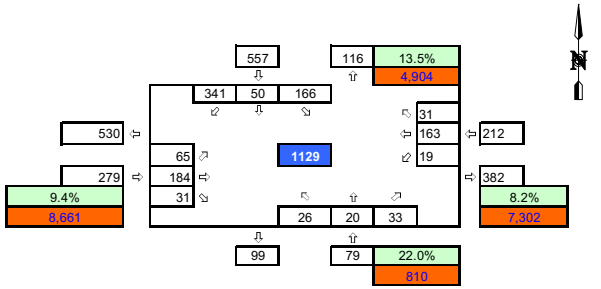
Int 59 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Regents Road**
E/W Street: **Arriba Street**
Intersection #: 59
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Regents Road**
E/W Street: **Arriba Street**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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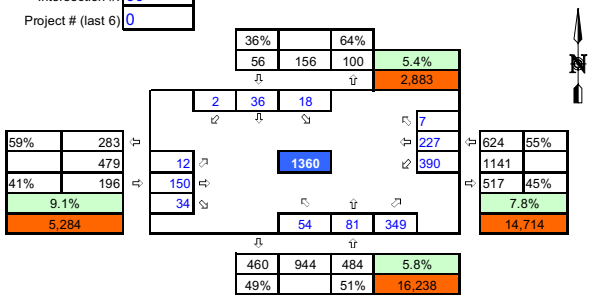
Int 59 PM

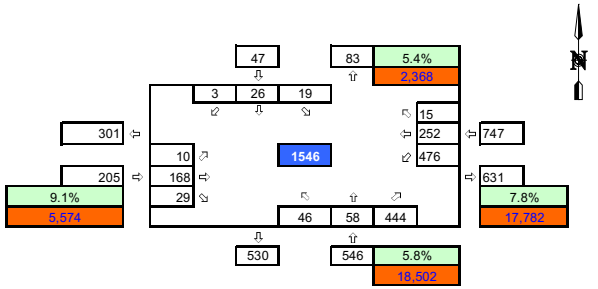
Int 60 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Regents Road**
E/W Street: **Governor Drive**
Intersection #: 60
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Regents Road**
E/W Street: **Governor Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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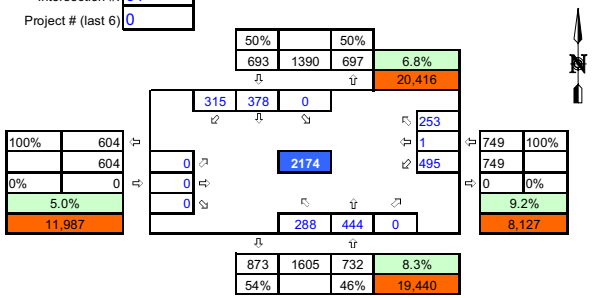
Int 60 PM

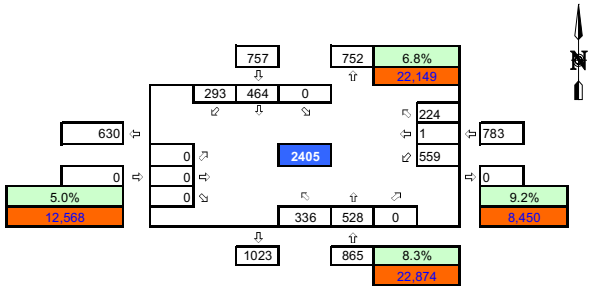
Int 61 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Regents Road**
E/W Street: **SR-52 WB Ramps**
Intersection #: 61
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Regents Road**
E/W Street: **SR-52 WB Ramps**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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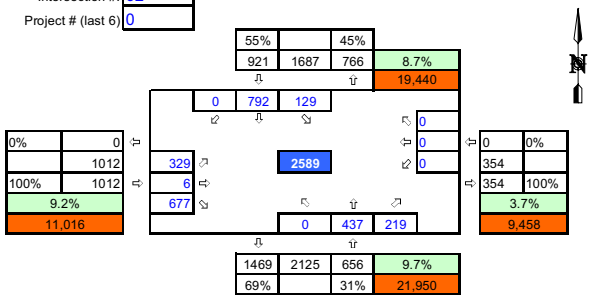
Int 61 PM

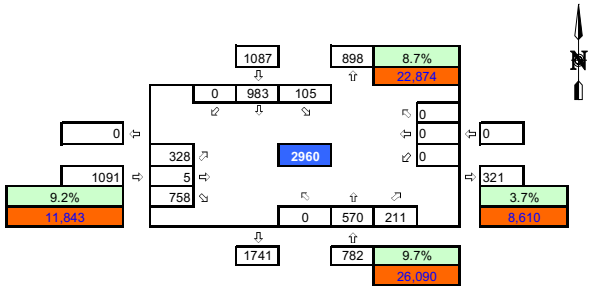
Int 62 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Regents Road**
E/W Street:	**SR-52 EB Ramps**
Intersection #:	62
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Regents Road**
E/W Street:	**SR-52 EB Ramps**



LEGEND

Existing K-Factor	xx%
ADT Volume	xx

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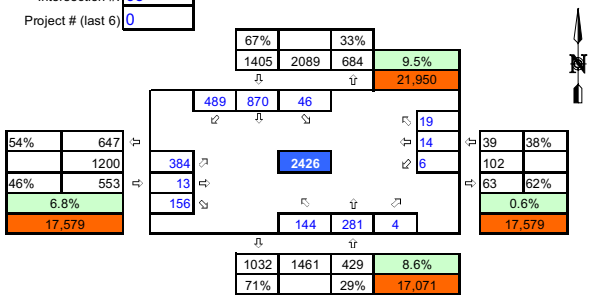
Int 62 PM

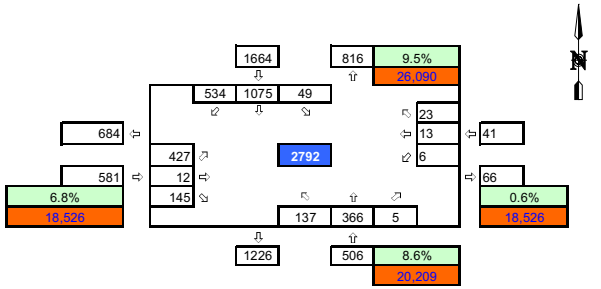
Int 63 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Regents Road / Clairemont Mesa Blvd**
E/W Street:	**Luna Avenue**
Intersection #:	63
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Regents Road / Clairemont Mesa Blvd**
E/W Street:	**Luna Avenue**



LEGEND

Existing K-Factor	xx%
ADT Volume	xx

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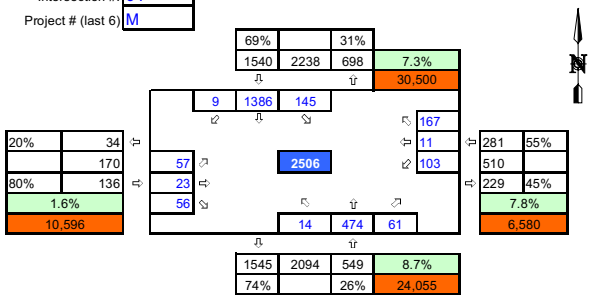
Int 63 PM

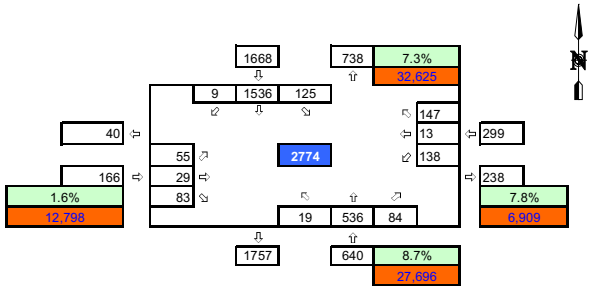
Int 64 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **N. Torrey Pines Road**
E/W Street: **UCSD Northpoint Driveway**
Intersection #: 64
Project # (last 6): M



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **N. Torrey Pines Road**
E/W Street: **UCSD Northpoint Driveway**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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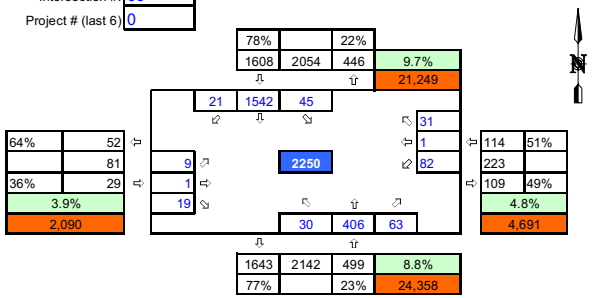
Int 64 PM

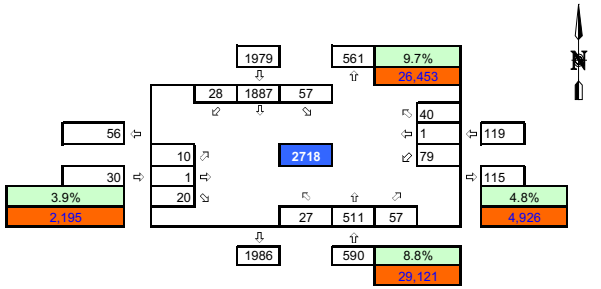
Int 65 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **N. Torrey Pines Road**
E/W Street: **Pangea Drive**
Intersection #: 65
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **N. Torrey Pines Road**
E/W Street: **Pangea Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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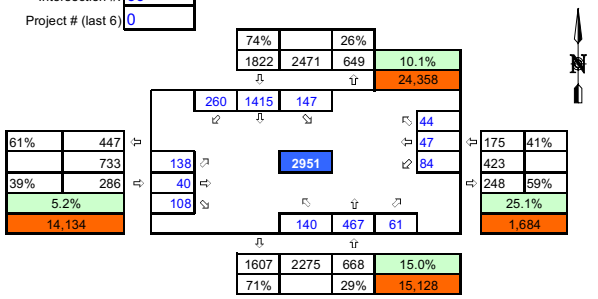
Int 65 PM

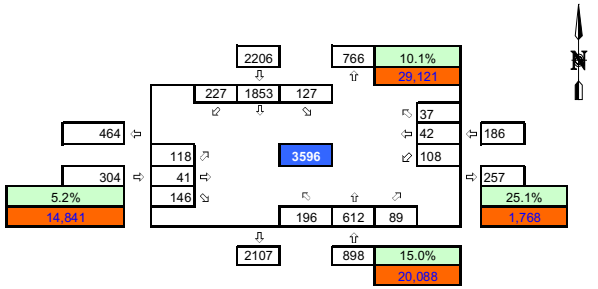
Int 66 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **N. Torrey Pines Road**
E/W Street: **La Jolla Shores Drive**
Intersection #: 66
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **N. Torrey Pines Road**
E/W Street: **La Jolla Shores Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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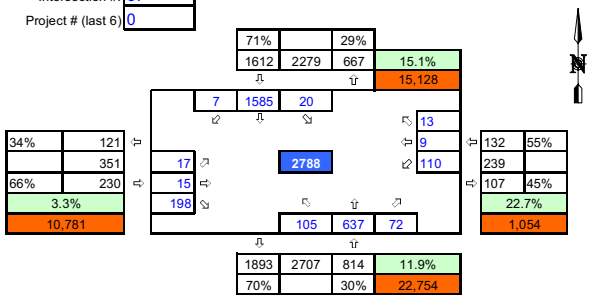
Int 66 PM

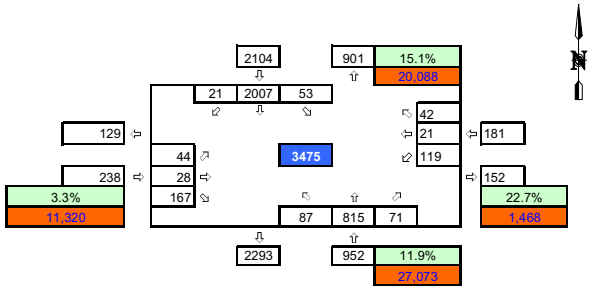
Int 67 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **N. Torrey Pines Road**
E/W Street: **Expedition Way / Revelle College Drive**
Intersection #: 67
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **N. Torrey Pines Road**
E/W Street: **Expedition Way / Revelle College Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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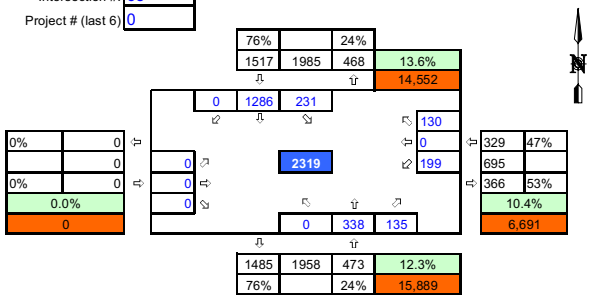
Int 67 PM

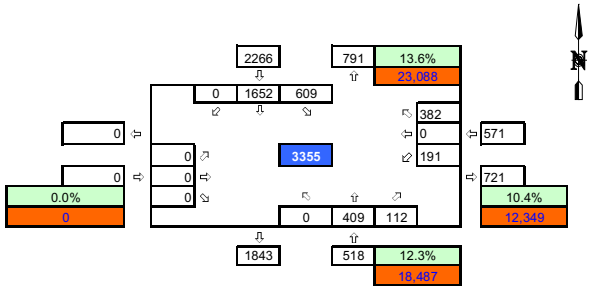
Int 68 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Gilman Drive**
E/W Street: **Villa La Jolla Drive**
Intersection #: 68
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Gilman Drive**
E/W Street: **Villa La Jolla Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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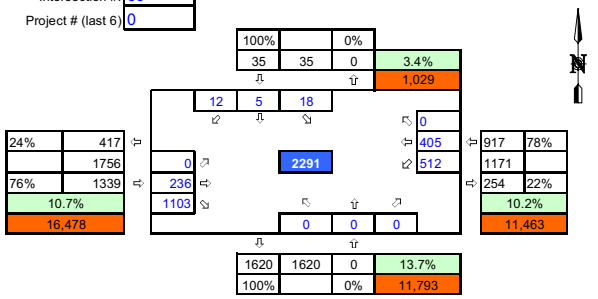
Int 68 PM

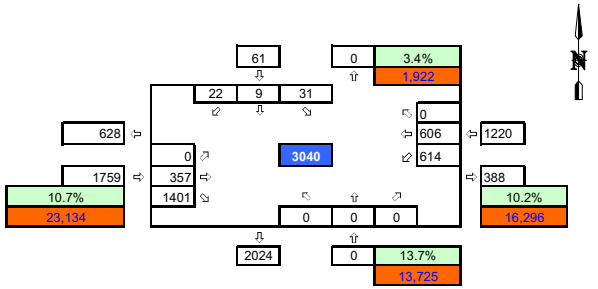
Int 69 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **I-5 SB Ramps**
E/W Street: **Gillman Drive**
Intersection #: 69
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **I-5 SB Ramps**
E/W Street: **Gillman Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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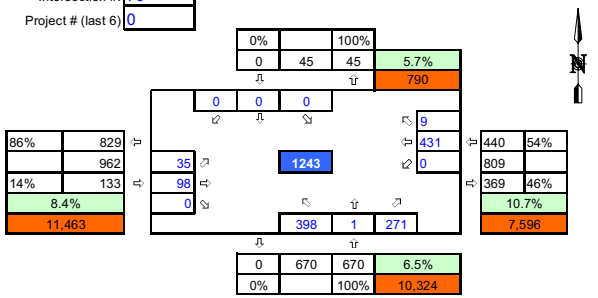
Int 69 PM

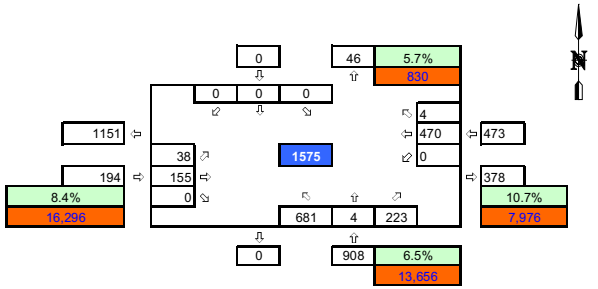
Int 70 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**I-5 NB Ramps**
E/W Street:	**Gillman Drive**
Intersection #:	70
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**I-5 NB Ramps**
E/W Street:	**Gillman Drive**

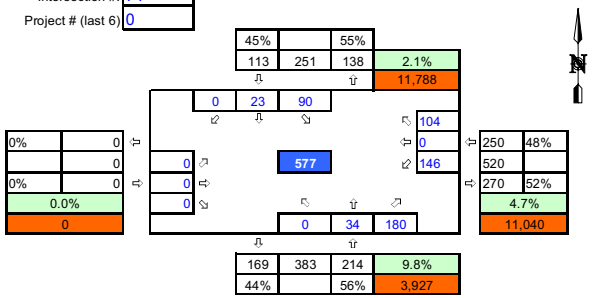


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

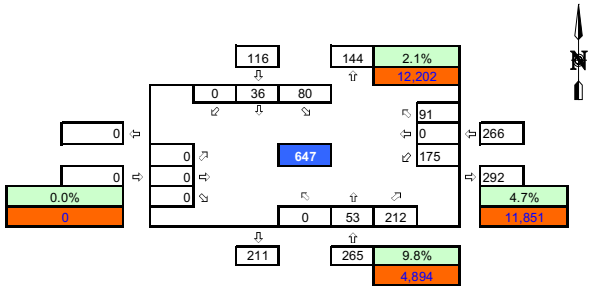
Int 71 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Charmant Drive / Palmilla Drive**
E/W Street:	**Lebon Drive**
Intersection #:	71
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Charmant Drive / Palmilla Drive**
E/W Street:	**Lebon Drive**

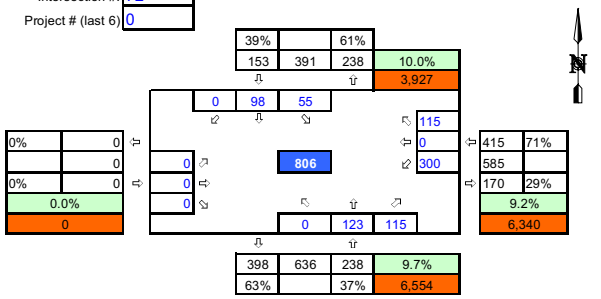


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

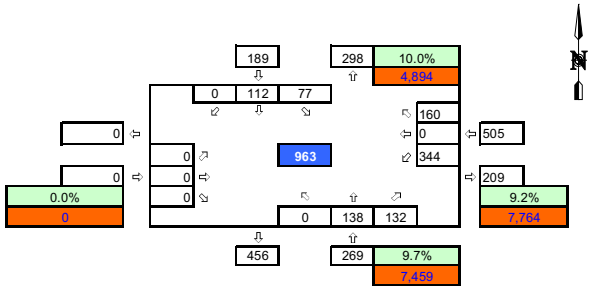
Int 72 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Palmilla Drive**
E/W Street: **Ariba Street**
Intersection #: 72
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Palmilla Drive**
E/W Street: **Ariba Street**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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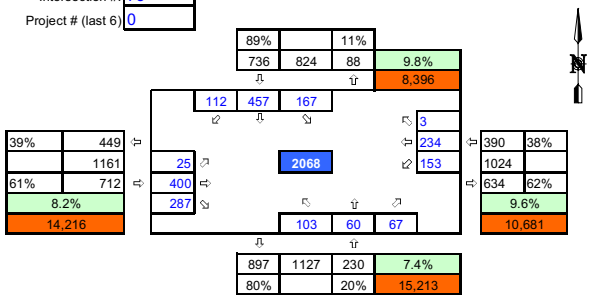
Int 72 PM

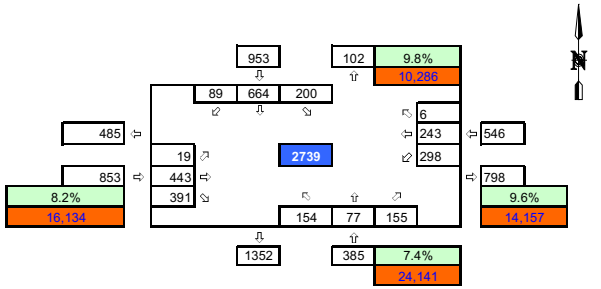
Int 73 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Towne Center Drive**
E/W Street: **Eastgate Mall**
Intersection #: 73
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Towne Center Drive**
E/W Street: **Eastgate Mall**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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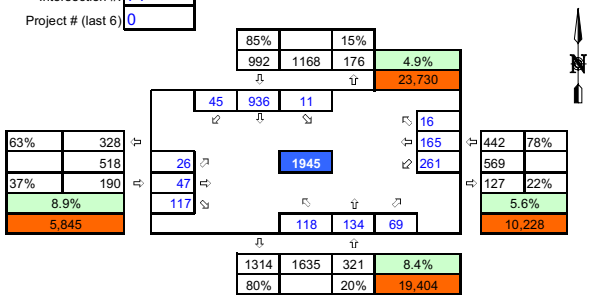
Int 73 PM

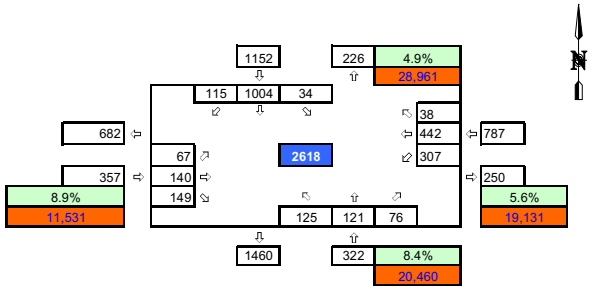
Int 74 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Towne Center Drive**
E/W Street: **Executive Drive**
Intersection #: 74
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Towne Center Drive**
E/W Street: **Executive Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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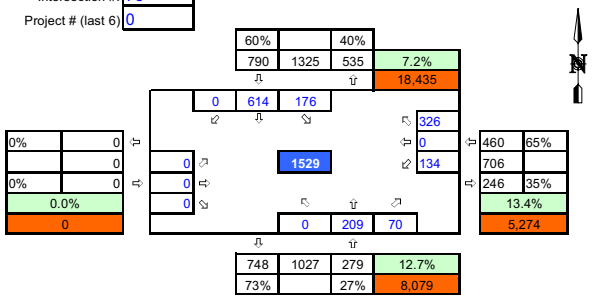
Int 74 PM

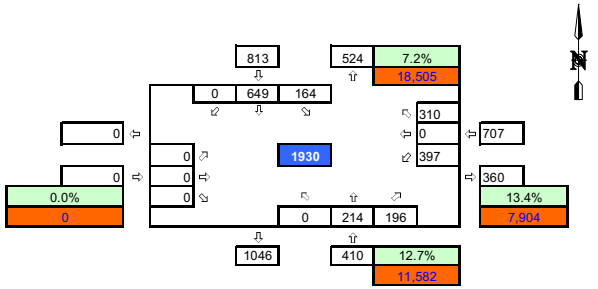
Int 75 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Towne Center Drive**
E/W Street: **Golden Haven Drive**
Intersection #: 75
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Towne Center Drive**
E/W Street: **Golden Haven Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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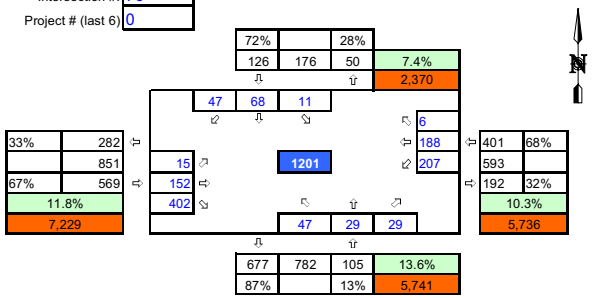
Int 75 PM

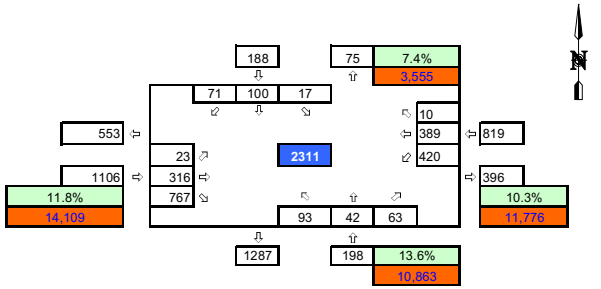
Int 76 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Executive Way**
E/W Street: **Executive Drive**
Intersection #: 76
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Executive Way**
E/W Street: **Executive Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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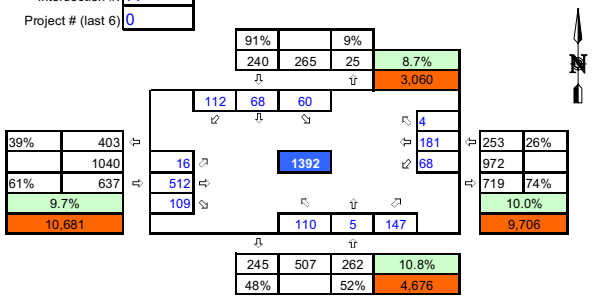
Int 76 PM

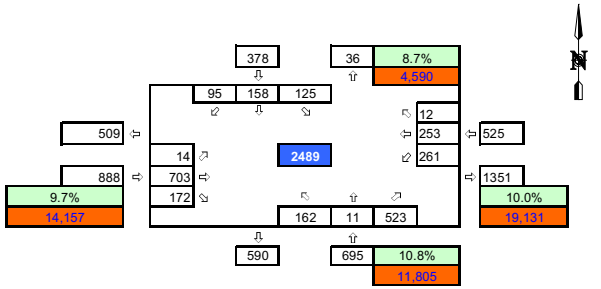
Int 77 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Judicial Drive**
E/W Street: **Eastgate Mall**
Intersection #: 77
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Judicial Drive**
E/W Street: **Eastgate Mall**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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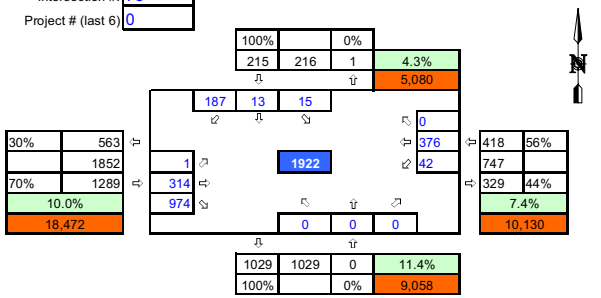
Int 77 PM

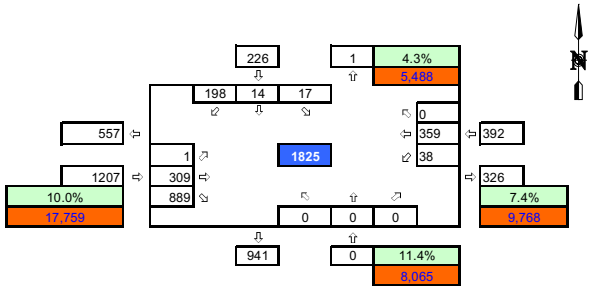
Int 78 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**I-805 SB Ramps**
E/W Street:	**Governor Drive**
Intersection #:	78
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**I-805 SB Ramps**
E/W Street:	**Governor Drive**



LEGEND

Existing K-Factor	xx%
ADT Volume	xx

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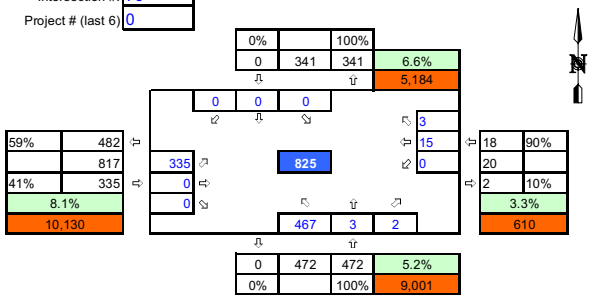
Int 78 PM

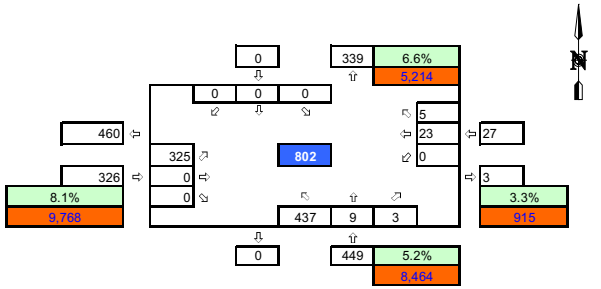
Int 79 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**I-805 NB Ramps**
E/W Street:	**Governor Drive**
Intersection #:	79
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**I-805 NB Ramps**
E/W Street:	**Governor Drive**



LEGEND

Existing K-Factor	xx%
ADT Volume	xx

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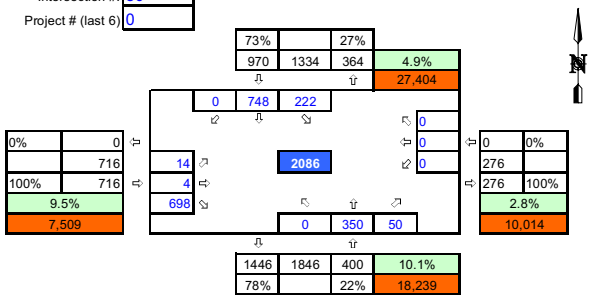
Int 79 PM

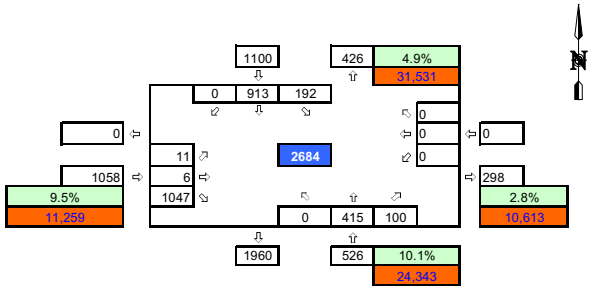
Int 80 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Gilman Drive**
E/W Street:	**La Jolla Village Drive EB**
Intersection #:	80
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Gilman Drive**
E/W Street:	**La Jolla Village Drive EB**



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

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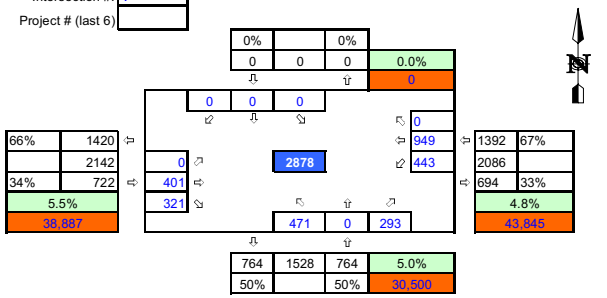
Int 80 PM

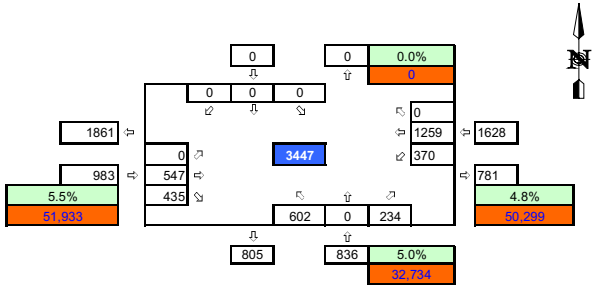
Int 1 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**N. Torrey Pines Road**
E/W Street:	**Genesee Avenue**
Intersection #:	1
Project # (last 6)	



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**N. Torrey Pines Road**
E/W Street:	**Genesee Avenue**



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

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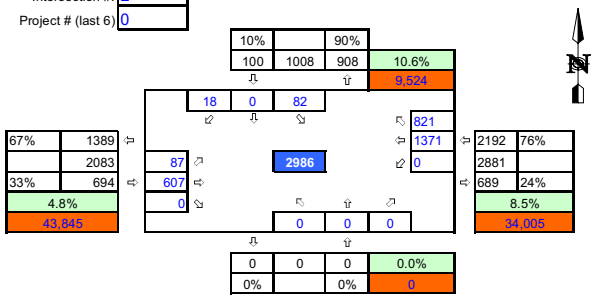
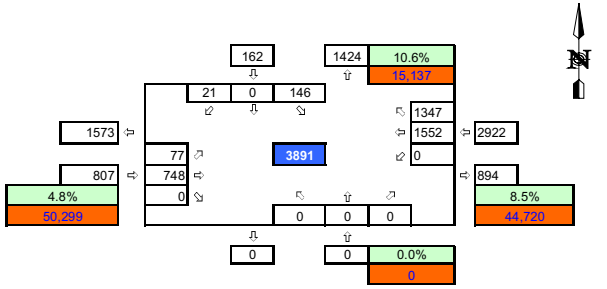
Int 2 AM Peak Volumes

Scenario:	Existing Conditions
N/S Street:	John Hopkins Drive (S)
E/W Street:	Genesee Avenue
Intersection #:	2
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

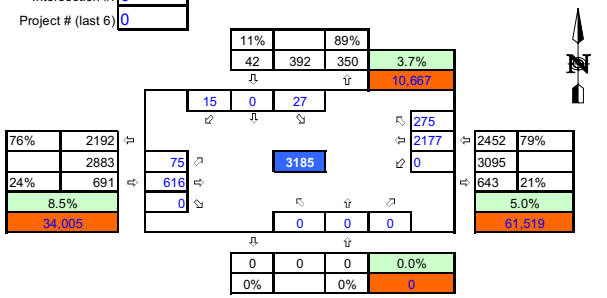
Scenario:	Horizon Year Conditions
N/S Street:	John Hopkins Drive (S)
E/W Street:	Genesee Avenue



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

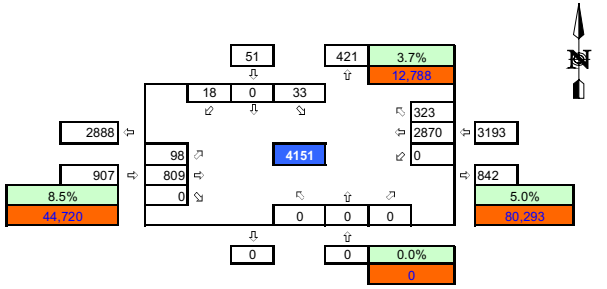
Int 3 AM Peak Volumes

Scenario:	Existing Conditions
N/S Street:	Science Center Drive
E/W Street:	Genesee Avenue
Intersection #:	3
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

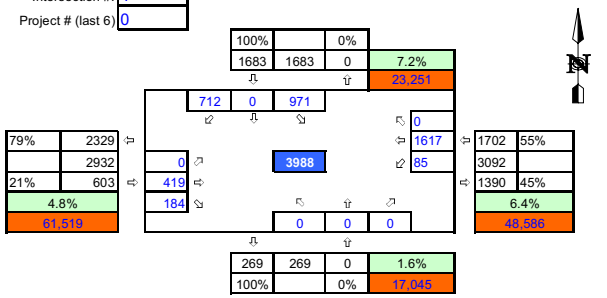
Scenario:	Horizon Year Conditions
N/S Street:	Science Center Drive
E/W Street:	Genesee Avenue



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

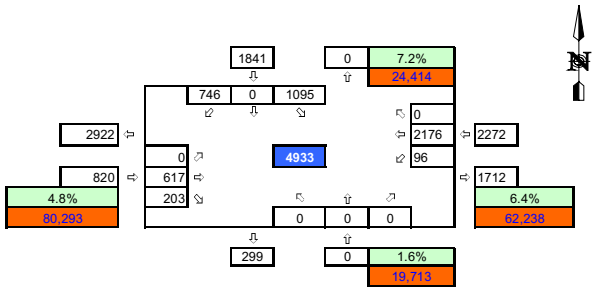
Int 4 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **I-5 SB Ramps**
E/W Street: **Genesee Avenue**
Intersection #: 4
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **I-5 SB Ramps**
E/W Street: **Genesee Avenue**

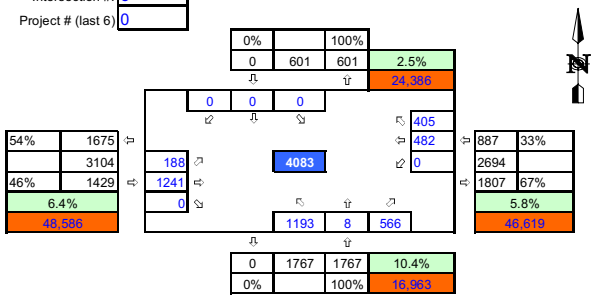


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

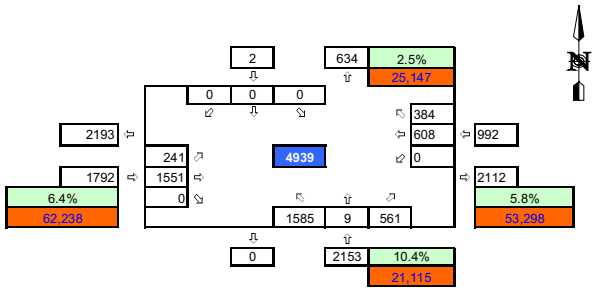
Int 5 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **I-5 NB Ramps**
E/W Street: **Genesee Avenue**
Intersection #: 5
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **I-5 NB Ramps**
E/W Street: **Genesee Avenue**

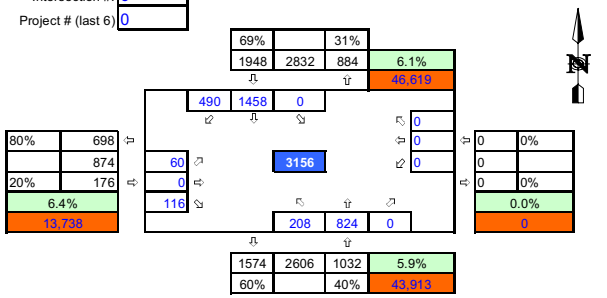


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

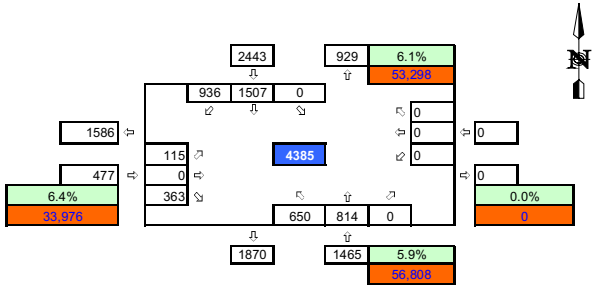
Int 6 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Scripps Hospital**
Intersection #: 6
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

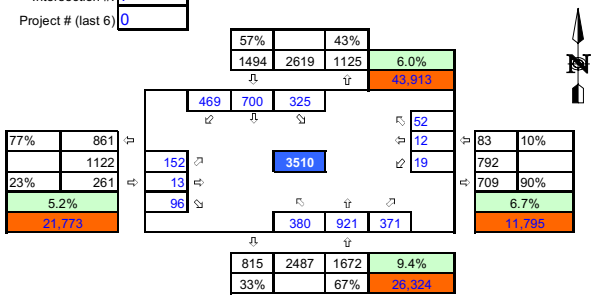
Scenario: **Horizon Year Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Scripps Hospital**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

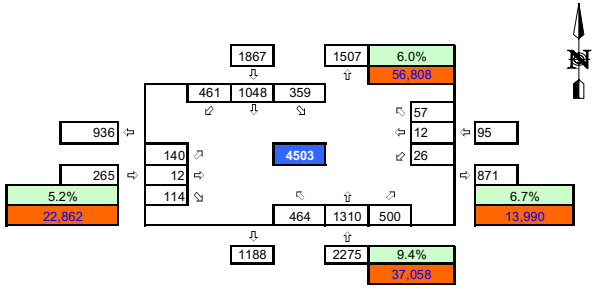
Int 7 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Campus Point Drive**
Intersection #: 7
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

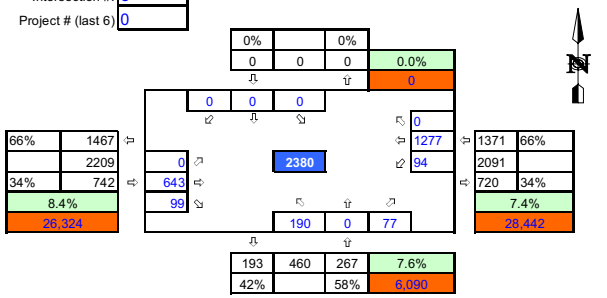
Scenario: **Horizon Year Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Campus Point Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

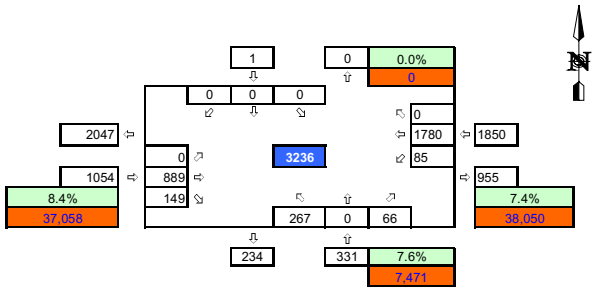
Int 8 AM Peak Volumes

Scenario:	Existing Conditions
N/S Street:	Regents Road
E/W Street:	Genesee Avenue
Intersection #:	8
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

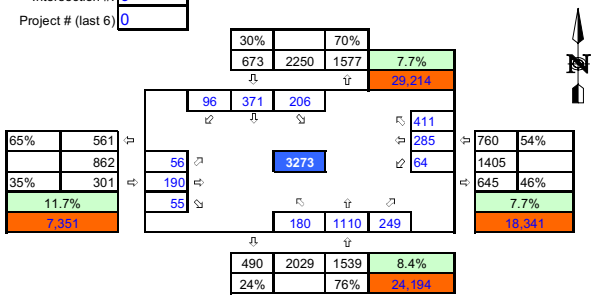
Scenario:	Horizon Year Conditions
N/S Street:	Regents Road
E/W Street:	Genesee Avenue



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

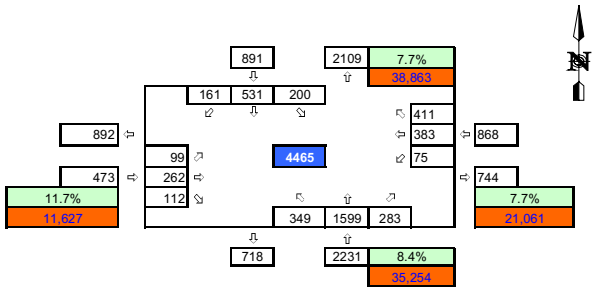
Int 9 AM Peak Volumes

Scenario:	Existing Conditions
N/S Street:	Genesee Avenue
E/W Street:	Eastgate Mall
Intersection #:	9
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

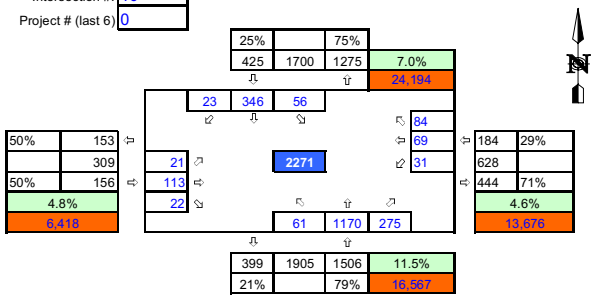
Scenario:	Horizon Year Conditions
N/S Street:	Genesee Avenue
E/W Street:	Eastgate Mall



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

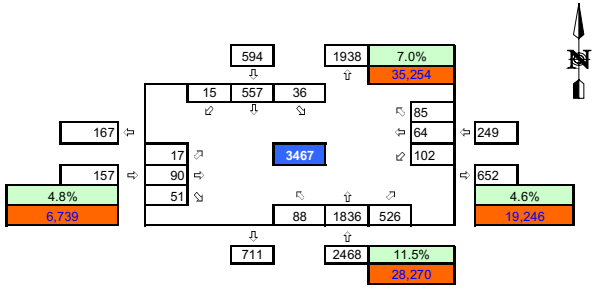
Int 10 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Executive Drive**
Intersection #: 10
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Executive Drive**



LEGEND

Existing K-Factor	xx%
ADT Volume	xx

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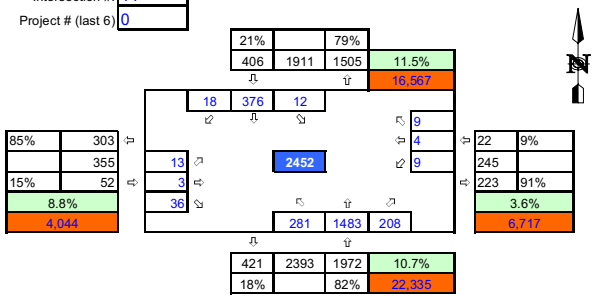
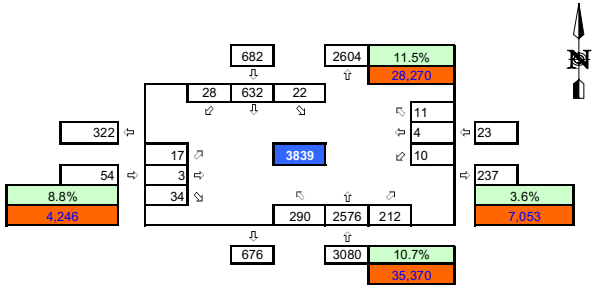
Int 11 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Executive Square**
Intersection #: 11
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Executive Square**



LEGEND

Existing K-Factor	xx%
ADT Volume	xx

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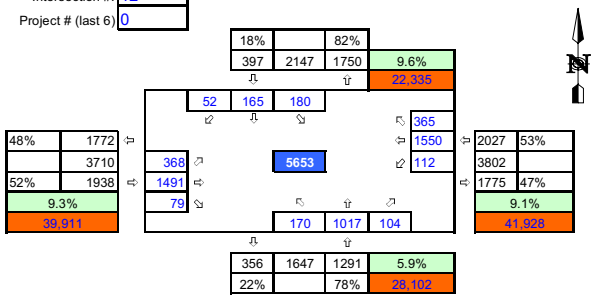
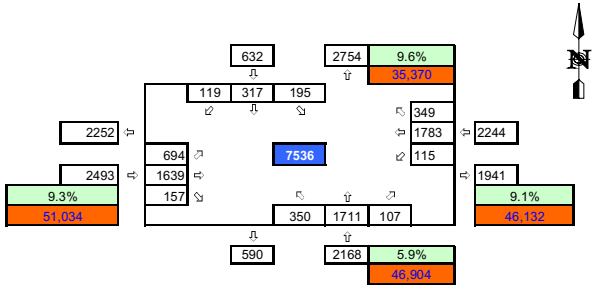
Int 12 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **La Jolla Village Drive**
Intersection #: 12
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **La Jolla Village Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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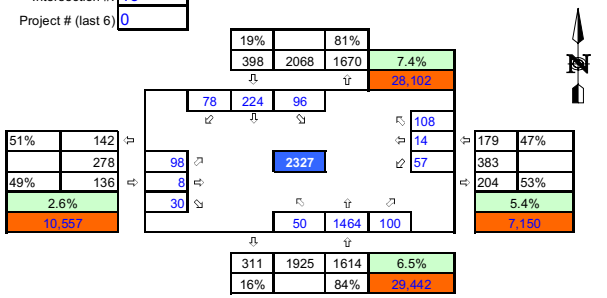
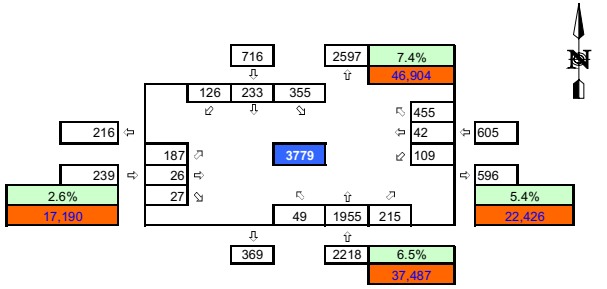
Int 13 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Esplanade Court**
Intersection #: 13
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Esplanade Court**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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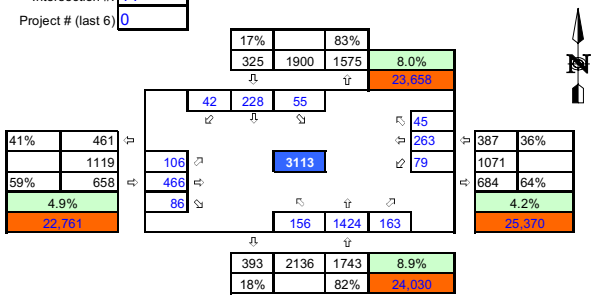
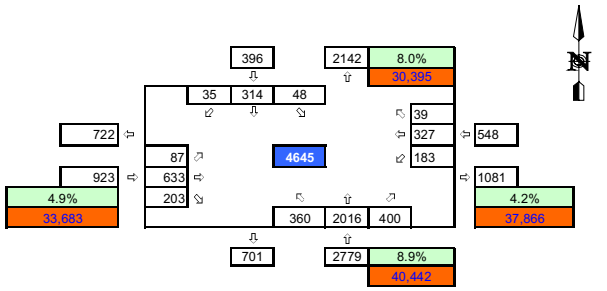
Int 14 AM Peak Volumes

Scenario:	Existing Conditions
N/S Street:	Genesee Avenue
E/W Street:	Nobel Drive
Intersection #:	14
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

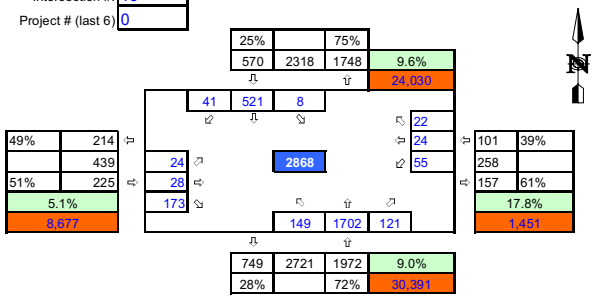
Scenario:	Horizon Year Conditions
N/S Street:	Genesee Avenue
E/W Street:	Nobel Drive



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

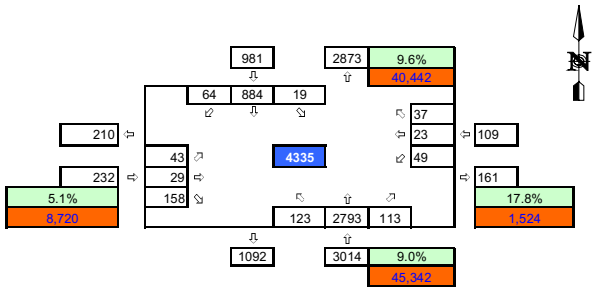
Int 15 AM Peak Volumes

Scenario:	Existing Conditions
N/S Street:	Genesee Avenue
E/W Street:	Decoro Street
Intersection #:	15
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

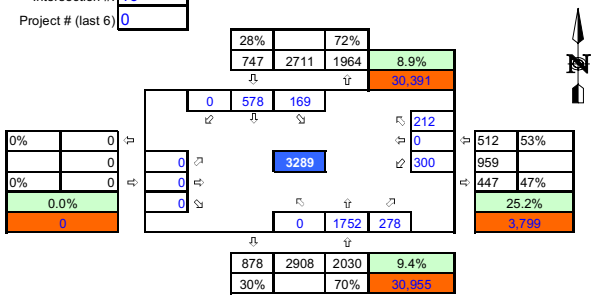
Scenario:	Horizon Year Conditions
N/S Street:	Genesee Avenue
E/W Street:	Decoro Street



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

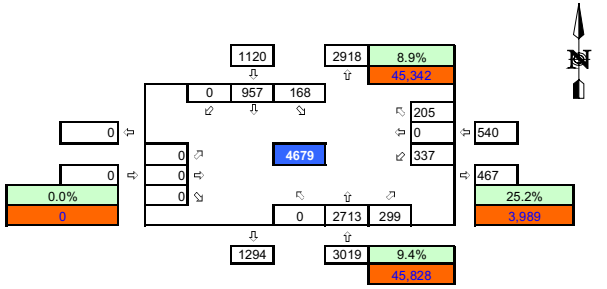
Int 16 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Centurion Square**
Intersection #: 16
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

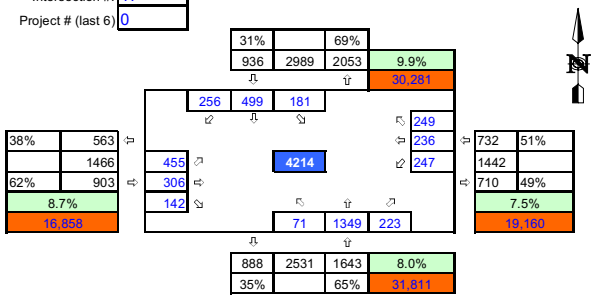
Scenario: **Horizon Year Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Centurion Square**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

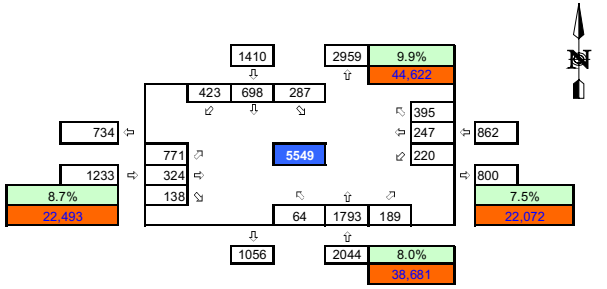
Int 17 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Governor Drive**
Intersection #: 17
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

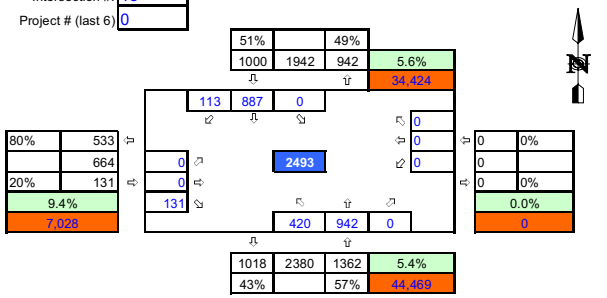
Scenario: **Horizon Year Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Governor Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

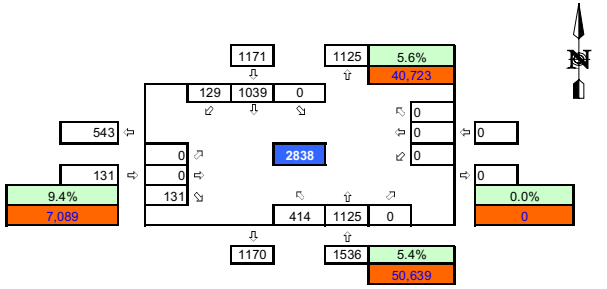
Int 18 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **SR-52 WB Ramps**
Intersection #: 18
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

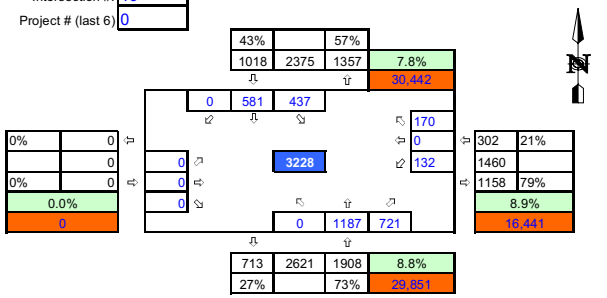
Scenario: **Horizon Year Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **SR-52 WB Ramps**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

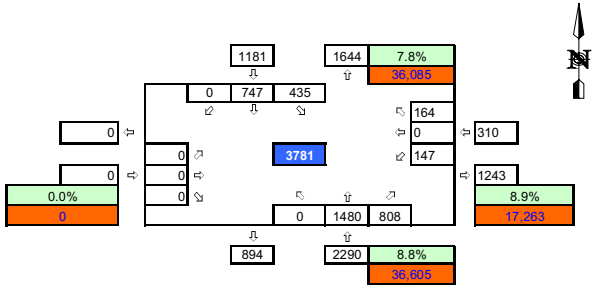
Int 19 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **SR-52 EB Ramps**
Intersection #: 19
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

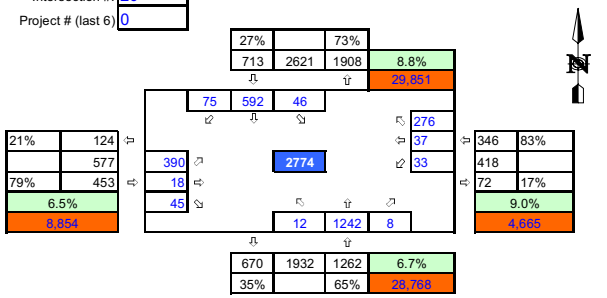
Scenario: **Horizon Year Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **SR-52 EB Ramps**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

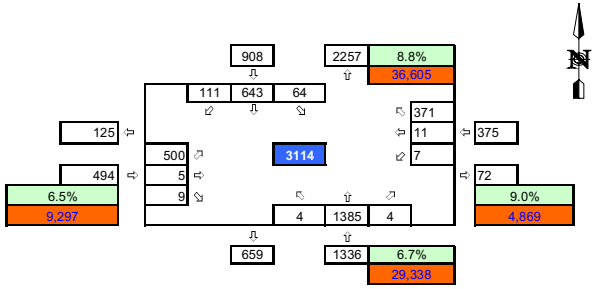
Int 20 AM Peak Volumes

Scenario:	Existing Conditions
N/S Street:	Genesee Avenue
E/W Street:	Lehrer Drive / Appleton Street
Intersection #:	20
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	Horizon Year Conditions
N/S Street:	Genesee Avenue
E/W Street:	Lehrer Drive / Appleton Street



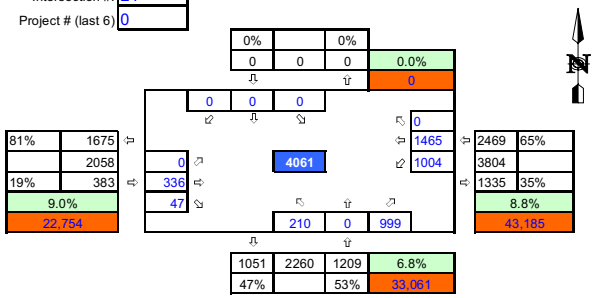
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

K:\SND_TPTO\095240101 - University CPA\Excel\Horizon Year Conditions\Alternative D\Turn32_Alt D.xlsx

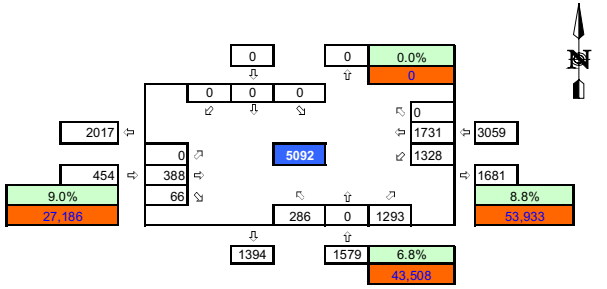
Int 21 AM Peak Volumes

Scenario:	Existing Conditions
N/S Street:	Torrey Pines Road
E/W Street:	La Jolla Village Drive
Intersection #:	21
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	Horizon Year Conditions
N/S Street:	Torrey Pines Road
E/W Street:	La Jolla Village Drive



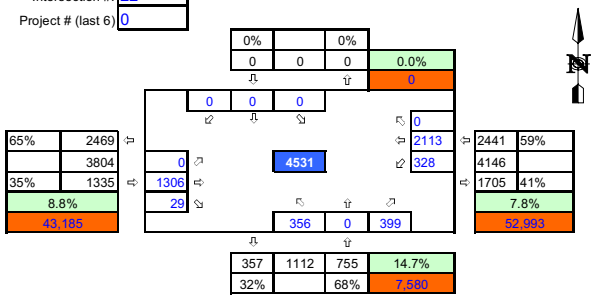
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

K:\SND_TPTO\095240101 - University CPA\Excel\Horizon Year Conditions\Alternative D\Turn32_Alt D.xlsx

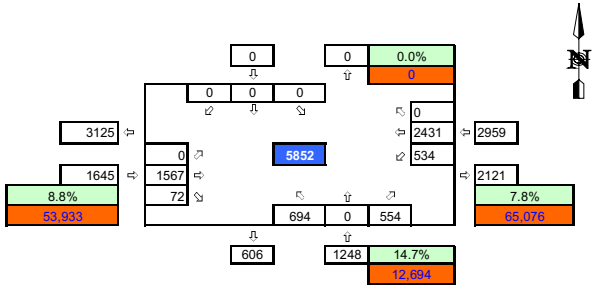
Int 22 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **La Jolla Scenic Drive**
E/W Street: **La Jolla Village Drive**
Intersection #: 22
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **La Jolla Scenic Drive**
E/W Street: **La Jolla Village Drive**



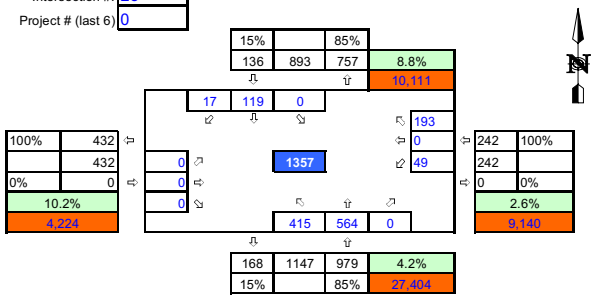
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

K:\SND_TPTO\095240101 - University CPA\Excel\Horizon Year Conditions\Alternative D\Turn32_Alt D.xlsx

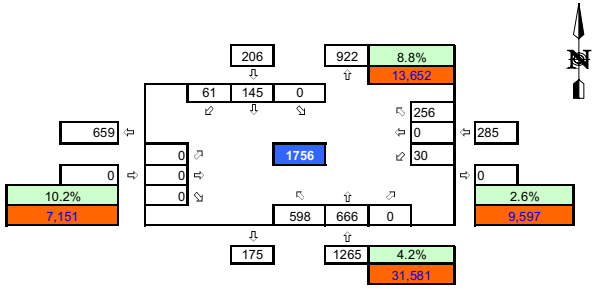
Int 23 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Gillman Drive**
E/W Street: **La Jolla Village Drive WB**
Intersection #: 23
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Gillman Drive**
E/W Street: **La Jolla Village Drive WB**



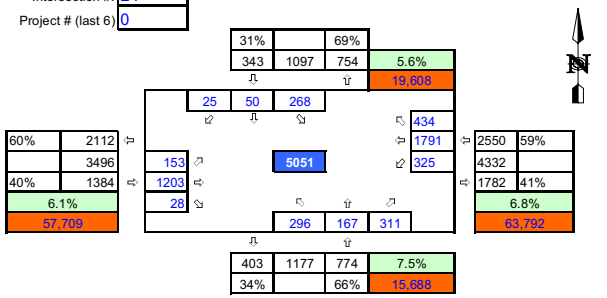
LEGEND

Existing K-Factor	xx%
ADT Volume	xx

K:\SND_TPTO\095240101 - University CPA\Excel\Horizon Year Conditions\Alternative D\Turn32_Alt D.xlsx

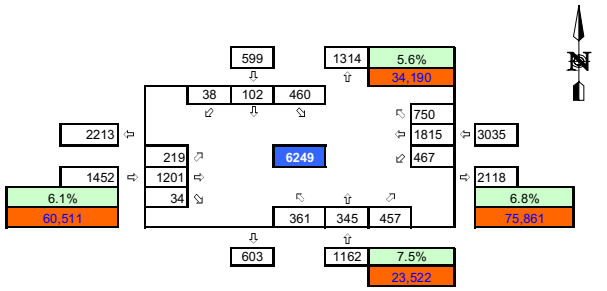
Int 24 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Villa La Jolla Drive**
E/W Street: **La Jolla Village Drive**
Intersection #: 24
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Villa La Jolla Drive**
E/W Street: **La Jolla Village Drive**

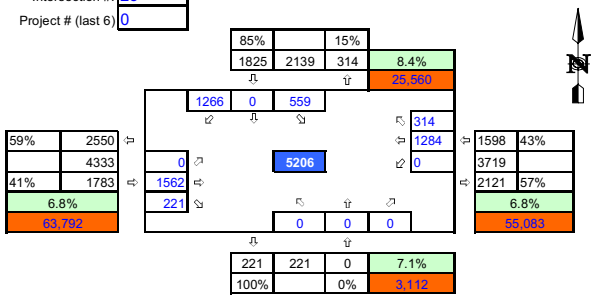


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

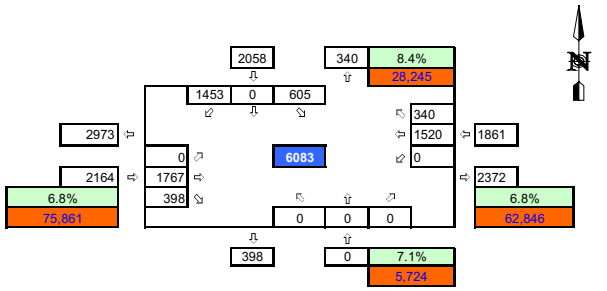
Int 25 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **I-5 SB Off-Ramps**
E/W Street: **La Jolla Village Drive**
Intersection #: 25
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **I-5 SB Off-Ramps**
E/W Street: **La Jolla Village Drive**

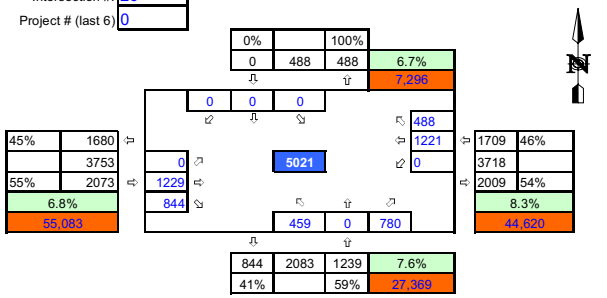


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

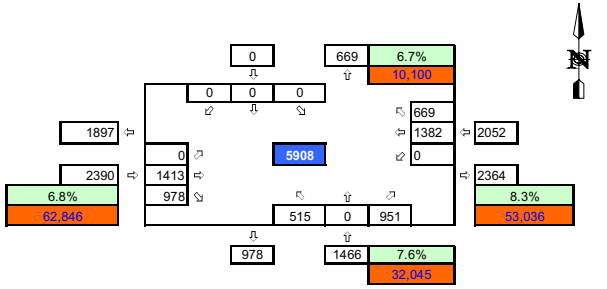
Int 26 AM Peak Volumes

Scenario:	Existing Conditions
N/S Street:	I-5 NB Off-Ramps
E/W Street:	La Jolla Village Drive
Intersection #:	26
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	Horizon Year Conditions
N/S Street:	I-5 NB Off-Ramps
E/W Street:	La Jolla Village Drive

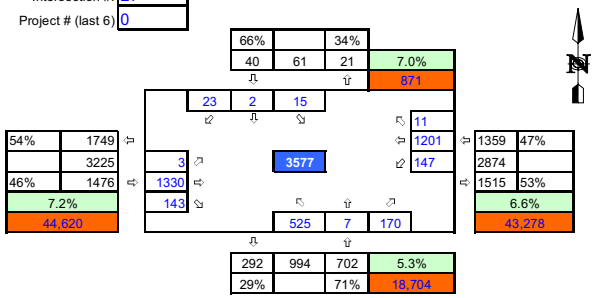


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

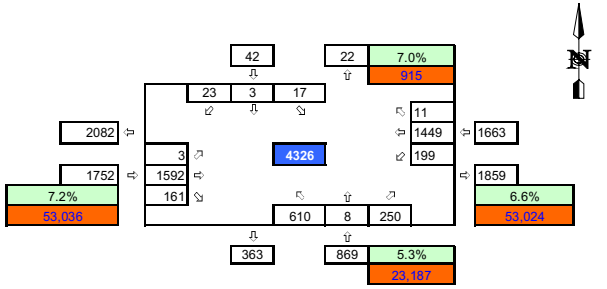
Int 27 AM Peak Volumes

Scenario:	Existing Conditions
N/S Street:	Lebon Drive
E/W Street:	La Jolla Village Drive
Intersection #:	27
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	Horizon Year Conditions
N/S Street:	Lebon Drive
E/W Street:	La Jolla Village Drive

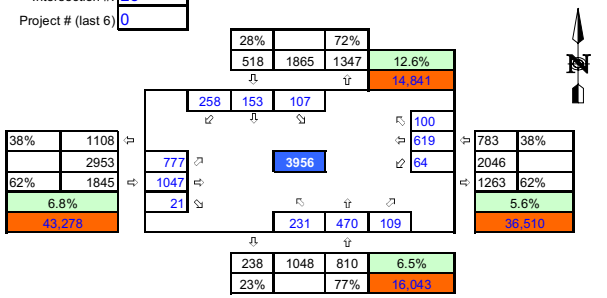


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

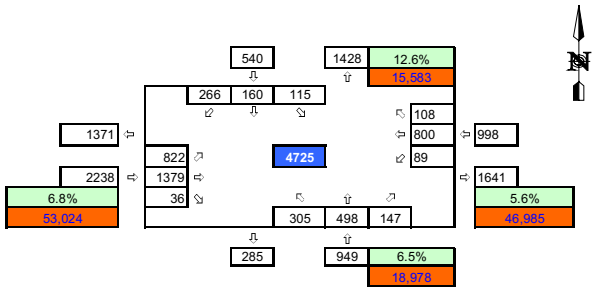
Int 28 AM Peak Volumes

Scenario:	Existing Conditions
N/S Street:	Regents Road
E/W Street:	La Jolla Village Drive
Intersection #:	28
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

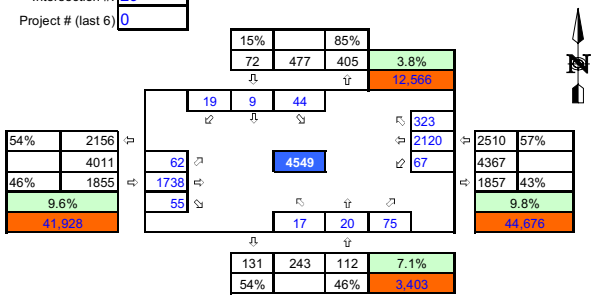
Scenario:	Horizon Year Conditions
N/S Street:	Regents Road
E/W Street:	La Jolla Village Drive



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

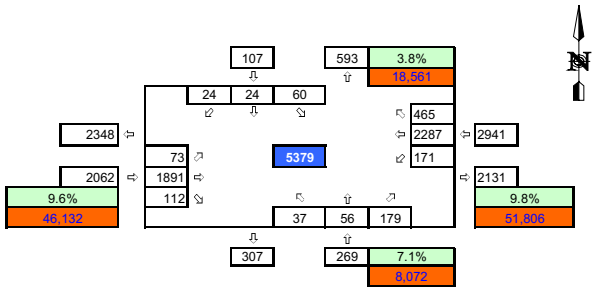
Int 29 AM Peak Volumes

Scenario:	Existing Conditions
N/S Street:	Executive Way
E/W Street:	La Jolla Village Drive
Intersection #:	29
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

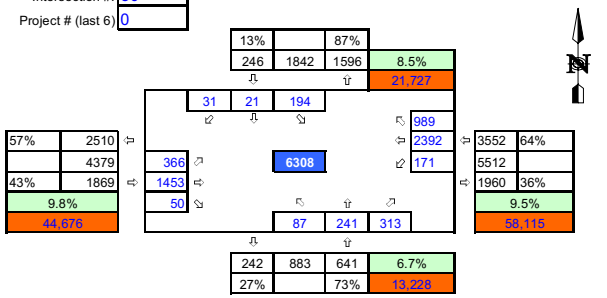
Scenario:	Horizon Year Conditions
N/S Street:	Executive Way
E/W Street:	La Jolla Village Drive



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

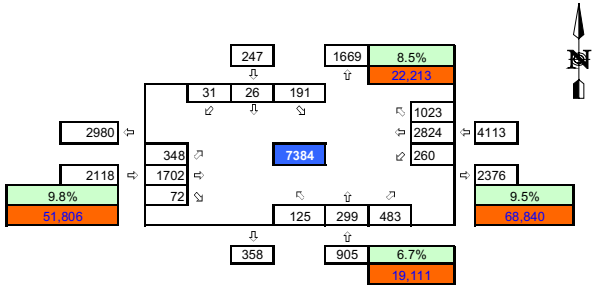
Int 30 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Towne Center Drive**
E/W Street: **La Jolla Village Drive**
Intersection #: 30
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Towne Center Drive**
E/W Street: **La Jolla Village Drive**

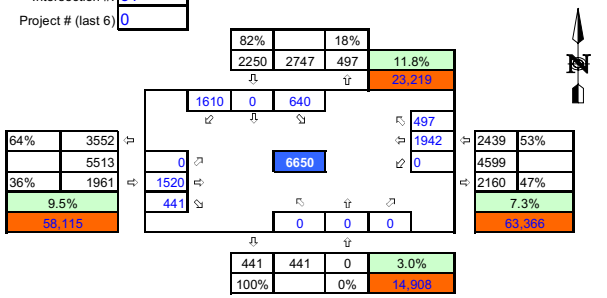


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

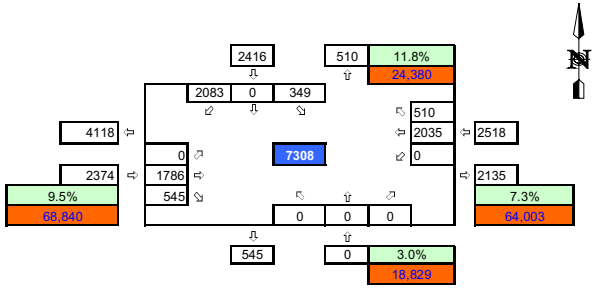
Int 31 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **I-805 SB Ramps**
E/W Street: **La Jolla Village Drive**
Intersection #: 31
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **I-805 SB Ramps**
E/W Street: **La Jolla Village Drive**

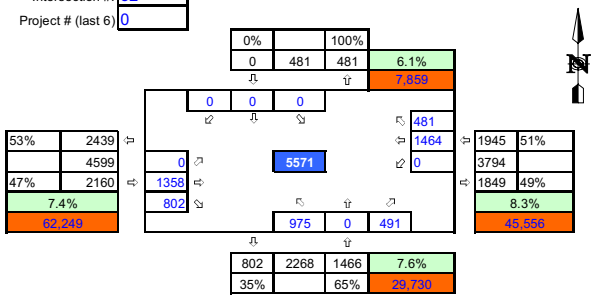


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

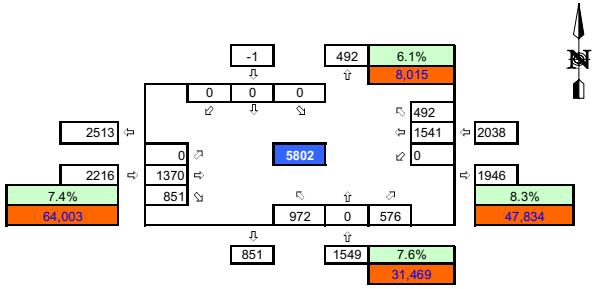
Int 32 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**I-805 NB Ramps**
E/W Street:	**La Jolla Village Drive**
Intersection #:	32
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

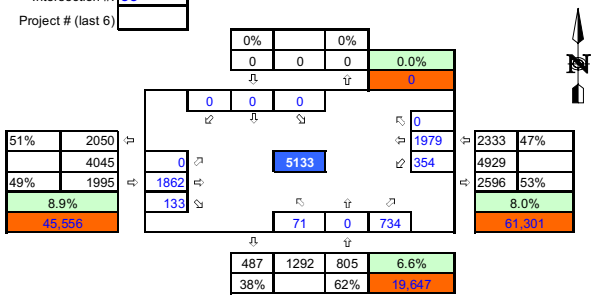
Scenario:	**Horizon Year Conditions**
N/S Street:	**I-805 NB Ramps**
E/W Street:	**La Jolla Village Drive**



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

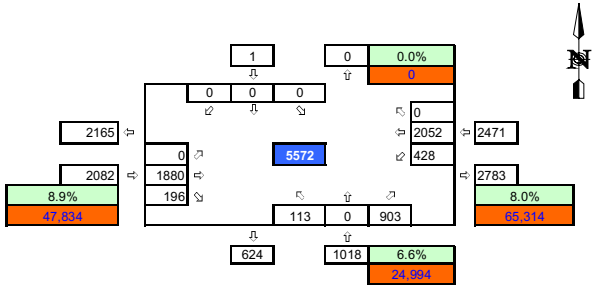
Int 33 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Noble Drive**
E/W Street:	**Miramar Road**
Intersection #:	33
Project # (last 6)	



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

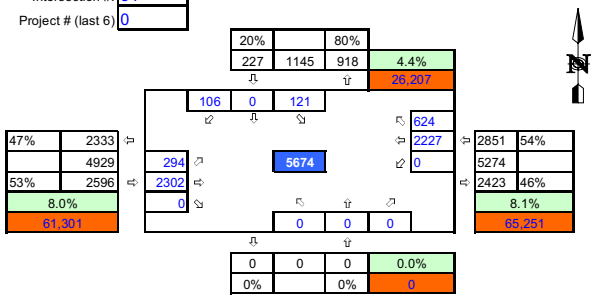
Scenario:	**Horizon Year Conditions**
N/S Street:	**Noble Drive**
E/W Street:	**Miramar Road**



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

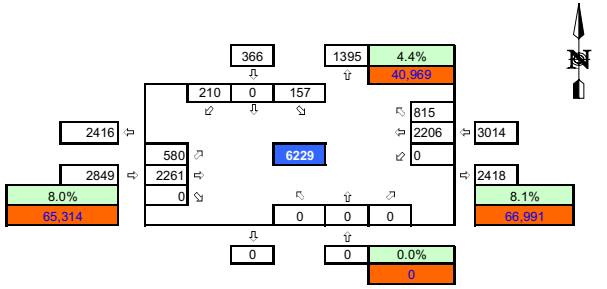
Int 34 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Eastgate Mall**
E/W Street:	**Miramar Road**
Intersection #:	34
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

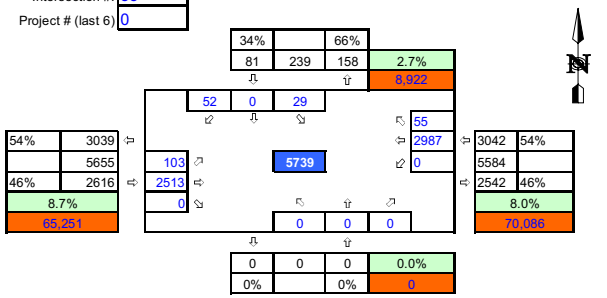
Scenario:	**Horizon Year Conditions**
N/S Street:	**Eastgate Mall**
E/W Street:	**Miramar Road**



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

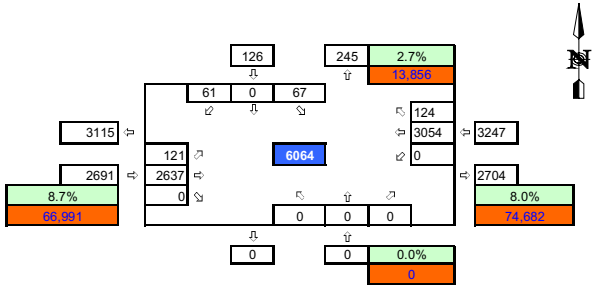
Int 35 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Miramar Mall**
E/W Street:	**Miramar Road**
Intersection #:	35
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

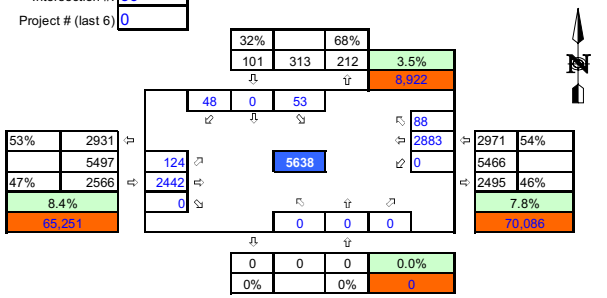
Scenario:	**Horizon Year Conditions**
N/S Street:	**Miramar Mall**
E/W Street:	**Miramar Road**



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

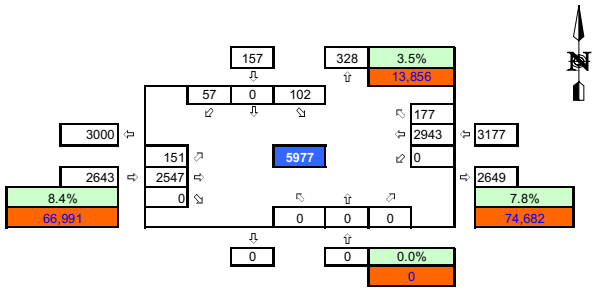
Int 36 AM Peak Volumes

Scenario:	Existing Conditions
N/S Street:	Miramar Place
E/W Street:	Miramar Road
Intersection #:	36
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

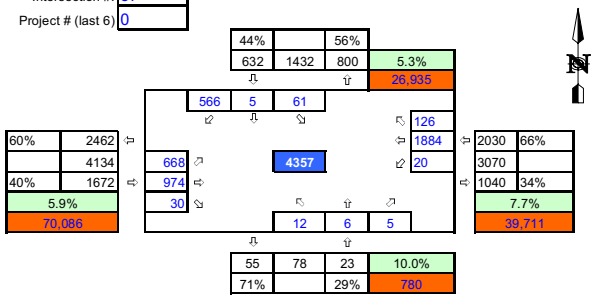
Scenario:	Horizon Year Conditions
N/S Street:	Miramar Place
E/W Street:	Miramar Road



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

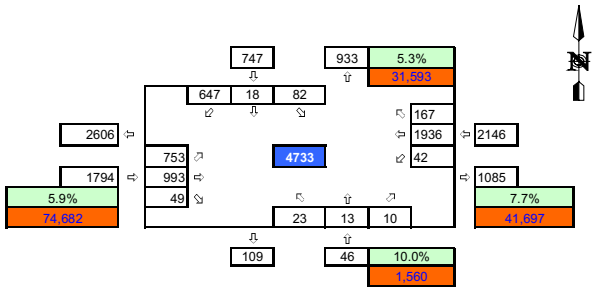
Int 37 AM Peak Volumes

Scenario:	Existing Conditions
N/S Street:	Camino Santa Fe
E/W Street:	Miramar Road
Intersection #:	37
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

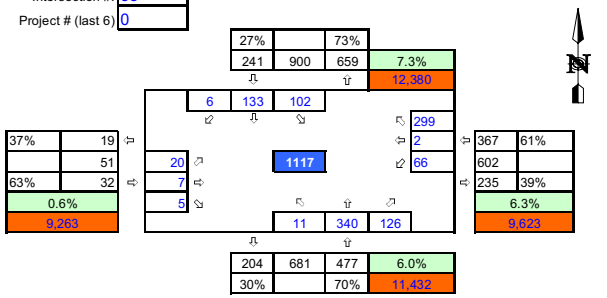
Scenario:	Horizon Year Conditions
N/S Street:	Camino Santa Fe
E/W Street:	Miramar Road



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

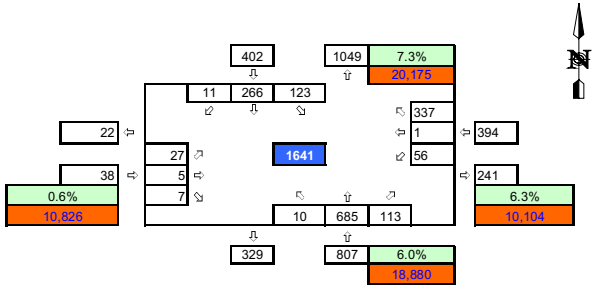
Int 38 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Villa La Jolla Drive**
E/W Street: **Nobel Drive**
Intersection #: 38
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Villa La Jolla Drive**
E/W Street: **Nobel Drive**

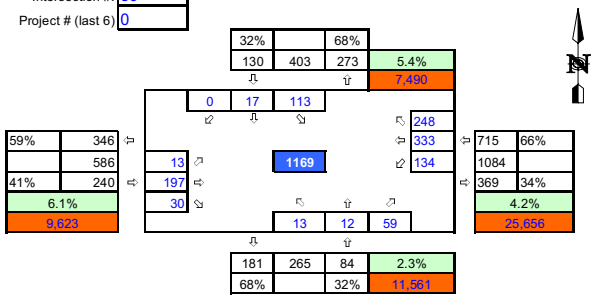


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

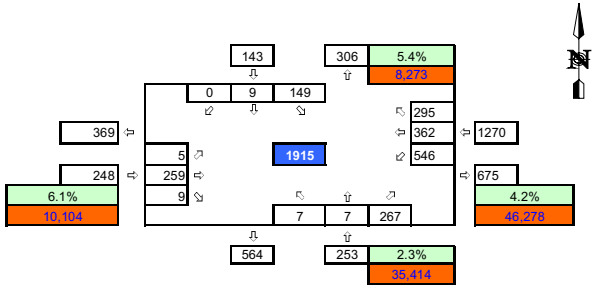
Int 39 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **La Jolla Village Square Driveway**
E/W Street: **Nobel Drive**
Intersection #: 39
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **La Jolla Village Square Driveway**
E/W Street: **Nobel Drive**

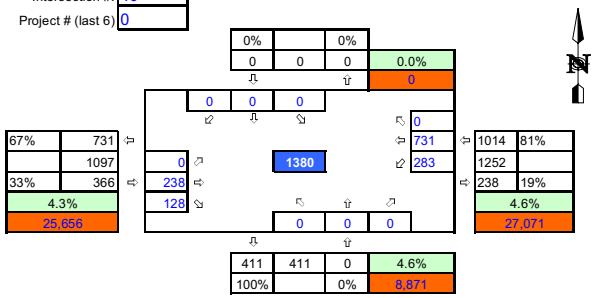


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

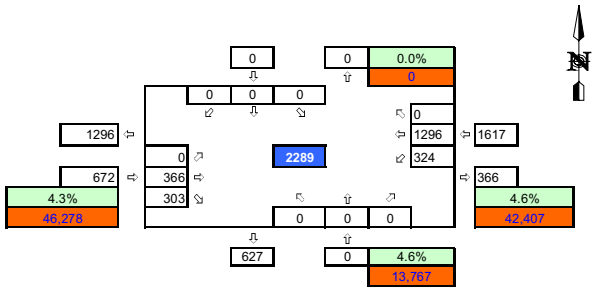
Int 40 AM Peak Volumes

Scenario:	Existing Conditions
N/S Street:	I-5 SB On
E/W Street:	Nobel Drive
Intersection #:	40
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	Horizon Year Conditions
N/S Street:	I-5 SB On
E/W Street:	Nobel Drive

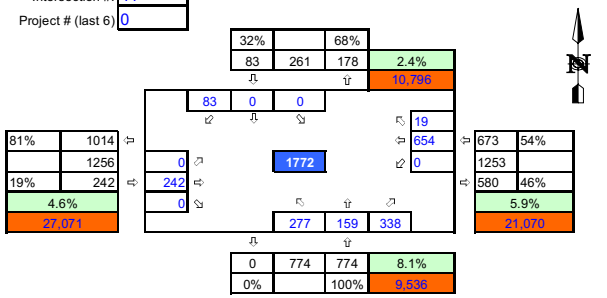


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

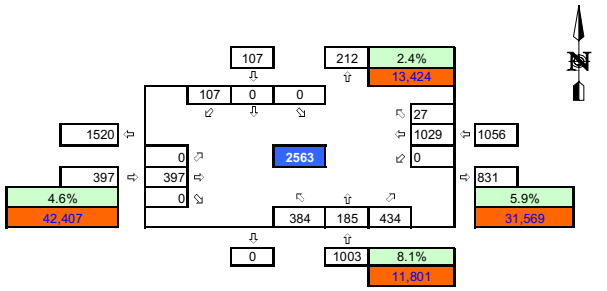
Int 41 AM Peak Volumes

Scenario:	Existing Conditions
N/S Street:	University Center Lane/I-5 NB Off
E/W Street:	Nobel Drive
Intersection #:	41
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	Horizon Year Conditions
N/S Street:	University Center Lane/I-5 NB Off
E/W Street:	Nobel Drive

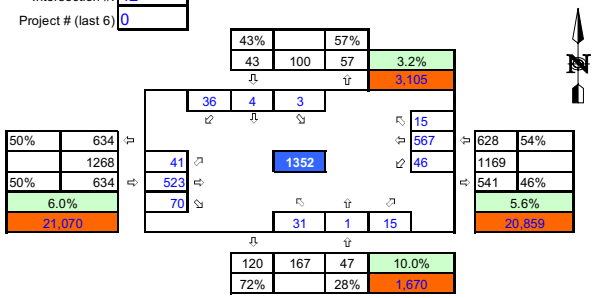


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

Int 42 AM Peak Volumes

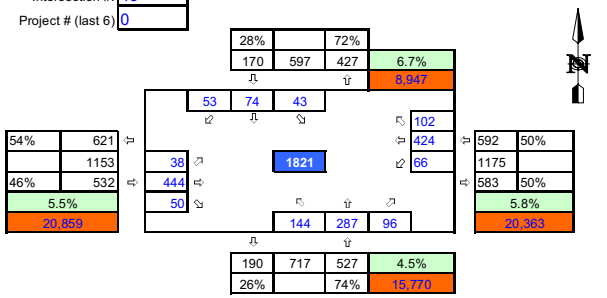
Scenario:	**Existing Conditions**
N/S Street:	**Caminito Plaza Centro**
E/W Street:	**Nobel Drive**
Intersection #:	42
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

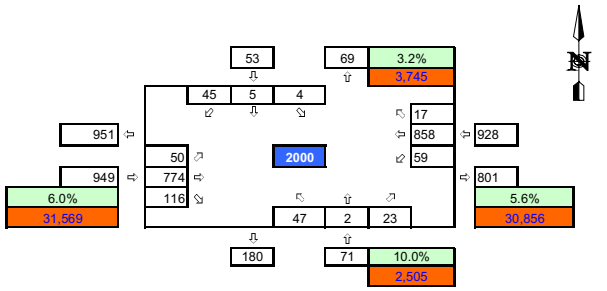
Int 43 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Lebon Drive**
E/W Street:	**Nobel Drive**
Intersection #:	43
Project # (last 6)	0

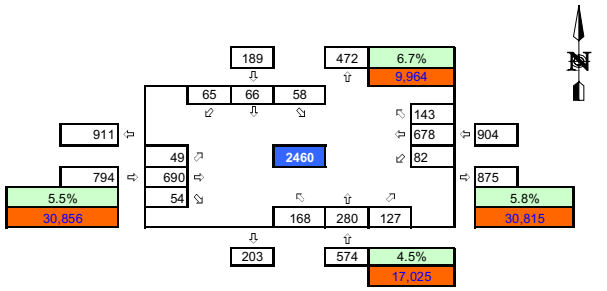


Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Caminito Plaza Centro**
E/W Street:	**Nobel Drive**



Scenario:	**Horizon Year Conditions**
N/S Street:	**Lebon Drive**
E/W Street:	**Nobel Drive**



LEGEND

Existing K-Factor	xx%
ADT Volume	xx

LEGEND

Existing K-Factor	xx%
ADT Volume	xx

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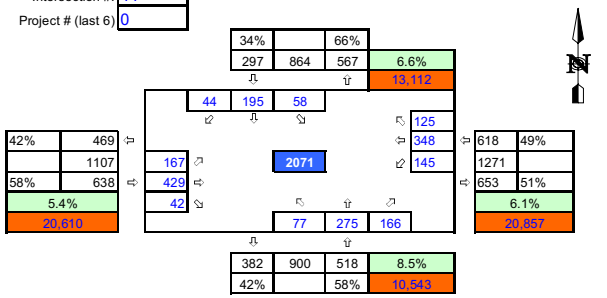
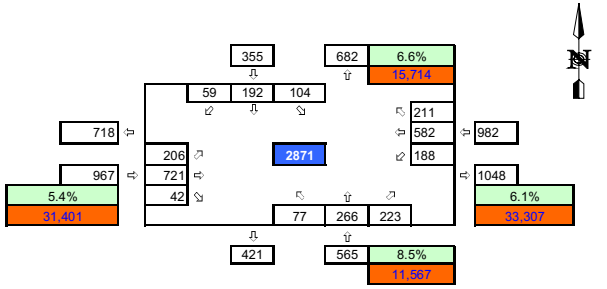
Int 44 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Regents Road**
E/W Street: **Nobel Drive**
Intersection #: 44
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Regents Road**
E/W Street: **Nobel Drive**



LEGEND

Existing K-Factor	xx%
ADT Volume	xx

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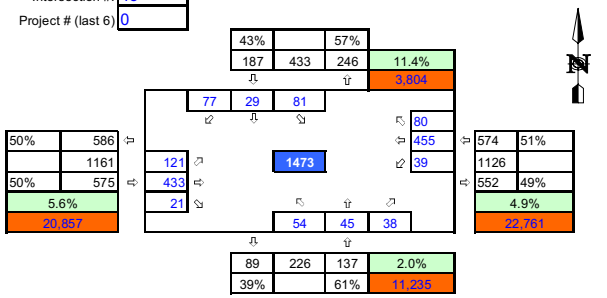
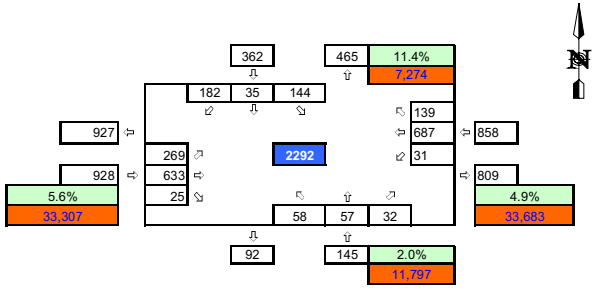
Int 45 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Costa Verde Boulevard/Cargill Ave**
E/W Street: **Cargill Ave / Nobel Drive**
Intersection #: 45
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Costa Verde Boulevard/Cargill Ave**
E/W Street: **Cargill Ave / Nobel Drive**



LEGEND

Existing K-Factor	xx%
ADT Volume	xx

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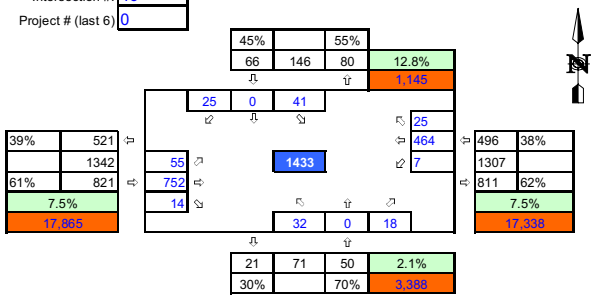
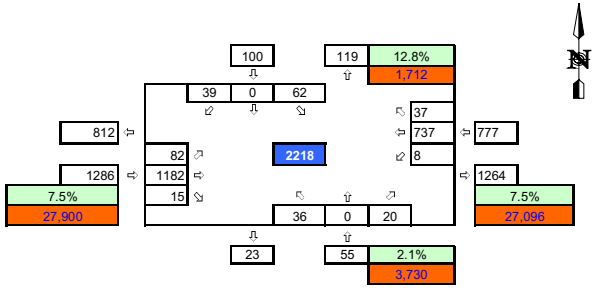
Int 46 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Lombard Place**
E/W Street:	**Nobel Drive**
Intersection #:	46
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

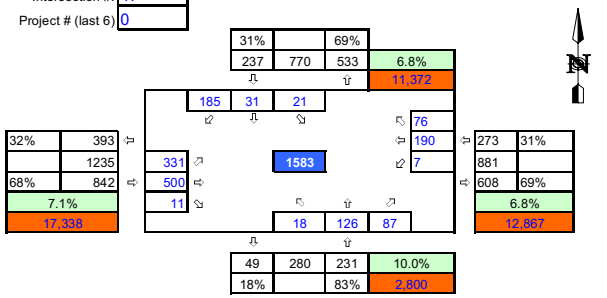
Scenario:	**Horizon Year Conditions**
N/S Street:	**Lombard Place**
E/W Street:	**Nobel Drive**



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

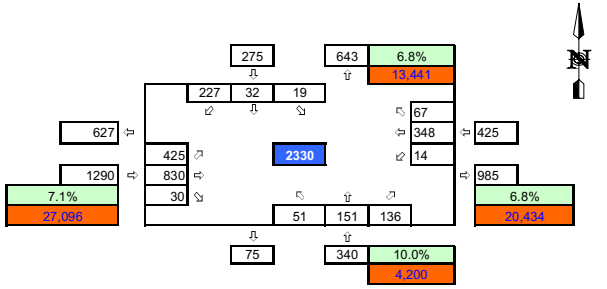
Int 47 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Towne Center Drive**
E/W Street:	**Nobel Drive**
Intersection #:	47
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

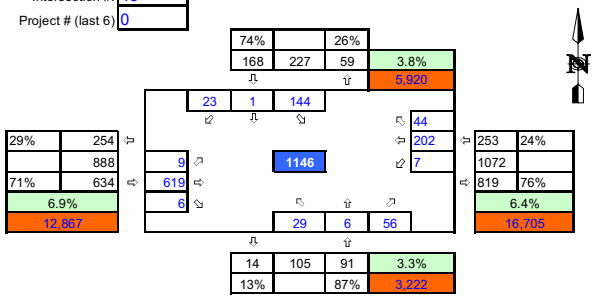
Scenario:	**Horizon Year Conditions**
N/S Street:	**Towne Center Drive**
E/W Street:	**Nobel Drive**



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

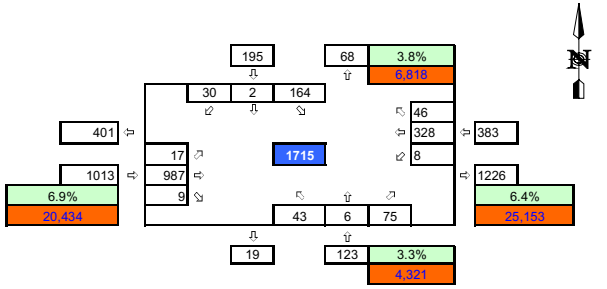
Int 48 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Shoreline Drive**
E/W Street: **Nobel Drive**
Intersection #: 48
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Shoreline Drive**
E/W Street: **Nobel Drive**



LEGEND

Existing K-Factor	xx%
ADT Volume	xx

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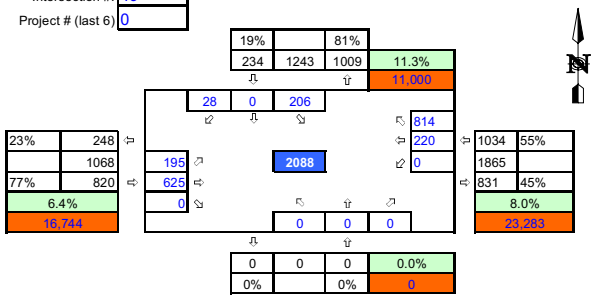
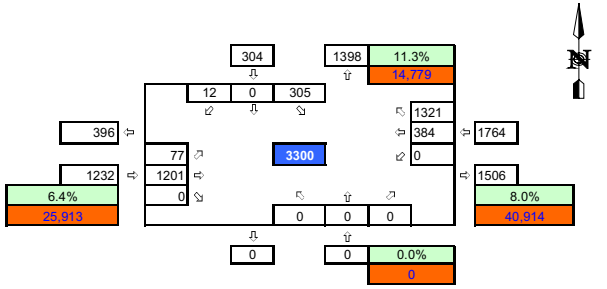
Int 49 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Judicial Drive**
E/W Street: **Nobel Drive**
Intersection #: 49
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Judicial Drive**
E/W Street: **Nobel Drive**



LEGEND

Existing K-Factor	xx%
ADT Volume	xx

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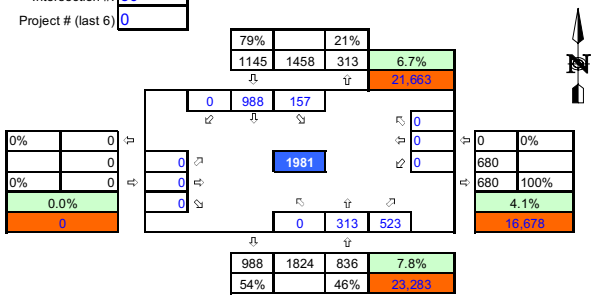
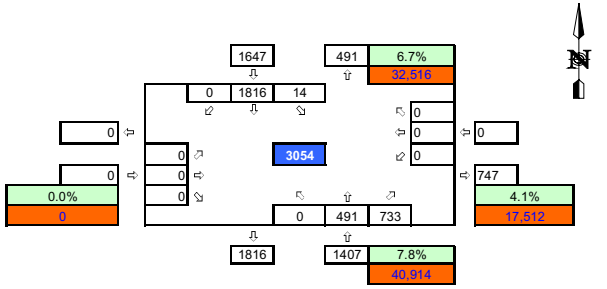
Int 50 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Nobel Drive**
E/W Street:	**I-805 SB On-Ramp**
Intersection #:	50
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

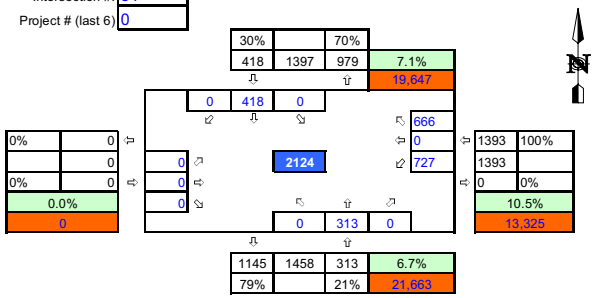
Scenario:	**Horizon Year Conditions**
N/S Street:	**Nobel Drive**
E/W Street:	**I-805 SB On-Ramp**



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

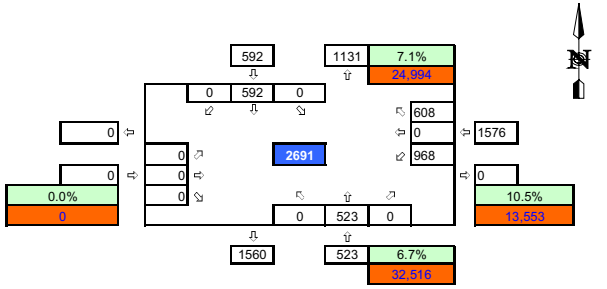
Int 51 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Nobel Drive**
E/W Street:	**I-805 N Off-Ramp**
Intersection #:	51
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

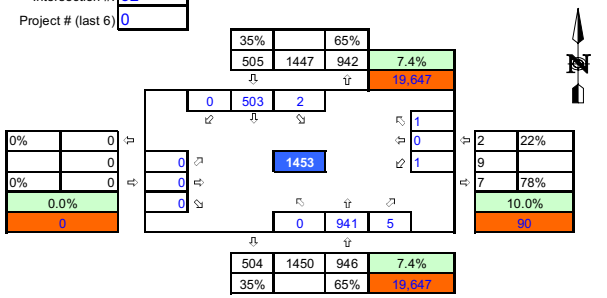
Scenario:	**Horizon Year Conditions**
N/S Street:	**Nobel Drive**
E/W Street:	**I-805 N Off-Ramp**



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

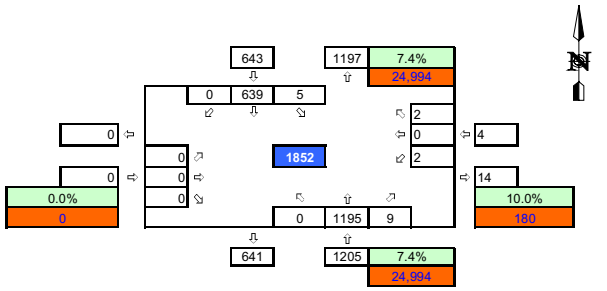
Int 52 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Nobel Drive**
E/W Street:	**Avenue of Flags**
Intersection #:	52
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

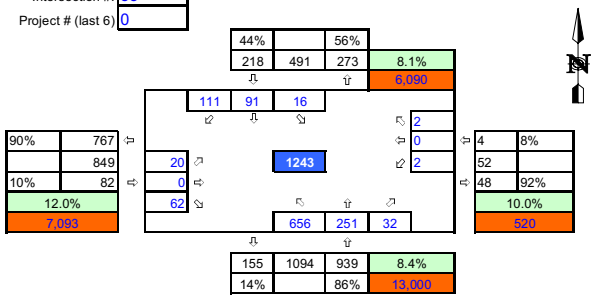
Scenario:	**Horizon Year Conditions**
N/S Street:	**Nobel Drive**
E/W Street:	**Avenue of Flags**



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

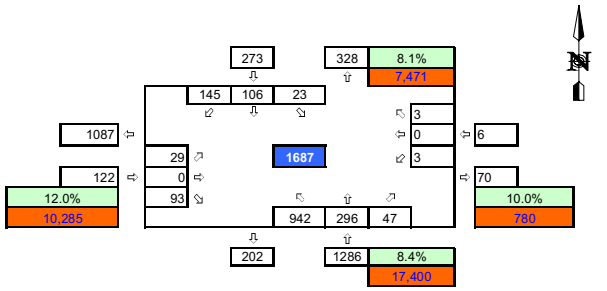
Int 53 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Regents Road**
E/W Street:	**Health Science Drive / County Day Ln**
Intersection #:	53
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

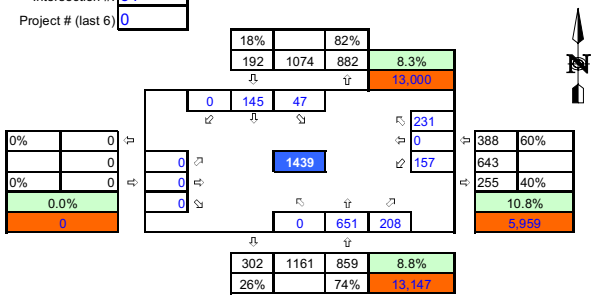
Scenario:	**Horizon Year Conditions**
N/S Street:	**Regents Road**
E/W Street:	**Health Science Drive / County Day Ln**



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

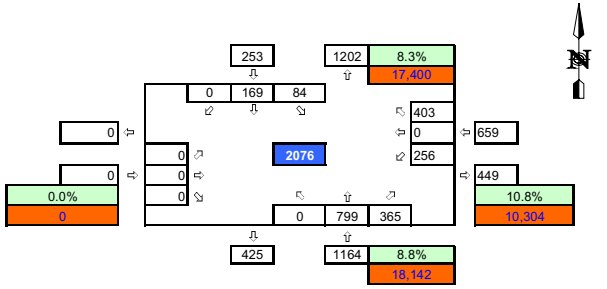
Int 54 AM Peak Volumes

Scenario:	Existing Conditions
N/S Street:	Regents Road
E/W Street:	Eastgate Mall
Intersection #:	54
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	Horizon Year Conditions
N/S Street:	Regents Road
E/W Street:	Eastgate Mall

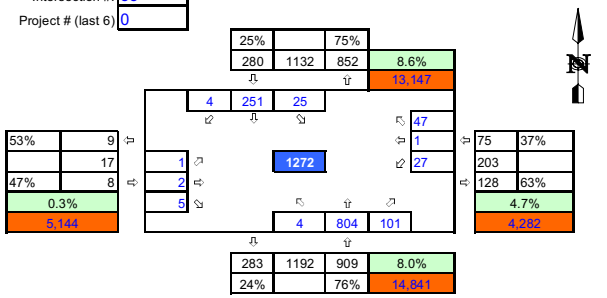


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

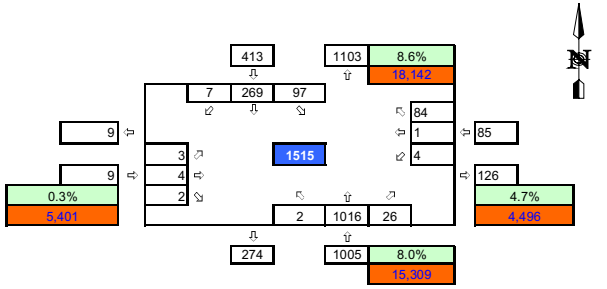
Int 55 AM Peak Volumes

Scenario:	Existing Conditions
N/S Street:	Regents Road
E/W Street:	Executive Drive
Intersection #:	55
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	Horizon Year Conditions
N/S Street:	Regents Road
E/W Street:	Executive Drive

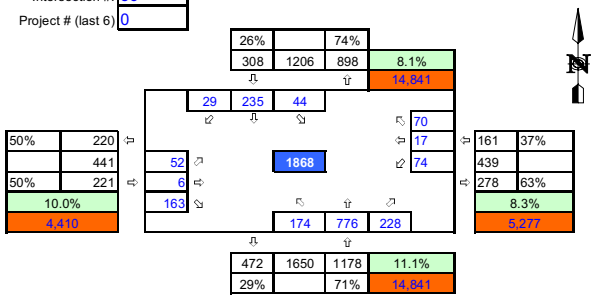


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

Int 56 AM Peak Volumes

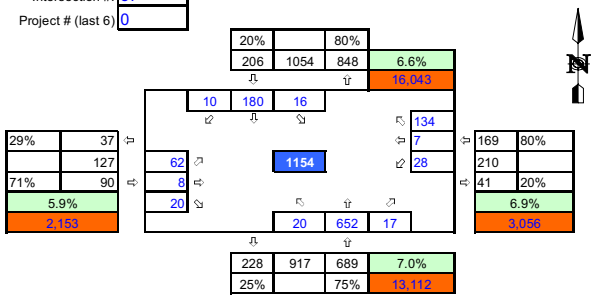
Scenario:	Existing Conditions
N/S Street:	Regents Road
E/W Street:	Miramar Street / Regents Park Row
Intersection #:	56
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

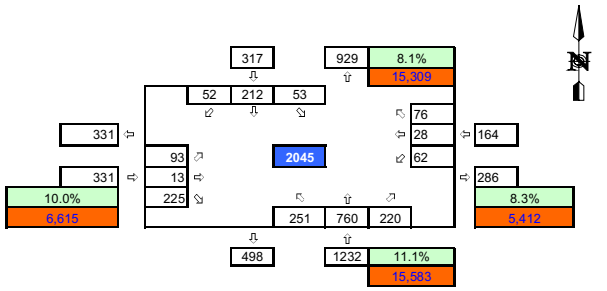
Int 57 AM Peak Volumes

Scenario:	Existing Conditions
N/S Street:	Regents Road
E/W Street:	Plaza De Palmas
Intersection #:	57
Project # (last 6)	0

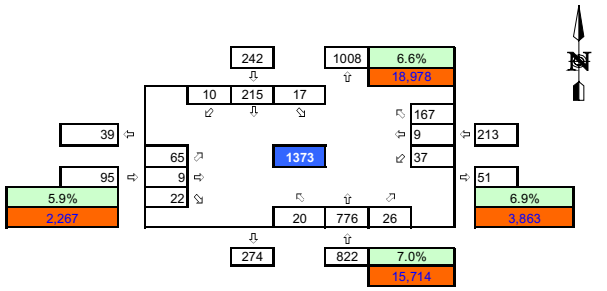


Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	Horizon Year Conditions
N/S Street:	Regents Road
E/W Street:	Miramar Street / Regents Park Row



Scenario:	Horizon Year Conditions
N/S Street:	Regents Road
E/W Street:	Plaza De Palmas



LEGEND

Existing K-Factor	xx%
ADT Volume	xx

LEGEND

Existing K-Factor	xx%
ADT Volume	xx

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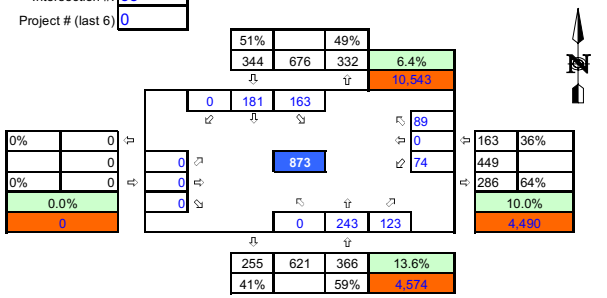
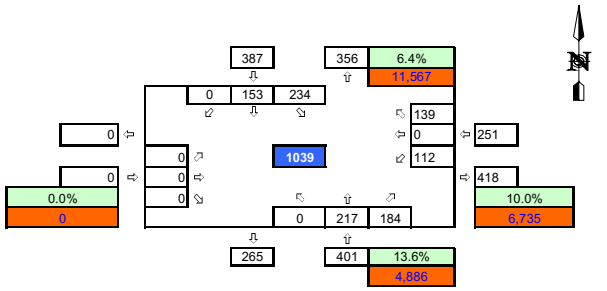
Int 58 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Regents Road**
E/W Street: **Berino Court**
Intersection #: 58
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Regents Road**
E/W Street: **Berino Court**

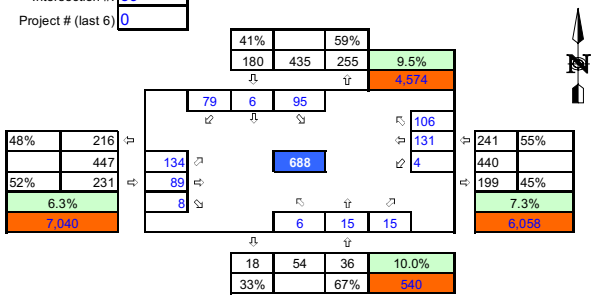


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

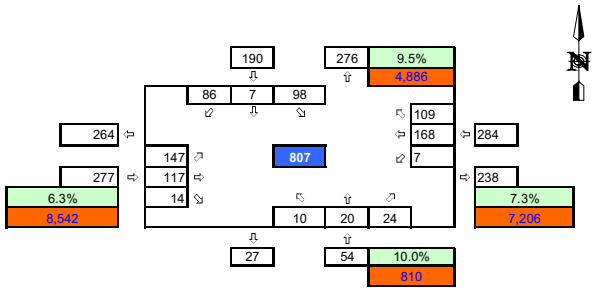
Int 59 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Regents Road**
E/W Street: **Arriba Street**
Intersection #: 59
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Regents Road**
E/W Street: **Arriba Street**

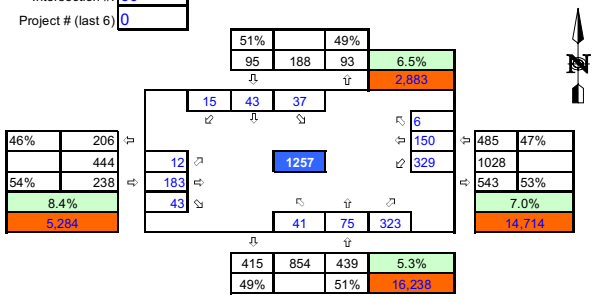


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

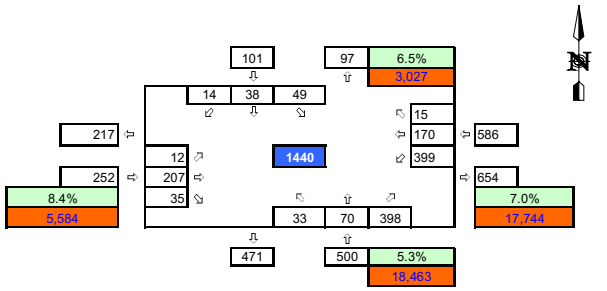
Int 60 AM Peak Volumes

Scenario:	Existing Conditions
N/S Street:	Regents Road
E/W Street:	Governor Drive
Intersection #:	60
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

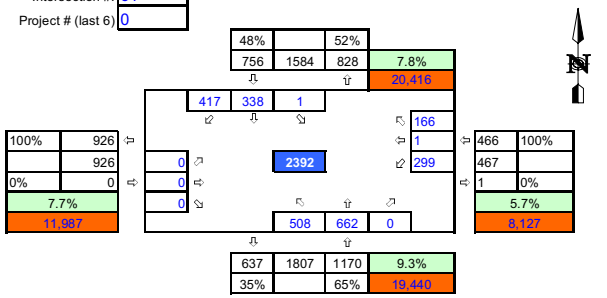
Scenario:	Horizon Year Conditions
N/S Street:	Regents Road
E/W Street:	Governor Drive



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

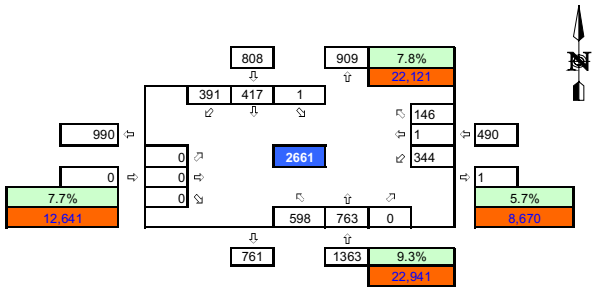
Int 61 AM Peak Volumes

Scenario:	Existing Conditions
N/S Street:	Regents Road
E/W Street:	SR-52 WB Ramps
Intersection #:	61
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

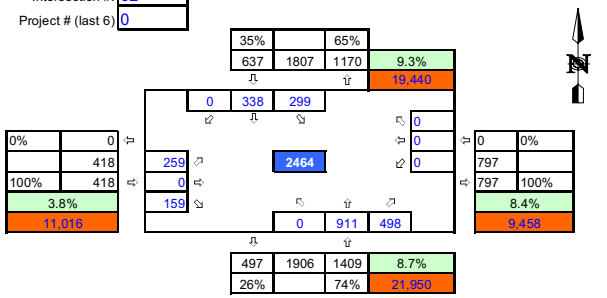
Scenario:	Horizon Year Conditions
N/S Street:	Regents Road
E/W Street:	SR-52 WB Ramps



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

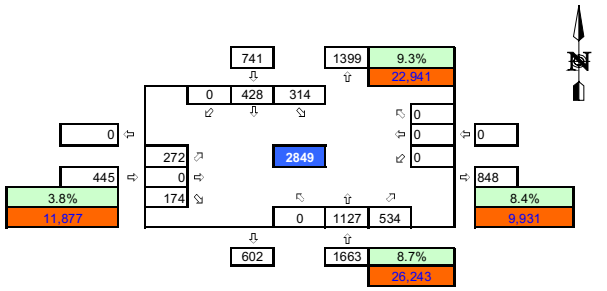
Int 62 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Regents Road**
E/W Street:	**SR-52 EB Ramps**
Intersection #:	62
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Regents Road**
E/W Street:	**SR-52 EB Ramps**

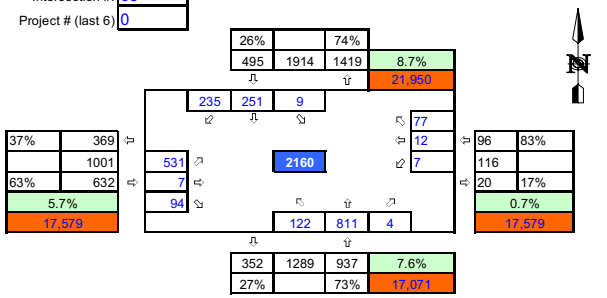


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

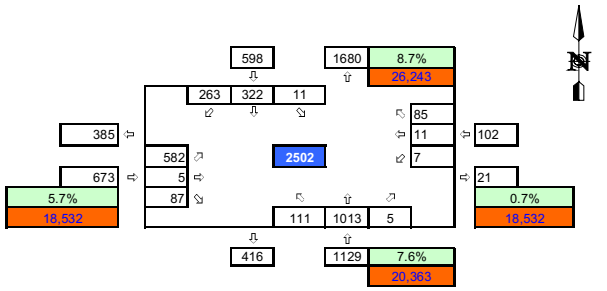
Int 63 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Regents Road / Clairemont Mesa Blvd**
E/W Street:	**Luna Avenue**
Intersection #:	63
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Regents Road / Clairemont Mesa Blvd**
E/W Street:	**Luna Avenue**

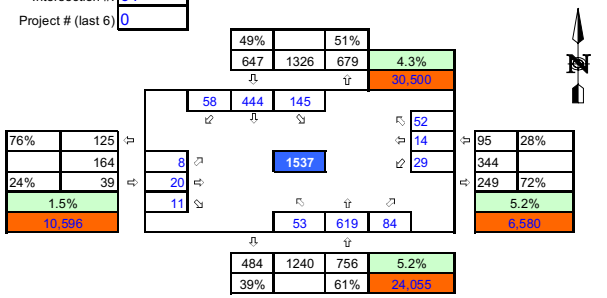


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

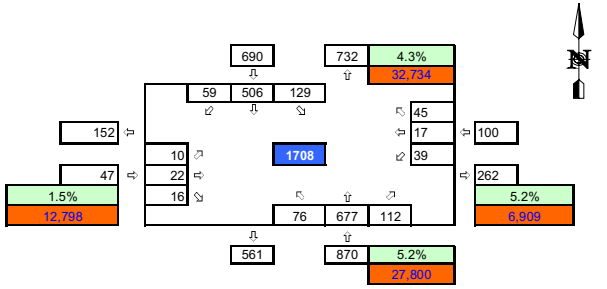
Int 64 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**N. Torrey Pines Road**
E/W Street:	**UCSD Northpoint Driveway**
Intersection #:	64
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**N. Torrey Pines Road**
E/W Street:	**UCSD Northpoint Driveway**

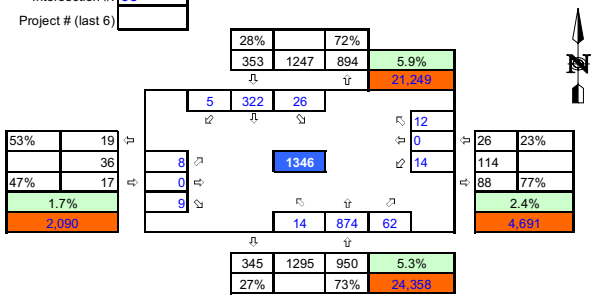


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

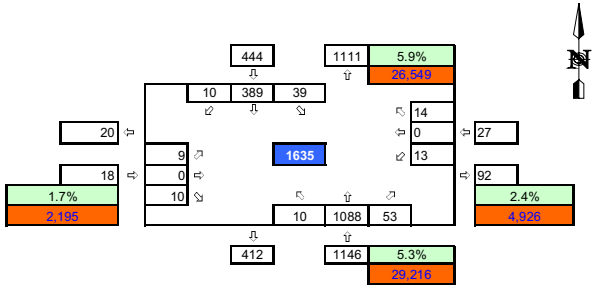
Int 65 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**N. Torrey Pines Road**
E/W Street:	**Pangea Drive**
Intersection #:	65
Project # (last 6)	



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**N. Torrey Pines Road**
E/W Street:	**Pangea Drive**

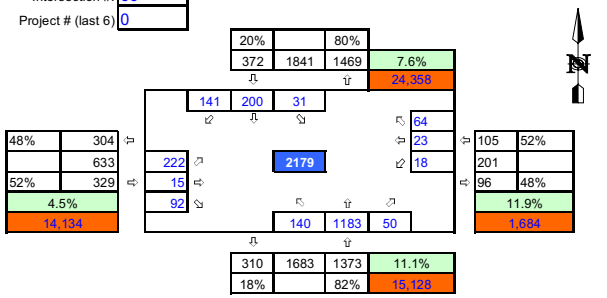


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

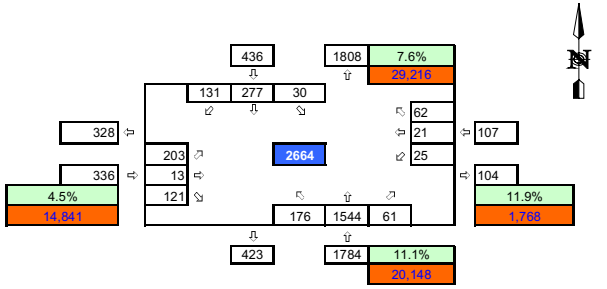
Int 66 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**N. Torrey Pines Road**
E/W Street:	**La Jolla Shores Drive**
Intersection #:	66
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**N. Torrey Pines Road**
E/W Street:	**La Jolla Shores Drive**

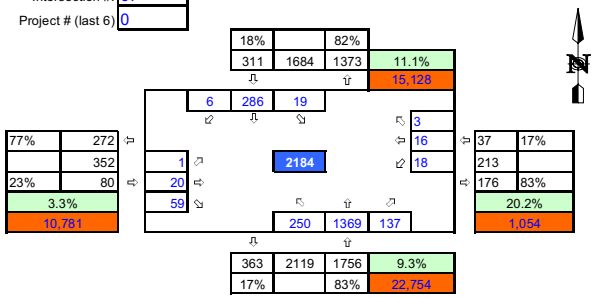


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

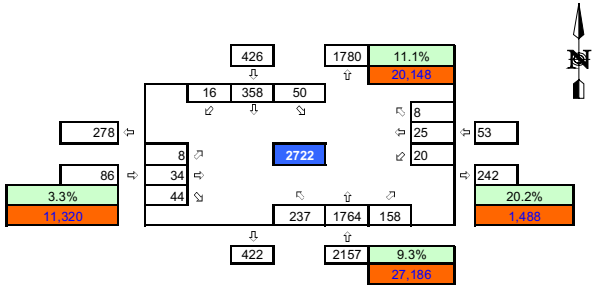
Int 67 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**N. Torrey Pines Road**
E/W Street:	**Expedition Way / Revelle College Drive**
Intersection #:	67
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**N. Torrey Pines Road**
E/W Street:	**Expedition Way / Revelle College Drive**

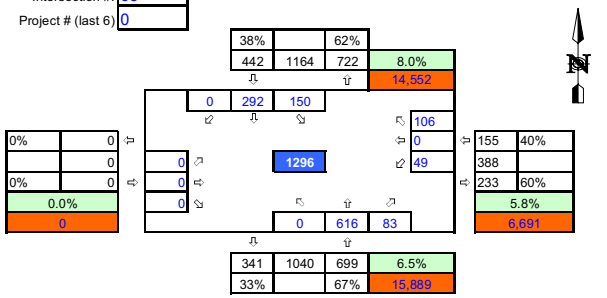


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

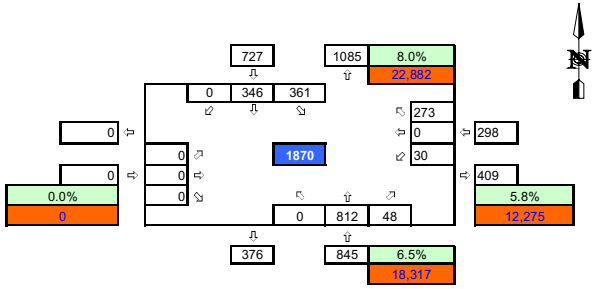
Int 68 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Gilman Drive**
E/W Street:	**Villa La Jolla Drive**
Intersection #:	68
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

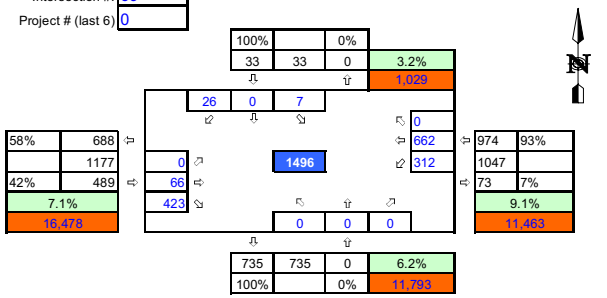
Scenario:	**Horizon Year Conditions**
N/S Street:	**Gilman Drive**
E/W Street:	**Villa La Jolla Drive**



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

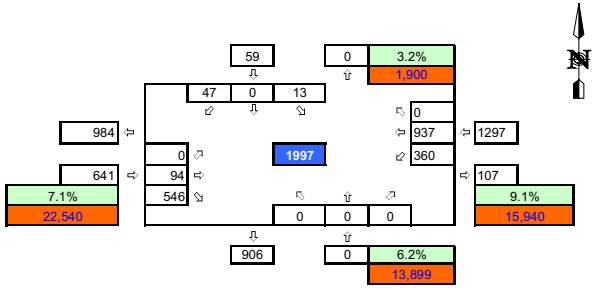
Int 69 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**I-5 SB Ramps**
E/W Street:	**Gillman Drive**
Intersection #:	69
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

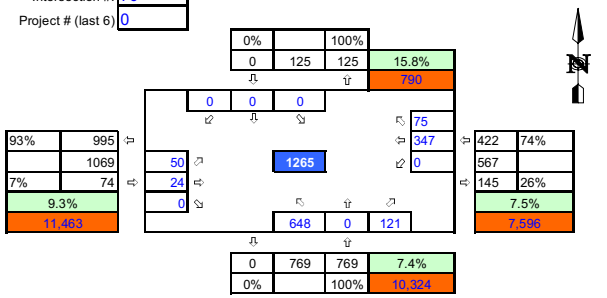
Scenario:	**Horizon Year Conditions**
N/S Street:	**I-5 SB Ramps**
E/W Street:	**Gillman Drive**



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

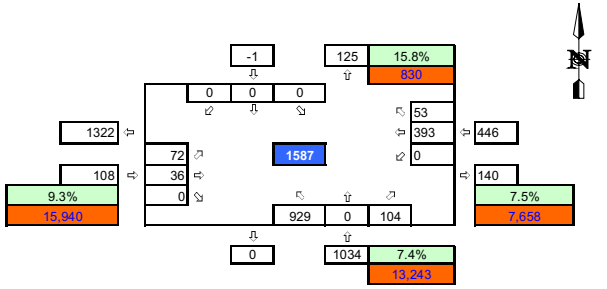
Int 70 AM Peak Volumes

Scenario:	Existing Conditions
N/S Street:	I-5 NB Ramps
E/W Street:	Gillman Drive
Intersection #:	70
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	Horizon Year Conditions
N/S Street:	I-5 NB Ramps
E/W Street:	Gillman Drive

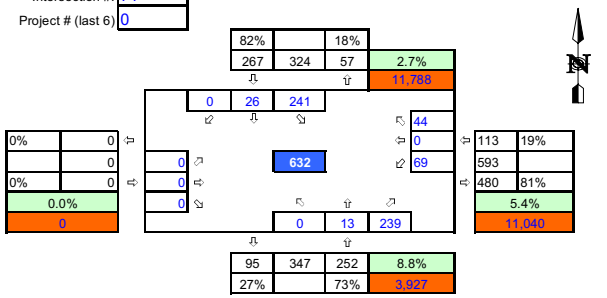


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

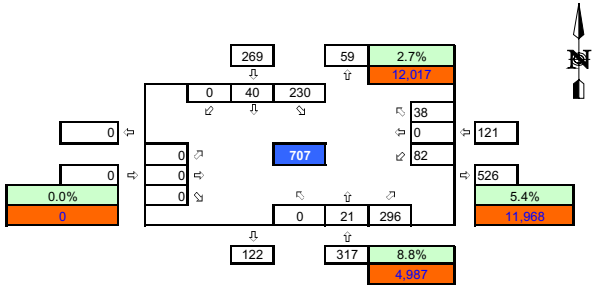
Int 71 AM Peak Volumes

Scenario:	Existing Conditions
N/S Street:	Charmant Drive / Palmilla Drive
E/W Street:	Lebon Drive
Intersection #:	71
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	Horizon Year Conditions
N/S Street:	Charmant Drive / Palmilla Drive
E/W Street:	Lebon Drive

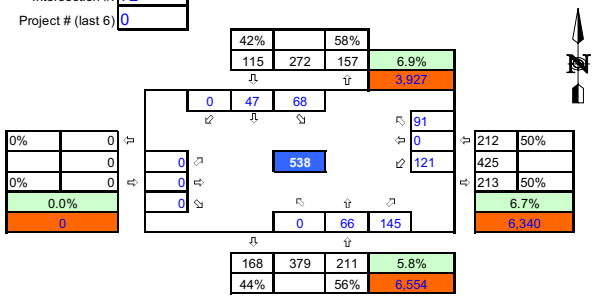


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

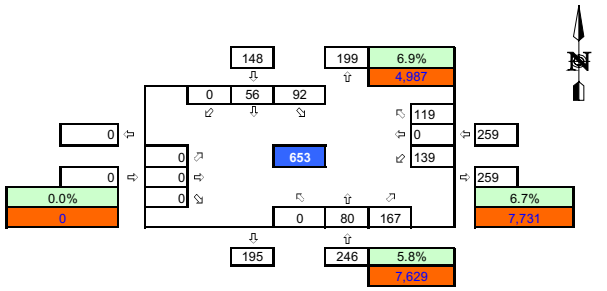
Int 72 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Palmilla Drive**
E/W Street:	**Ariba Street**
Intersection #:	72
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

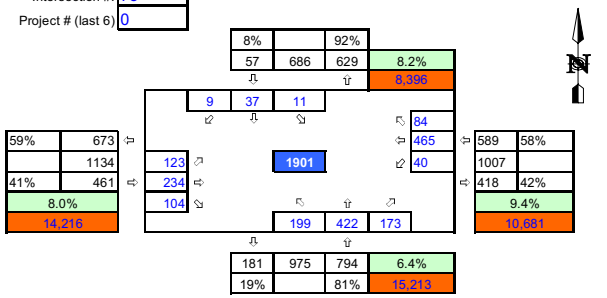
Scenario:	**Horizon Year Conditions**
N/S Street:	**Palmilla Drive**
E/W Street:	**Ariba Street**



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

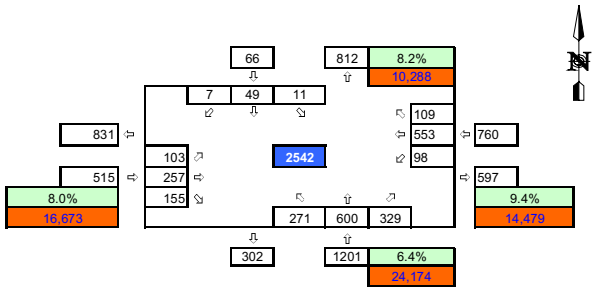
Int 73 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Towne Center Drive**
E/W Street:	**Eastgate Mall**
Intersection #:	73
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

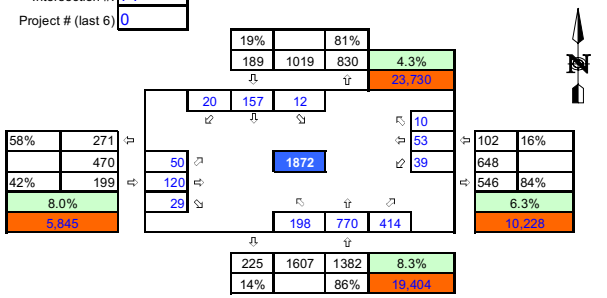
Scenario:	**Horizon Year Conditions**
N/S Street:	**Towne Center Drive**
E/W Street:	**Eastgate Mall**



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

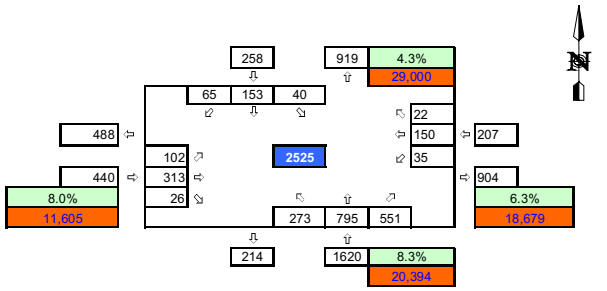
Int 74 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Towne Center Drive**
E/W Street:	**Executive Drive**
Intersection #:	74
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Towne Center Drive**
E/W Street:	**Executive Drive**



LEGEND

Existing K-Factor	xx%
ADT Volume	xx

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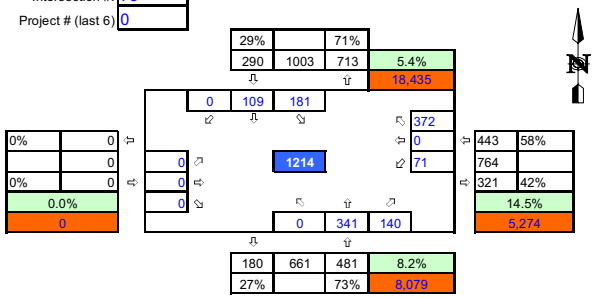
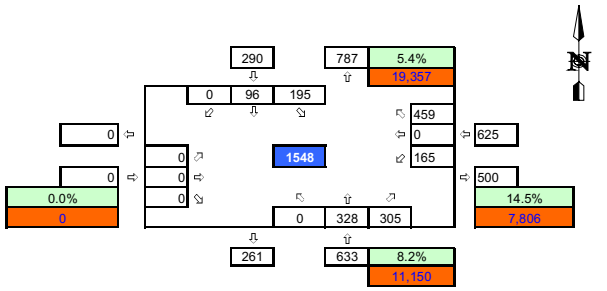
Int 75 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Towne Center Drive**
E/W Street:	**Golden Haven Drive**
Intersection #:	75
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Towne Center Drive**
E/W Street:	**Golden Haven Drive**



LEGEND

Existing K-Factor	xx%
ADT Volume	xx

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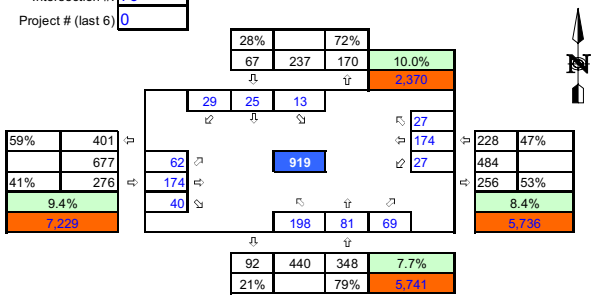
Int 76 AM Peak Volumes

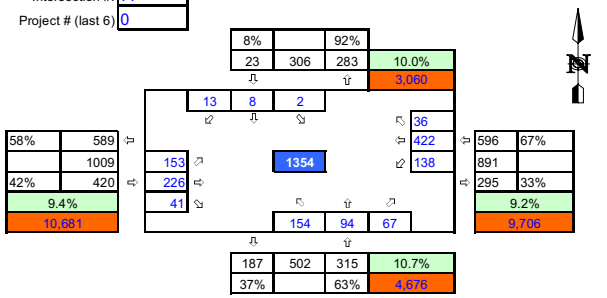
Scenario: **Existing Conditions**
N/S Street: **Executive Way**
E/W Street: **Executive Drive**
Intersection #: 76
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

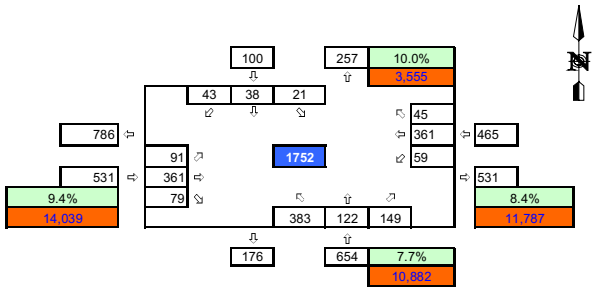
Int 77 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Judicial Drive**
E/W Street: **Eastgate Mall**
Intersection #: 77
Project # (last 6): 0

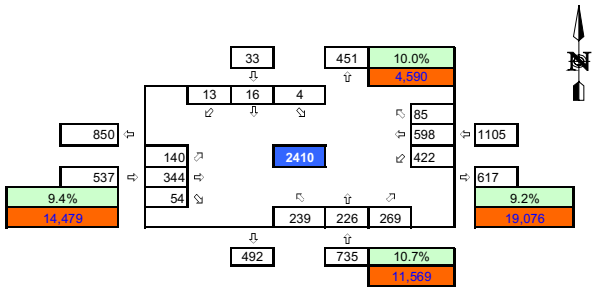


Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Executive Way**
E/W Street: **Executive Drive**



Scenario: **Horizon Year Conditions**
N/S Street: **Judicial Drive**
E/W Street: **Eastgate Mall**



LEGEND

Existing K-Factor	xx%
ADT Volume	xx

LEGEND

Existing K-Factor	xx%
ADT Volume	xx

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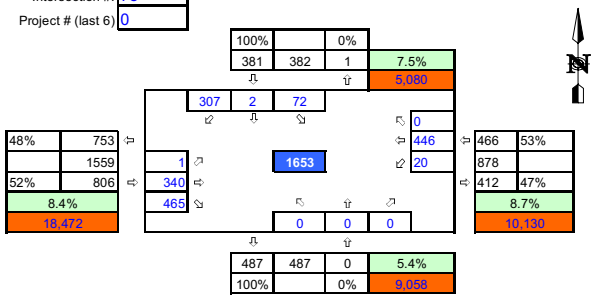
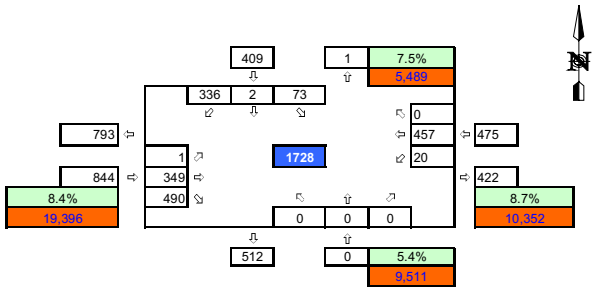
Int 78 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**I-805 SB Ramps**
E/W Street:	**Governor Drive**
Intersection #:	78
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

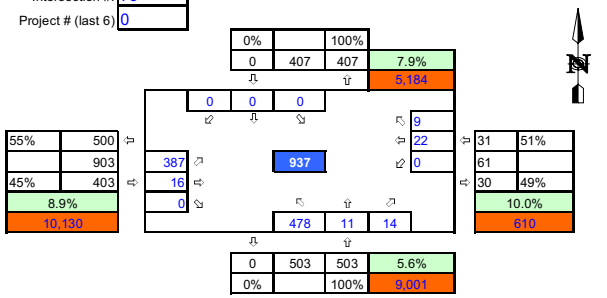
Scenario:	**Horizon Year Conditions**
N/S Street:	**I-805 SB Ramps**
E/W Street:	**Governor Drive**



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

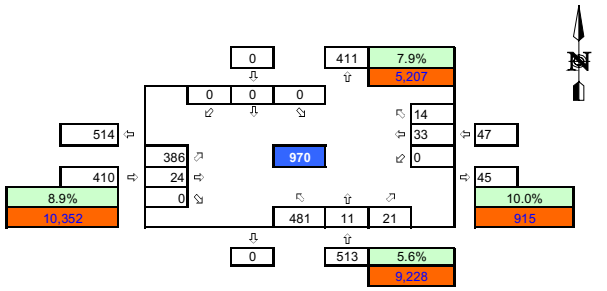
Int 79 AM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**I-805 NB Ramps**
E/W Street:	**Governor Drive**
Intersection #:	79
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

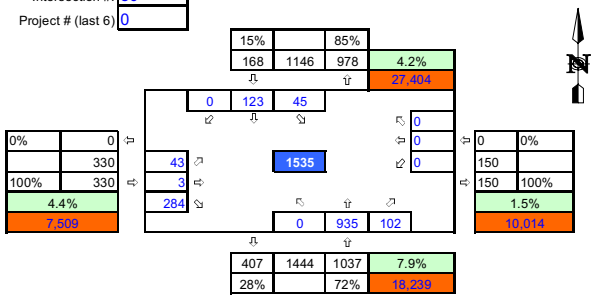
Scenario:	**Horizon Year Conditions**
N/S Street:	**I-805 NB Ramps**
E/W Street:	**Governor Drive**



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

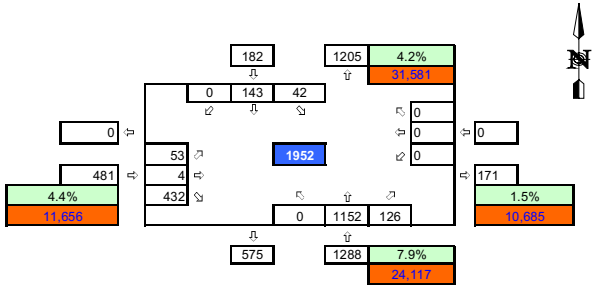
Int 80 AM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Gilman Drive**
E/W Street: **La Jolla Village Drive EB**
Intersection #: 80
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Gilman Drive**
E/W Street: **La Jolla Village Drive EB**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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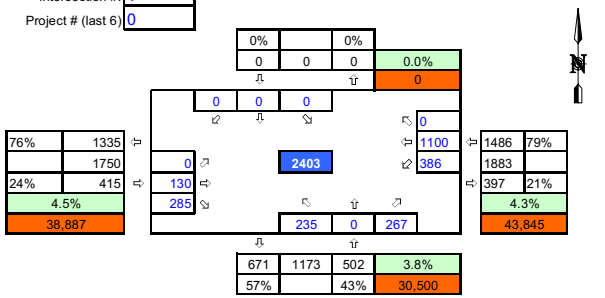
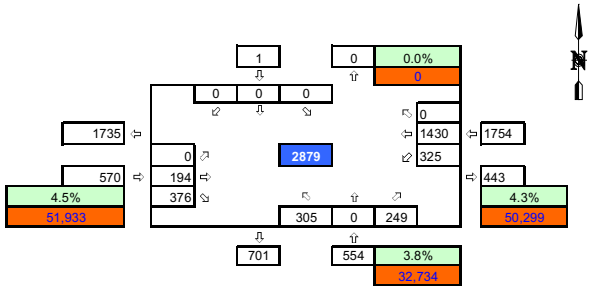
Int 1 MID Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **N. Torrey Pines Road**
E/W Street: **Genesee Avenue**
Intersection #: 1
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **N. Torrey Pines Road**
E/W Street: **Genesee Avenue**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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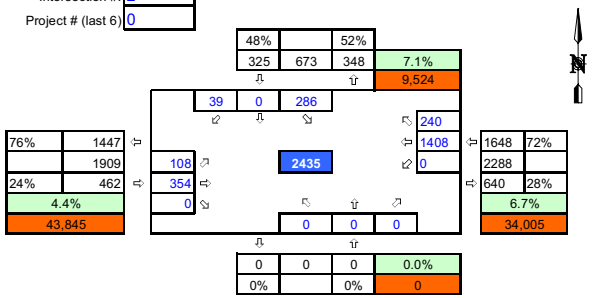
Int 1 MID

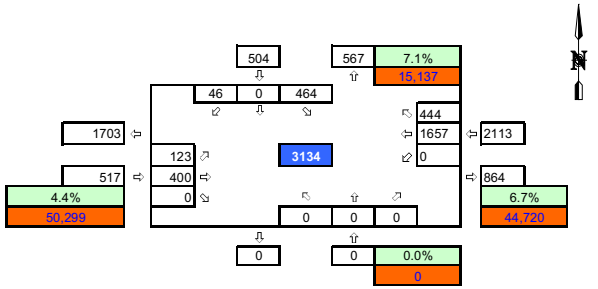
Int 2 MID Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**John Hopkins Drive (S)**
E/W Street:	**Genesee Avenue**
Intersection #:	2
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**John Hopkins Drive (S)**
E/W Street:	**Genesee Avenue**



LEGEND

Existing K-Factor	xx%
ADT Volume	xx

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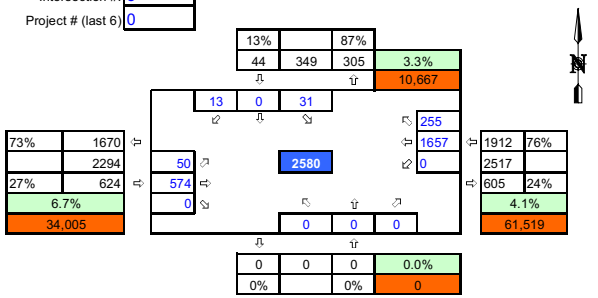
Int 2 MID

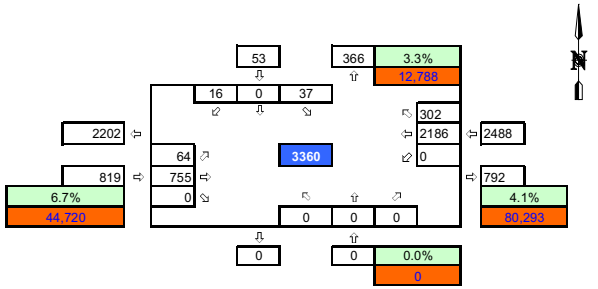
Int 3 MID Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Science Center Drive**
E/W Street:	**Genesee Avenue**
Intersection #:	3
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Science Center Drive**
E/W Street:	**Genesee Avenue**



LEGEND

Existing K-Factor	xx%
ADT Volume	xx

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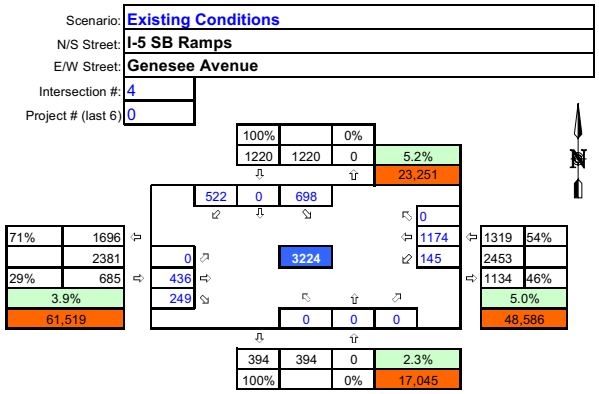
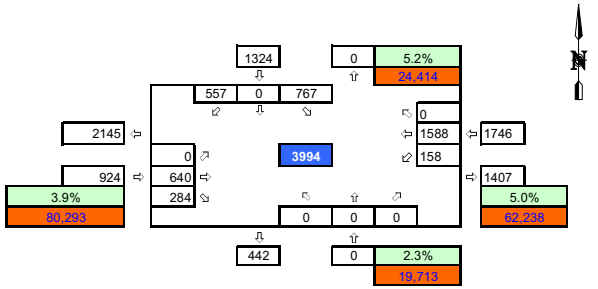
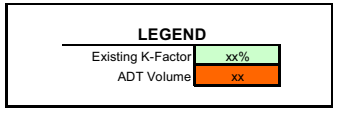
Int 3 MID

Int 4 MID Peak Volumes

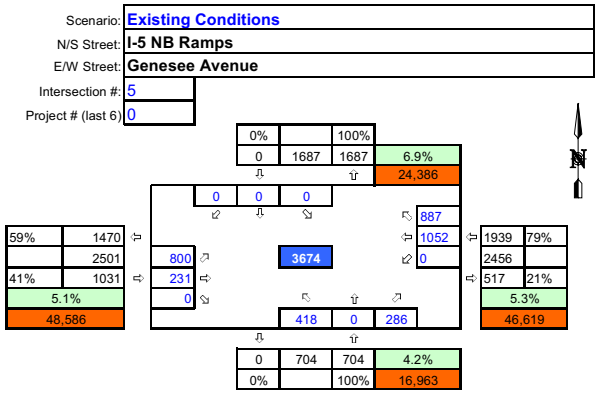


Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

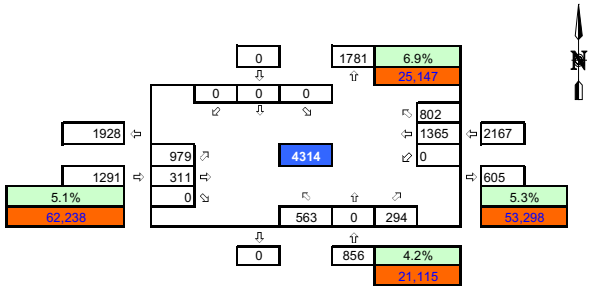


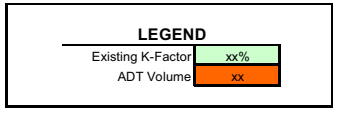


Int 5 MID Peak Volumes



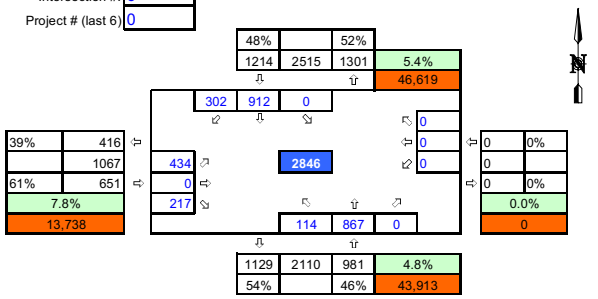
Note: Traffic volumes were collected by Accurate Video Counts during May 2015.





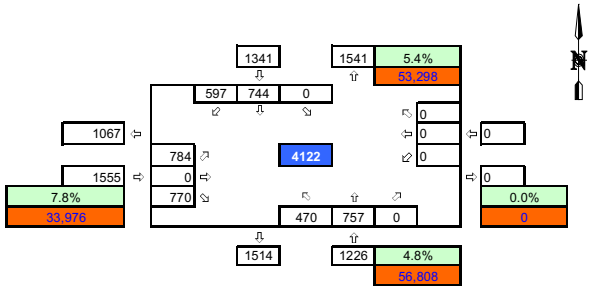
Int 6 MID Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**Scripps Hospital**
Intersection #:	6
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**Scripps Hospital**

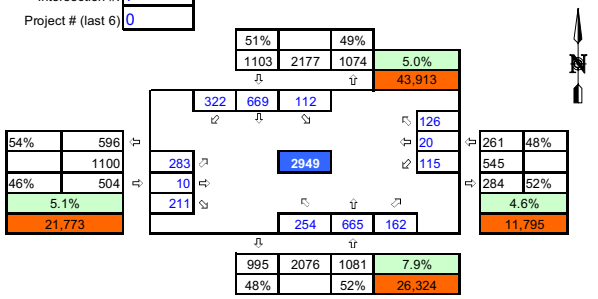


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

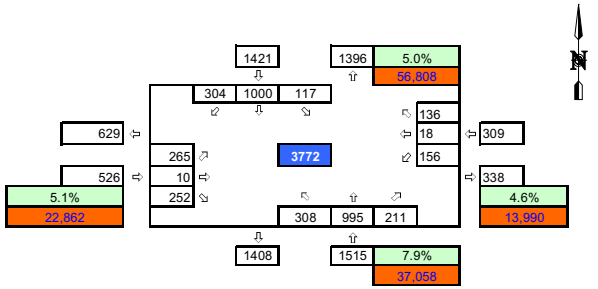
Int 7 MID Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**Campus Point Drive**
Intersection #:	7
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**Campus Point Drive**

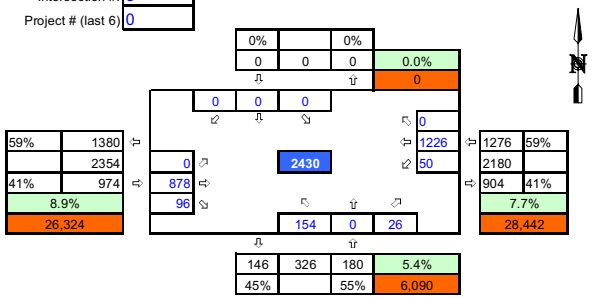


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

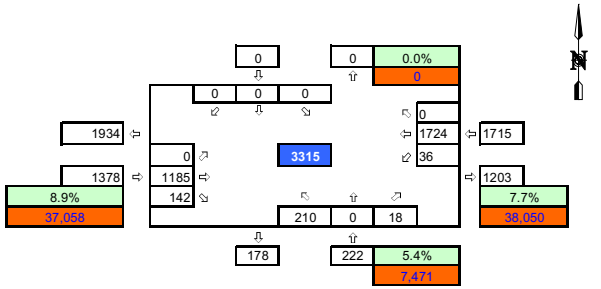
Int 8 MID Peak Volumes

Scenario:	Existing Conditions
N/S Street:	Regents Road
E/W Street:	Genesee Avenue
Intersection #:	8
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	Horizon Year Conditions
N/S Street:	Regents Road
E/W Street:	Genesee Avenue

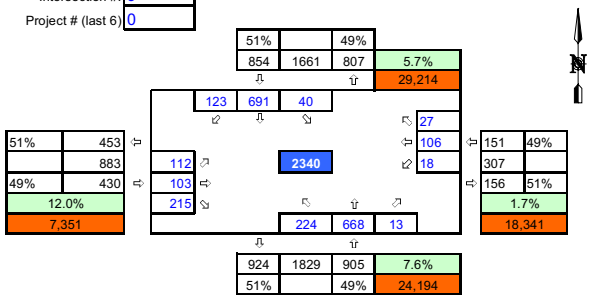


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

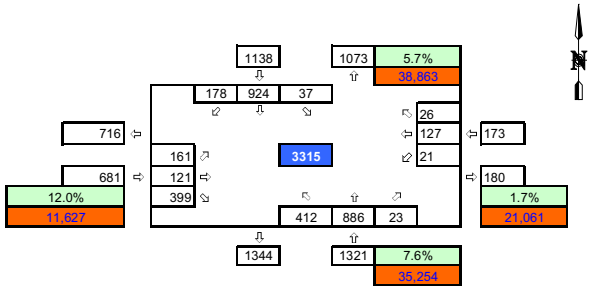
Int 9 MID Peak Volumes

Scenario:	Existing Conditions
N/S Street:	Genesee Avenue
E/W Street:	Eastgate Mall
Intersection #:	9
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	Horizon Year Conditions
N/S Street:	Genesee Avenue
E/W Street:	Eastgate Mall

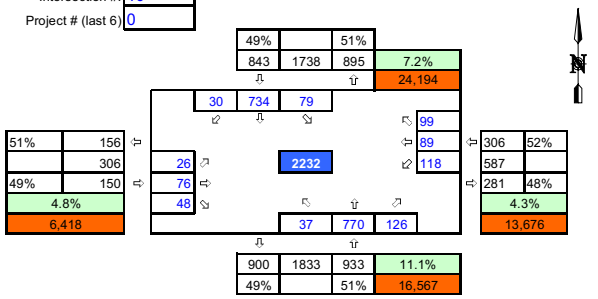


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

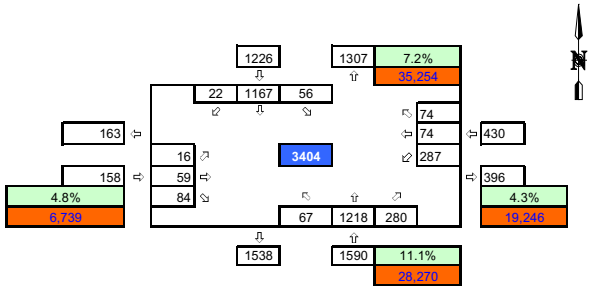
Int 10 MID Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**Executive Drive**
Intersection #:	10
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**Executive Drive**

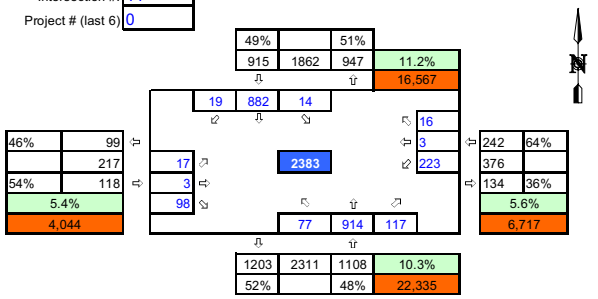


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

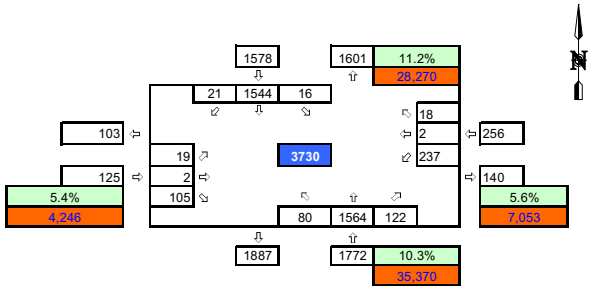
Int 11 MID Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**Executive Square**
Intersection #:	11
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**Executive Square**

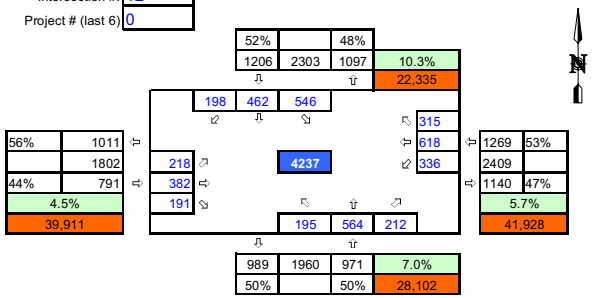


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

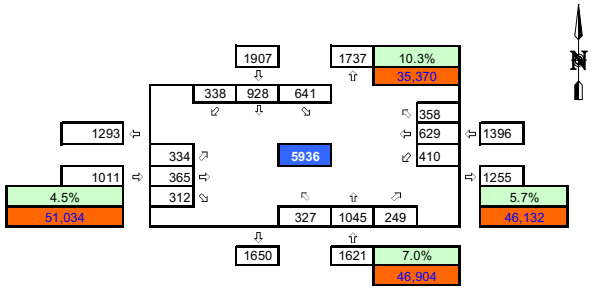
Int 12 MID Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **La Jolla Village Drive**
Intersection #: 12
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **La Jolla Village Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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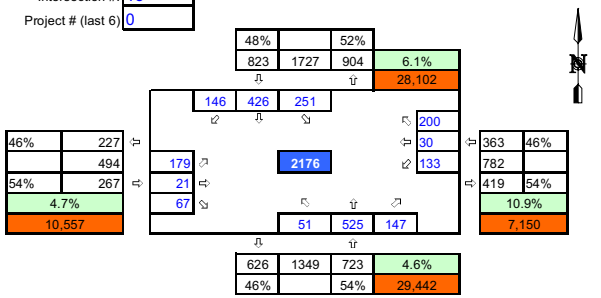
Int 12 MID

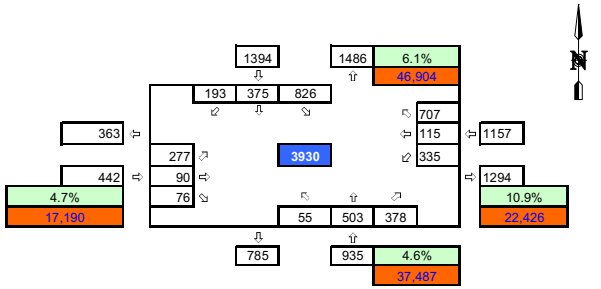
Int 13 MID Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Esplanade Court**
Intersection #: 13
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Esplanade Court**

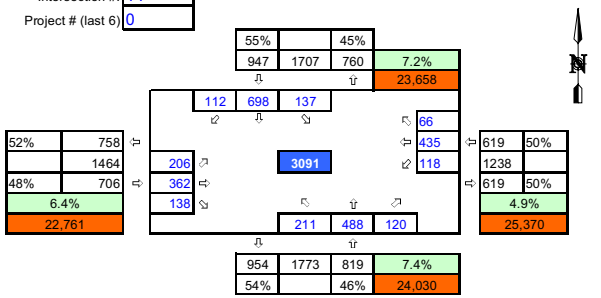


LEGEND
Existing K-Factor: xx%
ADT Volume: xx

K:\SND_TPTO\095240101 - University CPA\Excel\Horizon Year Conditions\Alternative D\Turn32_Alt D.xlsx
Int 13 MID

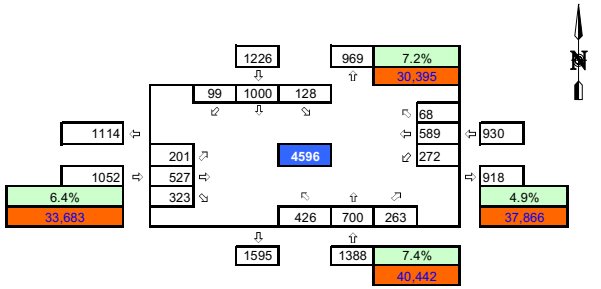
Int 14 MID Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Nobel Drive**
Intersection #: 14
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

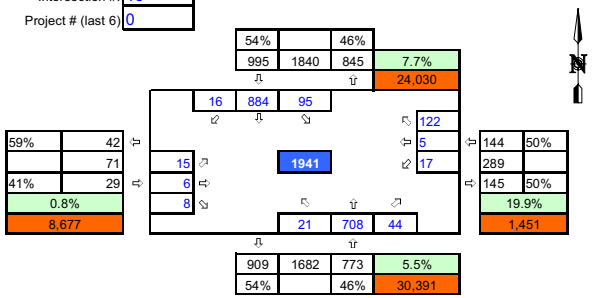
Scenario: **Horizon Year Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Nobel Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

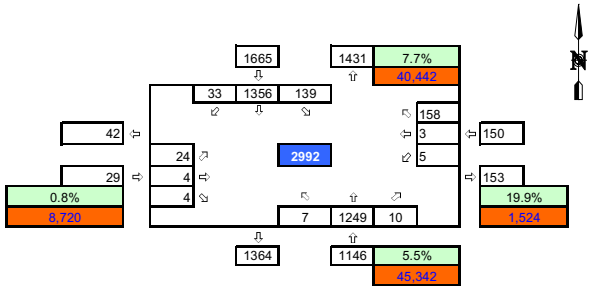
Int 15 MID Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Decoro Street**
Intersection #: 15
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

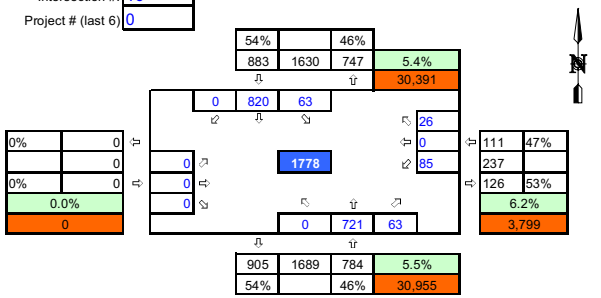
Scenario: **Horizon Year Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Decoro Street**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

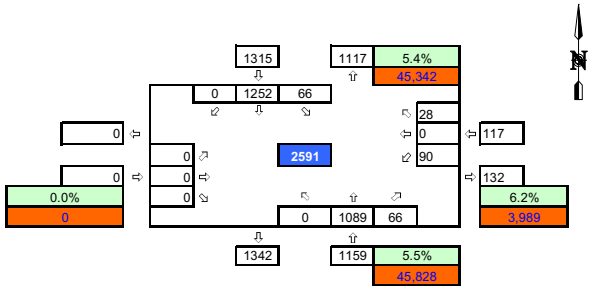
Int 16 MID Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Centurion Square**
Intersection #: 16
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Centurion Square**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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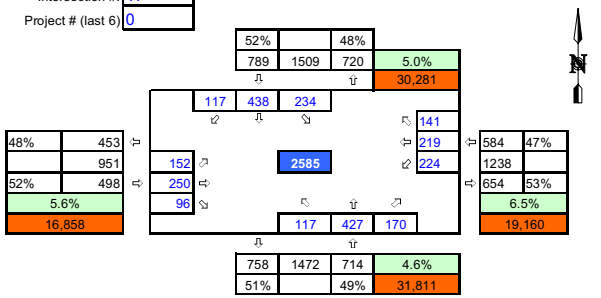
Int 16 MID

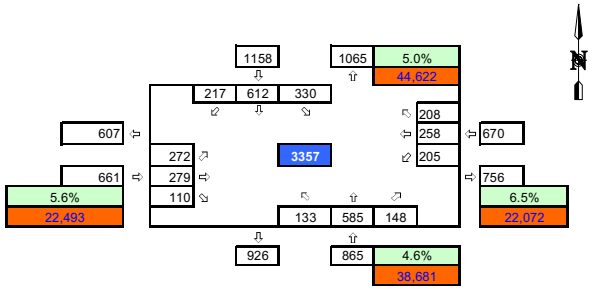
Int 17 MID Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Governor Drive**
Intersection #: 17
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Governor Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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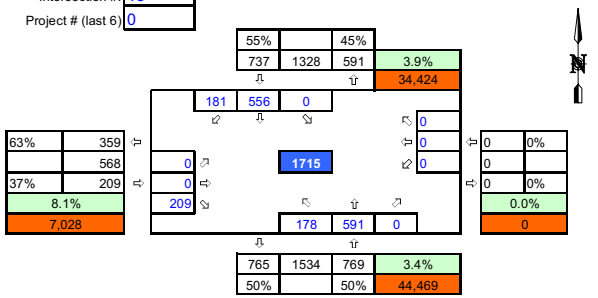
Int 17 MID

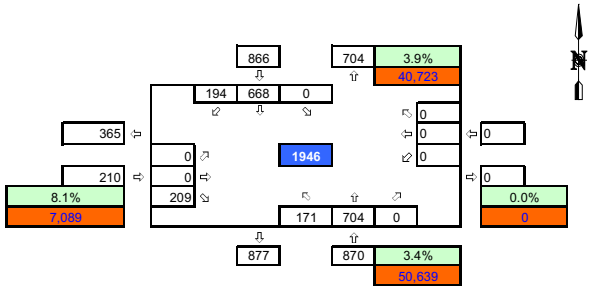
Int 18 MID Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**SR-52 WB Ramps**
Intersection #:	18
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**SR-52 WB Ramps**

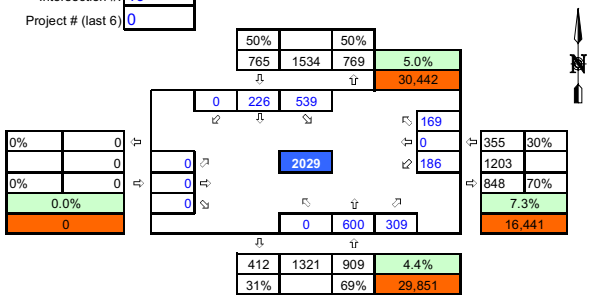


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

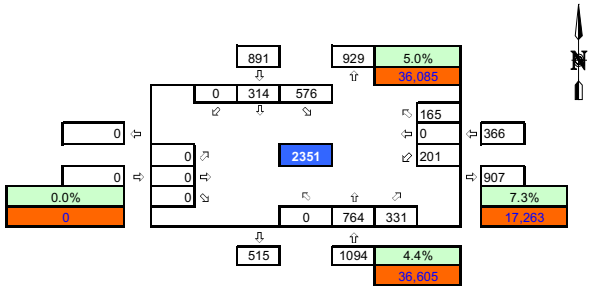
Int 19 MID Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**SR-52 EB Ramps**
Intersection #:	19
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**SR-52 EB Ramps**

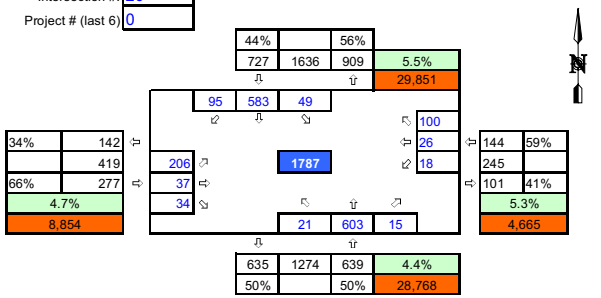


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

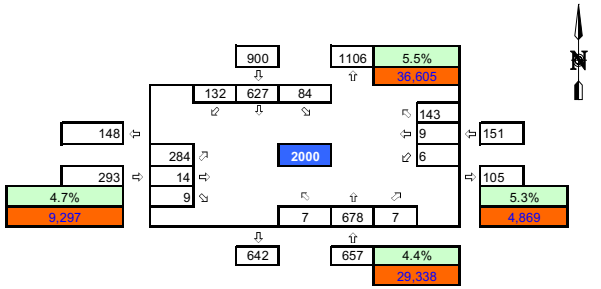
Int 20 MID Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**Lehrer Drive / Appleton Street**
Intersection #:	20
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**Lehrer Drive / Appleton Street**

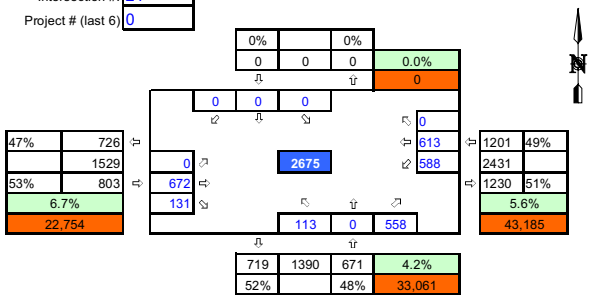


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

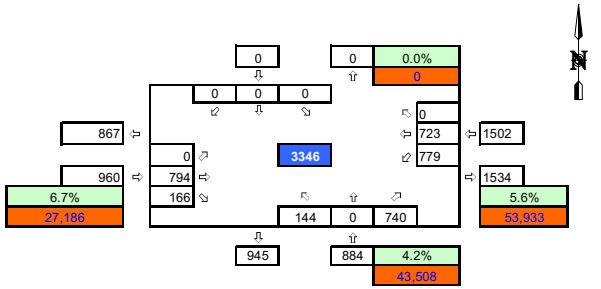
Int 21 MID Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Torrey Pines Road**
E/W Street:	**La Jolla Village Drive**
Intersection #:	21
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Torrey Pines Road**
E/W Street:	**La Jolla Village Drive**

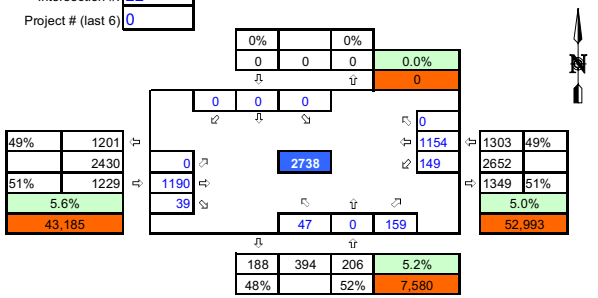


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

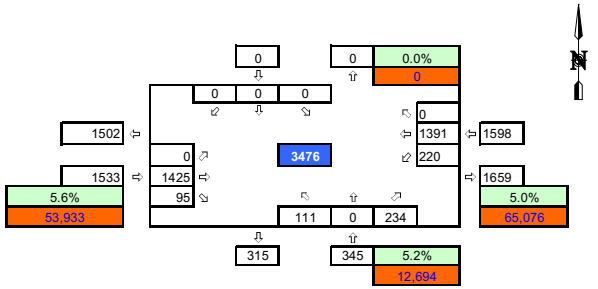
Int 22 MID Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **La Jolla Scenic Drive**
E/W Street: **La Jolla Village Drive**
Intersection #: 22
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **La Jolla Scenic Drive**
E/W Street: **La Jolla Village Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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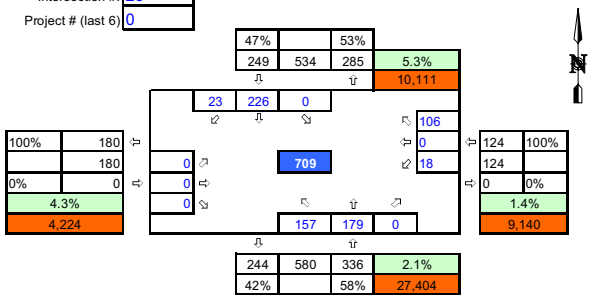
Int 22 MID

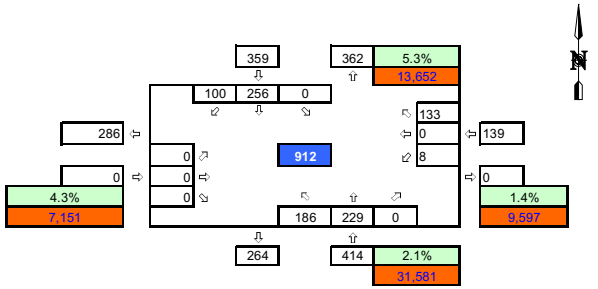
Int 23 MID Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Gillman Drive**
E/W Street: **La Jolla Village Drive WB**
Intersection #: 23
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Gillman Drive**
E/W Street: **La Jolla Village Drive WB**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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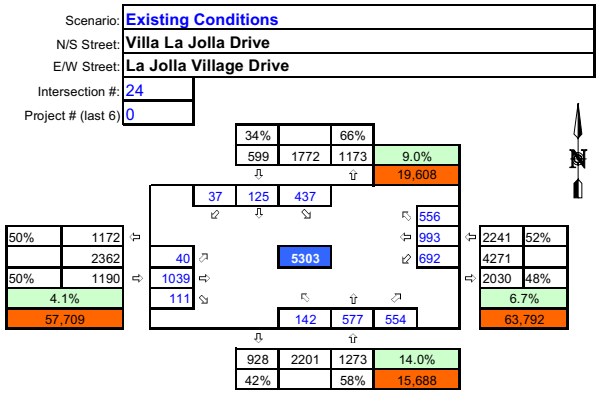
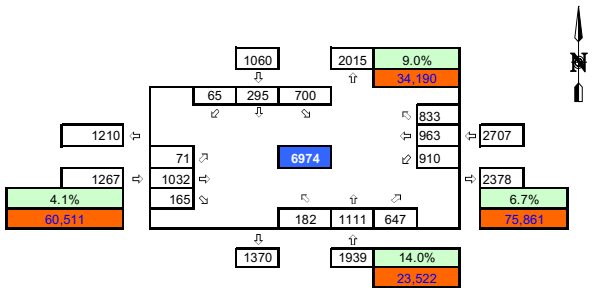
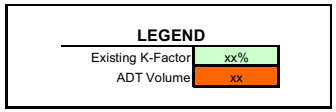
Int 23 MID

Int 24 MID Peak Volumes

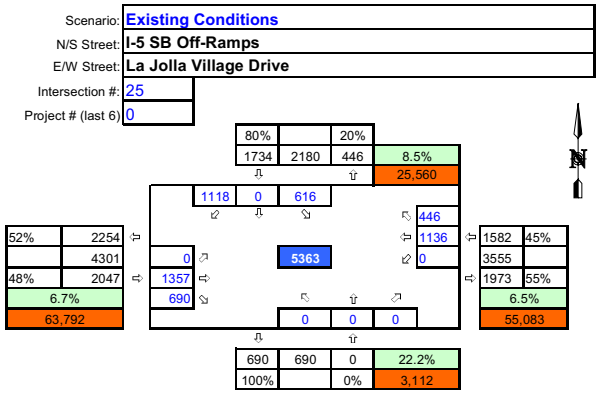


Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

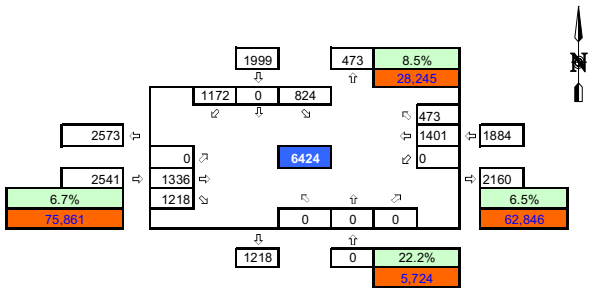


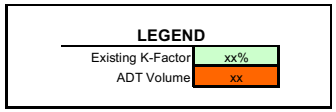


Int 25 MID Peak Volumes

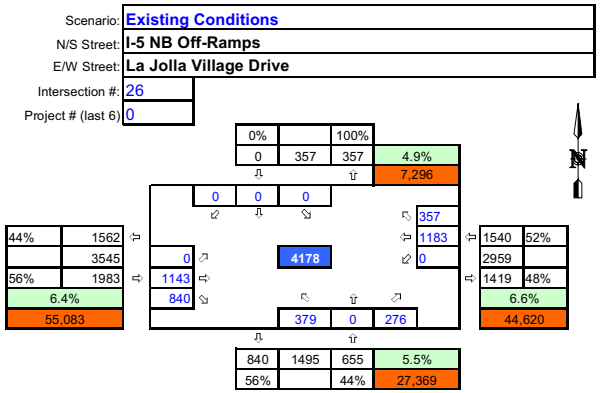


Note: Traffic volumes were collected by Accurate Video Counts during May 2015.



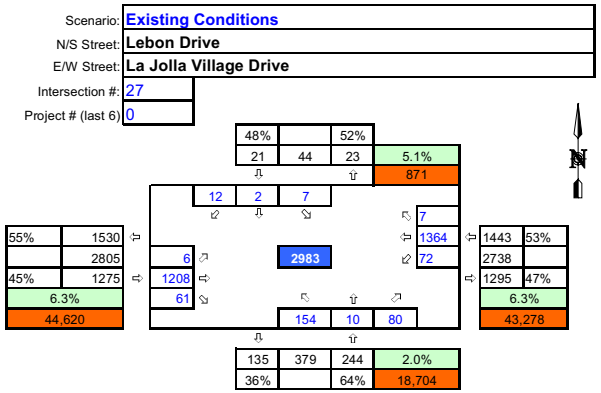


Int 26 MID Peak Volumes

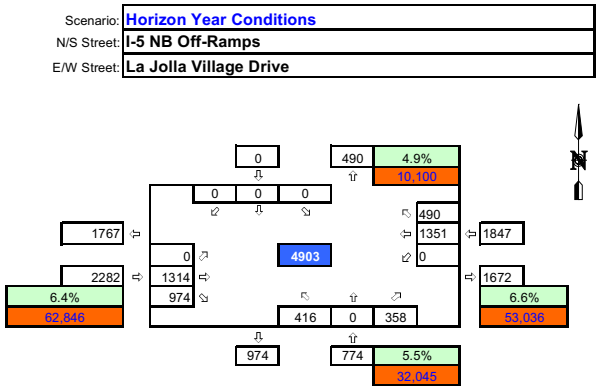


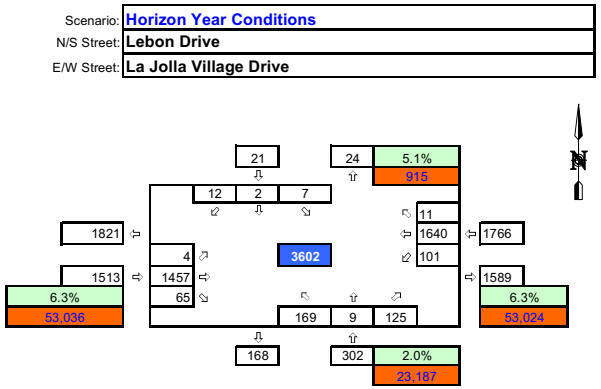
Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Int 27 MID Peak Volumes



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.



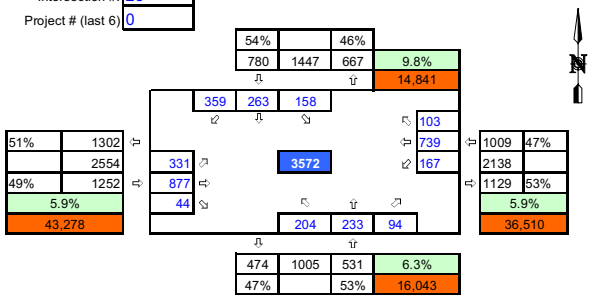


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

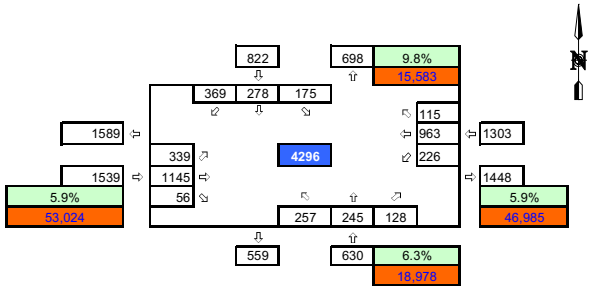
Int 28 MID Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Regents Road**
E/W Street: **La Jolla Village Drive**
Intersection #: 28
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Regents Road**
E/W Street: **La Jolla Village Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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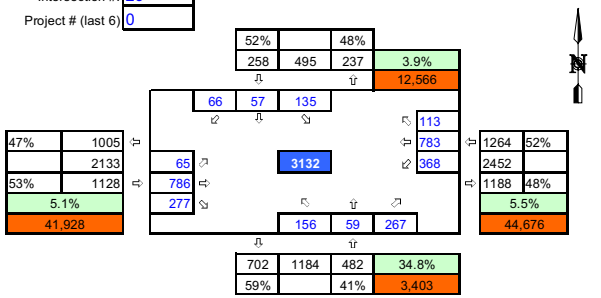
Int 28 MID

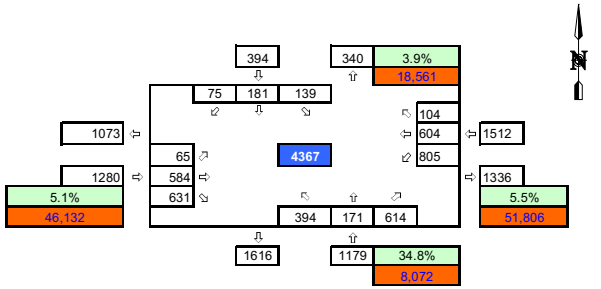
Int 29 MID Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Executive Way**
E/W Street: **La Jolla Village Drive**
Intersection #: 29
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Executive Way**
E/W Street: **La Jolla Village Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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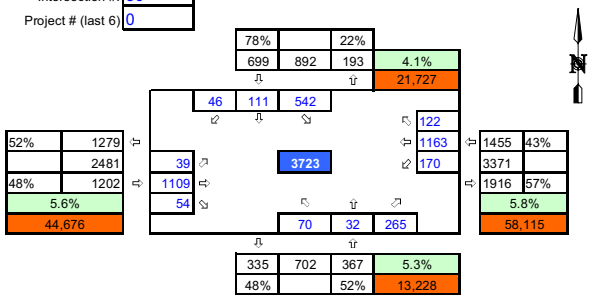
Int 29 MID

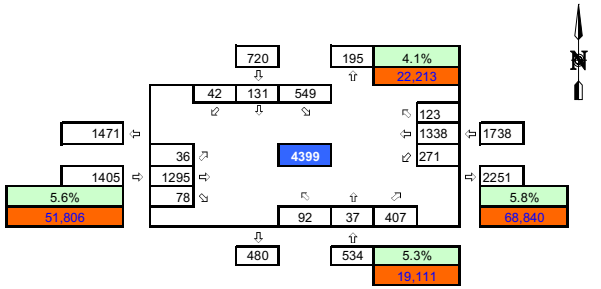
Int 30 MID Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Towne Center Drive**
E/W Street: **La Jolla Village Drive**
Intersection #: 30
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Towne Center Drive**
E/W Street: **La Jolla Village Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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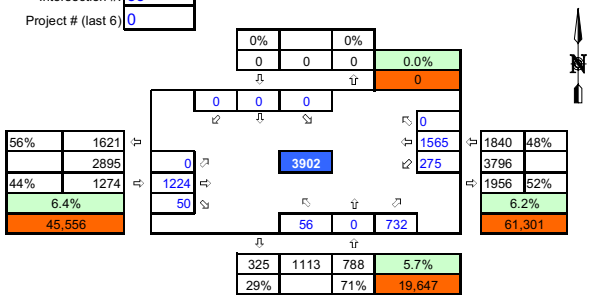
Int 30 MID

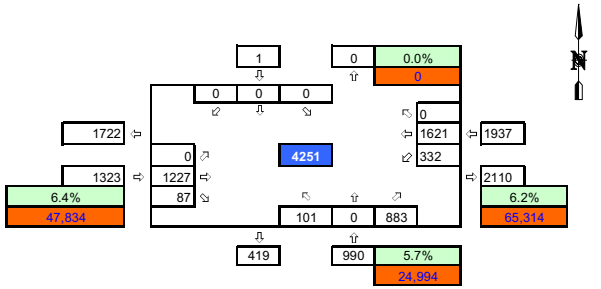
Int 33 MID Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Noble Drive**
E/W Street: **Miramar Road**
Intersection #: 33
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Noble Drive**
E/W Street: **Miramar Road**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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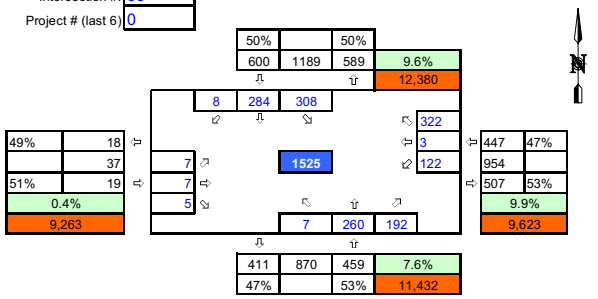
Int 33 MID

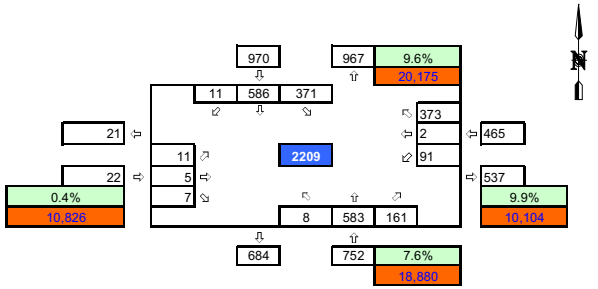
Int 38 MID Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Villa La Jolla Drive**
E/W Street: **Nobel Drive**
Intersection #: 38
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Villa La Jolla Drive**
E/W Street: **Nobel Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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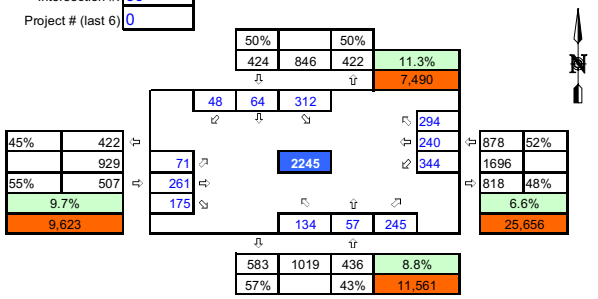
Int 38 MID

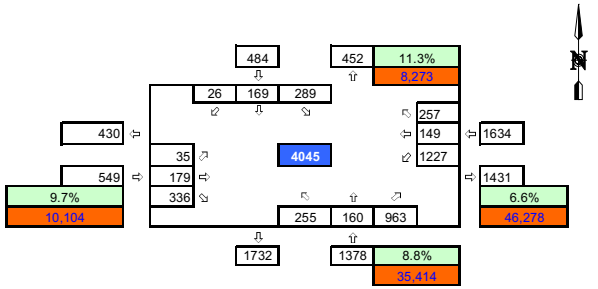
Int 39 MID Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **La Jolla Village Square Driveway**
E/W Street: **Nobel Drive**
Intersection #: 39
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **La Jolla Village Square Driveway**
E/W Street: **Nobel Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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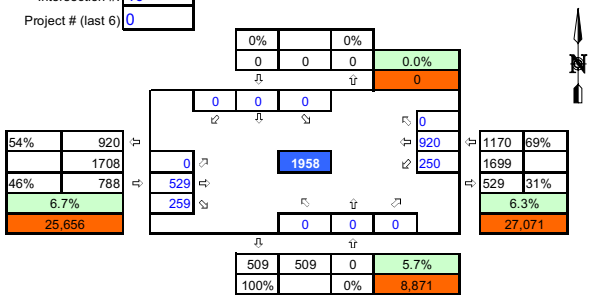
Int 39 MID

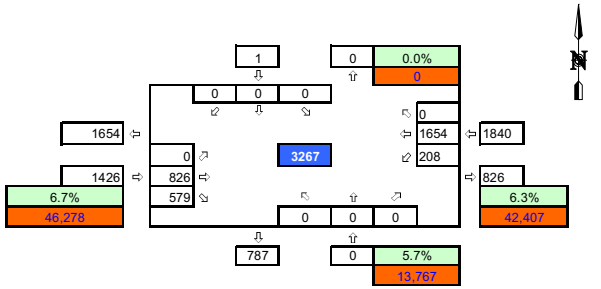
Int 40 MID Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **I-5 SB On**
E/W Street: **Nobel Drive**
Intersection #: 40
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

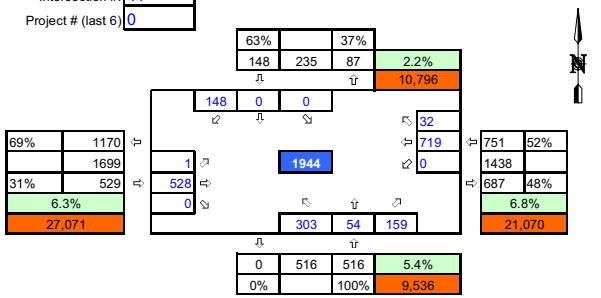
Scenario: **Horizon Year Conditions**
N/S Street: **I-5 SB On**
E/W Street: **Nobel Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

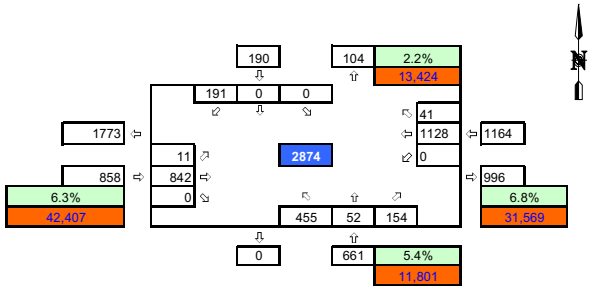
Int 41 MID Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **University Center Lane/I-5 NB Off**
E/W Street: **Nobel Drive**
Intersection #: 41
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

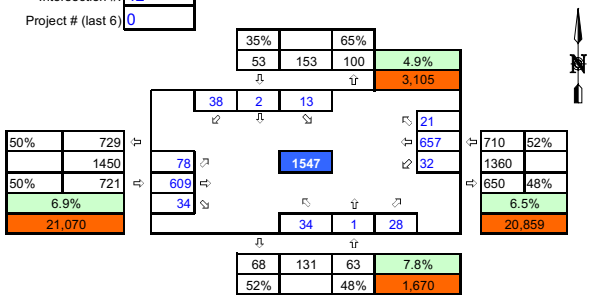
Scenario: **Horizon Year Conditions**
N/S Street: **University Center Lane/I-5 NB Off**
E/W Street: **Nobel Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

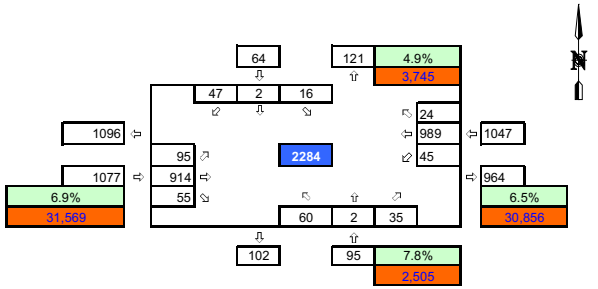
Int 42 MID Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Caminito Plaza Centro**
E/W Street:	**Nobel Drive**
Intersection #:	42
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Caminito Plaza Centro**
E/W Street:	**Nobel Drive**

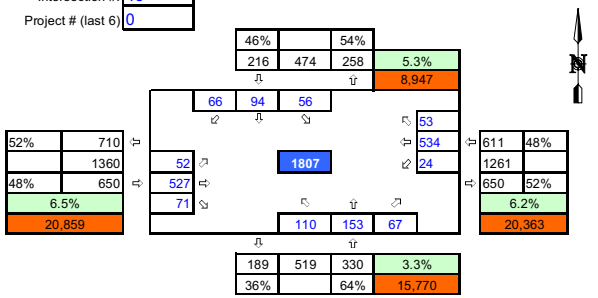


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

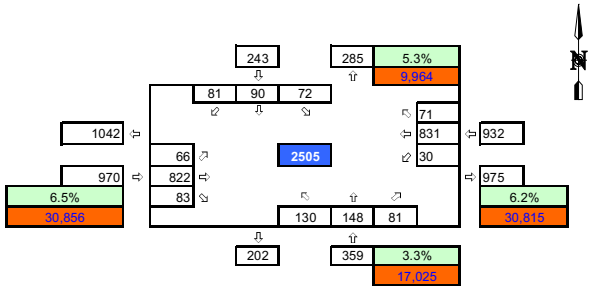
Int 43 MID Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Lebon Drive**
E/W Street:	**Nobel Drive**
Intersection #:	43
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Lebon Drive**
E/W Street:	**Nobel Drive**

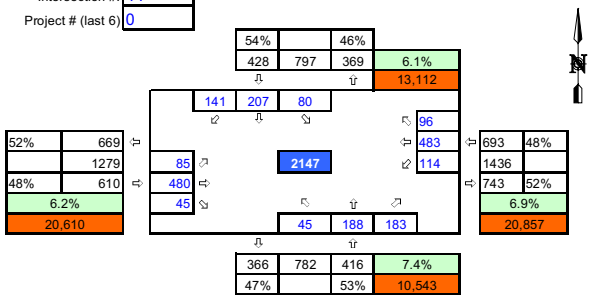


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

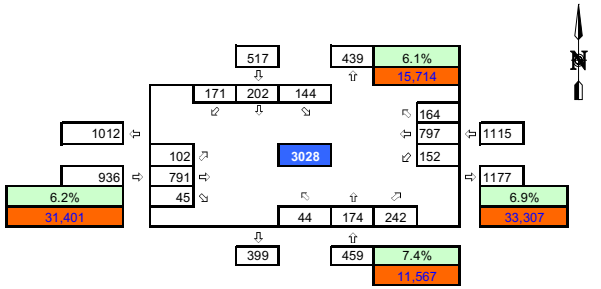
Int 44 MID Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Regents Road**
E/W Street: **Nobel Drive**
Intersection #: 44
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Regents Road**
E/W Street: **Nobel Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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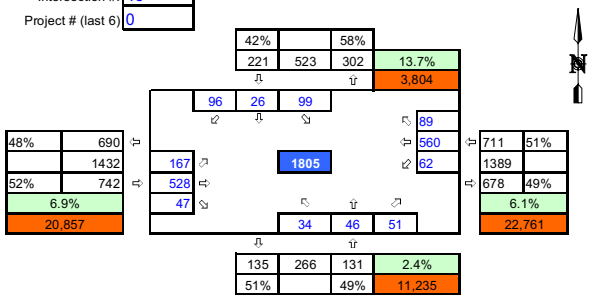
Int 44 MID

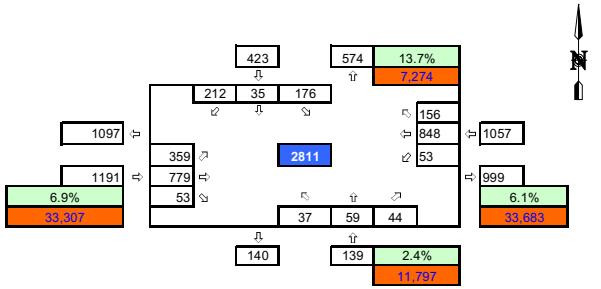
Int 45 MID Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Costa Verde Boulevard/Cargill Ave**
E/W Street: **Cargill Ave / Nobel Drive**
Intersection #: 45
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Costa Verde Boulevard/Cargill Ave**
E/W Street: **Cargill Ave / Nobel Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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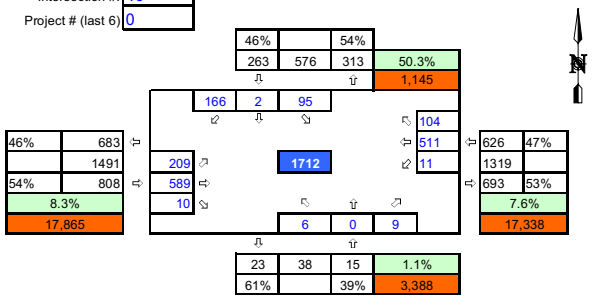
Int 45 MID

Int 46 MID Peak Volumes

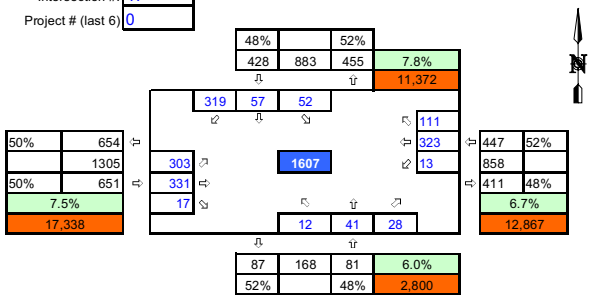
Scenario:	**Existing Conditions**
N/S Street:	**Lombard Place**
E/W Street:	**Nobel Drive**
Intersection #:	46
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

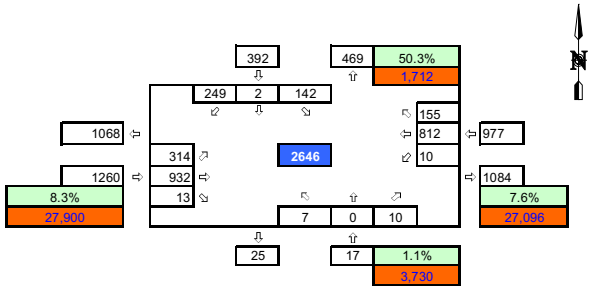
Int 47 MID Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Towne Center Drive**
E/W Street:	**Nobel Drive**
Intersection #:	47
Project # (last 6)	0

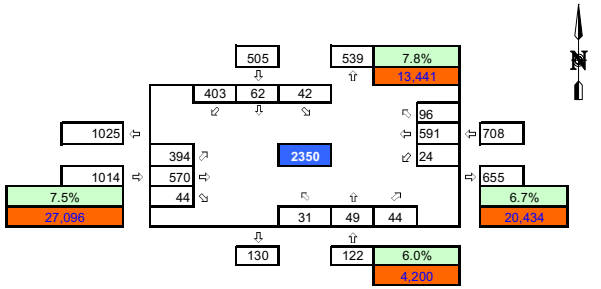


Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Lombard Place**
E/W Street:	**Nobel Drive**



Scenario:	**Horizon Year Conditions**
N/S Street:	**Towne Center Drive**
E/W Street:	**Nobel Drive**

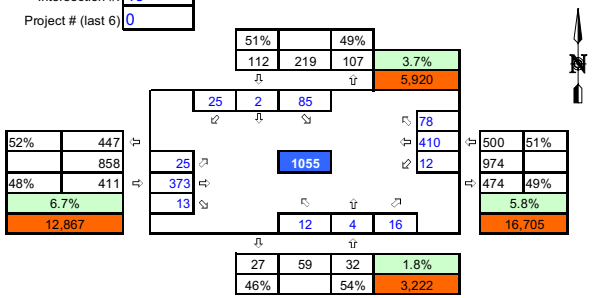


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

Int 48 MID Peak Volumes

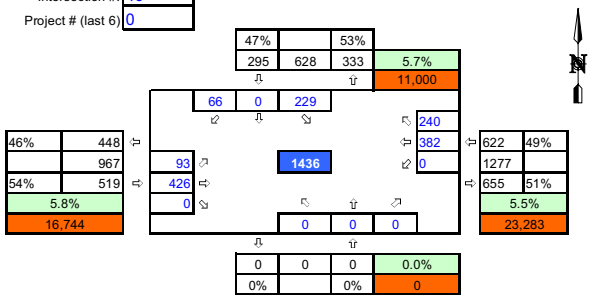
Scenario:	**Existing Conditions**
N/S Street:	**Shoreline Drive**
E/W Street:	**Nobel Drive**
Intersection #:	48
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

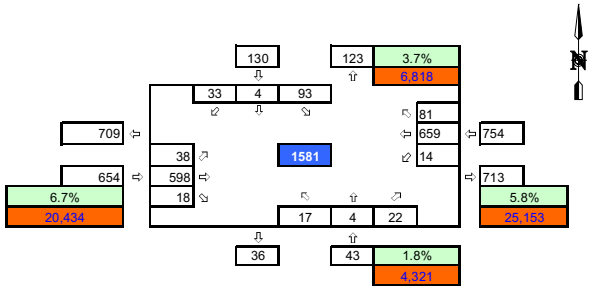
Int 49 MID Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Judicial Drive**
E/W Street:	**Nobel Drive**
Intersection #:	49
Project # (last 6)	0

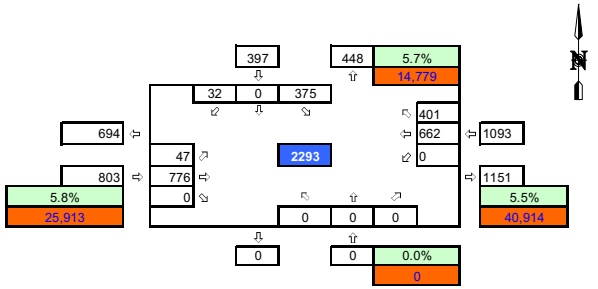


Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Shoreline Drive**
E/W Street:	**Nobel Drive**



Scenario:	**Horizon Year Conditions**
N/S Street:	**Judicial Drive**
E/W Street:	**Nobel Drive**



LEGEND

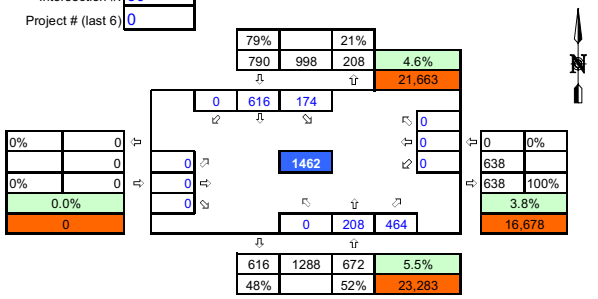
Existing K-Factor	xx%
ADT Volume	xx

LEGEND

Existing K-Factor	xx%
ADT Volume	xx

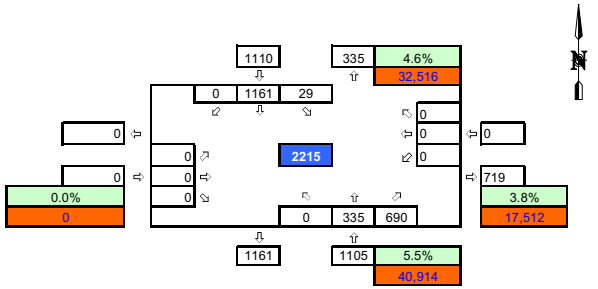
Int 50 MID Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Nobel Drive**
E/W Street: **I-805 SB On-Ramp**
Intersection #: 50
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Nobel Drive**
E/W Street: **I-805 SB On-Ramp**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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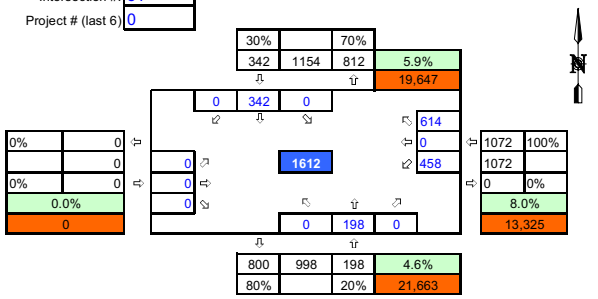
Int 50 MID

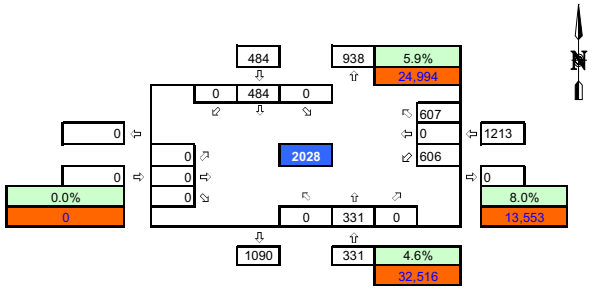
Int 51 MID Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Nobel Drive**
E/W Street: **I-805 N Off-Ramp**
Intersection #: 51
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Nobel Drive**
E/W Street: **I-805 N Off-Ramp**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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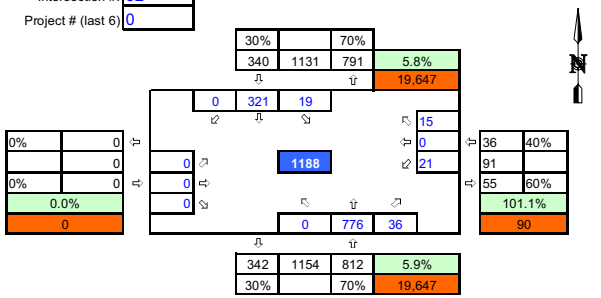
Int 51 MID

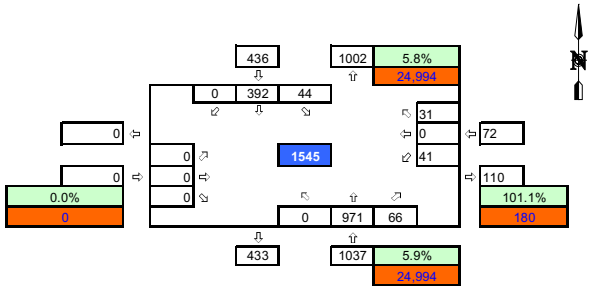
Int 52 MID Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Nobel Drive**
E/W Street:	**Avenue of Flags**
Intersection #:	52
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Nobel Drive**
E/W Street:	**Avenue of Flags**

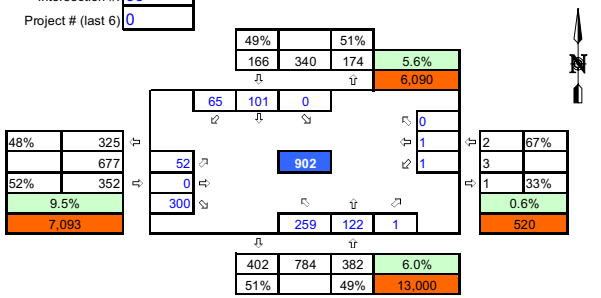


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

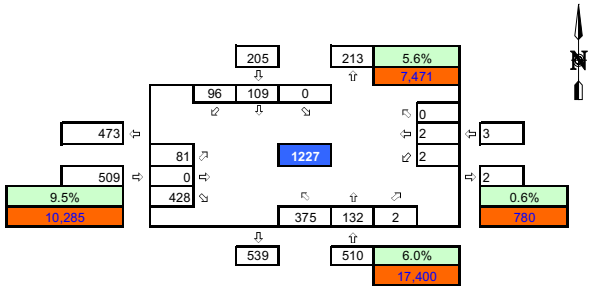
Int 53 MID Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Regents Road**
E/W Street:	**Health Science Drive / County Day Ln**
Intersection #:	53
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

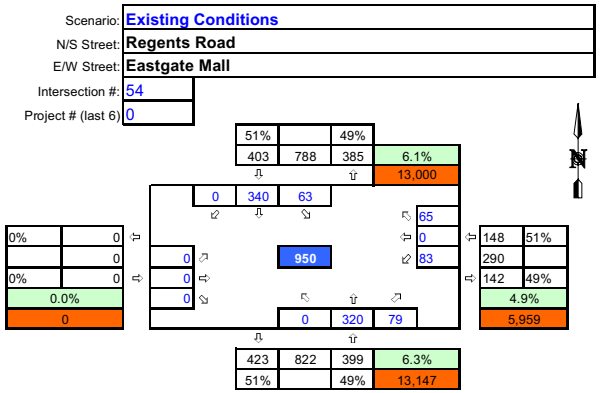
Scenario:	**Horizon Year Conditions**
N/S Street:	**Regents Road**
E/W Street:	**Health Science Drive / County Day Ln**



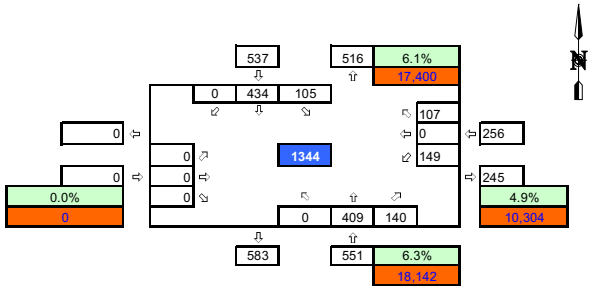
LEGEND

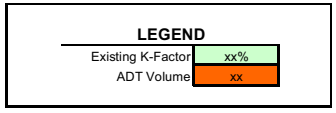
Existing K-Factor	xx%
ADT Volume	xx

Int 54 MID Peak Volumes

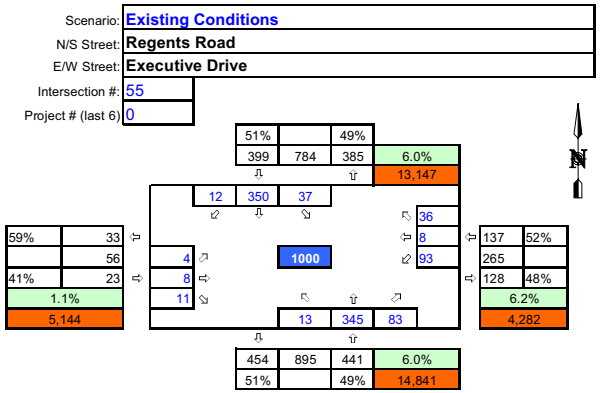


Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

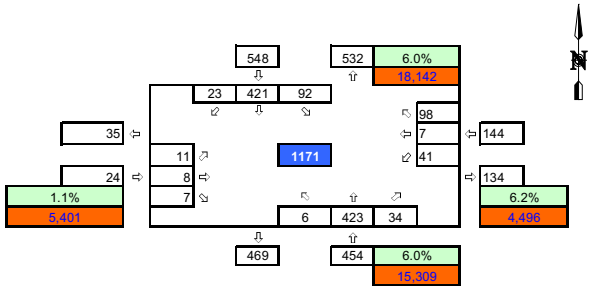


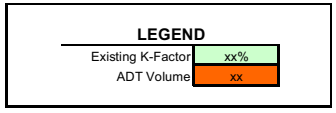


Int 55 MID Peak Volumes



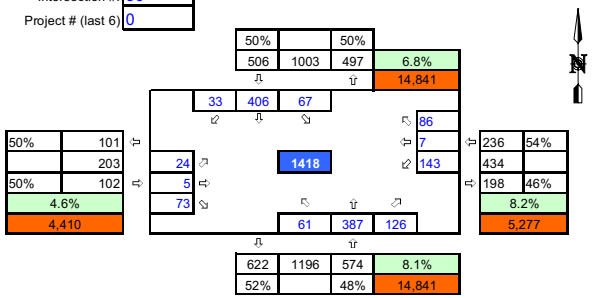
Note: Traffic volumes were collected by Accurate Video Counts during May 2015.





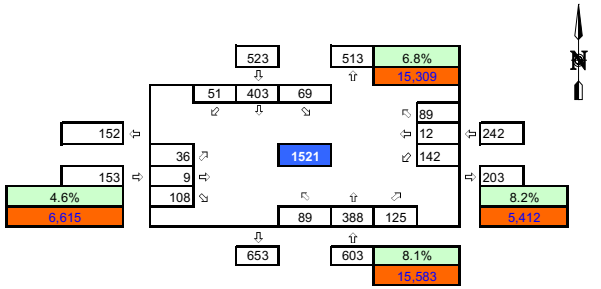
Int 56 MID Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Regents Road**
E/W Street: **Miramar Street / Regents Park Row**
Intersection #: 56
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Regents Road**
E/W Street: **Miramar Street / Regents Park Row**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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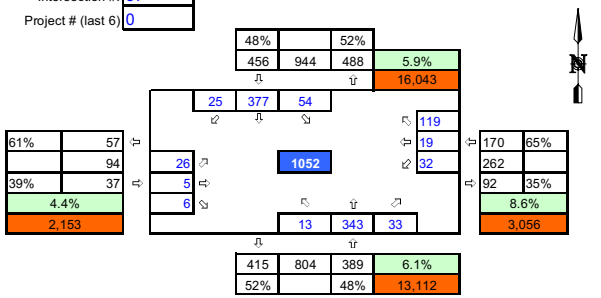
Int 56 MID

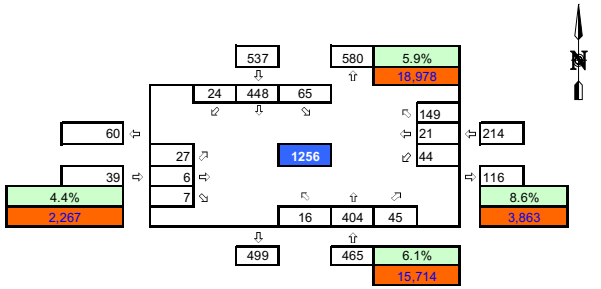
Int 57 MID Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Regents Road**
E/W Street: **Plaza De Palmas**
Intersection #: 57
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Regents Road**
E/W Street: **Plaza De Palmas**

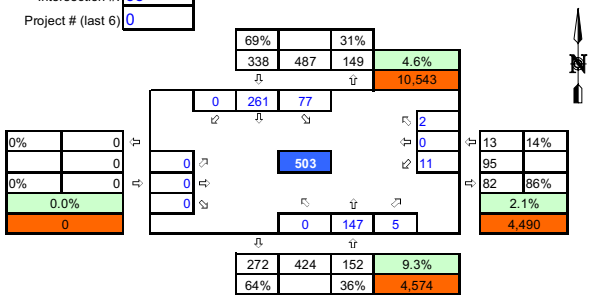


LEGEND
Existing K-Factor: xx%
ADT Volume: xx

K:\SND_TPTO\095240101 - University CPA\Excel\Horizon Year Conditions\Alternative D\Turn32_Alt D.xlsx
Int 57 MID

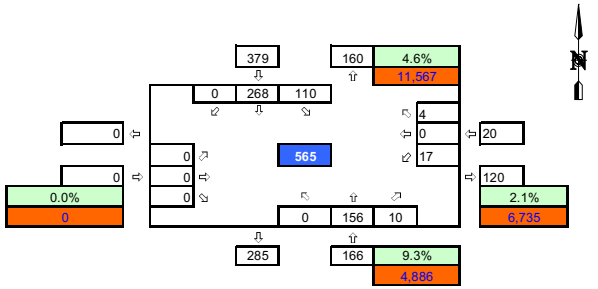
Int 58 MID Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Regents Road**
E/W Street: **Berino Court**
Intersection #: 58
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Regents Road**
E/W Street: **Berino Court**

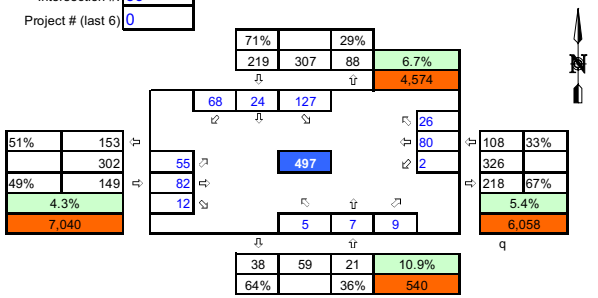


LEGEND
Existing K-Factor: xx%
ADT Volume: xx

K:\SND_TPTO\095240101 - University CPA\Excel\Horizon Year Conditions\Alternative D\Turn32_Alt D.xlsx
Int 58 MID

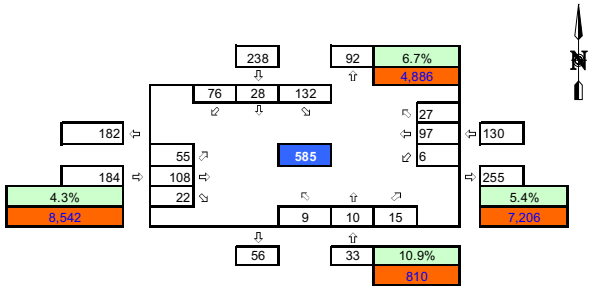
Int 59 MID Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Regents Road**
E/W Street: **Arriba Street**
Intersection #: 59
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Regents Road**
E/W Street: **Arriba Street**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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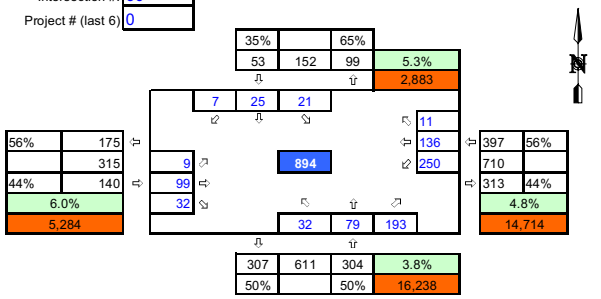
Int 59 MID

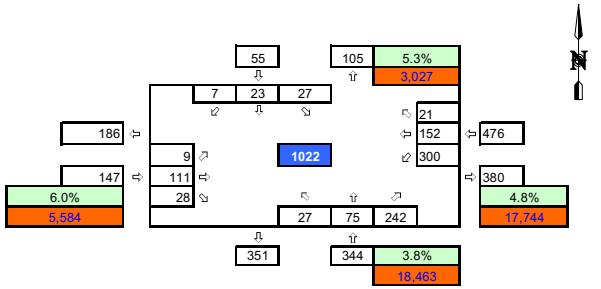
Int 60 MID Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Regents Road**
E/W Street: **Governor Drive**
Intersection #: 60
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Regents Road**
E/W Street: **Governor Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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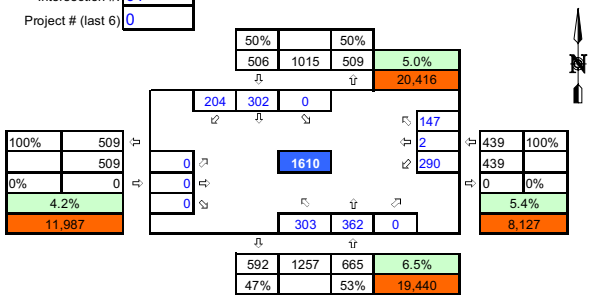
Int 60 MID

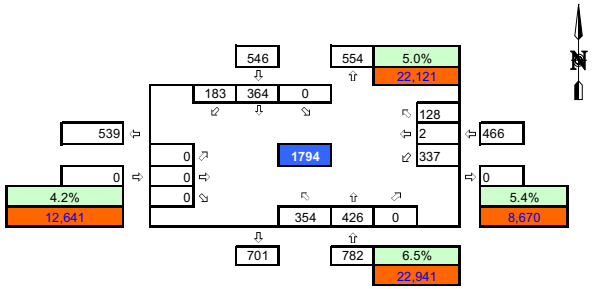
Int 61 MID Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Regents Road**
E/W Street: **SR-52 WB Ramps**
Intersection #: 61
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Regents Road**
E/W Street: **SR-52 WB Ramps**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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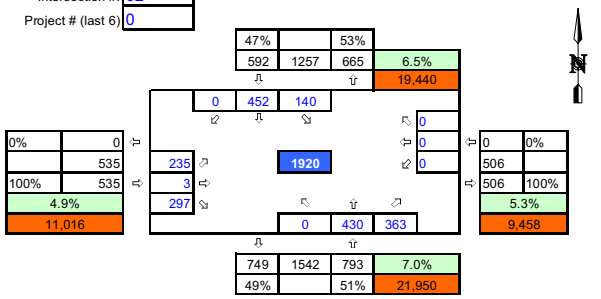
Int 61 MID

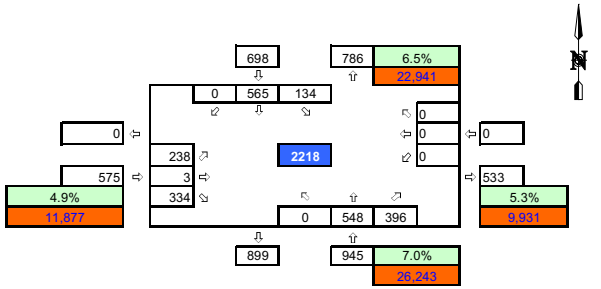
Int 62 MID Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Regents Road**
E/W Street: **SR-52 EB Ramps**
Intersection #: 62
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Regents Road**
E/W Street: **SR-52 EB Ramps**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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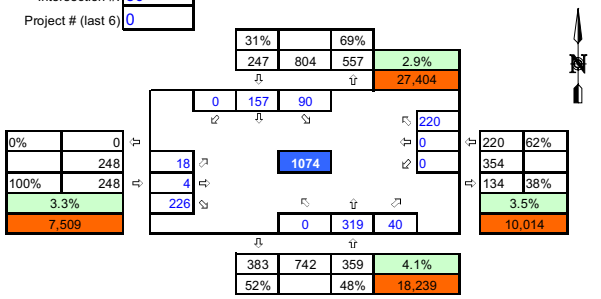
Int 62 MID

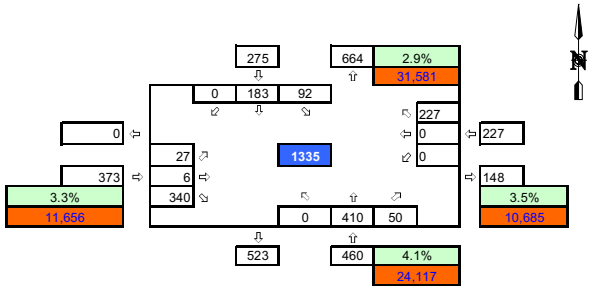
Int 80 MID Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Gilman Drive**
E/W Street: **La Jolla Village Drive EB**
Intersection #: 80
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Gilman Drive**
E/W Street: **La Jolla Village Drive EB**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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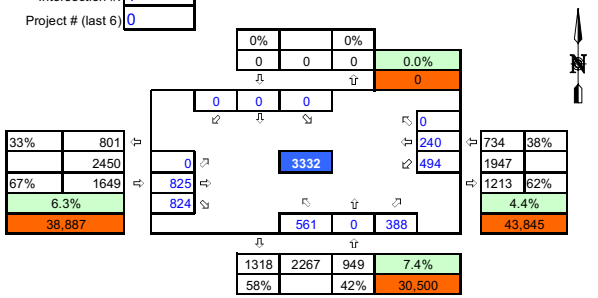
Int 80 MID

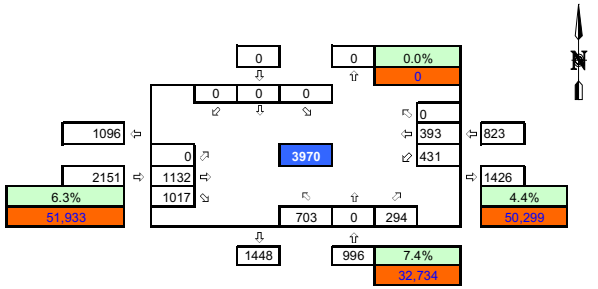
Int 1 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**N. Torrey Pines Road**
E/W Street:	**Genesee Avenue**
Intersection #:	1
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**N. Torrey Pines Road**
E/W Street:	**Genesee Avenue**



LEGEND

Existing K-Factor	xx%
ADT Volume	xx

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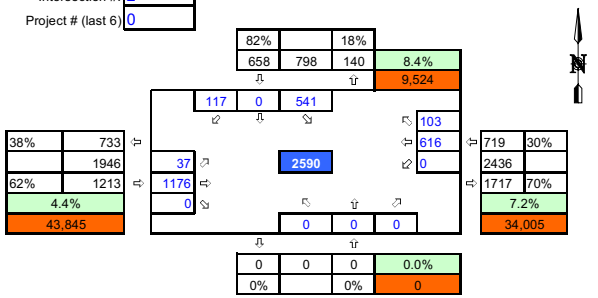
Int 1 PM

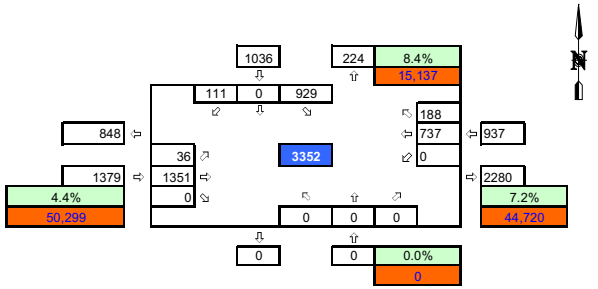
Int 2 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**John Hopkins Drive (S)**
E/W Street:	**Genesee Avenue**
Intersection #:	2
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**John Hopkins Drive (S)**
E/W Street:	**Genesee Avenue**



LEGEND

Existing K-Factor	xx%
ADT Volume	xx

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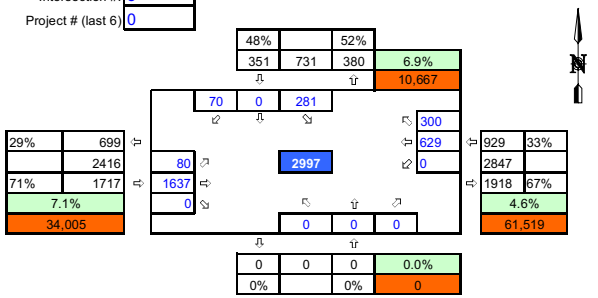
Int 2 PM

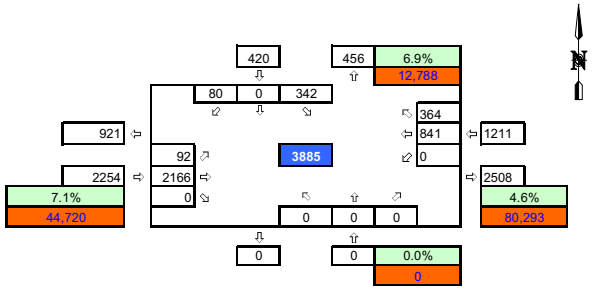
Int 3 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Science Center Drive**
E/W Street:	**Genesee Avenue**
Intersection #:	3
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Science Center Drive**
E/W Street:	**Genesee Avenue**

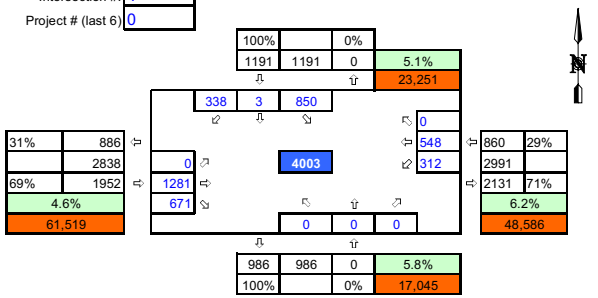


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

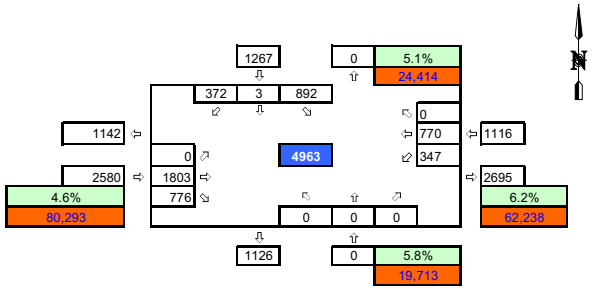
Int 4 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**I-5 SB Ramps**
E/W Street:	**Genesee Avenue**
Intersection #:	4
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**I-5 SB Ramps**
E/W Street:	**Genesee Avenue**

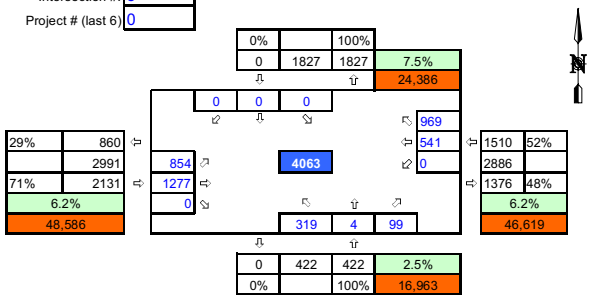


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

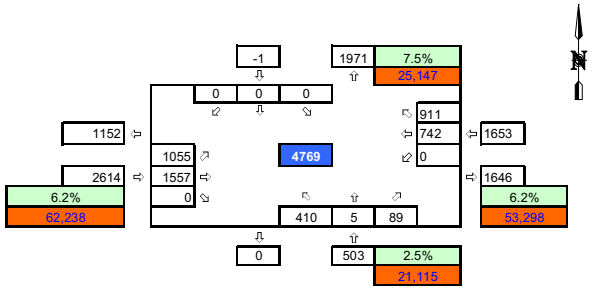
Int 5 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**I-5 NB Ramps**
E/W Street:	**Genesee Avenue**
Intersection #:	5
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**I-5 NB Ramps**
E/W Street:	**Genesee Avenue**



LEGEND

Existing K-Factor	xx%
ADT Volume	xx

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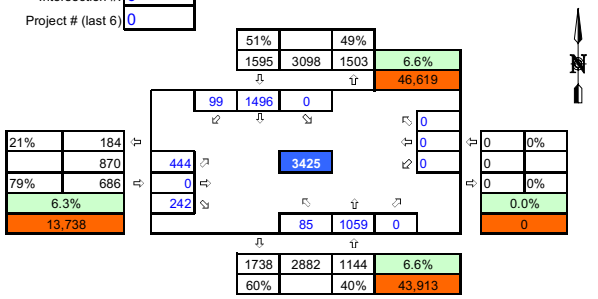
Int 5 PM

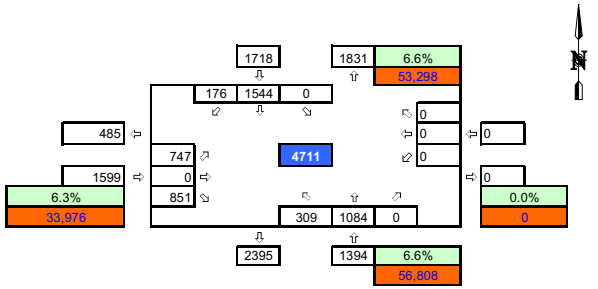
Int 6 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**Scripps Hospital**
Intersection #:	6
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**Scripps Hospital**



LEGEND

Existing K-Factor	xx%
ADT Volume	xx

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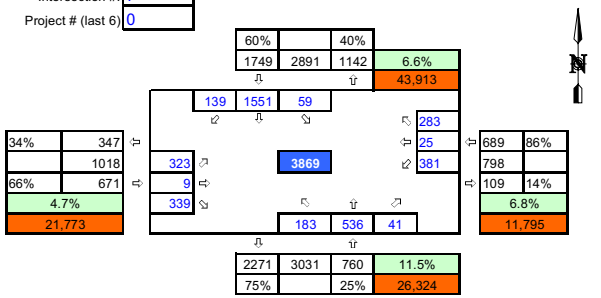
Int 6 PM

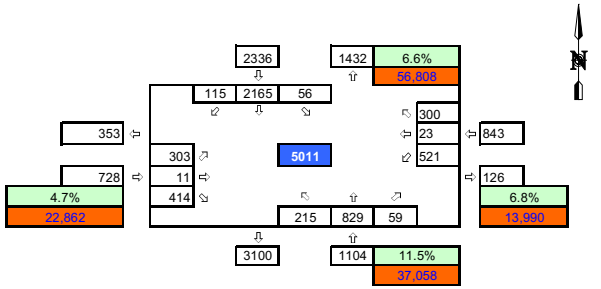
Int 7 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**Campus Point Drive**
Intersection #:	7
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**Campus Point Drive**

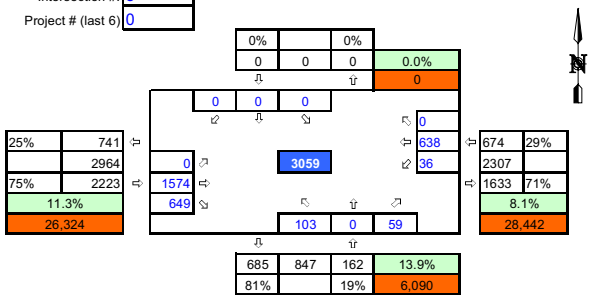


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

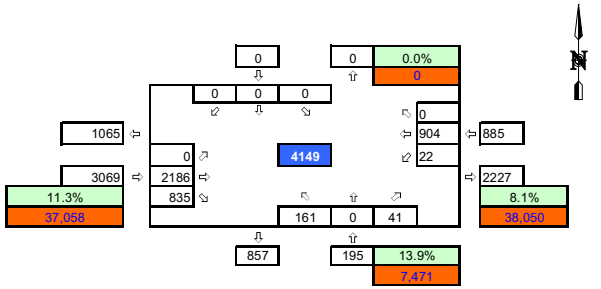
Int 8 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Regents Road**
E/W Street:	**Genesee Avenue**
Intersection #:	8
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Regents Road**
E/W Street:	**Genesee Avenue**

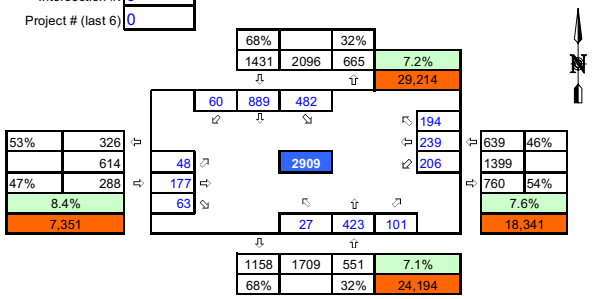


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

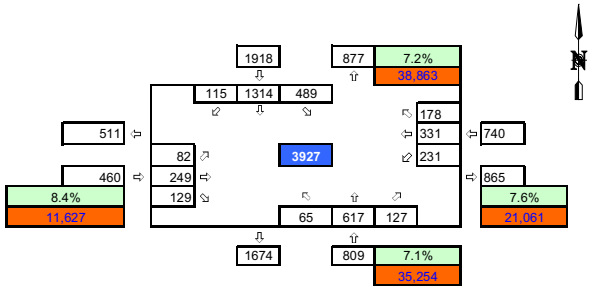
Int 9 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**Eastgate Mall**
Intersection #:	9
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

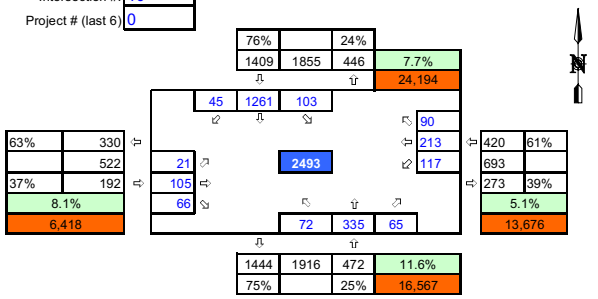
Scenario:	**Horizon Year Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**Eastgate Mall**



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

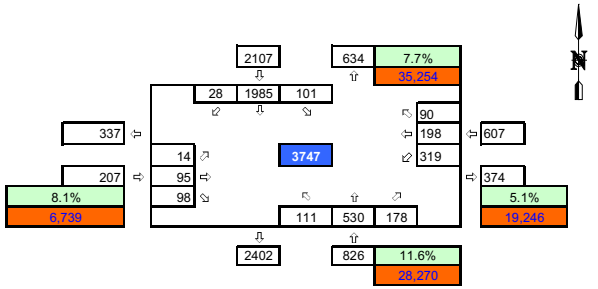
Int 10 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**Executive Drive**
Intersection #:	10
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

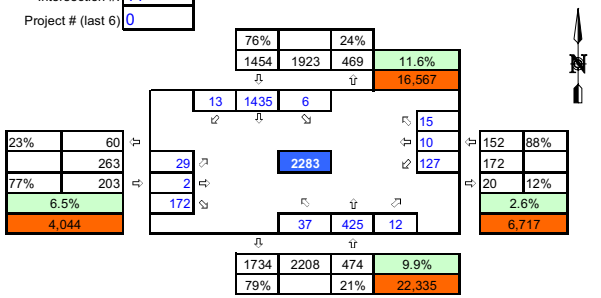
Scenario:	**Horizon Year Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**Executive Drive**



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

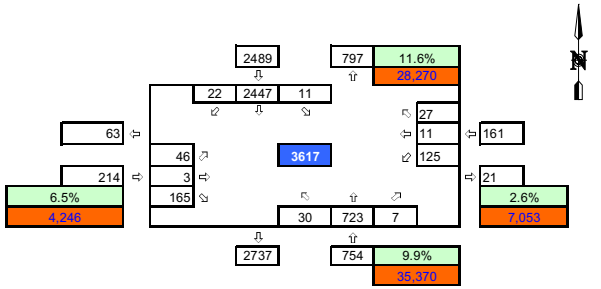
Int 11 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Executive Square**
Intersection #: 11
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Executive Square**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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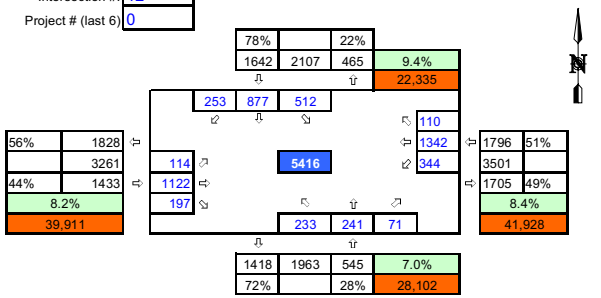
Int 11 PM

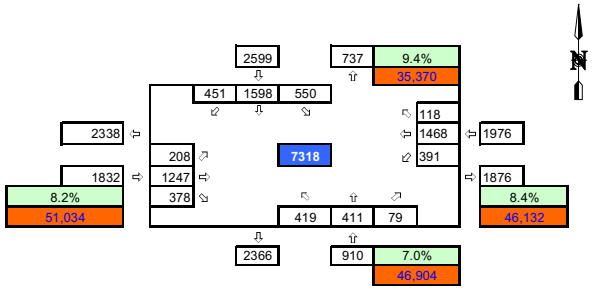
Int 12 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **La Jolla Village Drive**
Intersection #: 12
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **La Jolla Village Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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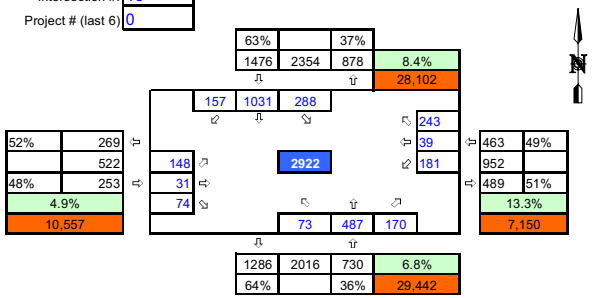
Int 12 PM

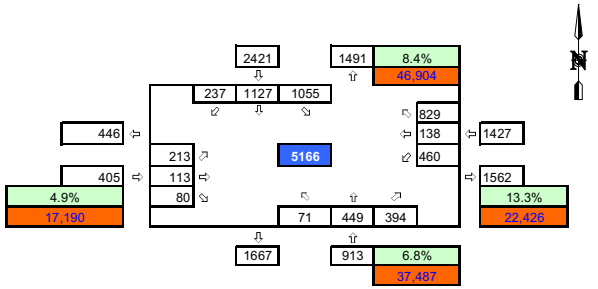
Int 13 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**Esplanade Court**
Intersection #:	13
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**Esplanade Court**

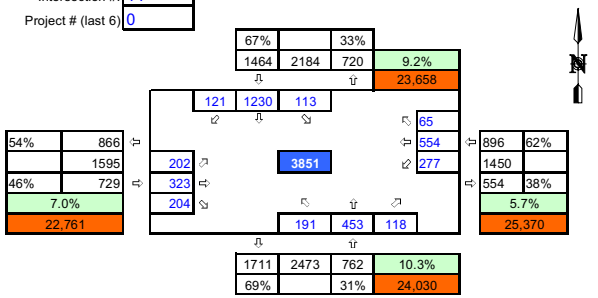


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

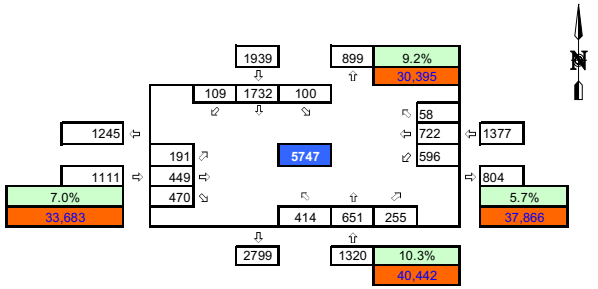
Int 14 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**Nobel Drive**
Intersection #:	14
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**Nobel Drive**

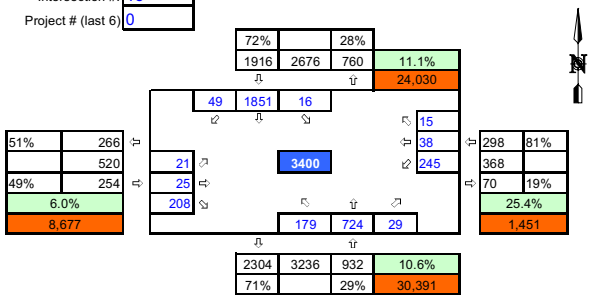


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

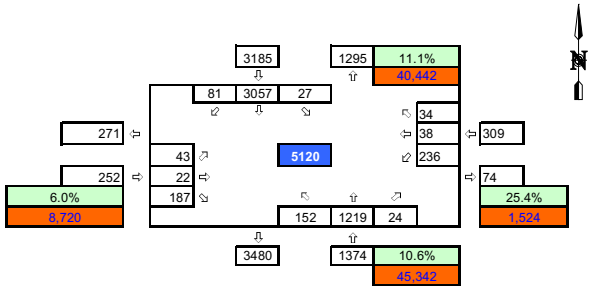
Int 15 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Decoro Street**
Intersection #: 15
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Decoro Street**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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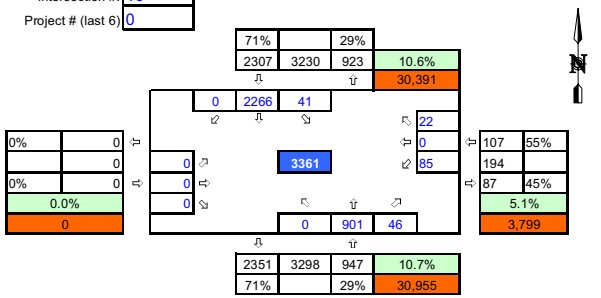
Int 15 PM

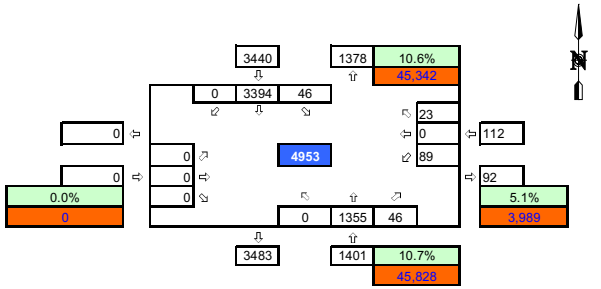
Int 16 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Centurion Square**
Intersection #: 16
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Genesee Avenue**
E/W Street: **Centurion Square**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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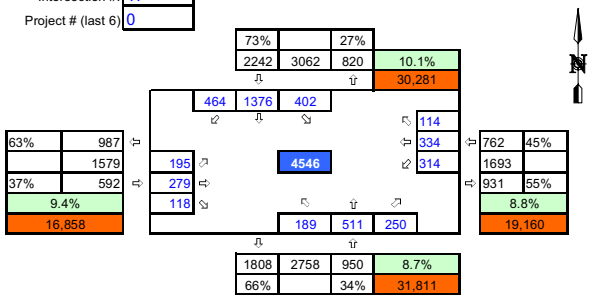
Int 16 PM

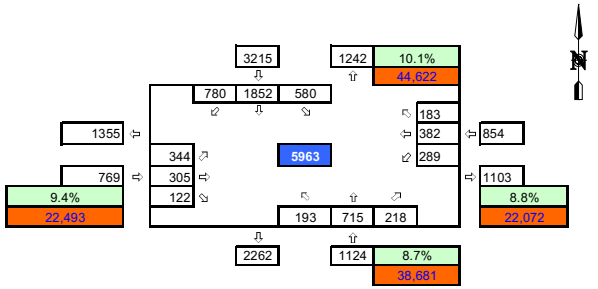
Int 17 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**Governor Drive**
Intersection #:	17
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**Governor Drive**



LEGEND

Existing K-Factor	xx%
ADT Volume	xx

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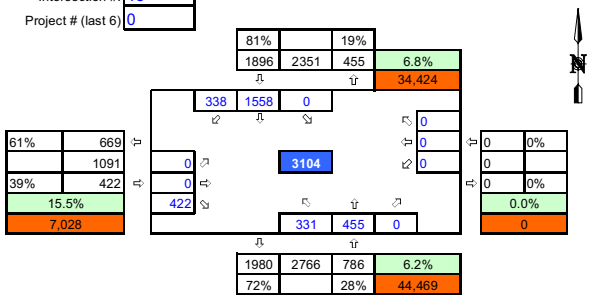
Int 17 PM

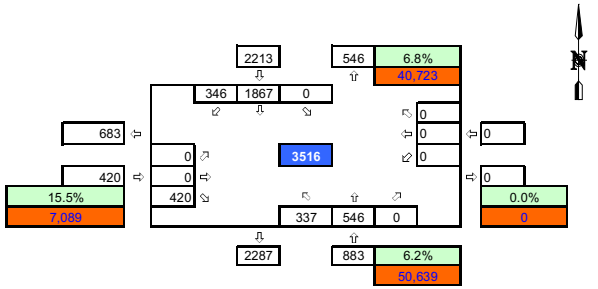
Int 18 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**SR-52 WB Ramps**
Intersection #:	18
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**SR-52 WB Ramps**



LEGEND

Existing K-Factor	xx%
ADT Volume	xx

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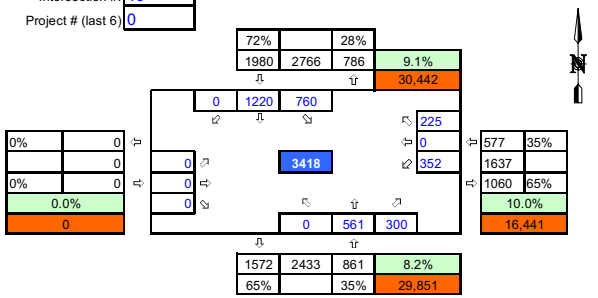
Int 18 PM

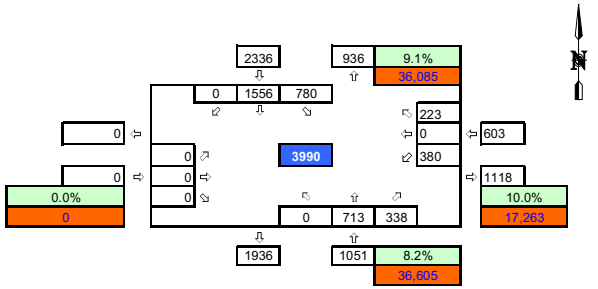
Int 19 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**SR-52 EB Ramps**
Intersection #:	19
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**SR-52 EB Ramps**

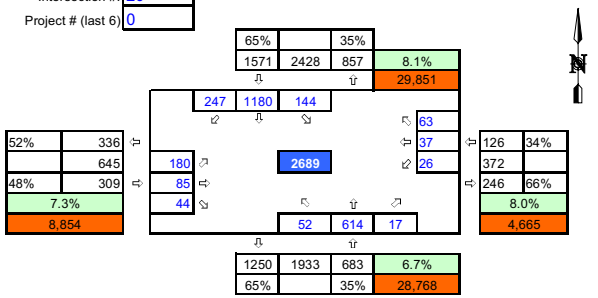


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

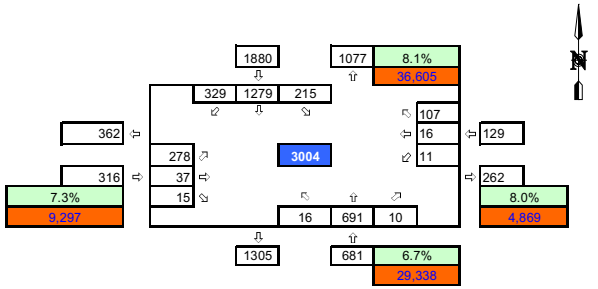
Int 20 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**Lehrer Drive / Appleton Street**
Intersection #:	20
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Genesee Avenue**
E/W Street:	**Lehrer Drive / Appleton Street**

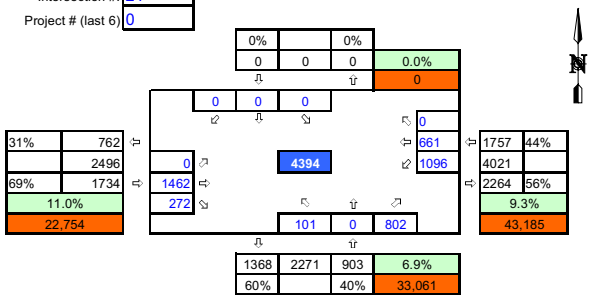


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

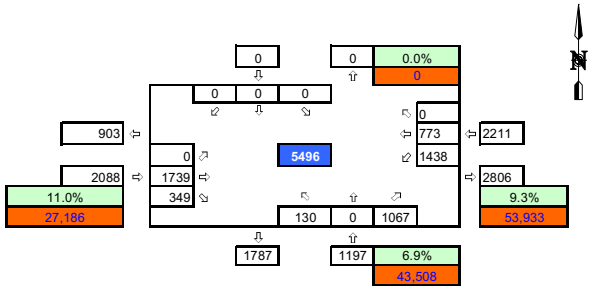
Int 21 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Torrey Pines Road**
E/W Street: **La Jolla Village Drive**
Intersection #: 21
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

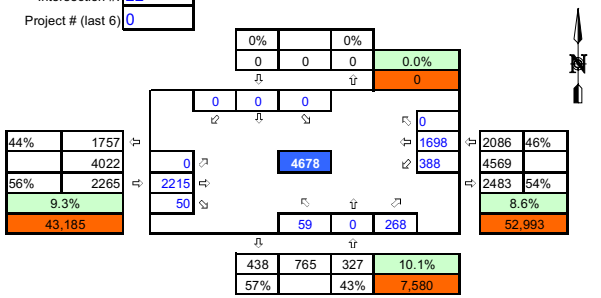
Scenario: **Horizon Year Conditions**
N/S Street: **Torrey Pines Road**
E/W Street: **La Jolla Village Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

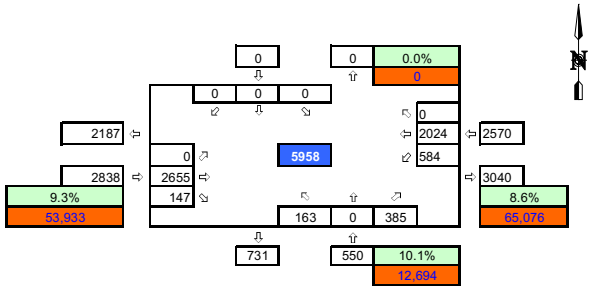
Int 22 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **La Jolla Scenic Drive**
E/W Street: **La Jolla Village Drive**
Intersection #: 22
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

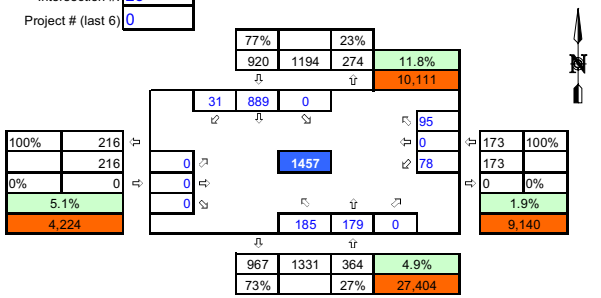
Scenario: **Horizon Year Conditions**
N/S Street: **La Jolla Scenic Drive**
E/W Street: **La Jolla Village Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

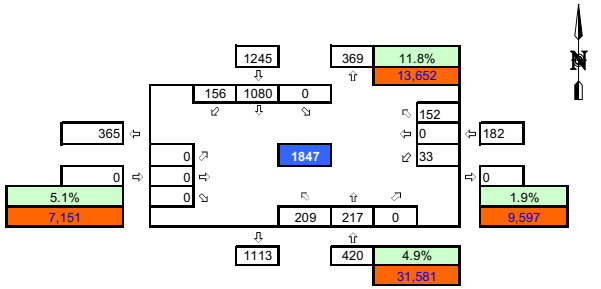
Int 23 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Gillman Drive**
E/W Street:	**La Jolla Village Drive WB**
Intersection #:	23
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Gillman Drive**
E/W Street:	**La Jolla Village Drive WB**

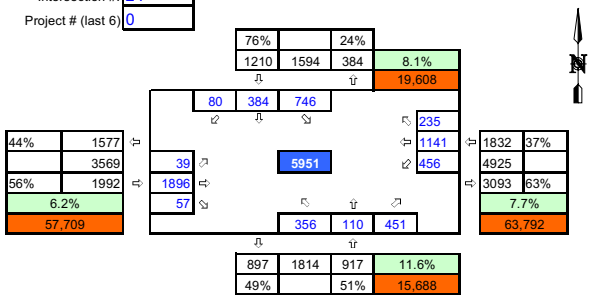


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

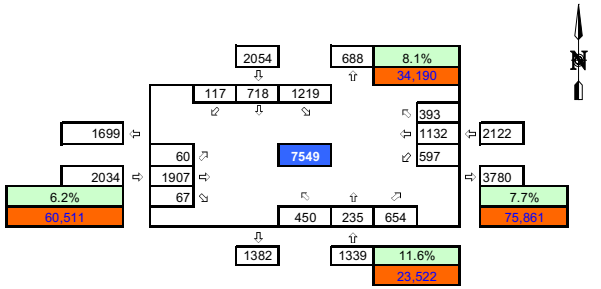
Int 24 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Villa La Jolla Drive**
E/W Street:	**La Jolla Village Drive**
Intersection #:	24
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Villa La Jolla Drive**
E/W Street:	**La Jolla Village Drive**

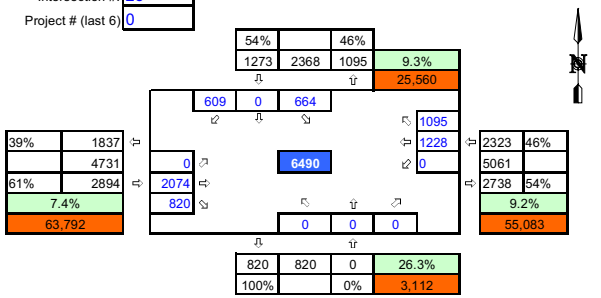


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

Int 25 PM Peak Volumes

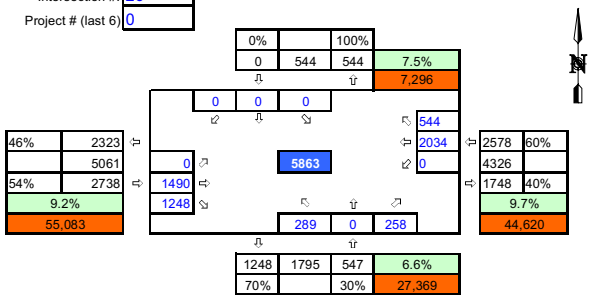
Scenario:	**Existing Conditions**
N/S Street:	**I-5 SB Off-Ramps**
E/W Street:	**La Jolla Village Drive**
Intersection #:	25
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

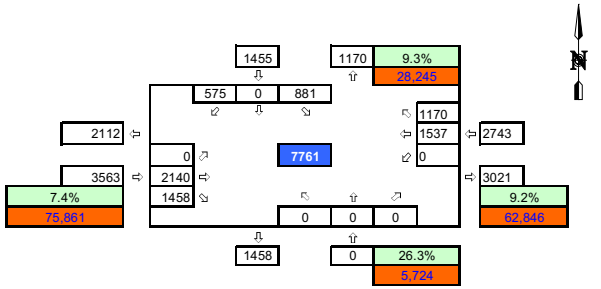
Int 26 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**I-5 NB Off-Ramps**
E/W Street:	**La Jolla Village Drive**
Intersection #:	26
Project # (last 6)	0

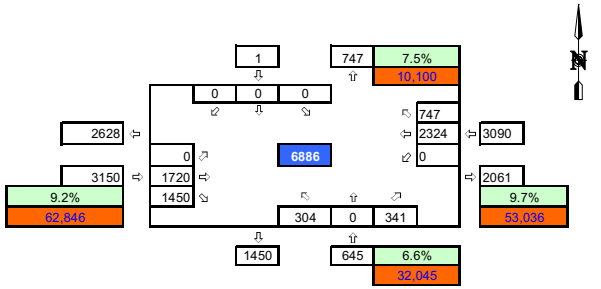


Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**I-5 SB Off-Ramps**
E/W Street:	**La Jolla Village Drive**



Scenario:	**Horizon Year Conditions**
N/S Street:	**I-5 NB Off-Ramps**
E/W Street:	**La Jolla Village Drive**



LEGEND

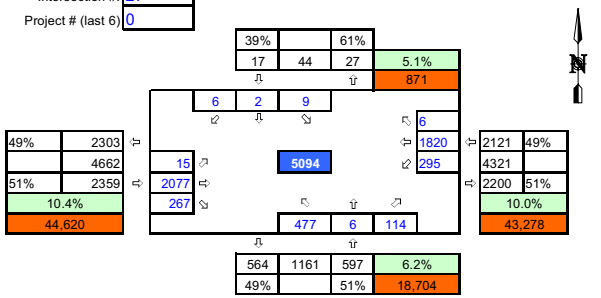
Existing K-Factor	xx%
ADT Volume	xx

LEGEND

Existing K-Factor	xx%
ADT Volume	xx

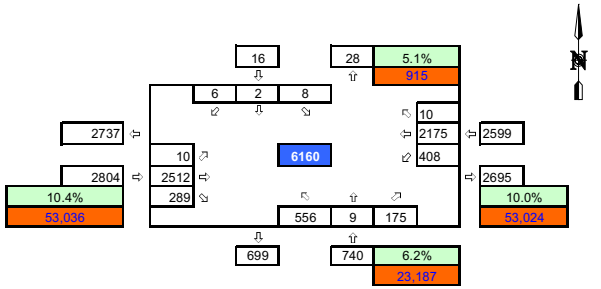
Int 27 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Lebon Drive**
E/W Street: **La Jolla Village Drive**
Intersection #: 27
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Lebon Drive**
E/W Street: **La Jolla Village Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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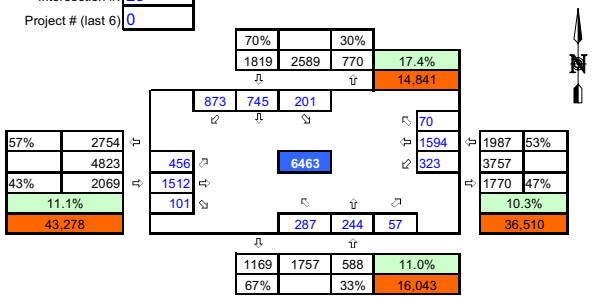
Int 27 PM

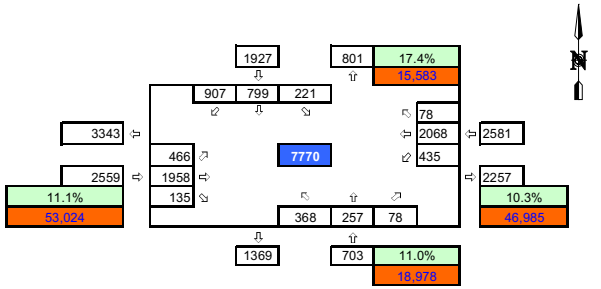
Int 28 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Regents Road**
E/W Street: **La Jolla Village Drive**
Intersection #: 28
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Regents Road**
E/W Street: **La Jolla Village Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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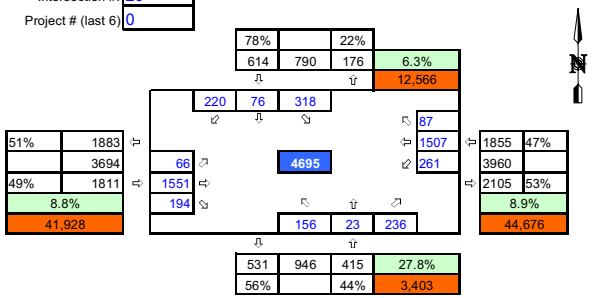
Int 28 PM

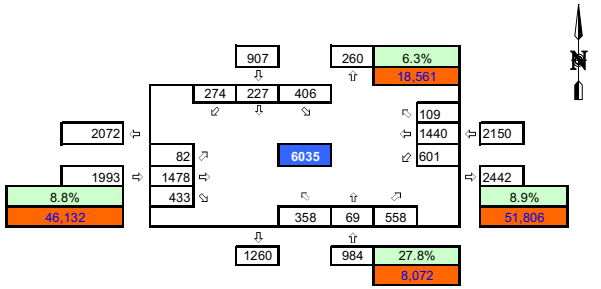
Int 29 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Executive Way**
E/W Street: **La Jolla Village Drive**
Intersection #: 29
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Executive Way**
E/W Street: **La Jolla Village Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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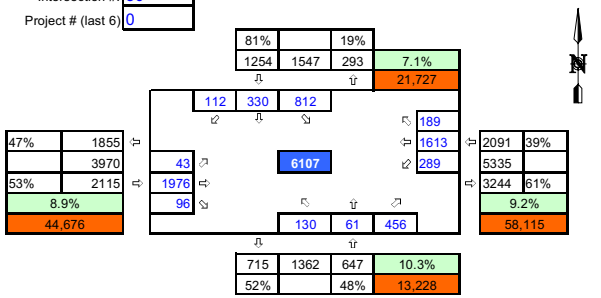
Int 29 PM

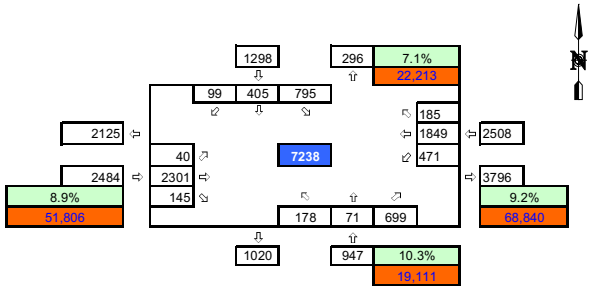
Int 30 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Towne Center Drive**
E/W Street: **La Jolla Village Drive**
Intersection #: 30
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Towne Center Drive**
E/W Street: **La Jolla Village Drive**

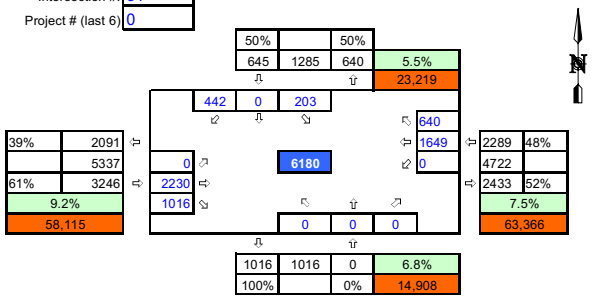


LEGEND
Existing K-Factor: xx%
ADT Volume: xx

K:\SND_TPTO\095240101 - University CPA\Excel\Horizon Year Conditions\Alternative D\Turn32_Alt D.xlsx
Int 30 PM

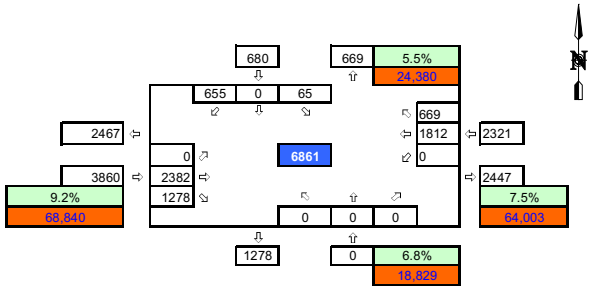
Int 31 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**I-805 SB Ramps**
E/W Street:	**La Jolla Village Drive**
Intersection #:	31
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**I-805 SB Ramps**
E/W Street:	**La Jolla Village Drive**

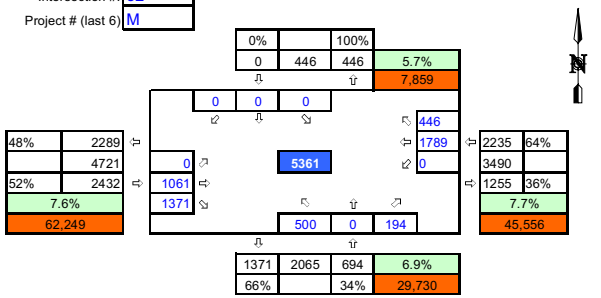


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

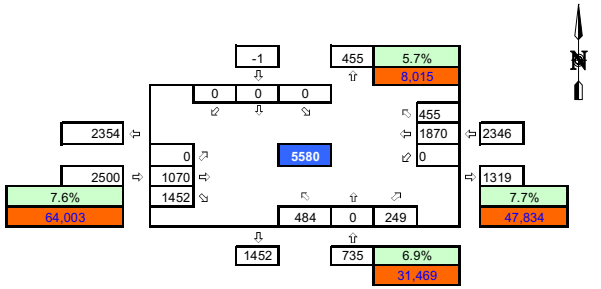
Int 32 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**I-805 NB Ramps**
E/W Street:	**La Jolla Village Drive**
Intersection #:	32
Project # (last 6)	M



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**I-805 NB Ramps**
E/W Street:	**La Jolla Village Drive**

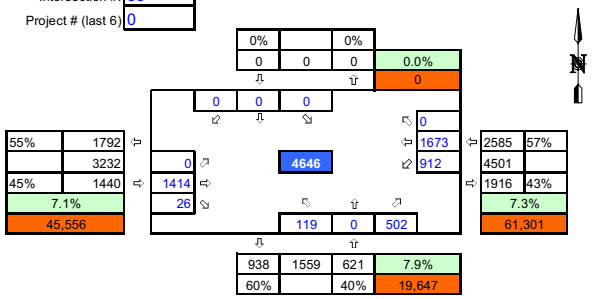


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

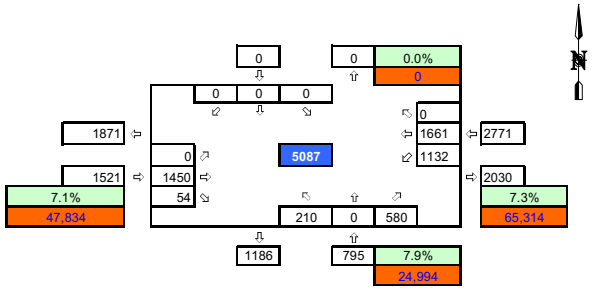
Int 33 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Noble Drive**
E/W Street: **Miramar Road**
Intersection #: 33
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

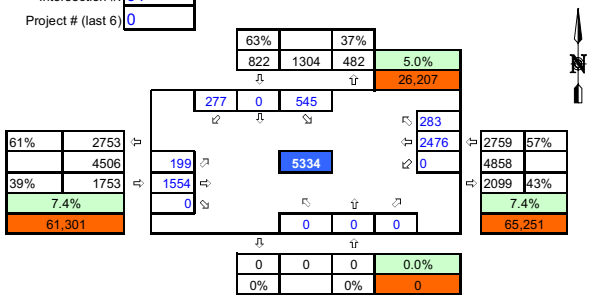
Scenario: **Horizon Year Conditions**
N/S Street: **Noble Drive**
E/W Street: **Miramar Road**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

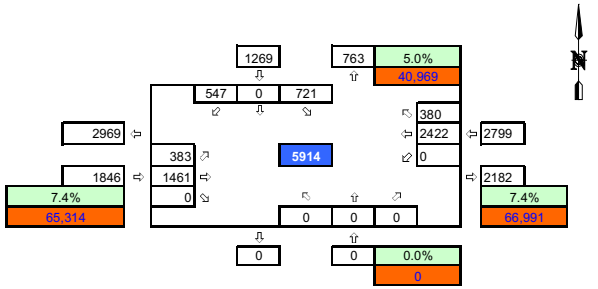
Int 34 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Eastgate Mall**
E/W Street: **Miramar Road**
Intersection #: 34
Project # (last 6): 0



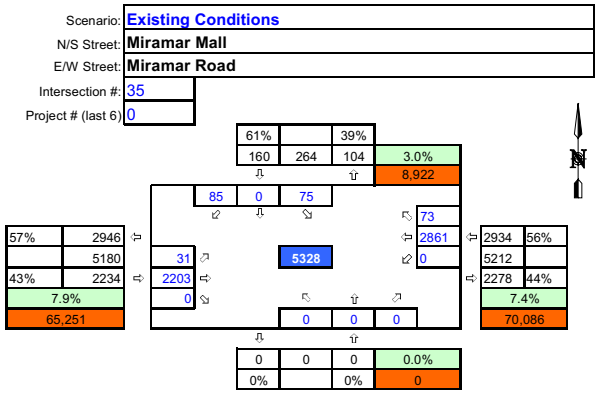
Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Eastgate Mall**
E/W Street: **Miramar Road**

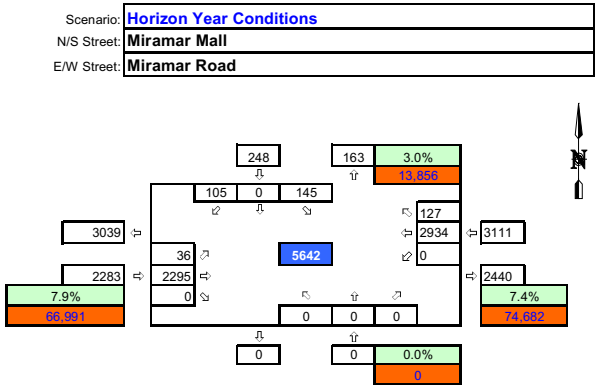


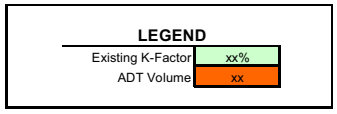
LEGEND
Existing K-Factor: xx%
ADT Volume: xx

Int 35 PM Peak Volumes

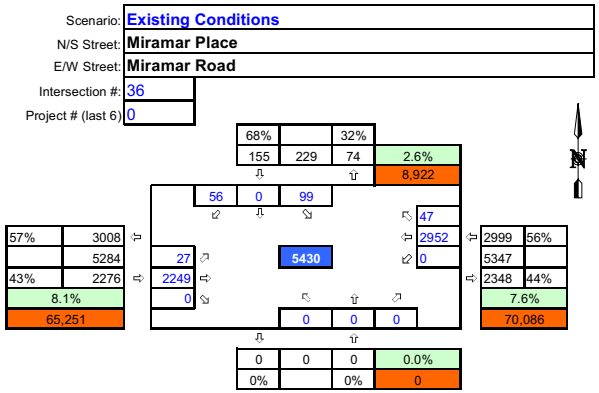


Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

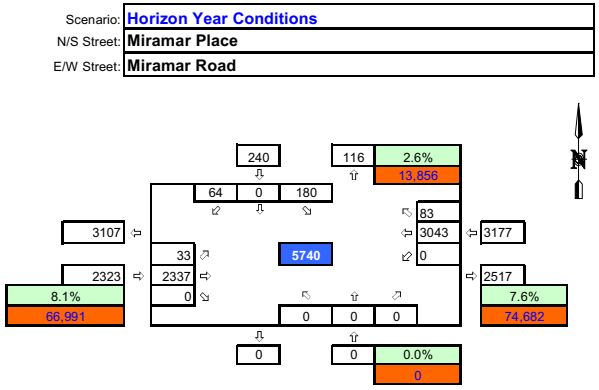


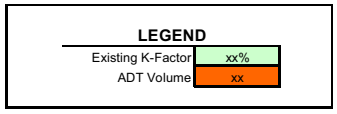


Int 36 PM Peak Volumes



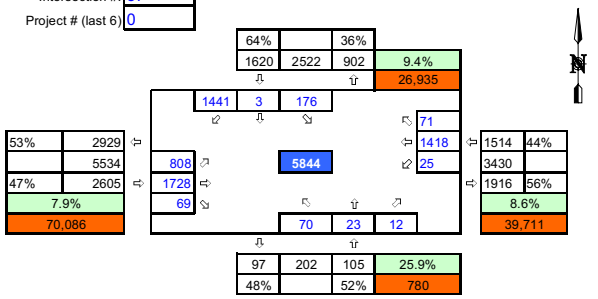
Note: Traffic volumes were collected by Accurate Video Counts during May 2015.





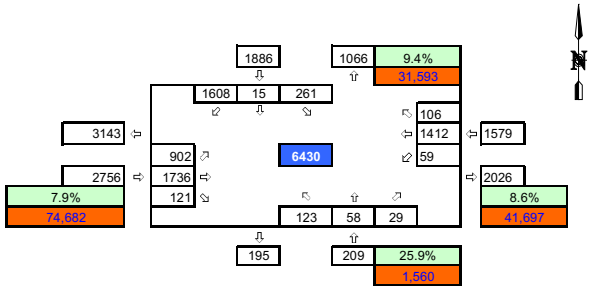
Int 37 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Camino Santa Fe**
E/W Street: **Miramar Road**
Intersection #: 37
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Camino Santa Fe**
E/W Street: **Miramar Road**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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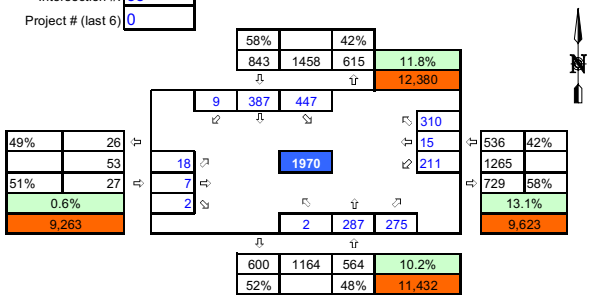
Int 37 PM

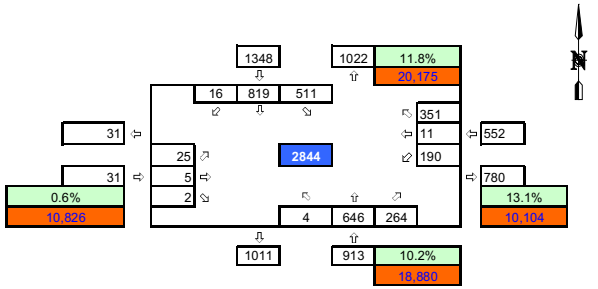
Int 38 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Villa La Jolla Drive**
E/W Street: **Nobel Drive**
Intersection #: 38
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Villa La Jolla Drive**
E/W Street: **Nobel Drive**

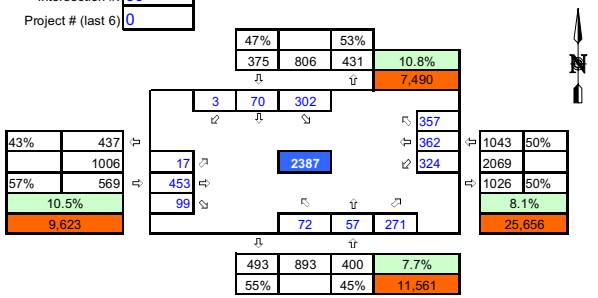


LEGEND
Existing K-Factor: xx%
ADT Volume: xx

K:\SND_TPTO\095240101 - University CPA\Excel\Horizon Year Conditions\Alternative D\Turn32_Alt D.xlsx
Int 38 PM

Int 39 PM Peak Volumes

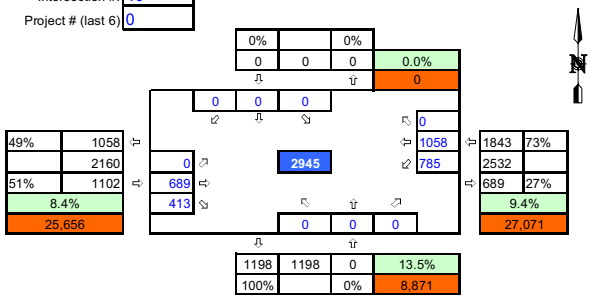
Scenario:	**Existing Conditions**
N/S Street:	**La Jolla Village Square Driveway**
E/W Street:	**Nobel Drive**
Intersection #:	39
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

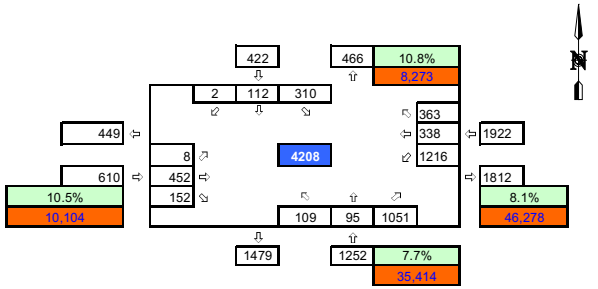
Int 40 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**I-5 SB On**
E/W Street:	**Nobel Drive**
Intersection #:	40
Project # (last 6)	0

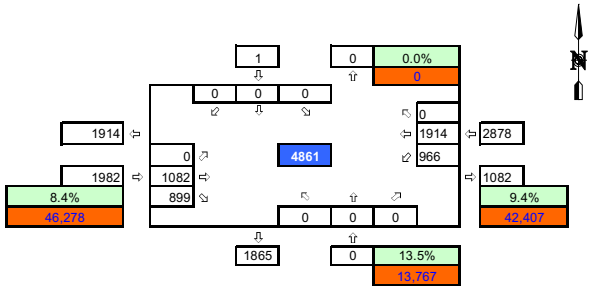


Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**La Jolla Village Square Driveway**
E/W Street:	**Nobel Drive**



Scenario:	**Horizon Year Conditions**
N/S Street:	**I-5 SB On**
E/W Street:	**Nobel Drive**



LEGEND

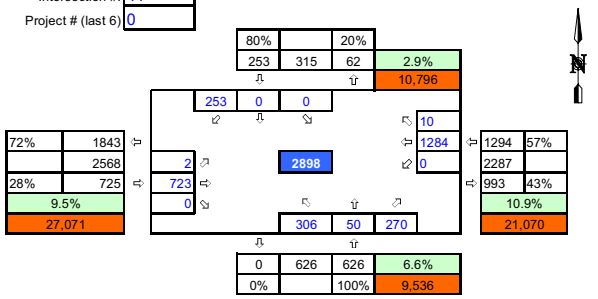
Existing K-Factor	xx%
ADT Volume	xx

LEGEND

Existing K-Factor	xx%
ADT Volume	xx

Int 41 PM Peak Volumes

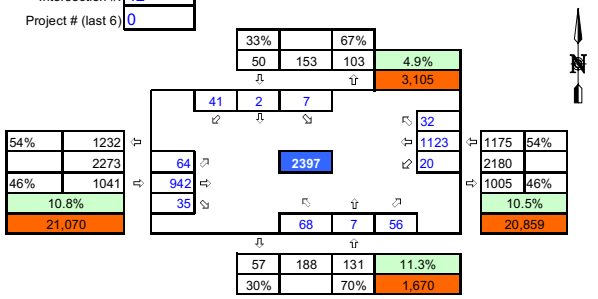
Scenario:	**Existing Conditions**
N/S Street:	**University Center Lane/I-5 NB Off**
E/W Street:	**Nobel Drive**
Intersection #:	41
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

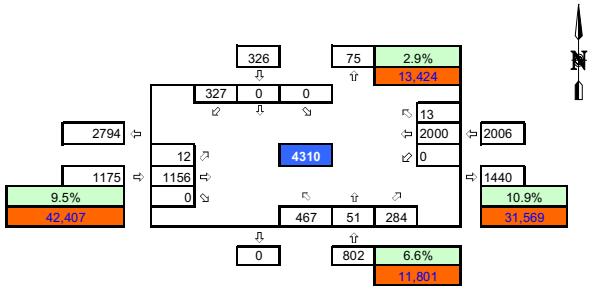
Int 42 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Caminito Plaza Centro**
E/W Street:	**Nobel Drive**
Intersection #:	42
Project # (last 6)	0

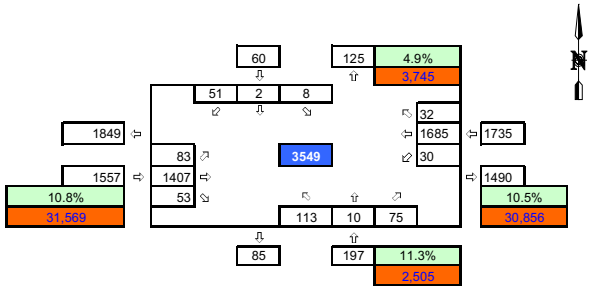


Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**University Center Lane/I-5 NB Off**
E/W Street:	**Nobel Drive**



Scenario:	**Horizon Year Conditions**
N/S Street:	**Caminito Plaza Centro**
E/W Street:	**Nobel Drive**

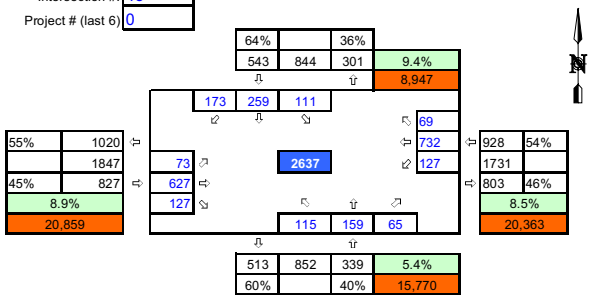


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

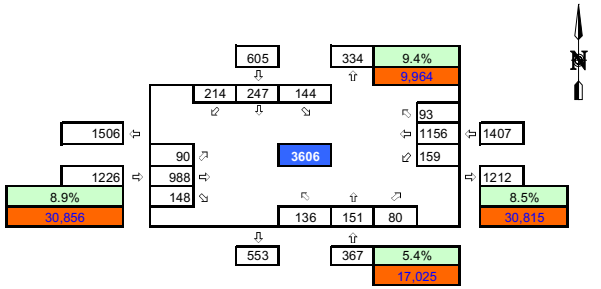
Int 43 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Lebon Drive**
E/W Street: **Nobel Drive**
Intersection #: 43
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Lebon Drive**
E/W Street: **Nobel Drive**

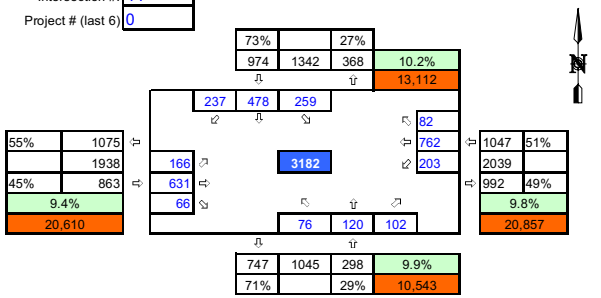


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

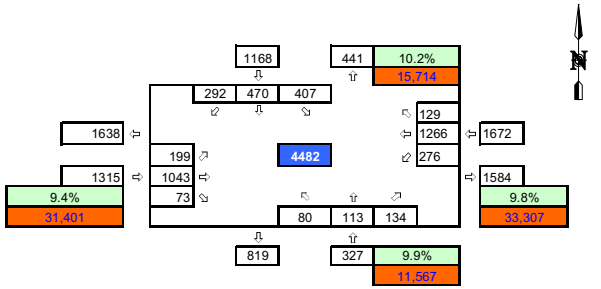
Int 44 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Regents Road**
E/W Street: **Nobel Drive**
Intersection #: 44
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Regents Road**
E/W Street: **Nobel Drive**

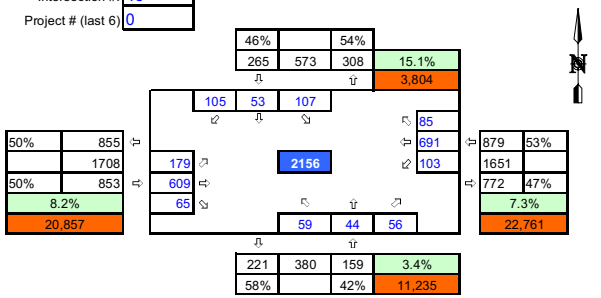


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

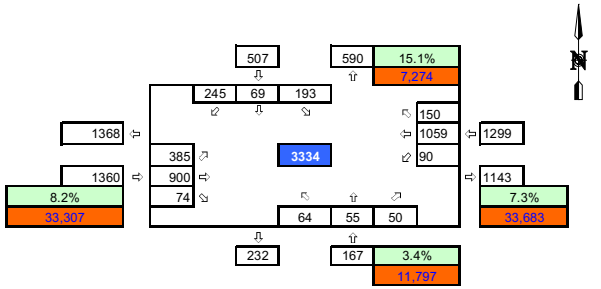
Int 45 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Costa Verde Boulevard/Cargill Ave**
E/W Street:	**Cargill Ave / Nobel Drive**
Intersection #:	45
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Costa Verde Boulevard/Cargill Ave**
E/W Street:	**Cargill Ave / Nobel Drive**

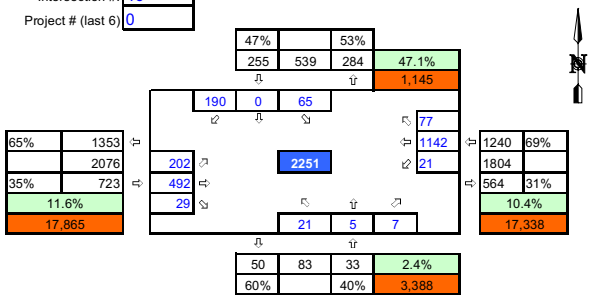


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

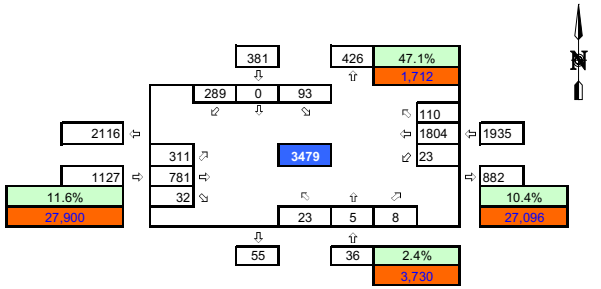
Int 46 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Lombard Place**
E/W Street:	**Nobel Drive**
Intersection #:	46
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Lombard Place**
E/W Street:	**Nobel Drive**

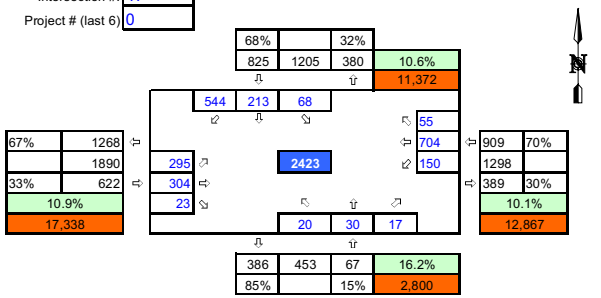


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

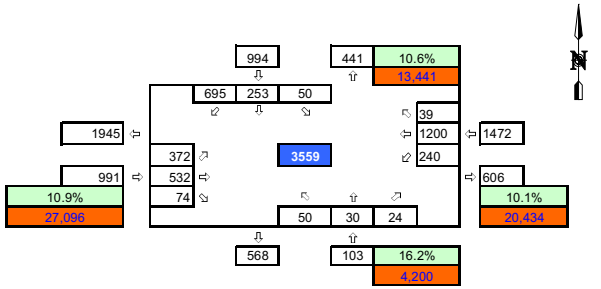
Int 47 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Towne Center Drive**
E/W Street:	**Nobel Drive**
Intersection #:	47
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Towne Center Drive**
E/W Street:	**Nobel Drive**

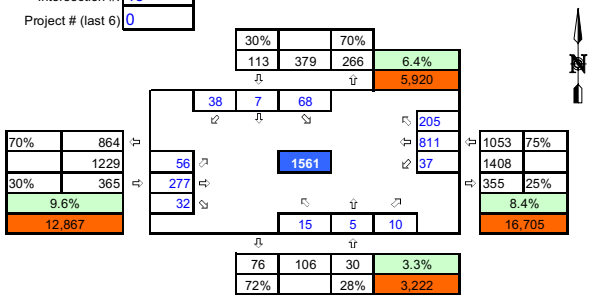


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

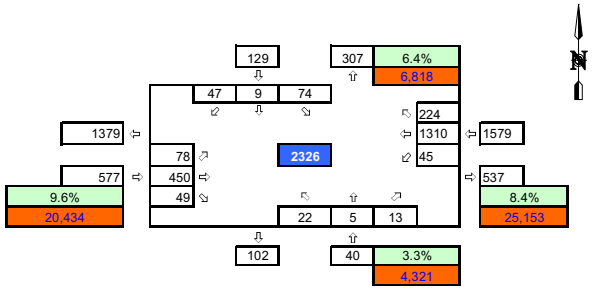
Int 48 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Shoreline Drive**
E/W Street:	**Nobel Drive**
Intersection #:	48
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Shoreline Drive**
E/W Street:	**Nobel Drive**

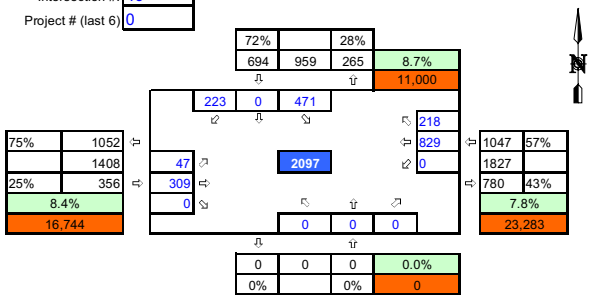


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

Int 49 PM Peak Volumes

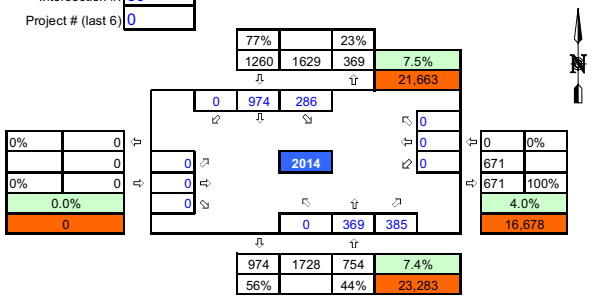
Scenario:	**Existing Conditions**
N/S Street:	**Judicial Drive**
E/W Street:	**Nobel Drive**
Intersection #:	49
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

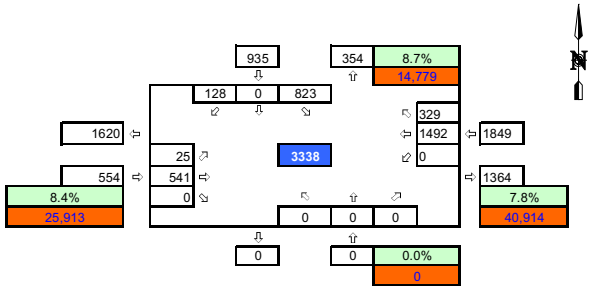
Int 50 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Nobel Drive**
E/W Street:	**I-805 SB On-Ramp**
Intersection #:	50
Project # (last 6)	0

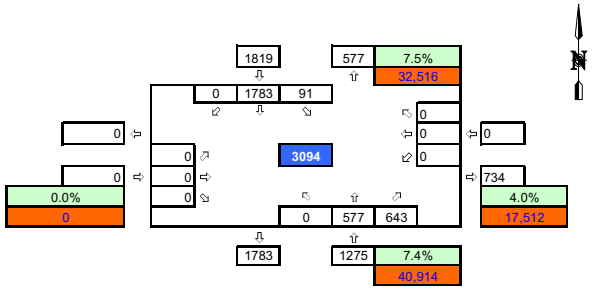


Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Judicial Drive**
E/W Street:	**Nobel Drive**



Scenario:	**Horizon Year Conditions**
N/S Street:	**Nobel Drive**
E/W Street:	**I-805 SB On-Ramp**

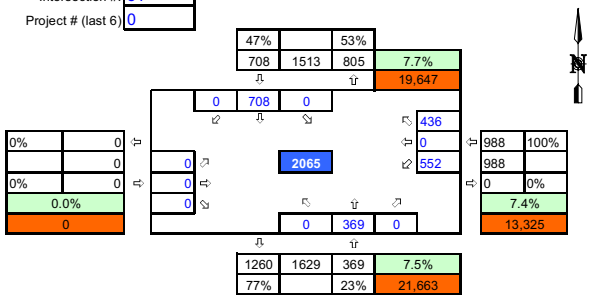


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

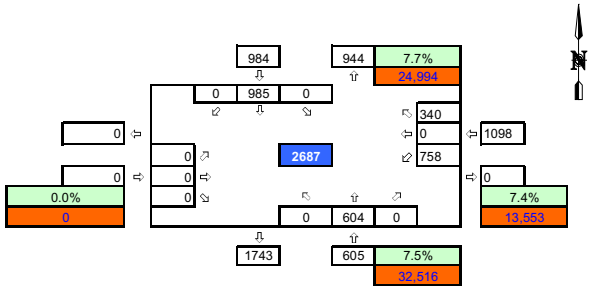
Int 51 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Nobel Drive**
E/W Street:	**I-805 N Off-Ramp**
Intersection #:	51
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Nobel Drive**
E/W Street:	**I-805 N Off-Ramp**

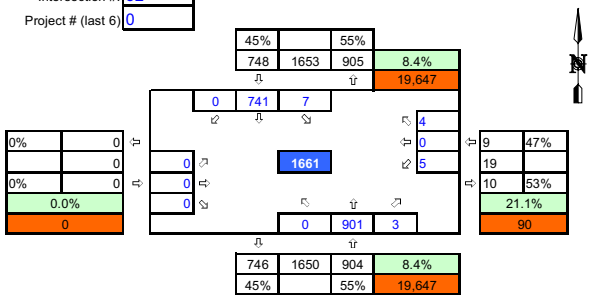


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

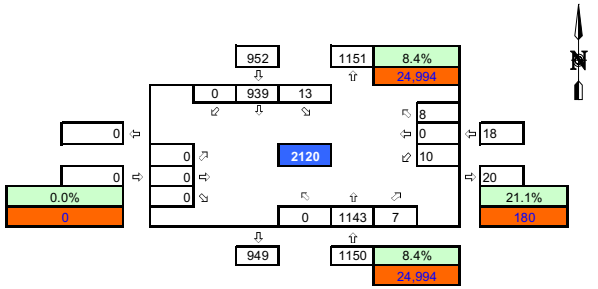
Int 52 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Nobel Drive**
E/W Street:	**Avenue of Flags**
Intersection #:	52
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Nobel Drive**
E/W Street:	**Avenue of Flags**

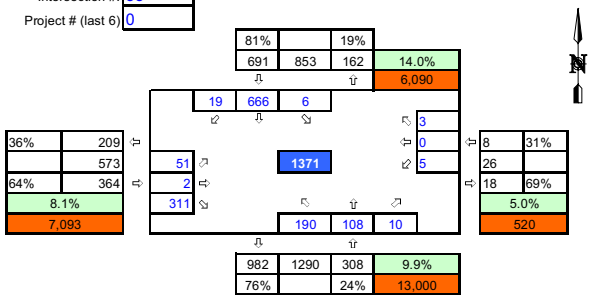


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

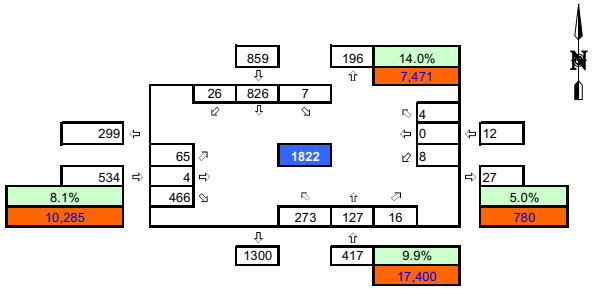
Int 53 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Regents Road**
E/W Street: **Health Science Drive / County Day Ln**
Intersection #: 53
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Regents Road**
E/W Street: **Health Science Drive / County Day Ln**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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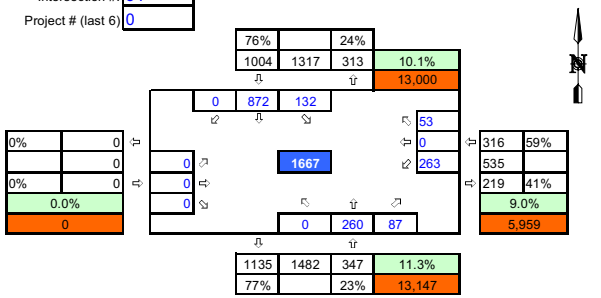
Int 53 PM

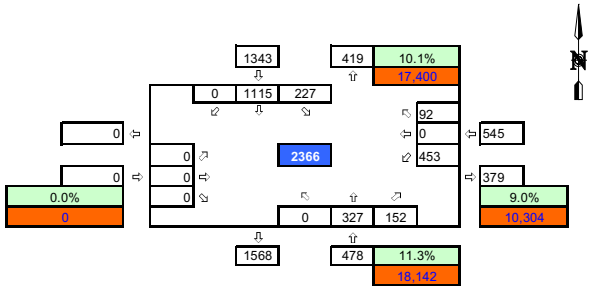
Int 54 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Regents Road**
E/W Street: **Eastgate Mall**
Intersection #: 54
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Regents Road**
E/W Street: **Eastgate Mall**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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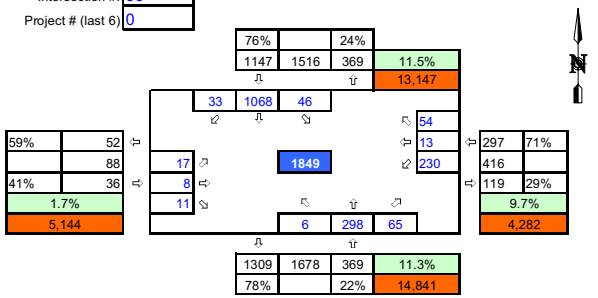
Int 54 PM

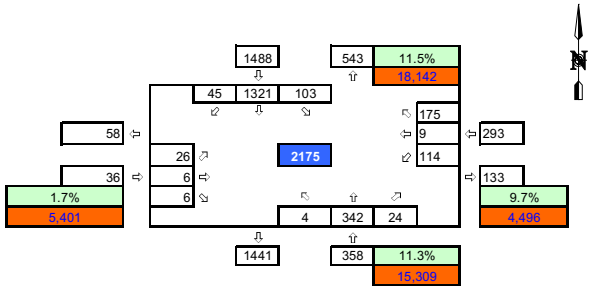
Int 55 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Regents Road**
E/W Street:	**Executive Drive**
Intersection #:	55
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Regents Road**
E/W Street:	**Executive Drive**

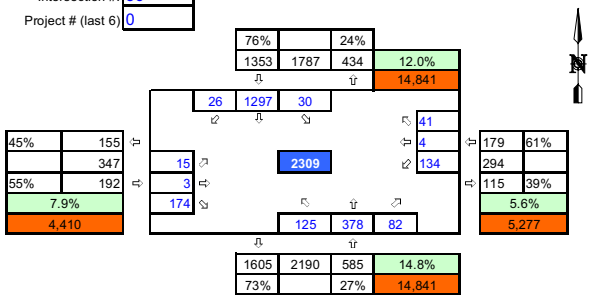


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

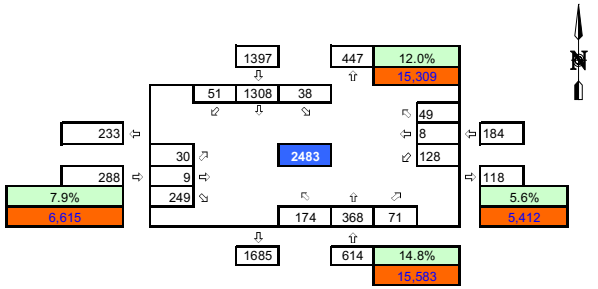
Int 56 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Regents Road**
E/W Street:	**Miramar Street / Regents Park Row**
Intersection #:	56
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Regents Road**
E/W Street:	**Miramar Street / Regents Park Row**

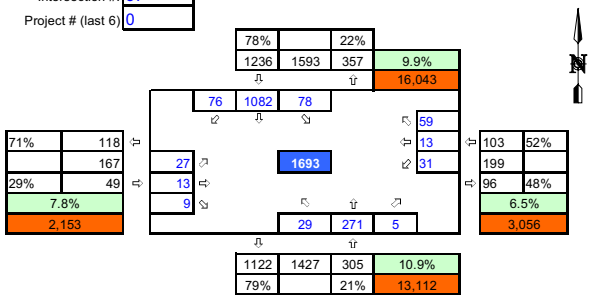


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

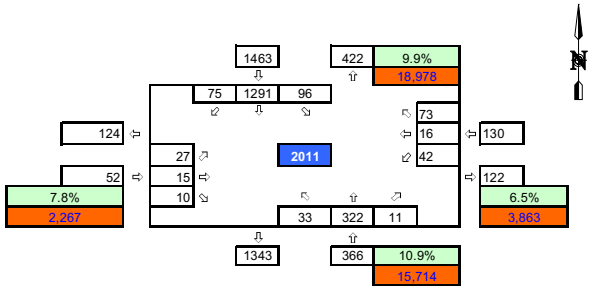
Int 57 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Regents Road**
E/W Street:	**Plaza De Palmas**
Intersection #:	57
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Regents Road**
E/W Street:	**Plaza De Palmas**



LEGEND

Existing K-Factor	xx%
ADT Volume	xx

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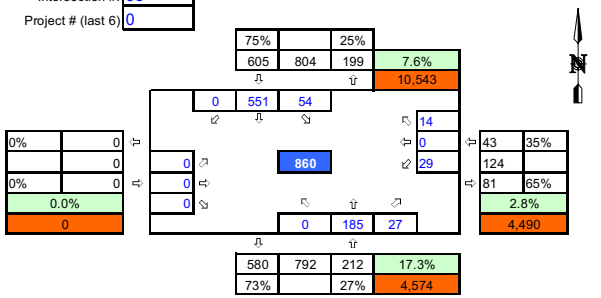
Int 57 PM

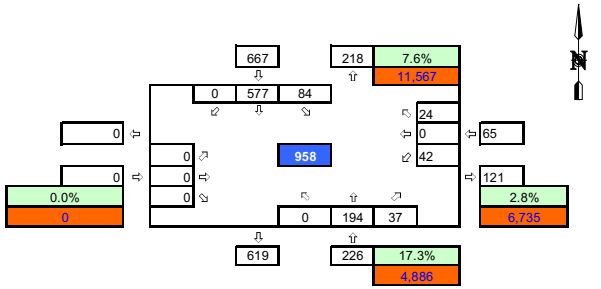
Int 58 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Regents Road**
E/W Street:	**Berino Court**
Intersection #:	58
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Regents Road**
E/W Street:	**Berino Court**



LEGEND

Existing K-Factor	xx%
ADT Volume	xx

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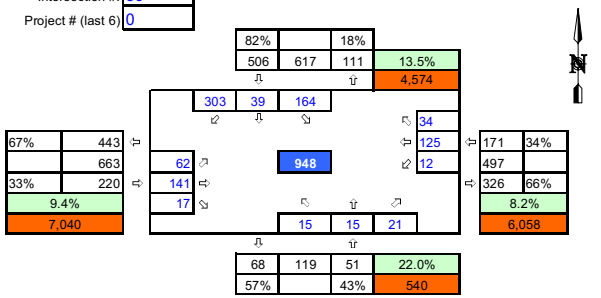
Int 58 PM

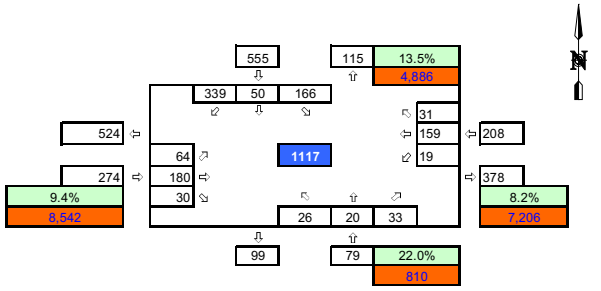
Int 59 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Regents Road**
E/W Street: **Arriba Street**
Intersection #: 59
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

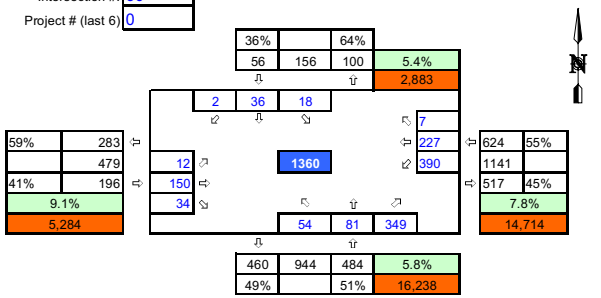
Scenario: **Horizon Year Conditions**
N/S Street: **Regents Road**
E/W Street: **Arriba Street**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

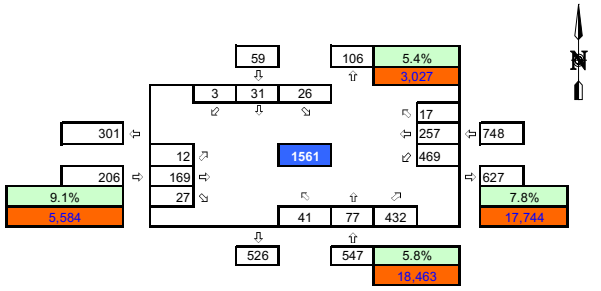
Int 60 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Regents Road**
E/W Street: **Governor Drive**
Intersection #: 60
Project # (last 6): 0



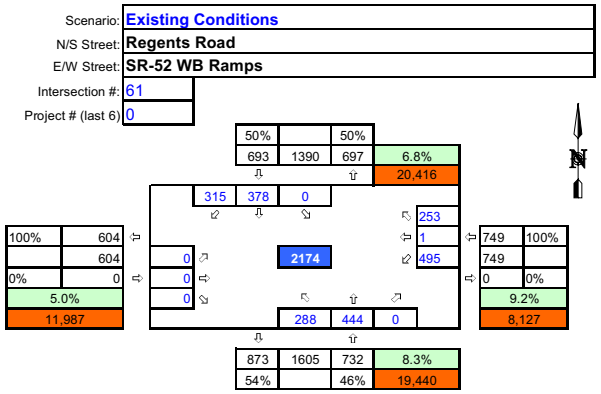
Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Regents Road**
E/W Street: **Governor Drive**



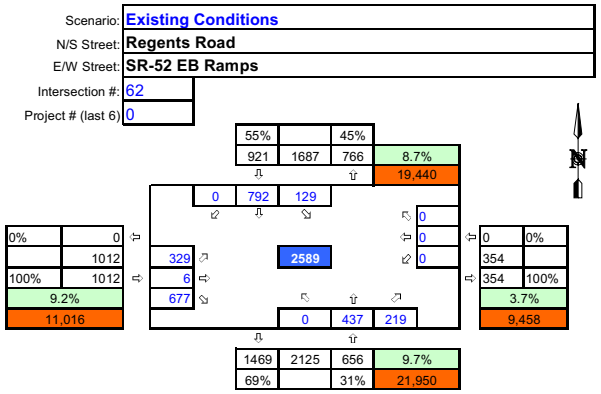
LEGEND
Existing K-Factor: xx%
ADT Volume: xx

Int 61 PM Peak Volumes

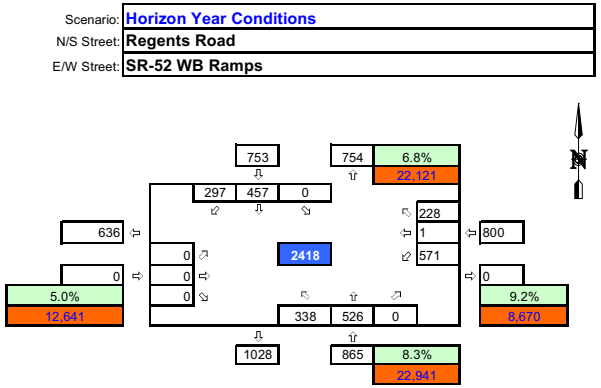


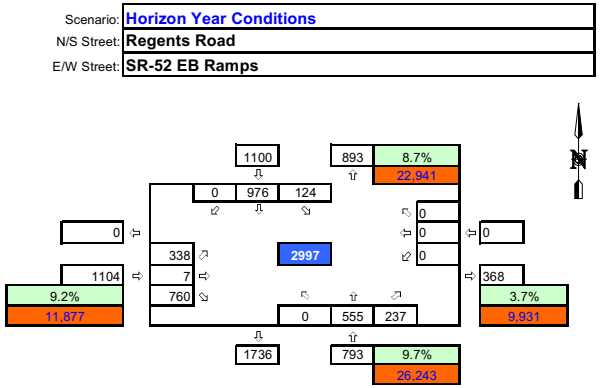
Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

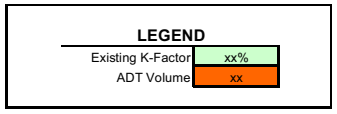
Int 62 PM Peak Volumes

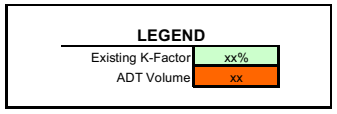


Note: Traffic volumes were collected by Accurate Video Counts during May 2015.



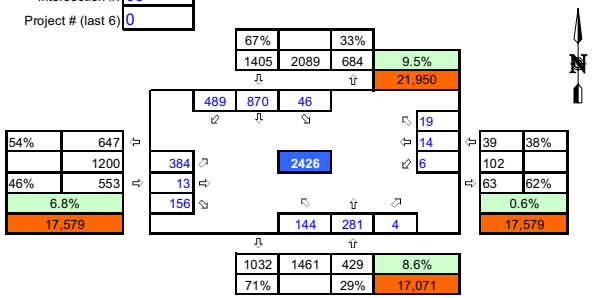






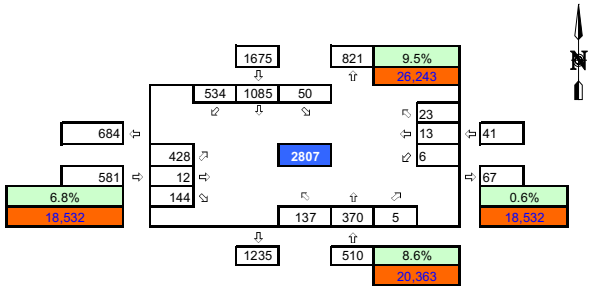
Int 63 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Regents Road / Clairemont Mesa Blvd**
E/W Street: **Luna Avenue**
Intersection #: 63
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Regents Road / Clairemont Mesa Blvd**
E/W Street: **Luna Avenue**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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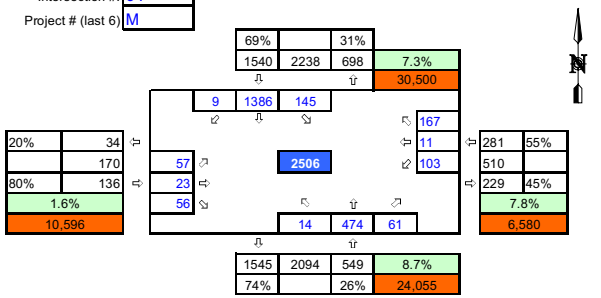
Int 63 PM

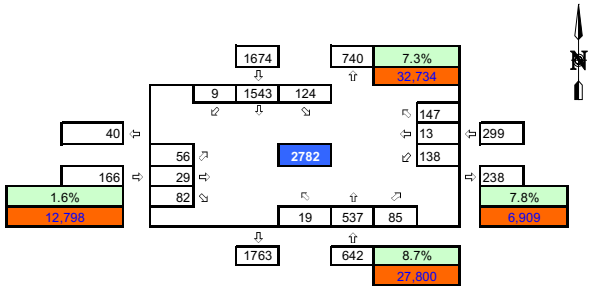
Int 64 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **N. Torrey Pines Road**
E/W Street: **UCSD Northpoint Driveway**
Intersection #: 64
Project # (last 6): M



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **N. Torrey Pines Road**
E/W Street: **UCSD Northpoint Driveway**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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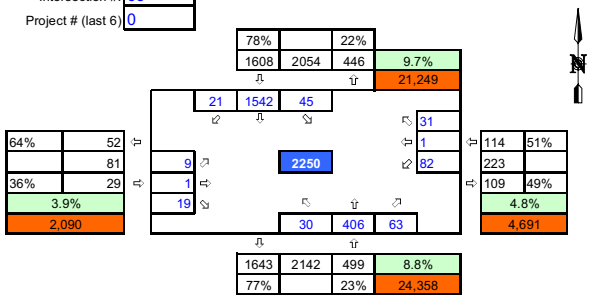
Int 64 PM

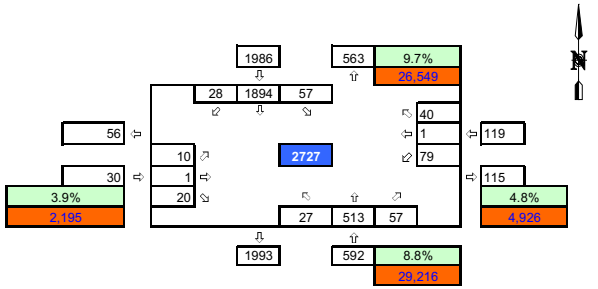
Int 65 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **N. Torrey Pines Road**
E/W Street: **Pangea Drive**
Intersection #: 65
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

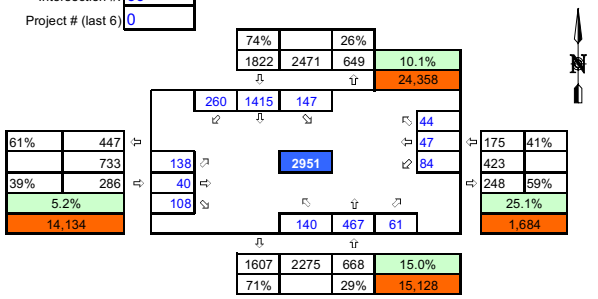
Scenario: **Horizon Year Conditions**
N/S Street: **N. Torrey Pines Road**
E/W Street: **Pangea Drive**



LEGEND
Existing K-Factor xx%
ADT Volume xx

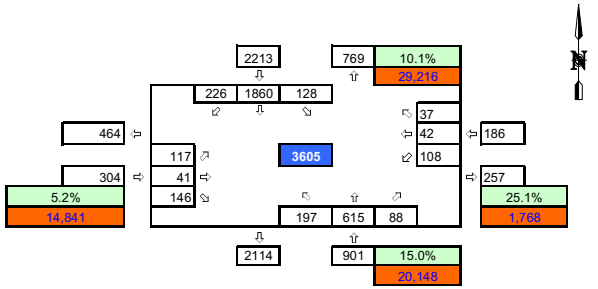
Int 66 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **N. Torrey Pines Road**
E/W Street: **La Jolla Shores Drive**
Intersection #: 66
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

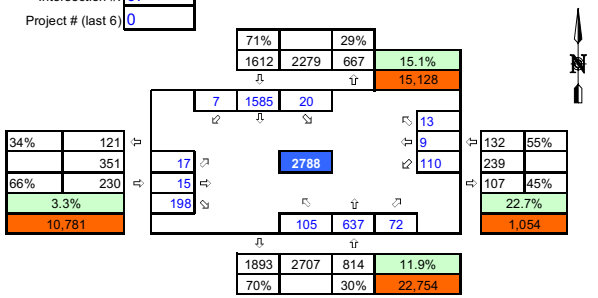
Scenario: **Horizon Year Conditions**
N/S Street: **N. Torrey Pines Road**
E/W Street: **La Jolla Shores Drive**



LEGEND
Existing K-Factor xx%
ADT Volume xx

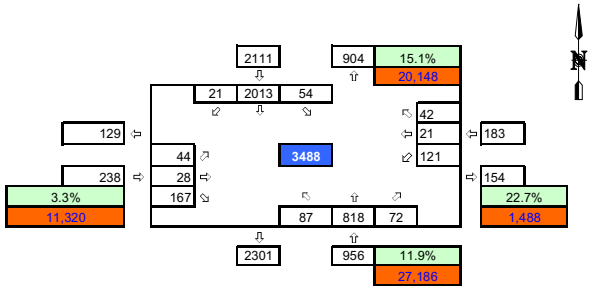
Int 67 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**N. Torrey Pines Road**
E/W Street:	**Expedition Way / Revelle College Drive**
Intersection #:	67
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**N. Torrey Pines Road**
E/W Street:	**Expedition Way / Revelle College Drive**

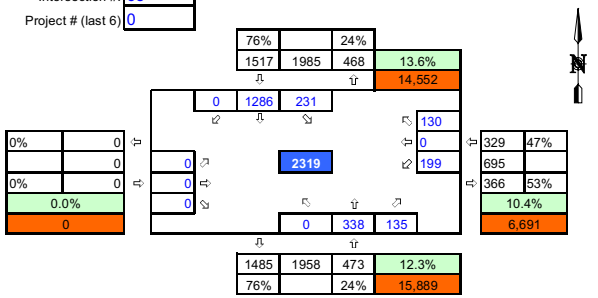


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

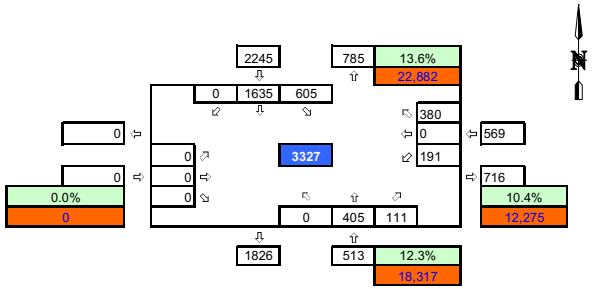
Int 68 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Gilman Drive**
E/W Street:	**Villa La Jolla Drive**
Intersection #:	68
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Gilman Drive**
E/W Street:	**Villa La Jolla Drive**

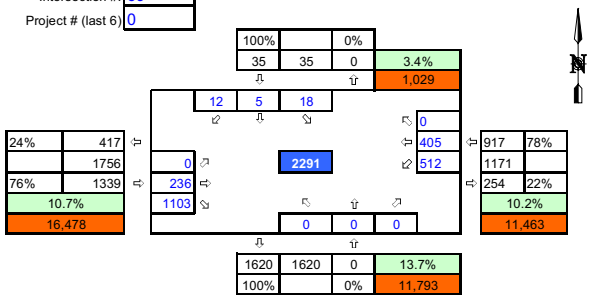


LEGEND

Existing K-Factor	xx%
ADT Volume	xx

Int 69 PM Peak Volumes

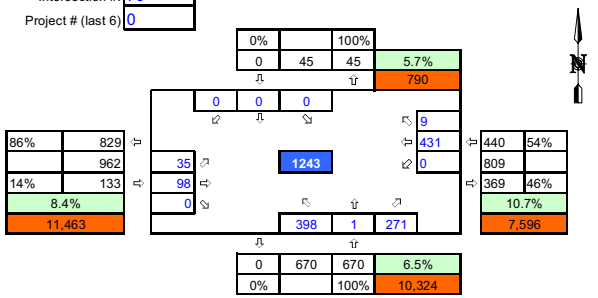
Scenario:	**Existing Conditions**
N/S Street:	**I-5 SB Ramps**
E/W Street:	**Gillman Drive**
Intersection #:	69
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

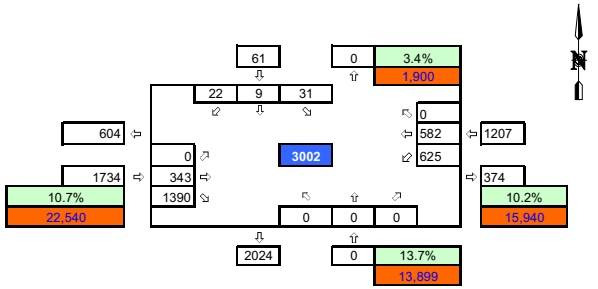
Int 70 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**I-5 NB Ramps**
E/W Street:	**Gillman Drive**
Intersection #:	70
Project # (last 6)	0

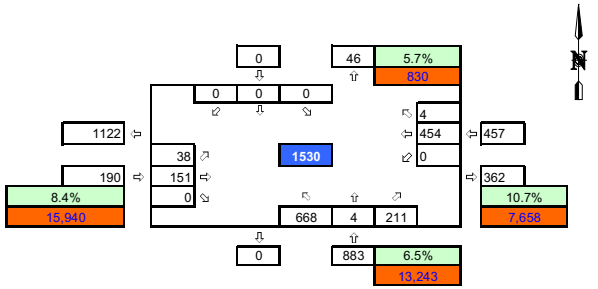


Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**I-5 SB Ramps**
E/W Street:	**Gillman Drive**



Scenario:	**Horizon Year Conditions**
N/S Street:	**I-5 NB Ramps**
E/W Street:	**Gillman Drive**



LEGEND

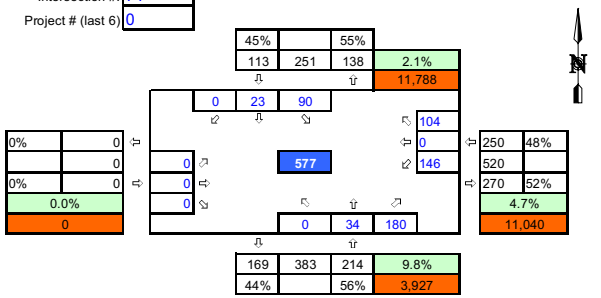
Existing K-Factor	xx%
ADT Volume	xx

LEGEND

Existing K-Factor	xx%
ADT Volume	xx

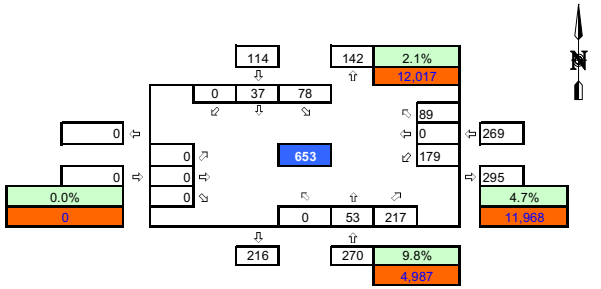
Int 71 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Charmant Drive / Palmilla Drive**
E/W Street:	**Lebon Drive**
Intersection #:	71
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Charmant Drive / Palmilla Drive**
E/W Street:	**Lebon Drive**



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

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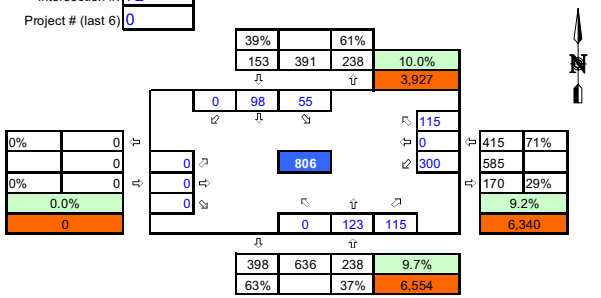
Int 71 PM

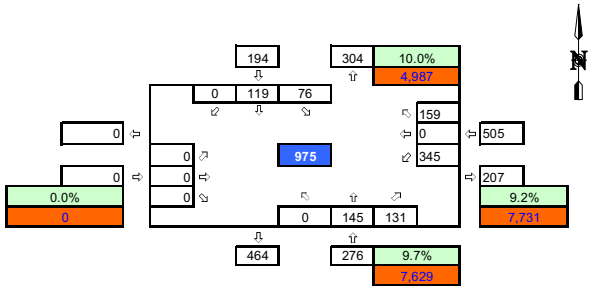
Int 72 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Palmilla Drive**
E/W Street:	**Ariba Street**
Intersection #:	72
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Palmilla Drive**
E/W Street:	**Ariba Street**



LEGEND	
Existing K-Factor	xx%
ADT Volume	xx

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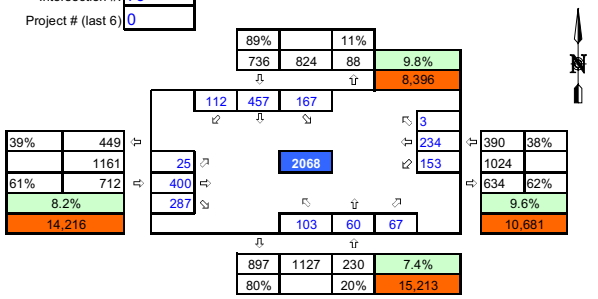
Int 72 PM

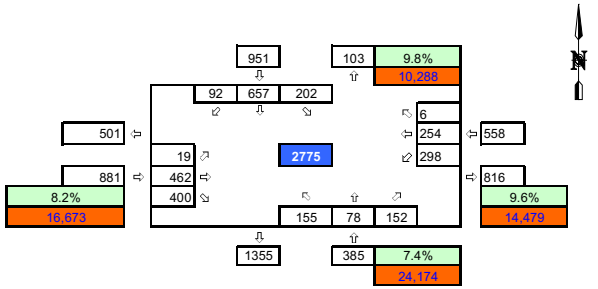
Int 73 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Towne Center Drive**
E/W Street: **Eastgate Mall**
Intersection #: 73
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Towne Center Drive**
E/W Street: **Eastgate Mall**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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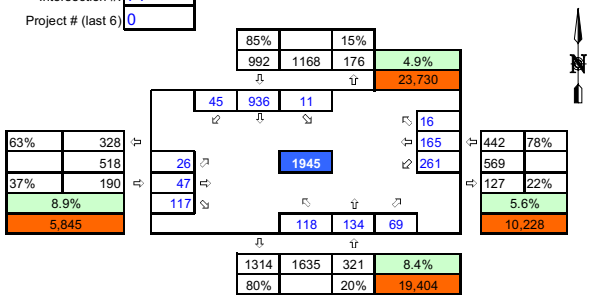
Int 73 PM

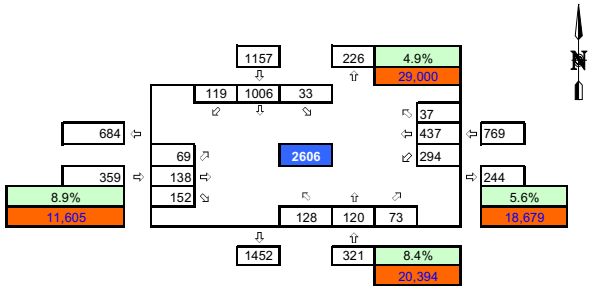
Int 74 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Towne Center Drive**
E/W Street: **Executive Drive**
Intersection #: 74
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

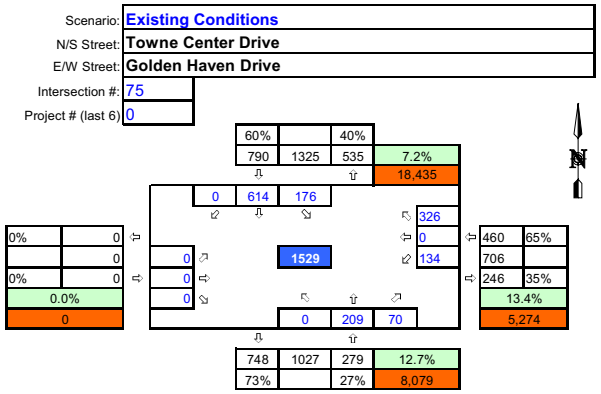
Scenario: **Horizon Year Conditions**
N/S Street: **Towne Center Drive**
E/W Street: **Executive Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

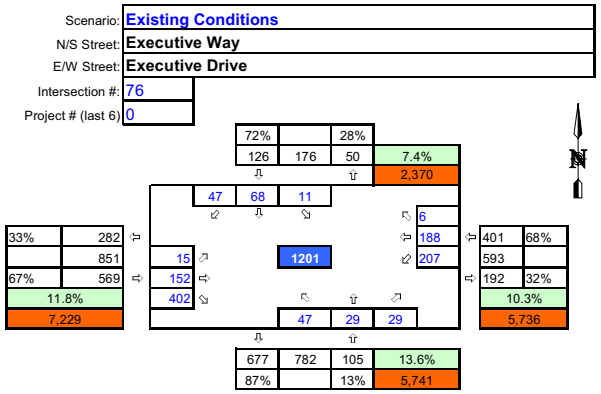
K:\SND_TPTO\095240101 - University CPA\Excel\Horizon Year Conditions\Alternative D\Turn32_Alt D.xlsx
Int 74 PM

Int 75 PM Peak Volumes

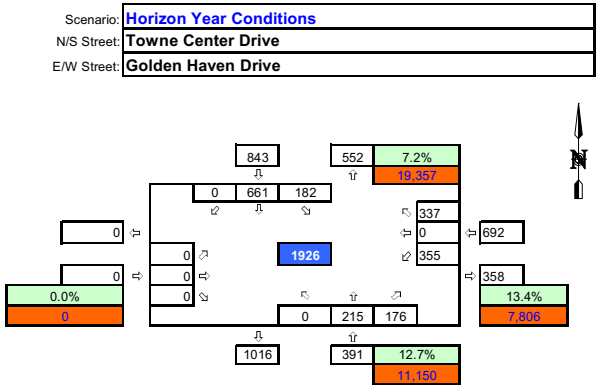


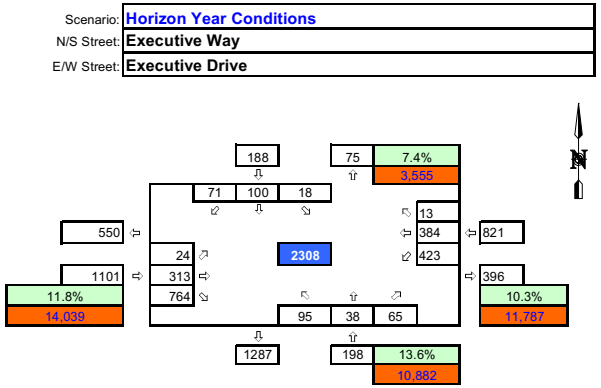
Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

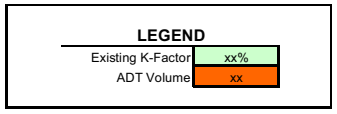
Int 76 PM Peak Volumes

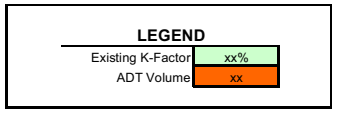


Note: Traffic volumes were collected by Accurate Video Counts during May 2015.



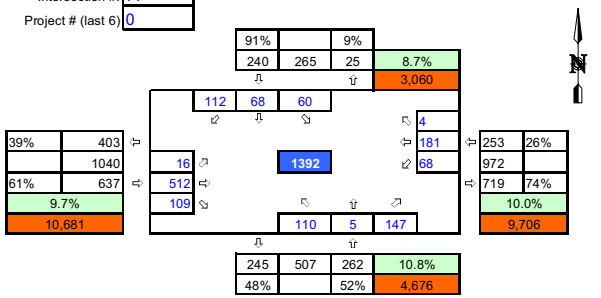






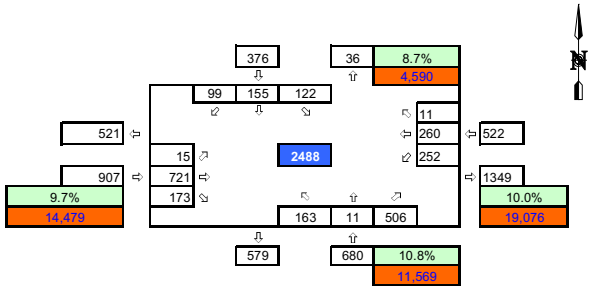
Int 77 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **Judicial Drive**
E/W Street: **Eastgate Mall**
Intersection #: 77
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **Judicial Drive**
E/W Street: **Eastgate Mall**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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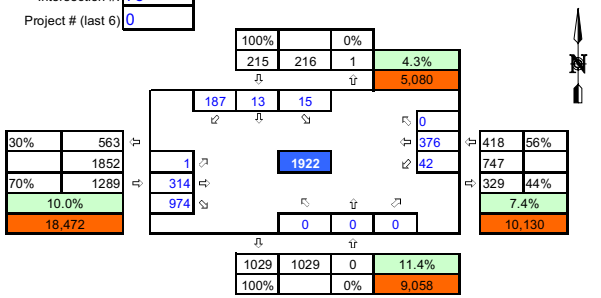
Int 77 PM

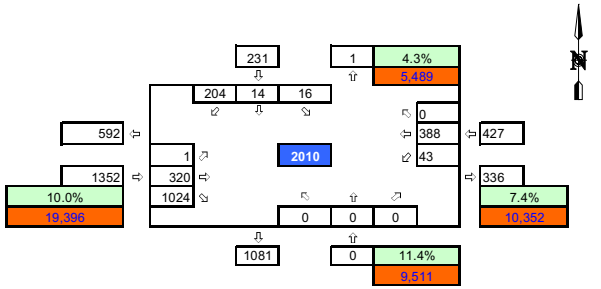
Int 78 PM Peak Volumes

Scenario: **Existing Conditions**
N/S Street: **I-805 SB Ramps**
E/W Street: **Governor Drive**
Intersection #: 78
Project # (last 6): 0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario: **Horizon Year Conditions**
N/S Street: **I-805 SB Ramps**
E/W Street: **Governor Drive**



LEGEND
Existing K-Factor: xx%
ADT Volume: xx

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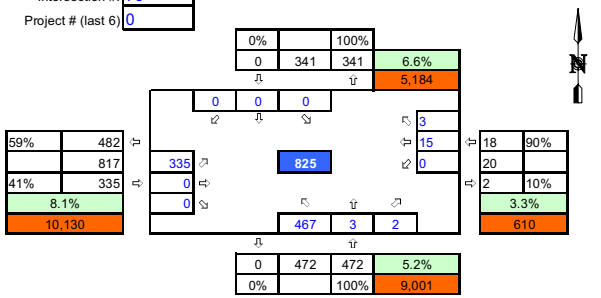
Int 78 PM

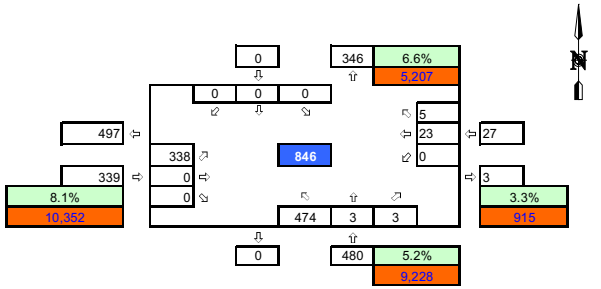
Int 79 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**I-805 NB Ramps**
E/W Street:	**Governor Drive**
Intersection #:	79
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**I-805 NB Ramps**
E/W Street:	**Governor Drive**



LEGEND

Existing K-Factor	xx%
ADT Volume	xx

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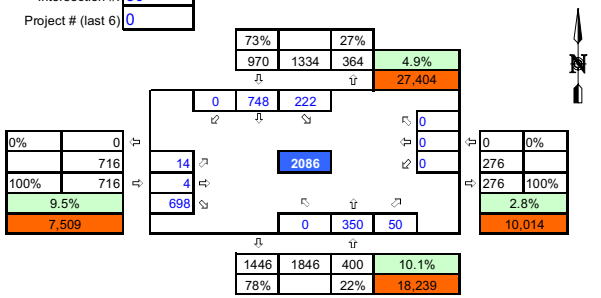
Int 79 PM

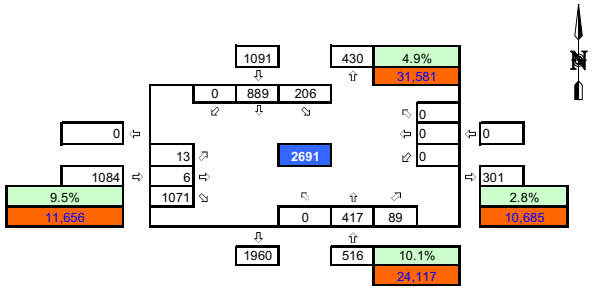
Int 80 PM Peak Volumes

Scenario:	**Existing Conditions**
N/S Street:	**Gilman Drive**
E/W Street:	**La Jolla Village Drive EB**
Intersection #:	80
Project # (last 6)	0



Note: Traffic volumes were collected by Accurate Video Counts during May 2015.

Scenario:	**Horizon Year Conditions**
N/S Street:	**Gilman Drive**
E/W Street:	**La Jolla Village Drive EB**



LEGEND

Existing K-Factor	xx%
ADT Volume	xx

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Int 80 PM

APPENDIX G

ALTERNATIVE A SUPPORTING INFORMATION

- Intersection LOS Worksheets
- Detailed Arterial Analysis Worksheets

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	ø4
Lane Configurations							
Traffic Volume (vph)	520	429	370	1204	595	236	
Future Volume (vph)	520	429	370	1204	595	236	
Turn Type	NA	Perm	Prot	NA	Prot	pt+ov	
Protected Phases	2		1	6	8	8 1	4
Permitted Phases		2					
Detector Phase	2	2	1	6	8	8 1	
Switch Phase							
Minimum Initial (s)	10.0	10.0	7.0	10.0	10.0		4.0
Minimum Split (s)	43.2	43.2	11.4	24.0	23.3		8.0
Total Split (s)	45.8	45.8	37.4	84.7	45.3		42.8
Total Split (%)	35.2%	35.2%	28.8%	65.2%	34.8%		33%
Yellow Time (s)	5.2	5.2	3.4	5.0	4.3		3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	6.2	6.2	4.4	6.0	5.3		
Lead/Lag	Lag	Lag	Lead				
Lead-Lag Optimize?							
Recall Mode	C-Max	C-Max	None	C-Max	None		None

Intersection Summary

Cycle Length: 130
Actuated Cycle Length: 130
Offset: 30 (23%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 80
Control Type: Actuated-Coordinated

Splits and Phases: 1: N. Torrey Pines Rd. & Genesee Ave

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	520	429	370	1204	595	236
Future Volume (vph)	520	429	370	1204	595	236
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.2	6.2	4.4	6.0	5.3	5.3
Lane Util. Factor	0.91	1.00	0.97	0.91	0.97	0.88
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	5085	1583	3433	5085	3433	2787
Flt Permitted	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (perm)	5085	1583	3433	5085	3433	2787
Peak-hour factor, PHF	0.85	0.85	0.91	0.91	0.85	0.85
Adj. Flow (vph)	612	505	407	1323	700	278
RTOR Reduction (vph)	0	271	0	0	0	80
Lane Group Flow (vph)	612	234	407	1323	700	198
Turn Type	NA	Perm	Prot	NA	Prot	pt+ov
Protected Phases	2		1	6	8	8 1
Permitted Phases		2				
Actuated Green, G (s)	60.3	60.3	19.9	84.8	33.9	59.1
Effective Green, g (s)	60.3	60.3	19.9	84.8	33.9	59.1
Actuated g/C Ratio	0.46	0.46	0.15	0.65	0.26	0.45
Clearance Time (s)	6.2	6.2	4.4	6.0	5.3	
Vehicle Extension (s)	4.0	4.0	2.0	3.7	3.8	
Lane Grp Cap (vph)	2358	734	525	3316	895	1267
v/s Ratio Prot	0.12		c0.12	c0.26	c0.20	0.07
v/s Ratio Perm		0.15				
v/c Ratio	0.26	0.32	0.78	0.40	0.78	0.16
Uniform Delay, d1	21.2	21.9	52.9	10.6	44.6	20.8
Progression Factor	1.00	1.00	1.08	0.29	0.81	0.26
Incremental Delay, d2	0.3	1.1	6.2	0.3	4.5	0.1
Delay (s)	21.5	23.1	63.1	3.4	40.6	5.6
Level of Service	C	C	E	A	D	A
Approach Delay (s)	22.2			17.5	30.6	
Approach LOS	C			B	C	

Intersection Summary

HCM 2000 Control Delay	22.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	15.9
Intersection Capacity Utilization	50.8%	ICU Level of Service	A
Analysis Period (min)	15		

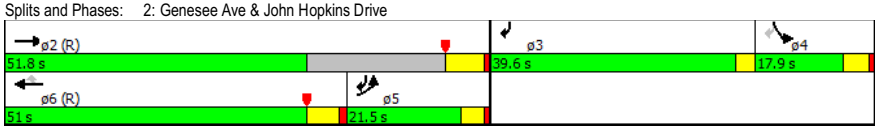
c Critical Lane Group

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	ø3
Lane Configurations							
Traffic Volume (vph)	86	720	1476	1473	163	23	
Future Volume (vph)	86	720	1476	1473	163	23	
Turn Type	Prot	NA	NA	Perm	Prot	pt+ov	
Protected Phases	5	2	6		4	3 5	3
Permitted Phases				6		4	
Detector Phase	5	2	6	6	4	3 5	
Switch Phase							
Minimum Initial (s)	4.0	10.0	10.0	10.0	7.0		4.0
Minimum Split (s)	9.5	16.7	15.9	15.9	11.9		7.0
Total Split (s)	21.5	51.8	51.0	51.0	17.9		39.6
Total Split (%)	16.5%	39.8%	39.2%	39.2%	13.8%		30%
Yellow Time (s)	3.4	5.7	4.9	4.9	3.9		3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		0.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	4.4	6.7	5.9	5.9	4.9		
Lead/Lag	Lag		Lead	Lead	Lag		Lead
Lead-Lag Optimize?	Yes		Yes	Yes	Yes		Yes
Recall Mode	None	C-Min	C-Min	C-Min	None		None

Intersection Summary

Cycle Length: 130
Actuated Cycle Length: 130
Offset: 16 (12%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 2: Genesee Ave & John Hopkins Drive



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	86	720	1476	1473	163	23
Future Volume (vph)	86	720	1476	1473	163	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	6.7	5.9	5.9	4.9	3.0
Lane Util. Factor	1.00	0.91	0.81	1.00	0.97	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	5085	7544	1583	3433	1583
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	5085	7544	1583	3433	1583
Peak-hour factor, PHF	0.89	0.89	0.94	0.94	0.80	0.80
Adj. Flow (vph)	97	809	1570	1567	204	29
RTOR Reduction (vph)	0	0	0	0	0	1
Lane Group Flow (vph)	97	809	1570	1567	204	28
Turn Type	Prot	NA	NA	Perm	Prot	pt+ov
Protected Phases	5	2	6		4	3 5
Permitted Phases				6		4
Actuated Green, G (s)	11.5	92.5	77.4	77.4	13.8	38.8
Effective Green, g (s)	11.5	92.5	77.4	77.4	13.8	34.4
Actuated g/C Ratio	0.09	0.71	0.60	0.60	0.11	0.26
Clearance Time (s)	4.4	6.7	5.9	5.9	4.9	
Vehicle Extension (s)	2.0	4.0	3.9	3.9	5.0	
Lane Grp Cap (vph)	156	3618	4491	942	364	455
v/s Ratio Prot	c0.05	0.16	0.21		c0.06	c0.01
v/s Ratio Perm				c0.99		0.01
v/c Ratio	0.62	0.22	0.35	1.66	0.56	0.06
Uniform Delay, d1	57.2	6.4	13.4	26.3	55.2	35.7
Progression Factor	0.80	0.52	1.17	1.17	1.00	1.00
Incremental Delay, d2	5.4	0.1	0.1	301.1	3.2	0.0
Delay (s)	51.4	3.5	15.9	331.8	58.4	35.7
Level of Service	D	A	B	F	E	D
Approach Delay (s)		8.6	173.7		55.6	
Approach LOS		A	F		E	

Intersection Summary

HCM 2000 Control Delay	132.3	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.29		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	18.2
Intersection Capacity Utilization	104.6%	ICU Level of Service	G
Analysis Period (min)	15		

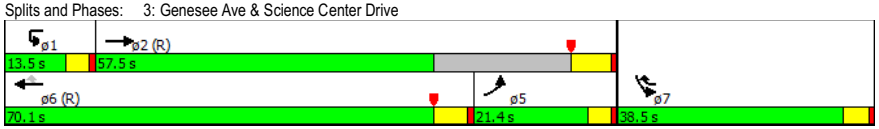
c Critical Lane Group

Lane Group	EBL	EBT	WBU	WBT	WBR	SBL
Lane Configurations						
Traffic Volume (vph)	99	809	3	2874	323	33
Future Volume (vph)	99	809	3	2874	323	33
Turn Type	Prot	NA	Prot	NA	pm+ov	Prot
Protected Phases	5	2	1	6	7	7
Permitted Phases					6	
Detector Phase	5	2	1	6	7	7
Switch Phase						
Minimum Initial (s)	4.0	10.0	4.0	10.0	4.0	4.0
Minimum Split (s)	9.5	22.5	9.5	16.0	8.9	8.9
Total Split (s)	21.4	57.5	13.5	70.1	38.5	38.5
Total Split (%)	16.5%	44.2%	10.4%	53.9%	29.6%	29.6%
Yellow Time (s)	3.4	5.9	3.4	5.0	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	6.9	4.4	6.0	4.9	4.9
Lead/Lag	Lag	Lag	Lead	Lead		
Lead-Lag Optimize?	Yes	Yes	Yes	Yes		
Recall Mode	None	C-Max	None	C-Max	None	None

Intersection Summary

Cycle Length: 130
Actuated Cycle Length: 130
Offset: 39 (30%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 70
Control Type: Actuated-Coordinated

Splits and Phases: 3: Genesee Ave & Science Center Drive



Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Traffic Volume (vph)	99	809	3	2874	323	33	18
Future Volume (vph)	99	809	3	2874	323	33	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	6.9	4.4	6.0	4.9	4.9	
Lane Util. Factor	1.00	0.91	1.00	0.91	1.00	0.97	
Frt	1.00	1.00	1.00	1.00	0.85	0.95	
Flt Protected	0.95	1.00	0.95	1.00	1.00	0.97	
Satd. Flow (prot)	1770	5085	1770	5085	1583	3313	
Flt Permitted	0.95	1.00	0.95	1.00	1.00	0.97	
Satd. Flow (perm)	1770	5085	1770	5085	1583	3313	
Peak-hour factor, PHF	0.88	0.88	0.92	0.95	0.95	0.80	0.80
Adj. Flow (vph)	112	919	3	3025	340	41	22
RTOR Reduction (vph)	0	0	0	0	94	22	0
Lane Group Flow (vph)	113	919	3	3025	246	42	0
Turn Type	Prot	NA	Prot	NA	pm+ov	Prot	
Protected Phases	5	2	1	6	7	7	
Permitted Phases					6		
Actuated Green, G (s)	20.5	105.4	1.3	87.1	94.2	7.1	
Effective Green, g (s)	20.5	105.4	1.3	87.1	94.2	7.1	
Actuated g/C Ratio	0.16	0.81	0.01	0.67	0.72	0.05	
Clearance Time (s)	4.4	6.9	4.4	6.0	4.9	4.9	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	279	4122	17	3406	1206	180	
v/s Ratio Prot	c0.06	0.18	0.00	c0.59	c0.01	0.01	
v/s Ratio Perm					0.14		
v/c Ratio	0.41	0.22	0.18	0.89	0.20	0.23	
Uniform Delay, d1	49.3	2.8	63.8	17.5	5.8	58.8	
Progression Factor	0.94	0.68	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.9	0.1	4.9	3.9	0.1	0.7	
Delay (s)	47.1	2.1	68.7	21.4	5.9	59.5	
Level of Service	D	A	E	C	A	E	
Approach Delay (s)		7.0		19.9		59.5	
Approach LOS		A		B		E	

Intersection Summary

HCM 2000 Control Delay	17.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	16.2
Intersection Capacity Utilization	77.1%	ICU Level of Service	D
Analysis Period (min)	15		

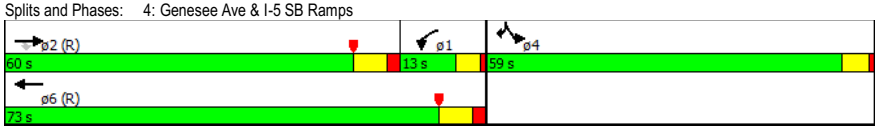
c Critical Lane Group

Lane Group	EBT	EBR	WBL	WBT	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	644	192	97	2213	1039	666
Future Volume (vph)	644	192	97	2213	1039	666
Turn Type	NA	Perm	Prot	NA	Prot	Prot
Protected Phases	2		1	6	4	4
Permitted Phases		2				
Detector Phase	2	2	1	6	4	4
Switch Phase						
Minimum Initial (s)	10.0	10.0	5.0	10.0	13.0	13.0
Minimum Split (s)	25.2	25.2	9.7	28.2	18.1	18.1
Total Split (s)	60.0	60.0	13.0	73.0	59.0	59.0
Total Split (%)	45.5%	45.5%	9.8%	55.3%	44.7%	44.7%
Yellow Time (s)	5.2	5.2	3.7	5.2	4.1	4.1
All-Red Time (s)	2.0	2.0	1.0	2.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.2	7.2	4.7	7.2	5.1	5.1
Lead/Lag	Lead	Lead	Lag			
Lead-Lag Optimize?	Yes	Yes	Yes			
Recall Mode	C-Max	C-Max	None	C-Max	Min	Min

Intersection Summary

Cycle Length: 132
Actuated Cycle Length: 132
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 4: Genesee Ave & I-5 SB Ramps



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	644	192	97	2213	0	0	0	0	1039	0	666
Future Volume (vph)	0	644	192	97	2213	0	0	0	0	1039	0	666
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		7.2	7.2	4.7	7.2					5.1		5.1
Lane Util. Factor		0.81	0.88	0.97	0.91					0.97		0.88
Frt		1.00	0.85	1.00	1.00					1.00		0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (prot)		7544	2787	3433	5085					3433		2787
Flt Permitted		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (perm)		7544	2787	3433	5085					3433		2787
Peak-hour factor, PHF	0.99	0.99	0.99	0.93	0.93	0.93	0.25	0.25	0.25	0.85	0.85	0.85
Adj. Flow (vph)	0	651	194	104	2380	0	0	0	0	1222	0	784
RTOR Reduction (vph)	0	0	113	0	0	0	0	0	0	0	0	57
Lane Group Flow (vph)	0	651	81	104	2380	0	0	0	0	1222	0	727
Turn Type		NA	Perm	Prot	NA					Prot		Prot
Protected Phases		2		1	6					4		4
Permitted Phases			2									
Actuated Green, G (s)		55.2	55.2	8.3	68.2					51.5		51.5
Effective Green, g (s)		55.2	55.2	8.3	68.2					51.5		51.5
Actuated g/C Ratio		0.42	0.42	0.06	0.52					0.39		0.39
Clearance Time (s)		7.2	7.2	4.7	7.2					5.1		5.1
Vehicle Extension (s)		2.0	2.0	2.0	2.0					2.0		2.0
Lane Grp Cap (vph)		3154	1165	215	2627					1339		1087
v/s Ratio Prot		0.09		0.03	c0.47					c0.36		0.26
v/s Ratio Perm			0.03									
v/c Ratio		0.21	0.07	0.48	0.91					0.91		0.67
Uniform Delay, d1		24.5	23.0	59.8	29.0					38.1		33.2
Progression Factor		1.00	1.00	1.17	1.29					1.00		1.00
Incremental Delay, d2		0.1	0.1	0.3	3.3					9.5		1.2
Delay (s)		24.6	23.1	70.0	40.6					47.6		34.4
Level of Service		C	C	E	D					D		C
Approach Delay (s)		24.3			41.8			0.0			42.5	
Approach LOS		C			D			A			D	

Intersection Summary

HCM 2000 Control Delay	39.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.95		
Actuated Cycle Length (s)	132.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	102.5%	ICU Level of Service	G
Analysis Period (min)	15		

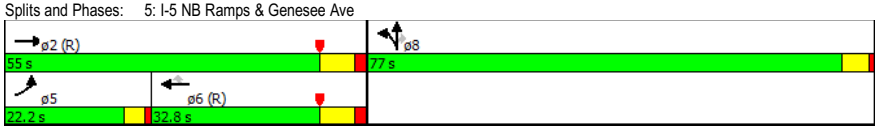
c Critical Lane Group

Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Configurations							
Traffic Volume (vph)	247	1549	611	379	1572	10	543
Future Volume (vph)	247	1549	611	379	1572	10	543
Turn Type	Prot	NA	NA	Perm	Split	NA	Perm
Protected Phases	5	2	6		8	8	
Permitted Phases				6			8
Detector Phase	5	2	6	6	8	8	8
Switch Phase							
Minimum Initial (s)	11.0	10.0	10.0	10.0	5.0	5.0	5.0
Minimum Split (s)	22.2	28.2	25.2	25.2	10.1	10.1	10.1
Total Split (s)	22.2	55.0	32.8	32.8	77.0	77.0	77.0
Total Split (%)	16.8%	41.7%	24.8%	24.8%	58.3%	58.3%	58.3%
Yellow Time (s)	3.2	5.2	5.2	5.2	4.1	4.1	4.1
All-Red Time (s)	1.0	2.0	2.0	2.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.2	7.2	7.2	7.2	5.1	5.1	5.1
Lead/Lag	Lead		Lag	Lag			
Lead-Lag Optimize?	Yes		Yes	Yes			
Recall Mode	None	C-Max	C-Max	C-Max	None	None	None

Intersection Summary

Cycle Length: 132
Actuated Cycle Length: 132
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 110
Control Type: Actuated-Coordinated

Splits and Phases: 5: I-5 NB Ramps & Genesee Ave



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	247	1549	0	0	611	379	1572	10	543	0	0	0
Future Volume (vph)	247	1549	0	0	611	379	1572	10	543	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	7.2			7.2	7.2	5.1	5.1	5.1			
Lane Util. Factor	0.97	0.91			0.81	0.88	0.95	0.95	0.88			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.95	1.00			
Satd. Flow (prot)	3433	5085			7544	2787	1681	1686	2787			
Flt Permitted	0.95	1.00			1.00	1.00	0.95	0.95	1.00			
Satd. Flow (perm)	3433	5085			7544	2787	1681	1686	2787			
Peak-hour factor, PHF	0.86	0.86	0.86	0.80	0.80	0.80	0.88	0.88	0.88	0.25	0.25	0.25
Adj. Flow (vph)	287	1801	0	0	764	474	1786	11	617	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	371	0	0	31	0	0	0
Lane Group Flow (vph)	287	1801	0	0	764	103	893	904	586	0	0	0
Turn Type	Prot	NA			NA	Perm	Split	NA	Perm			
Protected Phases	5	2			6		8	8				
Permitted Phases						6			8			
Actuated Green, G (s)	15.0	47.8			28.6	28.6	71.9	71.9	71.9			
Effective Green, g (s)	15.0	47.8			28.6	28.6	71.9	71.9	71.9			
Actuated g/C Ratio	0.11	0.36			0.22	0.22	0.54	0.54	0.54			
Clearance Time (s)	4.2	7.2			7.2	7.2	5.1	5.1	5.1			
Vehicle Extension (s)	2.0	2.0			2.0	2.0	2.0	2.0	2.0			
Lane Grp Cap (vph)	390	1841			1634	603	915	918	1518			
v/s Ratio Prot	0.08	c0.35			0.10		0.53	c0.54				
v/s Ratio Perm						0.04			0.21			
v/c Ratio	0.74	0.98			0.47	0.17	0.98	0.98	0.39			
Uniform Delay, d1	56.6	41.6			45.1	42.1	29.2	29.5	17.3			
Progression Factor	0.67	1.02			0.80	1.45	1.00	1.00	1.00			
Incremental Delay, d2	5.1	14.6			0.9	0.6	23.7	25.7	0.1			
Delay (s)	43.1	56.8			36.9	61.5	52.9	55.2	17.4			
Level of Service	D	E			D	E	D	E	B			
Approach Delay (s)		55.0			46.3			44.7			0.0	
Approach LOS		D			D			D			A	

Intersection Summary

HCM 2000 Control Delay	48.8	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.02		
Actuated Cycle Length (s)	132.0	Sum of lost time (s)	16.5
Intersection Capacity Utilization	102.5%	ICU Level of Service	G
Analysis Period (min)	15		

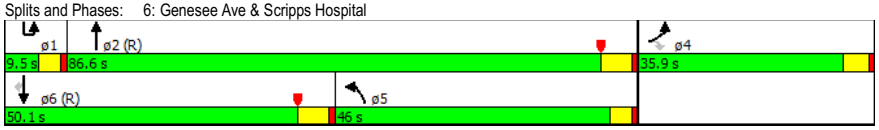
c Critical Lane Group

Lane Group	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	110	369	663	812	6	1513	919
Future Volume (vph)	110	369	663	812	6	1513	919
Turn Type	Prot	Perm	Prot	NA	Prot	NA	Perm
Protected Phases	4		5	2	1	6	
Permitted Phases		4					6
Detector Phase	4	4	5	2	1	6	6
Switch Phase							
Minimum Initial (s)	7.0	7.0	4.0	10.0	4.0	10.0	10.0
Minimum Split (s)	35.9	35.9	9.5	22.5	9.5	30.5	30.5
Total Split (s)	35.9	35.9	46.0	86.6	9.5	50.1	50.1
Total Split (%)	27.2%	27.2%	34.8%	65.6%	7.2%	38.0%	38.0%
Yellow Time (s)	3.9	3.9	3.4	4.7	3.4	4.7	4.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	4.4	5.7	4.4	5.7	5.7
Lead/Lag			Lag	Lag	Lead	Lead	Lead
Lead-Lag Optimize?			Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	C-Max	None	C-Max	C-Max

Intersection Summary

Cycle Length: 132
Actuated Cycle Length: 132
Offset: 69 (52%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 6: Genesee Ave & Scripps Hospital



Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	110	369	663	812	6	1513	919
Future Volume (vph)	110	369	663	812	6	1513	919
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9	4.4	5.7	4.4	5.7	5.7
Lane Util. Factor	0.97	1.00	1.00	0.91	1.00	0.91	1.00
Frt	1.00	0.85	1.00	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	1583	1770	5085	1770	5085	1583
Flt Permitted	0.95	1.00	0.95	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	1583	1770	5085	1770	5085	1583
Peak-hour factor, PHF	0.90	0.90	0.90	0.80	0.92	0.89	0.90
Adj. Flow (vph)	122	410	737	1015	7	1700	1021
RTOR Reduction (vph)	0	357	0	0	0	0	292
Lane Group Flow (vph)	122	53	737	1015	7	1700	729
Turn Type	Prot	Perm	Prot	NA	Prot	NA	Perm
Protected Phases	4		5	2	1	6	
Permitted Phases		4					6
Actuated Green, G (s)	17.2	17.2	45.1	98.8	1.0	54.7	54.7
Effective Green, g (s)	17.2	17.2	45.1	98.8	1.0	54.7	54.7
Actuated g/C Ratio	0.13	0.13	0.34	0.75	0.01	0.41	0.41
Clearance Time (s)	4.9	4.9	4.4	5.7	4.4	5.7	5.7
Vehicle Extension (s)	2.0	2.0	2.0	5.2	2.0	4.0	4.0
Lane Grp Cap (vph)	447	206	604	3806	13	2107	655
v/s Ratio Prot	c0.04		c0.42	0.20	0.00	0.33	
v/s Ratio Perm		0.03					c0.46
v/c Ratio	0.27	0.26	1.22	0.27	0.54	0.81	1.11
Uniform Delay, d1	51.8	51.7	43.5	5.2	65.3	34.0	38.6
Progression Factor	1.00	1.00	0.53	0.17	0.76	0.88	1.39
Incremental Delay, d2	0.1	0.2	111.1	0.1	13.4	2.3	65.0
Delay (s)	51.9	51.9	134.3	1.0	63.3	32.3	118.6
Level of Service	D	D	F	A	E	C	F
Approach Delay (s)	51.9			57.1		64.7	
Approach LOS	D			E		E	

Intersection Summary

HCM 2000 Control Delay	60.7	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.03		
Actuated Cycle Length (s)	132.0	Sum of lost time (s)	15.0
Intersection Capacity Utilization	102.1%	ICU Level of Service	G
Analysis Period (min)	15		

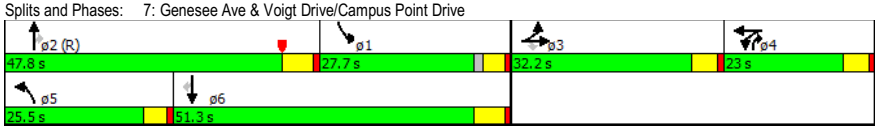
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	135	11	118	28	13	475	1334	516	347	1079	452
Future Volume (vph)	135	11	118	28	13	475	1334	516	347	1079	452
Turn Type	Split	NA	Perm	Split	NA	Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	3	3		4	4	5	2	4	1	6	
Permitted Phases			3					2			6
Detector Phase	3	3	3	4	4	5	2	4	1	6	6
Switch Phase											
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	4.0	10.0	7.0	4.0	10.0	10.0
Minimum Split (s)	11.9	11.9	11.9	22.5	22.5	22.5	37.7	22.5	22.5	33.7	33.7
Total Split (s)	32.2	32.2	32.2	23.0	23.0	25.5	47.8	23.0	27.7	51.3	51.3
Total Split (%)	24.4%	24.4%	24.4%	17.4%	17.4%	19.3%	36.2%	17.4%	21.0%	38.9%	38.9%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.9	3.4	4.7	3.9	3.4	4.7	4.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	4.9	4.9	4.9	4.4	5.7	4.9	4.4	5.7	5.7
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	None	None	None	None

Intersection Summary

Cycle Length: 132
Actuated Cycle Length: 132
Offset: 99 (75%), Referenced to phase 2:NBT, Start of Yellow
Natural Cycle: 95
Control Type: Actuated-Coordinated

Splits and Phases: 7: Genesee Ave & Voigt Drive/Campus Point Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	135	11	118	28	13	54	475	1334	516	347	1079	452
Future Volume (vph)	135	11	118	28	13	54	475	1334	516	347	1079	452
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9	4.9	4.9	4.9		4.4	5.7	4.9	4.4	5.7	5.7
Lane Util. Factor	0.97	1.00	0.88	0.97	0.95		0.97	0.91	1.00	0.97	0.91	1.00
Frt	1.00	1.00	0.85	1.00	0.88		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	1863	2787	3433	3113		3433	5085	1583	3433	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	1863	2787	3433	3113		3433	5085	1583	3433	5085	1583
Peak-hour factor, PHF	0.90	0.90	0.90	0.83	0.83	0.83	0.88	0.88	0.88	0.80	0.80	0.80
Adj. Flow (vph)	150	12	131	34	16	65	540	1516	586	434	1349	565
RTOR Reduction (vph)	0	0	115	0	59	0	0	0	211	0	0	235
Lane Group Flow (vph)	150	12	16	34	22	0	540	1516	375	434	1349	330
Turn Type	Split	NA	Perm	Split	NA		Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	3	3		4	4		5	2	4	1	6	
Permitted Phases			3						2			6
Actuated Green, G (s)	16.1	16.1	16.1	12.4	12.4		23.9	60.7	73.1	22.9	59.7	59.7
Effective Green, g (s)	16.1	16.1	16.1	12.4	12.4		23.9	60.7	73.1	22.9	59.7	59.7
Actuated g/C Ratio	0.12	0.12	0.12	0.09	0.09		0.18	0.46	0.55	0.17	0.45	0.45
Clearance Time (s)	4.9	4.9	4.9	4.9	4.9		4.4	5.7	4.9	4.4	5.7	5.7
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0		2.0	3.7	2.0	2.0	4.0	4.0
Lane Grp Cap (vph)	418	227	339	322	292		621	2338	935	595	2299	715
v/s Ratio Prot	c0.04	0.01		0.01	0.01		c0.16	c0.30	c0.04	c0.13	0.27	
v/s Ratio Perm			0.01						0.20			0.21
v/c Ratio	0.36	0.05	0.05	0.11	0.08		0.87	0.65	0.40	0.73	0.59	0.46
Uniform Delay, d1	53.2	51.2	51.2	54.7	54.6		52.5	27.4	16.9	51.6	27.0	25.0
Progression Factor	1.00	1.00	1.00	1.00	1.00		0.76	0.98	1.48	1.16	1.16	2.46
Incremental Delay, d2	0.2	0.0	0.0	0.1	0.0		9.5	1.1	0.1	2.9	0.3	0.5
Delay (s)	53.4	51.2	51.2	54.8	54.6		49.5	28.0	25.1	62.5	31.6	62.1
Level of Service	D	D	D	D	D		D	C	C	E	C	E
Approach Delay (s)		52.3			54.7			31.8			44.7	
Approach LOS		D			D			C			D	

Intersection Summary

HCM 2000 Control Delay	39.0	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	132.0	Sum of lost time (s)	19.9
Intersection Capacity Utilization	59.9%	ICU Level of Service	B
Analysis Period (min)	15		

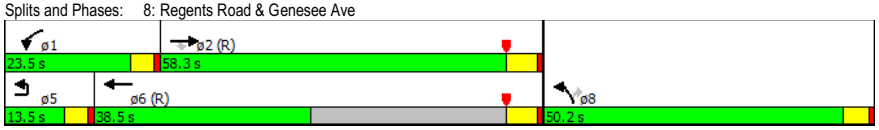
c Critical Lane Group

Lane Group	EBU	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations							
Traffic Volume (vph)	98	882	183	87	1778	318	66
Future Volume (vph)	98	882	183	87	1778	318	66
Turn Type	Prot	NA	Perm	Prot	NA	Prot	Perm
Protected Phases	5	2		1	6	8	
Permitted Phases			2				8
Detector Phase	5	2	2	1	6	8	8
Switch Phase							
Minimum Initial (s)	4.0	10.0	10.0	4.0	10.0	7.0	7.0
Minimum Split (s)	9.5	22.7	22.7	9.5	22.5	37.9	37.9
Total Split (s)	13.5	58.3	58.3	23.5	38.5	50.2	50.2
Total Split (%)	10.2%	44.2%	44.2%	17.8%	29.2%	38.0%	38.0%
Yellow Time (s)	3.4	4.7	4.7	3.4	4.7	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.7	5.7	4.4	5.7	4.9	4.9
Lead/Lag	Lead	Lag	Lag	Lead	Lag		
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		
Recall Mode	None	C-Max	C-Max	None	C-Max	None	None

Intersection Summary

Cycle Length: 132
Actuated Cycle Length: 132
Offset: 60 (45%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 8: Regents Road & Genesee Ave



Movement	EBU	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations							
Traffic Volume (vph)	98	882	183	87	1778	318	66
Future Volume (vph)	98	882	183	87	1778	318	66
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	12	16	12
Total Lost time (s)	4.4	5.7	5.7	4.4	5.7	4.9	4.9
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	1770	5085	1583	1770	5085	2006	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (perm)	1770	5085	1583	1770	5085	2006	1583
Peak-hour factor, PHF	0.92	0.80	0.80	0.90	0.90	0.80	0.80
Adj. Flow (vph)	107	1102	229	97	1976	398	82
RTOR Reduction (vph)	0	0	100	0	0	0	63
Lane Group Flow (vph)	107	1103	129	97	1976	398	20
Turn Type	Prot	NA	Perm	Prot	NA	Prot	Perm
Protected Phases	5	2		1	6	8	
Permitted Phases			2				8
Actuated Green, G (s)	13.1	74.3	74.3	11.6	72.8	31.1	31.1
Effective Green, g (s)	13.1	74.3	74.3	11.6	72.8	31.1	31.1
Actuated g/C Ratio	0.10	0.56	0.56	0.09	0.55	0.24	0.24
Clearance Time (s)	4.4	5.7	5.7	4.4	5.7	4.9	4.9
Vehicle Extension (s)	2.0	5.0	5.0	2.0	3.9	2.0	2.0
Lane Grp Cap (vph)	175	2862	891	155	2804	472	372
v/s Ratio Prot	c0.06	0.22		0.05	c0.39	c0.20	
v/s Ratio Perm			0.08				0.01
v/c Ratio	0.61	0.39	0.14	0.63	0.70	0.84	0.05
Uniform Delay, d1	57.0	16.1	13.7	58.1	21.7	48.1	39.0
Progression Factor	0.70	1.47	5.25	1.30	0.69	1.00	1.00
Incremental Delay, d2	3.7	0.3	0.3	1.4	0.4	12.4	0.0
Delay (s)	43.7	24.0	72.4	76.8	15.4	60.5	39.1
Level of Service	D	C	E	E	B	E	D
Approach Delay (s)		33.2			18.3	56.8	
Approach LOS		C			B	E	

Intersection Summary

HCM 2000 Control Delay	28.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	132.0	Sum of lost time (s)	15.0
Intersection Capacity Utilization	69.9%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	100	256	73	372	341	1591	200	526
Future Volume (vph)	100	256	73	372	341	1591	200	526
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	7	4	3	8	5	2	1	6
Permitted Phases								
Detector Phase	7	4	3	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	4.0	7.0	4.0	7.0	4.0	10.0	4.0	10.0
Minimum Split (s)	15.0	38.9	9.5	39.1	9.5	31.7	9.5	32.7
Total Split (s)	15.0	39.7	14.4	39.1	40.0	62.9	15.0	37.9
Total Split (%)	11.4%	30.1%	10.9%	29.6%	30.3%	47.7%	11.4%	28.7%
Yellow Time (s)	3.4	3.9	3.4	4.1	3.4	4.7	3.4	4.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	4.9	4.4	5.1	4.4	5.7	4.4	5.7
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max

Intersection Summary

Cycle Length: 132
Actuated Cycle Length: 132
Offset: 101 (77%), Referenced to phase 6:SBT, Start of Yellow
Natural Cycle: 130
Control Type: Actuated-Coordinated

Splits and Phases: 9: Genesee Ave & Eastgate Mall

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	100	256	110	73	372	407	341	1591	274	200	526	163
Future Volume (vph)	100	256	110	73	372	407	341	1591	274	200	526	163
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	5.1		4.4	5.7		4.4	5.7	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.91		0.97	0.91	
Frt	1.00	0.95		1.00	0.92		1.00	0.98		1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3379		1770	3262		1770	4973		3433	4905	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	3379		1770	3262		1770	4973		3433	4905	
Peak-hour factor, PHF	0.80	0.80	0.80	0.82	0.82	0.82	0.86	0.86	0.86	0.80	0.80	0.80
Adj. Flow (vph)	125	320	138	89	454	496	397	1850	319	250	658	204
RTOR Reduction (vph)	0	0	0	0	135	0	0	18	0	0	42	0
Lane Group Flow (vph)	125	458	0	89	815	0	397	2151	0	250	820	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Actuated Green, G (s)	10.5	35.4		9.2	33.9		35.6	57.3		10.7	32.4	
Effective Green, g (s)	10.5	35.4		9.2	33.9		35.6	57.3		10.7	32.4	
Actuated g/C Ratio	0.08	0.27		0.07	0.26		0.27	0.43		0.08	0.25	
Clearance Time (s)	4.4	4.9		4.4	5.1		4.4	5.7		4.4	5.7	
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	4.2		2.0	4.3	
Lane Grp Cap (vph)	140	906		123	837		477	2158		278	1203	
v/s Ratio Prot	c0.07	0.14		0.05	c0.25		0.22	c0.43		c0.07	0.17	
v/s Ratio Perm												
v/c Ratio	0.89	0.51		0.72	0.97		0.83	1.00		0.90	0.68	
Uniform Delay, d1	60.2	40.9		60.2	48.6		45.4	37.3		60.1	45.1	
Progression Factor	1.00	1.00		1.00	1.00		0.66	0.58		0.76	1.07	
Incremental Delay, d2	44.6	0.2		16.3	24.5		8.8	16.0		27.4	3.0	
Delay (s)	104.8	41.1		76.4	73.1		38.9	37.6		73.2	51.4	
Level of Service	F	D		E	E		D	D		E	D	
Approach Delay (s)		54.7			73.4			37.8			56.3	
Approach LOS		D			E			D			E	

Intersection Summary

HCM 2000 Control Delay	50.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.97		
Actuated Cycle Length (s)	132.0	Sum of lost time (s)	19.6
Intersection Capacity Utilization	87.8%	ICU Level of Service	E
Analysis Period (min)	15		

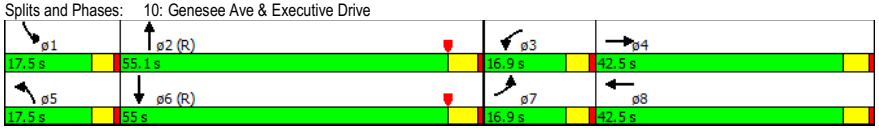
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	18	100	86	67	82	1783	47	538
Future Volume (vph)	18	100	86	67	82	1783	47	538
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	7	4	3	8	5	2	1	6
Permitted Phases								
Detector Phase	7	4	3	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	10.0	4.0	10.0
Minimum Split (s)	8.4	8.9	8.4	8.9	8.4	15.5	9.5	15.4
Total Split (s)	16.9	42.5	16.9	42.5	17.5	55.1	17.5	55.0
Total Split (%)	12.8%	32.2%	12.8%	32.2%	13.3%	41.7%	13.3%	41.7%
Yellow Time (s)	3.4	3.9	3.4	3.9	3.4	4.5	3.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	4.9	4.4	4.9	4.4	5.5	4.4	5.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	None	C-Max

Intersection Summary

Cycle Length: 132
Actuated Cycle Length: 132
Offset: 127 (96%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 70
Control Type: Actuated-Coordinated

Splits and Phases: 10: Genesee Ave & Executive Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	18	100	43	86	67	95	82	1783	489	47	538	16
Future Volume (vph)	18	100	43	86	67	95	82	1783	489	47	538	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	4.9		4.4	5.5		4.4	5.4	
Lane Util. Factor	1.00	0.95		0.97	0.95		1.00	0.91		1.00	0.91	
Frt	1.00	0.95		1.00	0.91		1.00	0.97		1.00	1.00	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3379		3433	3228		1770	4921		1770	5063	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	3379		3433	3228		1770	4921		1770	5063	
Peak-hour factor, PHF	0.92	0.92	0.92	0.80	0.80	0.80	0.91	0.91	0.91	0.80	0.80	0.80
Adj. Flow (vph)	20	109	47	108	84	119	90	1959	537	59	672	20
RTOR Reduction (vph)	0	40	0	0	97	0	0	25	0	0	2	0
Lane Group Flow (vph)	20	116	0	108	106	0	90	2471	0	59	691	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Actuated Green, G (s)	4.2	19.7		8.5	24.0		11.1	76.8		7.8	73.6	
Effective Green, g (s)	4.2	19.7		8.5	24.0		11.1	76.8		7.8	73.6	
Actuated g/C Ratio	0.03	0.15		0.06	0.18		0.08	0.58		0.06	0.56	
Clearance Time (s)	4.4	4.9		4.4	4.9		4.4	5.5		4.4	5.4	
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	3.6		2.0	3.8	
Lane Grp Cap (vph)	56	504		221	586		148	2863		104	2823	
v/s Ratio Prot	0.01	c0.03		c0.03	c0.03		c0.05	c0.50		0.03	0.14	
v/s Ratio Perm												
v/c Ratio	0.36	0.23		0.49	0.18		0.61	0.86		0.57	0.24	
Uniform Delay, d1	62.6	49.5		59.7	45.7		58.4	23.2		60.5	15.0	
Progression Factor	1.00	1.00		1.00	1.00		1.29	0.71		1.23	0.28	
Incremental Delay, d2	1.4	0.1		0.6	0.1		3.5	2.8		3.1	0.2	
Delay (s)	64.0	49.6		60.3	45.7		78.7	19.3		77.4	4.3	
Level of Service	E	D		E	D		E	B		E	A	
Approach Delay (s)		51.2			50.8			21.4			10.1	
Approach LOS		D			D			C			B	

Intersection Summary

HCM 2000 Control Delay	22.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	132.0	Sum of lost time (s)	19.2
Intersection Capacity Utilization	72.9%	ICU Level of Service	C
Analysis Period (min)	15		

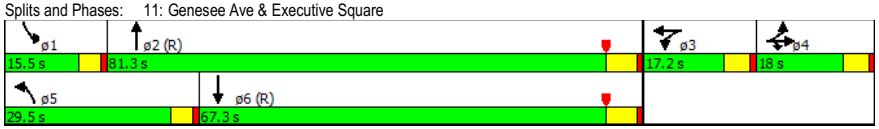
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	14	2	38	3	10	293	2470	13	623
Future Volume (vph)	14	2	38	3	10	293	2470	13	623
Turn Type	Split	NA	Prot	NA	NA	Prot	NA	Prot	NA
Protected Phases	4	4	4	3		5	2	1	6
Permitted Phases									
Detector Phase	4	4	4	3		5	2	1	6
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	4.0		4.0	10.0	4.0	10.0
Minimum Split (s)	8.9	8.9	8.9	8.9		8.4	15.7	8.4	15.7
Total Split (s)	18.0	18.0	18.0	17.2		29.5	81.3	15.5	67.3
Total Split (%)	13.6%	13.6%	13.6%	13.0%		22.3%	61.6%	11.7%	51.0%
Yellow Time (s)	3.9	3.9	3.9	3.9		3.4	4.7	3.4	4.7
All-Red Time (s)	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	4.9	4.9		4.4	5.7	4.4	5.7
Lead/Lag	Lag	Lag	Lag	Lead		Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None		None	C-Max	None	C-Max

Intersection Summary

Cycle Length: 132
Actuated Cycle Length: 132
Offset: 14 (11%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 80
Control Type: Actuated-Coordinated

Splits and Phases: 11: Genesee Ave & Executive Square



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	14	2	38	9	3	10	293	2470	224	13	623	20
Future Volume (vph)	14	2	38	9	3	10	293	2470	224	13	623	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9	4.9		4.9	4.0	4.4	5.7		4.4	5.7	
Lane Util. Factor	0.95	0.91	0.95		0.95	0.95	1.00	0.91		1.00	0.91	
Frt	1.00	0.88	0.85		0.99	0.85	1.00	0.99		1.00	1.00	
Flt Protected	0.95	1.00	1.00		0.97	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1477	1504		1695	1504	1770	5022		1770	5062	
Flt Permitted	0.95	1.00	1.00		0.97	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1681	1477	1504		1695	1504	1770	5022		1770	5062	
Peak-hour factor, PHF	0.87	0.87	0.87	0.80	0.80	0.80	0.96	0.96	0.96	0.80	0.80	0.80
Adj. Flow (vph)	16	2	44	11	4	12	305	2573	233	16	779	25
RTOR Reduction (vph)	0	19	23	0	1	12	0	4	0	0	2	0
Lane Group Flow (vph)	14	5	1	0	15	0	305	2802	0	16	802	0
Turn Type	Split	NA	Prot	Split	NA	NA	Prot	NA		Prot	NA	
Protected Phases	4	4	4	3	3		5	2		1	6	
Permitted Phases												
Actuated Green, G (s)	4.9	4.9	4.9		2.8	0.0	28.6	101.6		2.8	75.8	
Effective Green, g (s)	4.9	4.9	4.9		2.8	0.0	28.6	101.6		2.8	75.8	
Actuated g/C Ratio	0.04	0.04	0.04		0.02	0.00	0.22	0.77		0.02	0.57	
Clearance Time (s)	4.9	4.9	4.9		4.9		4.4	5.7		4.4	5.7	
Vehicle Extension (s)	2.0	2.0	2.0		2.0		2.0	3.9		2.0	2.2	
Lane Grp Cap (vph)	62	54	55		35	0	383	3865		37	2906	
v/s Ratio Prot	c0.01	0.00	0.00		c0.01		c0.17	c0.56		0.01	0.16	
v/s Ratio Perm												
v/c Ratio	0.23	0.09	0.02		0.43	0.00	0.80	0.72		0.43	0.28	
Uniform Delay, d1	61.7	61.4	61.2		63.8	66.0	48.9	7.9		63.8	14.2	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.19	0.25	
Incremental Delay, d2	0.7	0.3	0.0		3.1	0.0	10.2	1.2		2.9	0.2	
Delay (s)	62.4	61.6	61.3		66.9	66.0	59.2	9.1		79.0	3.7	
Level of Service	E	E	E		E	E	E	A		E	A	
Approach Delay (s)		61.7			66.5			14.0			5.2	
Approach LOS		E			E			B			A	

Intersection Summary

HCM 2000 Control Delay	13.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	132.0	Sum of lost time (s)	19.9
Intersection Capacity Utilization	76.1%	ICU Level of Service	D
Analysis Period (min)	15		

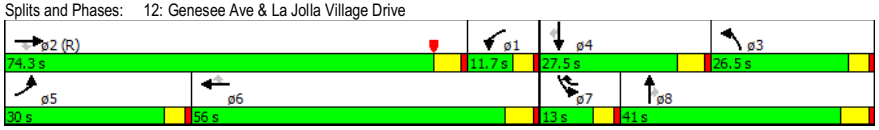
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	771	1678	142	98	1855	360	326	1557	89	203	289	134
Future Volume (vph)	771	1678	142	98	1855	360	326	1557	89	203	289	134
Turn Type	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6	7	3	8		7	4	
Permitted Phases			2			6			8			4
Detector Phase	5	2	2	1	6	7	3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	4.0	10.0	10.0	4.0	10.0	4.0	4.0	10.0	10.0	4.0	10.0	10.0
Minimum Split (s)	8.4	15.3	15.3	8.4	15.5	8.4	8.4	15.7	15.7	8.4	15.4	15.4
Total Split (s)	30.0	74.3	74.3	11.7	56.0	13.0	26.5	41.0	41.0	13.0	27.5	27.5
Total Split (%)	21.4%	53.1%	53.1%	8.4%	40.0%	9.3%	18.9%	29.3%	29.3%	9.3%	19.6%	19.6%
Yellow Time (s)	3.4	4.3	4.3	3.4	4.5	3.4	3.4	4.7	4.7	3.4	4.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.3	5.3	4.4	5.5	4.4	4.4	5.7	5.7	4.4	5.4	5.4
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lead	Lag	Lag	Lag	Lead	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 140
Actuated Cycle Length: 140
Offset: 21 (15%), Referenced to phase 2:EBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 12: Genesee Ave & La Jolla Village Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	771	1678	142	98	1855	360	326	1557	89	203	289	134
Future Volume (vph)	771	1678	142	98	1855	360	326	1557	89	203	289	134
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.3	5.3	4.4	5.5	4.4	4.4	5.7	5.7	4.4	5.4	5.4
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.91	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5085	1583	3433	5085	1583	3433	5085	1583	3433	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5085	1583	3433	5085	1583	3433	5085	1583	3433	5085	1583
Peak-hour factor, PHF	0.87	0.87	0.87	0.82	0.82	0.82	0.89	0.89	0.89	0.80	0.80	0.80
Adj. Flow (vph)	886	1929	163	120	2262	439	366	1749	100	254	361	168
RTOR Reduction (vph)	0	0	71	0	0	56	0	0	75	0	0	147
Lane Group Flow (vph)	886	1929	92	120	2262	383	366	1749	25	254	361	21
Turn Type	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6	7	3	8		7	4	
Permitted Phases			2			6			8			4
Actuated Green, G (s)	25.6	69.0	69.0	7.3	50.5	59.1	26.9	35.3	35.3	8.6	17.3	17.3
Effective Green, g (s)	25.6	69.0	69.0	7.3	50.5	59.1	26.9	35.3	35.3	8.6	17.3	17.3
Actuated g/C Ratio	0.18	0.49	0.49	0.05	0.36	0.42	0.19	0.25	0.25	0.06	0.12	0.12
Clearance Time (s)	4.4	5.3	5.3	4.4	5.5	4.4	4.4	5.7	5.7	4.4	5.4	5.4
Vehicle Extension (s)	2.0	6.0	6.0	2.0	5.8	2.0	2.0	3.5	3.5	2.0	4.1	4.1
Lane Grp Cap (vph)	627	2506	780	179	1834	668	659	1282	399	210	628	195
v/s Ratio Prot	c0.26	0.38		0.03	c0.44	0.04	0.11	c0.34		c0.07	0.07	
v/s Ratio Perm			0.06			0.21			0.02			0.01
v/c Ratio	1.41	0.77	0.12	0.67	1.23	0.57	0.56	1.36	0.06	1.21	0.57	0.11
Uniform Delay, d1	57.2	29.0	19.1	65.2	44.8	30.8	51.1	52.4	39.8	65.7	57.9	54.5
Progression Factor	0.95	1.69	3.94	0.61	0.47	0.08	0.65	0.67	0.37	1.00	1.00	1.00
Incremental Delay, d2	193.6	1.9	0.3	0.7	105.5	0.1	0.3	166.3	0.0	130.1	1.6	0.3
Delay (s)	248.1	50.9	75.5	40.2	126.6	2.4	33.6	201.2	14.9	195.8	59.5	54.8
Level of Service	F	D	E	D	F	A	C	F	B	F	E	D
Approach Delay (s)		110.9			103.6			165.1			102.7	
Approach LOS		F			F			F			F	

Intersection Summary

HCM 2000 Control Delay	121.5	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.31		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	110.4%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	175	31	121	49	433	53	1759	328	199
Future Volume (vph)	175	31	121	49	433	53	1759	328	199
Turn Type	Split	NA	Split	NA	Perm	Prot	NA	Prot	NA
Protected Phases	4	4	3	3		5	2	1	6
Permitted Phases					3				
Detector Phase	4	4	3	3	3	5	2	1	6
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	10.0	4.0	10.0
Minimum Split (s)	8.9	8.9	8.9	8.9	8.9	8.4	16.0	8.4	15.7
Total Split (s)	18.0	18.0	41.9	41.9	41.9	16.5	63.6	16.5	63.3
Total Split (%)	12.9%	12.9%	29.9%	29.9%	29.9%	11.8%	45.4%	11.8%	45.2%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.9	3.4	5.0	3.4	4.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	4.9	4.9	4.9	4.4	6.0	4.4	5.7
Lead/Lag	Lag	Lag	Lead	Lead	Lead	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	None	C-Max

Intersection Summary

Cycle Length: 140
Actuated Cycle Length: 140
Offset: 75 (54%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 13: Genesee Ave & Esplanade Court

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	175	31	29	121	49	433	53	1759	246	328	199	112
Future Volume (vph)	175	31	29	121	49	433	53	1759	246	328	199	112
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9		4.9	4.9	4.9	4.4	6.0		4.4	5.7	
Lane Util. Factor	0.97	1.00		0.97	0.95	0.95	1.00	0.91		0.97	0.91	
Frt	1.00	0.93		1.00	0.88	0.85	1.00	0.98		1.00	0.95	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	3433	1729		3433	1557	1504	1770	4992		3433	4810	
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	3433	1729		3433	1557	1504	1770	4992		3433	4810	
Peak-hour factor, PHF	0.80	0.80	0.80	0.80	0.80	0.80	0.92	0.92	0.92	0.87	0.87	0.87
Adj. Flow (vph)	219	39	36	151	61	541	58	1912	267	377	229	129
RTOR Reduction (vph)	0	24	0	0	115	139	0	12	0	0	58	0
Lane Group Flow (vph)	219	51	0	151	189	159	58	2167	0	377	300	0
Turn Type	Split	NA		Split	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	4	4		3	3		5	2		1	6	
Permitted Phases						3						
Actuated Green, G (s)	12.1	12.1		24.5	24.5	24.5	7.8	61.8		21.4	75.7	
Effective Green, g (s)	12.1	12.1		24.5	24.5	24.5	7.8	61.8		21.4	75.7	
Actuated g/C Ratio	0.09	0.09		0.18	0.18	0.18	0.06	0.44		0.15	0.54	
Clearance Time (s)	4.9	4.9		4.9	4.9	4.9	4.4	6.0		4.4	5.7	
Vehicle Extension (s)	2.0	2.0		2.0	2.0	2.0	2.0	3.7		2.0	4.1	
Lane Grp Cap (vph)	296	149		600	272	263	98	2203		524	2600	
v/s Ratio Prot	c0.06	0.03		0.04	c0.12		0.03	c0.43		c0.11	0.06	
v/s Ratio Perm						0.11						
v/c Ratio	0.74	0.34		0.25	0.70	0.61	0.59	0.98		0.72	0.12	
Uniform Delay, d1	62.4	60.2		49.8	54.3	53.3	64.5	38.6		56.4	15.7	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.29	0.29		1.25	0.21	
Incremental Delay, d2	8.1	0.5		0.1	6.1	2.7	4.2	12.2		3.7	0.1	
Delay (s)	70.5	60.7		49.9	60.4	56.0	87.7	23.4		74.3	3.5	
Level of Service	E	E		D	E	E	F	C		E	A	
Approach Delay (s)		68.0			56.5			25.1			39.8	
Approach LOS		E			E			C			D	

Intersection Summary

HCM 2000 Control Delay	36.8	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	20.2
Intersection Capacity Utilization	82.1%	ICU Level of Service	E
Analysis Period (min)	15		

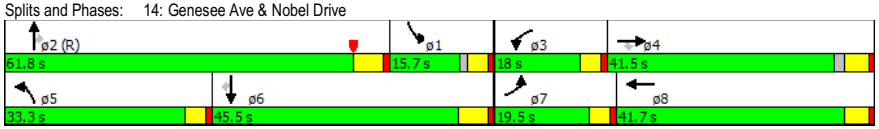
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	104	703	147	147	387	276	1768	327	62	271	44
Future Volume (vph)	104	703	147	147	387	276	1768	327	62	271	44
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8	5	2		1	6	
Permitted Phases			4					2			6
Detector Phase	7	4	4	3	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	4.0	10.0	10.0	4.0	10.0	4.0	10.0	10.0	4.0	10.0	10.0
Minimum Split (s)	8.4	14.9	14.9	8.4	15.1	8.4	15.7	15.7	8.4	15.9	15.9
Total Split (s)	19.5	41.5	41.5	18.0	41.7	33.3	61.8	61.8	15.7	45.5	45.5
Total Split (%)	13.9%	29.6%	29.6%	12.9%	29.8%	23.8%	44.1%	44.1%	11.2%	32.5%	32.5%
Yellow Time (s)	3.4	3.9	3.9	3.4	4.1	3.4	4.7	4.7	3.4	4.9	4.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	4.9	4.9	4.4	5.1	4.4	5.7	5.7	4.4	5.9	5.9
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	None	None	None

Intersection Summary

Cycle Length: 140
Actuated Cycle Length: 140
Offset: 65 (46%), Referenced to phase 2:NBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 14: Genesee Ave & Nobel Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	104	703	147	147	387	50	276	1768	327	62	271	44
Future Volume (vph)	104	703	147	147	387	50	276	1768	327	62	271	44
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9	4.9	4.4	5.1		4.4	5.7	5.7	4.4	5.9	5.9
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95		0.97	0.91	1.00	0.97	0.91	1.00
Frt	1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	3539	1583	3433	3478		3433	5085	1583	3433	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3539	1583	3433	3478		3433	5085	1583	3433	5085	1583
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.94	0.94	0.94	0.80	0.80	0.80
Adj. Flow (vph)	124	837	175	162	425	55	294	1881	348	78	339	55
RTOR Reduction (vph)	0	0	111	0	7	0	0	0	75	0	0	34
Lane Group Flow (vph)	124	837	64	162	473	0	294	1881	273	78	339	21
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4						2			6
Actuated Green, G (s)	9.4	40.1	40.1	11.0	41.5		16.4	61.9	61.9	7.6	52.9	52.9
Effective Green, g (s)	9.4	40.1	40.1	11.0	41.5		16.4	61.9	61.9	7.6	52.9	52.9
Actuated g/C Ratio	0.07	0.29	0.29	0.08	0.30		0.12	0.44	0.44	0.05	0.38	0.38
Clearance Time (s)	4.4	4.9	4.9	4.4	5.1		4.4	5.7	5.7	4.4	5.9	5.9
Vehicle Extension (s)	2.0	4.0	4.0	2.0	2.1		2.0	8.0	8.0	2.0	4.0	4.0
Lane Grp Cap (vph)	230	1013	453	269	1030		402	2248	699	186	1921	598
v/s Ratio Prot	0.04	c0.24		c0.05	0.14		0.09	c0.37		c0.02	0.07	
v/s Ratio Perm			0.04						0.17			0.01
v/c Ratio	0.54	0.83	0.14	0.60	0.46		0.73	0.84	0.39	0.42	0.18	0.03
Uniform Delay, d1	63.2	46.7	37.2	62.4	40.1		59.7	34.6	26.3	64.1	29.0	27.5
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.07	0.51	0.33	0.99	1.21	3.74
Incremental Delay, d2	1.2	5.9	0.2	2.6	0.1		3.7	2.5	1.0	0.6	0.1	0.0
Delay (s)	64.4	52.6	37.4	65.0	40.3		67.7	20.2	9.7	64.0	35.3	102.8
Level of Service	E	D	D	E	D		E	C	A	E	D	F
Approach Delay (s)		51.5			46.5			24.3			47.9	
Approach LOS		D			D			C			D	

Intersection Summary

HCM 2000 Control Delay	36.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	19.8
Intersection Capacity Utilization	77.3%	ICU Level of Service	D
Analysis Period (min)	15		

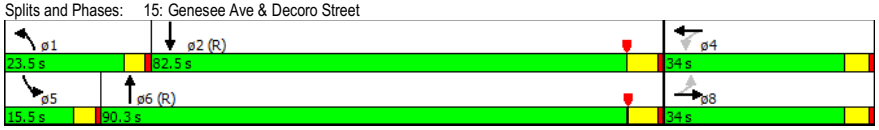
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	79	53	34	29	80	2194	37	667
Future Volume (vph)	79	53	34	29	80	2194	37	667
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		8		4	1	6	5	2
Permitted Phases	8		4					
Detector Phase	8	8	4	4	1	6	5	2
Switch Phase								
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	10.0	4.0	10.0
Minimum Split (s)	8.9	8.9	8.9	8.9	8.4	15.7	8.4	15.9
Total Split (s)	34.0	34.0	34.0	34.0	23.5	90.3	15.5	82.5
Total Split (%)	24.3%	24.3%	24.3%	24.3%	16.8%	64.5%	11.1%	58.9%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.4	4.7	3.4	4.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.9		4.9	4.4	5.7	4.4	5.9
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	None	C-Max

Intersection Summary

Cycle Length: 140
Actuated Cycle Length: 140
Offset: 44 (31%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow
Natural Cycle: 70
Control Type: Actuated-Coordinated

Splits and Phases: 15: Genesee Ave & Decoro Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	79	53	112	34	29	66	80	2194	90	37	667	107
Future Volume (vph)	79	53	112	34	29	66	80	2194	90	37	667	107
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9			4.9		4.4	5.7		4.4	5.9	
Lane Util. Factor		1.00			1.00		1.00	0.91		1.00	0.91	
Frt		0.94			0.93		1.00	0.99		1.00	0.98	
Flt Protected		0.98			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1720			1711		1770	5055		1770	4980	
Flt Permitted		0.76			0.76		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1321			1326		1770	5055		1770	4980	
Peak-hour factor, PHF	0.84	0.84	0.84	0.85	0.85	0.85	0.93	0.93	0.93	0.80	0.80	0.80
Adj. Flow (vph)	94	63	133	40	34	78	86	2359	97	46	834	134
RTOR Reduction (vph)	0	21	0	0	27	0	0	3	0	0	13	0
Lane Group Flow (vph)	0	269	0	0	125	0	86	2453	0	46	955	0
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		8			4		1	6		5	2	
Permitted Phases	8			4								
Actuated Green, G (s)		29.1			29.1		11.2	88.9		7.0	84.5	
Effective Green, g (s)		29.1			29.1		11.2	88.9		7.0	84.5	
Actuated g/C Ratio		0.21			0.21		0.08	0.64		0.05	0.60	
Clearance Time (s)		4.9			4.9		4.4	5.7		4.4	5.9	
Vehicle Extension (s)		2.0			2.0		2.0	4.3		2.0	3.7	
Lane Grp Cap (vph)		274			275		141	3209		88	3005	
v/s Ratio Prot							c0.05	c0.49		0.03	0.19	
v/s Ratio Perm		c0.20			0.09							
v/c Ratio		0.98			0.45		0.61	0.76		0.52	0.32	
Uniform Delay, d1		55.2			48.5		62.3	18.1		64.9	13.6	
Progression Factor		1.00			1.00		1.00	0.61		1.00	1.45	
Incremental Delay, d2		48.6			0.4		3.6	1.3		2.5	0.3	
Delay (s)		103.8			48.9		66.1	12.3		67.5	20.0	
Level of Service		F			D		E	B		E	C	
Approach Delay (s)		103.8			48.9			14.2			22.2	
Approach LOS		F			D			B			C	

Intersection Summary

HCM 2000 Control Delay	24.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	15.2
Intersection Capacity Utilization	80.4%	ICU Level of Service	D
Analysis Period (min)	15		

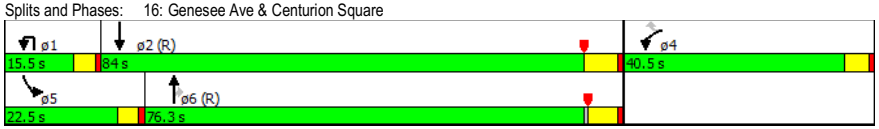
c Critical Lane Group

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	ø1
Lane Configurations							
Traffic Volume (vph)	318	222	2003	290	178	672	
Future Volume (vph)	318	222	2003	290	178	672	
Turn Type	Prot	Perm	NA	Perm	Prot	NA	
Protected Phases	4		6		5	2	1
Permitted Phases		4		6			
Detector Phase	4	4	6	6	5	2	
Switch Phase							
Minimum Initial (s)	7.0	7.0	10.0	10.0	4.0	10.0	4.0
Minimum Split (s)	34.9	34.9	28.7	28.7	8.4	16.4	8.4
Total Split (s)	40.5	40.5	76.3	76.3	22.5	84.0	15.5
Total Split (%)	28.9%	28.9%	54.5%	54.5%	16.1%	60.0%	11%
Yellow Time (s)	3.9	3.9	4.7	4.7	3.4	5.4	3.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.9	4.9	5.7	5.7	4.4	6.4	
Lead/Lag			Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?			Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	C-Max	C-Max	None	C-Max	None

Intersection Summary

Cycle Length: 140
Actuated Cycle Length: 140
Offset: 43 (31%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 16: Genesee Ave & Centurion Square



Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	318	222	0	2003	290	178	672
Future Volume (vph)	318	222	0	2003	290	178	672
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9		5.7	5.7	4.4	6.4
Lane Util. Factor	1.00	1.00		0.91	1.00	0.97	0.91
Frt	1.00	0.85		1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00		1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583		5085	1583	3433	5085
Flt Permitted	0.95	1.00		1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583		5085	1583	3433	5085
Peak-hour factor, PHF	0.80	0.80	0.92	0.93	0.93	0.81	0.81
Adj. Flow (vph)	398	278	0	2154	312	220	830
RTOR Reduction (vph)	0	137	0	0	82	0	0
Lane Group Flow (vph)	398	141	0	2154	230	220	830
Turn Type	Prot	Perm	Prot	NA	Perm	Prot	NA
Protected Phases	4		1	6		5	2
Permitted Phases		4			6		
Actuated Green, G (s)	33.6	33.6		78.1	78.1	13.3	95.1
Effective Green, g (s)	33.6	33.6		78.1	78.1	13.3	95.1
Actuated g/C Ratio	0.24	0.24		0.56	0.56	0.10	0.68
Clearance Time (s)	4.9	4.9		5.7	5.7	4.4	6.4
Vehicle Extension (s)	2.0	2.0		4.2	4.2	2.0	3.4
Lane Grp Cap (vph)	424	379		2836	883	326	3454
v/s Ratio Prot	c0.22			c0.42		c0.06	0.16
v/s Ratio Perm		0.09			0.15		
v/c Ratio	0.94	0.37		0.76	0.26	0.67	0.24
Uniform Delay, d1	52.2	44.4		23.7	16.0	61.3	8.6
Progression Factor	1.00	1.00		1.00	1.00	1.19	0.68
Incremental Delay, d2	28.1	0.2		2.0	0.7	4.0	0.2
Delay (s)	80.3	44.6		25.7	16.7	77.1	6.0
Level of Service	F	D		C	B	E	A
Approach Delay (s)	65.6			24.6			20.9
Approach LOS	E			C			C

Intersection Summary

HCM 2000 Control Delay	30.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	15.7
Intersection Capacity Utilization	73.9%	ICU Level of Service	D
Analysis Period (min)	15		

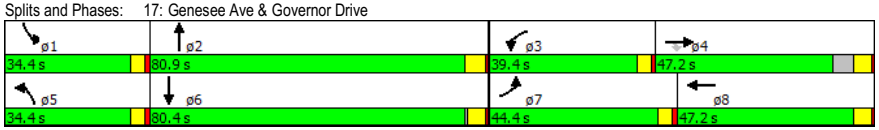
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	243	223	119	427	162	63	1787	218	684
Future Volume (vph)	243	223	119	427	162	63	1787	218	684
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Prot	NA
Protected Phases	7	4		3	8	5	2	1	6
Permitted Phases			4						
Detector Phase	7	4	4	3	8	5	2	1	6
Switch Phase									
Minimum Initial (s)	4.0	8.0	8.0	4.0	8.0	4.0	8.0	4.0	8.0
Minimum Split (s)	8.4	13.2	13.2	8.4	13.2	8.4	13.9	8.4	13.4
Total Split (s)	44.4	47.2	47.2	39.4	47.2	34.4	80.9	34.4	80.4
Total Split (%)	21.5%	22.8%	22.8%	19.0%	22.8%	16.6%	39.1%	16.6%	38.9%
Yellow Time (s)	3.4	4.2	4.2	3.4	4.2	3.4	4.9	3.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.2	5.2	4.4	5.2	4.4	5.9	4.4	5.4
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	None	Min

Intersection Summary

Cycle Length: 206.9
Actuated Cycle Length: 184.8
Natural Cycle: 110
Control Type: Actuated-Uncoordinated

Splits and Phases: 17: Genesee Ave & Governor Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	243	223	119	427	162	279	63	1787	406	218	684	142
Future Volume (vph)	243	223	119	427	162	279	63	1787	406	218	684	142
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	16	12	12	12	12	12	12	12
Total Lost time (s)	4.4	5.2	5.2	4.4	5.2		4.4	5.9		4.4	5.4	
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95		1.00	0.91		0.97	0.91	
Frt	1.00	1.00	0.85	1.00	0.91		1.00	0.97		1.00	0.97	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	3433	3539	1583	3433	3631		1770	4944		3433	4954	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	3433	3539	1583	3433	3631		1770	4944		3433	4954	
Peak-hour factor, PHF	0.80	0.80	0.80	0.80	0.80	0.80	0.90	0.90	0.90	0.85	0.85	0.85
Adj. Flow (vph)	304	279	149	534	202	349	70	1986	451	256	805	167
RTOR Reduction (vph)	0	0	83	0	138	0	0	17	0	0	13	0
Lane Group Flow (vph)	304	279	66	534	414	0	70	2420	0	256	959	0
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4									
Actuated Green, G (s)	20.8	39.1	39.1	32.6	50.9		11.7	75.1		18.2	82.1	
Effective Green, g (s)	20.8	39.1	39.1	32.6	50.9		11.7	75.1		18.2	82.1	
Actuated g/C Ratio	0.11	0.21	0.21	0.18	0.28		0.06	0.41		0.10	0.44	
Clearance Time (s)	4.4	5.2	5.2	4.4	5.2		4.4	5.9		4.4	5.4	
Vehicle Extension (s)	2.0	2.3	2.3	2.0	3.8		2.0	2.9		2.0	3.5	
Lane Grp Cap (vph)	386	748	334	605	999		112	2008		337	2199	
v/s Ratio Prot	0.09	0.08		c0.16	c0.11		0.04	c0.49		c0.07	0.19	
v/s Ratio Perm			0.04									
v/c Ratio	0.79	0.37	0.20	0.88	0.41		0.62	1.21		0.76	0.44	
Uniform Delay, d1	79.9	62.4	60.0	74.3	54.8		84.5	54.9		81.2	35.4	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	9.4	0.2	0.2	13.9	0.4		7.6	97.4		8.5	0.2	
Delay (s)	89.3	62.6	60.2	88.2	55.2		92.0	152.3		89.7	35.6	
Level of Service	F	E	E	F	E		F	F		F	D	
Approach Delay (s)		73.2			71.4			150.6			46.9	
Approach LOS		E			E			F			D	

Intersection Summary

HCM 2000 Control Delay	102.0	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	0.91		
Actuated Cycle Length (s)	184.9	Sum of lost time (s)	19.9
Intersection Capacity Utilization	86.8%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	156	348	1256	1019	297
Future Volume (Veh/h)	0	156	348	1256	1019	297
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.80	0.80	0.83	0.83	0.83	0.83
Hourly flow rate (vph)	0	195	419	1513	1228	358
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2570	614	1228			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2570	614	1228			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	55	26			
cM capacity (veh/h)	5	435	563			

Direction, Lane #	EB 1	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3
Volume Total	195	419	504	504	504	614	614	358
Volume Left	0	419	0	0	0	0	0	0
Volume Right	195	0	0	0	0	0	0	358
cSH	435	563	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.45	0.74	0.30	0.30	0.30	0.36	0.36	0.21
Queue Length 95th (ft)	57	161	0	0	0	0	0	0
Control Delay (s)	19.8	27.7	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	C	D						
Approach Delay (s)	19.8	6.0				0.0		
Approach LOS	C							

Intersection Summary			
Average Delay	4.2		
Intersection Capacity Utilization	54.1%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	125	149	1480	704	406	744
Future Volume (vph)	125	149	1480	704	406	744
Turn Type	Prot	Perm	NA	Perm	Prot	NA
Protected Phases	4		2		1	6
Permitted Phases		4		2		
Detector Phase	4	4	2	2	1	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	13.0	13.0	5.0	10.0
Minimum Split (s)	37.1	37.1	38.5	38.5	10.7	17.5
Total Split (s)	37.1	37.1	73.9	73.9	39.0	112.9
Total Split (%)	24.7%	24.7%	49.3%	49.3%	26.0%	75.3%
Yellow Time (s)	4.1	4.1	5.5	5.5	3.7	5.5
All-Red Time (s)	1.0	1.0	2.0	2.0	1.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.1	5.1	7.5	7.5	4.7	7.5
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	None	None	Min	Min	None	Min

Intersection Summary
Cycle Length: 150
Actuated Cycle Length: 134.8
Natural Cycle: 150
Control Type: Actuated-Uncoordinated

Splits and Phases: 19: Genesee Ave & SR-52 EB Ramps

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	125	149	1480	704	406	744
Future Volume (vph)	125	149	1480	704	406	744
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1	7.5	7.5	4.7	7.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.83	0.83	0.83	0.83	0.84	0.84
Adj. Flow (vph)	151	180	1783	848	483	886
RTOR Reduction (vph)	0	158	0	119	0	0
Lane Group Flow (vph)	151	22	1783	729	483	886
Turn Type	Prot	Perm	NA	Perm	Prot	NA
Protected Phases	4		2		1	6
Permitted Phases		4		2		
Actuated Green, G (s)	16.7	16.7	66.5	66.5	34.3	105.5
Effective Green, g (s)	16.7	16.7	66.5	66.5	34.3	105.5
Actuated g/C Ratio	0.12	0.12	0.49	0.49	0.25	0.78
Clearance Time (s)	5.1	5.1	7.5	7.5	4.7	7.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	219	196	1745	780	450	2769
v/s Ratio Prot	c0.09		c0.50		c0.27	0.25
v/s Ratio Perm		0.01		0.46		
v/c Ratio	0.69	0.11	1.02	0.94	1.07	0.32
Uniform Delay, d1	56.6	52.5	34.2	32.1	50.3	4.2
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	8.7	0.3	27.2	18.2	63.4	0.1
Delay (s)	65.3	52.7	61.4	50.3	113.7	4.3
Level of Service	E	D	E	D	F	A
Approach Delay (s)	58.5		57.8			42.9
Approach LOS	E		E			D

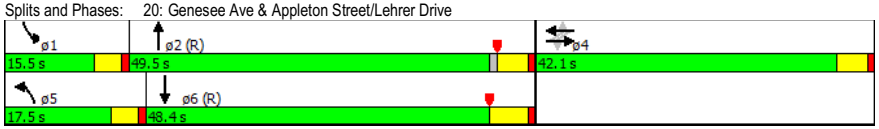
Intersection Summary			
HCM 2000 Control Delay	53.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.99		
Actuated Cycle Length (s)	134.8	Sum of lost time (s)	17.3
Intersection Capacity Utilization	84.7%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	474	8	14	17	7	1374	62	650
Future Volume (vph)	474	8	14	17	7	1374	62	650
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		4	5	2	1	6
Permitted Phases	4		4					
Detector Phase	4	4	4	4	5	2	1	6
Switch Phase								
Minimum Initial (s)	6.0	6.0	6.0	6.0	4.0	10.0	4.0	10.0
Minimum Split (s)	10.9	10.9	10.9	10.9	8.4	14.9	8.4	15.8
Total Split (s)	42.1	42.1	42.1	42.1	17.5	49.5	15.5	48.4
Total Split (%)	39.0%	39.0%	39.0%	39.0%	16.2%	45.8%	14.4%	44.8%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.4	3.9	3.4	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.9		4.9	4.4	4.9	4.4	5.8
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	None	C-Max

Intersection Summary
Cycle Length: 108
Actuated Cycle Length: 108
Offset: 7 (6%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 20: Genesee Ave & Appleton Street/Lehrer Drive



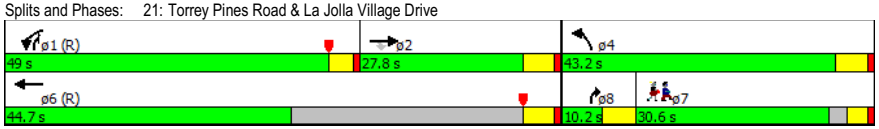
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	474	8	18	14	17	349	7	1374	5	62	650	103
Future Volume (vph)	474	8	18	14	17	349	7	1374	5	62	650	103
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	16	12	12	16	12	12	12	12	12	12	12
Total Lost time (s)		4.9			4.9		4.4	4.9		4.4	5.8	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frt		1.00			0.88		1.00	1.00		1.00	0.98	
Flt Protected		0.95			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		2006			1846		1770	3537		1770	3467	
Flt Permitted		0.32			0.98		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		681			1812		1770	3537		1770	3467	
Peak-hour factor, PHF	0.83	0.83	0.83	0.89	0.89	0.89	0.80	0.80	0.80	0.80	0.80	0.80
Adj. Flow (vph)	571	10	22	16	19	392	9	1718	6	78	812	129
RTOR Reduction (vph)	0	1	0	0	149	0	0	0	0	0	9	0
Lane Group Flow (vph)	0	602	0	0	278	0	9	1724	0	78	933	0
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4			4								
Actuated Green, G (s)		37.2			37.2		1.5	48.4		8.2	54.2	
Effective Green, g (s)		37.2			37.2		1.5	48.4		8.2	54.2	
Actuated g/C Ratio		0.34			0.34		0.01	0.45		0.08	0.50	
Clearance Time (s)		4.9			4.9		4.4	4.9		4.4	5.8	
Vehicle Extension (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		234			624		24	1585		134	1739	
v/s Ratio Prot							0.01	c0.49		c0.04	0.27	
v/s Ratio Perm		c0.88			0.15							
v/c Ratio		2.57			0.44		0.38	1.09		0.58	0.54	
Uniform Delay, d1		35.4			27.4		52.8	29.8		48.2	18.3	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		719.5			0.5		9.6	50.5		6.3	1.2	
Delay (s)		754.9			27.9		62.4	80.3		54.5	19.5	
Level of Service		F			C		E	F		D	B	
Approach Delay (s)		754.9			27.9			80.2			22.2	
Approach LOS		F			C			F			C	

Intersection Summary			
HCM 2000 Control Delay	166.2	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.65		
Actuated Cycle Length (s)	108.0	Sum of lost time (s)	15.1
Intersection Capacity Utilization	108.5%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	ø7	ø8
Lane Configurations								
Traffic Volume (vph)	391	62	1289	1735	272	1263		
Future Volume (vph)	391	62	1289	1735	272	1263		
Turn Type	NA	Perm	Prot	NA	Prot	pt+ov		
Protected Phases	2		1	6	4	8 1	7	8
Permitted Phases		2						
Detector Phase	2	2	1	6	4	8 1		
Switch Phase								
Minimum Initial (s)	10.0	10.0	4.0	10.0	4.0		4.0	4.0
Minimum Split (s)	15.4	15.4	8.4	15.3	9.6		8.0	9.6
Total Split (s)	27.8	27.8	49.0	44.7	43.2		30.6	10.2
Total Split (%)	23.2%	23.2%	40.8%	37.3%	36.0%		26%	9%
Yellow Time (s)	4.4	4.4	3.4	4.3	4.6		3.0	4.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	0.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0			
Total Lost Time (s)	5.4	5.4	4.4	5.3	5.6			
Lead/Lag	Lag	Lag	Lead				Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes				Yes	Yes
Recall Mode	None	None	C-Max	C-Max	None		None	None

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 116 (97%), Referenced to phase 1:WBL and 6:WBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 21: Torrey Pines Road & La Jolla Village Drive



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	391	62	1289	1735	272	1263
Future Volume (vph)	391	62	1289	1735	272	1263
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.4	5.4	4.4	5.3	5.6	4.6
Lane Util. Factor	0.91	1.00	0.97	0.91	0.97	0.88
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	5085	1583	3433	5085	3433	2787
Flt Permitted	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (perm)	5085	1583	3433	5085	3433	2787
Peak-hour factor, PHF	0.83	0.83	0.93	0.93	0.84	0.84
Adj. Flow (vph)	471	75	1386	1866	324	1504
RTOR Reduction (vph)	0	61	0	0	0	0
Lane Group Flow (vph)	471	14	1386	1866	324	1504
Turn Type	NA	Perm	Prot	NA	Prot	pt+ov
Protected Phases	2		1	6	4	8 1
Permitted Phases		2				
Actuated Green, G (s)	22.4	22.4	49.0	75.9	33.2	56.0
Effective Green, g (s)	22.4	22.4	49.0	75.9	33.2	56.0
Actuated g/C Ratio	0.19	0.19	0.41	0.63	0.28	0.47
Clearance Time (s)	5.4	5.4	4.4	5.3	5.6	
Vehicle Extension (s)	5.5	5.5	2.0	8.0	2.0	
Lane Grp Cap (vph)	949	295	1401	3216	949	1300
v/s Ratio Prot	0.09		0.40	c0.37	c0.09	c0.54
v/s Ratio Perm		0.01				
v/c Ratio	0.50	0.05	0.99	0.58	0.34	1.16
Uniform Delay, d1	43.7	40.0	35.2	12.8	34.7	32.0
Progression Factor	0.65	0.70	1.06	0.57	1.00	1.00
Incremental Delay, d2	1.0	0.2	11.1	0.2	0.1	79.7
Delay (s)	29.5	28.3	48.4	7.6	34.7	111.7
Level of Service	C	C	D	A	C	F
Approach Delay (s)	29.3			25.0	98.0	
Approach LOS	C			C	F	

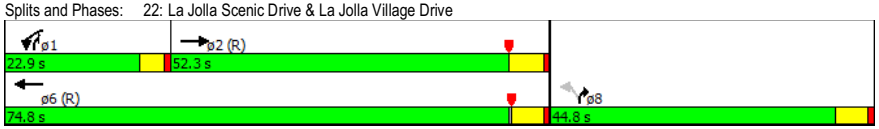
Intersection Summary			
HCM 2000 Control Delay	49.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.86		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	18.4
Intersection Capacity Utilization	65.7%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Configurations					
Traffic Volume (vph)	1558	478	2418	645	489
Future Volume (vph)	1558	478	2418	645	489
Turn Type	NA	Prot	NA	Perm	pt+ov
Protected Phases	2	1	6		8 1
Permitted Phases				8	
Detector Phase	2	1	6	8	8 1
Switch Phase					
Minimum Initial (s)	10.0	4.0	10.0	4.0	
Minimum Split (s)	15.7	8.4	15.3	9.5	
Total Split (s)	52.3	22.9	74.8	44.8	
Total Split (%)	43.6%	19.1%	62.3%	37.3%	
Yellow Time (s)	4.7	3.4	4.3	4.5	
All-Red Time (s)	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.7	4.4	5.3	5.5	
Lead/Lag	Lag	Lead			
Lead-Lag Optimize?	Yes	Yes			
Recall Mode	C-Max	None	C-Max	None	

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 34 (28%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 100
Control Type: Actuated-Coordinated

Splits and Phases: 22: La Jolla Scenic Drive & La Jolla Village Drive



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1558	67	478	2418	645	489
Future Volume (vph)	1558	67	478	2418	645	489
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.7		4.4	5.3	5.5	5.5
Lane Util. Factor	0.91		0.97	0.91	1.00	0.88
Frt	0.99		1.00	1.00	1.00	0.85
Flt Protected	1.00		0.95	1.00	0.95	1.00
Satd. Flow (prot)	5054		3433	5085	1770	2787
Flt Permitted	1.00		0.95	1.00	0.95	1.00
Satd. Flow (perm)	5054		3433	5085	1770	2787
Peak-hour factor, PHF	0.88	0.88	0.96	0.96	0.85	0.85
Adj. Flow (vph)	1770	76	498	2519	759	575
RTOR Reduction (vph)	4	0	0	0	0	1
Lane Group Flow (vph)	1842	0	498	2519	759	574
Turn Type	NA		Prot	NA	Perm	pt+ov
Protected Phases	2		1	6		8 1
Permitted Phases					8	
Actuated Green, G (s)	46.6		18.5	69.9	39.3	63.3
Effective Green, g (s)	46.6		18.5	69.9	39.3	63.3
Actuated g/C Ratio	0.39		0.15	0.58	0.33	0.53
Clearance Time (s)	5.7		4.4	5.3	5.5	
Vehicle Extension (s)	4.0		2.0	5.9	2.0	
Lane Grp Cap (vph)	1962		529	2962	579	1470
v/s Ratio Prot	c0.36		c0.15	0.50		0.21
v/s Ratio Perm					c0.43	
v/c Ratio	0.94		0.94	0.85	1.31	0.39
Uniform Delay, d1	35.3		50.2	20.7	40.4	16.9
Progression Factor	0.83		0.69	1.13	1.00	1.00
Incremental Delay, d2	3.4		15.2	1.7	152.0	0.1
Delay (s)	32.8		49.9	25.1	192.3	16.9
Level of Service	C		D	C	F	B
Approach Delay (s)	32.8			29.2	116.7	
Approach LOS	C			C	F	

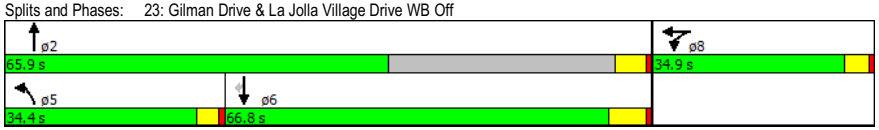
Intersection Summary				
HCM 2000 Control Delay	49.1	HCM 2000 Level of Service	D	
HCM 2000 Volume to Capacity ratio	1.08			
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	15.6	
Intersection Capacity Utilization	94.0%	ICU Level of Service	F	
Analysis Period (min)	15			

c Critical Lane Group

Lane Group	WBT	NBL	NBT	SBT	SBR
Lane Configurations					
Traffic Volume (vph)	0	593	724	150	64
Future Volume (vph)	0	593	724	150	64
Turn Type	NA	Prot	NA	NA	Perm
Protected Phases	8	5	2	6	
Permitted Phases					6
Detector Phase	8	5	2	6	6
Switch Phase					
Minimum Initial (s)	4.0	4.0	10.0	10.0	10.0
Minimum Split (s)	8.9	8.4	15.9	16.8	16.8
Total Split (s)	34.9	34.4	65.9	66.8	66.8
Total Split (%)	25.6%	25.3%	48.4%	49.1%	49.1%
Yellow Time (s)	3.9	3.4	4.9	5.8	5.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.4	5.9	6.8	6.8
Lead/Lag		Lead		Lag	Lag
Lead-Lag Optimize?		Yes		Yes	Yes
Recall Mode	None	None	Min	Min	Min

Intersection Summary
Cycle Length: 136.1
Actuated Cycle Length: 67.6
Natural Cycle: 60
Control Type: Actuated-Uncoordinated

Splits and Phases: 23: Gilman Drive & La Jolla Village Drive WB Off



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	20	0	178	593	724	0	0	150	64
Future Volume (vph)	0	0	0	20	0	178	593	724	0	0	150	64
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.9		4.4	5.9			6.8	6.8
Lane Util. Factor					1.00		1.00	0.95			0.95	1.00
Frt					0.88		1.00	1.00			1.00	0.85
Flt Protected					1.00		0.95	1.00			1.00	1.00
Satd. Flow (prot)					1628		1770	3539			3539	1583
Flt Permitted					1.00		0.95	1.00			1.00	1.00
Satd. Flow (perm)					1628		1770	3539			3539	1583
Peak-hour factor, PHF	0.25	0.25	0.25	0.90	0.90	0.90	0.90	0.90	0.90	0.83	0.83	0.83
Adj. Flow (vph)	0	0	0	22	0	198	659	804	0	0	181	77
RTOR Reduction (vph)	0	0	0	0	168	0	0	0	0	0	0	65
Lane Group Flow (vph)	0	0	0	0	52	0	659	804	0	0	181	12
Turn Type				Split	NA		Prot	NA			NA	Perm
Protected Phases				8	8		5	2			6	
Permitted Phases												6
Actuated Green, G (s)					10.1		30.6	46.5			10.6	10.6
Effective Green, g (s)					10.1		30.6	46.5			10.6	10.6
Actuated g/C Ratio					0.15		0.45	0.69			0.16	0.16
Clearance Time (s)					4.9		4.4	5.9			6.8	6.8
Vehicle Extension (s)					3.0		3.0	3.0			3.0	3.0
Lane Grp Cap (vph)					243		803	2441			556	248
v/s Ratio Prot					c0.03		c0.37	c0.23			0.05	
v/s Ratio Perm												0.01
v/c Ratio					0.21		0.82	0.33			0.33	0.05
Uniform Delay, d1					25.2		16.0	4.2			25.2	24.1
Progression Factor					1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2					0.4		6.7	0.1			0.3	0.1
Delay (s)					25.6		22.8	4.3			25.6	24.2
Level of Service					C		C	A			C	C
Approach Delay (s)		0.0			25.6			12.6			25.2	
Approach LOS		A			C			B			C	

Intersection Summary				
HCM 2000 Control Delay	15.7	HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio	0.62			
Actuated Cycle Length (s)	67.4	Sum of lost time (s)	16.1	
Intersection Capacity Utilization	Err%	ICU Level of Service	H	
Analysis Period (min)	15			

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	24	4	430	0	0	0	0	1180	144	23	168	0
Future Volume (Veh/h)	24	4	430	0	0	0	0	1180	144	23	168	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.64	0.64	0.64	0.25	0.25	0.25	0.92	0.92	0.92	1.00	1.00	1.00
Hourly flow rate (vph)	38	6	672	0	0	0	0	1283	157	23	168	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)			13									
Median type								None			None	
Median storage veh)												
Upstream signal (ft)											483	
pX, platoon unblocked	0.99	0.99	0.99	0.99	0.99		0.99					
vC, conflicting volume	856	1654	84	1752	1497	642	168			1440		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	839	1644	62	1742	1485	642	146			1440		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	85	94	32	100	100	100	100			95		
cM capacity (veh/h)	247	93	983	16	117	417	1422			467		

Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	710	642	642	157	23	84	84
Volume Left	38	0	0	0	23	0	0
Volume Right	672	0	0	157	0	0	0
cSH	1039	1700	1700	1700	467	1700	1700
Volume to Capacity	0.68	0.38	0.38	0.09	0.05	0.05	0.05
Queue Length 95th (ft)	142	0	0	0	4	0	0
Control Delay (s)	16.5	0.0	0.0	0.0	13.1	0.0	0.0
Lane LOS	C				B		
Approach Delay (s)	Err	0.0			1.6		
Approach LOS	F						

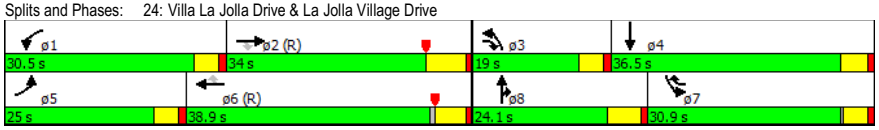
Intersection Summary				
Average Delay	Err			
Intersection Capacity Utilization	Err%	ICU Level of Service	H	
Analysis Period (min)	15			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	214	1185	35	470	1791	750	358	346	463	458	103
Future Volume (vph)	214	1185	35	470	1791	750	358	346	463	458	103
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	Prot	Prot	NA
Protected Phases	5	2	3	1	6	7	3	8	8	7	4
Permitted Phases			2			6					
Detector Phase	5	2	3	1	6	7	3	8	8	7	4
Switch Phase											
Minimum Initial (s)	4.0	10.0	4.0	4.0	10.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.4	16.4	8.4	8.4	15.3	8.4	8.4	9.5	9.5	8.4	8.9
Total Split (s)	25.0	34.0	19.0	30.5	38.9	30.9	19.0	24.1	24.1	30.9	36.5
Total Split (%)	20.8%	28.3%	15.8%	25.4%	32.4%	25.8%	15.8%	20.1%	20.1%	25.8%	30.4%
Yellow Time (s)	3.4	5.4	3.4	3.4	4.3	3.4	3.4	4.5	4.5	3.4	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	6.4	4.4	4.4	5.3	4.4	4.4	5.5	5.5	4.4	4.9
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	C-Max	None	None	None	None	None	None

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 65 (54%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 24: Villa La Jolla Drive & La Jolla Village Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	214	1185	35	470	1791	750	358	346	463	458	103	38
Future Volume (vph)	214	1185	35	470	1791	750	358	346	463	458	103	38
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	6.4	4.4	4.4	5.3	4.4	4.4	5.5	5.5	4.4	4.9	
Lane Util. Factor	1.00	0.91	1.00	0.97	0.91	1.00	0.97	0.95	0.95	0.97	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.97	0.85	1.00	0.96	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	5085	1583	3433	5085	1583	3433	1718	1504	3433	1787	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	5085	1583	3433	5085	1583	3433	1718	1504	3433	1787	
Peak-hour factor, PHF	0.87	0.87	0.87	0.91	0.91	0.91	0.80	0.80	0.80	0.80	0.80	0.80
Adj. Flow (vph)	246	1362	40	516	1968	824	448	432	579	572	129	48
RTOR Reduction (vph)	0	0	25	0	0	51	0	8	275	0	11	0
Lane Group Flow (vph)	246	1362	15	516	1968	773	448	529	200	573	166	0
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	Prot	Prot	NA	
Protected Phases	5	2	3	1	6	7	3	8	8	7	4	
Permitted Phases			2			6						
Actuated Green, G (s)	19.0	31.7	46.3	22.0	35.8	62.8	14.6	18.6	18.6	27.0	31.6	
Effective Green, g (s)	19.0	31.7	46.3	22.0	35.8	62.8	14.6	18.6	18.6	27.0	31.6	
Actuated g/C Ratio	0.16	0.26	0.39	0.18	0.30	0.52	0.12	0.16	0.16	0.22	0.26	
Clearance Time (s)	4.4	6.4	4.4	4.4	5.3	4.4	4.4	5.5	5.5	4.4	4.9	
Vehicle Extension (s)	2.0	4.4	2.0	2.0	4.7	2.0	2.0	3.3	3.3	2.0	2.0	
Lane Grp Cap (vph)	280	1343	610	629	1517	828	417	266	233	772	470	
v/s Ratio Prot	0.14	0.27	0.00	c0.15	c0.39	c0.21	0.13	c0.31	0.13	0.17	c0.09	
v/s Ratio Perm			0.01			0.28						
v/c Ratio	0.88	1.01	0.03	0.82	1.30	0.93	1.07	1.99	0.86	0.74	0.35	
Uniform Delay, d1	49.4	44.1	22.9	47.1	42.1	26.7	52.7	50.7	49.4	43.3	35.9	
Progression Factor	1.42	0.59	1.00	1.06	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	16.6	22.7	0.0	0.8	134.2	2.2	65.4	458.8	25.9	3.4	0.2	
Delay (s)	86.6	48.7	22.9	50.9	176.4	29.0	118.1	509.5	75.4	46.7	36.1	
Level of Service	F	D	C	D	F	C	F	F	E	D	D	
Approach Delay (s)		53.7			120.1			248.2			44.2	
Approach LOS		D			F			F			D	

Intersection Summary

HCM 2000 Control Delay	123.0	HCM 2000 Level of Service	F		
HCM 2000 Volume to Capacity ratio	1.23				
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	20.7		
Intersection Capacity Utilization	103.5%	ICU Level of Service	G		
Analysis Period (min)	15				

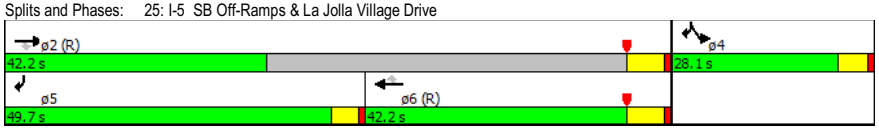
c Critical Lane Group

Lane Group	EBT	EBR	WBT	WBR	SBL	SBR	ø5
Lane Configurations							
Traffic Volume (vph)	1792	364	1507	319	514	1436	
Future Volume (vph)	1792	364	1507	319	514	1436	
Turn Type	NA	Perm	NA	Perm	Prot	custom	
Protected Phases	2		6		4	4 5	5
Permitted Phases		2		6			
Detector Phase	2	2	6	6	4	4 5	
Switch Phase							
Minimum Initial (s)	10.0	10.0	15.0	15.0	5.0		2.0
Minimum Split (s)	16.2	16.2	21.2	21.2	10.1		6.7
Total Split (s)	42.2	42.2	42.2	42.2	28.1		49.7
Total Split (%)	35.2%	35.2%	35.2%	35.2%	23.4%		41%
Yellow Time (s)	5.2	5.2	5.2	5.2	4.1		3.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	6.2	6.2	6.2	6.2	5.1		
Lead/Lag			Lag	Lag			Lead
Lead-Lag Optimize?			Yes	Yes			Yes
Recall Mode	C-Max	C-Max	C-Max	C-Max	Min		None

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 70 (58%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 25: I-5 SB Off-Ramps & La Jolla Village Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1792	364	0	1507	319	0	0	0	514	0	1436
Future Volume (vph)	0	1792	364	0	1507	319	0	0	0	514	0	1436
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.2	6.2		6.2	6.2				5.1		5.1
Lane Util. Factor		0.86	1.00		0.91	1.00				0.97		0.88
Frt		1.00	0.85		1.00	0.85				1.00		0.85
Flt Protected		1.00	1.00		1.00	1.00				0.95		1.00
Satd. Flow (prot)		6408	1583		5085	1583				3433		2787
Flt Permitted		1.00	1.00		1.00	1.00				0.95		1.00
Satd. Flow (perm)		6408	1583		5085	1583				3433		2787
Peak-hour factor, PHF	0.93	0.93	0.93	0.94	0.94	0.94	0.25	0.25	0.25	0.84	0.84	0.84
Adj. Flow (vph)	0	1927	391	0	1603	339	0	0	0	612	0	1710
RTOR Reduction (vph)	0	0	112	0	0	190	0	0	0	0	0	11
Lane Group Flow (vph)	0	1927	279	0	1603	149	0	0	0	612	0	1699
Turn Type		NA	Perm		NA	Perm				Prot		custom
Protected Phases		2			6					4		4 5
Permitted Phases			2			6						
Actuated Green, G (s)		85.7	85.7		36.0	36.0				23.0		73.1
Effective Green, g (s)		85.7	85.7		36.0	36.0				23.0		73.1
Actuated g/C Ratio		0.71	0.71		0.30	0.30				0.19		0.61
Clearance Time (s)		6.2	6.2		6.2	6.2				5.1		
Vehicle Extension (s)		2.0	2.0		2.0	2.0				2.0		
Lane Grp Cap (vph)		4576	1130		1525	474				657		1697
v/s Ratio Prot		0.30			c0.32					0.18		c0.61
v/s Ratio Perm			0.18			0.09						
v/c Ratio		0.42	0.25		1.05	0.31				0.93		1.00
Uniform Delay, d1		7.0	6.0		42.0	32.5				47.7		23.5
Progression Factor		1.08	3.75		0.92	0.90				1.00		1.00
Incremental Delay, d2		0.1	0.1		36.5	1.5				19.8		22.1
Delay (s)		7.6	22.5		75.3	30.8				67.5		45.5
Level of Service		A	C		E	C				E		D
Approach Delay (s)		10.1			67.5			0.0			51.3	
Approach LOS		B			E			A			D	

Intersection Summary

HCM 2000 Control Delay	41.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.07		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	88.8%	ICU Level of Service	E
Analysis Period (min)	15		

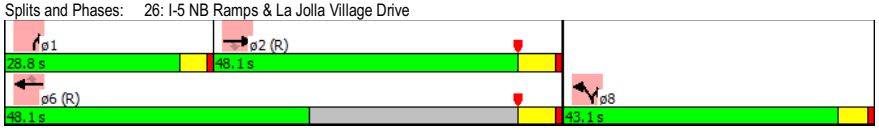
c Critical Lane Group

Lane Group	EBT	EBR	WBT	WBR	NBL	NBR	ø1
Lane Configurations							
Traffic Volume (vph)	1386	957	1299	723	542	911	
Future Volume (vph)	1386	957	1299	723	542	911	
Turn Type	NA	Perm	NA	Perm	Prot	custom	
Protected Phases	2		6		8	1 8	1
Permitted Phases		2		6			
Detector Phase	2	2	6	6	8	1 8	
Switch Phase							
Minimum Initial (s)	16.0	16.0	16.0	16.0	5.0		2.0
Minimum Split (s)	36.2	36.2	22.2	22.2	21.1		9.5
Total Split (s)	48.1	48.1	48.1	48.1	43.1		28.8
Total Split (%)	40.1%	40.1%	40.1%	40.1%	35.9%		24%
Yellow Time (s)	5.2	5.2	5.2	5.2	4.1		3.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	6.2	6.2	6.2	6.2	5.1		
Lead/Lag	Lag	Lag					Lead
Lead-Lag Optimize?	Yes	Yes					Yes
Recall Mode	C-Max	C-Max	C-Max	C-Max	Min		None

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 75 (63%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 70
Control Type: Actuated-Coordinated

Splits and Phases: 26: I-5 NB Ramps & La Jolla Village Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1386	957	0	1299	723	542	0	911	0	0	0
Future Volume (vph)	0	1386	957	0	1299	723	542	0	911	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.2	6.2		6.2	6.2	5.1		4.7			
Lane Util. Factor		0.91	1.00		0.91	1.00	0.97		0.88			
Frt		1.00	0.85		1.00	0.85	1.00		0.85			
Flt Protected		1.00	1.00		1.00	1.00	0.95		1.00			
Satd. Flow (prot)		5085	1583		5085	1583	3433		2787			
Flt Permitted		1.00	1.00		1.00	1.00	0.95		1.00			
Satd. Flow (perm)		5085	1583		5085	1583	3433		2787			
Peak-hour factor, PHF	0.98	0.98	0.98	0.92	0.92	0.92	0.92	0.92	0.92	0.25	0.25	0.25
Adj. Flow (vph)	0	1414	977	0	1412	786	589	0	990	0	0	0
RTOR Reduction (vph)	0	0	527	0	0	320	0	0	17	0	0	0
Lane Group Flow (vph)	0	1414	450	0	1412	466	589	0	973	0	0	0
Turn Type		NA	Perm		NA	Perm	Prot		custom			
Protected Phases		2			6		8		1 8			
Permitted Phases			2			6						
Actuated Green, G (s)		53.8	53.8		71.1	71.1	37.6		55.3			
Effective Green, g (s)		53.8	53.8		71.1	71.1	37.6		50.2			
Actuated g/C Ratio		0.45	0.45		0.59	0.59	0.31		0.42			
Clearance Time (s)		6.2	6.2		6.2	6.2	5.1					
Vehicle Extension (s)		2.0	2.0		2.0	2.0	2.0					
Lane Grp Cap (vph)		2279	709		3012	937	1075		1165			
v/s Ratio Prot		0.28			0.28		0.17		c0.35			
v/s Ratio Perm			c0.28			0.29						
v/c Ratio		0.62	0.63		0.47	0.50	0.55		0.84			
Uniform Delay, d1		25.3	25.5		13.8	14.1	34.2		31.2			
Progression Factor		1.30	4.54		1.00	1.00	1.00		1.00			
Incremental Delay, d2		1.1	3.7		0.5	1.9	0.3		5.3			
Delay (s)		33.9	119.4		14.3	16.0	34.5		36.5			
Level of Service		C	F		B	B	C		D			
Approach Delay (s)		68.9			14.9			35.8			0.0	
Approach LOS		E			B			D			A	

Intersection Summary

HCM 2000 Control Delay	41.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	67.7%	ICU Level of Service	C
Analysis Period (min)	15		

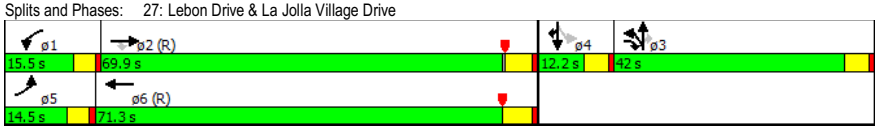
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	3	1535	171	206	1384	638	8	257	16	3	23
Future Volume (vph)	3	1535	171	206	1384	638	8	257	16	3	23
Turn Type	Prot	NA	pm+ov	Prot	NA	Split	NA	Perm	Perm	NA	Prot
Protected Phases	5	2	3	1	6	3	3			4	4
Permitted Phases			2					3	4		
Detector Phase	5	2	3	1	6	3	3	3	4	4	4
Switch Phase											
Minimum Initial (s)	4.0	10.0	7.0	4.0	10.0	7.0	7.0	7.0	4.0	4.0	4.0
Minimum Split (s)	8.4	15.3	11.9	8.4	15.7	11.9	11.9	11.9	8.9	8.9	8.9
Total Split (s)	14.5	69.9	42.0	15.5	71.3	42.0	42.0	42.0	12.2	12.2	12.2
Total Split (%)	10.4%	49.9%	30.0%	11.1%	50.9%	30.0%	30.0%	30.0%	8.7%	8.7%	8.7%
Yellow Time (s)	3.4	4.3	3.9	3.4	4.7	3.9	3.9	3.9	3.9	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	4.4	5.3	4.9	4.4	5.7	4.9	4.9	4.9		4.9	4.9
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lag	Lag	Lead	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	C-Max	None	None	None	None	None	None

Intersection Summary

Cycle Length: 140
Actuated Cycle Length: 140
Offset: 83 (59%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 27: Lebon Drive & La Jolla Village Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	1535	171	206	1384	11	638	8	257	16	3	23
Future Volume (vph)	3	1535	171	206	1384	11	638	8	257	16	3	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.3	4.9	4.4	5.7		4.9	4.9	4.9		4.9	4.9
Lane Util. Factor	1.00	0.91	1.00	0.97	0.91		0.97	0.95	0.95		1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00		1.00	0.86	0.85		1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00		0.96	1.00
Satd. Flow (prot)	1770	5085	1583	3433	5079		3433	1521	1504		1788	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00		0.64	1.00
Satd. Flow (perm)	1770	5085	1583	3433	5079		3433	1521	1504		1198	1583
Peak-hour factor, PHF	0.80	0.80	0.80	0.94	0.94	0.94	0.84	0.84	0.84	0.80	0.80	0.80
Adj. Flow (vph)	4	1919	214	219	1472	12	760	10	306	20	4	29
RTOR Reduction (vph)	0	0	55	0	0	0	0	109	114	0	0	28
Lane Group Flow (vph)	4	1919	159	219	1484	0	760	51	42	0	24	1
Turn Type	Prot	NA	pm+ov	Prot	NA		Split	NA	Perm	Perm	NA	Prot
Protected Phases	5	2	3	1	6		3	3			4	4
Permitted Phases			2						3	4		
Actuated Green, G (s)	1.2	66.0	104.0	10.8	75.2		38.0	38.0	38.0		5.7	5.7
Effective Green, g (s)	1.2	66.0	104.0	10.8	75.2		38.0	38.0	38.0		5.7	5.7
Actuated g/C Ratio	0.01	0.47	0.74	0.08	0.54		0.27	0.27	0.27		0.04	0.04
Clearance Time (s)	4.4	5.3	4.9	4.4	5.7		4.9	4.9	4.9		4.9	4.9
Vehicle Extension (s)	2.0	6.1	6.5	2.0	5.6		6.5	6.5	6.5		2.0	2.0
Lane Grp Cap (vph)	15	2397	1175	264	2728		931	412	408		48	64
v/s Ratio Prot	0.00	c0.38	0.04	c0.06	0.29		c0.22	0.03				0.00
v/s Ratio Perm			0.06						0.03		c0.02	
v/c Ratio	0.27	0.80	0.14	0.83	0.54		0.82	0.12	0.10		0.50	0.02
Uniform Delay, d1	69.0	31.4	5.1	63.7	21.2		47.7	38.4	38.2		65.8	64.5
Progression Factor	1.00	1.00	1.00	1.09	0.92		1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	3.5	2.9	0.2	6.7	0.3		6.8	0.4	0.4		3.0	0.0
Delay (s)	72.4	34.3	5.3	76.3	19.8		54.5	38.9	38.6		68.7	64.5
Level of Service	E	C	A	E	B		D	D	D		E	E
Approach Delay (s)		31.5			27.0			49.9			66.4	
Approach LOS		C			C			D			E	

Intersection Summary

HCM 2000 Control Delay	34.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	19.9
Intersection Capacity Utilization	72.6%	ICU Level of Service	C
Analysis Period (min)	15		

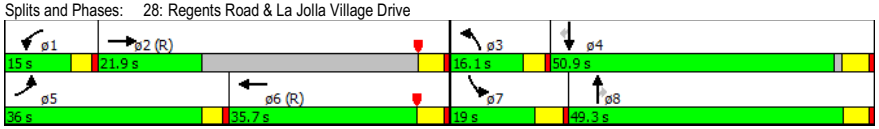
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	715	1410	136	800	312	692	236	148	208	223
Future Volume (vph)	715	1410	136	800	312	692	236	148	208	223
Turn Type	Prot	NA	Prot	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2	1	6	3	8		7	4	
Permitted Phases							8			4
Detector Phase	5	2	1	6	3	8	8	7	4	4
Switch Phase										
Minimum Initial (s)	4.0	10.0	4.0	10.0	4.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	8.4	15.3	8.4	15.4	8.4	15.3	15.3	15.4	15.4	15.4
Total Split (s)	36.0	21.9	15.0	35.7	16.1	49.3	49.3	19.0	50.9	50.9
Total Split (%)	25.7%	15.6%	10.7%	25.5%	11.5%	35.2%	35.2%	13.6%	36.4%	36.4%
Yellow Time (s)	3.4	4.3	3.4	4.4	3.4	4.3	4.3	4.4	4.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.3	4.4	5.4	4.4	5.3	5.3	5.4	5.4	5.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Min	None	C-Min	None	Min	Min	Min	Min	Min

Intersection Summary

Cycle Length: 140
Actuated Cycle Length: 140
Offset: 55 (39%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 120
Control Type: Actuated-Coordinated

Splits and Phases: 28: Regents Road & La Jolla Village Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	715	1410	32	136	800	143	312	692	236	148	208	223
Future Volume (vph)	715	1410	32	136	800	143	312	692	236	148	208	223
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.3		4.4	5.4		4.4	5.3	5.3	5.4	5.4	5.4
Lane Util. Factor	0.97	0.91		0.97	0.91		0.97	0.95	1.00	1.00	0.95	1.00
Frt	1.00	1.00		1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5068		3433	4970		3433	3539	1583	1770	3539	1583
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5068		3433	4970		3433	3539	1583	1770	3539	1583
Peak-hour factor, PHF	0.86	0.86	0.86	0.84	0.84	0.84	0.80	0.80	0.80	0.80	0.80	0.80
Adj. Flow (vph)	831	1640	37	162	952	170	390	865	295	185	260	279
RTOR Reduction (vph)	0	2	0	0	18	0	0	0	130	0	0	192
Lane Group Flow (vph)	831	1675	0	162	1104	0	390	865	165	185	260	87
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases									8			4
Actuated Green, G (s)	34.8	54.8		10.4	30.3		11.7	40.8	40.8	13.6	43.6	43.6
Effective Green, g (s)	34.8	54.8		10.4	30.3		11.7	40.8	40.8	13.6	43.6	43.6
Actuated g/C Ratio	0.25	0.39		0.07	0.22		0.08	0.29	0.29	0.10	0.31	0.31
Clearance Time (s)	4.4	5.3		4.4	5.4		4.4	5.3	5.3	5.4	5.4	5.4
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	853	1983		255	1075		286	1031	461	171	1102	492
v/s Ratio Prot	c0.24	0.33		0.05	c0.22		c0.11	c0.24		0.10	c0.07	
v/s Ratio Perm									0.10			0.05
v/c Ratio	0.97	0.84		0.64	1.03		1.36	0.84	0.36	1.08	0.24	0.18
Uniform Delay, d1	52.2	38.7		63.0	54.9		64.2	46.5	39.2	63.2	35.8	35.1
Progression Factor	1.28	1.44		1.46	0.44		1.00	1.00	1.00	0.99	0.91	1.14
Incremental Delay, d2	20.8	3.6		0.5	16.4		184.6	6.1	0.5	91.8	0.1	0.2
Delay (s)	87.3	59.5		92.5	40.7		248.7	52.6	39.7	154.3	32.6	40.3
Level of Service	F	E		F	D		F	D	D	F	C	D
Approach Delay (s)		68.7			47.2			99.5			66.7	
Approach LOS		E			D			F			E	

Intersection Summary

HCM 2000 Control Delay	71.8	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.96		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	20.5
Intersection Capacity Utilization	83.6%	ICU Level of Service	E
Analysis Period (min)	15		

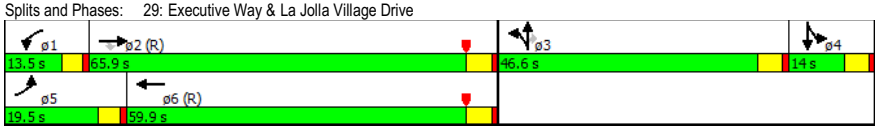
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	83	1926	107	138	2338	33	51	152	62	23
Future Volume (vph)	83	1926	107	138	2338	33	51	152	62	23
Turn Type	Prot	NA	Perm	Prot	NA	Split	NA	Perm	Split	NA
Protected Phases	5	2		1	6	3	3		4	4
Permitted Phases			2					3		
Detector Phase	5	2	2	1	6	3	3	3	4	4
Switch Phase										
Minimum Initial (s)	4.0	10.0	10.0	4.0	10.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.4	15.3	15.3	8.4	15.3	45.9	45.9	45.9	8.9	8.9
Total Split (s)	19.5	65.9	65.9	13.5	59.9	46.6	46.6	46.6	14.0	14.0
Total Split (%)	13.9%	47.1%	47.1%	9.6%	42.8%	33.3%	33.3%	33.3%	10.0%	10.0%
Yellow Time (s)	3.4	4.3	4.3	3.4	4.3	3.9	3.9	3.9	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.3	5.3	4.4	5.3	4.9	4.9	4.9	4.9	4.9
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	None	None	None	None	None

Intersection Summary

Cycle Length: 140
Actuated Cycle Length: 140
Offset: 20 (14%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 29: Executive Way & La Jolla Village Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	83	1926	107	138	2338	467	33	51	152	62	23	26
Future Volume (vph)	83	1926	107	138	2338	467	33	51	152	62	23	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.3	5.3	4.4	5.3		4.9	4.9	4.9	4.9	4.9	
Lane Util. Factor	1.00	0.91	1.00	0.97	0.91		0.95	0.95	1.00	1.00	0.95	
Frt	1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85	1.00	0.92	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	5085	1583	3433	4958		1681	1764	1583	1770	3257	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	5085	1583	3433	4958		1681	1764	1583	1770	3257	
Peak-hour factor, PHF	0.91	0.91	0.91	0.87	0.87	0.87	0.85	0.85	0.85	0.80	0.80	0.80
Adj. Flow (vph)	91	2116	118	159	2687	537	39	60	179	78	29	32
RTOR Reduction (vph)	0	0	46	0	17	0	0	0	131	0	31	0
Lane Group Flow (vph)	91	2116	72	159	3207	0	35	64	48	78	31	0
Turn Type	Prot	NA	Perm	Prot	NA		Split	NA	Perm	Split	NA	
Protected Phases	5	2		1	6		3	3		4	4	
Permitted Phases			2						3			
Actuated Green, G (s)	11.3	73.8	73.8	8.9	71.4		27.2	27.2	27.2	10.6	10.6	
Effective Green, g (s)	11.3	73.8	73.8	8.9	71.4		27.2	27.2	27.2	10.6	10.6	
Actuated g/C Ratio	0.08	0.53	0.53	0.06	0.51		0.19	0.19	0.19	0.08	0.08	
Clearance Time (s)	4.4	5.3	5.3	4.4	5.3		4.9	4.9	4.9	4.9	4.9	
Vehicle Extension (s)	2.0	5.8	5.8	2.0	5.5		2.0	2.0	2.0	6.1	6.1	
Lane Grp Cap (vph)	142	2680	834	218	2528		326	342	307	134	246	
v/s Ratio Prot	c0.05	0.42		0.05	c0.65		0.02	c0.04		c0.04	0.01	
v/s Ratio Perm			0.05						0.03			
v/c Ratio	0.64	0.79	0.09	0.73	1.27		0.11	0.19	0.16	0.58	0.13	
Uniform Delay, d1	62.4	26.8	16.4	64.4	34.3		46.4	47.2	46.9	62.6	60.4	
Progression Factor	1.23	0.49	0.49	1.31	0.38		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	4.4	1.5	0.1	1.0	121.1		0.1	0.1	0.1	12.0	0.7	
Delay (s)	81.1	14.6	8.1	85.5	134.3		46.5	47.3	47.0	74.5	61.1	
Level of Service	F	B	A	F	F		D	D	D	E	E	
Approach Delay (s)		16.9			132.0			47.0			68.6	
Approach LOS		B			F			D			E	

Intersection Summary

HCM 2000 Control Delay	83.0	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	19.5
Intersection Capacity Utilization	82.5%	ICU Level of Service	E
Analysis Period (min)	15		

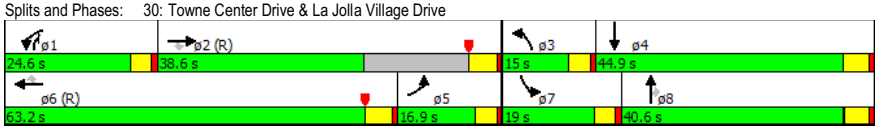
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	382	1684	75	231	2815	975	129	296	427	187	27
Future Volume (vph)	382	1684	75	231	2815	975	129	296	427	187	27
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA
Protected Phases	5	2		1	6		3	8	1	7	4
Permitted Phases			2			6			8		
Detector Phase	5	2	2	1	6	6	3	8	1	7	4
Switch Phase											
Minimum Initial (s)	4.0	10.0	10.0	4.0	10.0	10.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.4	15.5	15.5	8.4	15.3	15.3	8.4	9.0	8.4	8.4	9.3
Total Split (s)	16.9	38.6	38.6	24.6	63.2	63.2	15.0	40.6	24.6	19.0	44.9
Total Split (%)	12.1%	27.6%	27.6%	17.6%	45.1%	45.1%	10.7%	29.0%	17.6%	13.6%	32.1%
Yellow Time (s)	3.4	4.5	4.5	3.4	4.3	4.3	3.4	4.0	3.4	3.4	4.3
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.5	5.5	4.4	5.3	5.3	4.4	5.0	4.4	4.4	5.3
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lead	Lead	Lag	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	None	None	None	None

Intersection Summary

Cycle Length: 140
Actuated Cycle Length: 140
Offset: 13 (9%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 30: Towne Center Drive & La Jolla Village Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	382	1684	75	231	2815	975	129	296	427	187	27	32
Future Volume (vph)	382	1684	75	231	2815	975	129	296	427	187	27	32
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.5	5.5	4.4	5.3	5.3	4.4	5.0	4.4	4.4	5.3	
Lane Util. Factor	0.97	0.91	1.00	0.97	0.86	0.86	0.97	1.00	0.88	0.97	0.95	
Frt	1.00	1.00	0.85	1.00	0.99	0.85	1.00	1.00	0.85	1.00	0.92	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	3433	5085	1583	3433	4772	1362	3433	1863	2787	3433	3249	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	3433	5085	1583	3433	4772	1362	3433	1863	2787	3433	3249	
Peak-hour factor, PHF	0.93	0.93	0.93	0.90	0.90	0.90	0.80	0.80	0.80	0.92	0.92	0.92
Adj. Flow (vph)	411	1811	81	257	3128	1083	161	370	534	203	29	35
RTOR Reduction (vph)	0	0	47	0	3	167	0	0	62	0	28	0
Lane Group Flow (vph)	411	1811	34	257	3277	764	161	370	472	203	36	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	
Protected Phases	5	2		1	6		3	8	1	7	4	
Permitted Phases			2			6			8			
Actuated Green, G (s)	12.5	58.8	58.8	16.2	62.7	62.7	16.2	32.8	49.0	12.9	29.2	
Effective Green, g (s)	12.5	58.8	58.8	16.2	62.7	62.7	16.2	32.8	49.0	12.9	29.2	
Actuated g/C Ratio	0.09	0.42	0.42	0.12	0.45	0.45	0.12	0.23	0.35	0.09	0.21	
Clearance Time (s)	4.4	5.5	5.5	4.4	5.3	5.3	4.4	5.0	4.4	4.4	5.3	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	306	2135	664	397	2137	609	397	436	975	316	677	
v/s Ratio Prot	c0.12	0.36		0.07	c0.69		0.05	c0.20	0.06	c0.06	0.01	
v/s Ratio Perm			0.02			0.56			0.11			
v/c Ratio	1.34	0.85	0.05	0.65	1.53	1.25	0.41	0.85	0.48	0.64	0.05	
Uniform Delay, d1	63.8	36.6	24.1	59.2	38.6	38.6	57.4	51.2	35.6	61.3	44.3	
Progression Factor	0.53	0.28	0.07	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	168.1	2.9	0.1	3.6	242.4	127.8	0.7	14.2	0.4	4.4	0.0	
Delay (s)	202.1	13.1	1.7	62.8	281.0	166.4	58.1	65.5	36.0	65.7	44.4	
Level of Service	F	B	A	E	F	F	E	E	D	E	D	
Approach Delay (s)		46.4			244.6			49.6			60.6	
Approach LOS		D			F			D			E	

Intersection Summary

HCM 2000 Control Delay	156.6	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.24		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	19.6
Intersection Capacity Utilization	109.4%	ICU Level of Service	H
Analysis Period (min)	15		

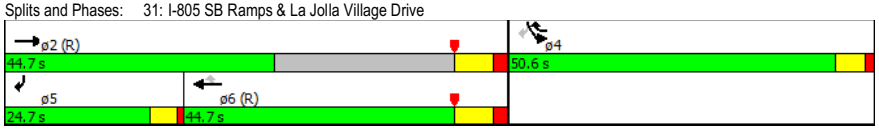
c Critical Lane Group

Lane Group	EBT	WBT	WBR	SBL	SBR
Lane Configurations					
Traffic Volume (vph)	1741	1972	502	341	2039
Future Volume (vph)	1741	1972	502	341	2039
Turn Type	NA	NA	pm+ov	Prot	custom
Protected Phases	2	6	4	4	5
Permitted Phases			6		4
Detector Phase	2	6	4	4	5
Switch Phase					
Minimum Initial (s)	15.0	15.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	10.6	10.6	9.7
Total Split (s)	44.7	44.7	50.6	50.6	24.7
Total Split (%)	37.3%	37.3%	42.2%	42.2%	20.6%
Yellow Time (s)	5.5	5.5	4.1	4.1	3.7
All-Red Time (s)	2.0	2.0	1.5	1.5	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.5	7.5	5.6	5.6	4.7
Lead/Lag		Lag			Lead
Lead-Lag Optimize?		Yes			Yes
Recall Mode	C-Max	C-Max	None	None	None

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 10 (8%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 31: I-805 SB Ramps & La Jolla Village Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1741	0	0	1972	502	0	0	0	341	0	2039
Future Volume (vph)	0	1741	0	0	1972	502	0	0	0	341	0	2039
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		7.5			7.5	5.6				5.6		4.7
Lane Util. Factor		0.91			0.91	1.00				0.97		0.88
Frt		1.00			1.00	0.85				1.00		0.85
Flt Protected		1.00			1.00	1.00				0.95		1.00
Satd. Flow (prot)		5085			5085	1583				3433		2787
Flt Permitted		1.00			1.00	1.00				0.95		1.00
Satd. Flow (perm)		5085			5085	1583				3433		2787
Peak-hour factor, PHF	0.92	0.92	0.92	0.96	0.96	0.96	0.25	0.25	0.25	0.80	0.80	0.80
Adj. Flow (vph)	0	1892	0	0	2054	523	0	0	0	426	0	2549
RTOR Reduction (vph)	0	0	0	0	0	274	0	0	0	0	0	19
Lane Group Flow (vph)	0	1892	0	0	2054	249	0	0	0	426	0	2530
Turn Type		NA			NA	pm+ov				Prot		custom
Protected Phases		2			6	4				4		5
Permitted Phases						6						4
Actuated Green, G (s)		86.9			37.2	57.2				20.0		65.0
Effective Green, g (s)		86.9			37.2	57.2				20.0		65.0
Actuated g/C Ratio		0.72			0.31	0.48				0.17		0.54
Clearance Time (s)		7.5			7.5	5.6				5.6		4.7
Vehicle Extension (s)		2.0			2.0	2.0				2.0		2.0
Lane Grp Cap (vph)		3682			1576	754				572		1509
v/s Ratio Prot		0.37			c0.40	0.06				0.12		c0.63
v/s Ratio Perm						0.10						0.28
v/c Ratio		0.51			1.30	0.33				0.74		1.68
Uniform Delay, d1		7.3			41.4	19.5				47.6		27.5
Progression Factor		1.00			0.87	3.75				1.00		1.00
Incremental Delay, d2		0.5			139.7	0.1				4.6		307.5
Delay (s)		7.8			175.9	73.3				52.2		335.0
Level of Service		A			F	E				D		F
Approach Delay (s)		7.8			155.1			0.0			294.5	
Approach LOS		A			F			A			F	

Intersection Summary

HCM 2000 Control Delay	173.3	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.54		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	17.8
Intersection Capacity Utilization	119.6%	ICU Level of Service	H
Analysis Period (min)	15		

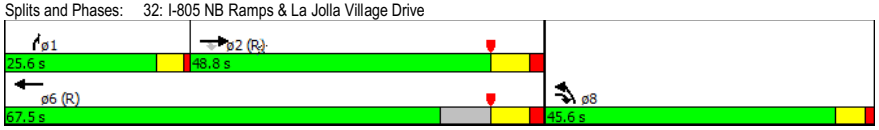
c Critical Lane Group

Lane Group	EBT	EBR	WBT	NBL	NBR
Lane Configurations					
Traffic Volume (vph)	1363	796	1485	947	511
Future Volume (vph)	1363	796	1485	947	511
Turn Type	NA	pm+ov	NA	Prot	Prot
Protected Phases	2	8	6	8	1
Permitted Phases		2			
Detector Phase	2	8	6	8	1
Switch Phase					
Minimum Initial (s)	16.0	5.0	15.0	5.0	5.0
Minimum Split (s)	23.5	10.6	22.5	10.6	10.6
Total Split (s)	48.8	45.6	67.5	45.6	25.6
Total Split (%)	40.7%	38.0%	56.3%	38.0%	21.3%
Yellow Time (s)	5.5	4.1	5.5	4.1	3.7
All-Red Time (s)	2.0	1.5	2.0	1.5	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.5	5.6	7.5	5.6	4.7
Lead/Lag	Lag				Lead
Lead-Lag Optimize?	Yes				Yes
Recall Mode	C-Max	None	C-Max	None	None

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 18 (15%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 75
Control Type: Actuated-Coordinated

Splits and Phases: 32: I-805 NB Ramps & La Jolla Village Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1363	796	0	1485	490	947	0	511	0	0	0
Future Volume (vph)	0	1363	796	0	1485	490	947	0	511	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		7.5	5.6		7.5		5.6		4.7			
Lane Util. Factor		0.91	1.00		0.86		0.97		0.88			
Frt		1.00	0.85		0.96		1.00		0.85			
Flt Protected		1.00	1.00		1.00		0.95		1.00			
Satd. Flow (prot)		5085	1583		6170		3433		2787			
Flt Permitted		1.00	1.00		1.00		0.95		1.00			
Satd. Flow (perm)		5085	1583		6170		3433		2787			
Peak-hour factor, PHF	0.90	0.90	0.90	0.96	0.96	0.96	0.88	0.88	0.88	0.25	0.25	0.25
Adj. Flow (vph)	0	1514	884	0	1547	510	1076	0	581	0	0	0
RTOR Reduction (vph)	0	0	225	0	49	0	0	0	373	0	0	0
Lane Group Flow (vph)	0	1514	659	0	2008	0	1076	0	208	0	0	0
Turn Type		NA	pm+ov		NA		Prot		Prot			
Protected Phases		2	8		6		8		1			
Permitted Phases			2									
Actuated Green, G (s)		49.9	89.4		67.4		39.5		12.8			
Effective Green, g (s)		49.9	89.4		67.4		39.5		12.8			
Actuated g/C Ratio		0.42	0.75		0.56		0.33		0.11			
Clearance Time (s)		7.5	5.6		7.5		5.6		4.7			
Vehicle Extension (s)		2.0	2.0		2.0		2.0		2.0			
Lane Grp Cap (vph)		2114	1179		3465		1130		297			
v/s Ratio Prot		c0.30	0.18		0.33		c0.31		c0.07			
v/s Ratio Perm			0.23									
v/c Ratio		0.72	0.56		0.58		0.95		0.70			
Uniform Delay, d1		29.2	6.7		17.1		39.3		51.7			
Progression Factor		1.00	14.79		1.00		1.00		1.00			
Incremental Delay, d2		1.9	0.3		0.7		16.4		5.7			
Delay (s)		31.2	99.1		17.8		55.7		57.4			
Level of Service		C	F		B		E		E			
Approach Delay (s)		56.2			17.8			56.3			0.0	
Approach LOS		E			B			E			A	

Intersection Summary

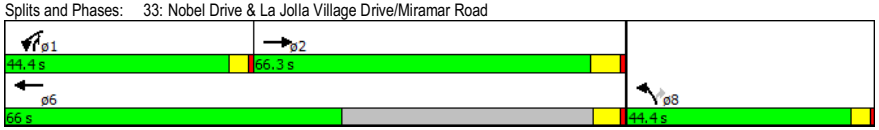
HCM 2000 Control Delay	43.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	17.8
Intersection Capacity Utilization	66.3%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Configurations					
Traffic Volume (vph)	1879	450	2011	79	896
Future Volume (vph)	1879	450	2011	79	896
Turn Type	NA	Prot	NA	Prot	pm+ov
Protected Phases	2	1	6	8	1
Permitted Phases					8
Detector Phase	2	1	6	8	1
Switch Phase					
Minimum Initial (s)	10.0	4.0	10.0	7.0	4.0
Minimum Split (s)	16.3	8.4	16.0	11.4	8.4
Total Split (s)	66.3	44.4	66.0	44.4	44.4
Total Split (%)	42.7%	28.6%	42.6%	28.6%	28.6%
Yellow Time (s)	5.3	3.4	5.0	3.4	3.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.3	4.4	6.0	4.4	4.4
Lead/Lag	Lag	Lead			Lead
Lead-Lag Optimize?	Yes	Yes			Yes
Recall Mode	Min	None	Min	None	None

Intersection Summary
Cycle Length: 155.1
Actuated Cycle Length: 120.2
Natural Cycle: 60
Control Type: Actuated-Uncoordinated

Splits and Phases: 33: Nobel Drive & La Jolla Village Drive/Miramar Road



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1879	144	450	2011	79	896
Future Volume (vph)	1879	144	450	2011	79	896
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.3		4.4	6.0	4.4	4.4
Lane Util. Factor	0.86		0.97	0.86	1.00	0.88
Frt	0.99		1.00	1.00	1.00	0.85
Flt Protected	1.00		0.95	1.00	0.95	1.00
Satd. Flow (prot)	6340		3433	6408	1770	2787
Flt Permitted	1.00		0.95	1.00	0.95	1.00
Satd. Flow (perm)	6340		3433	6408	1770	2787
Peak-hour factor, PHF	0.86	0.86	0.91	0.91	0.94	0.94
Adj. Flow (vph)	2185	167	495	2210	84	953
RTOR Reduction (vph)	6	0	0	0	0	0
Lane Group Flow (vph)	2346	0	495	2210	84	953
Turn Type	NA		Prot	NA	Prot	pm+ov
Protected Phases	2		1	6	8	1
Permitted Phases						8
Actuated Green, G (s)	60.2		35.0	99.9	9.9	44.9
Effective Green, g (s)	60.2		35.0	99.9	9.9	44.9
Actuated g/C Ratio	0.50		0.29	0.83	0.08	0.37
Clearance Time (s)	6.3		4.4	6.0	4.4	4.4
Vehicle Extension (s)	5.0		2.0	5.4	2.0	2.0
Lane Grp Cap (vph)	3175		999	5325	145	1143
v/s Ratio Prot	c0.37		0.14	0.34	0.05	c0.24
v/s Ratio Perm						0.10
v/c Ratio	0.74		0.50	0.42	0.58	0.83
Uniform Delay, d1	23.8		35.3	2.6	53.1	34.3
Progression Factor	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	1.1		0.1	0.1	3.5	5.1
Delay (s)	24.9		35.4	2.7	56.6	39.4
Level of Service	C		D	A	E	D
Approach Delay (s)	24.9			8.7	40.8	
Approach LOS	C			A	D	

Intersection Summary			
HCM 2000 Control Delay	20.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	120.2	Sum of lost time (s)	15.1
Intersection Capacity Utilization	69.9%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBU	WBT	WBR	SBL
Lane Configurations						
Traffic Volume (vph)	581	2256	3	2202	812	156
Future Volume (vph)	581	2256	3	2202	812	156
Turn Type	Prot	NA	Prot	NA	Perm	Prot
Protected Phases	5	2	1	6		7
Permitted Phases					6	
Detector Phase	5	2	1	6	6	7
Switch Phase						
Minimum Initial (s)	4.0	10.0	4.0	10.0	10.0	10.0
Minimum Split (s)	8.4	16.3	8.4	15.4	15.4	14.4
Total Split (s)	34.4	66.3	24.4	65.4	65.4	44.4
Total Split (%)	23.9%	46.0%	16.9%	45.4%	45.4%	30.8%
Yellow Time (s)	3.4	5.3	3.4	4.4	4.4	3.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	6.3	4.4	5.4	5.4	4.4
Lead/Lag	Lead	Lag	Lead	Lag	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	Min	None	Min	Min	None

Intersection Summary

Cycle Length: 144.2
Actuated Cycle Length: 117.5
Natural Cycle: 90
Control Type: Actuated-Uncoordinated

Splits and Phases: 34: Miramar Road & Eastgate Mall

Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Traffic Volume (vph)	581	2256	3	2202	812	156	210
Future Volume (vph)	581	2256	3	2202	812	156	210
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	6.3	4.4	5.4	5.4	4.4	
Lane Util. Factor	0.97	0.91	1.00	0.86	1.00	0.97	
Frt	1.00	1.00	1.00	1.00	0.85	0.91	
Flt Protected	0.95	1.00	0.95	1.00	1.00	0.98	
Satd. Flow (prot)	3433	5085	1770	6408	1583	3234	
Flt Permitted	0.95	1.00	0.95	1.00	1.00	0.98	
Satd. Flow (perm)	3433	5085	1770	6408	1583	3234	
Peak-hour factor, PHF	0.87	0.87	0.92	0.92	0.92	0.80	0.80
Adj. Flow (vph)	668	2593	3	2393	883	195	262
RTOR Reduction (vph)	0	0	0	0	317	203	0
Lane Group Flow (vph)	668	2593	3	2393	566	255	0
Turn Type	Prot	NA	Prot	NA	Perm	Prot	
Protected Phases	5	2	1	6		7	
Permitted Phases					6		
Actuated Green, G (s)	27.3	89.2	1.0	63.8	63.8	15.7	
Effective Green, g (s)	27.3	89.2	1.0	63.8	63.8	15.7	
Actuated g/C Ratio	0.23	0.74	0.01	0.53	0.53	0.13	
Clearance Time (s)	4.4	6.3	4.4	5.4	5.4	4.4	
Vehicle Extension (s)	2.0	5.0	2.0	6.1	6.1	4.5	
Lane Grp Cap (vph)	774	3748	14	3378	834	419	
v/s Ratio Prot	c0.19	c0.51	0.00	0.37		c0.08	
v/s Ratio Perm					0.36		
v/c Ratio	0.86	0.69	0.21	0.71	0.68	0.61	
Uniform Delay, d1	45.1	8.5	59.6	21.6	21.1	49.8	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	9.5	0.7	2.8	1.0	3.5	3.3	
Delay (s)	54.6	9.2	62.4	22.6	24.5	53.0	
Level of Service	D	A	E	C	C	D	
Approach Delay (s)		18.5		23.2		53.0	
Approach LOS		B		C		D	

Intersection Summary

HCM 2000 Control Delay	23.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	121.0	Sum of lost time (s)	15.1
Intersection Capacity Utilization	75.0%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBT	WBR	SBL
Lane Configurations					
Traffic Volume (vph)	119	2637	3047	126	68
Future Volume (vph)	119	2637	3047	126	68
Turn Type	Prot	NA	NA	Perm	Prot
Protected Phases	5	2	6		4
Permitted Phases				6	
Detector Phase	5	2	6	6	4
Switch Phase					
Minimum Initial (s)	4.0	10.0	10.0	10.0	4.0
Minimum Split (s)	8.4	15.8	15.4	15.4	8.9
Total Split (s)	22.6	89.9	89.9	89.9	37.5
Total Split (%)	15.1%	59.9%	59.9%	59.9%	25.0%
Yellow Time (s)	3.4	4.8	4.4	4.4	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.8	5.4	5.4	4.9
Lead/Lag	Lag		Lead	Lead	
Lead-Lag Optimize?	Yes		Yes	Yes	
Recall Mode	None	C-Max	C-Max	C-Max	None

Intersection Summary

Cycle Length: 150
Actuated Cycle Length: 150
Offset: 87 (58%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 35: Miramar Road & Miramar Mall

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	119	2637	3047	126	68	61
Future Volume (vph)	119	2637	3047	126	68	61
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.8	5.4	5.4	4.9	
Lane Util. Factor	1.00	0.91	0.91	1.00	1.00	
Frt	1.00	1.00	1.00	0.85	0.94	
Flt Protected	0.95	1.00	1.00	1.00	0.97	
Satd. Flow (prot)	1770	5085	5085	1583	1699	
Flt Permitted	0.95	1.00	1.00	1.00	0.97	
Satd. Flow (perm)	1770	5085	5085	1583	1699	
Peak-hour factor, PHF	0.86	0.86	0.92	0.92	0.81	0.81
Adj. Flow (vph)	138	3066	3312	137	84	75
RTOR Reduction (vph)	0	0	0	30	24	0
Lane Group Flow (vph)	138	3066	3312	107	135	0
Turn Type	Prot	NA	NA	Perm	Prot	
Protected Phases	5	2	6		4	
Permitted Phases				6		
Actuated Green, G (s)	18.2	121.2	99.0	99.0	18.1	
Effective Green, g (s)	18.2	121.2	99.0	99.0	18.1	
Actuated g/C Ratio	0.12	0.81	0.66	0.66	0.12	
Clearance Time (s)	4.4	5.8	5.4	5.4	4.9	
Vehicle Extension (s)	2.0	4.6	5.2	5.2	2.0	
Lane Grp Cap (vph)	214	4108	3356	1044	205	
v/s Ratio Prot	0.08	c0.60	c0.65		c0.08	
v/s Ratio Perm				0.07		
v/c Ratio	0.64	0.75	0.99	0.10	0.66	
Uniform Delay, d1	62.8	7.0	24.9	9.3	63.0	
Progression Factor	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	4.9	1.3	12.8	0.2	5.7	
Delay (s)	67.7	8.2	37.6	9.5	68.8	
Level of Service	E	A	D	A	E	
Approach Delay (s)		10.8	36.5		68.8	
Approach LOS		B	D		E	

Intersection Summary

HCM 2000 Control Delay	25.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.92		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	14.7
Intersection Capacity Utilization	85.2%	ICU Level of Service	E
Analysis Period (min)	15		

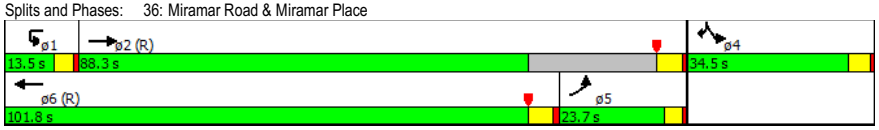
c Critical Lane Group

Lane Group	EBL	EBT	WBU	WBT	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	147	2546	24	2937	104	55
Future Volume (vph)	147	2546	24	2937	104	55
Turn Type	Prot	NA	Prot	NA	Prot	Prot
Protected Phases	5	2	1	6	4	4
Permitted Phases						
Detector Phase	5	2	1	6	4	4
Switch Phase						
Minimum Initial (s)	4.0	10.0	4.0	10.0	4.0	4.0
Minimum Split (s)	8.4	15.7	8.4	15.7	8.9	8.9
Total Split (s)	23.7	88.3	13.5	101.8	34.5	34.5
Total Split (%)	14.8%	55.2%	8.4%	63.6%	21.6%	21.6%
Yellow Time (s)	3.4	4.7	3.4	4.7	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.7	4.4	5.7	4.9	4.9
Lead/Lag	Lag	Lag	Lead	Lead		
Lead-Lag Optimize?	Yes	Yes	Yes	Yes		
Recall Mode	None	C-Max	None	C-Max	None	None

Intersection Summary

Cycle Length: 160
Actuated Cycle Length: 160
Offset: 150 (94%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 36: Miramar Road & Miramar Place



Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Traffic Volume (vph)	147	2546	24	2937	181	104	55
Future Volume (vph)	147	2546	24	2937	181	104	55
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.7	4.4	5.7		4.9	4.9
Lane Util. Factor	1.00	0.91	1.00	0.91		0.97	0.91
Frt	1.00	1.00	1.00	0.99		0.99	0.85
Flt Protected	0.95	1.00	0.95	1.00		0.96	1.00
Satd. Flow (prot)	1770	5085	1770	5041		3421	1441
Flt Permitted	0.95	1.00	0.95	1.00		0.96	1.00
Satd. Flow (perm)	1770	5085	1770	5041		3421	1441
Peak-hour factor, PHF	0.85	0.85	0.92	0.95	0.95	0.80	0.80
Adj. Flow (vph)	173	2995	26	3092	191	130	69
RTOR Reduction (vph)	0	0	0	3	0	4	57
Lane Group Flow (vph)	173	2995	26	3280	0	134	4
Turn Type	Prot	NA	Prot	NA		Prot	Prot
Protected Phases	5	2	1	6		4	4
Permitted Phases							
Actuated Green, G (s)	21.0	128.6	4.8	112.4		11.6	11.6
Effective Green, g (s)	21.0	128.6	4.8	112.4		11.6	11.6
Actuated g/C Ratio	0.13	0.80	0.03	0.70		0.07	0.07
Clearance Time (s)	4.4	5.7	4.4	5.7		4.9	4.9
Vehicle Extension (s)	3.0	4.8	2.0	5.4		3.0	3.0
Lane Grp Cap (vph)	232	4087	53	3541		248	104
v/s Ratio Prot	0.10	c0.59	0.01	c0.65		c0.04	0.00
v/s Ratio Perm							
v/c Ratio	0.75	0.73	0.49	0.93		0.54	0.04
Uniform Delay, d1	66.9	7.5	76.4	20.3		71.6	69.0
Progression Factor	1.00	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	12.2	1.2	2.6	5.5		2.4	0.2
Delay (s)	79.2	8.7	79.0	25.7		74.0	69.2
Level of Service	E	A	E	C		E	E
Approach Delay (s)		12.5		26.2		72.6	
Approach LOS		B		C		E	

Intersection Summary

HCM 2000 Control Delay	21.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	15.0
Intersection Capacity Utilization	85.0%	ICU Level of Service	E
Analysis Period (min)	15		

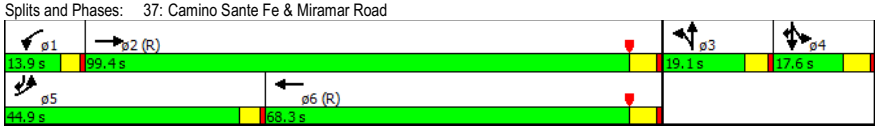
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	794	943	37	1878	25	13	61	12	685
Future Volume (vph)	794	943	37	1878	25	13	61	12	685
Turn Type	Prot	NA	Prot	NA	Split	NA	Split	NA	pt+ov
Protected Phases	5	2	1	6	3	3	4	4	4 5
Permitted Phases									
Detector Phase	5	2	1	6	3	3	4	4	4 5
Switch Phase									
Minimum Initial (s)	12.0	10.0	4.0	10.0	4.0	4.0	4.0	4.0	
Minimum Split (s)	16.4	15.8	8.4	15.7	8.9	8.9	9.5	9.5	
Total Split (s)	44.9	99.4	13.9	68.3	19.1	19.1	17.6	17.6	
Total Split (%)	29.9%	66.3%	9.3%	45.5%	12.7%	12.7%	11.7%	11.7%	
Yellow Time (s)	3.4	4.8	3.4	4.7	3.9	3.9	4.5	4.5	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.4	5.8	4.4	5.7	4.9	4.9	5.5	5.5	
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lead	Lag	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	C-Max	None	C-Max	None	None	None	None	

Intersection Summary

Cycle Length: 150
Actuated Cycle Length: 150
Offset: 98 (65%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 100
Control Type: Actuated-Coordinated

Splits and Phases: 37: Camino Sante Fe & Miramar Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	794	943	60	37	1878	124	25	13	9	61	12	685
Future Volume (vph)	794	943	60	37	1878	124	25	13	9	61	12	685
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.8		4.4	5.7		4.9	4.9		5.5	5.5	5.5
Lane Util. Factor	0.97	0.91		0.97	0.91		1.00	1.00		0.95	0.95	0.88
Frt	1.00	0.99		1.00	0.99		1.00	0.94		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	0.97	1.00
Satd. Flow (prot)	3433	5039		3433	5038		1770	1749		1681	1712	2787
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	0.97	1.00
Satd. Flow (perm)	3433	5039		3433	5038		1770	1749		1681	1712	2787
Peak-hour factor, PHF	0.99	0.99	0.99	0.97	0.97	0.97	0.80	0.80	0.80	0.80	0.80	0.80
Adj. Flow (vph)	802	953	61	38	1936	128	31	16	11	76	15	856
RTOR Reduction (vph)	0	4	0	0	5	0	0	11	0	0	0	136
Lane Group Flow (vph)	802	1010	0	38	2059	0	31	16	0	45	46	720
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	pt+ov
Protected Phases	5	2		1	6		3	3		4	4	4 5
Permitted Phases												
Actuated Green, G (s)	38.4	98.1		5.2	65.0		6.2	6.2		19.9	19.9	63.8
Effective Green, g (s)	38.4	98.1		5.2	65.0		6.2	6.2		19.9	19.9	63.8
Actuated g/C Ratio	0.26	0.65		0.03	0.43		0.04	0.04		0.13	0.13	0.43
Clearance Time (s)	4.4	5.8		4.4	5.7		4.9	4.9		5.5	5.5	
Vehicle Extension (s)	2.0	4.8		2.0	5.4		2.0	2.0		2.8	2.8	
Lane Grp Cap (vph)	878	3295		119	2183		73	72		223	227	1185
v/s Ratio Prot	c0.23	0.20		0.01	c0.41		c0.02	0.01		0.03	0.03	c0.26
v/s Ratio Perm												
v/c Ratio	0.91	0.31		0.32	0.94		0.42	0.23		0.20	0.20	0.61
Uniform Delay, d1	54.2	11.2		70.7	40.7		70.2	69.6		58.0	58.0	33.4
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	13.5	0.2		0.6	9.9		1.4	0.6		0.4	0.4	0.8
Delay (s)	67.7	11.5		71.2	50.6		71.6	70.2		58.4	58.4	34.2
Level of Service	E	B		E	D		E	E		E	E	C
Approach Delay (s)		36.3			51.0			70.9			36.6	
Approach LOS		D			D			E			D	

Intersection Summary

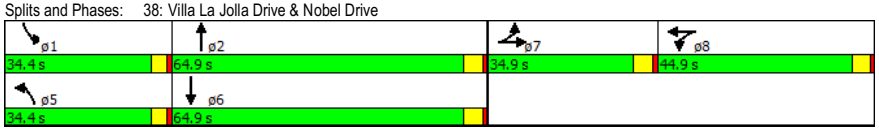
HCM 2000 Control Delay	43.0	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	20.6
Intersection Capacity Utilization	83.4%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	4	36	1	10	738	120	287
Future Volume (vph)	4	36	1	10	738	120	287
Turn Type	NA	Split	NA	Prot	NA	Prot	NA
Protected Phases	7	8	8	5	2	1	6
Permitted Phases							
Detector Phase	7	8	8	5	2	1	6
Switch Phase							
Minimum Initial (s)	6.0	6.0	6.0	4.0	7.0	6.0	10.0
Minimum Split (s)	10.9	10.9	10.9	8.4	11.9	10.4	14.9
Total Split (s)	34.9	44.9	44.9	34.4	64.9	34.4	64.9
Total Split (%)	19.5%	25.1%	25.1%	19.2%	36.2%	19.2%	36.2%
Yellow Time (s)	3.9	3.9	3.9	3.4	3.9	3.4	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	4.9	4.4	4.9	4.4	4.9
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	Min	None	Min

Intersection Summary
Cycle Length: 179.1
Actuated Cycle Length: 70
Natural Cycle: 55
Control Type: Actuated-Uncoordinated

Splits and Phases: 38: Villa La Jolla Drive & Nobel Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	4	5	36	1	299	10	738	76	120	287	11
Future Volume (vph)	30	4	5	36	1	299	10	738	76	120	287	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9		4.9	4.9		4.4	4.9		4.4	4.9	
Lane Util. Factor		1.00		0.97	1.00		1.00	0.95		0.97	0.95	
Frt		0.98		1.00	0.85		1.00	0.99		1.00	0.99	
Flt Protected		0.96		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1763		3433	1584		1770	3489		3433	3520	
Flt Permitted		0.96		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1763		3433	1584		1770	3489		3433	3520	
Peak-hour factor, PHF	0.81	0.81	0.81	0.92	0.92	0.92	0.91	0.91	0.91	0.89	0.89	0.89
Adj. Flow (vph)	37	5	6	39	1	325	11	811	84	135	322	12
RTOR Reduction (vph)	0	3	0	0	290	0	0	4	0	0	1	0
Lane Group Flow (vph)	0	45	0	39	36	0	11	891	0	135	333	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	7	7		8	8		5	2		1	6	
Permitted Phases												
Actuated Green, G (s)		5.7		8.0	8.0		0.9	32.9		8.5	40.5	
Effective Green, g (s)		5.7		8.0	8.0		0.9	32.9		8.5	40.5	
Actuated g/C Ratio		0.08		0.11	0.11		0.01	0.44		0.11	0.55	
Clearance Time (s)		4.9		4.9	4.9		4.4	4.9		4.4	4.9	
Vehicle Extension (s)		2.0		2.0	2.0		2.0	4.3		2.0	3.7	
Lane Grp Cap (vph)		135		370	170		21	1547		393	1921	
v/s Ratio Prot		c0.03		0.01	c0.02		0.01	c0.26		c0.04	0.09	
v/s Ratio Perm												
v/c Ratio		0.34		0.11	0.21		0.52	0.58		0.34	0.17	
Uniform Delay, d1		32.5		29.9	30.2		36.4	15.4		30.3	8.5	
Progression Factor		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.5		0.0	0.2		10.4	0.7		0.2	0.1	
Delay (s)		33.0		29.9	30.4		46.9	16.1		30.5	8.5	
Level of Service		C		C	C		D	B		C	A	
Approach Delay (s)		33.0			30.4			16.5			14.8	
Approach LOS		C			C			B			B	

Intersection Summary			
HCM 2000 Control Delay	19.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.46		
Actuated Cycle Length (s)	74.2	Sum of lost time (s)	19.1
Intersection Capacity Utilization	66.8%	ICU Level of Service	C
Analysis Period (min)	15		

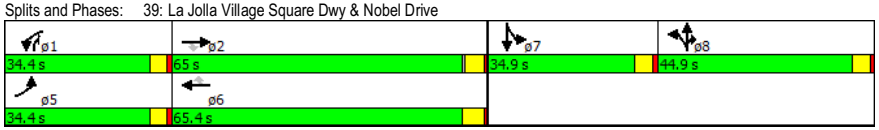
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	4	234	5	550	306	300	5	5	284	159	5
Future Volume (vph)	4	234	5	550	306	300	5	5	284	159	5
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Split	NA	pt+ov	Split	NA
Protected Phases	5	2		1	6		8	8	8 1	7	7
Permitted Phases			2			6					
Detector Phase	5	2	2	1	6	6	8	8	8 1	7	7
Switch Phase											
Minimum Initial (s)	4.0	7.0	7.0	4.0	7.0	7.0	8.0	8.0		8.0	8.0
Minimum Split (s)	9.4	12.0	12.0	8.4	12.4	12.4	12.9	12.9		12.9	12.9
Total Split (s)	34.4	65.0	65.0	34.4	65.4	65.4	44.9	44.9		34.9	34.9
Total Split (%)	19.2%	36.2%	36.2%	19.2%	36.4%	36.4%	25.0%	25.0%		19.4%	19.4%
Yellow Time (s)	3.4	4.0	4.0	3.4	4.4	4.4	3.9	3.9		3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	4.4	5.0	5.0	4.4	5.4	5.4	4.9	4.9		4.9	4.9
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lag	Lag		Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None		None	None

Intersection Summary

Cycle Length: 179.6
Actuated Cycle Length: 100.8
Natural Cycle: 55
Control Type: Actuated-Uncoordinated

Splits and Phases: 39: La Jolla Village Square Dwy & Nobel Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	4	234	5	550	306	300	5	5	284	159	5	0
Future Volume (vph)	4	234	5	550	306	300	5	5	284	159	5	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.0	5.0	4.4	5.4	5.4	4.9	4.9	4.9	4.9	4.9	
Lane Util. Factor	1.00	0.95	1.00	0.97	0.95	1.00	0.95	0.95	1.00	0.95	0.95	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.99	1.00	0.95	0.96	
Satd. Flow (prot)	1770	3539	1583	3433	3539	1583	1681	1757	1583	1681	1690	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.99	1.00	0.95	0.96	
Satd. Flow (perm)	1770	3539	1583	3433	3539	1583	1681	1757	1583	1681	1690	
Peak-hour factor, PHF	0.87	0.87	0.87	0.91	0.91	0.91	0.80	0.80	0.80	0.80	0.80	0.80
Adj. Flow (vph)	5	269	6	604	336	330	6	6	355	199	6	0
RTOR Reduction (vph)	0	0	5	0	0	170	0	0	189	0	0	0
Lane Group Flow (vph)	5	269	1	604	336	160	5	7	166	101	104	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Split	NA	pt+ov	Split	NA	
Protected Phases	5	2		1	6		8	8	8 1	7	7	
Permitted Phases			2			6						
Actuated Green, G (s)	0.9	21.6	21.6	30.1	50.4	50.4	10.3	10.3	45.3	22.6	22.6	
Effective Green, g (s)	0.9	21.6	21.6	30.1	50.4	50.4	10.3	10.3	45.3	22.6	22.6	
Actuated g/C Ratio	0.01	0.21	0.21	0.29	0.49	0.49	0.10	0.10	0.44	0.22	0.22	
Clearance Time (s)	4.4	5.0	5.0	4.4	5.4	5.4	4.9	4.9		4.9	4.9	
Vehicle Extension (s)	2.0	4.1	4.1	2.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)	15	736	329	995	1718	768	166	174	690	365	367	
v/s Ratio Prot	0.00	c0.08		c0.18	0.09		0.00	0.00	c0.10	0.06	c0.06	
v/s Ratio Perm			0.00			0.10						
v/c Ratio	0.33	0.37	0.00	0.61	0.20	0.21	0.03	0.04	0.24	0.28	0.28	
Uniform Delay, d1	51.2	35.2	32.6	31.8	15.2	15.3	42.2	42.3	18.4	33.8	33.8	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	4.7	0.4	0.0	0.7	0.1	0.2	0.1	0.1	0.2	0.6	0.6	
Delay (s)	55.9	35.7	32.6	32.5	15.3	15.5	42.3	42.4	18.7	34.4	34.4	
Level of Service	E	D	C	C	B	B	D	D	B	C	C	
Approach Delay (s)		36.0			23.5			19.4			34.4	
Approach LOS		D			C			B			C	

Intersection Summary

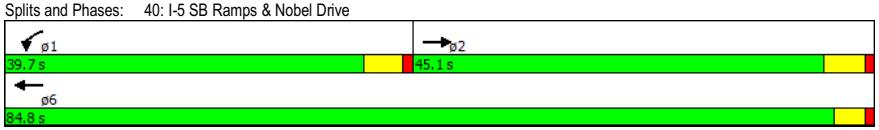
HCM 2000 Control Delay	25.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.42		
Actuated Cycle Length (s)	103.8	Sum of lost time (s)	19.6
Intersection Capacity Utilization	45.3%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBT	WBL	WBT
Lane Configurations			
Traffic Volume (vph)	362	267	1304
Future Volume (vph)	362	267	1304
Turn Type	NA	Prot	NA
Protected Phases	2	1	6
Permitted Phases			
Detector Phase	2	1	6
Switch Phase			
Minimum Initial (s)	13.0	5.0	1.0
Minimum Split (s)	18.1	9.7	5.5
Total Split (s)	45.1	39.7	84.8
Total Split (%)	53.2%	46.8%	100.0%
Yellow Time (s)	4.1	3.7	3.0
All-Red Time (s)	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0
Total Lost Time (s)	5.1	4.7	4.0
Lead/Lag	Lag	Lead	
Lead-Lag Optimize?	Yes	Yes	
Recall Mode	Min	None	Min

Intersection Summary
Cycle Length: 84.8
Actuated Cycle Length: 34.1
Natural Cycle: 40
Control Type: Actuated-Uncoordinated

Splits and Phases: 40: I-5 SB Ramps & Nobel Drive



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	362	297	267	1304	0	0
Future Volume (vph)	362	297	267	1304	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1		4.7	4.0		
Lane Util. Factor	0.95		0.97	0.95		
Frt	0.93		1.00	1.00		
Flt Protected	1.00		0.95	1.00		
Satd. Flow (prot)	3300		3433	3539		
Flt Permitted	1.00		0.95	1.00		
Satd. Flow (perm)	3300		3433	3539		
Peak-hour factor, PHF	0.87	0.87	0.90	0.90	0.25	0.25
Adj. Flow (vph)	416	341	297	1449	0	0
RTOR Reduction (vph)	178	0	0	0	0	0
Lane Group Flow (vph)	579	0	297	1449	0	0
Turn Type	NA		Prot	NA		
Protected Phases	2		1	6		
Permitted Phases						
Actuated Green, G (s)	15.7		8.5	34.0		
Effective Green, g (s)	15.7		8.5	34.0		
Actuated g/C Ratio	0.46		0.25	1.00		
Clearance Time (s)	5.1		4.7	4.0		
Vehicle Extension (s)	3.0		3.0	3.0		
Lane Grp Cap (vph)	1523		858	3539		
v/s Ratio Prot	0.18		0.09	c0.41		
v/s Ratio Perm						
v/c Ratio	0.38		0.35	0.41		
Uniform Delay, d1	6.0		10.5	0.0		
Progression Factor	1.00		1.00	1.00		
Incremental Delay, d2	0.2		0.2	0.1		
Delay (s)	6.1		10.7	0.1		
Level of Service	A		B	A		
Approach Delay (s)	6.1			1.9	0.0	
Approach LOS	A			A	A	

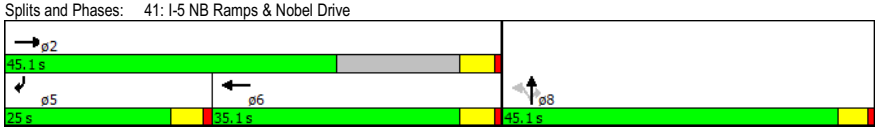
Intersection Summary			
HCM 2000 Control Delay	3.2	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	34.0	Sum of lost time (s)	9.8
Intersection Capacity Utilization	39.4%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBT	WBT	NBL	NBT	NBR	SBR
Lane Configurations						
Traffic Volume (vph)	398	1055	298	160	421	104
Future Volume (vph)	398	1055	298	160	421	104
Turn Type	NA	NA	Perm	NA	Perm	Prot
Protected Phases	2	6		8		5
Permitted Phases			8		8	
Detector Phase	2	6	8	8	8	5
Switch Phase						
Minimum Initial (s)	11.0	13.0	5.0	5.0	5.0	5.0
Minimum Split (s)	16.1	18.1	22.5	22.5	22.5	10.0
Total Split (s)	45.1	35.1	45.1	45.1	45.1	25.0
Total Split (%)	42.9%	33.4%	42.9%	42.9%	42.9%	23.8%
Yellow Time (s)	4.1	4.1	3.5	3.5	3.5	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.1	5.1	4.5	4.5	4.5	5.0
Lead/Lag		Lag				Lead
Lead-Lag Optimize?		Yes				Yes
Recall Mode	Min	Min	None	None	None	None

Intersection Summary
Cycle Length: 105.2
Actuated Cycle Length: 63.6
Natural Cycle: 60
Control Type: Actuated-Uncoordinated

Splits and Phases: 41: I-5 NB Ramps & Nobel Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	398	0	0	1055	34	298	160	421	0	0	104
Future Volume (vph)	0	398	0	0	1055	34	298	160	421	0	0	104
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.1			5.1		4.5	4.5	4.5			5.0
Lane Util. Factor		0.95			0.91		0.95	0.95	1.00			1.00
Frt		1.00			1.00		1.00	1.00	0.85			0.86
Flt Protected		1.00			1.00		0.95	0.98	1.00			1.00
Satd. Flow (prot)		3539			5061		1681	1742	1583			1611
Flt Permitted		1.00			1.00		0.95	0.98	1.00			1.00
Satd. Flow (perm)		3539			5061		1681	1742	1583			1611
Peak-hour factor, PHF	0.90	0.90	0.90	0.80	0.80	0.80	0.95	0.95	0.95	0.80	0.80	0.80
Adj. Flow (vph)	0	442	0	0	1319	42	314	168	443	0	0	130
RTOR Reduction (vph)	0	0	0	0	3	0	0	0	261	0	0	120
Lane Group Flow (vph)	0	442	0	0	1359	0	235	247	182	0	0	10
Turn Type		NA			NA		Perm	NA	Perm			Prot
Protected Phases		2			6			8				5
Permitted Phases							8		8			
Actuated Green, G (s)		35.8			25.7		18.0	18.0	18.0			5.1
Effective Green, g (s)		35.8			25.7		18.0	18.0	18.0			5.1
Actuated g/C Ratio		0.56			0.41		0.28	0.28	0.28			0.08
Clearance Time (s)		5.1			5.1		4.5	4.5	4.5			5.0
Vehicle Extension (s)		2.0			2.0		3.0	3.0	3.0			2.0
Lane Grp Cap (vph)		1998			2051		477	494	449			129
v/s Ratio Prot		c0.12			c0.27							0.01
v/s Ratio Perm							0.14	0.14	0.11			
v/c Ratio		0.22			0.66		0.49	0.50	0.40			0.08
Uniform Delay, d1		6.9			15.3		18.9	18.9	18.4			27.0
Progression Factor		1.00			1.00		1.00	1.00	1.00			1.00
Incremental Delay, d2		0.0			0.6		0.8	0.8	0.6			0.1
Delay (s)		6.9			16.0		19.7	19.7	19.0			27.1
Level of Service		A			B		B	B	B			C
Approach Delay (s)		6.9			16.0			19.4			27.1	
Approach LOS		A			B			B			C	

Intersection Summary			
HCM 2000 Control Delay	16.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	63.4	Sum of lost time (s)	14.6
Intersection Capacity Utilization	52.2%	ICU Level of Service	A
Analysis Period (min)	15		

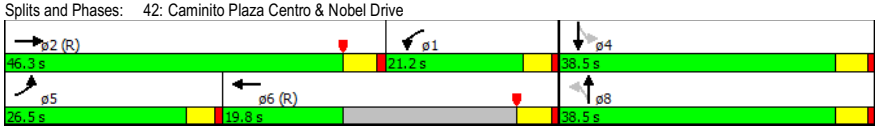
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	53	781	61	863	47	2	4	5
Future Volume (vph)	53	781	61	863	47	2	4	5
Turn Type	Prot	NA	Prot	NA	Perm	NA	Perm	NA
Protected Phases	5	2	1	6		8		4
Permitted Phases					8		4	
Detector Phase	5	2	1	6	8	8	4	4
Switch Phase								
Minimum Initial (s)	4.0	10.0	4.0	10.0	6.0	6.0	6.0	6.0
Minimum Split (s)	8.4	15.2	8.4	15.2	10.9	10.9	10.9	10.9
Total Split (s)	26.5	46.3	21.2	19.8	38.5	38.5	38.5	38.5
Total Split (%)	25.0%	43.7%	20.0%	18.7%	36.3%	36.3%	36.3%	36.3%
Yellow Time (s)	3.4	4.2	3.4	4.2	3.9	3.9	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	4.4	5.2	4.4	5.2		4.9		4.9
Lead/Lag	Lead	Lead	Lag	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes				
Recall Mode	None	C-Max	None	C-Max	None	None	None	None

Intersection Summary

Cycle Length: 106
Actuated Cycle Length: 106
Offset: 26 (25%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 40
Control Type: Actuated-Coordinated

Splits and Phases: 42: Caminito Plaza Centro & Nobel Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	53	781	114	61	863	19	47	2	23	4	5	47
Future Volume (vph)	53	781	114	61	863	19	47	2	23	4	5	47
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.2		4.4	5.2			4.9			4.9	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Frt	1.00	0.98		1.00	1.00			0.96			0.89	
Flt Protected	0.95	1.00		0.95	1.00			0.97			1.00	
Satd. Flow (prot)	1770	4988		1770	5069			1727			1645	
Flt Permitted	0.95	1.00		0.95	1.00			0.79			0.98	
Satd. Flow (perm)	1770	4988		1770	5069			1403			1620	
Peak-hour factor, PHF	0.92	0.92	0.92	0.93	0.93	0.93	0.80	0.80	0.80	0.80	0.80	0.80
Adj. Flow (vph)	58	849	124	66	928	20	59	2	29	5	6	59
RTOR Reduction (vph)	0	13	0	0	1	0	0	19	0	0	50	0
Lane Group Flow (vph)	58	960	0	66	947	0	0	72	0	0	20	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8			4		
Actuated Green, G (s)	7.0	61.2		13.5	67.7			16.8			16.8	
Effective Green, g (s)	7.0	61.2		13.5	67.7			16.8			16.8	
Actuated g/C Ratio	0.07	0.58		0.13	0.64			0.16			0.16	
Clearance Time (s)	4.4	5.2		4.4	5.2			4.9			4.9	
Vehicle Extension (s)	2.0	5.0		2.0	4.5			2.5			2.0	
Lane Grp Cap (vph)	116	2879		225	3237			222			256	
v/s Ratio Prot	c0.03	c0.19		0.04	c0.19							
v/s Ratio Perm								c0.05			0.01	
v/c Ratio	0.50	0.33		0.29	0.29			0.32			0.08	
Uniform Delay, d1	47.8	11.7		41.9	8.5			39.6			38.0	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	1.2	0.3		0.3	0.2			0.6			0.0	
Delay (s)	49.0	12.0		42.2	8.7			40.2			38.1	
Level of Service	D	B		D	A			D			D	
Approach Delay (s)		14.1			10.9			40.2			38.1	
Approach LOS		B			B			D			D	

Intersection Summary

HCM 2000 Control Delay	14.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.34		
Actuated Cycle Length (s)	106.0	Sum of lost time (s)	14.5
Intersection Capacity Utilization	43.9%	ICU Level of Service	A
Analysis Period (min)	15		

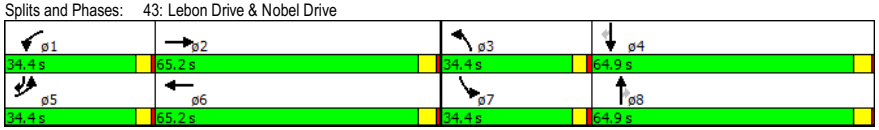
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	77	629	70	597	236	367	93	44	90	91
Future Volume (vph)	77	629	70	597	236	367	93	44	90	91
Turn Type	Prot	NA	Prot	NA	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	5	2	1	6	3	8		7	4	5
Permitted Phases							8			4
Detector Phase	5	2	1	6	3	8	8	7	4	5
Switch Phase										
Minimum Initial (s)	4.0	10.0	4.0	10.0	4.0	8.0	8.0	10.0	10.0	4.0
Minimum Split (s)	8.4	15.2	8.4	15.2	8.4	12.9	12.9	14.4	14.9	8.4
Total Split (s)	34.4	65.2	34.4	65.2	34.4	64.9	64.9	34.4	64.9	34.4
Total Split (%)	17.3%	32.8%	17.3%	32.8%	17.3%	32.6%	32.6%	17.3%	32.6%	17.3%
Yellow Time (s)	3.4	4.2	3.4	4.2	3.4	3.9	3.9	3.4	3.9	3.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.2	4.4	5.2	4.4	4.9	4.9	4.4	4.9	4.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 198.9
Actuated Cycle Length: 101.9
Natural Cycle: 60
Control Type: Actuated-Uncoordinated

Splits and Phases: 43: Lebon Drive & Nobel Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	77	629	90	70	597	116	236	367	93	44	90	91
Future Volume (vph)	77	629	90	70	597	116	236	367	93	44	90	91
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.2		4.4	5.2		4.4	4.9	4.9	4.4	4.9	4.4
Lane Util. Factor	0.97	0.91		1.00	0.91		0.97	0.95	1.00	0.97	0.95	1.00
Frt	1.00	0.98		1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	4990		1770	4962		3433	3539	1583	3433	3539	1583
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	4990		1770	4962		3433	3539	1583	3433	3539	1583
Peak-hour factor, PHF	0.88	0.88	0.88	0.91	0.91	0.91	0.85	0.85	0.85	0.85	0.85	0.85
Adj. Flow (vph)	88	715	102	77	656	127	278	432	109	52	106	107
RTOR Reduction (vph)	0	9	0	0	14	0	0	0	47	0	0	47
Lane Group Flow (vph)	88	808	0	77	769	0	278	432	62	52	106	60
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	5	2		1	6		3	8		7	4	5
Permitted Phases									8			4
Actuated Green, G (s)	7.8	35.1		7.8	35.1		14.0	34.3	34.3	7.3	27.6	35.4
Effective Green, g (s)	7.8	35.1		7.8	35.1		14.0	34.3	34.3	7.3	27.6	35.4
Actuated g/C Ratio	0.08	0.34		0.08	0.34		0.14	0.33	0.33	0.07	0.27	0.34
Clearance Time (s)	4.4	5.2		4.4	5.2		4.4	4.9	4.9	4.4	4.9	4.4
Vehicle Extension (s)	2.0	4.5		2.0	4.5		2.0	6.4	6.4	2.0	5.5	2.0
Lane Grp Cap (vph)	258	1693		133	1684		464	1173	525	242	944	541
v/s Ratio Prot	0.03	c0.16		c0.04	0.16		c0.08	c0.12		0.02	0.03	0.01
v/s Ratio Perm									0.04			0.03
v/c Ratio	0.34	0.48		0.58	0.46		0.60	0.37	0.12	0.21	0.11	0.11
Uniform Delay, d1	45.4	26.9		46.2	26.7		42.1	26.3	24.0	45.3	28.6	23.2
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.3	0.4		3.8	0.3		1.4	0.6	0.3	0.2	0.1	0.0
Delay (s)	45.6	27.3		50.0	27.0		43.5	26.9	24.3	45.5	28.8	23.3
Level of Service	D	C		D	C		D	C	C	D	C	C
Approach Delay (s)		29.1			29.1			32.2			29.8	
Approach LOS		C			C			C			C	

Intersection Summary

HCM 2000 Control Delay	30.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	103.4	Sum of lost time (s)	18.9
Intersection Capacity Utilization	48.9%	ICU Level of Service	A
Analysis Period (min)	15		

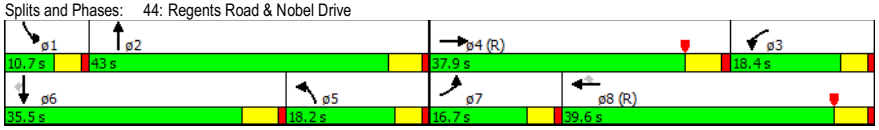
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	211	573	376	441	166	173	709	69	403	46
Future Volume (vph)	211	573	376	441	166	173	709	69	403	46
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Prot	NA	Perm
Protected Phases	7	4	3	8		5	2	1	6	
Permitted Phases					8					6
Detector Phase	7	4	3	8	8	5	2	1	6	6
Switch Phase										
Minimum Initial (s)	4.0	10.0	4.0	10.0	10.0	4.0	10.0	4.0	10.0	10.0
Minimum Split (s)	8.4	37.7	8.4	37.3	37.3	8.4	41.2	8.4	35.5	35.5
Total Split (s)	16.7	37.9	18.4	39.6	39.6	18.2	43.0	10.7	35.5	35.5
Total Split (%)	15.2%	34.5%	16.7%	36.0%	36.0%	16.5%	39.1%	9.7%	32.3%	32.3%
Yellow Time (s)	3.4	4.7	3.4	4.3	4.3	3.4	4.2	3.4	4.5	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.7	4.4	5.3	5.3	4.4	5.2	4.4	5.5	5.5
Lead/Lag	Lead	Lead	Lag	Lag	Lag	Lag	Lag	Lead	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	C-Max	None	Min	None	Min	Min

Intersection Summary

Cycle Length: 110
Actuated Cycle Length: 110
Offset: 0 (0%), Referenced to phase 4:EBT and 8:WBT, Start of Yellow
Natural Cycle: 110
Control Type: Actuated-Coordinated

Splits and Phases: 44: Regents Road & Nobel Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	211	573	109	376	441	166	173	709	405	69	403	46
Future Volume (vph)	211	573	109	376	441	166	173	709	405	69	403	46
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.7		4.4	5.3	5.3	4.4	5.2		4.4	5.5	5.5
Lane Util. Factor	0.97	0.91		0.97	0.95	1.00	1.00	0.91		1.00	0.95	1.00
Frt	1.00	0.98		1.00	1.00	0.85	1.00	0.95		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3433	4964		3433	3539	1583	1770	4808		1770	3539	1583
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	3433	4964		3433	3539	1583	1770	4808		1770	3539	1583
Peak-hour factor, PHF	0.97	0.97	0.97	0.88	0.88	0.88	0.80	0.80	0.80	0.80	0.80	0.80
Adj. Flow (vph)	218	591	112	427	501	189	216	886	506	86	504	58
RTOR Reduction (vph)	0	25	0	0	0	119	0	94	0	0	0	43
Lane Group Flow (vph)	218	678	0	427	501	70	216	1298	0	86	504	15
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA		Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8						6
Actuated Green, G (s)	10.7	32.2		14.0	35.9	35.9	15.9	37.8		6.3	27.9	27.9
Effective Green, g (s)	10.7	32.2		14.0	35.9	35.9	15.9	37.8		6.3	27.9	27.9
Actuated g/C Ratio	0.10	0.29		0.13	0.33	0.33	0.14	0.34		0.06	0.25	0.25
Clearance Time (s)	4.4	5.7		4.4	5.3	5.3	4.4	5.2		4.4	5.5	5.5
Vehicle Extension (s)	2.0	4.4		2.0	6.1	6.1	2.0	5.7		2.0	6.2	6.2
Lane Grp Cap (vph)	333	1453		436	1155	516	255	1652		101	897	401
v/s Ratio Prot	c0.06	c0.14		c0.12	0.14		0.12	c0.27		c0.05	0.14	
v/s Ratio Perm						0.04						0.01
v/c Ratio	0.65	0.47		0.98	0.43	0.14	0.85	0.79		0.85	0.56	0.04
Uniform Delay, d1	47.9	31.9		47.9	29.1	26.1	45.9	32.5		51.4	35.7	30.9
Progression Factor	1.00	1.00		0.65	0.46	0.08	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	3.5	1.1		33.5	1.0	0.5	21.3	3.1		44.7	1.7	0.1
Delay (s)	51.4	32.9		64.8	14.4	2.4	67.1	35.6		96.1	37.5	31.0
Level of Service	D	C		E	B	A	E	D		F	D	C
Approach Delay (s)		37.3			31.6			39.8			44.7	
Approach LOS		D			C			D			D	

Intersection Summary

HCM 2000 Control Delay	37.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	67.2%	ICU Level of Service	C
Analysis Period (min)	15		

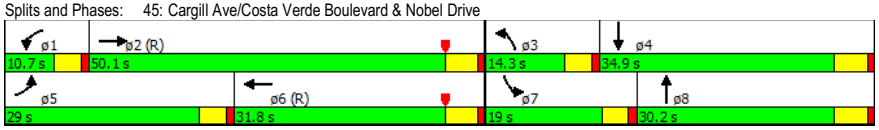
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	272	631	31	686	57	58	151	36
Future Volume (vph)	272	631	31	686	57	58	151	36
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	5	2	1	6	3	8	7	4
Permitted Phases								
Detector Phase	5	2	1	6	3	8	7	4
Switch Phase								
Minimum Initial (s)	4.0	25.0	4.0	25.0	4.0	25.0	4.0	25.0
Minimum Split (s)	8.4	30.2	8.4	30.2	8.4	30.2	8.4	30.2
Total Split (s)	29.0	50.1	10.7	31.8	14.3	30.2	19.0	34.9
Total Split (%)	26.4%	45.5%	9.7%	28.9%	13.0%	27.5%	17.3%	31.7%
Yellow Time (s)	3.4	4.2	3.4	4.2	3.4	4.2	3.4	4.2
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.2	4.4	5.2	4.4	5.2	4.4	5.2
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	Max	None	Max

Intersection Summary

Cycle Length: 110
Actuated Cycle Length: 110
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 45: Cargill Ave/Costa Verde Boulevard & Nobel Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	272	631	26	31	686	148	57	58	32	151	36	183
Future Volume (vph)	272	631	26	31	686	148	57	58	32	151	36	183
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.2		4.4	5.2		4.4	5.2		4.4	5.2	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	1.00		1.00	1.00	
Frt	1.00	0.99		1.00	0.97		1.00	0.95		1.00	0.87	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	5055		1770	4950		1770	1764		1770	1629	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	5055		1770	4950		1770	1764		1770	1629	
Peak-hour factor, PHF	0.88	0.88	0.88	0.91	0.91	0.91	0.80	0.80	0.80	0.87	0.87	0.87
Adj. Flow (vph)	309	717	30	34	754	163	71	72	40	174	41	210
RTOR Reduction (vph)	0	4	0	0	30	0	0	17	0	0	146	0
Lane Group Flow (vph)	309	743	0	34	887	0	71	96	0	174	105	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases												
Actuated Green, G (s)	22.1	46.5		3.8	28.2		7.2	27.2		13.3	33.3	
Effective Green, g (s)	22.1	46.5		3.8	28.2		7.2	27.2		13.3	33.3	
Actuated g/C Ratio	0.20	0.42		0.03	0.26		0.07	0.25		0.12	0.30	
Clearance Time (s)	4.4	5.2		4.4	5.2		4.4	5.2		4.4	5.2	
Vehicle Extension (s)	2.0	4.5		2.0	4.5		2.0	4.5		2.0	4.5	
Lane Grp Cap (vph)	355	2136		61	1269		115	436		214	493	
v/s Ratio Prot	c0.17	0.15		0.02	c0.18		0.04	0.05		c0.10	c0.06	
v/s Ratio Perm												
v/c Ratio	0.87	0.35		0.56	0.70		0.62	0.22		0.81	0.21	
Uniform Delay, d1	42.6	21.5		52.3	37.1		50.1	33.0		47.1	28.6	
Progression Factor	1.04	0.42		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	15.7	0.3		6.1	3.2		6.8	1.2		19.5	1.0	
Delay (s)	60.0	9.5		58.4	40.3		56.8	34.1		66.7	29.6	
Level of Service	E	A		E	D		E	C		E	C	
Approach Delay (s)		24.3			40.9			42.9			44.8	
Approach LOS		C			D			D			D	

Intersection Summary

HCM 2000 Control Delay	34.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	19.2
Intersection Capacity Utilization	81.1%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	78	1131	11	697	34	0	63	0
Future Volume (vph)	78	1131	11	697	34	0	63	0
Turn Type	Prot	NA	Prot	NA	Perm	NA	Perm	NA
Protected Phases	5	2	1	6		8		4
Permitted Phases					8		4	
Detector Phase	5	2	1	6	8	8	4	4
Switch Phase								
Minimum Initial (s)	4.0	7.0	4.0	7.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.4	19.0	8.4	28.9	32.9	32.9	32.9	32.9
Total Split (s)	34.4	65.0	34.4	64.9	44.9	44.9	44.9	44.9
Total Split (%)	23.8%	45.0%	23.8%	45.0%	31.1%	31.1%	31.1%	31.1%
Yellow Time (s)	3.4	4.0	3.4	3.9	3.9	3.9	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.4	5.0	4.4	4.9		4.9	4.9	4.9
Lead/Lag	Lead	Lag	Lead	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes				
Recall Mode	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 144.3
Actuated Cycle Length: 67.8
Natural Cycle: 80
Control Type: Actuated-Uncoordinated

Splits and Phases: 46: Lombard Place & Nobel Drive

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	78	1131	11	11	697	40	34	0	19	63	0	38
Future Volume (vph)	78	1131	11	11	697	40	34	0	19	63	0	38
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.0		4.4	4.9			4.9		4.9	4.9	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00		1.00	1.00	
Frt	1.00	1.00		1.00	0.99			0.95		1.00	0.85	
Flt Protected	0.95	1.00		0.95	1.00			0.97		0.95	1.00	
Satd. Flow (prot)	1770	3534		1770	3510			1718		1770	1583	
Flt Permitted	0.95	1.00		0.95	1.00			0.78		0.83	1.00	
Satd. Flow (perm)	1770	3534		1770	3510			1377		1546	1583	
Peak-hour factor, PHF	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Adj. Flow (vph)	98	1414	14	14	871	50	42	0	24	79	0	48
RTOR Reduction (vph)	0	0	0	0	2	0	0	42	0	0	42	0
Lane Group Flow (vph)	98	1428	0	14	919	0	0	25	0	79	6	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8			4		
Actuated Green, G (s)	7.5	47.6		0.9	41.1			9.3		9.3	9.3	
Effective Green, g (s)	7.5	47.6		0.9	41.1			9.3		9.3	9.3	
Actuated g/C Ratio	0.10	0.66		0.01	0.57			0.13		0.13	0.13	
Clearance Time (s)	4.4	5.0		4.4	4.9			4.9		4.9	4.9	
Vehicle Extension (s)	2.0	3.7		2.0	4.4			2.0		2.0	2.0	
Lane Grp Cap (vph)	184	2333		22	2000			177		199	204	
v/s Ratio Prot	c0.06	c0.40		0.01	0.26						0.00	
v/s Ratio Perm								0.02		c0.05		
v/c Ratio	0.53	0.61		0.64	0.46			0.14		0.40	0.03	
Uniform Delay, d1	30.6	7.0		35.4	9.0			27.9		28.8	27.5	
Progression Factor	1.00	1.00		1.00	1.00			1.00		1.00	1.00	
Incremental Delay, d2	1.5	0.5		36.7	0.3			0.1		0.5	0.0	
Delay (s)	32.1	7.5		72.2	9.3			28.0		29.3	27.5	
Level of Service	C	A		E	A			C		C	C	
Approach Delay (s)		9.1			10.2			28.0			28.6	
Approach LOS		A			B			C			C	

Intersection Summary

HCM 2000 Control Delay	10.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	72.1	Sum of lost time (s)	14.3
Intersection Capacity Utilization	56.6%	ICU Level of Service	B
Analysis Period (min)	15		

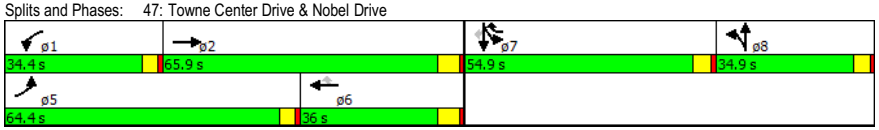
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	425	782	13	328	65	155	19	34	224
Future Volume (vph)	425	782	13	328	65	155	19	34	224
Turn Type	Prot	NA	Prot	NA	pm+ov	NA	Split	NA	Perm
Protected Phases	5	2	1	6	7	8	7	7	
Permitted Phases					6				7
Detector Phase	5	2	1	6	7	8	7	7	7
Switch Phase									
Minimum Initial (s)	4.0	7.0	4.0	7.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.4	12.9	8.4	13.0	8.9	8.9	8.9	8.9	8.9
Total Split (s)	64.4	65.9	34.4	36.0	54.9	34.9	54.9	54.9	54.9
Total Split (%)	33.9%	34.6%	18.1%	18.9%	28.9%	18.3%	28.9%	28.9%	28.9%
Yellow Time (s)	3.4	4.9	3.4	5.0	3.9	3.9	3.9	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.9	4.4	6.0	4.9	4.9	4.9	4.9	4.9
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 190.2
Actuated Cycle Length: 90.1
Natural Cycle: 55
Control Type: Actuated-Uncoordinated

Splits and Phases: 47: Towne Center Drive & Nobel Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	425	782	28	13	328	65	51	155	132	19	34	224
Future Volume (vph)	425	782	28	13	328	65	51	155	132	19	34	224
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.9		4.4	6.0	4.9		4.9		4.9	4.9	4.9
Lane Util. Factor	0.97	0.95		1.00	0.91	1.00		0.95		1.00	1.00	1.00
Frt	1.00	0.99		1.00	1.00	0.85		0.94		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.99		0.95	1.00	1.00
Satd. Flow (prot)	3433	3521		1770	5085	1583		3307		1770	1863	1583
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.99		0.95	1.00	1.00
Satd. Flow (perm)	3433	3521		1770	5085	1583		3307		1770	1863	1583
Peak-hour factor, PHF	0.85	0.85	0.85	0.91	0.91	0.91	0.80	0.80	0.80	0.82	0.82	0.82
Adj. Flow (vph)	500	920	33	14	360	71	64	194	165	23	41	273
RTOR Reduction (vph)	0	1	0	0	0	45	0	52	0	0	0	237
Lane Group Flow (vph)	500	952	0	14	360	26	0	371	0	23	41	36
Turn Type	Prot	NA		Prot	NA	pm+ov	Split	NA		Split	NA	Perm
Protected Phases	5	2		1	6	7	8	8		7	7	
Permitted Phases						6						7
Actuated Green, G (s)	20.9	40.5		2.0	21.5	33.5		17.0		12.0	12.0	12.0
Effective Green, g (s)	20.9	40.5		2.0	21.5	33.5		17.0		12.0	12.0	12.0
Actuated g/C Ratio	0.23	0.44		0.02	0.23	0.37		0.19		0.13	0.13	0.13
Clearance Time (s)	4.4	5.9		4.4	6.0	4.9		4.9		4.9	4.9	4.9
Vehicle Extension (s)	2.0	4.9		2.0	3.3	4.0		2.0		4.0	4.0	4.0
Lane Grp Cap (vph)	783	1556		38	1193	578		613		231	244	207
v/s Ratio Prot	c0.15	c0.27		0.01	0.07	0.01		c0.11		0.01	0.02	
v/s Ratio Perm						0.01						c0.02
v/c Ratio	0.64	0.61		0.37	0.30	0.04		0.61		0.10	0.17	0.17
Uniform Delay, d1	31.9	19.5		44.2	28.9	18.7		34.2		35.0	35.4	35.4
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00
Incremental Delay, d2	1.3	1.0		2.2	0.2	0.0		1.2		0.3	0.4	0.5
Delay (s)	33.2	20.6		46.4	29.0	18.8		35.4		35.3	35.8	35.9
Level of Service	C	C		D	C	B		D		D	D	D
Approach Delay (s)		24.9			27.9			35.4			35.9	
Approach LOS		C			C			D			D	

Intersection Summary

HCM 2000 Control Delay	28.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	91.6	Sum of lost time (s)	20.2
Intersection Capacity Utilization	54.3%	ICU Level of Service	A
Analysis Period (min)	15		

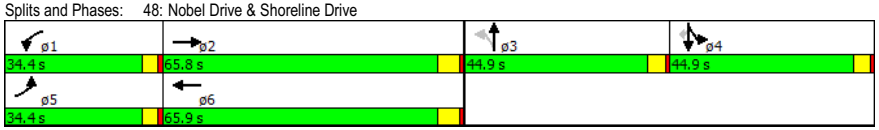
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	14	933	8	310	41	6	163	1	28
Future Volume (vph)	14	933	8	310	41	6	163	1	28
Turn Type	Prot	NA	Prot	NA	Perm	NA	Split	NA	Perm
Protected Phases	5	2	1	6		3	4	4	
Permitted Phases					3				4
Detector Phase	5	2	1	6	3	3	4	4	4
Switch Phase									
Minimum Initial (s)	4.0	10.0	4.0	10.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.4	15.8	8.4	30.9	8.9	8.9	33.9	33.9	33.9
Total Split (s)	34.4	65.8	34.4	65.9	44.9	44.9	44.9	44.9	44.9
Total Split (%)	18.1%	34.6%	18.1%	34.7%	23.6%	23.6%	23.6%	23.6%	23.6%
Yellow Time (s)	3.4	4.8	3.4	4.9	3.9	3.9	3.9	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.8	4.4	5.9		4.9	4.9	4.9	4.9
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 190.1
Actuated Cycle Length: 113.1
Natural Cycle: 85
Control Type: Actuated-Uncoordinated

Splits and Phases: 48: Nobel Drive & Shoreline Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	14	933	10	8	310	48	41	6	76	163	1	28
Future Volume (vph)	14	933	10	8	310	48	41	6	76	163	1	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.8		4.4	5.9			4.9		4.9	4.9	4.9
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00		1.00	1.00	0.88
Frt	1.00	1.00		1.00	0.98			0.92		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.98		0.95	1.00	1.00
Satd. Flow (prot)	1770	5077		1770	4983			1680		1770	1863	2787
Flt Permitted	0.95	1.00		0.95	1.00			0.21		0.95	1.00	1.00
Satd. Flow (perm)	1770	5077		1770	4983			354		1770	1863	2787
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.88	0.88	0.88	0.86	0.86	0.86
Adj. Flow (vph)	15	1025	11	9	341	53	47	7	86	190	1	33
RTOR Reduction (vph)	0	1	0	0	11	0	0	25	0	0	0	28
Lane Group Flow (vph)	15	1035	0	9	383	0	0	115	0	190	1	5
Turn Type	Prot	NA		Prot	NA		Perm	NA		Split	NA	Perm
Protected Phases	5	2		1	6			3		4	4	
Permitted Phases							3					4
Actuated Green, G (s)	2.4	36.2		1.0	34.7			41.0		18.2	18.2	18.2
Effective Green, g (s)	2.4	36.2		1.0	34.7			41.0		18.2	18.2	18.2
Actuated g/C Ratio	0.02	0.31		0.01	0.30			0.35		0.16	0.16	0.16
Clearance Time (s)	4.4	5.8		4.4	5.9			4.9		4.9	4.9	4.9
Vehicle Extension (s)	2.0	4.6		2.0	4.4			2.0		2.0	2.0	2.0
Lane Grp Cap (vph)	36	1578		15	1485			124		276	291	435
v/s Ratio Prot	c0.01	c0.20		0.01	0.08					c0.11	0.00	
v/s Ratio Perm								c0.33				0.00
v/c Ratio	0.42	0.66		0.60	0.26			0.93		0.69	0.00	0.01
Uniform Delay, d1	56.3	34.7		57.5	31.1			36.3		46.4	41.4	41.5
Progression Factor	1.00	1.00		1.00	1.00			1.00		1.00	1.00	1.00
Incremental Delay, d2	2.8	1.2		36.3	0.2			58.9		5.6	0.0	0.0
Delay (s)	59.1	35.9		93.8	31.2			95.2		52.0	41.4	41.5
Level of Service	E	D		F	C			F		D	D	D
Approach Delay (s)		36.3			32.6			95.2			50.4	
Approach LOS		D			C			F			D	

Intersection Summary

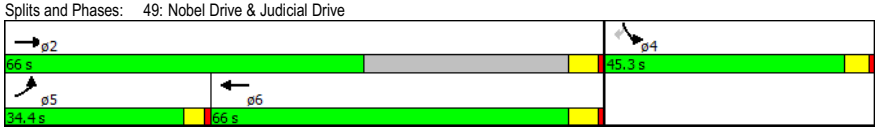
HCM 2000 Control Delay	41.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	116.4	Sum of lost time (s)	20.1
Intersection Capacity Utilization	42.9%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBT	SBL	SBR
Lane Configurations					
Traffic Volume (vph)	72	1149	366	297	11
Future Volume (vph)	72	1149	366	297	11
Turn Type	Prot	NA	NA	Prot	Perm
Protected Phases	5	2	6	4	
Permitted Phases					4
Detector Phase	5	2	6	4	4
Switch Phase					
Minimum Initial (s)	4.0	10.0	10.0	7.0	7.0
Minimum Split (s)	11.4	16.0	16.0	12.3	12.3
Total Split (s)	34.4	66.0	66.0	45.3	45.3
Total Split (%)	23.6%	45.3%	45.3%	31.1%	31.1%
Yellow Time (s)	3.4	5.0	5.0	4.3	4.3
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	6.0	6.0	5.3	5.3
Lead/Lag	Lead		Lag		
Lead-Lag Optimize?	Yes		Yes		
Recall Mode	None	Min	Min	None	None

Intersection Summary
Cycle Length: 145.7
Actuated Cycle Length: 97.5
Natural Cycle: 55
Control Type: Actuated-Uncoordinated

Splits and Phases: 49: Nobel Drive & Judicial Drive



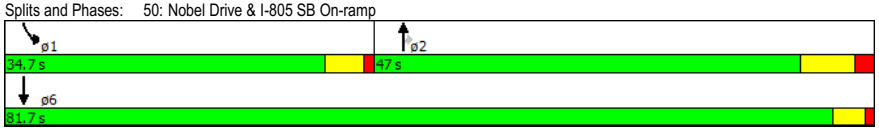
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	72	1149	366	1275	297	11
Future Volume (vph)	72	1149	366	1275	297	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	6.0	6.0		5.3	5.3
Lane Util. Factor	0.97	0.91	0.91		0.97	1.00
Frt	1.00	1.00	0.88		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	3433	5085	4493		3433	1583
Flt Permitted	0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)	3433	5085	4493		3433	1583
Peak-hour factor, PHF	0.91	0.91	0.90	0.90	0.87	0.87
Adj. Flow (vph)	79	1263	407	1417	341	13
RTOR Reduction (vph)	0	0	298	0	0	11
Lane Group Flow (vph)	79	1263	1526	0	341	2
Turn Type	Prot	NA	NA		Prot	Perm
Protected Phases	5	2	6		4	
Permitted Phases						4
Actuated Green, G (s)	5.5	68.3	58.4		18.6	18.6
Effective Green, g (s)	5.5	68.3	58.4		18.6	18.6
Actuated g/C Ratio	0.06	0.70	0.59		0.19	0.19
Clearance Time (s)	4.4	6.0	6.0		5.3	5.3
Vehicle Extension (s)	2.0	5.4	5.4		4.4	4.4
Lane Grp Cap (vph)	192	3536	2672		650	299
v/s Ratio Prot	0.02	c0.25	c0.34		c0.10	
v/s Ratio Perm						0.00
v/c Ratio	0.41	0.36	1.12dr		0.52	0.01
Uniform Delay, d1	44.8	6.1	12.2		35.8	32.3
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	0.5	0.1	0.5		1.2	0.0
Delay (s)	45.3	6.2	12.7		37.0	32.3
Level of Service	D	A	B		D	C
Approach Delay (s)		8.5	12.7		36.8	
Approach LOS		A	B		D	

Intersection Summary			
HCM 2000 Control Delay	13.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.55		
Actuated Cycle Length (s)	98.2	Sum of lost time (s)	15.7
Intersection Capacity Utilization	53.8%	ICU Level of Service	A
Analysis Period (min)	15		
dr Defacto Right Lane. Recode with 1 though lane as a right lane.			
c Critical Lane Group			

Lane Group	NBT	NBR	SBL	SBT
Lane Configurations				
Traffic Volume (vph)	531	670	25	1792
Future Volume (vph)	531	670	25	1792
Turn Type	NA	Perm	Prot	NA
Protected Phases	2		1	6
Permitted Phases		2		
Detector Phase	2	2	1	6
Switch Phase				
Minimum Initial (s)	12.0	12.0	5.0	1.0
Minimum Split (s)	19.0	19.0	9.7	5.0
Total Split (s)	47.0	47.0	34.7	81.7
Total Split (%)	57.5%	57.5%	42.5%	100.0%
Yellow Time (s)	5.0	5.0	3.7	3.0
All-Red Time (s)	2.0	2.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	4.7	4.0
Lead/Lag	Lag	Lag	Lead	
Lead-Lag Optimize?	Yes	Yes	Yes	
Recall Mode	Min	Min	None	Min

Intersection Summary
Cycle Length: 81.7
Actuated Cycle Length: 44.9
Natural Cycle: 40
Control Type: Actuated-Uncoordinated

Splits and Phases: 50: Nobel Drive & I-805 SB On-ramp



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	531	670	25	1792
Future Volume (vph)	0	0	531	670	25	1792
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)			7.0	7.0	4.7	4.0
Lane Util. Factor			0.95	0.88	0.97	0.91
Frt			1.00	0.85	1.00	1.00
Flt Protected			1.00	1.00	0.95	1.00
Satd. Flow (prot)			3539	2787	3433	5085
Flt Permitted			1.00	1.00	0.95	1.00
Satd. Flow (perm)			3539	2787	3433	5085
Peak-hour factor, PHF	0.25	0.25	0.90	0.90	0.93	0.93
Adj. Flow (vph)	0	0	590	744	27	1927
RTOR Reduction (vph)	0	0	0	195	0	0
Lane Group Flow (vph)	0	0	590	549	27	1927
Turn Type			NA	Perm	Prot	NA
Protected Phases			2		1	6
Permitted Phases				2		
Actuated Green, G (s)			36.0	36.0	1.1	48.8
Effective Green, g (s)			36.0	36.0	1.1	48.8
Actuated g/C Ratio			0.74	0.74	0.02	1.00
Clearance Time (s)			7.0	7.0	4.7	4.0
Vehicle Extension (s)			3.0	3.0	3.0	3.0
Lane Grp Cap (vph)			2610	2055	77	5085
v/s Ratio Prot			0.17		0.01	c0.38
v/s Ratio Perm				0.20		
v/c Ratio			0.23	0.27	0.35	0.38
Uniform Delay, d1			2.0	2.1	23.5	0.0
Progression Factor			1.00	1.00	1.00	1.00
Incremental Delay, d2			0.0	0.1	2.8	0.0
Delay (s)			2.1	2.2	26.2	0.0
Level of Service			A	A	C	A
Approach Delay (s)	0.0		2.1			0.4
Approach LOS	A		A			A

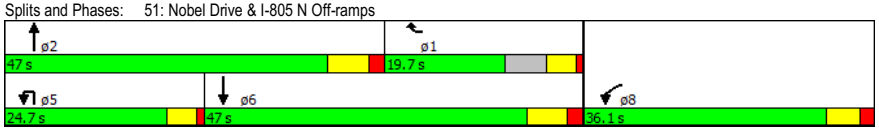
Intersection Summary			
HCM 2000 Control Delay	1.1	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	48.8	Sum of lost time (s)	11.7
Intersection Capacity Utilization	55.7%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	WBL	WBR	NBT	SBT	ø5
Lane Configurations					
Traffic Volume (vph)	1021	485	567	582	
Future Volume (vph)	1021	485	567	582	
Turn Type	Prot	Prot	NA	NA	
Protected Phases	8	1	2	6	5
Permitted Phases					
Detector Phase	8	1	2	6	
Switch Phase					
Minimum Initial (s)	5.0	5.0	16.0	11.0	5.0
Minimum Split (s)	11.1	9.7	23.0	18.0	9.7
Total Split (s)	36.1	19.7	47.0	47.0	24.7
Total Split (%)	33.5%	18.3%	43.6%	43.6%	23%
Yellow Time (s)	4.1	3.7	5.0	5.0	3.7
All-Red Time (s)	2.0	1.0	2.0	2.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.1	4.7	7.0	7.0	
Lead/Lag		Lag	Lead	Lag	Lead
Lead-Lag Optimize?		Yes	Yes	Yes	Yes
Recall Mode	None	None	Min	Min	None

Intersection Summary
Cycle Length: 107.8
Actuated Cycle Length: 76.6
Natural Cycle: 60
Control Type: Actuated-Uncoordinated

Splits and Phases: 51: Nobel Drive & I-805 N Off-ramps



Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	1021	485	0	567	0	0	582
Future Volume (vph)	1021	485	0	567	0	0	582
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.1	4.7		7.0			7.0
Lane Util. Factor	0.97	0.88		0.95			0.91
Frt	1.00	0.85		1.00			1.00
Flt Protected	0.95	1.00		1.00			1.00
Satd. Flow (prot)	3433	2787		3539			5085
Flt Permitted	0.95	1.00		1.00			1.00
Satd. Flow (perm)	3433	2787		3539			5085
Peak-hour factor, PHF	0.97	0.97	0.92	0.84	0.84	0.84	0.84
Adj. Flow (vph)	1053	500	0	675	0	0	693
RTOR Reduction (vph)	0	368	0	0	0	0	0
Lane Group Flow (vph)	1053	132	0	675	0	0	693
Turn Type	Prot	Prot	Prot	NA			NA
Protected Phases	8	1	5	2			6
Permitted Phases							
Actuated Green, G (s)	30.3	8.7		19.7			33.1
Effective Green, g (s)	30.3	8.7		19.7			33.1
Actuated g/C Ratio	0.40	0.11		0.26			0.43
Clearance Time (s)	6.1	4.7		7.0			7.0
Vehicle Extension (s)	2.0	3.0		2.0			2.0
Lane Grp Cap (vph)	1359	316		911			2200
v/s Ratio Prot	c0.31	c0.05		c0.19			0.14
v/s Ratio Perm							
v/c Ratio	0.77	0.42		0.74			0.32
Uniform Delay, d1	20.1	31.5		26.1			14.3
Progression Factor	1.00	1.00		1.00			1.00
Incremental Delay, d2	2.6	0.9		2.9			0.0
Delay (s)	22.7	32.4		28.9			14.3
Level of Service	C	C		C			B
Approach Delay (s)	25.8			28.9			14.3
Approach LOS	C			C			B

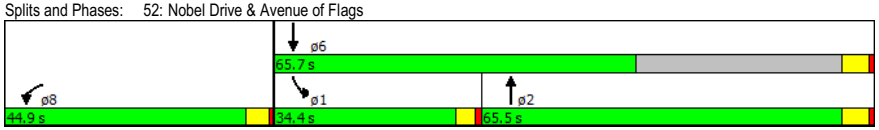
Intersection Summary			
HCM 2000 Control Delay	23.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	76.5	Sum of lost time (s)	17.8
Intersection Capacity Utilization	55.7%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	WBL	NBT	SBL	SBT
Lane Configurations				
Traffic Volume (vph)	2	1139	4	608
Future Volume (vph)	2	1139	4	608
Turn Type	Prot	NA	Prot	NA
Protected Phases	8	2	1	6
Permitted Phases				
Detector Phase	8	2	1	6
Switch Phase				
Minimum Initial (s)	4.0	7.0	4.0	7.0
Minimum Split (s)	8.9	12.5	8.4	12.7
Total Split (s)	44.9	65.5	34.4	65.7
Total Split (%)	31.0%	45.2%	23.8%	45.4%
Yellow Time (s)	3.9	4.5	3.4	4.7
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	5.5	4.4	5.7
Lead/Lag		Lag	Lead	
Lead-Lag Optimize?		Yes	Yes	
Recall Mode	None	Min	None	Min

Intersection Summary
Cycle Length: 144.8
Actuated Cycle Length: 60
Natural Cycle: 45
Control Type: Actuated-Uncoordinated

Splits and Phases: 52: Nobel Drive & Avenue of Flags



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	2	2	1139	10	4	608
Future Volume (vph)	2	2	1139	10	4	608
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9		5.5		4.4	5.7
Lane Util. Factor	1.00		0.95		1.00	0.95
Frt	0.93		1.00		1.00	1.00
Flt Protected	0.98		1.00		0.95	1.00
Satd. Flow (prot)	1695		3535		1770	3539
Flt Permitted	0.98		1.00		0.95	1.00
Satd. Flow (perm)	1695		3535		1770	3539
Peak-hour factor, PHF	0.25	0.25	0.88	0.88	0.97	0.97
Adj. Flow (vph)	8	8	1294	11	4	627
RTOR Reduction (vph)	8	0	0	0	0	0
Lane Group Flow (vph)	8	0	1305	0	4	627
Turn Type	Prot		NA		Prot	NA
Protected Phases	8		2		1	6
Permitted Phases						
Actuated Green, G (s)	0.8		51.5		0.7	56.4
Effective Green, g (s)	0.8		51.5		0.7	56.4
Actuated g/C Ratio	0.01		0.76		0.01	0.83
Clearance Time (s)	4.9		5.5		4.4	5.7
Vehicle Extension (s)	2.0		5.2		2.0	4.9
Lane Grp Cap (vph)	20		2685		18	2943
v/s Ratio Prot	c0.00		c0.37		0.00	c0.18
v/s Ratio Perm						
v/c Ratio	0.40		0.49		0.22	0.21
Uniform Delay, d1	33.3		3.1		33.3	1.2
Progression Factor	1.00		1.00		1.00	1.00
Incremental Delay, d2	4.8		0.3		2.3	0.1
Delay (s)	38.1		3.4		35.6	1.2
Level of Service	D		A		D	A
Approach Delay (s)	38.1		3.4			1.5
Approach LOS	D		A			A

Intersection Summary			
HCM 2000 Control Delay	3.1	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	67.8	Sum of lost time (s)	14.8
Intersection Capacity Utilization	43.8%	ICU Level of Service	A
Analysis Period (min)	15		

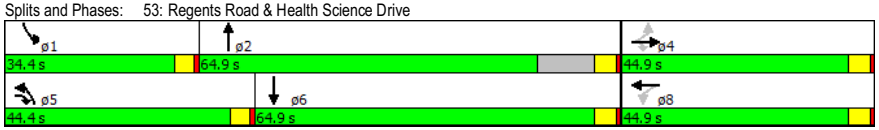
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	30	0	91	3	0	944	350	26	124
Future Volume (vph)	30	0	91	3	0	944	350	26	124
Turn Type	Perm	NA	pm+ov	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4	5		8	5	2	1	6
Permitted Phases	4		4	8					
Detector Phase	4	4	5	8	8	5	2	1	6
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	10.0	4.0	10.0
Minimum Split (s)	8.9	8.9	8.4	22.9	22.9	8.4	14.9	8.4	14.9
Total Split (s)	44.9	44.9	44.4	44.9	44.9	44.4	64.9	34.4	64.9
Total Split (%)	29.1%	29.1%	28.8%	29.1%	29.1%	28.8%	42.1%	22.3%	42.1%
Yellow Time (s)	3.9	3.9	3.4	3.9	3.9	3.4	3.9	3.4	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.9	4.4		4.9	4.4	4.9	4.4	4.9
Lead/Lag			Lead			Lead	Lag	Lead	Lag
Lead-Lag Optimize?			Yes			Yes	Yes	Yes	Yes
Recall Mode	None	None	Min	None	None	Min	None	None	None

Intersection Summary

Cycle Length: 154.2
Actuated Cycle Length: 68.9
Natural Cycle: 110
Control Type: Actuated-Uncoordinated

Splits and Phases: 53: Regents Road & Health Science Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	0	91	3	0	3	944	350	45	26	124	160
Future Volume (vph)	30	0	91	3	0	3	944	350	45	26	124	160
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9	4.4		4.9		4.4	4.9		4.4	4.9	
Lane Util. Factor		1.00	1.00		1.00		1.00	0.95		1.00	0.95	
Frt		1.00	0.85		0.93		1.00	0.98		1.00	0.92	
Flt Protected		0.95	1.00		0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1770	1583		1695		1770	3479		1770	3240	
Flt Permitted		1.00	1.00		0.83		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1863	1583		1434		1770	3479		1770	3240	
Peak-hour factor, PHF	0.93	0.93	0.93	0.80	0.80	0.80	0.85	0.85	0.85	0.80	0.80	0.80
Adj. Flow (vph)	32	0	98	4	0	4	1111	412	53	32	155	200
RTOR Reduction (vph)	0	0	39	0	8	0	0	3	0	0	159	0
Lane Group Flow (vph)	0	32	59	0	0	0	1111	462	0	33	196	0
Turn Type	Perm	NA	pm+ov	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4	5		8		5	2		1	6	
Permitted Phases	4		4	8								
Actuated Green, G (s)		3.8	45.2		3.8		41.4	54.5		2.4	15.5	
Effective Green, g (s)		3.8	45.2		3.8		41.4	54.5		2.4	15.5	
Actuated g/C Ratio		0.05	0.60		0.05		0.55	0.73		0.03	0.21	
Clearance Time (s)		4.9	4.4		4.9		4.4	4.9		4.4	4.9	
Vehicle Extension (s)		2.0	2.0		2.0		2.0	3.8		2.0	3.8	
Lane Grp Cap (vph)		94	955		72		978	2531		56	670	
v/s Ratio Prot			0.03				c0.63	0.13		0.02	c0.06	
v/s Ratio Perm		c0.02	0.00		0.00							
v/c Ratio		0.34	0.06		0.01		1.14	0.18		0.59	0.29	
Uniform Delay, d1		34.3	6.1		33.8		16.8	3.2		35.8	25.1	
Progression Factor		1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.8	0.0		0.0		73.9	0.0		9.8	0.3	
Delay (s)		35.1	6.1		33.8		90.7	3.2		45.6	25.4	
Level of Service		D	A		C		F	A		D	C	
Approach Delay (s)		13.3			33.8			64.9			27.1	
Approach LOS		B			C			E			C	

Intersection Summary

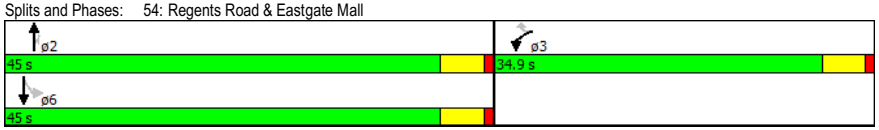
HCM 2000 Control Delay	54.6	HCM 2000 Level of Service	D	
HCM 2000 Volume to Capacity ratio	0.87			
Actuated Cycle Length (s)	74.9	Sum of lost time (s)	14.2	
Intersection Capacity Utilization	76.0%	ICU Level of Service	D	
Analysis Period (min)	15			

c Critical Lane Group

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	263	396	875	364	83	186
Future Volume (vph)	263	396	875	364	83	186
Turn Type	Prot	Perm	NA	Perm	Perm	NA
Protected Phases	3		2			6
Permitted Phases		3		2	6	
Detector Phase	3	3	2	2	6	6
Switch Phase						
Minimum Initial (s)	4.0	4.0	7.0	7.0	7.0	7.0
Minimum Split (s)	8.9	8.9	12.0	12.0	12.0	12.0
Total Split (s)	34.9	34.9	45.0	45.0	45.0	45.0
Total Split (%)	43.7%	43.7%	56.3%	56.3%	56.3%	56.3%
Yellow Time (s)	3.9	3.9	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	5.0	5.0	5.0	5.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None	None	Min	Min	Min	Min

Intersection Summary
Cycle Length: 79.9
Actuated Cycle Length: 65.5
Natural Cycle: 50
Control Type: Actuated-Uncoordinated

Splits and Phases: 54: Regents Road & Eastgate Mall



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	263	396	875	364	83	186
Future Volume (vph)	263	396	875	364	83	186
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9	5.0	5.0	5.0	5.0
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.18	1.00
Satd. Flow (perm)	1770	1583	3539	1583	339	3539
Peak-hour factor, PHF	0.80	0.80	0.81	0.81	0.87	0.87
Adj. Flow (vph)	329	495	1080	449	95	214
RTOR Reduction (vph)	0	40	0	226	0	0
Lane Group Flow (vph)	329	455	1080	223	95	214
Turn Type	Prot	Perm	NA	Perm	Perm	NA
Protected Phases	3		2			6
Permitted Phases		3		2	6	
Actuated Green, G (s)	22.7	22.7	32.2	32.2	32.2	32.2
Effective Green, g (s)	22.7	22.7	32.2	32.2	32.2	32.2
Actuated g/C Ratio	0.35	0.35	0.50	0.50	0.50	0.50
Clearance Time (s)	4.9	4.9	5.0	5.0	5.0	5.0
Vehicle Extension (s)	2.0	2.0	3.4	3.4	3.5	3.5
Lane Grp Cap (vph)	620	554	1758	786	168	1758
v/s Ratio Prot	0.19		c0.31			0.06
v/s Ratio Perm		c0.29		0.14	0.28	
v/c Ratio	0.53	0.82	0.61	0.28	0.57	0.12
Uniform Delay, d1	16.8	19.2	11.8	9.5	11.4	8.7
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.4	9.1	0.7	0.2	4.7	0.0
Delay (s)	17.2	28.3	12.5	9.8	16.1	8.8
Level of Service	B	C	B	A	B	A
Approach Delay (s)	23.9		11.7			11.0
Approach LOS	C		B			B

Intersection Summary			
HCM 2000 Control Delay	15.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	64.8	Sum of lost time (s)	9.9
Intersection Capacity Utilization	57.0%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	2	3	7	2	76	2	1119	78	318
Future Volume (vph)	2	3	7	2	76	2	1119	78	318
Turn Type	Perm	NA	Perm	NA	Perm	Prot	NA	Prot	NA
Protected Phases		4		8		5	2	1	6
Permitted Phases	4		8		8				
Detector Phase	4	4	8	8	8	5	2	1	6
Switch Phase									
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	4.0	10.0	4.0	10.0
Minimum Split (s)	11.9	11.9	11.9	11.9	11.9	8.4	14.9	8.4	14.9
Total Split (s)	34.9	34.9	44.9	44.9	44.9	34.4	64.9	34.4	64.9
Total Split (%)	24.2%	24.2%	31.1%	31.1%	31.1%	23.9%	45.0%	23.9%	45.0%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.9	3.4	3.9	3.4	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.9		4.9	4.9	4.4	4.9	4.4	4.9
Lead/Lag						Lead	Lag	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	None	Min

Intersection Summary

Cycle Length: 144.2
Actuated Cycle Length: 85.4
Natural Cycle: 60
Control Type: Actuated-Uncoordinated

Splits and Phases: 55: Regents Road & Executive Drive

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	3	3	7	2	76	2	1119	48	78	318	6
Future Volume (vph)	2	3	3	7	2	76	2	1119	48	78	318	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9			4.9	4.9	4.4	4.9		4.4	4.9	
Lane Util. Factor		1.00			1.00	1.00	1.00	0.95		1.00	0.95	
Frt		0.95			1.00	0.85	1.00	0.99		1.00	1.00	
Flt Protected		0.99			0.96	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1747			1790	1583	1770	3517		1770	3529	
Flt Permitted		0.94			0.81	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1660			1509	1583	1770	3517		1770	3529	
Peak-hour factor, PHF	0.80	0.80	0.80	0.82	0.82	0.82	0.82	0.82	0.82	0.80	0.80	0.80
Adj. Flow (vph)	2	4	4	9	2	93	2	1365	59	98	398	8
RTOR Reduction (vph)	0	4	0	0	0	83	0	2	0	0	1	0
Lane Group Flow (vph)	0	7	0	0	11	10	2	1422	0	98	405	0
Turn Type	Perm	NA		Perm	NA	Perm	Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8		8						
Actuated Green, G (s)		9.8			9.8	9.8	0.8	54.9		9.9	64.0	
Effective Green, g (s)		9.8			9.8	9.8	0.8	54.9		9.9	64.0	
Actuated g/C Ratio		0.11			0.11	0.11	0.01	0.62		0.11	0.72	
Clearance Time (s)		4.9			4.9	4.9	4.4	4.9		4.4	4.9	
Vehicle Extension (s)		2.0			3.1	3.1	2.0	3.1		2.0	3.1	
Lane Grp Cap (vph)		183			166	174	15	2174		197	2543	
v/s Ratio Prot							0.00	c0.40		c0.06	0.11	
v/s Ratio Perm		0.00			c0.01	0.01						
v/c Ratio		0.04			0.07	0.06	0.13	0.65		0.50	0.16	
Uniform Delay, d1		35.3			35.4	35.4	43.7	10.9		37.1	3.9	
Progression Factor		1.00			1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.0			0.2	0.1	1.5	0.7		0.7	0.0	
Delay (s)		35.3			35.6	35.5	45.1	11.6		37.8	3.9	
Level of Service		D			D	D	D	B		D	A	
Approach Delay (s)		35.3			35.5			11.6			10.5	
Approach LOS		D			D			B			B	

Intersection Summary

HCM 2000 Control Delay	12.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	88.8	Sum of lost time (s)	14.2
Intersection Capacity Utilization	56.4%	ICU Level of Service	B
Analysis Period (min)	15		

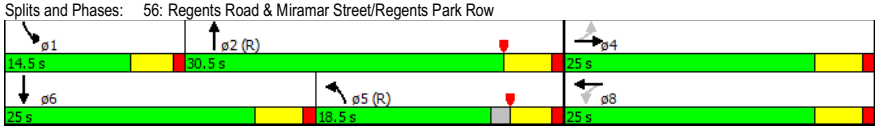
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	93	13	62	28	251	760	53	212
Future Volume (vph)	93	13	62	28	251	760	53	212
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	7.0	4.0	7.0
Minimum Split (s)	8.9	8.9	8.9	8.9	8.4	11.9	8.4	11.9
Total Split (s)	25.0	25.0	25.0	25.0	18.5	30.5	14.5	25.0
Total Split (%)	35.7%	35.7%	35.7%	35.7%	26.4%	43.6%	20.7%	35.7%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.4	3.9	3.4	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	4.9	4.9	4.4	4.9	4.4	4.9
Lead/Lag					Lag	Lag	Lead	Lead
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	C-Max	C-Max	None	Max

Intersection Summary

Cycle Length: 70
Actuated Cycle Length: 70
Offset: 10 (14%), Referenced to phase 2:NBT and 5:NBL, Start of Yellow
Natural Cycle: 50
Control Type: Actuated-Coordinated

Splits and Phases: 56: Regents Road & Miramar Street/Regents Park Row



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	93	13	225	62	28	76	251	760	220	53	212	52
Future Volume (vph)	93	13	225	62	28	76	251	760	220	53	212	52
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9		4.9	4.9		4.4	4.9		4.4	4.9	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frt	1.00	0.86		1.00	0.89		1.00	0.97		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1598		1770	1659		1770	3420		1770	3434	
Flt Permitted	0.67	1.00		0.40	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1255	1598		754	1659		1770	3420		1770	3434	
Peak-hour factor, PHF	0.97	0.97	0.97	0.80	0.80	0.80	0.81	0.81	0.81	0.87	0.87	0.87
Adj. Flow (vph)	96	13	232	78	35	95	310	938	272	61	244	60
RTOR Reduction (vph)	0	191	0	0	78	0	0	27	0	0	26	0
Lane Group Flow (vph)	96	54	0	78	52	0	310	1183	0	61	278	0
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8								
Actuated Green, G (s)	12.5	12.5		12.5	12.5		15.6	38.4		4.9	27.7	
Effective Green, g (s)	12.5	12.5		12.5	12.5		15.6	38.4		4.9	27.7	
Actuated g/C Ratio	0.18	0.18		0.18	0.18		0.22	0.55		0.07	0.40	
Clearance Time (s)	4.9	4.9		4.9	4.9		4.4	4.9		4.4	4.9	
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	3.8		2.0	3.8	
Lane Grp Cap (vph)	224	285		134	296		394	1876		123	1358	
v/s Ratio Prot		0.03			0.03		c0.18	c0.35		c0.03	0.08	
v/s Ratio Perm	0.08			c0.10								
v/c Ratio	0.43	0.19		0.58	0.18		0.79	0.63		0.50	0.20	
Uniform Delay, d1	25.6	24.4		26.4	24.4		25.6	10.9		31.4	13.9	
Progression Factor	1.00	1.00		1.00	1.00		1.35	1.64		1.00	1.00	
Incremental Delay, d2	0.5	0.1		4.1	0.1		6.8	0.7		1.1	0.3	
Delay (s)	26.1	24.6		30.5	24.5		41.5	18.6		32.5	14.2	
Level of Service	C	C		C	C		D	B		C	B	
Approach Delay (s)		25.0			26.7			23.2			17.3	
Approach LOS		C			C			C			B	

Intersection Summary

HCM 2000 Control Delay	22.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	70.0	Sum of lost time (s)	14.2
Intersection Capacity Utilization	65.3%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	50	7	61	6	131	24	1143	15	300
Future Volume (vph)	50	7	61	6	131	24	1143	15	300
Turn Type	Perm	NA	Perm	NA	pm+ov	Prot	NA	Prot	NA
Protected Phases		4		8	1	5	2	1	6
Permitted Phases	4		8		8				
Detector Phase	4	4	8	8	1	5	2	1	6
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	10.0	4.0	10.0
Minimum Split (s)	8.9	8.9	8.9	8.9	8.4	8.4	15.2	8.4	15.3
Total Split (s)	44.9	44.9	44.9	44.9	34.4	34.4	65.2	34.4	65.3
Total Split (%)	31.1%	31.1%	31.1%	31.1%	23.8%	23.8%	45.1%	23.8%	45.2%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.4	3.4	4.2	3.4	4.3
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.9		4.9	4.4	4.4	5.2	4.4	5.3
Lead/Lag					Lead	Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 144.6
Actuated Cycle Length: 75.8
Natural Cycle: 45
Control Type: Actuated-Uncoordinated

Splits and Phases: 57: Regents Road & Plaza De Palmas

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	50	7	39	61	6	131	24	1143	26	15	300	9
Future Volume (vph)	50	7	39	61	6	131	24	1143	26	15	300	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9			4.9	4.4	4.4	5.2		4.4	5.3	
Lane Util. Factor		1.00			1.00	1.00	1.00	0.91		1.00	0.95	
Frt		0.95			1.00	0.85	1.00	1.00		1.00	1.00	
Flt Protected		0.97			0.96	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1716			1781	1583	1770	5068		1770	3524	
Flt Permitted		0.79			0.68	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1397			1269	1583	1770	5068		1770	3524	
Peak-hour factor, PHF	0.80	0.80	0.80	0.81	0.81	0.81	0.80	0.80	0.80	0.80	0.80	0.80
Adj. Flow (vph)	62	9	49	75	7	162	30	1429	32	19	375	11
RTOR Reduction (vph)	0	19	0	0	0	13	0	1	0	0	1	0
Lane Group Flow (vph)	0	102	0	0	82	149	30	1461	0	19	385	0
Turn Type	Perm	NA		Perm	NA	pm+ov	Prot	NA		Prot	NA	
Protected Phases		4			8	1	5	2		1	6	
Permitted Phases	4			8		8						
Actuated Green, G (s)		13.2			13.2	19.0	3.7	43.5		5.8	45.5	
Effective Green, g (s)		13.2			13.2	19.0	3.7	43.5		5.8	45.5	
Actuated g/C Ratio		0.17			0.17	0.25	0.05	0.56		0.08	0.59	
Clearance Time (s)		4.9			4.9	4.4	4.4	5.2		4.4	5.3	
Vehicle Extension (s)		2.0			2.0	2.0	2.0	4.5		2.0	4.2	
Lane Grp Cap (vph)		239			217	390	85	2863		133	2082	
v/s Ratio Prot						c0.03	0.02	c0.29		0.01	0.11	
v/s Ratio Perm		c0.07			0.06	0.07						
v/c Ratio		0.43			0.38	0.38	0.35	0.51		0.14	0.19	
Uniform Delay, d1		28.5			28.3	24.1	35.5	10.2		33.3	7.2	
Progression Factor		1.00			1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.4			0.4	0.2	0.9	0.3		0.2	0.1	
Delay (s)		29.0			28.7	24.3	36.4	10.5		33.5	7.3	
Level of Service		C			C	C	D	B		C	A	
Approach Delay (s)		29.0			25.8			11.0			8.5	
Approach LOS		C			C			B			A	

Intersection Summary

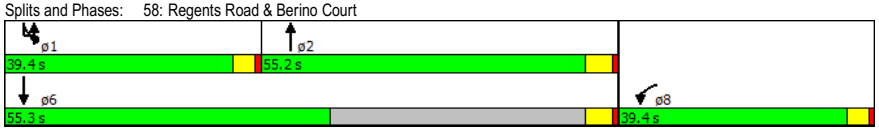
HCM 2000 Control Delay	13.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	77.0	Sum of lost time (s)	14.6
Intersection Capacity Utilization	48.4%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	WBL	NBT	SBL	SBT
Lane Configurations				
Traffic Volume (vph)	106	974	245	603
Future Volume (vph)	106	974	245	603
Turn Type	Prot	NA	Prot	NA
Protected Phases	8	2	1	6
Permitted Phases				
Detector Phase	8	2	1	6
Switch Phase				
Minimum Initial (s)	4.0	7.0	4.0	7.0
Minimum Split (s)	8.4	12.2	8.4	23.3
Total Split (s)	39.4	55.2	39.4	55.3
Total Split (%)	29.4%	41.2%	29.4%	41.3%
Yellow Time (s)	3.4	4.2	3.4	4.3
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.2	4.4	5.3
Lead/Lag		Lag	Lead	
Lead-Lag Optimize?		Yes	Yes	
Recall Mode	None	None	None	None

Intersection Summary
Cycle Length: 134
Actuated Cycle Length: 126.1
Natural Cycle: 90
Control Type: Actuated-Uncoordinated

Splits and Phases: 58: Regents Road & Berino Court



Movement	WBL	WBR	NBT	NBR	SBU	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	106	128	974	158	89	245	603
Future Volume (vph)	106	128	974	158	89	245	603
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4		5.2			4.4	5.3
Lane Util. Factor	1.00		0.95			1.00	0.95
Frt	0.93		0.98			1.00	1.00
Flt Protected	0.98		1.00			0.95	1.00
Satd. Flow (prot)	1687		3465			1770	3539
Flt Permitted	0.98		1.00			0.95	1.00
Satd. Flow (perm)	1687		3465			1770	3539
Peak-hour factor, PHF	0.80	0.80	0.80	0.80	0.92	0.80	0.80
Adj. Flow (vph)	132	160	1218	198	97	306	754
RTOR Reduction (vph)	0	0	10	0	0	0	0
Lane Group Flow (vph)	293	0	1406	0	0	403	754
Turn Type	Prot		NA		Prot	Prot	NA
Protected Phases	8		2		1	1	6
Permitted Phases							
Actuated Green, G (s)	30.4		50.1			31.6	86.0
Effective Green, g (s)	30.4		50.1			31.6	86.0
Actuated g/C Ratio	0.24		0.40			0.25	0.68
Clearance Time (s)	4.4		5.2			4.4	5.3
Vehicle Extension (s)	2.0		3.9			2.0	3.7
Lane Grp Cap (vph)	406		1376			443	2413
v/s Ratio Prot	c0.17		c0.41			c0.23	0.21
v/s Ratio Perm							
v/c Ratio	0.72		1.02			0.91	0.31
Uniform Delay, d1	44.0		38.0			45.9	8.1
Progression Factor	1.00		1.00			1.00	1.00
Incremental Delay, d2	5.3		30.0			21.8	0.1
Delay (s)	49.3		68.0			67.7	8.2
Level of Service	D		E			E	A
Approach Delay (s)	49.3		68.0				28.9
Approach LOS	D		E				C

Intersection Summary			
HCM 2000 Control Delay	50.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.91		
Actuated Cycle Length (s)	126.1	Sum of lost time (s)	14.0
Intersection Capacity Utilization	75.9%	ICU Level of Service	D
Analysis Period (min)	15		

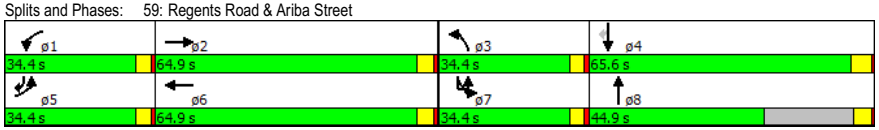
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	113	14	121	57	423	883	29	531	124
Future Volume (vph)	113	14	121	57	423	883	29	531	124
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA	pm+ov
Protected Phases	5	2	1	6	3	8	7	4	5
Permitted Phases									4
Detector Phase	5	2	1	6	3	8	7	4	5
Switch Phase									
Minimum Initial (s)	4.0	7.0	4.0	7.0	4.0	7.0	4.0	7.0	4.0
Minimum Split (s)	8.4	11.9	8.4	11.9	8.4	11.9	8.4	12.6	8.4
Total Split (s)	34.4	64.9	34.4	64.9	34.4	44.9	34.4	65.6	34.4
Total Split (%)	17.3%	32.6%	17.3%	32.6%	17.3%	22.5%	17.3%	32.9%	17.3%
Yellow Time (s)	3.4	3.9	3.4	3.9	3.4	3.9	3.4	4.6	3.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	4.9	4.4	4.9	4.4	4.9	4.4	5.6	4.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 199.3
Actuated Cycle Length: 126.4
Natural Cycle: 90
Control Type: Actuated-Uncoordinated

Splits and Phases: 59: Regents Road & Ariba Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	113	14	394	121	57	53	423	883	193	99	29	531
Future Volume (vph)	113	14	394	121	57	53	423	883	193	99	29	531
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	4.9		4.4	4.9			4.4	5.6
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95			1.00	0.95
Frt	1.00	0.86		1.00	0.93		1.00	0.97			1.00	1.00
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			0.95	1.00
Satd. Flow (prot)	1770	3027		1770	3283		1770	3444			1770	3539
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00			0.95	1.00
Satd. Flow (perm)	1770	3027		1770	3283		1770	3444			1770	3539
Peak-hour factor, PHF	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.92	0.80	0.80
Adj. Flow (vph)	141	18	492	151	71	66	529	1104	241	108	36	664
RTOR Reduction (vph)	0	296	0	0	52	0	0	8	0	0	0	0
Lane Group Flow (vph)	141	215	0	151	85	0	529	1337	0	0	144	664
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	Prot	NA
Protected Phases	5	2		1	6		3	8		7	7	4
Permitted Phases												
Actuated Green, G (s)	15.4	26.6		16.1	27.3		30.7	49.1			15.6	33.3
Effective Green, g (s)	15.4	26.6		16.1	27.3		30.7	49.1			15.6	33.3
Actuated g/C Ratio	0.12	0.21		0.13	0.22		0.24	0.39			0.12	0.26
Clearance Time (s)	4.4	4.9		4.4	4.9		4.4	4.9			4.4	5.6
Vehicle Extension (s)	2.0	6.3		2.0	5.9		2.0	4.8			2.0	4.4
Lane Grp Cap (vph)	216	639		226	711		431	1342			219	935
v/s Ratio Prot	0.08	c0.07		c0.09	0.03		c0.30	c0.39			0.08	0.19
v/s Ratio Perm												
v/c Ratio	0.65	0.34		0.67	0.12		1.23	1.00			0.66	0.71
Uniform Delay, d1	52.7	42.2		52.4	39.7		47.6	38.4			52.7	42.0
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2	5.3	1.0		5.7	0.2		121.3	23.6			5.3	2.9
Delay (s)	58.1	43.2		58.1	39.9		169.0	61.9			58.0	44.9
Level of Service	E	D		E	D		F	E			E	D
Approach Delay (s)		46.4			49.4			92.2				43.6
Approach LOS		D			D			F				D

Intersection Summary

HCM 2000 Control Delay	68.6	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	126.0	Sum of lost time (s)	19.3
Intersection Capacity Utilization	74.1%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

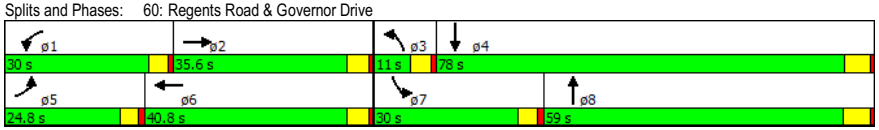
Movement	SBR
Lane Configurations	
Traffic Volume (vph)	124
Future Volume (vph)	124
Ideal Flow (vphpl)	1900
Total Lost time (s)	4.4
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1583
Flt Permitted	1.00
Satd. Flow (perm)	1583
Peak-hour factor, PHF	0.80
Adj. Flow (vph)	155
RTOR Reduction (vph)	95
Lane Group Flow (vph)	60
Turn Type	pm+ov
Protected Phases	5
Permitted Phases	4
Actuated Green, G (s)	48.7
Effective Green, g (s)	48.7
Actuated g/C Ratio	0.39
Clearance Time (s)	4.4
Vehicle Extension (s)	2.0
Lane Grp Cap (vph)	611
v/s Ratio Prot	0.01
v/s Ratio Perm	0.03
v/c Ratio	0.10
Uniform Delay, d1	24.6
Progression Factor	1.00
Incremental Delay, d2	0.0
Delay (s)	24.7
Level of Service	C
Approach Delay (s)	
Approach LOS	

Intersection Summary

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	171	66	307	64	23	1231	340	551
Future Volume (vph)	171	66	307	64	23	1231	340	551
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	5	2	1	6	3	8	7	4
Permitted Phases								
Detector Phase	5	2	1	6	3	8	7	4
Switch Phase								
Minimum Initial (s)	4.0	4.0	4.0	7.0	5.0	7.0	5.0	4.0
Minimum Split (s)	8.4	32.9	8.4	33.9	9.5	34.8	9.5	35.5
Total Split (s)	24.8	35.6	30.0	40.8	11.0	59.0	30.0	78.0
Total Split (%)	16.0%	23.0%	19.4%	26.4%	7.1%	38.2%	19.4%	50.5%
Yellow Time (s)	3.4	3.9	3.4	3.9	3.5	4.8	3.5	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	4.9	4.4	4.9	4.5	5.8	4.5	5.5
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Min	None	Min	None	None	None	None

Intersection Summary
Cycle Length: 154.6
Actuated Cycle Length: 140.4
Natural Cycle: 150
Control Type: Actuated-Uncoordinated

Splits and Phases: 60: Regents Road & Governor Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	171	66	39	307	64	97	23	1231	135	340	551	155
Future Volume (vph)	171	66	39	307	64	97	23	1231	135	340	551	155
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	4.9		4.5	5.8		4.5	5.5	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	0.94		1.00	0.91		1.00	0.99		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3342		1770	3220		1770	3487		1770	3423	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	3342		1770	3220		1770	3487		1770	3423	
Peak-hour factor, PHF	0.80	0.80	0.80	0.80	0.80	0.80	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	214	82	49	384	80	121	26	1368	150	378	612	172
RTOR Reduction (vph)	0	43	0	0	102	0	0	5	0	0	14	0
Lane Group Flow (vph)	214	89	0	384	99	0	26	1513	0	378	770	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases												
Actuated Green, G (s)	19.7	16.1		25.7	22.1		3.8	55.4		25.6	77.5	
Effective Green, g (s)	19.7	16.1		25.7	22.1		3.8	55.4		25.6	77.5	
Actuated g/C Ratio	0.14	0.11		0.18	0.16		0.03	0.39		0.18	0.54	
Clearance Time (s)	4.4	4.9		4.4	4.9		4.5	5.8		4.5	5.5	
Vehicle Extension (s)	2.0	4.5		2.0	5.0		3.0	4.6		3.0	2.0	
Lane Grp Cap (vph)	244	377		319	499		47	1356		318	1862	
v/s Ratio Prot	0.12	c0.03		c0.22	0.03		0.01	c0.43		c0.21	0.22	
v/s Ratio Perm												
v/c Ratio	0.88	0.23		1.20	0.20		0.55	1.12		1.19	0.41	
Uniform Delay, d1	60.2	57.5		58.4	52.4		68.5	43.5		58.4	19.1	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	27.1	0.6		117.7	0.4		13.3	62.8		112.0	0.1	
Delay (s)	87.2	58.1		176.0	52.8		81.8	106.3		170.4	19.1	
Level of Service	F	E		F	D		F	F		F	B	
Approach Delay (s)		76.1			133.7			105.8			68.3	
Approach LOS		E			F			F			E	

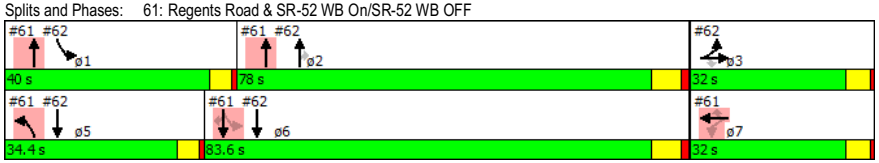
Intersection Summary			
HCM 2000 Control Delay	95.5	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.03		
Actuated Cycle Length (s)	142.4	Sum of lost time (s)	19.6
Intersection Capacity Utilization	93.8%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	WBT	WBR	NBL	NBT	SBL	SBT	SBR	ø1	ø2	ø3
Lane Configurations										
Traffic Volume (vph)	1	127	481	1123	1	676	343			
Future Volume (vph)	1	127	481	1123	1	676	343			
Turn Type	NA	Perm	Prot	NA	Perm	NA	Perm			
Protected Phases	7		5	1 2		6		1	2	3
Permitted Phases		7			6		6			
Detector Phase	7	7	5	1 2	6	6	6			
Switch Phase										
Minimum Initial (s)	5.0	5.0	5.0		13.0	13.0	13.0	5.0	13.0	5.0
Minimum Split (s)	10.1	10.1	9.7		23.7	23.7	23.7	22.7	23.7	10.1
Total Split (s)	32.0	32.0	34.4		83.6	83.6	83.6	40.0	78.0	32.0
Total Split (%)	21.3%	21.3%	22.9%		55.7%	55.7%	55.7%	27%	52%	21%
Yellow Time (s)	4.1	4.1	3.7		5.2	5.2	5.2	3.7	5.2	4.1
All-Red Time (s)	1.0	1.0	1.0		1.5	1.5	1.5	1.0	1.5	1.0
Lost Time Adjust (s)	0.0	0.0	0.0			0.0	0.0			
Total Lost Time (s)	5.1	5.1	4.7			6.7	6.7			
Lead/Lag			Lead		Lag	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?			Yes		Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None	None		Max	Max	Max	None	Max	None

Intersection Summary
Cycle Length: 150
Actuated Cycle Length: 150
Natural Cycle: 100
Control Type: Actuated-Uncoordinated

Splits and Phases: 61: Regents Road & SR-52 WB On/SR-52 WB OFF



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	305	1	127	481	1123	0	1	676	343
Future Volume (vph)	0	0	0	305	1	127	481	1123	0	1	676	343
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					5.1	5.1	4.7	4.7			6.7	6.7
Lane Util. Factor					1.00	1.00	0.97	0.95			0.95	1.00
Frt					1.00	0.85	1.00	1.00			1.00	0.85
Flt Protected					0.95	1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)					1774	1583	3433	3539			3539	1583
Flt Permitted					0.95	1.00	0.95	1.00			0.95	1.00
Satd. Flow (perm)					1774	1583	3433	3539			3377	1583
Peak-hour factor, PHF	0.25	0.25	0.25	0.80	0.80	0.80	0.96	0.96	0.96	0.89	0.89	0.89
Adj. Flow (vph)	0	0	0	381	1	159	501	1170	0	1	760	385
RTOR Reduction (vph)	0	0	0	0	0	96	0	0	0	0	0	182
Lane Group Flow (vph)	0	0	0	0	382	63	501	1170	0	0	761	203
Turn Type				Perm	NA	Perm	Prot	NA		Perm	NA	Perm
Protected Phases					7		5	1 2			6	
Permitted Phases				7		7				6		6
Actuated Green, G (s)					26.9	26.9	27.4	111.3			79.2	79.2
Effective Green, g (s)					26.9	26.9	27.4	111.3			79.2	79.2
Actuated g/C Ratio					0.18	0.18	0.18	0.74			0.53	0.53
Clearance Time (s)					5.1	5.1	4.7				6.7	6.7
Vehicle Extension (s)					2.0	2.0	2.0				3.0	3.0
Lane Grp Cap (vph)					318	283	627	2625			1783	835
v/s Ratio Prot							c0.15	c0.33				
v/s Ratio Perm					0.22	0.04					0.23	0.13
v/c Ratio					1.20	0.22	0.80	0.45			0.43	0.24
Uniform Delay, d1					61.5	52.6	58.7	7.5			21.6	19.2
Progression Factor					1.00	1.00	1.17	0.91			1.00	1.00
Incremental Delay, d2					116.8	0.1	3.0	0.1			0.7	0.7
Delay (s)					178.3	52.8	71.5	6.8			22.3	19.9
Level of Service					F	D	E	A			C	B
Approach Delay (s)		0.0			141.4			26.2			21.5	
Approach LOS		A			F			C			C	

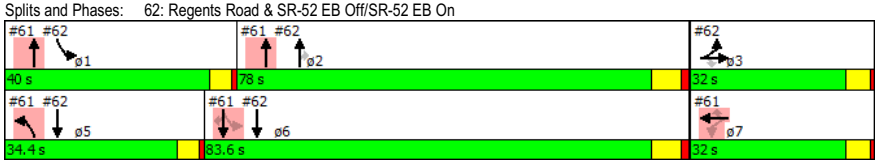
Intersection Summary			
HCM 2000 Control Delay	43.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	16.5
Intersection Capacity Utilization	83.0%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	EBR	NBT	NBR	SBL	SBT	ø5	ø6	ø7
Lane Configurations										
Traffic Volume (vph)	245	0	112	1470	417	351	565			
Future Volume (vph)	245	0	112	1470	417	351	565			
Turn Type	Split	NA	Perm	NA	Perm	Prot	NA			
Protected Phases	3	3		2		1	5 6	5	6	7
Permitted Phases			3		2					
Detector Phase	3	3	3	2	2	1	5 6			
Switch Phase										
Minimum Initial (s)	5.0	5.0	5.0	13.0	13.0	5.0		5.0	13.0	5.0
Minimum Split (s)	10.1	10.1	10.1	23.7	23.7	22.7		9.7	23.7	10.1
Total Split (s)	32.0	32.0	32.0	78.0	78.0	40.0		34.4	83.6	32.0
Total Split (%)	21.3%	21.3%	21.3%	52.0%	52.0%	26.7%		23%	56%	21%
Yellow Time (s)	4.1	4.1	4.1	5.2	5.2	3.7		3.7	5.2	4.1
All-Red Time (s)	1.0	1.0	1.0	1.5	1.5	1.0		1.0	1.5	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0				
Total Lost Time (s)	5.1	5.1	5.1	6.7	6.7	4.7				
Lead/Lag				Lag	Lag	Lead		Lead	Lag	
Lead-Lag Optimize?				Yes	Yes	Yes		Yes	Yes	
Recall Mode	None	None	None	Max	Max	None		None	Max	None

Intersection Summary
Cycle Length: 150
Actuated Cycle Length: 150
Natural Cycle: 100
Control Type: Actuated-Uncoordinated

Splits and Phases: 62: Regents Road & SR-52 EB Off/SR-52 EB On



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	245	0	112	0	0	0	0	1470	417	351	565	0
Future Volume (vph)	245	0	112	0	0	0	0	1470	417	351	565	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1	5.1					6.7	6.7	4.7	4.7	
Lane Util. Factor	0.95	0.95	1.00					0.95	1.00	1.00	0.95	
Frt	1.00	1.00	0.85					1.00	0.85	1.00	1.00	
Flt Protected	0.95	0.95	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1681	1681	1583					3539	1583	1770	3539	
Flt Permitted	0.95	0.95	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1681	1681	1583					3539	1583	1770	3539	
Peak-hour factor, PHF	0.80	0.80	0.80	0.25	0.25	0.25	0.91	0.91	0.91	0.80	0.80	0.80
Adj. Flow (vph)	306	0	140	0	0	0	0	1615	458	439	706	0
RTOR Reduction (vph)	0	0	78	0	0	0	0	0	44	0	0	0
Lane Group Flow (vph)	153	153	62	0	0	0	0	1615	414	439	706	0
Turn Type	Split	NA	Perm					NA	Perm	Prot	NA	
Protected Phases	3	3						2		1	5 6	
Permitted Phases			3						2			
Actuated Green, G (s)	26.9	26.9	26.9					71.3	71.3	35.3	111.3	
Effective Green, g (s)	26.9	26.9	26.9					71.3	71.3	35.3	111.3	
Actuated g/C Ratio	0.18	0.18	0.18					0.48	0.48	0.24	0.74	
Clearance Time (s)	5.1	5.1	5.1					6.7	6.7	4.7		
Vehicle Extension (s)	2.0	2.0	2.0					3.0	3.0	3.0		
Lane Grp Cap (vph)	301	301	283					1682	752	416	2625	
v/s Ratio Prot	c0.09	0.09						c0.46		c0.25	0.20	
v/s Ratio Perm			0.04						0.26			
v/c Ratio	0.51	0.51	0.22					0.96	0.55	1.06	0.27	
Uniform Delay, d1	55.6	55.6	52.6					38.0	28.0	57.4	6.2	
Progression Factor	1.00	1.00	1.00					1.00	1.00	1.30	1.08	
Incremental Delay, d2	0.5	0.5	0.1					14.3	2.9	52.9	0.0	
Delay (s)	56.1	56.1	52.7					52.3	30.9	127.3	6.8	
Level of Service	E	E	D					D	C	F	A	
Approach Delay (s)		55.0			0.0			47.6			53.0	
Approach LOS		E			A			D			D	

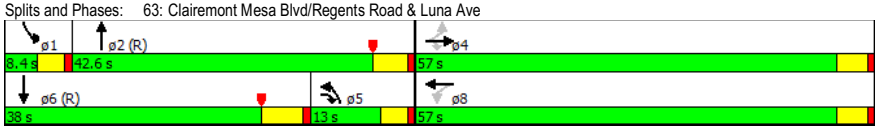
Intersection Summary			
HCM 2000 Control Delay	50.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	16.5
Intersection Capacity Utilization	80.6%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	588	5	81	7	9	104	1215	11	395
Future Volume (vph)	588	5	81	7	9	104	1215	11	395
Turn Type	Perm	NA	pm+ov	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4	5		8	5	2	1	6
Permitted Phases	4		4	8					
Detector Phase	4	4	5	8	8	5	2	1	6
Switch Phase									
Minimum Initial (s)	10.0	10.0	4.0	1.0	1.0	4.0	10.0	4.0	4.0
Minimum Split (s)	14.9	14.9	8.4	5.9	5.9	8.4	15.3	8.4	10.2
Total Split (s)	57.0	57.0	13.0	57.0	57.0	13.0	42.6	8.4	38.0
Total Split (%)	52.8%	52.8%	12.0%	52.8%	52.8%	12.0%	39.4%	7.8%	35.2%
Yellow Time (s)	3.9	3.9	3.4	3.9	3.9	3.4	4.3	3.4	5.2
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.9	4.4		4.9	4.4	5.3	4.4	6.2
Lead/Lag			Lag			Lag	Lag	Lead	Lead
Lead-Lag Optimize?			Yes			Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	None	C-Max

Intersection Summary
Cycle Length: 108
Actuated Cycle Length: 108
Offset: 78 (72%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 110
Control Type: Actuated-Coordinated

Splits and Phases: 63: Clairemont Mesa Blvd/Regents Road & Luna Ave



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	588	5	81	7	9	87	104	1215	5	11	395	271
Future Volume (vph)	588	5	81	7	9	87	104	1215	5	11	395	271
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9	4.4		4.9		4.4	5.3		4.4	6.2	
Lane Util. Factor		1.00	1.00		1.00		1.00	0.95		1.00	0.95	
Frt		1.00	0.85		0.89		1.00	1.00		1.00	0.94	
Flt Protected		0.95	1.00		1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1775	1583		1645		1770	3537		1770	3323	
Flt Permitted		0.65	1.00		0.96		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1211	1583		1577		1770	3537		1770	3323	
Peak-hour factor, PHF	0.87	0.87	0.87	0.80	0.80	0.80	0.94	0.94	0.94	0.80	0.80	0.80
Adj. Flow (vph)	676	6	93	9	11	109	111	1293	5	14	494	339
RTOR Reduction (vph)	0	0	38	0	56	0	0	0	0	0	118	0
Lane Group Flow (vph)	0	682	55	0	73	0	111	1298	0	14	715	0
Turn Type	Perm	NA	pm+ov	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4	5		8		5	2		1	6	
Permitted Phases	4		4	8								
Actuated Green, G (s)		52.1	63.3		52.1		11.2	39.7		1.6	29.2	
Effective Green, g (s)		52.1	63.3		52.1		11.2	39.7		1.6	29.2	
Actuated g/C Ratio		0.48	0.59		0.48		0.10	0.37		0.01	0.27	
Clearance Time (s)		4.9	4.4		4.9		4.4	5.3		4.4	6.2	
Vehicle Extension (s)		4.0	2.0		2.0		2.0	4.4		2.0	3.2	
Lane Grp Cap (vph)		584	992		760		183	1300		26	898	
v/s Ratio Prot			0.01				0.06	c0.37		0.01	c0.22	
v/s Ratio Perm		c0.56	0.03		0.05							
v/c Ratio		1.17	0.05		0.10		0.61	1.00		0.54	0.80	
Uniform Delay, d1		27.9	9.6		15.2		46.3	34.1		52.8	36.6	
Progression Factor		1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		92.9	0.0		0.0		3.9	24.6		10.3	7.2	
Delay (s)		120.9	9.6		15.2		50.2	58.7		63.1	43.9	
Level of Service		F	A		B		D	E		E	D	
Approach Delay (s)		107.5			15.2			58.0			44.2	
Approach LOS		F			B			E			D	

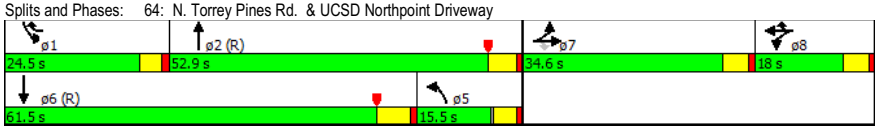
Intersection Summary				
HCM 2000 Control Delay	64.7	HCM 2000 Level of Service	E	
HCM 2000 Volume to Capacity ratio	1.12			
Actuated Cycle Length (s)	108.0	Sum of lost time (s)	15.5	
Intersection Capacity Utilization	88.8%	ICU Level of Service	E	
Analysis Period (min)	15			

c Critical Lane Group

Lane Group	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	23	16	38	17	45	76	672	129	502
Future Volume (vph)	23	16	38	17	45	76	672	129	502
Turn Type	NA	Perm	Split	NA	pt+ov	Prot	NA	Prot	NA
Protected Phases	7		8	8	8 1	5	2	1	6
Permitted Phases		7							
Detector Phase	7	7	8	8	8 1	5	2	1	6
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	4.0		4.0	10.0	4.0	10.0
Minimum Split (s)	8.9	8.9	8.9	8.9		8.4	15.3	8.4	15.9
Total Split (s)	34.6	34.6	18.0	18.0		15.5	52.9	24.5	61.5
Total Split (%)	26.6%	26.6%	13.8%	13.8%		11.9%	40.7%	18.8%	47.3%
Yellow Time (s)	3.9	3.9	3.9	3.9		3.4	4.3	3.4	4.9
All-Red Time (s)	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	4.9	4.9		4.4	5.3	4.4	5.9
Lead/Lag	Lead	Lead	Lag	Lag		Lag	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None		None	C-Max	None	C-Max

Intersection Summary
Cycle Length: 130
Actuated Cycle Length: 130
Offset: 72 (55%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 55
Control Type: Actuated-Coordinated

Splits and Phases: 64: N. Torrey Pines Rd. & UCSD Northpoint Driveway



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	23	16	38	17	45	76	672	111	129	502	59
Future Volume (vph)	10	23	16	38	17	45	76	672	111	129	502	59
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9	4.9	4.9	4.9	4.9	4.4	5.3		4.4	5.9	
Lane Util. Factor		1.00	1.00	1.00	1.00	1.00	1.00	0.95		0.97	0.95	
Frt		1.00	0.85	1.00	1.00	0.85	1.00	0.98		1.00	0.98	
Flt Protected		0.99	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1835	1583	1770	1863	1583	1770	3464		3433	3483	
Flt Permitted		0.99	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1835	1583	1770	1863	1583	1770	3464		3433	3483	
Peak-hour factor, PHF	0.89	0.89	0.89	0.80	0.80	0.80	0.89	0.89	0.89	0.91	0.91	0.91
Adj. Flow (vph)	11	26	18	48	21	56	85	755	125	142	552	65
RTOR Reduction (vph)	0	0	16	0	0	47	0	6	0	0	5	0
Lane Group Flow (vph)	0	37	2	48	21	9	85	874	0	142	612	0
Turn Type	Split	NA	Perm	Split	NA	pt+ov	Prot	NA		Prot	NA	
Protected Phases	7	7		8	8	8 1	5	2		1	6	
Permitted Phases			7									
Actuated Green, G (s)		14.4	14.4	7.0	7.0	21.7	11.5	79.3		9.8	77.0	
Effective Green, g (s)		14.4	14.4	7.0	7.0	21.7	11.5	79.3		9.8	77.0	
Actuated g/C Ratio		0.11	0.11	0.05	0.05	0.17	0.09	0.61		0.08	0.59	
Clearance Time (s)		4.9	4.9	4.9	4.9		4.4	5.3		4.4	5.9	
Vehicle Extension (s)		2.0	2.0	2.0	2.0		2.0	4.8		2.0	4.7	
Lane Grp Cap (vph)		203	175	95	100	264	156	2113		258	2063	
v/s Ratio Prot		c0.02		c0.03	0.01	0.01	c0.05	c0.25		c0.04	0.18	
v/s Ratio Perm			0.00									
v/c Ratio		0.18	0.01	0.51	0.21	0.04	0.54	0.41		0.55	0.30	
Uniform Delay, d1		52.5	51.5	59.8	58.9	45.4	56.7	13.2		58.0	13.1	
Progression Factor		1.00	1.00	1.00	1.00	1.00	1.00	1.00		0.75	1.48	
Incremental Delay, d2		0.2	0.0	1.5	0.4	0.0	2.1	0.6		1.3	0.3	
Delay (s)		52.6	51.5	61.4	59.2	45.4	58.8	13.8		44.8	19.7	
Level of Service		D	D	E	E	D	E	B		D	B	
Approach Delay (s)		52.2			53.9			17.8			24.4	
Approach LOS		D			D			B			C	

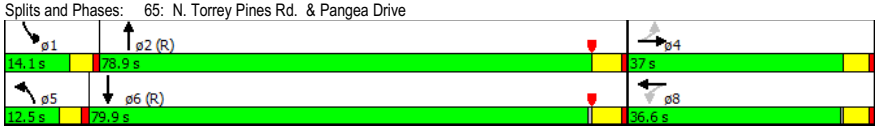
Intersection Summary				
HCM 2000 Control Delay	23.8	HCM 2000 Level of Service	C	
HCM 2000 Volume to Capacity ratio	0.41			
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	20.1	
Intersection Capacity Utilization	46.7%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	9	0	13	0	10	1083	39	387
Future Volume (vph)	9	0	13	0	10	1083	39	387
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	7.0	7.0	7.0	7.0	4.0	10.0	4.0	10.0
Minimum Split (s)	11.9	11.9	11.9	11.9	8.4	15.3	8.4	15.3
Total Split (s)	37.0	37.0	36.6	36.6	12.5	78.9	14.1	79.9
Total Split (%)	28.5%	28.5%	28.2%	28.2%	9.6%	60.7%	10.8%	61.5%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.4	4.3	3.4	4.3
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.9	4.9	4.9	4.4	5.3	4.4	5.3
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	None	C-Max

Intersection Summary
Cycle Length: 130
Actuated Cycle Length: 130
Offset: 59 (45%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 55
Control Type: Actuated-Coordinated

Splits and Phases: 65: N. Torrey Pines Rd. & Pangea Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	9	0	10	13	0	14	10	1083	53	39	387	10
Future Volume (vph)	9	0	10	13	0	14	10	1083	53	39	387	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9		4.9	4.9		4.4	5.3		4.4	5.3	
Lane Util. Factor		1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frt		0.93		1.00	0.85		1.00	0.99		1.00	1.00	
Flt Protected		0.98		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1688		1770	1583		1770	3514		1770	3526	
Flt Permitted		0.88		0.74	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1526		1381	1583		1770	3514		1770	3526	
Peak-hour factor, PHF	0.80	0.80	0.80	0.81	0.81	0.81	0.90	0.90	0.90	0.93	0.93	0.93
Adj. Flow (vph)	11	0	12	16	0	17	11	1203	59	42	416	11
RTOR Reduction (vph)	0	22	0	0	15	0	0	2	0	0	1	0
Lane Group Flow (vph)	0	2	0	16	2	0	11	1260	0	42	426	0
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8								
Actuated Green, G (s)		13.4		13.4	13.4		2.5	95.4		6.6	99.5	
Effective Green, g (s)		13.4		13.4	13.4		2.5	95.4		6.6	99.5	
Actuated g/C Ratio		0.10		0.10	0.10		0.02	0.73		0.05	0.77	
Clearance Time (s)		4.9		4.9	4.9		4.4	5.3		4.4	5.3	
Vehicle Extension (s)		2.0		2.0	2.0		2.0	5.7		2.0	5.5	
Lane Grp Cap (vph)		157		142	163		34	2578		89	2698	
v/s Ratio Prot					0.00		0.01	c0.36		c0.02	c0.12	
v/s Ratio Perm		0.00		c0.01								
v/c Ratio		0.02		0.11	0.01		0.32	0.49		0.47	0.16	
Uniform Delay, d1		52.4		52.9	52.3		62.9	7.2		60.0	4.1	
Progression Factor		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.0		0.1	0.0		2.0	0.7		1.4	0.1	
Delay (s)		52.4		53.0	52.4		64.9	7.8		61.4	4.2	
Level of Service		D		D	D		E	A		E	A	
Approach Delay (s)		52.4			52.7			8.3			9.3	
Approach LOS		D			D			A			A	

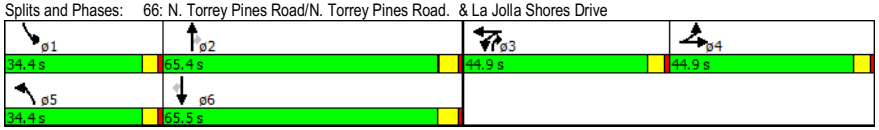
Intersection Summary			
HCM 2000 Control Delay	10.0	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.44		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	14.6
Intersection Capacity Utilization	48.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	203	13	24	21	176	1536	62	29	276	131
Future Volume (vph)	203	13	24	21	176	1536	62	29	276	131
Turn Type	Split	NA	Split	NA	Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	4	4	3	3	5	2	3	1	6	
Permitted Phases							2			6
Detector Phase	4	4	3	3	5	2	3	1	6	6
Switch Phase										
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	10.0	4.0	4.0	10.0	10.0
Minimum Split (s)	8.9	8.9	8.9	8.9	8.4	15.4	8.9	8.4	15.5	15.5
Total Split (s)	44.9	44.9	44.9	44.9	34.4	65.4	44.9	34.4	65.5	65.5
Total Split (%)	23.7%	23.7%	23.7%	23.7%	18.1%	34.5%	23.7%	18.1%	34.5%	34.5%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.4	4.4	3.9	3.4	4.5	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	4.9	4.9	4.4	5.4	4.9	4.4	5.5	5.5
Lead/Lag	Lag	Lag	Lead	Lead	Lead	Lag	Lead	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 189.7
Actuated Cycle Length: 139.3
Natural Cycle: 90
Control Type: Actuated-Uncoordinated

Splits and Phases: 66: N. Torrey Pines Road/N. Torrey Pines Road. & La Jolla Shores Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	203	13	122	24	21	62	176	1536	62	29	276	131
Future Volume (vph)	203	13	122	24	21	62	176	1536	62	29	276	131
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9		4.9	4.9		4.4	5.4	4.9	4.4	5.5	5.5
Lane Util. Factor	0.95	0.95		0.97	1.00		1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	0.89		1.00	0.89		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	0.99		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1681	1555		3433	1653		1770	3539	1583	1770	3539	1583
Flt Permitted	0.95	0.99		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1681	1555		3433	1653		1770	3539	1583	1770	3539	1583
Peak-hour factor, PHF	0.90	0.90	0.90	0.80	0.80	0.80	0.93	0.93	0.93	0.80	0.80	0.80
Adj. Flow (vph)	226	14	136	30	26	78	189	1652	67	36	345	164
RTOR Reduction (vph)	0	62	0	0	59	0	0	0	13	0	0	0
Lane Group Flow (vph)	197	117	0	30	45	0	189	1652	54	36	345	164
Turn Type	Split	NA		Split	NA		Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	4	4		3	3		5	2	3	1	6	
Permitted Phases									2			6
Actuated Green, G (s)	25.6	25.6		25.7	25.7		19.1	62.8	88.5	6.1	49.7	49.7
Effective Green, g (s)	25.6	25.6		25.7	25.7		19.1	62.8	88.5	6.1	49.7	49.7
Actuated g/C Ratio	0.18	0.18		0.18	0.18		0.14	0.45	0.63	0.04	0.36	0.36
Clearance Time (s)	4.9	4.9		4.9	4.9		4.4	5.4	4.9	4.4	5.5	5.5
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	4.0	2.0	2.0	3.9	3.9
Lane Grp Cap (vph)	307	284		631	303		241	1589	1002	77	1258	562
v/s Ratio Prot	c0.12	0.08		0.01	c0.03		c0.11	c0.47	0.01	0.02	0.10	
v/s Ratio Perm									0.02			0.10
v/c Ratio	0.64	0.41		0.05	0.15		0.78	1.04	0.05	0.47	0.27	0.29
Uniform Delay, d1	52.9	50.4		47.0	47.9		58.4	38.5	9.7	65.3	32.2	32.4
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	3.4	0.4		0.0	0.1		14.2	33.6	0.0	1.6	0.2	0.4
Delay (s)	56.3	50.8		47.0	48.0		72.6	72.1	9.8	66.9	32.3	32.8
Level of Service	E	D		D	D		E	E	A	E	C	C
Approach Delay (s)		53.7			47.7			70.0			34.7	
Approach LOS		D			D			E			C	

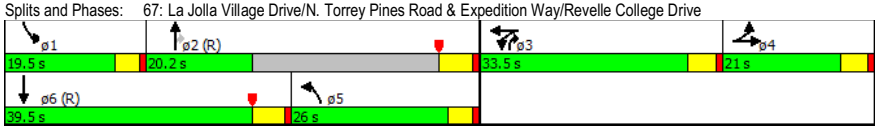
Intersection Summary			
HCM 2000 Control Delay	60.4	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	139.8	Sum of lost time (s)	19.7
Intersection Capacity Utilization	74.4%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	7	32	18	24	239	1763	145	46	359
Future Volume (vph)	7	32	18	24	239	1763	145	46	359
Turn Type	Split	NA	Split	NA	Prot	NA	pm+ov	Prot	NA
Protected Phases	4	4	3	3	5	2	3	1	6
Permitted Phases							2		
Detector Phase	4	4	3	3	5	2	3	1	6
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	10.0	4.0	4.0	10.0
Minimum Split (s)	8.9	8.9	8.9	8.9	8.4	15.6	8.9	8.4	15.4
Total Split (s)	21.0	21.0	33.5	33.5	26.0	20.2	33.5	19.5	39.5
Total Split (%)	17.5%	17.5%	27.9%	27.9%	21.7%	16.8%	27.9%	16.3%	32.9%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.4	4.6	3.9	3.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	4.9	4.9	4.4	5.6	4.9	4.4	5.4
Lead/Lag	Lag	Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	None	None	C-Max

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 27 (23%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 80
Control Type: Actuated-Coordinated

Splits and Phases: 67: La Jolla Village Drive/N. Torrey Pines Road & Expedition Way/Revelle College Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	7	32	46	18	24	8	239	1763	145	46	359	16
Future Volume (vph)	7	32	46	18	24	8	239	1763	145	46	359	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9		4.9	4.9		4.4	5.6	4.9	4.4	5.4	
Lane Util. Factor	0.95	0.95		0.97	1.00		1.00	0.95	1.00	1.00	0.95	
Frt	1.00	0.91		1.00	0.96		1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1681	1613		3433	1793		1770	3539	1583	1770	3517	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1681	1613		3433	1793		1770	3539	1583	1770	3517	
Peak-hour factor, PHF	0.91	0.91	0.91	0.80	0.80	0.80	0.94	0.94	0.94	0.80	0.80	0.80
Adj. Flow (vph)	8	35	51	22	30	10	254	1876	154	58	449	20
RTOR Reduction (vph)	0	46	0	0	9	0	0	0	40	0	2	0
Lane Group Flow (vph)	7	41	0	23	31	0	254	1876	114	58	467	0
Turn Type	Split	NA		Split	NA		Prot	NA	pm+ov	Prot	NA	
Protected Phases	4	4		3	3		5	2	3	1	6	
Permitted Phases									2			
Actuated Green, G (s)	7.7	7.7		10.3	10.3		22.5	74.8	85.1	7.4	59.9	
Effective Green, g (s)	7.7	7.7		10.3	10.3		22.5	74.8	85.1	7.4	59.9	
Actuated g/C Ratio	0.06	0.06		0.09	0.09		0.19	0.62	0.71	0.06	0.50	
Clearance Time (s)	4.9	4.9		4.9	4.9		4.4	5.6	4.9	4.4	5.4	
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	4.0	2.0	2.0	4.2	
Lane Grp Cap (vph)	107	103		294	153		331	2205	1122	109	1755	
v/s Ratio Prot	0.00	c0.03		0.01	c0.02		0.14	c0.53	0.01	c0.03	0.13	
v/s Ratio Perm									0.06			
v/c Ratio	0.07	0.40		0.08	0.20		0.77	0.85	0.10	0.53	0.27	
Uniform Delay, d1	52.8	53.9		50.5	51.0		46.3	18.1	5.5	54.6	17.4	
Progression Factor	1.00	1.00		1.00	1.00		0.95	0.81	2.67	1.00	1.00	
Incremental Delay, d2	0.1	0.9		0.0	0.2		8.1	3.8	0.0	2.5	0.4	
Delay (s)	52.9	54.9		50.5	51.3		52.2	18.4	14.6	57.1	17.7	
Level of Service	D	D		D	D		D	B	B	E	B	
Approach Delay (s)		54.7			51.0			21.9			22.1	
Approach LOS		D			D			C			C	

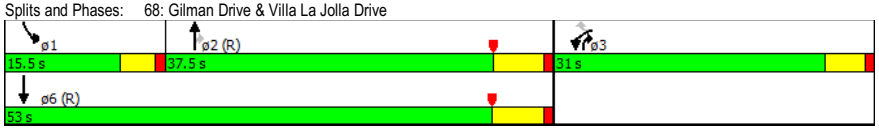
Intersection Summary			
HCM 2000 Control Delay	23.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	19.8
Intersection Capacity Utilization	71.7%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	25	281	852	44	369	366
Future Volume (vph)	25	281	852	44	369	366
Turn Type	Prot	Perm	NA	pm+ov	Prot	NA
Protected Phases	3		2	3	1	6
Permitted Phases		3		2		
Detector Phase	3	3	2	3	1	6
Switch Phase						
Minimum Initial (s)	4.0	4.0	7.0	4.0	4.0	7.0
Minimum Split (s)	8.9	8.9	12.9	8.9	8.4	13.0
Total Split (s)	31.0	31.0	37.5	31.0	15.5	53.0
Total Split (%)	36.9%	36.9%	44.6%	36.9%	18.5%	63.1%
Yellow Time (s)	3.9	3.9	4.9	3.9	3.4	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	5.9	4.9	4.4	6.0
Lead/Lag			Lag		Lead	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None	None	C-Max	None	None	C-Max

Intersection Summary
Cycle Length: 84
Actuated Cycle Length: 84
Offset: 9 (11%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 70
Control Type: Actuated-Coordinated

Splits and Phases: 68: Gilman Drive & Villa La Jolla Drive



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	25	281	852	44	369	366
Future Volume (vph)	25	281	852	44	369	366
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9	5.9	4.9	4.4	6.0
Lane Util. Factor	0.97	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	3433	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	3433	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.80	0.80	0.80	0.80	0.80	0.80
Adj. Flow (vph)	31	351	1065	55	461	458
RTOR Reduction (vph)	0	264	0	5	0	0
Lane Group Flow (vph)	31	87	1065	50	461	458
Turn Type	Prot	Perm	NA	pm+ov	Prot	NA
Protected Phases	3		2	3	1	6
Permitted Phases		3		2		
Actuated Green, G (s)	10.3	10.3	31.6	41.9	26.9	62.8
Effective Green, g (s)	10.3	10.3	31.6	41.9	26.9	62.8
Actuated g/C Ratio	0.12	0.12	0.38	0.50	0.32	0.75
Clearance Time (s)	4.9	4.9	5.9	4.9	4.4	6.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	420	194	1331	789	566	2645
v/s Ratio Prot	0.01		c0.30	0.01	c0.26	0.13
v/s Ratio Perm		c0.05		0.02		
v/c Ratio	0.07	0.45	0.80	0.06	0.81	0.17
Uniform Delay, d1	32.6	34.2	23.4	10.9	26.3	3.1
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.1	1.6	5.1	0.0	8.8	0.1
Delay (s)	32.7	35.9	28.5	10.9	35.0	3.2
Level of Service	C	D	C	B	D	A
Approach Delay (s)	35.6		27.6			19.2
Approach LOS	D		C			B

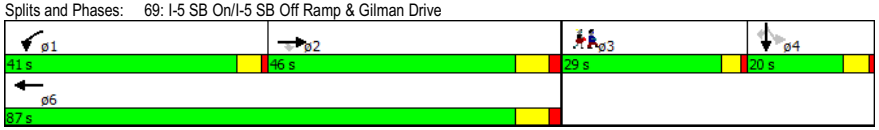
Intersection Summary			
HCM 2000 Control Delay	25.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	84.0	Sum of lost time (s)	15.2
Intersection Capacity Utilization	60.0%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBT	EBR	WBL	WBT	SBT	SBR	ø3
Lane Configurations							
Traffic Volume (vph)	83	585	234	941	0	76	
Future Volume (vph)	83	585	234	941	0	76	
Turn Type	NA	Perm	Prot	NA	NA	Perm	
Protected Phases	2		1	6	4		3
Permitted Phases		2				4	
Detector Phase	2	2	1	6	4	4	
Switch Phase							
Minimum Initial (s)	13.0	13.0	5.0	12.0	5.0	5.0	1.0
Minimum Split (s)	20.2	20.2	9.7	19.2	17.1	17.1	29.0
Total Split (s)	46.0	46.0	41.0	87.0	20.0	20.0	29.0
Total Split (%)	33.8%	33.8%	30.1%	64.0%	14.7%	14.7%	21%
Yellow Time (s)	5.2	5.2	3.7	5.2	4.1	4.1	3.0
All-Red Time (s)	2.0	2.0	1.0	2.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	7.2	7.2	4.7	7.2	5.1	5.1	
Lead/Lag	Lag	Lag	Lead		Lag	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes
Recall Mode	Min	Min	None	Min	None	None	None

Intersection Summary
Cycle Length: 136
Actuated Cycle Length: 44.6
Natural Cycle: 80
Control Type: Actuated-Uncoordinated

Splits and Phases: 69: I-5 SB On/I-5 SB Off Ramp & Gilman Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	83	585	234	941	0	0	0	0	12	0	76
Future Volume (vph)	0	83	585	234	941	0	0	0	0	12	0	76
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		7.2	7.2	4.7	7.2						5.1	5.1
Lane Util. Factor		1.00	0.88	1.00	0.95						1.00	1.00
Frt		1.00	0.85	1.00	1.00						1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00						0.95	1.00
Satd. Flow (prot)		1863	2787	1770	3539						1770	1583
Flt Permitted		1.00	1.00	0.95	1.00						0.95	1.00
Satd. Flow (perm)		1863	2787	1770	3539						1770	1583
Peak-hour factor, PHF	0.84	0.84	0.84	0.94	0.94	0.94	0.25	0.25	0.25	0.80	0.80	0.80
Adj. Flow (vph)	0	99	696	249	1001	0	0	0	0	15	0	95
RTOR Reduction (vph)	0	0	490	0	0	0	0	0	0	0	0	86
Lane Group Flow (vph)	0	99	206	249	1001	0	0	0	0	0	15	9
Turn Type		NA	Perm	Prot	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases			2							4		4
Actuated Green, G (s)		13.5	13.5	11.0	29.2						4.2	4.2
Effective Green, g (s)		13.5	13.5	11.0	29.2						4.2	4.2
Actuated g/C Ratio		0.30	0.30	0.24	0.64						0.09	0.09
Clearance Time (s)		7.2	7.2	4.7	7.2						5.1	5.1
Vehicle Extension (s)		2.0	2.0	2.0	2.0						2.0	2.0
Lane Grp Cap (vph)		550	823	426	2261						162	145
v/s Ratio Prot		0.05		c0.14	c0.28							
v/s Ratio Perm			0.07								0.01	0.01
v/c Ratio		0.18	0.25	0.58	0.44						0.09	0.06
Uniform Delay, d1		12.0	12.2	15.3	4.2						19.0	18.9
Progression Factor		1.00	1.00	1.00	1.00						1.00	1.00
Incremental Delay, d2		0.1	0.1	1.3	0.1						0.1	0.1
Delay (s)		12.0	12.3	16.7	4.2						19.1	19.0
Level of Service		B	B	B	A						B	B
Approach Delay (s)		12.3			6.7			0.0			19.0	
Approach LOS		B			A			A			B	

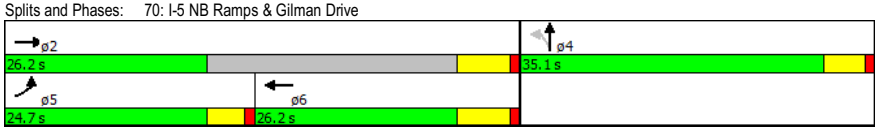
Intersection Summary			
HCM 2000 Control Delay	9.4	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	45.7	Sum of lost time (s)	21.0
Intersection Capacity Utilization	73.9%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBT	NBL	NBT
Lane Configurations					
Traffic Volume (vph)	68	28	328	880	0
Future Volume (vph)	68	28	328	880	0
Turn Type	Prot	NA	NA	Perm	NA
Protected Phases	5	2	6		4
Permitted Phases				4	
Detector Phase	5	2	6	4	4
Switch Phase					
Minimum Initial (s)	5.0	12.0	12.0	5.0	5.0
Minimum Split (s)	9.7	18.2	18.2	10.1	10.1
Total Split (s)	24.7	26.2	26.2	35.1	35.1
Total Split (%)	28.7%	30.5%	30.5%	40.8%	40.8%
Yellow Time (s)	3.7	5.2	5.2	4.1	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.7	6.2	6.2	5.1	5.1
Lead/Lag	Lead		Lag		
Lead-Lag Optimize?	Yes		Yes		
Recall Mode	None	Min	Min	None	None

Intersection Summary
Cycle Length: 86
Actuated Cycle Length: 60.8
Natural Cycle: 60
Control Type: Actuated-Uncoordinated

Splits and Phases: 70: I-5 NB Ramps & Gilman Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	68	28	0	0	328	54	880	0	95	0	0	0
Future Volume (vph)	68	28	0	0	328	54	880	0	95	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.7	6.2			6.2		5.1	5.1				
Lane Util. Factor	1.00	1.00			0.95		0.95	0.95				
Frt	1.00	1.00			0.98		1.00	0.97				
Flt Protected	0.95	1.00			1.00		0.95	0.96				
Satd. Flow (prot)	1770	1863			3464		1681	1651				
Flt Permitted	0.95	1.00			1.00		0.95	0.96				
Satd. Flow (perm)	1770	1863			3464		1681	1651				
Peak-hour factor, PHF	0.80	0.80	0.80	0.84	0.84	0.84	0.95	0.95	0.95	0.25	0.25	0.25
Adj. Flow (vph)	85	35	0	0	390	64	926	0	100	0	0	0
RTOR Reduction (vph)	0	0	0	0	15	0	0	59	0	0	0	0
Lane Group Flow (vph)	85	35	0	0	439	0	519	448	0	0	0	0
Turn Type	Prot	NA			NA		Perm	NA				
Protected Phases	5	2			6			4				
Permitted Phases							4					
Actuated Green, G (s)	6.2	25.0			14.1		25.1	25.1				
Effective Green, g (s)	6.2	25.0			14.1		25.1	25.1				
Actuated g/C Ratio	0.10	0.41			0.23		0.41	0.41				
Clearance Time (s)	4.7	6.2			6.2		5.1	5.1				
Vehicle Extension (s)	2.0	2.0			2.0		2.0	2.0				
Lane Grp Cap (vph)	178	758			795		687	674				
v/s Ratio Prot	c0.05	0.02			c0.13							
v/s Ratio Perm							c0.31	0.27				
v/c Ratio	0.48	0.05			0.55		0.76	0.66				
Uniform Delay, d1	26.1	11.0			20.9		15.5	14.7				
Progression Factor	1.00	1.00			1.00		1.00	1.00				
Incremental Delay, d2	0.7	0.0			0.5		4.2	1.9				
Delay (s)	26.8	11.0			21.3		19.7	16.7				
Level of Service	C	B			C		B	B				
Approach Delay (s)		22.2			21.3			18.2			0.0	
Approach LOS		C			C			B			A	

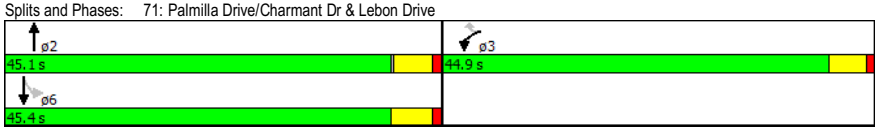
Intersection Summary			
HCM 2000 Control Delay	19.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	61.4	Sum of lost time (s)	16.0
Intersection Capacity Utilization	73.9%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Configurations					
Traffic Volume (vph)	141	13	55	115	163
Future Volume (vph)	141	13	55	115	163
Turn Type	Prot	Perm	NA	Perm	NA
Protected Phases	3		2		6
Permitted Phases		3		6	
Detector Phase	3	3	2	6	6
Switch Phase					
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	11.9	11.9	12.1	12.4	12.4
Total Split (s)	44.9	44.9	45.1	45.4	45.4
Total Split (%)	49.7%	49.7%	49.9%	50.3%	50.3%
Yellow Time (s)	3.9	3.9	4.1	4.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	5.1	5.4	5.4
Lead/Lag					
Lead-Lag Optimize?					
Recall Mode	Min	Min	None	None	None

Intersection Summary
Cycle Length: 90.3
Actuated Cycle Length: 41.6
Natural Cycle: 40
Control Type: Actuated-Uncoordinated

Splits and Phases: 71: Palmilla Drive/Charmant Dr & Lebon Drive



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	141	13	55	637	115	163
Future Volume (vph)	141	13	55	637	115	163
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9	5.1		5.4	5.4
Lane Util. Factor	0.97	0.91	0.95		1.00	0.95
Frt	1.00	0.85	0.86		1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	3437	1441	3050		1770	3539
Flt Permitted	0.95	1.00	1.00		0.31	1.00
Satd. Flow (perm)	3437	1441	3050		577	3539
Peak-hour factor, PHF	0.88	0.88	0.82	0.82	0.93	0.93
Adj. Flow (vph)	160	15	67	777	124	175
RTOR Reduction (vph)	2	10	389	0	0	0
Lane Group Flow (vph)	161	3	456	0	124	175
Turn Type	Prot	Perm	NA		Perm	NA
Protected Phases	3		2			6
Permitted Phases		3			6	
Actuated Green, G (s)	10.0	10.0	20.0		19.7	19.7
Effective Green, g (s)	10.0	10.0	20.0		19.7	19.7
Actuated g/C Ratio	0.25	0.25	0.50		0.49	0.49
Clearance Time (s)	4.9	4.9	5.1		5.4	5.4
Vehicle Extension (s)	2.0	2.0	3.8		3.4	3.4
Lane Grp Cap (vph)	859	360	1525		284	1742
v/s Ratio Prot	c0.05		0.15			0.05
v/s Ratio Perm		0.00			c0.21	
v/c Ratio	0.19	0.01	0.30		0.44	0.10
Uniform Delay, d1	11.8	11.3	5.9		6.6	5.4
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	0.0	0.0	0.1		1.2	0.0
Delay (s)	11.8	11.3	6.0		7.8	5.4
Level of Service	B	B	A		A	A
Approach Delay (s)	11.8		6.0			6.4
Approach LOS	B		A			A

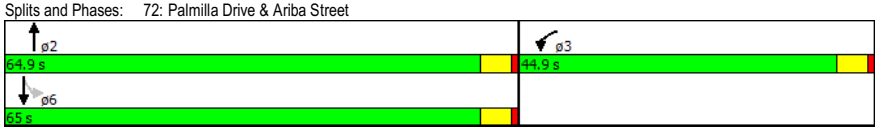
Intersection Summary				
HCM 2000 Control Delay	6.9	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.35		
Actuated Cycle Length (s)	40.0	Sum of lost time (s)	10.3
Intersection Capacity Utilization	47.2%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	WBL	NBT	SBL	SBT
Lane Configurations				
Traffic Volume (vph)	154	74	303	51
Future Volume (vph)	154	74	303	51
Turn Type	Prot	NA	Perm	NA
Protected Phases	3	2		6
Permitted Phases			6	
Detector Phase	3	2	6	6
Switch Phase				
Minimum Initial (s)	6.0	7.0	7.0	7.0
Minimum Split (s)	10.9	11.9	12.0	12.0
Total Split (s)	44.9	64.9	65.0	65.0
Total Split (%)	40.9%	59.1%	59.1%	59.1%
Yellow Time (s)	3.9	3.9	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	5.0	5.0
Lead/Lag				
Lead-Lag Optimize?				
Recall Mode	None	Min	Min	Min

Intersection Summary
Cycle Length: 109.9
Actuated Cycle Length: 49.8
Natural Cycle: 55
Control Type: Actuated-Uncoordinated

Splits and Phases: 72: Palmilla Drive & Ariba Street



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	154	378	74	201	303	51
Future Volume (vph)	154	378	74	201	303	51
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9		4.9		5.0	5.0
Lane Util. Factor	0.97		0.95		1.00	0.95
Frt	0.89		0.89		1.00	1.00
Flt Protected	0.99		1.00		0.95	1.00
Satd. Flow (prot)	3183		3151		1770	3539
Flt Permitted	0.99		1.00		0.55	1.00
Satd. Flow (perm)	3183		3151		1032	3539
Peak-hour factor, PHF	0.83	0.83	0.84	0.84	0.80	0.80
Adj. Flow (vph)	186	455	88	239	379	64
RTOR Reduction (vph)	339	0	110	0	0	0
Lane Group Flow (vph)	302	0	217	0	379	64
Turn Type	Prot		NA		Perm	NA
Protected Phases	3		2			6
Permitted Phases					6	
Actuated Green, G (s)	12.3		26.0		25.9	25.9
Effective Green, g (s)	12.3		26.0		25.9	25.9
Actuated g/C Ratio	0.26		0.54		0.54	0.54
Clearance Time (s)	4.9		4.9		5.0	5.0
Vehicle Extension (s)	2.0		4.0		3.8	3.8
Lane Grp Cap (vph)	813		1703		555	1905
v/s Ratio Prot	c0.09		0.07			0.02
v/s Ratio Perm					c0.37	
v/c Ratio	0.37		0.13		0.68	0.03
Uniform Delay, d1	14.7		5.5		8.1	5.2
Progression Factor	1.00		1.00		1.00	1.00
Incremental Delay, d2	0.1		0.0		3.7	0.0
Delay (s)	14.8		5.5		11.8	5.2
Level of Service	B		A		B	A
Approach Delay (s)	14.8		5.5			10.8
Approach LOS	B		A			B

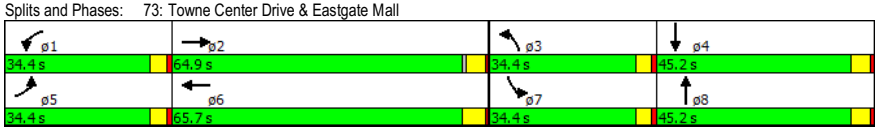
Intersection Summary			
HCM 2000 Control Delay	11.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	48.1	Sum of lost time (s)	9.9
Intersection Capacity Utilization	54.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	102	251	96	541	254	592	12	48
Future Volume (vph)	102	251	96	541	254	592	12	48
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	5	2	1	6	3	8	7	4
Permitted Phases								
Detector Phase	5	2	1	6	3	8	7	4
Switch Phase								
Minimum Initial (s)	4.0	7.0	4.0	7.0	4.0	7.0	4.0	7.0
Minimum Split (s)	8.4	11.9	8.4	12.7	8.4	12.2	8.4	12.7
Total Split (s)	34.4	64.9	34.4	65.7	34.4	45.2	34.4	45.2
Total Split (%)	19.1%	36.1%	19.1%	36.6%	19.1%	25.2%	19.1%	25.2%
Yellow Time (s)	3.4	3.9	3.4	4.7	3.4	4.2	3.4	4.2
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	4.9	4.4	5.7	4.4	5.2	4.4	5.2
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 179.7
Actuated Cycle Length: 95.9
Natural Cycle: 65
Control Type: Actuated-Uncoordinated

Splits and Phases: 73: Towne Center Drive & Eastgate Mall



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	102	251	148	96	541	114	254	592	321	12	48	8
Future Volume (vph)	102	251	148	96	541	114	254	592	321	12	48	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	5.7		4.4	5.2		4.4	5.2	
Lane Util. Factor	0.97	0.95		1.00	0.95		0.97	0.95		0.97	0.95	
Frt	1.00	0.94		1.00	0.97		1.00	0.95		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	3433	3343		1770	3447		3433	3353		3433	3463	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	3433	3343		1770	3447		3433	3353		3433	3463	
Peak-hour factor, PHF	0.94	0.94	0.94	0.96	0.96	0.96	0.86	0.86	0.86	0.80	0.80	0.80
Adj. Flow (vph)	109	267	157	100	564	119	295	688	373	15	60	10
RTOR Reduction (vph)	0	53	0	0	11	0	0	31	0	0	8	0
Lane Group Flow (vph)	109	371	0	100	672	0	295	1030	0	15	62	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases												
Actuated Green, G (s)	7.9	26.6		10.4	28.3		20.7	40.7		1.9	21.9	
Effective Green, g (s)	7.9	26.6		10.4	28.3		20.7	40.7		1.9	21.9	
Actuated g/C Ratio	0.08	0.27		0.11	0.29		0.21	0.41		0.02	0.22	
Clearance Time (s)	4.4	4.9		4.4	5.7		4.4	5.2		4.4	5.2	
Vehicle Extension (s)	2.0	5.1		2.0	4.8		2.0	5.1		2.0	4.8	
Lane Grp Cap (vph)	275	902		186	990		721	1385		66	769	
v/s Ratio Prot	0.03	0.11		c0.06	c0.20		c0.09	c0.31		0.00	0.02	
v/s Ratio Perm												
v/c Ratio	0.40	0.41		0.54	0.68		0.41	0.74		0.23	0.08	
Uniform Delay, d1	43.0	29.5		41.8	31.1		33.6	24.5		47.6	30.3	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.3	0.7		1.5	2.3		0.1	2.7		0.6	0.1	
Delay (s)	43.4	30.2		43.3	33.4		33.8	27.2		48.2	30.4	
Level of Service	D	C		D	C		C	C		D	C	
Approach Delay (s)		32.9			34.7			28.6			33.6	
Approach LOS		C			C			C			C	

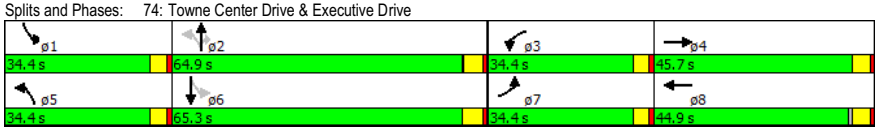
Intersection Summary			
HCM 2000 Control Delay	31.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	98.5	Sum of lost time (s)	19.7
Intersection Capacity Utilization	61.3%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	96	304	37	148	258	784	567	40	152
Future Volume (vph)	96	304	37	148	258	784	567	40	152
Turn Type	Prot	NA	Prot	NA	pm+pt	NA	Perm	pm+pt	NA
Protected Phases	7	4	3	8	5	2		1	6
Permitted Phases					2		2	6	
Detector Phase	7	4	3	8	5	2	2	1	6
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	7.0	4.0	7.0	7.0	4.0	7.0
Minimum Split (s)	8.4	8.9	8.4	11.9	8.4	11.9	11.9	8.4	12.3
Total Split (s)	34.4	45.7	34.4	44.9	34.4	64.9	64.9	34.4	65.3
Total Split (%)	19.1%	25.4%	19.1%	25.0%	19.1%	36.1%	36.1%	19.1%	36.3%
Yellow Time (s)	3.4	3.9	3.4	3.9	3.4	3.9	3.9	3.4	4.3
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	4.9	4.4	4.9	4.4	4.9	4.9	4.4	5.3
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Min	Min	None	Min

Intersection Summary
Cycle Length: 179.8
Actuated Cycle Length: 94.8
Natural Cycle: 60
Control Type: Actuated-Uncoordinated

Splits and Phases: 74: Towne Center Drive & Executive Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	96	304	24	37	148	26	258	784	567	40	152	63
Future Volume (vph)	96	304	24	37	148	26	258	784	567	40	152	63
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	4.9		4.4	4.9	4.9	4.4	5.3	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95	1.00	1.00	0.95	
Frt	1.00	0.99		1.00	0.98		1.00	1.00	0.85	1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3500		1770	3459		1770	3539	1583	1770	3383	
Flt Permitted	0.95	1.00		0.95	1.00		0.50	1.00	1.00	0.33	1.00	
Satd. Flow (perm)	1770	3500		1770	3459		939	3539	1583	619	3383	
Peak-hour factor, PHF	0.84	0.84	0.84	0.80	0.80	0.80	0.95	0.95	0.95	0.80	0.80	0.80
Adj. Flow (vph)	114	362	29	46	185	32	272	825	597	50	190	79
RTOR Reduction (vph)	0	3	0	0	8	0	0	0	193	0	26	0
Lane Group Flow (vph)	114	388	0	46	210	0	272	825	404	50	243	0
Turn Type	Prot	NA		Prot	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases							2		2	6		
Actuated Green, G (s)	11.8	25.3		6.0	19.5		50.7	41.6	41.6	34.2	29.5	
Effective Green, g (s)	11.8	25.3		6.0	19.5		50.7	41.6	41.6	34.2	29.5	
Actuated g/C Ratio	0.12	0.26		0.06	0.20		0.53	0.43	0.43	0.36	0.31	
Clearance Time (s)	4.4	4.9		4.4	4.9		4.4	4.9	4.9	4.4	5.3	
Vehicle Extension (s)	2.0	5.3		2.0	5.4		2.0	3.8	3.8	2.0	3.8	
Lane Grp Cap (vph)	217	920		110	701		636	1530	684	276	1037	
v/s Ratio Prot	c0.06	c0.11		0.03	0.06		c0.07	0.23		0.01	0.07	
v/s Ratio Perm							0.15		c0.26	0.06		
v/c Ratio	0.53	0.42		0.42	0.30		0.43	0.54	0.59	0.18	0.23	
Uniform Delay, d1	39.6	29.4		43.4	32.6		12.9	20.2	20.8	20.6	24.9	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	1.1	0.7		0.9	0.6		0.2	0.4	1.5	0.1	0.2	
Delay (s)	40.6	30.1		44.4	33.1		13.0	20.7	22.4	20.7	25.1	
Level of Service	D	C		D	C		B	C	C	C	C	
Approach Delay (s)		32.5			35.1			20.0			24.4	
Approach LOS		C			D			C			C	

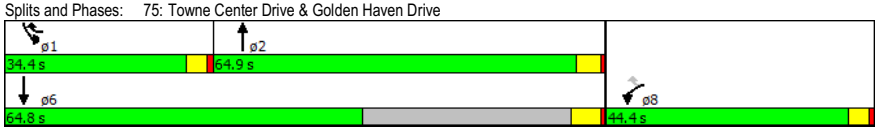
Intersection Summary			
HCM 2000 Control Delay	24.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.55		
Actuated Cycle Length (s)	96.2	Sum of lost time (s)	19.0
Intersection Capacity Utilization	59.4%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Configurations					
Traffic Volume (vph)	170	443	315	185	92
Future Volume (vph)	170	443	315	185	92
Turn Type	Prot	pm+ov	NA	Prot	NA
Protected Phases	8	1	2	1	6
Permitted Phases		8			
Detector Phase	8	1	2	1	6
Switch Phase					
Minimum Initial (s)	4.0	4.0	10.0	4.0	10.0
Minimum Split (s)	33.4	8.4	14.9	8.4	15.8
Total Split (s)	44.4	34.4	64.9	34.4	64.8
Total Split (%)	30.9%	23.9%	45.2%	23.9%	45.1%
Yellow Time (s)	3.4	3.4	3.9	3.4	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	4.4	4.9	4.4	5.8
Lead/Lag		Lead	Lag	Lead	
Lead-Lag Optimize?		Yes	Yes	Yes	
Recall Mode	None	None	None	None	None

Intersection Summary
Cycle Length: 143.7
Actuated Cycle Length: 66.1
Natural Cycle: 65
Control Type: Actuated-Uncoordinated

Splits and Phases: 75: Towne Center Drive & Golden Haven Drive



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	170	443	315	312	185	92
Future Volume (vph)	170	443	315	312	185	92
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	0%		0%			-7%
Total Lost time (s)	4.4	4.4	4.9		4.4	5.8
Lane Util. Factor	1.00	1.00	0.95		1.00	0.95
Frt	1.00	0.85	0.93		1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1770	1583	3275		1832	3663
Flt Permitted	0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)	1770	1583	3275		1832	3663
Peak-hour factor, PHF	0.91	0.91	0.86	0.86	0.85	0.85
Adj. Flow (vph)	187	487	366	363	218	108
RTOR Reduction (vph)	0	202	136	0	0	0
Lane Group Flow (vph)	187	285	593	0	218	108
Turn Type	Prot	pm+ov	NA		Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8				
Actuated Green, G (s)	13.9	27.6	23.6		13.7	40.8
Effective Green, g (s)	13.9	27.6	23.6		13.7	40.8
Actuated g/C Ratio	0.21	0.43	0.36		0.21	0.63
Clearance Time (s)	4.4	4.4	4.9		4.4	5.8
Vehicle Extension (s)	2.0	2.0	5.0		2.0	5.0
Lane Grp Cap (vph)	379	780	1190		386	2302
v/s Ratio Prot	c0.11	0.08	c0.18		c0.12	0.03
v/s Ratio Perm		0.10				
v/c Ratio	0.49	0.37	0.50		0.56	0.05
Uniform Delay, d1	22.4	12.7	16.0		22.9	4.6
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	0.4	0.1	0.7		1.1	0.0
Delay (s)	22.8	12.8	16.7		24.1	4.6
Level of Service	C	B	B		C	A
Approach Delay (s)	15.6		16.7			17.6
Approach LOS	B		B			B

Intersection Summary				
HCM 2000 Control Delay	16.4	HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio	0.51			
Actuated Cycle Length (s)	64.9	Sum of lost time (s)	13.7	
Intersection Capacity Utilization	53.9%	ICU Level of Service	A	
Analysis Period (min)	15			
c Critical Lane Group				

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	88	344	60	342	388	127	153	21	41
Future Volume (vph)	88	344	60	342	388	127	153	21	41
Turn Type	Perm	NA	Perm	NA	pm+pt	NA	Perm	pm+pt	NA
Protected Phases		4		8	5	2		1	6
Permitted Phases	4		8		2		2	6	
Detector Phase	4	4	8	8	5	2	2	1	6
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	7.0	7.0	4.0	7.0
Minimum Split (s)	8.9	8.9	8.4	8.4	8.4	11.9	11.9	8.4	11.9
Total Split (s)	44.9	44.9	44.4	44.4	34.4	64.9	64.9	34.4	64.9
Total Split (%)	31.1%	31.1%	30.8%	30.8%	23.9%	45.0%	45.0%	23.9%	45.0%
Yellow Time (s)	3.9	3.9	3.4	3.4	3.4	3.9	3.9	3.4	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	4.4	4.4	4.4	4.9	4.9	4.4	4.9
Lead/Lag					Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Min	Min	None	Min

Intersection Summary
Cycle Length: 144.2
Actuated Cycle Length: 63.7
Natural Cycle: 55
Control Type: Actuated-Uncoordinated

Splits and Phases: 76: Executive Way & Executive Drive

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	88	344	82	60	342	45	388	127	153	21	41	41
Future Volume (vph)	88	344	82	60	342	45	388	127	153	21	41	41
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9		4.4	4.4		4.4	4.9	4.9	4.4	4.9	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.97		1.00	0.98		1.00	1.00	0.85	1.00	0.93	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3437		1770	3477		1770	1863	1583	1770	1723	
Flt Permitted	0.41	1.00		0.36	1.00		0.52	1.00	1.00	0.66	1.00	
Satd. Flow (perm)	767	3437		668	3477		978	1863	1583	1231	1723	
Peak-hour factor, PHF	0.85	0.85	0.85	0.90	0.90	0.90	0.84	0.84	0.84	0.80	0.80	0.80
Adj. Flow (vph)	104	405	96	67	380	50	462	151	182	26	51	51
RTOR Reduction (vph)	0	15	0	0	8	0	0	0	87	0	34	0
Lane Group Flow (vph)	104	486	0	67	422	0	462	151	95	26	68	0
Turn Type	Perm	NA		Perm	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2		2	6		
Actuated Green, G (s)	15.5	15.5		16.0	16.0		40.6	34.4	34.4	15.7	13.9	
Effective Green, g (s)	15.5	15.5		16.0	16.0		40.6	34.4	34.4	15.7	13.9	
Actuated g/C Ratio	0.24	0.24		0.24	0.24		0.62	0.52	0.52	0.24	0.21	
Clearance Time (s)	4.9	4.9		4.4	4.4		4.4	4.9	4.9	4.4	4.9	
Vehicle Extension (s)	2.0	2.0		2.3	2.3		2.0	2.9	2.9	2.0	2.6	
Lane Grp Cap (vph)	180	808		162	844		870	972	826	307	363	
v/s Ratio Prot		c0.14			0.12		c0.18	0.08		0.00	0.04	
v/s Ratio Perm	0.14			0.10			c0.15		0.06	0.02		
v/c Ratio	0.58	0.60		0.41	0.50		0.53	0.16	0.12	0.08	0.19	
Uniform Delay, d1	22.3	22.4		21.0	21.5		6.8	8.2	8.0	19.4	21.4	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	2.8	0.9		1.0	0.3		0.3	0.1	0.1	0.0	0.2	
Delay (s)	25.1	23.3		22.0	21.8		7.1	8.3	8.1	19.4	21.6	
Level of Service	C	C		C	C		A	A	A	B	C	
Approach Delay (s)		23.6			21.8			7.6			21.1	
Approach LOS		C			C			A			C	

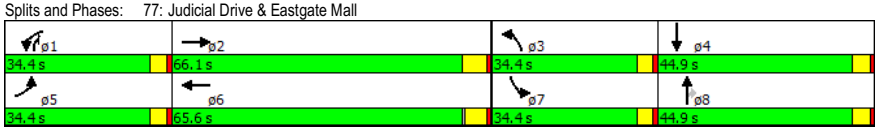
Intersection Summary			
HCM 2000 Control Delay	16.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	65.9	Sum of lost time (s)	14.2
Intersection Capacity Utilization	55.8%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	135	332	455	571	256	240	288	4	17
Future Volume (vph)	135	332	455	571	256	240	288	4	17
Turn Type	Prot	NA	Prot	NA	Prot	NA	pm+ov	Prot	NA
Protected Phases	5	2	1	6	3	8	1	7	4
Permitted Phases							8		
Detector Phase	5	2	1	6	3	8	1	7	4
Switch Phase									
Minimum Initial (s)	4.0	7.0	4.0	7.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.4	13.1	8.4	12.6	8.4	8.9	8.4	8.4	8.9
Total Split (s)	34.4	66.1	34.4	65.6	34.4	44.9	34.4	34.4	44.9
Total Split (%)	19.1%	36.8%	19.1%	36.5%	19.1%	25.0%	19.1%	19.1%	25.0%
Yellow Time (s)	3.4	5.1	3.4	4.6	3.4	3.9	3.4	3.4	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	6.1	4.4	5.6	4.4	4.9	4.4	4.4	4.9
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 179.8
Actuated Cycle Length: 99.5
Natural Cycle: 80
Control Type: Actuated-Uncoordinated

Splits and Phases: 77: Judicial Drive & Eastgate Mall



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	135	332	60	455	571	79	256	240	288	4	17	12
Future Volume (vph)	135	332	60	455	571	79	256	240	288	4	17	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	6.1		4.4	5.6		4.4	4.9	4.4	4.4	4.9	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.98		1.00	0.98		1.00	1.00	0.85	1.00	0.94	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3457		1770	3475		1770	1863	1583	1770	1746	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	3457		1770	3475		1770	1863	1583	1770	1746	
Peak-hour factor, PHF	0.93	0.93	0.93	0.84	0.84	0.84	0.94	0.94	0.94	0.80	0.80	0.80
Adj. Flow (vph)	145	357	65	542	680	94	272	255	306	5	21	15
RTOR Reduction (vph)	0	10	0	0	6	0	0	0	120	0	14	0
Lane Group Flow (vph)	145	412	0	542	768	0	272	255	186	5	22	0
Turn Type	Prot	NA		Prot	NA		Prot	NA	pm+ov	Prot	NA	
Protected Phases	5	2		1	6		3	8	1	7	4	
Permitted Phases									8			
Actuated Green, G (s)	13.8	19.5		31.8	38.0		23.5	30.4	62.2	0.8	7.7	
Effective Green, g (s)	13.8	19.5		31.8	38.0		23.5	30.4	62.2	0.8	7.7	
Actuated g/C Ratio	0.13	0.19		0.31	0.37		0.23	0.30	0.61	0.01	0.08	
Clearance Time (s)	4.4	6.1		4.4	5.6		4.4	4.9	4.4	4.4	4.9	
Vehicle Extension (s)	2.0	2.7		2.0	3.0		2.0	2.0	2.0	2.0	2.0	
Lane Grp Cap (vph)	238	658		550	1290		406	553	962	13	131	
v/s Ratio Prot	0.08	0.12		c0.31	c0.22		c0.15	c0.14	0.06	0.00	0.01	
v/s Ratio Perm									0.06			
v/c Ratio	0.61	0.63		0.99	0.60		0.67	0.46	0.19	0.38	0.17	
Uniform Delay, d1	41.7	38.1		35.0	25.9		35.9	29.3	8.9	50.5	44.3	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	3.0	1.7		34.3	0.7		3.2	0.2	0.0	6.8	0.2	
Delay (s)	44.7	39.8		69.3	26.7		39.1	29.5	8.9	57.3	44.5	
Level of Service	D	D		E	C		D	C	A	E	D	
Approach Delay (s)		41.0			44.2			25.1			46.1	
Approach LOS		D			D			C			D	

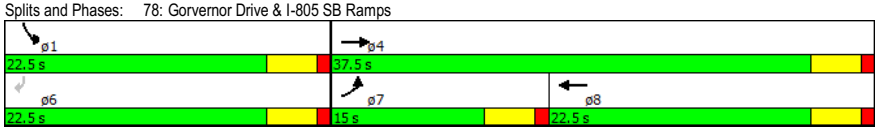
Intersection Summary			
HCM 2000 Control Delay	37.8	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	102.3	Sum of lost time (s)	19.8
Intersection Capacity Utilization	70.0%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBT	SBL	SBR
Lane Configurations					
Traffic Volume (vph)	418	327	419	75	307
Future Volume (vph)	418	327	419	75	307
Turn Type	Prot	NA	NA	Prot	Perm
Protected Phases	7	4	8	1	
Permitted Phases					6
Detector Phase	7	4	8	1	6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5
Total Split (s)	15.0	37.5	22.5	22.5	22.5
Total Split (%)	25.0%	62.5%	37.5%	37.5%	37.5%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead		Lag		
Lead-Lag Optimize?	Yes		Yes		
Recall Mode	None	None	None	None	Min

Intersection Summary
Cycle Length: 60
Actuated Cycle Length: 43
Natural Cycle: 60
Control Type: Actuated-Uncoordinated

Splits and Phases: 78: Gorvernor Drive & I-805 SB Ramps



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	418	327	419	19	75	307
Future Volume (vph)	418	327	419	19	75	307
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5		4.5	4.5
Lane Util. Factor	0.97	1.00	0.95		1.00	1.00
Frt	1.00	1.00	0.99		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	3433	1863	3517		1770	1583
Flt Permitted	0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)	3433	1863	3517		1770	1583
Peak-hour factor, PHF	0.88	0.88	0.89	0.89	1.00	1.00
Adj. Flow (vph)	475	372	471	21	75	307
RTOR Reduction (vph)	0	0	6	0	0	253
Lane Group Flow (vph)	475	372	486	0	75	54
Turn Type	Prot	NA	NA		Prot	Perm
Protected Phases	7	4	8		1	
Permitted Phases						6
Actuated Green, G (s)	10.1	26.3	11.7		7.6	7.6
Effective Green, g (s)	10.1	26.3	11.7		7.6	7.6
Actuated g/C Ratio	0.24	0.61	0.27		0.18	0.18
Clearance Time (s)	4.5	4.5	4.5		4.5	4.5
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	808	1142	959		313	280
v/s Ratio Prot	c0.14	0.20	c0.14		c0.04	
v/s Ratio Perm						0.03
v/c Ratio	0.59	0.33	0.51		0.24	0.19
Uniform Delay, d1	14.6	4.0	13.2		15.2	15.0
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	1.1	0.2	0.4		0.4	0.3
Delay (s)	15.7	4.2	13.6		15.6	15.4
Level of Service	B	A	B		B	B
Approach Delay (s)		10.6	13.6		15.4	
Approach LOS		B	B		B	

Intersection Summary				
HCM 2000 Control Delay	12.5	HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio	0.47			
Actuated Cycle Length (s)	42.9	Sum of lost time (s)	13.5	
Intersection Capacity Utilization	39.5%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	364	23	0	0	33	15	442	14	23	0	0	0
Future Volume (Veh/h)	364	23	0	0	33	15	442	14	23	0	0	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.96	0.96	0.96	0.55	0.55	0.55	0.95	0.95	0.95	1.00	1.00	1.00
Hourly flow rate (vph)	379	24	0	0	60	27	465	15	24	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1014	969	0	969	957	27	0			39		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1014	969	0	969	957	27	0			39		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	0	87	100	100	67	97	71			100		
cM capacity (veh/h)	125	181	1085	164	184	1048	1623			1571		

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	403	87	504
Volume Left	379	0	465
Volume Right	0	27	24
cSH	127	247	1623
Volume to Capacity	3.17	0.35	0.29
Queue Length 95th (ft)	Err	38	30
Control Delay (s)	Err	27.3	7.7
Lane LOS	F	D	A
Approach Delay (s)	Err	27.3	7.7
Approach LOS	F	D	

Intersection Summary				
Average Delay	4060.2			
Intersection Capacity Utilization	61.3%	ICU Level of Service	B	
Analysis Period (min)	15			

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	ø4
Lane Configurations							
Traffic Volume (vph)	182	370	325	1370	305	246	
Future Volume (vph)	182	370	325	1370	305	246	
Turn Type	NA	Perm	Prot	NA	Prot	pt+ov	
Protected Phases	2		1	6	8	8 1	4
Permitted Phases		2					
Detector Phase	2	2	1	6	8	8 1	
Switch Phase							
Minimum Initial (s)	10.0	10.0	7.0	10.0	10.0		4.0
Minimum Split (s)	43.2	43.2	11.4	24.9	23.3		41.0
Total Split (s)	48.6	48.6	34.1	82.7	45.3		43.8
Total Split (%)	38.0%	38.0%	26.6%	64.6%	35.4%		34%
Yellow Time (s)	5.2	5.2	3.4	5.0	4.3		3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	6.2	6.2	4.4	6.0	5.3		
Lead/Lag	Lag	Lag	Lead				
Lead-Lag Optimize?							
Recall Mode	C-Max	C-Max	None	C-Max	None		None

Intersection Summary

Cycle Length: 128
Actuated Cycle Length: 128
Offset: 70 (55%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 100
Control Type: Actuated-Coordinated

Splits and Phases: 1: N. Torrey Pines Rd. & Genesee Ave

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	182	370	325	1370	305	246
Future Volume (vph)	182	370	325	1370	305	246
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.2	6.2	4.4	6.0	5.3	5.3
Lane Util. Factor	0.91	1.00	0.97	0.91	0.97	0.88
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	5085	1583	3433	5085	3433	2787
Flt Permitted	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (perm)	5085	1583	3433	5085	3433	2787
Peak-hour factor, PHF	0.67	0.67	0.92	0.92	0.87	0.87
Adj. Flow (vph)	272	552	353	1489	351	283
RTOR Reduction (vph)	0	230	0	0	0	188
Lane Group Flow (vph)	272	322	353	1489	351	95
Turn Type	NA	Perm	Prot	NA	Prot	pt+ov
Protected Phases	2		1	6	8	8 1
Permitted Phases		2				
Actuated Green, G (s)	74.6	74.6	17.6	96.8	19.9	42.8
Effective Green, g (s)	74.6	74.6	17.6	96.8	19.9	42.8
Actuated g/C Ratio	0.58	0.58	0.14	0.76	0.16	0.33
Clearance Time (s)	6.2	6.2	4.4	6.0	5.3	
Vehicle Extension (s)	4.0	4.0	2.0	3.7	3.8	
Lane Grp Cap (vph)	2963	922	472	3845	533	931
v/s Ratio Prot	0.05		c0.10	c0.29	c0.10	0.03
v/s Ratio Perm		0.20				
v/c Ratio	0.09	0.35	0.75	0.39	0.66	0.10
Uniform Delay, d1	11.8	14.0	53.1	5.4	50.9	29.4
Progression Factor	1.00	1.00	1.48	0.55	1.00	1.00
Incremental Delay, d2	0.1	1.0	4.9	0.3	3.2	0.1
Delay (s)	11.8	15.0	83.6	3.2	54.0	29.4
Level of Service	B	B	F	A	D	C
Approach Delay (s)	14.0			18.6	43.0	
Approach LOS	B			B	D	

Intersection Summary

HCM 2000 Control Delay	22.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	128.0	Sum of lost time (s)	15.9
Intersection Capacity Utilization	44.6%	ICU Level of Service	A
Analysis Period (min)	15		

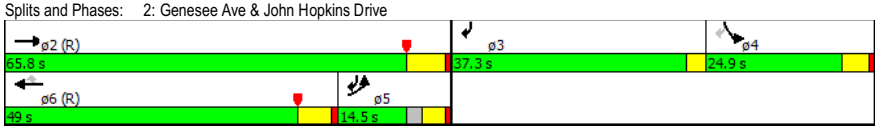
c Critical Lane Group

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	ø3
Lane Configurations							
Traffic Volume (vph)	139	362	1601	495	507	54	
Future Volume (vph)	139	362	1601	495	507	54	
Turn Type	Prot	NA	NA	Perm	Prot	pt+ov	
Protected Phases	5	2	6		4	3 5	3
Permitted Phases				6		4	
Detector Phase	5	2	6	6	4	3 5	
Switch Phase							
Minimum Initial (s)	4.0	10.0	10.0	10.0	7.0		4.0
Minimum Split (s)	9.5	16.7	15.9	15.9	11.9		7.0
Total Split (s)	14.5	65.8	49.0	49.0	24.9		37.3
Total Split (%)	11.3%	51.4%	38.3%	38.3%	19.5%		29%
Yellow Time (s)	3.4	5.7	4.9	4.9	3.9		3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		0.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	4.4	6.7	5.9	5.9	4.9		
Lead/Lag	Lag		Lead	Lead	Lag		Lead
Lead-Lag Optimize?	Yes		Yes	Yes	Yes		Yes
Recall Mode	None	C-Max	C-Max	C-Max	None		None

Intersection Summary

Cycle Length: 128
Actuated Cycle Length: 128
Offset: 58 (45%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 60
Control Type: Actuated-Coordinated

Splits and Phases: 2: Genesee Ave & John Hopkins Drive



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	139	362	1601	495	507	54
Future Volume (vph)	139	362	1601	495	507	54
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	6.7	5.9	5.9	4.9	3.0
Lane Util. Factor	1.00	0.91	0.81	1.00	0.97	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	5085	7544	1583	3433	1583
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	5085	7544	1583	3433	1583
Peak-hour factor, PHF	0.80	0.80	0.90	0.90	0.79	0.79
Adj. Flow (vph)	174	452	1779	550	642	68
RTOR Reduction (vph)	0	0	0	272	0	1
Lane Group Flow (vph)	174	453	1779	278	642	67
Turn Type	Prot	NA	NA	Perm	Prot	pt+ov
Protected Phases	5	2	6		4	3 5
Permitted Phases				6		4
Actuated Green, G (s)	12.4	71.2	55.2	55.2	39.0	59.0
Effective Green, g (s)	12.4	71.2	55.2	55.2	39.0	54.6
Actuated g/C Ratio	0.10	0.56	0.43	0.43	0.30	0.43
Clearance Time (s)	4.4	6.7	5.9	5.9	4.9	
Vehicle Extension (s)	2.0	4.0	3.9	3.9	5.0	
Lane Grp Cap (vph)	171	2828	3253	682	1045	712
v/s Ratio Prot	c0.10	0.09	c0.24		c0.19	c0.01
v/s Ratio Perm				0.18		0.03
v/c Ratio	1.02	0.16	0.55	0.41	0.61	0.09
Uniform Delay, d1	57.8	13.8	27.1	25.1	38.1	21.9
Progression Factor	0.94	0.74	1.40	3.76	1.00	1.00
Incremental Delay, d2	73.4	0.1	0.5	1.4	1.6	0.0
Delay (s)	127.7	10.4	38.4	95.8	39.6	22.0
Level of Service	F	B	D	F	D	C
Approach Delay (s)		42.9	52.0		37.9	
Approach LOS		D	D		D	

Intersection Summary

HCM 2000 Control Delay	47.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	128.0	Sum of lost time (s)	18.2
Intersection Capacity Utilization	53.4%	ICU Level of Service	A
Analysis Period (min)	15		

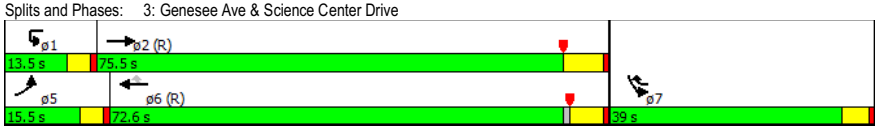
c Critical Lane Group

Lane Group	EBL	EBT	WBU	WBT	WBR	SBL
Lane Configurations						
Traffic Volume (vph)	64	756	8	2188	303	37
Future Volume (vph)	64	756	8	2188	303	37
Turn Type	Prot	NA	Prot	NA	pm+ov	Prot
Protected Phases	5	2	1	6	7	7
Permitted Phases					6	
Detector Phase	5	2	1	6	7	7
Switch Phase						
Minimum Initial (s)	4.0	10.0	4.0	10.0	4.0	4.0
Minimum Split (s)	9.5	22.5	9.5	16.0	8.9	8.9
Total Split (s)	15.5	75.5	13.5	72.6	39.0	39.0
Total Split (%)	12.1%	59.0%	10.5%	56.7%	30.5%	30.5%
Yellow Time (s)	3.4	5.9	3.4	5.0	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	6.9	4.4	6.0	4.9	4.9
Lead/Lag	Lead	Lag	Lead	Lag		
Lead-Lag Optimize?	Yes	Yes	Yes	Yes		
Recall Mode	None	C-Max	None	C-Max	None	None

Intersection Summary

Cycle Length: 128
Actuated Cycle Length: 128
Offset: 108 (84%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 60
Control Type: Actuated-Coordinated

Splits and Phases: 3: Genesee Ave & Science Center Drive



Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Traffic Volume (vph)	64	756	8	2188	303	37	16
Future Volume (vph)	64	756	8	2188	303	37	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	6.9	4.4	6.0	4.9	4.9	
Lane Util. Factor	1.00	0.91	1.00	0.91	1.00	0.97	
Frt	1.00	1.00	1.00	1.00	0.85	0.95	
Flt Protected	0.95	1.00	0.95	1.00	1.00	0.97	
Satd. Flow (prot)	1770	5085	1770	5085	1583	3332	
Flt Permitted	0.95	1.00	0.95	1.00	1.00	0.97	
Satd. Flow (perm)	1770	5085	1770	5085	1583	3332	
Peak-hour factor, PHF	0.82	0.82	0.92	0.92	0.92	0.86	0.86
Adj. Flow (vph)	78	922	9	2378	329	43	19
RTOR Reduction (vph)	0	0	0	0	64	18	0
Lane Group Flow (vph)	78	922	9	2378	265	44	0
Turn Type	Prot	NA	Prot	NA	pm+ov	Prot	
Protected Phases	5	2	1	6	7	7	
Permitted Phases					6		
Actuated Green, G (s)	9.6	103.1	1.5	95.9	103.1	7.2	
Effective Green, g (s)	9.6	103.1	1.5	95.9	103.1	7.2	
Actuated g/C Ratio	0.07	0.81	0.01	0.75	0.81	0.06	
Clearance Time (s)	4.4	6.9	4.4	6.0	4.9	4.9	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	132	4095	20	3809	1275	187	
v/s Ratio Prot	c0.04	0.18	0.01	c0.47	0.01	c0.01	
v/s Ratio Perm					0.16		
v/c Ratio	0.59	0.23	0.45	0.62	0.21	0.24	
Uniform Delay, d1	57.3	3.0	62.8	7.6	2.9	57.8	
Progression Factor	0.76	2.08	0.91	0.81	1.33	1.00	
Incremental Delay, d2	6.4	0.1	13.7	0.7	0.1	0.7	
Delay (s)	50.1	6.3	70.6	6.9	3.9	58.4	
Level of Service	D	A	E	A	A	E	
Approach Delay (s)		9.7		6.7		58.4	
Approach LOS		A		A		E	

Intersection Summary

HCM 2000 Control Delay	8.3	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	128.0	Sum of lost time (s)	16.2
Intersection Capacity Utilization	61.9%	ICU Level of Service	B
Analysis Period (min)	15		

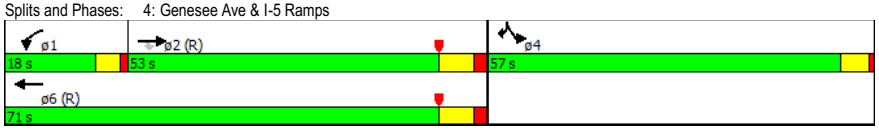
c Critical Lane Group

Lane Group	EBT	EBR	WBL	WBT	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	668	271	156	1615	719	503
Future Volume (vph)	668	271	156	1615	719	503
Turn Type	NA	Perm	Prot	NA	Prot	Prot
Protected Phases	2		1	6	4	4
Permitted Phases		2				
Detector Phase	2	2	1	6	4	4
Switch Phase						
Minimum Initial (s)	10.0	10.0	5.0	10.0	13.0	13.0
Minimum Split (s)	25.2	25.2	9.7	25.2	18.1	18.1
Total Split (s)	53.0	53.0	18.0	71.0	57.0	57.0
Total Split (%)	41.4%	41.4%	14.1%	55.5%	44.5%	44.5%
Yellow Time (s)	5.2	5.2	3.7	5.2	4.1	4.1
All-Red Time (s)	2.0	2.0	1.0	2.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.2	7.2	4.7	7.2	5.1	5.1
Lead/Lag	Lag	Lag	Lead			
Lead-Lag Optimize?	Yes	Yes	Yes			
Recall Mode	C-Max	C-Max	None	C-Max	Min	Min

Intersection Summary

Cycle Length: 128
Actuated Cycle Length: 128
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 60
Control Type: Actuated-Coordinated

Splits and Phases: 4: Genesee Ave & I-5 Ramps



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	668	271	156	1615	0	0	0	0	719	0	503
Future Volume (vph)	0	668	271	156	1615	0	0	0	0	719	0	503
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		7.2	7.2	4.7	7.2					5.1		5.1
Lane Util. Factor		0.81	0.88	0.97	0.91					0.97		0.88
Frt		1.00	0.85	1.00	1.00					1.00		0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (prot)		7544	2787	3433	5085					3433		2787
Flt Permitted		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (perm)		7544	2787	3433	5085					3433		2787
Peak-hour factor, PHF	0.67	0.67	0.67	0.92	0.92	0.92	0.25	0.25	0.25	0.86	0.86	0.86
Adj. Flow (vph)	0	997	404	170	1755	0	0	0	0	836	0	585
RTOR Reduction (vph)	0	0	207	0	0	0	0	0	0	0	0	54
Lane Group Flow (vph)	0	997	197	170	1755	0	0	0	0	836	0	531
Turn Type		NA	Perm	Prot	NA					Prot		Prot
Protected Phases		2		1	6					4		4
Permitted Phases			2									
Actuated Green, G (s)		62.5	62.5	10.7	77.9					37.8		37.8
Effective Green, g (s)		62.5	62.5	10.7	77.9					37.8		37.8
Actuated g/C Ratio		0.49	0.49	0.08	0.61					0.30		0.30
Clearance Time (s)		7.2	7.2	4.7	7.2					5.1		5.1
Vehicle Extension (s)		2.0	2.0	2.0	2.0					2.0		2.0
Lane Grp Cap (vph)		3683	1360	286	3094					1013		823
v/s Ratio Prot		0.13		0.05	c0.35					c0.24		0.19
v/s Ratio Perm			0.07									
v/c Ratio		0.27	0.15	0.59	0.57					0.83		0.65
Uniform Delay, d1		19.3	18.0	56.6	15.0					42.0		39.3
Progression Factor		1.29	5.24	1.26	0.10					1.00		1.00
Incremental Delay, d2		0.2	0.2	1.5	0.5					5.3		1.3
Delay (s)		25.1	94.7	72.9	1.9					47.3		40.6
Level of Service		C	F	E	A					D		D
Approach Delay (s)		45.2			8.2			0.0			44.6	
Approach LOS		D			A			A			D	

Intersection Summary

HCM 2000 Control Delay	30.0	HCM 2000 Level of Service	C	
HCM 2000 Volume to Capacity ratio	0.68			
Actuated Cycle Length (s)	128.0	Sum of lost time (s)	17.0	
Intersection Capacity Utilization	81.4%	ICU Level of Service	D	
Analysis Period (min)	15			

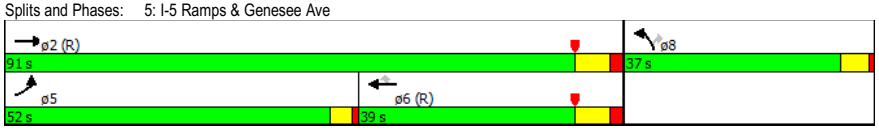
c Critical Lane Group

Lane Group	EBL	EBT	WBT	WBR	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	985	310	1361	802	557	289
Future Volume (vph)	985	310	1361	802	557	289
Turn Type	Prot	NA	NA	Perm	Prot	Perm
Protected Phases	5	2	6		8	
Permitted Phases				6		8
Detector Phase	5	2	6	6	8	8
Switch Phase						
Minimum Initial (s)	11.0	10.0	10.0	10.0	5.0	5.0
Minimum Split (s)	25.2	17.2	17.2	17.2	22.1	22.1
Total Split (s)	52.0	91.0	39.0	39.0	37.0	37.0
Total Split (%)	40.6%	71.1%	30.5%	30.5%	28.9%	28.9%
Yellow Time (s)	3.2	5.2	5.2	5.2	4.1	4.1
All-Red Time (s)	1.0	2.0	2.0	2.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.2	7.2	7.2	7.2	5.1	5.1
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Recall Mode	Min	C-Max	C-Max	C-Max	None	None

Intersection Summary

Cycle Length: 128
Actuated Cycle Length: 128
Offset: 81 (63%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 80
Control Type: Actuated-Coordinated

Splits and Phases: 5: I-5 Ramps & Genesee Ave



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	985	310	0	0	1361	802	557	0	289	0	0	0
Future Volume (vph)	985	310	0	0	1361	802	557	0	289	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	7.2			7.2	7.2	5.1		5.1			
Lane Util. Factor	0.97	0.91			0.81	0.88	0.97		0.88			
Frt	1.00	1.00			1.00	0.85	1.00		0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95		1.00			
Satd. Flow (prot)	3433	5085			7544	2787	3433		2787			
Flt Permitted	0.95	1.00			1.00	1.00	0.95		1.00			
Satd. Flow (perm)	3433	5085			7544	2787	3433		2787			
Peak-hour factor, PHF	0.90	0.90	0.90	0.88	0.88	0.88	0.79	0.79	0.79	0.25	0.25	0.25
Adj. Flow (vph)	1094	344	0	0	1547	911	705	0	366	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	559	0	0	282	0	0	0
Lane Group Flow (vph)	1094	344	0	0	1547	352	705	0	84	0	0	0
Turn Type	Prot	NA			NA	Perm	Prot		Perm			
Protected Phases	5	2			6		8					
Permitted Phases						6			8			
Actuated Green, G (s)	44.5	86.2			37.5	37.5	29.5		29.5			
Effective Green, g (s)	44.5	86.2			37.5	37.5	29.5		29.5			
Actuated g/C Ratio	0.35	0.67			0.29	0.29	0.23		0.23			
Clearance Time (s)	4.2	7.2			7.2	7.2	5.1		5.1			
Vehicle Extension (s)	2.0	2.0			2.0	2.0	2.0		2.0			
Lane Grp Cap (vph)	1193	3424			2210	816	791		642			
v/s Ratio Prot	c0.32	0.07			c0.21		c0.21					
v/s Ratio Perm						0.13			0.03			
v/c Ratio	0.92	0.10			0.70	0.43	0.89		0.13			
Uniform Delay, d1	40.0	7.3			40.2	36.6	47.7		39.1			
Progression Factor	0.93	1.40			0.70	0.47	1.00		1.00			
Incremental Delay, d2	10.1	0.1			1.8	1.6	12.0		0.0			
Delay (s)	47.1	10.3			29.9	18.8	59.7		39.1			
Level of Service	D	B			C	B	E		D			
Approach Delay (s)		38.3			25.8			52.7			0.0	
Approach LOS		D			C			D			A	

Intersection Summary

HCM 2000 Control Delay	35.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	128.0	Sum of lost time (s)	16.5
Intersection Capacity Utilization	81.4%	ICU Level of Service	D
Analysis Period (min)	15		

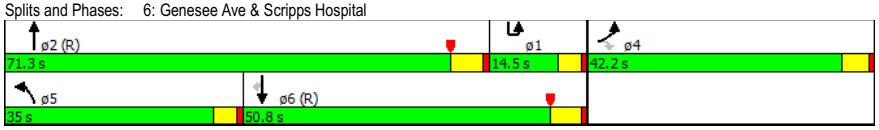
c Critical Lane Group

Lane Group	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	775	777	478	758	31	746	586
Future Volume (vph)	775	777	478	758	31	746	586
Turn Type	Prot	Perm	Prot	NA	Prot	NA	Perm
Protected Phases	4		5	2	1	6	
Permitted Phases		4					6
Detector Phase	4	4	5	2	1	6	6
Switch Phase							
Minimum Initial (s)	7.0	7.0	4.0	10.0	4.0	10.0	10.0
Minimum Split (s)	11.9	11.9	9.5	22.5	9.5	30.5	30.5
Total Split (s)	42.2	42.2	35.0	71.3	14.5	50.8	50.8
Total Split (%)	33.0%	33.0%	27.3%	55.7%	11.3%	39.7%	39.7%
Yellow Time (s)	3.9	3.9	3.4	4.7	3.4	4.7	4.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	4.4	5.7	4.4	5.7	5.7
Lead/Lag			Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?			Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	C-Max	None	C-Max	C-Max

Intersection Summary

Cycle Length: 128
Actuated Cycle Length: 128
Offset: 106 (83%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 6: Genesee Ave & Scripps Hospital



Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	775	777	478	758	31	746	586
Future Volume (vph)	775	777	478	758	31	746	586
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9	4.4	5.7	4.4	5.7	5.7
Lane Util. Factor	0.97	1.00	1.00	0.91	1.00	0.91	1.00
Frt	1.00	0.85	1.00	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	1583	1770	5085	1770	5085	1583
Flt Permitted	0.95	1.00	0.95	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	1583	1770	5085	1770	5085	1583
Peak-hour factor, PHF	0.93	0.93	0.96	0.96	0.92	0.93	0.93
Adj. Flow (vph)	833	835	498	790	34	802	630
RTOR Reduction (vph)	0	359	0	0	0	0	408
Lane Group Flow (vph)	833	476	498	790	34	802	222
Turn Type	Prot	Perm	Prot	NA	Prot	NA	Perm
Protected Phases	4		5	2	1	6	
Permitted Phases		4					6
Actuated Green, G (s)	37.3	37.3	30.6	69.6	6.1	45.1	45.1
Effective Green, g (s)	37.3	37.3	30.6	69.6	6.1	45.1	45.1
Actuated g/C Ratio	0.29	0.29	0.24	0.54	0.05	0.35	0.35
Clearance Time (s)	4.9	4.9	4.4	5.7	4.4	5.7	5.7
Vehicle Extension (s)	2.0	2.0	2.0	5.2	2.0	4.0	4.0
Lane Grp Cap (vph)	1000	461	423	2764	84	1791	557
v/s Ratio Prot	0.24		c0.28	0.16	0.02	c0.16	
v/s Ratio Perm		c0.30					0.14
v/c Ratio	0.83	1.03	1.18	0.29	0.40	0.45	0.40
Uniform Delay, d1	42.4	45.4	48.7	15.8	59.2	31.9	31.2
Progression Factor	1.00	1.00	1.01	1.56	1.01	0.99	1.82
Incremental Delay, d2	5.8	50.8	100.7	0.2	1.2	0.8	2.1
Delay (s)	48.2	96.2	149.9	24.8	61.0	32.2	58.9
Level of Service	D	F	F	C	E	C	E
Approach Delay (s)	72.2			73.2		44.4	
Approach LOS	E			E		D	

Intersection Summary

HCM 2000 Control Delay	63.3	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	128.0	Sum of lost time (s)	15.0
Intersection Capacity Utilization	75.5%	ICU Level of Service	D
Analysis Period (min)	15		

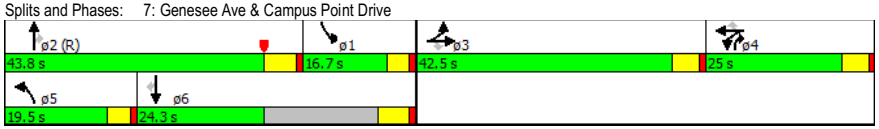
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	255	10	261	160	18	131	316	1020	217	111	1025	295
Future Volume (vph)	255	10	261	160	18	131	316	1020	217	111	1025	295
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	3	3		4	4		5	2	4	1	6	
Permitted Phases			3			4			2			6
Detector Phase	3	3	3	4	4	4	5	2	4	1	6	6
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	4.0	10.0	7.0	4.0	10.0	10.0
Minimum Split (s)	11.9	11.9	11.9	22.5	22.5	22.5	8.4	37.7	22.5	8.4	33.7	33.7
Total Split (s)	42.5	42.5	42.5	25.0	25.0	25.0	19.5	43.8	25.0	16.7	24.3	24.3
Total Split (%)	33.2%	33.2%	33.2%	19.5%	19.5%	19.5%	15.2%	34.2%	19.5%	13.0%	19.0%	19.0%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.9	3.9	3.4	4.7	3.9	3.4	4.7	4.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	4.9	4.9	4.9	4.9	4.4	5.7	4.9	4.4	5.7	5.7
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lag	Lead	Lead	Lag	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	None	None	None	None

Intersection Summary

Cycle Length: 128
Actuated Cycle Length: 128
Offset: 26 (20%), Referenced to phase 2:NBT, Start of Yellow
Natural Cycle: 85
Control Type: Actuated-Coordinated

Splits and Phases: 7: Genesee Ave & Campus Point Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	255	10	261	160	18	131	316	1020	217	111	1025	295
Future Volume (vph)	255	10	261	160	18	131	316	1020	217	111	1025	295
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9	4.9	4.9	4.9	4.9	4.4	5.7	4.9	4.4	5.7	5.7
Lane Util. Factor	0.97	1.00	0.88	0.95	0.95	0.88	0.97	0.91	1.00	0.97	0.91	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	0.96	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	1863	2787	1681	1701	2787	3433	5085	1583	3433	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	0.96	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	1863	2787	1681	1701	2787	3433	5085	1583	3433	5085	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.89	0.89	0.89	0.84	0.84	0.84	0.94	0.94	0.94
Adj. Flow (vph)	277	11	284	180	20	147	376	1214	258	118	1090	314
RTOR Reduction (vph)	0	0	250	0	0	132	0	0	91	0	0	145
Lane Group Flow (vph)	277	11	34	99	101	15	376	1214	167	118	1090	169
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	3	3		4	4		5	2	4	1	6	
Permitted Phases			3			4			2			6
Actuated Green, G (s)	15.3	15.3	15.3	12.7	12.7	12.7	19.4	70.0	82.7	10.1	60.7	60.7
Effective Green, g (s)	15.3	15.3	15.3	12.7	12.7	12.7	19.4	70.0	82.7	10.1	60.7	60.7
Actuated g/C Ratio	0.12	0.12	0.12	0.10	0.10	0.10	0.15	0.55	0.65	0.08	0.47	0.47
Clearance Time (s)	4.9	4.9	4.9	4.9	4.9	4.9	4.4	5.7	4.9	4.4	5.7	5.7
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	3.7	2.0	2.0	4.0	4.0
Lane Grp Cap (vph)	410	222	333	166	168	276	520	2780	1083	270	2411	750
v/s Ratio Prot	c0.08	0.01		0.06	c0.06		c0.11	0.24	0.02	0.03	c0.21	
v/s Ratio Perm			0.01			0.01			0.09			0.11
v/c Ratio	0.68	0.05	0.10	0.60	0.60	0.05	0.72	0.44	0.15	0.44	0.45	0.23
Uniform Delay, d1	54.0	49.9	50.2	55.2	55.2	52.2	51.7	17.3	8.9	56.2	22.5	19.8
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.31	0.95	2.90	0.93	0.79	1.19
Incremental Delay, d2	3.4	0.0	0.0	3.8	4.1	0.0	3.1	0.4	0.0	0.3	0.1	0.1
Delay (s)	57.4	49.9	50.3	59.0	59.3	52.2	70.9	16.8	25.8	52.4	17.9	23.6
Level of Service	E	D	D	E	E	D	E	B	C	D	B	C
Approach Delay (s)		53.7			56.2			29.0			21.8	
Approach LOS		D			E			C			C	

Intersection Summary

HCM 2000 Control Delay	31.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.55		
Actuated Cycle Length (s)	128.0	Sum of lost time (s)	19.9
Intersection Capacity Utilization	55.3%	ICU Level of Service	B
Analysis Period (min)	15		

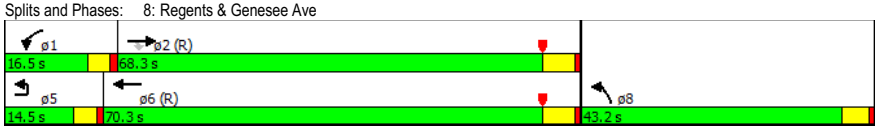
c Critical Lane Group

Lane Group	EBU	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations							
Traffic Volume (vph)	41	1179	172	34	1735	247	17
Future Volume (vph)	41	1179	172	34	1735	247	17
Turn Type	Prot	NA	Perm	Prot	NA	Prot	custom
Protected Phases	5	2		1	6	8	
Permitted Phases			2				
Detector Phase	5	2	2	1	6	8	
Switch Phase							
Minimum Initial (s)	4.0	10.0	10.0	4.0	10.0	7.0	
Minimum Split (s)	9.5	22.7	22.7	9.5	22.5	37.9	
Total Split (s)	14.5	68.3	68.3	16.5	70.3	43.2	
Total Split (%)	11.3%	53.4%	53.4%	12.9%	54.9%	33.8%	
Yellow Time (s)	3.4	4.7	4.7	3.4	4.7	3.9	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.4	5.7	5.7	4.4	5.7	4.9	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		
Recall Mode	None	C-Max	C-Max	None	C-Max	None	

Intersection Summary

Cycle Length: 128
Actuated Cycle Length: 128
Offset: 56 (44%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 100
Control Type: Actuated-Coordinated

Splits and Phases: 8: Regents & Genesee Ave



Movement	EBU	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations							
Traffic Volume (vph)	41	1179	172	34	1735	247	17
Future Volume (vph)	41	1179	172	34	1735	247	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	12	16	12
Total Lost time (s)	4.4	5.7	5.7	4.4	5.7	4.9	4.0
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	1770	5085	1583	1770	5085	2006	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (perm)	1770	5085	1583	1770	5085	2006	1583
Peak-hour factor, PHF	0.92	0.70	0.70	0.72	0.72	0.96	0.96
Adj. Flow (vph)	45	1684	246	47	2410	257	18
RTOR Reduction (vph)	0	0	81	0	0	0	18
Lane Group Flow (vph)	45	1684	165	47	2410	257	0
Turn Type	Prot	NA	Perm	Prot	NA	Prot	custom
Protected Phases	5	2		1	6	8	
Permitted Phases			2				
Actuated Green, G (s)	6.8	85.1	85.1	6.9	85.2	21.0	0.0
Effective Green, g (s)	6.8	85.1	85.1	6.9	85.2	21.0	0.0
Actuated g/C Ratio	0.05	0.66	0.66	0.05	0.67	0.16	0.00
Clearance Time (s)	4.4	5.7	5.7	4.4	5.7	4.9	
Vehicle Extension (s)	2.0	5.0	5.0	2.0	3.9	2.0	
Lane Grp Cap (vph)	94	3380	1052	95	3384	329	0
v/s Ratio Prot	0.03	0.33		c0.03	c0.47	c0.13	
v/s Ratio Perm			0.10				
v/c Ratio	0.48	0.50	0.16	0.49	0.71	0.78	0.00
Uniform Delay, d1	58.9	10.7	8.0	58.9	13.6	51.3	64.0
Progression Factor	1.02	0.52	0.34	1.08	0.88	1.00	1.00
Incremental Delay, d2	1.3	0.5	0.3	1.5	1.3	10.6	0.0
Delay (s)	61.3	6.1	3.0	64.9	13.2	61.9	64.0
Level of Service	E	A	A	E	B	E	E
Approach Delay (s)		6.9			14.2	62.0	
Approach LOS		A			B	E	

Intersection Summary

HCM 2000 Control Delay	14.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	128.0	Sum of lost time (s)	15.0
Intersection Capacity Utilization	56.6%	ICU Level of Service	B
Analysis Period (min)	15		

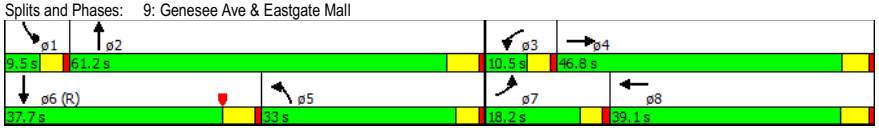
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	162	117	20	126	401	882	37	921
Future Volume (vph)	162	117	20	126	401	882	37	921
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	7	4	3	8	5	2	1	6
Permitted Phases								
Detector Phase	7	4	3	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	4.0	7.0	4.0	7.0	4.0	10.0	4.0	10.0
Minimum Split (s)	8.4	38.9	9.5	39.1	9.5	31.7	9.5	32.7
Total Split (s)	18.2	46.8	10.5	39.1	33.0	61.2	9.5	37.7
Total Split (%)	14.2%	36.6%	8.2%	30.5%	25.8%	47.8%	7.4%	29.5%
Yellow Time (s)	3.4	3.9	3.4	4.1	3.4	4.7	3.4	4.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	4.9	4.4	5.1	4.4	5.7	4.4	5.7
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max

Intersection Summary

Cycle Length: 128
Actuated Cycle Length: 128
Offset: 93 (73%), Referenced to phase 6:SBT, Start of Yellow
Natural Cycle: 145
Control Type: Actuated-Coordinated

Splits and Phases: 9: Genesee Ave & Eastgate Mall



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	162	117	388	20	126	24	401	882	21	37	921	176
Future Volume (vph)	162	117	388	20	126	24	401	882	21	37	921	176
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	5.1		4.4	5.7		4.4	5.7	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.91		0.97	0.91	
Frt	1.00	0.88		1.00	0.98		1.00	1.00		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3131		1770	3455		1770	5067		3433	4963	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	3131		1770	3455		1770	5067		3433	4963	
Peak-hour factor, PHF	0.83	0.83	0.83	0.79	0.79	0.79	0.96	0.96	0.96	0.82	0.82	0.82
Adj. Flow (vph)	195	141	467	25	159	30	418	919	22	45	1123	215
RTOR Reduction (vph)	0	383	0	0	15	0	0	1	0	0	17	0
Lane Group Flow (vph)	195	225	0	25	174	0	418	940	0	45	1321	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Actuated Green, G (s)	13.8	22.9		3.7	12.6		29.4	76.8		5.2	52.6	
Effective Green, g (s)	13.8	22.9		3.7	12.6		29.4	76.8		5.2	52.6	
Actuated g/C Ratio	0.11	0.18		0.03	0.10		0.23	0.60		0.04	0.41	
Clearance Time (s)	4.4	4.9		4.4	5.1		4.4	5.7		4.4	5.7	
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	4.2		2.0	4.3	
Lane Grp Cap (vph)	190	560		51	340		406	3040		139	2039	
v/s Ratio Prot	c0.11	0.07		0.01	c0.05		c0.24	0.19		0.01	c0.27	
v/s Ratio Perm												
v/c Ratio	1.03	0.40		0.49	0.51		1.03	0.31		0.32	0.65	
Uniform Delay, d1	57.1	46.5		61.2	54.8		49.3	12.6		59.7	30.3	
Progression Factor	1.00	1.00		1.00	1.00		0.60	0.21		0.96	0.72	
Incremental Delay, d2	72.3	0.2		2.7	0.5		48.9	0.1		0.4	1.4	
Delay (s)	129.4	46.7		63.9	55.3		78.7	2.8		57.6	23.2	
Level of Service	F	D		E	E		E	A		E	C	
Approach Delay (s)		66.8			56.3			26.1			24.3	
Approach LOS		E			E			C			C	

Intersection Summary

HCM 2000 Control Delay	35.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	128.0	Sum of lost time (s)	19.6
Intersection Capacity Utilization	79.2%	ICU Level of Service	D
Analysis Period (min)	15		

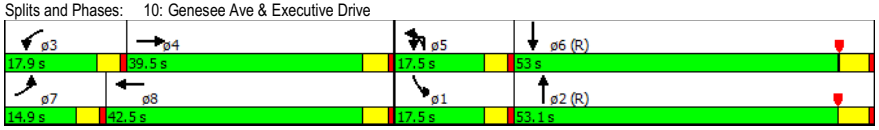
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	19	65	252	81	58	1179	69	1132
Future Volume (vph)	19	65	252	81	58	1179	69	1132
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	7	4	3	8	5	2	1	6
Permitted Phases								
Detector Phase	7	4	3	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	10.0	4.0	10.0
Minimum Split (s)	8.4	8.9	8.4	8.9	8.4	15.5	8.4	15.4
Total Split (s)	14.9	39.5	17.9	42.5	17.5	53.1	17.5	53.0
Total Split (%)	11.6%	30.9%	14.0%	33.2%	13.7%	41.5%	13.7%	41.4%
Yellow Time (s)	3.4	3.9	3.4	3.9	3.4	4.5	3.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	4.9	4.4	4.9	4.4	5.5	4.4	5.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	None	C-Max

Intersection Summary

Cycle Length: 128
Actuated Cycle Length: 128
Offset: 114 (89%), Referenced to phase 6:SBT and 2:NBT, Start of Yellow
Natural Cycle: 60
Control Type: Actuated-Coordinated

Splits and Phases: 10: Genesee Ave & Executive Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	19	65	76	252	81	93	18	58	1179	255	69	1132
Future Volume (vph)	19	65	76	252	81	93	18	58	1179	255	69	1132
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	4.9			4.4	5.5		4.4	5.4
Lane Util. Factor	1.00	0.95		0.97	0.95			1.00	0.91		1.00	0.91
Frt	1.00	0.92		1.00	0.92			1.00	0.97		1.00	1.00
Flt Protected	0.95	1.00		0.95	1.00			0.95	1.00		0.95	1.00
Satd. Flow (prot)	1770	3253		3433	3255			1770	4950		1770	5069
Flt Permitted	0.95	1.00		0.95	1.00			0.95	1.00		0.95	1.00
Satd. Flow (perm)	1770	3253		3433	3255			1770	4950		1770	5069
Peak-hour factor, PHF	0.85	0.85	0.85	0.86	0.86	0.86	0.92	0.80	0.80	0.80	0.94	0.94
Adj. Flow (vph)	22	76	89	293	94	108	20	72	1474	319	73	1204
RTOR Reduction (vph)	0	83	0	0	93	0	0	0	16	0	0	1
Lane Group Flow (vph)	22	82	0	293	109	0	0	93	1777	0	73	1229
Turn Type	Prot	NA		Prot	NA		Prot	Prot	NA		Prot	NA
Protected Phases	7	4		3	8		5	5	2		1	6
Permitted Phases												
Actuated Green, G (s)	4.2	9.3		13.1	18.2			11.1	77.8		8.6	75.4
Effective Green, g (s)	4.2	9.3		13.1	18.2			11.1	77.8		8.6	75.4
Actuated g/C Ratio	0.03	0.07		0.10	0.14			0.09	0.61		0.07	0.59
Clearance Time (s)	4.4	4.9		4.4	4.9			4.4	5.5		4.4	5.4
Vehicle Extension (s)	2.0	2.0		2.0	2.0			2.0	3.6		2.0	3.8
Lane Grp Cap (vph)	58	236		351	462			153	3008		118	2985
v/s Ratio Prot	0.01	c0.03		c0.09	0.03			c0.05	c0.36		0.04	0.24
v/s Ratio Perm												
v/c Ratio	0.38	0.35		0.83	0.24			0.61	0.59		0.62	0.41
Uniform Delay, d1	60.6	56.5		56.4	48.7			56.4	15.4		58.1	14.3
Progression Factor	1.00	1.00		1.00	1.00			1.10	0.55		1.29	0.27
Incremental Delay, d2	1.5	0.3		15.0	0.1			4.0	0.7		5.5	0.3
Delay (s)	62.1	56.8		71.4	48.8			65.8	9.2		80.4	4.2
Level of Service	E	E		E	D			E	A		F	A
Approach Delay (s)		57.4			62.2				12.0			8.4
Approach LOS		E			E				B			A

Intersection Summary

HCM 2000 Control Delay	19.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	128.0	Sum of lost time (s)	19.2
Intersection Capacity Utilization	59.7%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	24
Future Volume (vph)	24
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.94
Adj. Flow (vph)	26
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

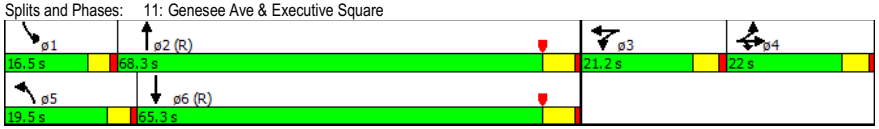
Intersection Summary

Lane Group	EBL	EBT	EBR	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	17	2	106	2	17	83	1486	14	1507
Future Volume (vph)	17	2	106	2	17	83	1486	14	1507
Turn Type	Split	NA	Prot	NA	NA	Prot	NA	Prot	NA
Protected Phases	4	4	4	3		5	2	1	6
Permitted Phases									
Detector Phase	4	4	4	3		5	2	1	6
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	4.0		4.0	10.0	4.0	10.0
Minimum Split (s)	8.9	8.9	8.9	8.9		8.4	15.7	8.4	15.7
Total Split (s)	22.0	22.0	22.0	21.2		19.5	68.3	16.5	65.3
Total Split (%)	17.2%	17.2%	17.2%	16.6%		15.2%	53.4%	12.9%	51.0%
Yellow Time (s)	3.9	3.9	3.9	3.9		3.4	4.7	3.4	4.7
All-Red Time (s)	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	4.9	4.9		4.4	5.7	4.4	5.7
Lead/Lag	Lag	Lag	Lag	Lead		Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None		None	C-Max	None	C-Max

Intersection Summary

Cycle Length: 128
Actuated Cycle Length: 128
Offset: 4 (3%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 65
Control Type: Actuated-Coordinated

Splits and Phases: 11: Genesee Ave & Executive Square



Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	1	17	2	106	244	2	17	83	1486	124	14	1507
Future Volume (vph)	1	17	2	106	244	2	17	83	1486	124	14	1507
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9	4.9	4.9		4.9	4.0	4.4	5.7		4.4	5.7
Lane Util. Factor		0.95	0.91	0.95		0.95	0.95	1.00	0.91		1.00	0.91
Frt		1.00	0.86	0.85		1.00	0.85	1.00	0.99		1.00	1.00
Flt Protected		0.95	1.00	1.00		0.95	1.00	0.95	1.00		0.95	1.00
Satd. Flow (prot)		1681	1456	1504		1685	1504	1770	5026		1770	5078
Flt Permitted		0.59	1.00	1.00		0.95	1.00	0.95	1.00		0.95	1.00
Satd. Flow (perm)		1048	1456	1504		1685	1504	1770	5026		1770	5078
Peak-hour factor, PHF	0.92	0.94	0.94	0.94	0.96	0.96	0.96	0.92	0.92	0.92	0.96	0.96
Adj. Flow (vph)	1	18	2	113	254	2	18	90	1615	135	15	1570
RTOR Reduction (vph)	0	0	47	51	0	0	16	0	7	0	0	1
Lane Group Flow (vph)	0	17	11	8	0	258	0	90	1743	0	15	1585
Turn Type		Split	NA	Prot	Split	NA	NA	Prot	NA		Prot	NA
Protected Phases		4	4	4	3	3		5	2		1	6
Permitted Phases												
Actuated Green, G (s)		17.1	17.1	17.1		16.3	0.0	10.8	72.0		2.7	63.9
Effective Green, g (s)		17.1	17.1	17.1		16.3	0.0	10.8	72.0		2.7	63.9
Actuated g/C Ratio		0.13	0.13	0.13		0.13	0.00	0.08	0.56		0.02	0.50
Clearance Time (s)		4.9	4.9	4.9		4.9		4.4	5.7		4.4	5.7
Vehicle Extension (s)		2.0	2.0	2.0		2.0		2.0	3.9		2.0	2.2
Lane Grp Cap (vph)		140	194	200		214	0	149	2827		37	2535
v/s Ratio Prot			0.01	0.01		c0.15		c0.05	c0.35		0.01	0.31
v/s Ratio Perm		c0.02										
v/c Ratio		0.12	0.06	0.04		1.21	0.00	0.60	0.62		0.41	0.63
Uniform Delay, d1		48.8	48.4	48.3		55.9	64.0	56.5	18.8		61.9	23.3
Progression Factor		1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.25	0.84
Incremental Delay, d2		0.1	0.0	0.0		128.1	0.0	4.7	1.0		2.4	1.1
Delay (s)		49.0	48.5	48.3		184.0	64.0	61.2	19.8		79.9	20.7
Level of Service		D	D	D		F	E	E	B		E	C
Approach Delay (s)			48.5			177.0			21.8			21.2
Approach LOS			D			F			C			C

Intersection Summary			
HCM 2000 Control Delay	33.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	128.0	Sum of lost time (s)	19.9
Intersection Capacity Utilization	67.9%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	15
Future Volume (vph)	15
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.96
Adj. Flow (vph)	16
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

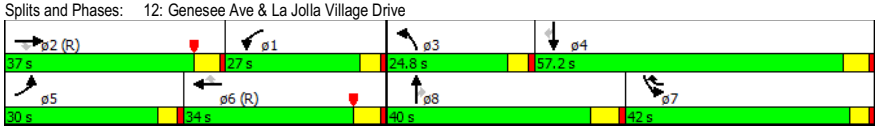
Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	370	389	288	366	673	387	296	950	218	674	837	368
Future Volume (vph)	370	389	288	366	673	387	296	950	218	674	837	368
Turn Type	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6	7	3	8		7	4	
Permitted Phases			2			6			8			4
Detector Phase	5	2	2	1	6	7	3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	4.0	10.0	10.0	4.0	10.0	4.0	4.0	10.0	10.0	4.0	10.0	10.0
Minimum Split (s)	8.4	15.3	15.3	8.4	15.5	8.4	8.4	15.7	15.7	8.4	15.4	15.4
Total Split (s)	30.0	37.0	37.0	27.0	34.0	42.0	24.8	40.0	40.0	42.0	57.2	57.2
Total Split (%)	20.5%	25.3%	25.3%	18.5%	23.3%	28.8%	17.0%	27.4%	27.4%	28.8%	39.2%	39.2%
Yellow Time (s)	3.4	4.3	4.3	3.4	4.5	3.4	3.4	4.7	4.7	3.4	4.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.3	5.3	4.4	5.5	4.4	4.4	5.7	5.7	4.4	5.4	5.4
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lag	Lead	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 146
Actuated Cycle Length: 146
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow, Master Intersection
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 12: Genesee Ave & La Jolla Village Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	370	389	288	366	673	387	296	950	218	674	837	368
Future Volume (vph)	370	389	288	366	673	387	296	950	218	674	837	368
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.3	5.3	4.4	5.5	4.4	4.4	5.7	5.7	4.4	5.4	5.4
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.91	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5085	1583	3433	5085	1583	3433	5085	1583	3433	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5085	1583	3433	5085	1583	3433	5085	1583	3433	5085	1583
Peak-hour factor, PHF	0.80	0.80	0.80	0.87	0.87	0.87	0.94	0.94	0.94	0.93	0.93	0.93
Adj. Flow (vph)	462	486	360	421	774	445	315	1011	232	725	900	396
RTOR Reduction (vph)	0	0	211	0	0	45	0	0	177	0	0	179
Lane Group Flow (vph)	463	486	149	421	774	400	315	1011	55	725	900	217
Turn Type	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6	7	3	8		7	4	
Permitted Phases			2			6			8			4
Actuated Green, G (s)	23.0	35.4	35.4	22.7	34.9	69.3	17.3	33.7	33.7	34.4	51.1	51.1
Effective Green, g (s)	23.0	35.4	35.4	22.7	34.9	69.3	17.3	33.7	33.7	34.4	51.1	51.1
Actuated g/C Ratio	0.16	0.24	0.24	0.16	0.24	0.47	0.12	0.23	0.23	0.24	0.35	0.35
Clearance Time (s)	4.4	5.3	5.3	4.4	5.5	4.4	4.4	5.7	5.7	4.4	5.4	5.4
Vehicle Extension (s)	2.0	6.0	6.0	2.0	5.8	2.0	2.0	3.5	3.5	2.0	4.1	4.1
Lane Grp Cap (vph)	540	1232	383	533	1215	751	406	1173	365	808	1779	554
v/s Ratio Prot	c0.13	0.10		c0.12	c0.15	0.13	0.09	c0.20		c0.21	0.18	
v/s Ratio Perm			0.09			0.13			0.03			0.14
v/c Ratio	0.86	0.39	0.39	0.79	0.64	0.53	0.78	0.86	0.15	0.90	0.51	0.39
Uniform Delay, d1	59.9	46.3	46.3	59.4	49.9	27.0	62.5	53.9	44.7	54.1	37.5	35.7
Progression Factor	0.71	0.75	1.77	0.71	0.68	0.53	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	8.8	0.6	2.0	6.1	2.2	0.3	8.2	6.9	0.2	12.3	0.3	0.7
Delay (s)	51.4	35.5	83.8	48.3	36.1	14.7	70.7	60.8	45.0	66.4	37.8	36.4
Level of Service	D	D	F	D	D	B	E	E	D	E	D	D
Approach Delay (s)		54.4			33.4			60.4			47.8	
Approach LOS		D			C			E			D	

Intersection Summary

HCM 2000 Control Delay	48.5	HCM 2000 Level of Service	D	
HCM 2000 Volume to Capacity ratio	0.83			
Actuated Cycle Length (s)	146.0	Sum of lost time (s)	20.0	
Intersection Capacity Utilization	77.8%	ICU Level of Service	D	
Analysis Period (min)	15			

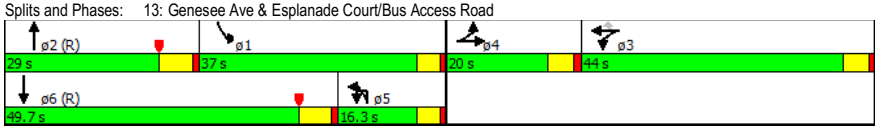
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	255	105	357	134	672	54	415	786	301
Future Volume (vph)	255	105	357	134	672	54	415	786	301
Turn Type	Split	NA	Split	NA	Perm	Prot	NA	Prot	NA
Protected Phases	4	4	3	3		5	2	1	6
Permitted Phases					3				
Detector Phase	4	4	3	3	3	5	2	1	6
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	10.0	4.0	10.0
Minimum Split (s)	8.9	8.9	8.9	8.9	8.9	8.4	16.0	8.4	15.7
Total Split (s)	20.0	20.0	44.0	44.0	44.0	16.3	29.0	37.0	49.7
Total Split (%)	15.4%	15.4%	33.8%	33.8%	33.8%	12.5%	22.3%	28.5%	38.2%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.9	3.4	5.0	3.4	4.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	4.9	4.9	4.9	4.4	6.0	4.4	5.7
Lead/Lag	Lead	Lead	Lag	Lag	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	None	C-Max

Intersection Summary

Cycle Length: 130
Actuated Cycle Length: 130
Offset: 77 (59%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 100
Control Type: Actuated-Coordinated

Splits and Phases: 13: Genesee Ave & Esplanade Court/Bus Access Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	255	105	78	357	134	672	8	54	415	410	786	301
Future Volume (vph)	255	105	78	357	134	672	8	54	415	410	786	301
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9		4.9	4.9	4.9		4.4	6.0		4.4	5.7
Lane Util. Factor	0.97	1.00		0.97	0.95	0.95		1.00	0.91		0.97	0.91
Frt	1.00	0.94		1.00	0.90	0.85		1.00	0.93		1.00	0.95
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.95	1.00		0.95	1.00
Satd. Flow (prot)	3433	1744		3433	1590	1504		1770	4706		3433	4808
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.95	1.00		0.95	1.00
Satd. Flow (perm)	3433	1744		3433	1590	1504		1770	4706		3433	4808
Peak-hour factor, PHF	0.78	0.78	0.78	0.68	0.68	0.68	0.92	0.84	0.84	0.84	0.82	0.82
Adj. Flow (vph)	327	135	100	525	197	988	9	64	494	488	959	367
RTOR Reduction (vph)	0	20	0	0	58	326	0	0	139	0	0	77
Lane Group Flow (vph)	327	215	0	525	554	247	0	73	843	0	959	500
Turn Type	Split	NA		Split	NA	Perm	Prot	Prot	NA		Prot	NA
Protected Phases	4	4		3	3		5	5	2		1	6
Permitted Phases						3						
Actuated Green, G (s)	15.1	15.1		39.1	39.1	39.1		9.5	22.1		33.5	46.4
Effective Green, g (s)	15.1	15.1		39.1	39.1	39.1		9.5	22.1		33.5	46.4
Actuated g/C Ratio	0.12	0.12		0.30	0.30	0.30		0.07	0.17		0.26	0.36
Clearance Time (s)	4.9	4.9		4.9	4.9	4.9		4.4	6.0		4.4	5.7
Vehicle Extension (s)	2.0	2.0		2.0	2.0	2.0		2.0	3.7		2.0	4.1
Lane Grp Cap (vph)	398	202		1032	478	452		129	800		884	1716
v/s Ratio Prot	0.10	c0.12		0.15	c0.35			0.04	c0.18		c0.28	0.10
v/s Ratio Perm						0.16						
v/c Ratio	0.82	1.06		0.51	1.16	0.55		0.57	1.17dr		1.08	0.29
Uniform Delay, d1	56.1	57.5		37.5	45.5	38.0		58.3	54.0		48.2	30.0
Progression Factor	1.00	1.00		1.00	1.00	1.00		0.73	0.72		1.00	1.00
Incremental Delay, d2	12.2	80.9		0.1	92.7	0.7		3.1	45.4		55.9	0.4
Delay (s)	68.4	138.4		37.7	138.1	38.8		45.3	84.3		104.2	30.4
Level of Service	E	F		D	F	D		D	F		F	C
Approach Delay (s)		97.6			74.0				81.6			76.5
Approach LOS		F			E				F			E

Intersection Summary

HCM 2000 Control Delay	79.2	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.10		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	20.2
Intersection Capacity Utilization	84.5%	ICU Level of Service	E
Analysis Period (min)	15		

dr Defacto Right Lane. Recode with 1 though lane as a right lane.
c Critical Lane Group

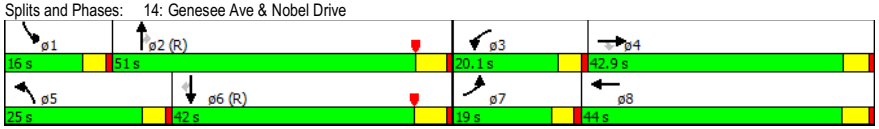
Movement	SBR
Lane Configurations	
Traffic Volume (vph)	172
Future Volume (vph)	172
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.82
Adj. Flow (vph)	210
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	228	582	249	223	664	343	590	218	157	854	117
Future Volume (vph)	228	582	249	223	664	343	590	218	157	854	117
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8	5	2		1	6	
Permitted Phases			4					2			6
Detector Phase	7	4	4	3	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	4.0	10.0	10.0	4.0	10.0	4.0	10.0	10.0	4.0	10.0	10.0
Minimum Split (s)	8.4	37.9	37.9	8.4	40.1	8.4	35.7	35.7	8.4	38.9	38.9
Total Split (s)	19.0	42.9	42.9	20.1	44.0	25.0	51.0	51.0	16.0	42.0	42.0
Total Split (%)	14.6%	33.0%	33.0%	15.5%	33.8%	19.2%	39.2%	39.2%	12.3%	32.3%	32.3%
Yellow Time (s)	3.4	3.9	3.9	3.4	4.1	3.4	4.7	4.7	3.4	4.9	4.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	4.9	4.9	4.4	5.1	4.4	5.7	5.7	4.4	5.9	5.9
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max

Intersection Summary
Cycle Length: 130
Actuated Cycle Length: 130
Offset: 83 (64%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 110
Control Type: Actuated-Coordinated

Splits and Phases: 14: Genesee Ave & Nobel Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	228	582	249	223	664	79	343	590	218	157	854	117
Future Volume (vph)	228	582	249	223	664	79	343	590	218	157	854	117
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9	4.9	4.4	5.1		4.4	5.7	5.7	4.4	5.9	5.9
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95		0.97	0.91	1.00	0.97	0.91	1.00
Frt	1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	3539	1583	3433	3483		3433	5085	1583	3433	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3539	1583	3433	3483		3433	5085	1583	3433	5085	1583
Peak-hour factor, PHF	0.90	0.90	0.90	0.87	0.87	0.87	0.87	0.87	0.87	0.92	0.92	0.92
Adj. Flow (vph)	253	647	277	256	763	91	394	678	251	171	928	127
RTOR Reduction (vph)	0	0	202	0	7	0	0	0	152	0	0	85
Lane Group Flow (vph)	253	647	75	256	847	0	394	678	99	171	928	42
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4						2			6
Actuated Green, G (s)	13.1	35.4	35.4	13.5	35.6		18.3	51.5	51.5	10.2	43.2	43.2
Effective Green, g (s)	13.1	35.4	35.4	13.5	35.6		18.3	51.5	51.5	10.2	43.2	43.2
Actuated g/C Ratio	0.10	0.27	0.27	0.10	0.27		0.14	0.40	0.40	0.08	0.33	0.33
Clearance Time (s)	4.4	4.9	4.9	4.4	5.1		4.4	5.7	5.7	4.4	5.9	5.9
Vehicle Extension (s)	2.0	4.0	4.0	2.0	2.1		2.0	8.0	8.0	2.0	4.0	4.0
Lane Grp Cap (vph)	345	963	431	356	953		483	2014	627	269	1689	526
v/s Ratio Prot	0.07	0.18		c0.07	c0.24		c0.11	0.13		0.05	c0.18	
v/s Ratio Perm			0.05						0.06			0.03
v/c Ratio	0.73	0.67	0.18	0.72	0.89		0.82	0.34	0.16	0.64	0.55	0.08
Uniform Delay, d1	56.8	42.1	36.1	56.4	45.3		54.2	27.3	25.3	58.1	35.5	29.8
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.16	0.37	0.31	1.22	0.61	0.51
Incremental Delay, d2	6.8	2.0	0.3	5.7	9.9		9.4	0.4	0.5	3.4	1.2	0.3
Delay (s)	63.5	44.2	36.4	62.1	55.2		72.5	10.4	8.5	74.4	22.9	15.6
Level of Service	E	D	D	E	E		E	B	A	E	C	B
Approach Delay (s)		46.5			56.8			28.5			29.3	
Approach LOS		D			E			C			C	

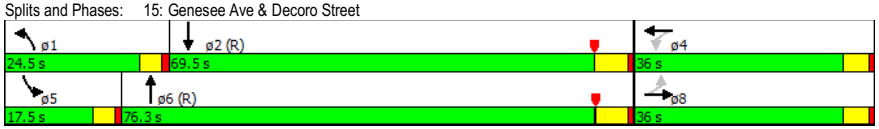
Intersection Summary			
HCM 2000 Control Delay	39.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	19.8
Intersection Capacity Utilization	70.2%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	27	4	4	4	4	975	164	1033
Future Volume (vph)	27	4	4	4	4	975	164	1033
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		8		4	1	6	5	2
Permitted Phases	8		4					
Detector Phase	8	8	4	4	1	6	5	2
Switch Phase								
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	10.0	4.0	10.0
Minimum Split (s)	8.9	8.9	8.9	8.9	8.4	15.7	8.4	15.9
Total Split (s)	36.0	36.0	36.0	36.0	24.5	76.3	17.5	69.5
Total Split (%)	27.7%	27.7%	27.7%	27.7%	18.8%	58.7%	13.5%	53.5%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.4	4.7	3.4	4.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.9		4.9	4.4	5.7	4.4	5.9
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	None	C-Max

Intersection Summary
Cycle Length: 130
Actuated Cycle Length: 130
Offset: 97 (75%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow
Natural Cycle: 50
Control Type: Actuated-Coordinated

Splits and Phases: 15: Genesee Ave & Decoro Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	27	4	4	4	4	187	13	4	975	7	164	1033
Future Volume (vph)	27	4	4	4	4	187	13	4	975	7	164	1033
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9			4.9			4.4	5.7		4.4	5.9
Lane Util. Factor		1.00			1.00			1.00	0.91		1.00	0.91
Frt		0.99			0.87			1.00	1.00		1.00	0.99
Flt Protected		0.96			1.00			0.95	1.00		0.95	1.00
Satd. Flow (prot)		1766			1621			1770	5080		1770	5059
Flt Permitted		0.38			0.99			0.10	1.00		0.95	1.00
Satd. Flow (perm)		698			1610			178	5080		1770	5059
Peak-hour factor, PHF	0.73	0.73	0.73	0.88	0.88	0.88	0.92	0.91	0.91	0.91	0.96	0.96
Adj. Flow (vph)	37	5	5	5	5	212	14	4	1071	8	171	1076
RTOR Reduction (vph)	0	4	0	0	198	0	0	0	0	0	0	3
Lane Group Flow (vph)	0	43	0	0	25	0	0	18	1079	0	171	1111
Turn Type	Perm	NA		Perm	NA			Prot	NA		Prot	NA
Protected Phases		8			4			1	6		5	2
Permitted Phases	8			4								
Actuated Green, G (s)		9.4			9.4			41.8	86.4		19.2	63.6
Effective Green, g (s)		9.4			9.4			41.8	86.4		19.2	63.6
Actuated g/C Ratio		0.07			0.07			0.32	0.66		0.15	0.49
Clearance Time (s)		4.9			4.9			4.4	5.7		4.4	5.9
Vehicle Extension (s)		2.0			2.0			2.0	4.3		2.0	3.7
Lane Grp Cap (vph)		50			116			57	3376		261	2475
v/s Ratio Prot									0.21		c0.10	c0.22
v/s Ratio Perm		c0.06			0.02			c0.10				
v/c Ratio		0.87			0.22			0.32	0.32		0.66	0.45
Uniform Delay, d1		59.7			56.8			33.3	9.3		52.3	21.7
Progression Factor		1.00			1.00			1.00	1.54		0.87	0.67
Incremental Delay, d2		76.6			0.3			1.1	0.2		3.8	0.5
Delay (s)		136.3			57.2			34.4	14.6		49.6	15.0
Level of Service		F			E			C	B		D	B
Approach Delay (s)		136.3			57.2				14.9			19.6
Approach LOS		F			E				B			B

Intersection Summary			
HCM 2000 Control Delay	22.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	15.2
Intersection Capacity Utilization	58.8%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	36
Future Volume (vph)	36
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.96
Adj. Flow (vph)	38
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

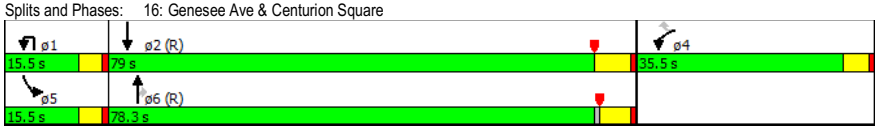
Intersection Summary

Lane Group	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	90	27	2	820	66	66	934
Future Volume (vph)	90	27	2	820	66	66	934
Turn Type	Prot	Perm	Prot	NA	Perm	Prot	NA
Protected Phases	4		1	6		5	2
Permitted Phases		4			6		
Detector Phase	4	4	1	6	6	5	2
Switch Phase							
Minimum Initial (s)	7.0	7.0	4.0	10.0	10.0	4.0	10.0
Minimum Split (s)	11.9	11.9	8.4	15.7	15.7	8.4	16.4
Total Split (s)	35.5	35.5	15.5	78.3	78.3	15.5	79.0
Total Split (%)	27.3%	27.3%	11.9%	60.2%	60.2%	11.9%	60.8%
Yellow Time (s)	3.9	3.9	3.4	4.7	4.7	3.4	5.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	4.4	5.7	5.7	4.4	6.4
Lead/Lag			Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?			Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	C-Max	C-Max	None	C-Max

Intersection Summary

Cycle Length: 130
Actuated Cycle Length: 130
Offset: 37 (28%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow
Natural Cycle: 40
Control Type: Actuated-Coordinated

Splits and Phases: 16: Genesee Ave & Centurion Square



Movement	WBL	WBR	NBU	NBT	NBR	SBU	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	90	27	2	820	66	42	66	934
Future Volume (vph)	90	27	2	820	66	42	66	934
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9	4.4	5.7	5.7		4.4	6.4
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00		0.97	0.91
Frt	1.00	0.85	1.00	1.00	0.85		1.00	1.00
Flt Protected	0.95	1.00	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1770	1583	1770	5085	1583		3433	5085
Flt Permitted	0.95	1.00	0.95	1.00	1.00		0.15	1.00
Satd. Flow (perm)	1770	1583	1770	5085	1583		529	5085
Peak-hour factor, PHF	0.66	0.66	0.92	0.90	0.90	0.92	0.94	0.94
Adj. Flow (vph)	136	41	2	911	73	46	70	994
RTOR Reduction (vph)	0	36	0	0	32	0	0	0
Lane Group Flow (vph)	136	5	2	911	41	0	116	994
Turn Type	Prot	Perm	Prot	NA	Perm		Prot	NA
Protected Phases	4		1	6			5	2
Permitted Phases		4			6			
Actuated Green, G (s)	14.4	14.4	1.1	73.3	73.3		27.3	98.8
Effective Green, g (s)	14.4	14.4	1.1	73.3	73.3		27.3	98.8
Actuated g/C Ratio	0.11	0.11	0.01	0.56	0.56		0.21	0.76
Clearance Time (s)	4.9	4.9	4.4	5.7	5.7		4.4	6.4
Vehicle Extension (s)	2.0	2.0	2.0	4.2	4.2		2.0	3.4
Lane Grp Cap (vph)	196	175	14	2867	892		111	3864
v/s Ratio Prot	c0.08		0.00	c0.18				0.20
v/s Ratio Perm		0.00			0.03		c0.22	
v/c Ratio	0.69	0.03	0.14	0.32	0.05		1.05	0.26
Uniform Delay, d1	55.7	51.5	64.0	15.1	12.7		51.4	4.7
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	0.64
Incremental Delay, d2	8.3	0.0	1.7	0.3	0.1		94.3	0.1
Delay (s)	64.0	51.6	65.7	15.4	12.8		145.7	3.1
Level of Service	E	D	E	B	B		F	A
Approach Delay (s)	61.1			15.3				18.0
Approach LOS	E			B				B

Intersection Summary

HCM 2000 Control Delay	20.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	15.7
Intersection Capacity Utilization	40.3%	ICU Level of Service	A
Analysis Period (min)	15		

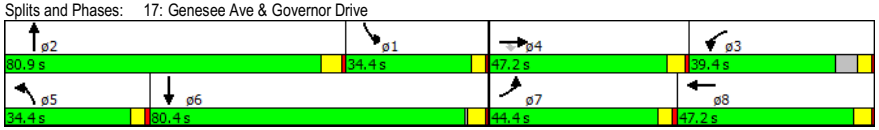
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	74	175	76	399	142	93	570	270	564
Future Volume (vph)	74	175	76	399	142	93	570	270	564
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Prot	NA
Protected Phases	7	4		3	8	5	2	1	6
Permitted Phases			4						
Detector Phase	7	4	4	3	8	5	2	1	6
Switch Phase									
Minimum Initial (s)	4.0	8.0	8.0	4.0	8.0	4.0	8.0	4.0	8.0
Minimum Split (s)	8.4	13.2	13.2	8.4	13.2	8.4	13.9	8.4	13.4
Total Split (s)	44.4	47.2	47.2	39.4	47.2	34.4	80.9	34.4	80.4
Total Split (%)	21.5%	22.8%	22.8%	19.0%	22.8%	16.6%	39.1%	16.6%	38.9%
Yellow Time (s)	3.4	4.2	4.2	3.4	4.2	3.4	4.9	3.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.2	5.2	4.4	5.2	4.4	5.9	4.4	5.4
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	None	Min

Intersection Summary

Cycle Length: 206.9
Actuated Cycle Length: 98.1
Natural Cycle: 60
Control Type: Actuated-Uncoordinated

Splits and Phases: 17: Genesee Ave & Governor Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	74	175	76	399	142	158	93	570	328	270	564	57
Future Volume (vph)	74	175	76	399	142	158	93	570	328	270	564	57
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	16	12	12	12	12	12	12	12
Total Lost time (s)	4.4	5.2	5.2	4.4	5.2		4.4	5.9		4.4	5.4	
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95		1.00	0.91		0.97	0.91	
Frt	1.00	1.00	0.85	1.00	0.92		1.00	0.95		1.00	0.99	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	3433	3539	1583	3433	3694		1770	4807		3433	5015	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	3433	3539	1583	3433	3694		1770	4807		3433	5015	
Peak-hour factor, PHF	0.94	0.94	0.94	0.83	0.83	0.83	0.93	0.93	0.93	0.83	0.83	0.83
Adj. Flow (vph)	79	186	81	481	171	190	100	613	353	325	680	69
RTOR Reduction (vph)	0	0	72	0	91	0	0	55	0	0	6	0
Lane Group Flow (vph)	79	186	9	481	270	0	100	911	0	325	743	0
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4									
Actuated Green, G (s)	7.5	11.4	11.4	20.8	24.7		11.4	29.5		15.8	34.4	
Effective Green, g (s)	7.5	11.4	11.4	20.8	24.7		11.4	29.5		15.8	34.4	
Actuated g/C Ratio	0.08	0.12	0.12	0.21	0.25		0.12	0.30		0.16	0.35	
Clearance Time (s)	4.4	5.2	5.2	4.4	5.2		4.4	5.9		4.4	5.4	
Vehicle Extension (s)	2.0	2.3	2.3	2.0	3.8		2.0	2.9		2.0	3.5	
Lane Grp Cap (vph)	264	414	185	733	936		207	1455		556	1771	
v/s Ratio Prot	0.02	c0.05		c0.14	c0.07		0.06	c0.19		c0.09	0.15	
v/s Ratio Perm			0.01									
v/c Ratio	0.30	0.45	0.05	0.66	0.29		0.48	0.63		0.58	0.42	
Uniform Delay, d1	42.5	40.1	38.2	35.0	29.3		40.2	29.2		37.8	23.9	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.2	0.5	0.1	1.6	0.2		0.6	0.8		1.0	0.2	
Delay (s)	42.7	40.5	38.3	36.7	29.5		40.9	30.0		38.8	24.1	
Level of Service	D	D	D	D	C		D	C		D	C	
Approach Delay (s)		40.5			33.6			31.1			28.5	
Approach LOS		D			C			C			C	

Intersection Summary

HCM 2000 Control Delay	31.9	HCM 2000 Level of Service		C	
HCM 2000 Volume to Capacity ratio	0.60				
Actuated Cycle Length (s)	97.4	Sum of lost time (s)		19.9	
Intersection Capacity Utilization	60.7%	ICU Level of Service		B	
Analysis Period (min)	15				

c Critical Lane Group

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	247	114	792	642	324
Future Volume (Veh/h)	0	247	114	792	642	324
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.87	0.87	0.83	0.83	0.87	0.87
Hourly flow rate (vph)	0	284	137	954	738	372
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1330	369	738			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1330	369	738			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	55	84			
cM capacity (veh/h)	123	628	864			

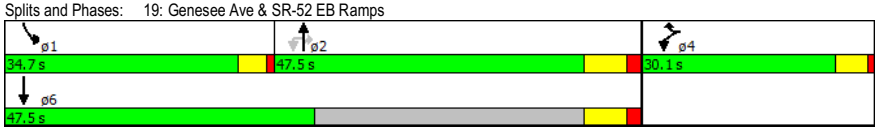
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3
Volume Total	284	137	318	318	318	369	369	372
Volume Left	0	137	0	0	0	0	0	0
Volume Right	284	0	0	0	0	0	0	372
cSH	628	864	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.45	0.16	0.19	0.19	0.19	0.22	0.22	0.22
Queue Length 95th (ft)	59	14	0	0	0	0	0	0
Control Delay (s)	15.4	10.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	C	A						
Approach Delay (s)	15.4	1.2				0.0		
Approach LOS	C							

Intersection Summary			
Average Delay	2.3		
Intersection Capacity Utilization	39.7%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	170	151	2	769	277	534	331
Future Volume (vph)	170	151	2	769	277	534	331
Turn Type	Prot	Prot	Perm	NA	Perm	Prot	NA
Protected Phases	4	4		2		1	6
Permitted Phases			2		2		
Detector Phase	4	4	2	2	2	1	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	13.0	13.0	13.0	5.0	10.0
Minimum Split (s)	37.1	37.1	38.5	38.5	38.5	9.7	25.5
Total Split (s)	30.1	30.1	47.5	47.5	47.5	34.7	47.5
Total Split (%)	26.8%	26.8%	42.3%	42.3%	42.3%	30.9%	42.3%
Yellow Time (s)	4.1	4.1	5.5	5.5	5.5	3.7	5.5
All-Red Time (s)	1.0	1.0	2.0	2.0	2.0	1.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	5.1	5.1		7.5	7.5	4.7	7.5
Lead/Lag			Lag	Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	Yes	
Recall Mode	None	None	Min	Min	Min	None	Min

Intersection Summary
Cycle Length: 112.3
Actuated Cycle Length: 97.4
Natural Cycle: 130
Control Type: Actuated-Uncoordinated

Splits and Phases: 19: Genesee Ave & SR-52 EB Ramps



Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	170	151	2	769	277	534	331
Future Volume (vph)	170	151	2	769	277	534	331
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1		7.5	7.5	4.7	7.5
Lane Util. Factor	1.00	1.00		0.95	1.00	1.00	0.95
Frt	1.00	0.85		1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00		1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583		3539	1583	1770	3539
Flt Permitted	0.95	1.00		0.95	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583		3377	1583	1770	3539
Peak-hour factor, PHF	0.92	0.92	0.92	0.82	0.82	0.90	0.90
Adj. Flow (vph)	185	164	2	938	338	593	368
RTOR Reduction (vph)	0	138	0	0	133	0	0
Lane Group Flow (vph)	185	26	0	940	205	593	368
Turn Type	Prot	Prot	Perm	NA	Perm	Prot	NA
Protected Phases	4	4		2		1	6
Permitted Phases			2		2		
Actuated Green, G (s)	15.6	15.6		34.0	34.0	30.4	69.1
Effective Green, g (s)	15.6	15.6		34.0	34.0	30.4	69.1
Actuated g/C Ratio	0.16	0.16		0.35	0.35	0.31	0.71
Clearance Time (s)	5.1	5.1		7.5	7.5	4.7	7.5
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	283	253		1180	553	553	2513
v/s Ratio Prot	c0.10	0.02				c0.34	0.10
v/s Ratio Perm				c0.28	0.13		
v/c Ratio	0.65	0.10		0.80	0.37	1.07	0.15
Uniform Delay, d1	38.3	34.9		28.5	23.7	33.5	4.6
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	5.3	0.2		3.8	0.4	59.1	0.0
Delay (s)	43.7	35.1		32.4	24.1	92.6	4.6
Level of Service	D	D		C	C	F	A
Approach Delay (s)	39.6			30.2			58.9
Approach LOS	D			C			E

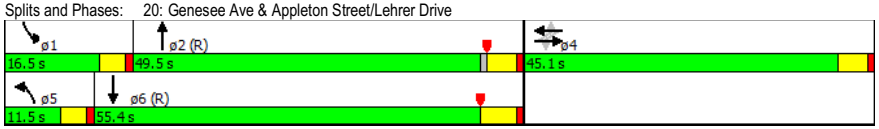
Intersection Summary			
HCM 2000 Control Delay	42.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	97.3	Sum of lost time (s)	17.3
Intersection Capacity Utilization	77.1%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	265	20	10	13	11	669	74	634
Future Volume (vph)	265	20	10	13	11	669	74	634
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		4	5	2	1	6
Permitted Phases	4		4					
Detector Phase	4	4	4	4	5	2	1	6
Switch Phase								
Minimum Initial (s)	6.0	6.0	6.0	6.0	4.0	10.0	4.0	10.0
Minimum Split (s)	10.9	10.9	10.9	10.9	8.4	14.9	8.4	15.8
Total Split (s)	45.1	45.1	45.1	45.1	11.5	49.5	16.5	55.4
Total Split (%)	40.3%	40.3%	40.3%	40.3%	10.3%	44.2%	14.7%	49.5%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.4	3.9	3.4	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.9		4.9	4.4	4.9	4.4	5.8
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	None	C-Max

Intersection Summary
Cycle Length: 112
Actuated Cycle Length: 112
Offset: 88 (79%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 55
Control Type: Actuated-Coordinated

Splits and Phases: 20: Genesee Ave & Appleton Street/Lehrer Drive



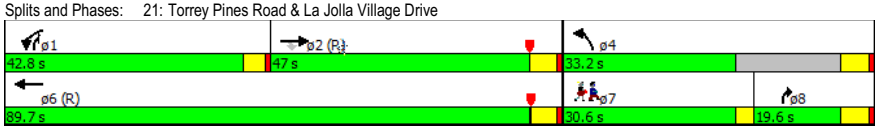
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	265	20	16	10	13	133	11	669	11	74	634	124
Future Volume (vph)	265	20	16	10	13	133	11	669	11	74	634	124
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	16	12	12	16	12	12	12	12	12	12	12
Total Lost time (s)		4.9			4.9		4.4	4.9		4.4	5.8	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frt		0.99			0.89		1.00	1.00		1.00	0.98	
Flt Protected		0.96			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		2008			1863		1770	3531		1770	3453	
Flt Permitted		0.55			0.97		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1145			1804		1770	3531		1770	3453	
Peak-hour factor, PHF	0.75	0.75	0.75	0.73	0.73	0.73	0.90	0.90	0.90	0.91	0.91	0.91
Adj. Flow (vph)	353	27	21	14	18	182	12	743	12	81	697	136
RTOR Reduction (vph)	0	2	0	0	117	0	0	1	0	0	13	0
Lane Group Flow (vph)	0	399	0	0	97	0	12	754	0	81	820	0
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4			4								
Actuated Green, G (s)		40.0			40.0		1.4	49.1		8.7	55.5	
Effective Green, g (s)		40.0			40.0		1.4	49.1		8.7	55.5	
Actuated g/C Ratio		0.36			0.36		0.01	0.44		0.08	0.50	
Clearance Time (s)		4.9			4.9		4.4	4.9		4.4	5.8	
Vehicle Extension (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		408			644		22	1547		137	1711	
v/s Ratio Prot							0.01	0.21		c0.05	c0.24	
v/s Ratio Perm		c0.35			0.05							
v/c Ratio		0.98			0.15		0.55	0.49		0.59	0.48	
Uniform Delay, d1		35.6			24.5		55.0	22.5		49.9	18.7	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		38.4			0.1		24.9	1.1		6.7	1.0	
Delay (s)		73.9			24.6		79.8	23.6		56.6	19.7	
Level of Service		E			C		E	C		E	B	
Approach Delay (s)		73.9			24.6			24.4			22.9	
Approach LOS		E			C			C			C	

Intersection Summary			
HCM 2000 Control Delay	32.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	112.0	Sum of lost time (s)	15.1
Intersection Capacity Utilization	67.6%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	ø7	ø8
Lane Configurations								
Traffic Volume (vph)	795	162	755	725	139	719		
Future Volume (vph)	795	162	755	725	139	719		
Turn Type	NA	Perm	Prot	NA	Prot	pt+ov		
Protected Phases	2		1	6	4	8 1	7	8
Permitted Phases		2						
Detector Phase	2	2	1	6	4	8 1		
Switch Phase								
Minimum Initial (s)	10.0	10.0	4.0	10.0	4.0		4.0	4.0
Minimum Split (s)	15.4	15.4	8.4	15.3	9.6		8.0	9.6
Total Split (s)	47.0	47.0	42.8	89.7	33.2		30.6	19.6
Total Split (%)	33.6%	33.6%	30.6%	64.1%	23.7%		22%	14%
Yellow Time (s)	4.4	4.4	3.4	4.3	4.6		3.0	4.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		0.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0			
Total Lost Time (s)	5.4	5.4	4.4	5.3	5.6			
Lead/Lag	Lag	Lag	Lead				Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes				Yes	Yes
Recall Mode	C-Max	C-Max	None	C-Max	None		None	None

Intersection Summary
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 15 (11%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 60
Control Type: Actuated-Coordinated

Splits and Phases: 21: Torrey Pines Road & La Jolla Village Drive



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	795	162	755	725	139	719
Future Volume (vph)	795	162	755	725	139	719
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.4	5.4	4.4	5.3	5.6	5.6
Lane Util. Factor	0.91	1.00	0.97	0.91	0.97	0.88
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	5085	1583	3433	5085	3433	2787
Flt Permitted	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (perm)	5085	1583	3433	5085	3433	2787
Peak-hour factor, PHF	0.76	0.76	0.91	0.91	0.82	0.82
Adj. Flow (vph)	1046	213	830	797	170	877
RTOR Reduction (vph)	0	126	0	0	0	0
Lane Group Flow (vph)	1046	87	830	797	170	877
Turn Type	NA	Perm	Prot	NA	Prot	pt+ov
Protected Phases	2		1	6	4	8 1
Permitted Phases		2				
Actuated Green, G (s)	55.2	55.2	37.5	97.2	31.9	75.0
Effective Green, g (s)	55.2	55.2	37.5	97.2	31.9	75.0
Actuated g/C Ratio	0.39	0.39	0.27	0.69	0.23	0.54
Clearance Time (s)	5.4	5.4	4.4	5.3	5.6	
Vehicle Extension (s)	5.5	5.5	2.0	8.0	2.0	
Lane Grp Cap (vph)	2004	624	919	3530	782	1493
v/s Ratio Prot	c0.21		c0.24	0.16	0.05	c0.31
v/s Ratio Perm		0.05				
v/c Ratio	0.52	0.14	0.90	0.23	0.22	0.59
Uniform Delay, d1	32.3	27.2	49.5	7.8	43.9	22.0
Progression Factor	1.00	1.00	0.93	0.87	1.00	1.00
Incremental Delay, d2	1.0	0.5	11.3	0.1	0.1	0.4
Delay (s)	33.3	27.6	57.5	6.9	44.0	22.4
Level of Service	C	C	E	A	D	C
Approach Delay (s)	32.4			32.7	25.9	
Approach LOS	C			C	C	

Intersection Summary			
HCM 2000 Control Delay	30.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	18.4
Intersection Capacity Utilization	53.7%	ICU Level of Service	A
Analysis Period (min)	15		

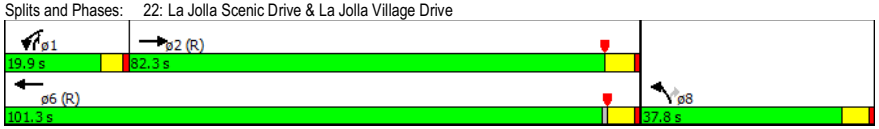
c Critical Lane Group

Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Configurations					
Traffic Volume (vph)	1405	193	1374	107	205
Future Volume (vph)	1405	193	1374	107	205
Turn Type	NA	Prot	NA	Prot	pm+ov
Protected Phases	2	1	6	8	1
Permitted Phases					8
Detector Phase	2	1	6	8	1
Switch Phase					
Minimum Initial (s)	10.0	4.0	10.0	4.0	4.0
Minimum Split (s)	15.7	8.4	15.3	9.5	8.4
Total Split (s)	82.3	19.9	101.3	37.8	19.9
Total Split (%)	58.8%	14.2%	72.4%	27.0%	14.2%
Yellow Time (s)	4.7	3.4	4.3	4.5	3.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.7	4.4	5.3	5.5	4.4
Lead/Lag	Lag	Lead			Lead
Lead-Lag Optimize?	Yes	Yes			Yes
Recall Mode	C-Max	None	C-Max	None	None

Intersection Summary

Cycle Length: 140
Actuated Cycle Length: 140
Offset: 12 (9%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 75
Control Type: Actuated-Coordinated

Splits and Phases: 22: La Jolla Scenic Drive & La Jolla Village Drive



Movement	EBU	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations							
Traffic Volume (vph)	1	1405	91	193	1374	107	205
Future Volume (vph)	1	1405	91	193	1374	107	205
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.7		4.4	5.3	5.5	4.4
Lane Util. Factor		0.91		0.97	0.91	1.00	0.88
Frt		0.99		1.00	1.00	1.00	0.85
Flt Protected		1.00		0.95	1.00	0.95	1.00
Satd. Flow (prot)		5039		3433	5085	1770	2787
Flt Permitted		0.94		0.95	1.00	0.95	1.00
Satd. Flow (perm)		4734		3433	5085	1770	2787
Peak-hour factor, PHF	0.92	0.95	0.95	0.92	0.92	0.88	0.88
Adj. Flow (vph)	1	1479	96	210	1493	122	233
RTOR Reduction (vph)	0	3	0	0	0	0	40
Lane Group Flow (vph)	0	1573	0	210	1493	122	193
Turn Type		NA		Prot	NA	Prot	pm+ov
Protected Phases		2		1	6	8	1
Permitted Phases							8
Actuated Green, G (s)		97.4		12.9	115.1	14.1	27.0
Effective Green, g (s)		97.4		12.9	115.1	14.1	27.0
Actuated g/C Ratio		0.70		0.09	0.82	0.10	0.19
Clearance Time (s)		5.7		4.4	5.3	5.5	4.4
Vehicle Extension (s)		4.0		2.0	5.9	2.0	2.0
Lane Grp Cap (vph)		3293		316	4180	178	537
v/s Ratio Prot				c0.06	0.29	c0.07	0.03
v/s Ratio Perm		c0.33					0.04
v/c Ratio		8.73dr		0.66	0.36	0.69	0.36
Uniform Delay, d1		9.7		61.5	3.1	60.8	49.0
Progression Factor		1.06		1.00	1.00	1.00	1.00
Incremental Delay, d2		0.4		4.0	0.2	8.4	0.2
Delay (s)		10.7		65.5	3.4	69.2	49.2
Level of Service		B		E	A	E	D
Approach Delay (s)		10.7			11.0	56.0	
Approach LOS		B			B	E	

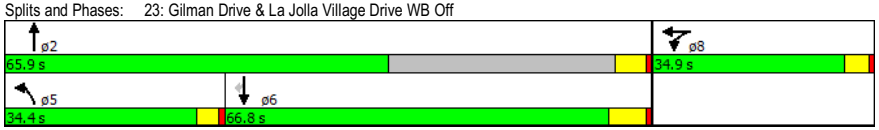
Intersection Summary			
HCM 2000 Control Delay	15.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	15.6
Intersection Capacity Utilization	75.4%	ICU Level of Service	D
Analysis Period (min)	15		

dr Defacto Right Lane. Recode with 1 though lane as a right lane.
c Critical Lane Group

Lane Group	WBT	NBL	NBT	SBT	SBR
Lane Configurations					
Traffic Volume (vph)	0	169	261	253	117
Future Volume (vph)	0	169	261	253	117
Turn Type	NA	Prot	NA	NA	Perm
Protected Phases	8	5	2	6	
Permitted Phases					6
Detector Phase	8	5	2	6	6
Switch Phase					
Minimum Initial (s)	4.0	4.0	10.0	10.0	10.0
Minimum Split (s)	34.9	8.5	17.9	18.8	18.8
Total Split (s)	34.9	34.4	65.9	66.8	66.8
Total Split (%)	25.6%	25.3%	48.4%	49.1%	49.1%
Yellow Time (s)	3.9	3.4	4.9	5.8	5.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.4	5.9	6.8	6.8
Lead/Lag		Lead		Lag	Lag
Lead-Lag Optimize?		Yes		Yes	Yes
Recall Mode	None	None	Min	Min	Min

Intersection Summary
Cycle Length: 136.1
Actuated Cycle Length: 41.1
Natural Cycle: 65
Control Type: Actuated-Uncoordinated

Splits and Phases: 23: Gilman Drive & La Jolla Village Drive WB Off



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	5	0	93	169	261	0	0	253	117
Future Volume (vph)	0	0	0	5	0	93	169	261	0	0	253	117
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.9		4.4	5.9			6.8	6.8
Lane Util. Factor					1.00		1.00	0.95			0.95	1.00
Frt					0.87		1.00	1.00			1.00	0.85
Flt Protected					1.00		0.95	1.00			1.00	1.00
Satd. Flow (prot)					1620		1770	3539			3539	1583
Flt Permitted					1.00		0.95	1.00			1.00	1.00
Satd. Flow (perm)					1620		1770	3539			3539	1583
Peak-hour factor, PHF	0.25	0.25	0.25	0.84	0.84	0.84	0.96	0.96	0.96	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	6	0	111	176	272	0	0	281	130
RTOR Reduction (vph)	0	0	0	0	98	0	0	0	0	0	0	95
Lane Group Flow (vph)	0	0	0	0	19	0	176	272	0	0	281	35
Turn Type				Split	NA		Prot	NA			NA	Perm
Protected Phases				8	8		5	2			6	
Permitted Phases												6
Actuated Green, G (s)					4.9		9.9	26.4			11.2	11.2
Effective Green, g (s)					4.9		9.9	26.4			11.2	11.2
Actuated g/C Ratio					0.12		0.24	0.63			0.27	0.27
Clearance Time (s)					4.9		4.4	5.9			6.8	6.8
Vehicle Extension (s)					3.0		3.0	3.0			3.0	3.0
Lane Grp Cap (vph)					188		416	2219			941	421
v/s Ratio Prot					c0.01		c0.10	0.08			c0.08	
v/s Ratio Perm												0.02
v/c Ratio					0.10		0.42	0.12			0.30	0.08
Uniform Delay, d1					16.6		13.7	3.2			12.3	11.6
Progression Factor					1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2					0.2		0.7	0.0			0.2	0.1
Delay (s)					16.9		14.4	3.2			12.5	11.7
Level of Service					B		B	A			B	B
Approach Delay (s)		0.0			16.9			7.6			12.2	
Approach LOS		A			B			A			B	

Intersection Summary				
HCM 2000 Control Delay	10.7	HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio	0.31			
Actuated Cycle Length (s)	42.1	Sum of lost time (s)	16.1	
Intersection Capacity Utilization	Err%	ICU Level of Service	H	
Analysis Period (min)	15			

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (veh/h)	17	5	327	0	0	228	2	0	412	68	74	212
Future Volume (Veh/h)	17	5	327	0	0	228	2	0	412	68	74	212
Sign Control		Stop			Stop				Free			Free
Grade		0%			0%				0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	18	5	355	0	0	248	0	0	448	74	80	230
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)			13									
Median type									None			None
Median storage veh)												
Upstream signal (ft)												483
pX, platoon unblocked							0.00					
vC, conflicting volume	862	912	115	903	838	224	0	230			522	
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	862	912	115	903	838	224	0	230			522	
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	0.0	4.1			4.1	
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	0.0	2.2			2.2	
p0 queue free %	89	98	61	100	100	68	0	100			92	
cM capacity (veh/h)	160	251	916	132	278	779	0	1335			1041	

Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	373	224	224	74	80	115	115
Volume Left	18	0	0	0	80	0	0
Volume Right	355	0	0	74	0	0	0
cSH	962	1700	1700	1700	1041	1700	1700
Volume to Capacity	0.39	0.13	0.13	0.04	0.08	0.07	0.07
Queue Length 95th (ft)	46	0	0	0	6	0	0
Control Delay (s)	12.3	0.0	0.0	0.0	8.7	0.0	0.0
Lane LOS	B				A		
Approach Delay (s)	Err	0.0			2.3		
Approach LOS	F						

Intersection Summary				
Average Delay	Err			
Intersection Capacity Utilization	Err%	ICU Level of Service	H	
Analysis Period (min)	15			

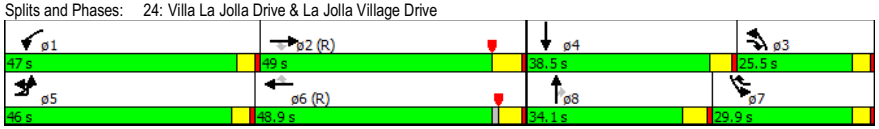
Movement	SBR
Lane Configurations	
Traffic Volume (veh/h)	0
Future Volume (Veh/h)	0
Sign Control	
Grade	
Peak Hour Factor	0.92
Hourly flow rate (vph)	0
Pedestrians	
Lane Width (ft)	
Walking Speed (ft/s)	
Percent Blockage	
Right turn flare (veh)	
Median type	
Median storage veh)	
Upstream signal (ft)	
pX, platoon unblocked	
vC, conflicting volume	
vC1, stage 1 conf vol	
vC2, stage 2 conf vol	
vCu, unblocked vol	
tC, single (s)	
tC, 2 stage (s)	
tF (s)	
p0 queue free %	
cM capacity (veh/h)	
Direction, Lane #	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	68	1019	165	917	947	824	182	1115	651	695	297
Future Volume (vph)	68	1019	165	917	947	824	182	1115	651	695	297
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA
Protected Phases	5	2	3	1	6	7	3	8		7	4
Permitted Phases			2			6			8		
Detector Phase	5	2	3	1	6	7	3	8	8	7	4
Switch Phase											
Minimum Initial (s)	4.0	10.0	4.0	4.0	10.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.4	16.4	22.4	8.4	15.3	8.4	22.4	9.5	9.5	8.4	8.9
Total Split (s)	46.0	49.0	25.5	47.0	48.9	29.9	25.5	34.1	34.1	29.9	38.5
Total Split (%)	28.8%	30.6%	15.9%	29.4%	30.6%	18.7%	15.9%	21.3%	21.3%	18.7%	24.1%
Yellow Time (s)	3.4	5.4	3.4	3.4	4.3	3.4	3.4	4.5	4.5	3.4	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	6.4	4.4	4.4	5.3	4.4	4.4	5.5	5.5	4.4	4.9
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	C-Max	None	None	None	None	None	None

Intersection Summary

Cycle Length: 160
Actuated Cycle Length: 160
Offset: 4 (3%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 24: Villa La Jolla Drive & La Jolla Village Drive



Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	65	68	1019	165	917	947	824	182	1115	651	695	297
Future Volume (vph)	65	68	1019	165	917	947	824	182	1115	651	695	297
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.4	6.4	4.4	4.4	5.3	4.4	4.4	5.5	5.5	4.4	4.9
Lane Util. Factor		1.00	0.91	1.00	0.97	0.91	1.00	0.97	0.95	0.95	0.97	1.00
Frt		1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99	0.85	1.00	0.97
Flt Protected		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)		1770	5085	1583	3433	5085	1583	3433	1755	1504	3433	1812
Flt Permitted		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Satd. Flow (perm)		1770	5085	1583	3433	5085	1583	3433	1755	1504	3433	1812
Peak-hour factor, PHF	0.92	0.93	0.93	0.93	0.95	0.95	0.95	0.89	0.89	0.89	0.88	0.88
Adj. Flow (vph)	71	73	1096	177	965	997	867	204	1253	731	790	338
RTOR Reduction (vph)	0	0	0	34	0	0	186	0	2	130	0	5
Lane Group Flow (vph)	0	144	1096	143	965	997	681	204	1324	528	790	408
Turn Type	Prot	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA
Protected Phases	5	5	2	3	1	6	7	3	8		7	4
Permitted Phases				2			6			8		
Actuated Green, G (s)		17.5	42.6	63.7	42.6	68.8	94.3	21.1	28.6	28.6	25.5	33.6
Effective Green, g (s)		17.5	42.6	63.7	42.6	68.8	94.3	21.1	28.6	28.6	25.5	33.6
Actuated g/C Ratio		0.11	0.27	0.40	0.27	0.43	0.59	0.13	0.18	0.18	0.16	0.21
Clearance Time (s)		4.4	6.4	4.4	4.4	5.3	4.4	4.4	5.5	5.5	4.4	4.9
Vehicle Extension (s)		2.0	4.4	2.0	2.0	4.7	2.0	2.0	3.3	3.3	2.0	2.0
Lane Grp Cap (vph)		193	1353	630	914	2186	932	452	313	268	547	380
v/s Ratio Prot		0.08	c0.22	0.03	c0.28	0.20	0.12	0.06	c0.75		c0.23	0.23
v/s Ratio Perm				0.06			0.31			0.35		
v/c Ratio		0.75	0.81	0.23	1.06	0.46	0.73	0.45	4.23	1.97	1.44	1.07
Uniform Delay, d1		69.1	54.9	31.9	58.7	32.3	23.7	64.1	65.7	65.7	67.2	63.2
Progression Factor		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2		12.8	5.3	0.1	45.6	0.7	2.6	0.3	1461.5	450.2	210.1	67.4
Delay (s)		81.9	60.3	31.9	104.3	33.0	26.3	64.4	1527.2	515.9	277.3	130.6
Level of Service		F	E	C	F	C	C	E	F	F	F	F
Approach Delay (s)			58.9			55.3			1086.7			227.0
Approach LOS			E			E			F			F

Intersection Summary			
HCM 2000 Control Delay	378.5	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.70		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	20.7
Intersection Capacity Utilization	154.8%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	66
Future Volume (vph)	66
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.88
Adj. Flow (vph)	75
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

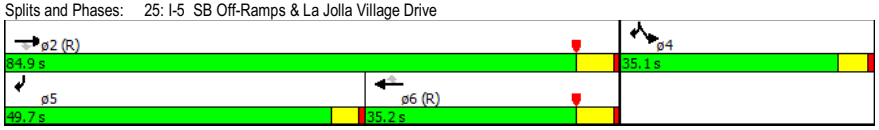
Intersection Summary

Lane Group	EBT	EBR	WBT	WBR	SBL	SBR	ø5
Lane Configurations							
Traffic Volume (vph)	1408	1121	1383	447	703	1178	
Future Volume (vph)	1408	1121	1383	447	703	1178	
Turn Type	NA	Perm	NA	Perm	Prot	custom	
Protected Phases	2		6		4	4 5	5
Permitted Phases		2		6			
Detector Phase	2	2	6	6	4	4 5	
Switch Phase							
Minimum Initial (s)	10.0	10.0	15.0	15.0	5.0		2.0
Minimum Split (s)	16.2	16.2	21.2	21.2	10.1		6.7
Total Split (s)	84.9	84.9	35.2	35.2	35.1		49.7
Total Split (%)	70.8%	70.8%	29.3%	29.3%	29.3%		41%
Yellow Time (s)	5.2	5.2	5.2	5.2	4.1		3.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	6.2	6.2	6.2	6.2	5.1		
Lead/Lag			Lag	Lag			Lead
Lead-Lag Optimize?			Yes	Yes			Yes
Recall Mode	C-Max	C-Max	C-Max	C-Max	Min		None

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 70 (58%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 75
Control Type: Actuated-Coordinated

Splits and Phases: 25: I-5 SB Off-Ramps & La Jolla Village Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1408	1121	0	1383	447	0	0	0	703	0	1178
Future Volume (vph)	0	1408	1121	0	1383	447	0	0	0	703	0	1178
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.2	6.2		6.2	6.2				5.1		5.1
Lane Util. Factor		0.86	1.00		0.91	1.00				0.97		0.88
Frt		1.00	0.85		1.00	0.85				1.00		0.85
Flt Protected		1.00	1.00		1.00	1.00				0.95		1.00
Satd. Flow (prot)		6408	1583		5085	1583				3433		2787
Flt Permitted		1.00	1.00		1.00	1.00				0.95		1.00
Satd. Flow (perm)		6408	1583		5085	1583				3433		2787
Peak-hour factor, PHF	0.92	0.92	0.92	0.80	0.80	0.80	0.25	0.25	0.25	0.88	0.88	0.88
Adj. Flow (vph)	0	1530	1218	0	1729	559	0	0	0	799	0	1339
RTOR Reduction (vph)	0	0	375	0	0	275	0	0	0	0	0	11
Lane Group Flow (vph)	0	1530	843	0	1729	284	0	0	0	799	0	1328
Turn Type		NA	Perm		NA	Perm				Prot		custom
Protected Phases		2			6					4		4 5
Permitted Phases			2			6						
Actuated Green, G (s)		78.7	78.7		34.2	34.2				30.0		74.9
Effective Green, g (s)		78.7	78.7		34.2	34.2				30.0		74.9
Actuated g/C Ratio		0.66	0.66		0.29	0.29				0.25		0.62
Clearance Time (s)		6.2	6.2		6.2	6.2				5.1		
Vehicle Extension (s)		2.0	2.0		2.0	2.0				2.0		
Lane Grp Cap (vph)		4202	1038		1449	451				858		1739
v/s Ratio Prot		0.24			c0.34					c0.23		0.48
v/s Ratio Perm			c0.53			0.18						
v/c Ratio		0.36	0.81		1.19	0.63				0.93		0.76
Uniform Delay, d1		9.3	15.2		42.9	37.4				44.0		16.2
Progression Factor		1.00	1.00		1.02	1.13				1.00		1.00
Incremental Delay, d2		0.2	6.9		93.5	6.1				16.3		1.8
Delay (s)		9.6	22.1		137.4	48.2				60.3		18.0
Level of Service		A	C		F	D				E		B
Approach Delay (s)		15.1			115.6			0.0			33.8	
Approach LOS		B			F			A			C	

Intersection Summary

HCM 2000 Control Delay	52.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.99		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	77.3%	ICU Level of Service	D
Analysis Period (min)	15		

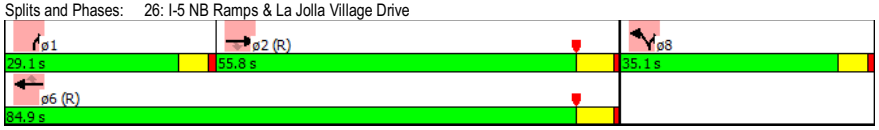
c Critical Lane Group

Lane Group	EBT	EBR	WBT	WBR	NBL	NBR	ø1
Lane Configurations							
Traffic Volume (vph)	1287	955	1286	530	429	338	
Future Volume (vph)	1287	955	1286	530	429	338	
Turn Type	NA	Perm	NA	Perm	Prot	custom	
Protected Phases	2		6		8	1 8	1
Permitted Phases		2		6			
Detector Phase	2	2	6	6	8	1 8	
Switch Phase							
Minimum Initial (s)	16.0	16.0	16.0	16.0	5.0		2.0
Minimum Split (s)	36.2	36.2	22.2	22.2	10.1		7.1
Total Split (s)	55.8	55.8	84.9	84.9	35.1		29.1
Total Split (%)	46.5%	46.5%	70.8%	70.8%	29.3%		24%
Yellow Time (s)	5.2	5.2	5.2	5.2	4.1		4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	6.2	6.2	6.2	6.2	5.1		
Lead/Lag	Lag	Lag					Lead
Lead-Lag Optimize?	Yes	Yes					Yes
Recall Mode	C-Max	C-Max	C-Max	C-Max	Min		None

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 75 (63%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 65
Control Type: Actuated-Coordinated

Splits and Phases: 26: I-5 NB Ramps & La Jolla Village Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1287	955	0	1286	530	429	0	338	0	0	0
Future Volume (vph)	0	1287	955	0	1286	530	429	0	338	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.2	6.2		6.2	6.2	5.1		5.1			
Lane Util. Factor		0.91	1.00		0.91	1.00	0.97		0.88			
Frt		1.00	0.85		1.00	0.85	1.00		0.85			
Flt Protected		1.00	1.00		1.00	1.00	0.95		1.00			
Satd. Flow (prot)		5085	1583		5085	1583	3433		2787			
Flt Permitted		1.00	1.00		1.00	1.00	0.95		1.00			
Satd. Flow (perm)		5085	1583		5085	1583	3433		2787			
Peak-hour factor, PHF	0.84	0.84	0.84	0.83	0.83	0.83	0.83	0.83	0.83	0.25	0.25	0.25
Adj. Flow (vph)	0	1532	1137	0	1549	639	517	0	407	0	0	0
RTOR Reduction (vph)	0	0	404	0	0	181	0	0	21	0	0	0
Lane Group Flow (vph)	0	1532	733	0	1549	458	517	0	386	0	0	0
Turn Type		NA	Perm		NA	Perm	Prot		custom			
Protected Phases		2			6		8		1 8			
Permitted Phases			2			6						
Actuated Green, G (s)		75.6	75.6		86.0	86.0	22.7		33.1			
Effective Green, g (s)		75.6	75.6		86.0	86.0	22.7		33.1			
Actuated g/C Ratio		0.63	0.63		0.72	0.72	0.19		0.28			
Clearance Time (s)		6.2	6.2		6.2	6.2	5.1					
Vehicle Extension (s)		2.0	2.0		2.0	2.0	2.0					
Lane Grp Cap (vph)		3203	997		3644	1134	649		768			
v/s Ratio Prot		0.30			0.30		c0.15		c0.14			
v/s Ratio Perm			c0.46			0.29						
v/c Ratio		0.48	0.74		0.43	0.40	0.80		0.50			
Uniform Delay, d1		11.8	15.3		6.9	6.8	46.4		36.5			
Progression Factor		1.03	4.26		1.00	1.00	1.00		1.00			
Incremental Delay, d2		0.5	4.3		0.4	1.1	6.3		0.2			
Delay (s)		12.6	69.5		7.3	7.8	52.7		36.7			
Level of Service		B	E		A	A	D		D			
Approach Delay (s)		36.9			7.5			45.7			0.0	
Approach LOS		D			A			D			A	

Intersection Summary

HCM 2000 Control Delay	27.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.4
Intersection Capacity Utilization	64.3%	ICU Level of Service	C
Analysis Period (min)	15		

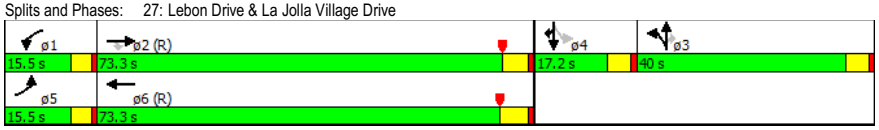
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	5	1411	74	99	1588	182	9	123	7	2	13
Future Volume (vph)	5	1411	74	99	1588	182	9	123	7	2	13
Turn Type	Prot	NA	Perm	Prot	NA	Split	NA	Perm	Perm	NA	Prot
Protected Phases	5	2		1	6	3	3			4	4
Permitted Phases			2					3	4		
Detector Phase	5	2	2	1	6	3	3	3	4	4	4
Switch Phase											
Minimum Initial (s)	4.0	10.0	10.0	4.0	10.0	7.0	7.0	7.0	4.0	4.0	4.0
Minimum Split (s)	8.4	15.3	15.3	8.4	15.7	39.9	39.9	39.9	8.9	8.9	8.9
Total Split (s)	15.5	73.3	73.3	15.5	73.3	40.0	40.0	40.0	17.2	17.2	17.2
Total Split (%)	10.6%	50.2%	50.2%	10.6%	50.2%	27.4%	27.4%	27.4%	11.8%	11.8%	11.8%
Yellow Time (s)	3.4	4.3	4.3	3.4	4.7	3.9	3.9	3.9	3.9	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	4.4	5.3	5.3	4.4	5.7	4.9	4.9	4.9		4.9	4.9
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lag	Lag	Lead	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	None	None	None	None	None	None

Intersection Summary

Cycle Length: 146
Actuated Cycle Length: 146
Offset: 126 (86%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 100
Control Type: Actuated-Coordinated

Splits and Phases: 27: Lebon Drive & La Jolla Village Drive



Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	11	5	1411	74	99	1588	10	182	9	123	7	2
Future Volume (vph)	11	5	1411	74	99	1588	10	182	9	123	7	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.4	5.3	5.3	4.4	5.7		4.9	4.9	4.9		4.9
Lane Util. Factor		1.00	0.91	1.00	0.97	0.91		0.97	0.95	0.95		1.00
Frt		1.00	1.00	0.85	1.00	1.00		1.00	0.87	0.85		1.00
Flt Protected		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00		0.96
Satd. Flow (prot)		1770	5085	1583	3433	5080		3433	1540	1504		1791
Flt Permitted		0.13	1.00	1.00	0.95	1.00		0.95	1.00	1.00		0.57
Satd. Flow (perm)		242	5085	1583	3433	5080		3433	1540	1504		1064
Peak-hour factor, PHF	0.92	0.98	0.98	0.98	0.78	0.78	0.78	0.65	0.65	0.65	0.58	0.58
Adj. Flow (vph)	12	5	1440	76	127	2036	13	280	14	189	12	3
RTOR Reduction (vph)	0	0	0	31	0	1	0	0	75	84	0	0
Lane Group Flow (vph)	0	17	1440	45	127	2048	0	280	28	16	0	15
Turn Type		Prot	NA	Perm	Prot	NA		Split	NA	Perm	Perm	NA
Protected Phases		5	2		1	6		3	3			4
Permitted Phases				2						3	4	
Actuated Green, G (s)		30.8	87.1	87.1	9.8	65.7		23.3	23.3	23.3		6.3
Effective Green, g (s)		30.8	87.1	87.1	9.8	65.7		23.3	23.3	23.3		6.3
Actuated g/C Ratio		0.21	0.60	0.60	0.07	0.45		0.16	0.16	0.16		0.04
Clearance Time (s)		4.4	5.3	5.3	4.4	5.7		4.9	4.9	4.9		4.9
Vehicle Extension (s)		2.0	6.1	6.1	2.0	5.6		6.5	6.5	6.5		2.0
Lane Grp Cap (vph)		51	3033	944	230	2286		547	245	240		45
v/s Ratio Prot			c0.28		c0.04	c0.40		c0.08	0.02			
v/s Ratio Perm		0.07		0.03						0.01		c0.01
v/c Ratio		0.33	0.47	0.05	0.55	0.90		0.51	0.12	0.07		0.33
Uniform Delay, d1		48.9	16.6	12.2	66.0	37.0		56.1	52.5	52.1		67.8
Progression Factor		1.00	1.00	1.00	1.12	0.67		1.00	1.00	1.00		1.00
Incremental Delay, d2		1.4	0.5	0.1	1.2	4.5		2.4	0.7	0.4		1.6
Delay (s)		50.3	17.1	12.3	75.0	29.1		58.5	53.2	52.5		69.4
Level of Service		D	B	B	E	C		E	D	D		E
Approach Delay (s)			17.2			31.8			56.2			67.9
Approach LOS			B			C			E			E

Intersection Summary

HCM 2000 Control Delay	29.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	146.0	Sum of lost time (s)	19.9
Intersection Capacity Utilization	60.0%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	13
Future Volume (vph)	13
Ideal Flow (vphpl)	1900
Total Lost time (s)	4.9
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1583
Flt Permitted	1.00
Satd. Flow (perm)	1583
Peak-hour factor, PHF	0.58
Adj. Flow (vph)	22
RTOR Reduction (vph)	21
Lane Group Flow (vph)	1
Turn Type	Prot
Protected Phases	4
Permitted Phases	
Actuated Green, G (s)	6.3
Effective Green, g (s)	6.3
Actuated g/C Ratio	0.04
Clearance Time (s)	4.9
Vehicle Extension (s)	2.0
Lane Grp Cap (vph)	68
v/s Ratio Prot	0.00
v/s Ratio Perm	
v/c Ratio	0.01
Uniform Delay, d1	66.9
Progression Factor	1.00
Incremental Delay, d2	0.0
Delay (s)	66.9
Level of Service	E
Approach Delay (s)	
Approach LOS	

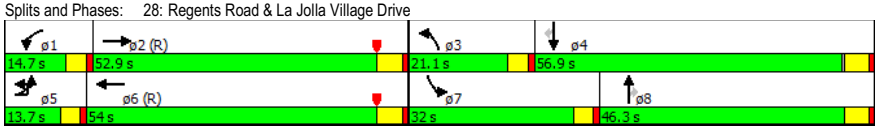
Intersection Summary

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	282	1148	328	943	286	334	208	220	350	314
Future Volume (vph)	282	1148	328	943	286	334	208	220	350	314
Turn Type	Prot	NA	Prot	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2	1	6	3	8		7	4	
Permitted Phases							8			4
Detector Phase	5	2	1	6	3	8	8	7	4	4
Switch Phase										
Minimum Initial (s)	4.0	10.0	4.0	10.0	4.0	10.0	10.0	4.0	10.0	10.0
Minimum Split (s)	8.4	41.3	8.4	35.4	8.4	41.3	41.3	8.4	35.3	35.3
Total Split (s)	13.7	52.9	14.7	54.0	21.1	46.3	46.3	32.0	56.9	56.9
Total Split (%)	9.4%	36.2%	10.1%	37.0%	14.5%	31.7%	31.7%	21.9%	39.0%	39.0%
Yellow Time (s)	3.4	4.3	3.4	4.4	3.4	4.3	4.3	3.4	4.3	4.3
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.3	4.4	5.4	4.4	5.3	5.3	4.4	5.3	5.3
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	None	None	None	None	None

Intersection Summary

Cycle Length: 146
Actuated Cycle Length: 146
Offset: 85 (58%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 120
Control Type: Actuated-Coordinated

Splits and Phases: 28: Regents Road & La Jolla Village Drive



Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	48	282	1148	58	328	943	140	286	334	208	220	350
Future Volume (vph)	48	282	1148	58	328	943	140	286	334	208	220	350
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.4	5.3		4.4	5.4		4.4	5.3	5.3	4.4	5.3
Lane Util. Factor		0.97	0.91		0.97	0.91		0.97	0.95	1.00	1.00	0.95
Frt		1.00	0.99		1.00	0.98		1.00	1.00	0.85	1.00	1.00
Flt Protected		0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)		3433	5049		3433	4987		3433	3539	1583	1770	3539
Flt Permitted		0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (perm)		3433	5049		3433	4987		3433	3539	1583	1770	3539
Peak-hour factor, PHF	0.92	0.98	0.98	0.98	0.82	0.82	0.82	0.88	0.88	0.88	0.77	0.77
Adj. Flow (vph)	52	288	1171	59	400	1150	171	325	380	236	286	455
RTOR Reduction (vph)	0	0	4	0	0	13	0	0	0	139	0	0
Lane Group Flow (vph)	0	340	1226	0	400	1308	0	325	380	97	286	455
Turn Type	Prot	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA
Protected Phases	5	5	2		1	6		3	8		7	4
Permitted Phases										8		
Actuated Green, G (s)		22.7	47.7		23.7	48.6		16.3	29.0	29.0	26.2	38.9
Effective Green, g (s)		22.7	47.7		23.7	48.6		16.3	29.0	29.0	26.2	38.9
Actuated g/C Ratio		0.16	0.33		0.16	0.33		0.11	0.20	0.20	0.18	0.27
Clearance Time (s)		4.4	5.3		4.4	5.4		4.4	5.3	5.3	4.4	5.3
Vehicle Extension (s)		3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)		533	1649		557	1660		383	702	314	317	942
v/s Ratio Prot		0.10	0.24		c0.12	c0.26		0.09	0.11		c0.16	0.13
v/s Ratio Perm										0.06		
v/c Ratio		0.64	0.74		0.72	0.79		0.85	0.54	0.31	0.90	0.48
Uniform Delay, d1		57.8	43.7		58.0	44.0		63.6	52.5	49.9	58.6	45.1
Progression Factor		1.11	1.23		0.98	0.65		1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2		2.3	2.8		3.8	3.3		15.9	0.9	0.6	27.2	0.4
Delay (s)		66.4	56.8		60.7	31.9		79.5	53.4	50.5	85.8	45.5
Level of Service		E	E		E	C		E	D	D	F	D
Approach Delay (s)			58.8			38.5			61.7			61.6
Approach LOS			E			D			E			E

Intersection Summary			
HCM 2000 Control Delay	53.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	146.0	Sum of lost time (s)	19.5
Intersection Capacity Utilization	74.6%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	314
Future Volume (vph)	314
Ideal Flow (vphpl)	1900
Total Lost time (s)	5.3
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1583
Flt Permitted	1.00
Satd. Flow (perm)	1583
Peak-hour factor, PHF	0.77
Adj. Flow (vph)	408
RTOR Reduction (vph)	62
Lane Group Flow (vph)	346
Turn Type	Perm
Protected Phases	
Permitted Phases	4
Actuated Green, G (s)	38.9
Effective Green, g (s)	38.9
Actuated g/C Ratio	0.27
Clearance Time (s)	5.3
Vehicle Extension (s)	3.0
Lane Grp Cap (vph)	421
v/s Ratio Prot	
v/s Ratio Perm	c0.22
v/c Ratio	0.82
Uniform Delay, d1	50.3
Progression Factor	1.00
Incremental Delay, d2	12.2
Delay (s)	62.6
Level of Service	E
Approach Delay (s)	
Approach LOS	

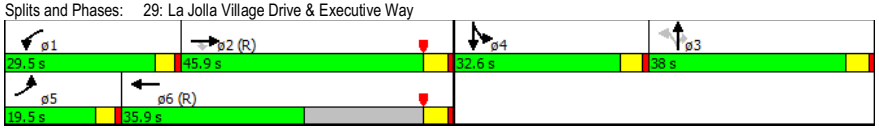
Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	75	665	558	704	684	337	152	530	157	156
Future Volume (vph)	75	665	558	704	684	337	152	530	157	156
Turn Type	Prot	NA	Perm	Prot	NA	Perm	NA	Perm	Split	NA
Protected Phases	5	2		1	6		3		4	4
Permitted Phases			2			3		3		
Detector Phase	5	2	2	1	6	3	3	3	4	4
Switch Phase										
Minimum Initial (s)	4.0	10.0	10.0	4.0	10.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.4	15.3	15.3	8.4	15.3	45.9	45.9	45.9	8.9	8.9
Total Split (s)	19.5	45.9	45.9	29.5	35.9	38.0	38.0	38.0	32.6	32.6
Total Split (%)	13.4%	31.4%	31.4%	20.2%	24.6%	26.0%	26.0%	26.0%	22.3%	22.3%
Yellow Time (s)	3.4	4.3	4.3	3.4	4.3	3.9	3.9	3.9	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.3	5.3	4.4	5.3	4.9	4.9	4.9	4.9	4.9
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lag	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	None	None	None	None	None

Intersection Summary

Cycle Length: 146
Actuated Cycle Length: 146
Offset: 28 (19%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 29: La Jolla Village Drive & Executive Way



Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	4	75	665	558	15	704	684	120	337	152	530	157
Future Volume (vph)	4	75	665	558	15	704	684	120	337	152	530	157
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.4	5.3	5.3		4.4	5.3		4.9	4.9	4.9	4.9
Lane Util. Factor		1.00	0.91	1.00		0.97	0.91		0.95	0.95	1.00	1.00
Frt		1.00	1.00	0.85		1.00	0.98		1.00	1.00	0.85	1.00
Flt Protected		0.95	1.00	1.00		0.95	1.00		0.95	0.98	1.00	0.95
Satd. Flow (prot)		1770	5085	1583		3433	4971		1681	1733	1583	1770
Flt Permitted		0.26	1.00	1.00		0.16	1.00		0.57	0.72	1.00	0.95
Satd. Flow (perm)		493	5085	1583		576	4971		1007	1279	1583	1770
Peak-hour factor, PHF	0.92	0.95	0.95	0.95	0.92	0.84	0.84	0.84	0.88	0.88	0.88	0.80
Adj. Flow (vph)	4	79	700	587	16	838	814	143	383	173	602	196
RTOR Reduction (vph)	0	0	0	424	0	0	17	0	0	0	269	0
Lane Group Flow (vph)	0	83	700	163	0	854	940	0	257	299	333	196
Turn Type		Prot	NA	Perm		Prot	NA		Perm	NA	Perm	Split
Protected Phases		5	2			1	6			3		4
Permitted Phases				2					3		3	
Actuated Green, G (s)		15.1	40.6	40.6		25.1	50.6		36.5	36.5	36.5	24.3
Effective Green, g (s)		15.1	40.6	40.6		25.1	50.6		36.5	36.5	36.5	24.3
Actuated g/C Ratio		0.10	0.28	0.28		0.17	0.35		0.25	0.25	0.25	0.17
Clearance Time (s)		4.4	5.3	5.3		4.4	5.3		4.9	4.9	4.9	4.9
Vehicle Extension (s)		2.0	5.8	5.8		2.0	5.5		2.0	2.0	2.0	6.1
Lane Grp Cap (vph)		50	1414	440		99	1722		251	319	395	294
v/s Ratio Prot			0.14				c0.19					c0.11
v/s Ratio Perm		0.17		0.10		c1.48			c0.26	0.23	0.21	
v/c Ratio		1.66	0.50	0.37		8.63	0.55		1.02	0.94	0.84	0.67
Uniform Delay, d1		65.5	44.1	42.4		60.5	38.4		54.8	53.6	52.0	57.1
Progression Factor		1.00	0.60	5.08		1.00	0.72		1.00	1.00	1.00	1.00
Incremental Delay, d2		356.7	1.0	1.9		3450.1	1.1		63.1	33.6	14.4	8.8
Delay (s)		422.1	27.5	217.3		3510.5	29.0		117.9	87.3	66.4	65.9
Level of Service		F	C	F		F	C		F	F	E	E
Approach Delay (s)			132.7				1670.7			83.2		
Approach LOS			F				F			F		

Intersection Summary

HCM 2000 Control Delay	689.6	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	2.32		
Actuated Cycle Length (s)	146.0	Sum of lost time (s)	19.5
Intersection Capacity Utilization	91.1%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	156	83
Future Volume (vph)	156	83
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	4.9	
Lane Util. Factor	0.95	
Frt	0.95	
Flt Protected	1.00	
Satd. Flow (prot)	3355	
Flt Permitted	1.00	
Satd. Flow (perm)	3355	
Peak-hour factor, PHF	0.80	0.80
Adj. Flow (vph)	195	104
RTOR Reduction (vph)	50	0
Lane Group Flow (vph)	249	0
Turn Type	NA	
Protected Phases	4	
Permitted Phases		
Actuated Green, G (s)	24.3	
Effective Green, g (s)	24.3	
Actuated g/C Ratio	0.17	
Clearance Time (s)	4.9	
Vehicle Extension (s)	6.1	
Lane Grp Cap (vph)	558	
v/s Ratio Prot	0.07	
v/s Ratio Perm		
v/c Ratio	0.45	
Uniform Delay, d1	54.8	
Progression Factor	1.00	
Incremental Delay, d2	1.6	
Delay (s)	56.4	
Level of Service	E	
Approach Delay (s)	60.2	
Approach LOS	E	

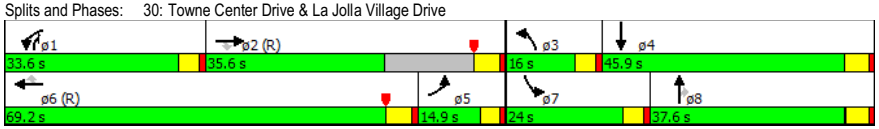
Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	41	1291	78	237	1336	116	97	38	365	536	135
Future Volume (vph)	41	1291	78	237	1336	116	97	38	365	536	135
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA
Protected Phases	5	2		1	6		3	8	1	7	4
Permitted Phases			2			6			8		
Detector Phase	5	2	2	1	6	6	3	8	1	7	4
Switch Phase											
Minimum Initial (s)	4.0	10.0	10.0	4.0	10.0	10.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.4	15.5	15.5	8.4	15.3	15.3	8.4	9.0	8.4	8.4	9.3
Total Split (s)	14.9	35.6	35.6	33.6	69.2	69.2	16.0	37.6	33.6	24.0	45.9
Total Split (%)	10.2%	24.4%	24.4%	23.0%	47.4%	47.4%	11.0%	25.8%	23.0%	16.4%	31.4%
Yellow Time (s)	3.4	4.5	4.5	3.4	4.3	4.3	3.4	4.0	3.4	3.4	4.3
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.5	5.5	4.4	5.3	5.3	4.4	5.0	4.4	4.4	5.3
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lead	Lead	Lag	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	None	None	None	None

Intersection Summary

Cycle Length: 146
Actuated Cycle Length: 146
Offset: 17 (12%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 65
Control Type: Actuated-Coordinated

Splits and Phases: 30: Towne Center Drive & La Jolla Village Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	41	1291	78	237	1336	116	97	38	365	536	135	46
Future Volume (vph)	41	1291	78	237	1336	116	97	38	365	536	135	46
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.5	5.5	4.4	5.3	5.3	4.4	5.0	4.4	4.4	5.3	
Lane Util. Factor	0.97	0.91	1.00	0.97	0.86	0.86	0.97	1.00	0.88	0.97	0.95	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.96	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	3433	5085	1583	3433	4800	1362	3433	1863	2787	3433	3404	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	3433	5085	1583	3433	4800	1362	3433	1863	2787	3433	3404	
Peak-hour factor, PHF	0.96	0.96	0.96	0.85	0.85	0.85	0.90	0.90	0.90	0.92	0.92	0.92
Adj. Flow (vph)	43	1345	81	279	1572	136	108	42	406	583	147	50
RTOR Reduction (vph)	0	0	36	0	0	46	0	0	103	0	28	0
Lane Group Flow (vph)	43	1345	45	279	1586	76	108	42	303	583	169	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	
Protected Phases	5	2		1	6		3	8	1	7	4	
Permitted Phases			2			6			8			
Actuated Green, G (s)	8.4	81.5	81.5	17.7	91.0	91.0	9.7	7.6	25.3	19.9	17.5	
Effective Green, g (s)	8.4	81.5	81.5	17.7	91.0	91.0	9.7	7.6	25.3	19.9	17.5	
Actuated g/C Ratio	0.06	0.56	0.56	0.12	0.62	0.62	0.07	0.05	0.17	0.14	0.12	
Clearance Time (s)	4.4	5.5	5.5	4.4	5.3	5.3	4.4	5.0	4.4	4.4	5.3	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	197	2838	883	416	2991	848	228	96	482	467	408	
v/s Ratio Prot	0.01	c0.26		c0.08	c0.33		0.03	0.02	c0.08	c0.17	0.05	
v/s Ratio Perm			0.03			0.06			0.03			
v/c Ratio	0.22	0.47	0.05	0.67	0.53	0.09	0.47	0.44	0.63	1.25	0.41	
Uniform Delay, d1	65.7	19.4	14.7	61.4	15.5	11.0	65.7	67.1	56.0	63.1	59.5	
Progression Factor	0.79	0.71	0.34	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.4	0.4	0.1	4.2	0.7	0.2	1.6	3.2	2.6	128.6	0.7	
Delay (s)	52.2	14.1	5.1	65.6	16.1	11.2	67.2	70.3	58.6	191.7	60.2	
Level of Service	D	B	A	E	B	B	E	E	E	F	E	
Approach Delay (s)		14.7			22.8			61.1			158.5	
Approach LOS		B			C			E			F	

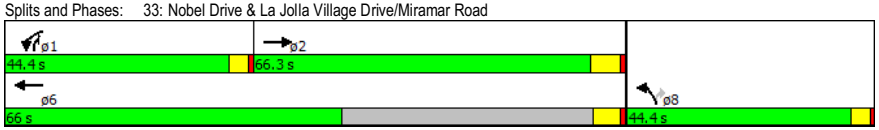
Intersection Summary			
HCM 2000 Control Delay	46.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	146.0	Sum of lost time (s)	19.6
Intersection Capacity Utilization	66.4%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Configurations					
Traffic Volume (vph)	1222	339	1596	66	881
Future Volume (vph)	1222	339	1596	66	881
Turn Type	NA	Prot	NA	Prot	pm+ov
Protected Phases	2	1	6	8	1
Permitted Phases					8
Detector Phase	2	1	6	8	1
Switch Phase					
Minimum Initial (s)	10.0	4.0	10.0	7.0	4.0
Minimum Split (s)	16.3	8.4	16.0	11.4	8.4
Total Split (s)	66.3	44.4	66.0	44.4	44.4
Total Split (%)	42.7%	28.6%	42.6%	28.6%	28.6%
Yellow Time (s)	5.3	3.4	5.0	3.4	3.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.3	4.4	6.0	4.4	4.4
Lead/Lag	Lag	Lead			Lead
Lead-Lag Optimize?	Yes	Yes			Yes
Recall Mode	Min	None	Min	None	None

Intersection Summary
Cycle Length: 155.1
Actuated Cycle Length: 88.1
Natural Cycle: 50
Control Type: Actuated-Uncoordinated

Splits and Phases: 33: Nobel Drive & La Jolla Village Drive/Miramar Road



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1222	59	339	1596	66	881
Future Volume (vph)	1222	59	339	1596	66	881
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.3		4.4	6.0	4.4	4.4
Lane Util. Factor	0.86		0.97	0.86	1.00	0.88
Frt	0.99		1.00	1.00	1.00	0.85
Flt Protected	1.00		0.95	1.00	0.95	1.00
Satd. Flow (prot)	6363		3433	6408	1770	2787
Flt Permitted	1.00		0.95	1.00	0.95	1.00
Satd. Flow (perm)	6363		3433	6408	1770	2787
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.96	0.96
Adj. Flow (vph)	1300	63	361	1698	69	918
RTOR Reduction (vph)	4	0	0	0	0	11
Lane Group Flow (vph)	1359	0	361	1698	69	907
Turn Type	NA		Prot	NA	Prot	pm+ov
Protected Phases	2		1	6	8	1
Permitted Phases						8
Actuated Green, G (s)	36.6		30.5	71.8	6.6	37.1
Effective Green, g (s)	36.6		30.5	71.8	6.6	37.1
Actuated g/C Ratio	0.41		0.34	0.81	0.07	0.42
Clearance Time (s)	6.3		4.4	6.0	4.4	4.4
Vehicle Extension (s)	5.0		2.0	5.4	2.0	2.0
Lane Grp Cap (vph)	2622		1179	5181	131	1302
v/s Ratio Prot	c0.21		0.11	0.26	0.04	c0.24
v/s Ratio Perm						0.09
v/c Ratio	0.52		0.31	0.33	0.53	0.70
Uniform Delay, d1	19.5		21.4	2.2	39.6	21.2
Progression Factor	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	0.3		0.1	0.1	1.8	1.3
Delay (s)	19.9		21.4	2.3	41.4	22.6
Level of Service	B		C	A	D	C
Approach Delay (s)	19.9			5.7	23.9	
Approach LOS	B			A	C	

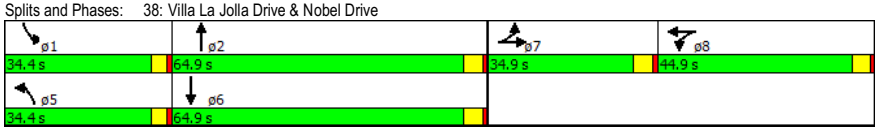
Intersection Summary				
HCM 2000 Control Delay	14.1	HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio	0.65			
Actuated Cycle Length (s)	88.8	Sum of lost time (s)	15.1	
Intersection Capacity Utilization	58.4%	ICU Level of Service	B	
Analysis Period (min)	15			

c Critical Lane Group

Lane Group	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	4	55	2	7	651	344	630
Future Volume (vph)	4	55	2	7	651	344	630
Turn Type	NA	Split	NA	Prot	NA	Prot	NA
Protected Phases	7	8	8	5	2	1	6
Permitted Phases							
Detector Phase	7	8	8	5	2	1	6
Switch Phase							
Minimum Initial (s)	6.0	6.0	6.0	4.0	7.0	6.0	10.0
Minimum Split (s)	10.9	10.9	10.9	8.4	11.9	10.4	14.9
Total Split (s)	34.9	44.9	44.9	34.4	64.9	34.4	64.9
Total Split (%)	19.5%	25.1%	25.1%	19.2%	36.2%	19.2%	36.2%
Yellow Time (s)	3.9	3.9	3.9	3.4	3.9	3.4	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	4.9	4.4	4.9	4.4	4.9
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	Min	None	Min

Intersection Summary
Cycle Length: 179.1
Actuated Cycle Length: 75.3
Natural Cycle: 60
Control Type: Actuated-Uncoordinated

Splits and Phases: 38: Villa La Jolla Drive & Nobel Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	13	4	6	55	2	336	7	651	103	344	630	12
Future Volume (vph)	13	4	6	55	2	336	7	651	103	344	630	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9		4.9	4.9		4.4	4.9		4.4	4.9	
Lane Util. Factor		1.00		0.97	1.00		1.00	0.95		0.97	0.95	
Frt		0.96		1.00	0.85		1.00	0.98		1.00	1.00	
Flt Protected		0.97		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1747		3433	1585		1770	3467		3433	3529	
Flt Permitted		0.97		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1747		3433	1585		1770	3467		3433	3529	
Peak-hour factor, PHF	0.68	0.68	0.68	0.92	0.92	0.92	0.93	0.93	0.93	0.91	0.91	0.91
Adj. Flow (vph)	19	6	9	60	2	365	8	700	111	378	692	13
RTOR Reduction (vph)	0	9	0	0	327	0	0	6	0	0	0	0
Lane Group Flow (vph)	0	25	0	60	40	0	8	805	0	378	705	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	7	7		8	8		5	2		1	6	
Permitted Phases												
Actuated Green, G (s)		3.7		8.5	8.5		0.9	33.9		15.4	48.4	
Effective Green, g (s)		3.7		8.5	8.5		0.9	33.9		15.4	48.4	
Actuated g/C Ratio		0.05		0.11	0.11		0.01	0.42		0.19	0.60	
Clearance Time (s)		4.9		4.9	4.9		4.4	4.9		4.4	4.9	
Vehicle Extension (s)		2.0		2.0	2.0		2.0	4.3		2.0	3.7	
Lane Grp Cap (vph)		80		362	167		19	1458		655	2119	
v/s Ratio Prot		c0.01		0.02	c0.03		0.00	c0.23		c0.11	0.20	
v/s Ratio Perm												
v/c Ratio		0.32		0.17	0.24		0.42	0.55		0.58	0.33	
Uniform Delay, d1		37.2		32.8	33.1		39.6	17.6		29.6	8.0	
Progression Factor		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.8		0.1	0.3		5.4	0.6		0.8	0.1	
Delay (s)		38.1		32.9	33.4		45.0	18.2		30.4	8.2	
Level of Service		D		C	C		D	B		C	A	
Approach Delay (s)		38.1			33.3			18.5			15.9	
Approach LOS		D			C			B			B	

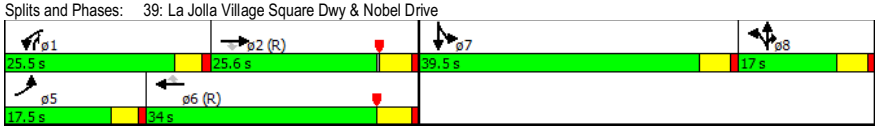
Intersection Summary			
HCM 2000 Control Delay	20.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	80.6	Sum of lost time (s)	19.1
Intersection Capacity Utilization	63.8%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	29	149	285	1253	121	257	216	164	989	287	175
Future Volume (vph)	29	149	285	1253	121	257	216	164	989	287	175
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Split	NA	pt+ov	Split	NA
Protected Phases	5	2		1	6		8	8	8 1	7	7
Permitted Phases			2			6					
Detector Phase	5	2	2	1	6	6	8	8	8 1	7	7
Switch Phase											
Minimum Initial (s)	4.0	7.0	7.0	4.0	7.0	7.0	8.0	8.0		8.0	8.0
Minimum Split (s)	9.4	12.0	12.0	8.4	12.4	12.4	12.9	12.9		38.9	38.9
Total Split (s)	17.5	25.6	25.6	25.5	34.0	34.0	17.0	17.0		39.5	39.5
Total Split (%)	16.2%	23.7%	23.7%	23.6%	31.5%	31.5%	15.7%	15.7%		36.6%	36.6%
Yellow Time (s)	3.4	4.0	4.0	3.4	4.4	4.4	3.9	3.9		3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	4.4	5.0	5.0	4.4	5.4	5.4	4.9	4.9		4.9	4.9
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lag	Lag		Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	None		None	None

Intersection Summary
Cycle Length: 108
Actuated Cycle Length: 108
Offset: 41 (38%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 39: La Jolla Village Square Dwy & Nobel Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	29	149	285	1253	121	257	216	164	989	287	175	22
Future Volume (vph)	29	149	285	1253	121	257	216	164	989	287	175	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.0	5.0	4.4	5.4	5.4	4.9	4.9	4.9	4.9	4.9	
Lane Util. Factor	1.00	0.95	1.00	0.97	0.95	1.00	0.95	0.95	1.00	0.95	0.95	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.99	1.00	0.95	0.99	
Satd. Flow (prot)	1770	3539	1583	3433	3539	1583	1681	1756	1583	1681	1729	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.99	1.00	0.95	0.99	
Satd. Flow (perm)	1770	3539	1583	3433	3539	1583	1681	1756	1583	1681	1729	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.86	0.86	0.86	0.92	0.92	0.92
Adj. Flow (vph)	31	159	303	1333	129	273	251	191	1150	312	190	24
RTOR Reduction (vph)	0	0	244	0	0	179	0	0	183	0	4	0
Lane Group Flow (vph)	31	159	59	1333	129	94	216	226	967	259	263	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Split	NA	pt+ov	Split	NA	
Protected Phases	5	2		1	6		8	8	8 1	7	7	
Permitted Phases			2			6						
Actuated Green, G (s)	4.5	21.0	21.0	21.1	37.2	37.2	22.7	22.7	48.7	24.0	24.0	
Effective Green, g (s)	4.5	21.0	21.0	21.1	37.2	37.2	22.7	22.7	48.7	24.0	24.0	
Actuated g/C Ratio	0.04	0.19	0.19	0.20	0.34	0.34	0.21	0.21	0.45	0.22	0.22	
Clearance Time (s)	4.4	5.0	5.0	4.4	5.4	5.4	4.9	4.9		4.9	4.9	
Vehicle Extension (s)	2.0	4.1	4.1	2.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)	73	688	307	670	1218	545	353	369	713	373	384	
v/s Ratio Prot	0.02	c0.04		c0.39	0.04		0.13	0.13	c0.61	c0.15	0.15	
v/s Ratio Perm			0.04			0.06						
v/c Ratio	0.42	0.23	0.19	1.99	0.11	0.17	0.61	0.61	1.36	0.69	0.69	
Uniform Delay, d1	50.5	36.7	36.4	43.5	24.1	24.7	38.7	38.7	29.6	38.6	38.5	
Progression Factor	1.00	1.00	1.00	1.14	1.13	2.47	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	1.4	0.8	1.4	450.1	0.2	0.6	3.6	3.4	169.2	5.9	5.4	
Delay (s)	51.9	37.5	37.8	499.5	27.4	61.6	42.2	42.1	198.8	44.6	44.0	
Level of Service	D	D	D	F	C	E	D	D	F	D	D	
Approach Delay (s)		38.6			395.5			155.3			44.3	
Approach LOS		D			F			F			D	

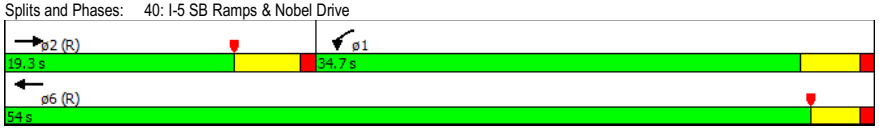
Intersection Summary			
HCM 2000 Control Delay	224.5	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.10		
Actuated Cycle Length (s)	108.0	Sum of lost time (s)	19.6
Intersection Capacity Utilization	92.6%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBT	WBL	WBT
Lane Configurations			
Traffic Volume (vph)	817	151	1665
Future Volume (vph)	817	151	1665
Turn Type	NA	Prot	NA
Protected Phases	2	1	6
Permitted Phases			
Detector Phase	2	1	6
Switch Phase			
Minimum Initial (s)	13.0	5.0	1.0
Minimum Split (s)	18.1	9.7	22.0
Total Split (s)	19.3	34.7	54.0
Total Split (%)	35.7%	64.3%	100.0%
Yellow Time (s)	4.1	3.7	3.0
All-Red Time (s)	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0
Total Lost Time (s)	5.1	4.7	4.0
Lead/Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	
Recall Mode	C-Max	None	C-Max

Intersection Summary
Cycle Length: 54
Actuated Cycle Length: 54
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 40
Control Type: Actuated-Coordinated

Splits and Phases: 40: I-5 SB Ramps & Nobel Drive



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	817	557	151	1665	0	0
Future Volume (vph)	817	557	151	1665	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1		4.7	4.0		
Lane Util. Factor	0.95		0.97	0.95		
Frt	0.94		1.00	1.00		
Flt Protected	1.00		0.95	1.00		
Satd. Flow (prot)	3324		3433	3539		
Flt Permitted	1.00		0.95	1.00		
Satd. Flow (perm)	3324		3433	3539		
Peak-hour factor, PHF	0.89	0.89	0.98	0.98	0.25	0.25
Adj. Flow (vph)	918	626	154	1699	0	0
RTOR Reduction (vph)	190	0	0	0	0	0
Lane Group Flow (vph)	1354	0	154	1699	0	0
Turn Type	NA		Prot	NA		
Protected Phases	2		1	6		
Permitted Phases						
Actuated Green, G (s)	20.2		24.0	54.0		
Effective Green, g (s)	20.2		24.0	54.0		
Actuated g/C Ratio	0.37		0.44	1.00		
Clearance Time (s)	5.1		4.7	4.0		
Vehicle Extension (s)	3.0		3.0	3.0		
Lane Grp Cap (vph)	1243		1525	3539		
v/s Ratio Prot	c0.41		0.04	c0.48		
v/s Ratio Perm						
v/c Ratio	1.09		0.10	0.48		
Uniform Delay, d1	16.9		8.7	0.0		
Progression Factor	1.34		1.06	1.00		
Incremental Delay, d2	41.8		0.0	0.4		
Delay (s)	64.4		9.3	0.4		
Level of Service	E		A	A		
Approach Delay (s)	64.4			1.2	0.0	
Approach LOS	E			A	A	

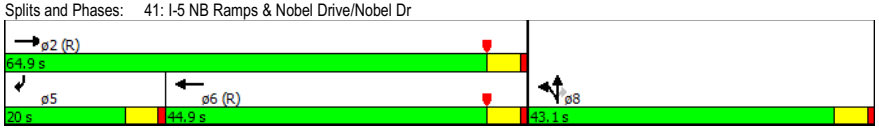
Intersection Summary			
HCM 2000 Control Delay	29.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	54.0	Sum of lost time (s)	9.8
Intersection Capacity Utilization	52.9%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBT	WBT	NBL	NBT	NBR	SBR
Lane Configurations						
Traffic Volume (vph)	839	1153	379	46	149	180
Future Volume (vph)	839	1153	379	46	149	180
Turn Type	NA	NA	Split	NA	Perm	Prot
Protected Phases	2	6	8	8		5
Permitted Phases					8	
Detector Phase	2	6	8	8	8	5
Switch Phase						
Minimum Initial (s)	11.0	13.0	5.0	5.0	5.0	5.0
Minimum Split (s)	16.1	18.1	10.1	10.1	10.1	10.0
Total Split (s)	64.9	44.9	43.1	43.1	43.1	20.0
Total Split (%)	60.1%	41.6%	39.9%	39.9%	39.9%	18.5%
Yellow Time (s)	4.1	4.1	4.1	4.1	4.1	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.1	5.1	5.1	5.1	5.1	5.0
Lead/Lag		Lag				Lead
Lead-Lag Optimize?		Yes				Yes
Recall Mode	C-Max	C-Max	Min	Min	Min	None

Intersection Summary
Cycle Length: 108
Actuated Cycle Length: 108
Offset: 67 (62%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 70
Control Type: Actuated-Coordinated

Splits and Phases: 41: I-5 NB Ramps & Nobel Drive/Nobel Dr



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	839	0	0	1153	39	379	46	149	0	0	180
Future Volume (vph)	11	839	0	0	1153	39	379	46	149	0	0	180
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.1			5.1		5.1	5.1	5.1			5.0
Lane Util. Factor		0.95			0.91		0.95	0.95	1.00			1.00
Frt		1.00			1.00		1.00	1.00	0.85			0.86
Flt Protected		1.00			1.00		0.95	0.96	1.00			1.00
Satd. Flow (prot)		3537			5061		1681	1703	1583			1611
Flt Permitted		0.93			1.00		0.95	0.96	1.00			1.00
Satd. Flow (perm)		3293			5061		1681	1703	1583			1611
Peak-hour factor, PHF	0.91	0.91	0.91	0.94	0.94	0.94	0.96	0.96	0.96	0.79	0.79	0.79
Adj. Flow (vph)	12	922	0	0	1227	41	395	48	155	0	0	228
RTOR Reduction (vph)	0	0	0	0	2	0	0	0	99	0	0	115
Lane Group Flow (vph)	0	934	0	0	1266	0	221	222	56	0	0	113
Turn Type		NA			NA		Split	NA	Perm			Prot
Protected Phases		2			6		8	8				5
Permitted Phases									8			
Actuated Green, G (s)		78.3			61.4		19.5	19.5	19.5			11.9
Effective Green, g (s)		78.3			61.4		19.5	19.5	19.5			11.9
Actuated g/C Ratio		0.72			0.57		0.18	0.18	0.18			0.11
Clearance Time (s)		5.1			5.1		5.1	5.1	5.1			5.0
Vehicle Extension (s)		2.0			2.0		2.0	2.0	2.0			2.0
Lane Grp Cap (vph)		2387			2877		303	307	285			177
v/s Ratio Prot					c0.25		c0.13	0.13				c0.07
v/s Ratio Perm		0.28							0.04			
v/c Ratio		0.39			0.44		0.73	0.72	0.20			0.64
Uniform Delay, d1		5.7			13.4		41.8	41.7	37.6			46.0
Progression Factor		1.28			1.01		1.00	1.00	1.00			1.00
Incremental Delay, d2		0.1			0.5		7.3	7.0	0.1			5.5
Delay (s)		7.4			14.0		49.0	48.7	37.7			51.5
Level of Service		A			B		D	D	D			D
Approach Delay (s)		7.4			14.0			46.0			51.5	
Approach LOS		A			B			D			D	

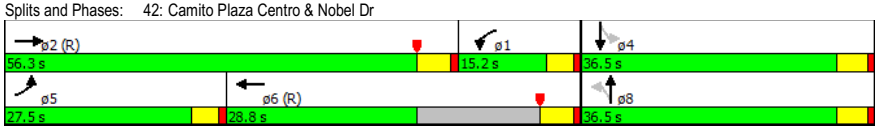
Intersection Summary			
HCM 2000 Control Delay	21.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	108.0	Sum of lost time (s)	15.2
Intersection Capacity Utilization	58.7%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	101	920	48	994	59	2	17	3
Future Volume (vph)	101	920	48	994	59	2	17	3
Turn Type	Prot	NA	Prot	NA	Perm	NA	Perm	NA
Protected Phases	5	2	1	6		8		4
Permitted Phases					8		4	
Detector Phase	5	2	1	6	8	8	4	4
Switch Phase								
Minimum Initial (s)	4.0	10.0	4.0	10.0	6.0	6.0	6.0	6.0
Minimum Split (s)	9.5	25.2	9.5	25.2	36.5	36.5	36.5	36.5
Total Split (s)	27.5	56.3	15.2	28.8	36.5	36.5	36.5	36.5
Total Split (%)	25.5%	52.1%	14.1%	26.7%	33.8%	33.8%	33.8%	33.8%
Yellow Time (s)	3.4	4.2	3.4	4.2	3.9	3.9	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	4.4	5.2	4.4	5.2		4.9		4.9
Lead/Lag	Lead	Lead	Lag	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes				
Recall Mode	None	C-Max	None	C-Max	None	None	None	None

Intersection Summary
Cycle Length: 108
Actuated Cycle Length: 108
Offset: 22 (20%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 75
Control Type: Actuated-Coordinated

Splits and Phases: 42: Camito Plaza Centro & Nobel Dr



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	101	920	51	48	994	26	59	2	36	17	3	49
Future Volume (vph)	101	920	51	48	994	26	59	2	36	17	3	49
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.2		4.4	5.2			4.9			4.9	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Frt	1.00	0.99		1.00	1.00			0.95			0.90	
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.99	
Satd. Flow (prot)	1770	5045		1770	5066			1717			1664	
Flt Permitted	0.95	1.00		0.95	1.00			0.75			0.92	
Satd. Flow (perm)	1770	5045		1770	5066			1336			1546	
Peak-hour factor, PHF	0.94	0.94	0.94	0.93	0.93	0.93	0.83	0.83	0.83	0.83	0.83	0.83
Adj. Flow (vph)	107	979	54	52	1069	28	71	2	43	20	4	59
RTOR Reduction (vph)	0	4	0	0	2	0	0	24	0	0	51	0
Lane Group Flow (vph)	107	1029	0	52	1095	0	0	92	0	0	32	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8			4		
Actuated Green, G (s)	11.8	70.3		8.6	67.1			14.6			14.6	
Effective Green, g (s)	11.8	70.3		8.6	67.1			14.6			14.6	
Actuated g/C Ratio	0.11	0.65		0.08	0.62			0.14			0.14	
Clearance Time (s)	4.4	5.2		4.4	5.2			4.9			4.9	
Vehicle Extension (s)	3.0	5.0		3.0	4.5			2.5			2.0	
Lane Grp Cap (vph)	193	3283		140	3147			180			208	
v/s Ratio Prot	c0.06	0.20		0.03	c0.22							
v/s Ratio Perm								c0.07			0.02	
v/c Ratio	0.55	0.31		0.37	0.35			0.51			0.15	
Uniform Delay, d1	45.6	8.3		47.1	9.9			43.4			41.2	
Progression Factor	0.89	1.36		1.00	1.00			1.00			1.00	
Incremental Delay, d2	2.3	0.2		1.7	0.3			1.7			0.1	
Delay (s)	42.8	11.4		48.8	10.2			45.0			41.4	
Level of Service	D	B		D	B			D			D	
Approach Delay (s)		14.4			11.9			45.0			41.4	
Approach LOS		B			B			D			D	

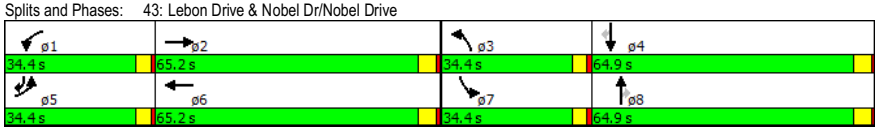
Intersection Summary			
HCM 2000 Control Delay	15.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.40		
Actuated Cycle Length (s)	108.0	Sum of lost time (s)	14.5
Intersection Capacity Utilization	49.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	105	741	24	732	198	179	60	54	103	128
Future Volume (vph)	105	741	24	732	198	179	60	54	103	128
Turn Type	Prot	NA	Prot	NA	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	5	2	1	6	3	8		7	4	5
Permitted Phases							8			4
Detector Phase	5	2	1	6	3	8	8	7	4	5
Switch Phase										
Minimum Initial (s)	4.0	10.0	4.0	10.0	4.0	8.0	8.0	10.0	10.0	4.0
Minimum Split (s)	8.4	15.2	8.4	15.2	8.4	12.9	12.9	14.4	14.9	8.4
Total Split (s)	34.4	65.2	34.4	65.2	34.4	64.9	64.9	34.4	64.9	34.4
Total Split (%)	17.3%	32.8%	17.3%	32.8%	17.3%	32.6%	32.6%	17.3%	32.6%	17.3%
Yellow Time (s)	3.4	4.2	3.4	4.2	3.4	3.9	3.9	3.4	3.9	3.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.2	4.4	5.2	4.4	4.9	4.9	4.4	4.9	4.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 198.9
Actuated Cycle Length: 76
Natural Cycle: 55
Control Type: Actuated-Uncoordinated

Splits and Phases: 43: Lebon Drive & Nobel Dr/Nobel Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	105	741	122	24	732	54	198	179	60	54	103	128
Future Volume (vph)	105	741	122	24	732	54	198	179	60	54	103	128
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.2		4.4	5.2		4.4	4.9	4.9	4.4	4.9	4.4
Lane Util. Factor	0.97	0.91		1.00	0.91		0.97	0.95	1.00	0.97	0.95	1.00
Frt	1.00	0.98		1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	4977		1770	5033		3433	3539	1583	3433	3539	1583
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	4977		1770	5033		3433	3539	1583	3433	3539	1583
Peak-hour factor, PHF	0.91	0.91	0.91	0.89	0.89	0.89	0.94	0.94	0.94	0.79	0.79	0.79
Adj. Flow (vph)	115	814	134	27	822	61	211	190	64	68	130	162
RTOR Reduction (vph)	0	10	0	0	4	0	0	0	50	0	0	55
Lane Group Flow (vph)	115	938	0	27	879	0	211	190	14	68	130	107
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	5	2		1	6		3	8		7	4	5
Permitted Phases									8			4
Actuated Green, G (s)	7.8	31.5		3.8	27.5		10.3	16.9	16.9	7.7	14.3	22.1
Effective Green, g (s)	7.8	31.5		3.8	27.5		10.3	16.9	16.9	7.7	14.3	22.1
Actuated g/C Ratio	0.10	0.40		0.05	0.35		0.13	0.21	0.21	0.10	0.18	0.28
Clearance Time (s)	4.4	5.2		4.4	5.2		4.4	4.9	4.9	4.4	4.9	4.4
Vehicle Extension (s)	2.0	4.5		2.0	4.5		2.0	6.4	6.4	2.0	5.5	2.0
Lane Grp Cap (vph)	339	1989		85	1756		448	758	339	335	642	443
v/s Ratio Prot	c0.03	c0.19		0.02	0.17		c0.06	c0.05		0.02	0.04	0.02
v/s Ratio Perm									0.01			0.04
v/c Ratio	0.34	0.47		0.32	0.50		0.47	0.25	0.04	0.20	0.20	0.24
Uniform Delay, d1	33.1	17.5		36.2	20.2		31.7	25.7	24.5	32.7	27.4	21.9
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2	0.3		0.8	0.4		0.3	0.5	0.2	0.1	0.4	0.1
Delay (s)	33.3	17.8		37.0	20.6		32.0	26.2	24.7	32.8	27.8	22.0
Level of Service	C	B		D	C		C	C	C	C	C	C
Approach Delay (s)		19.5			21.1			28.6			26.1	
Approach LOS		B			C			C			C	

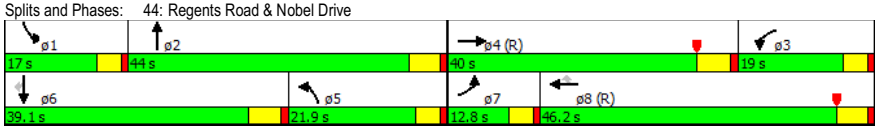
Intersection Summary				
HCM 2000 Control Delay	22.4	HCM 2000 Level of Service	C	
HCM 2000 Volume to Capacity ratio	0.43			
Actuated Cycle Length (s)	78.8	Sum of lost time (s)	18.9	
Intersection Capacity Utilization	51.1%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	105	642	291	671	136	102	636	110	460	174
Future Volume (vph)	105	642	291	671	136	102	636	110	460	174
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Prot	NA	Perm
Protected Phases	7	4	3	8		5	2	1	6	
Permitted Phases					8					6
Detector Phase	7	4	3	8	8	5	2	1	6	6
Switch Phase										
Minimum Initial (s)	4.0	10.0	4.0	10.0	10.0	4.0	10.0	4.0	10.0	10.0
Minimum Split (s)	8.4	37.7	8.4	37.3	37.3	8.4	41.2	8.4	35.5	35.5
Total Split (s)	12.8	40.0	19.0	46.2	46.2	21.9	44.0	17.0	39.1	39.1
Total Split (%)	10.7%	33.3%	15.8%	38.5%	38.5%	18.3%	36.7%	14.2%	32.6%	32.6%
Yellow Time (s)	3.4	4.7	3.4	4.3	4.3	3.4	4.2	3.4	4.5	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.7	4.4	5.3	5.3	4.4	5.2	4.4	5.5	5.5
Lead/Lag	Lead	Lead	Lag	Lag	Lag	Lag	Lag	Lead	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	C-Max	None	Min	None	Min	Min

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 4:EBT and 8:WBT, Start of Yellow
Natural Cycle: 100
Control Type: Actuated-Coordinated

Splits and Phases: 44: Regents Road & Nobel Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	105	642	103	291	671	136	102	636	445	110	460	174
Future Volume (vph)	105	642	103	291	671	136	102	636	445	110	460	174
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.7		4.4	5.3	5.3	4.4	5.2		4.4	5.5	5.5
Lane Util. Factor	0.97	0.91		0.97	0.95	1.00	1.00	0.91		1.00	0.95	1.00
Frt	1.00	0.98		1.00	1.00	0.85	1.00	0.94		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3433	4980		3433	3539	1583	1770	4771		1770	3539	1583
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	3433	4980		3433	3539	1583	1770	4771		1770	3539	1583
Peak-hour factor, PHF	0.91	0.91	0.91	0.94	0.94	0.94	0.74	0.74	0.74	0.95	0.95	0.95
Adj. Flow (vph)	115	705	113	310	714	145	138	859	601	116	484	183
RTOR Reduction (vph)	0	18	0	0	0	95	0	103	0	0	0	123
Lane Group Flow (vph)	115	800	0	310	714	50	138	1357	0	116	484	60
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA		Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8						6
Actuated Green, G (s)	7.7	34.3		14.6	41.6	41.6	23.0	40.4		11.0	28.1	28.1
Effective Green, g (s)	7.7	34.3		14.6	41.6	41.6	23.0	40.4		11.0	28.1	28.1
Actuated g/C Ratio	0.06	0.29		0.12	0.35	0.35	0.19	0.34		0.09	0.23	0.23
Clearance Time (s)	4.4	5.7		4.4	5.3	5.3	4.4	5.2		4.4	5.5	5.5
Vehicle Extension (s)	2.0	4.4		2.0	6.1	6.1	2.0	5.7		2.0	6.2	6.2
Lane Grp Cap (vph)	220	1423		417	1226	548	339	1606		162	828	370
v/s Ratio Prot	0.03	c0.16		c0.09	c0.20		0.08	c0.28		c0.07	0.14	
v/s Ratio Perm						0.03						0.04
v/c Ratio	0.52	0.56		0.74	0.58	0.09	0.41	0.94dr		0.72	0.58	0.16
Uniform Delay, d1	54.4	36.5		50.9	32.1	26.5	42.5	36.9		53.0	40.8	36.6
Progression Factor	1.00	1.00		0.56	0.53	0.43	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	1.0	1.6		4.5	1.5	0.2	0.3	4.9		11.8	2.1	0.6
Delay (s)	55.4	38.1		33.0	18.4	11.7	42.8	41.8		64.8	42.9	37.2
Level of Service	E	D		C	B	B	D	D		E	D	D
Approach Delay (s)		40.2			21.4			41.9			44.8	
Approach LOS		D			C			D			D	

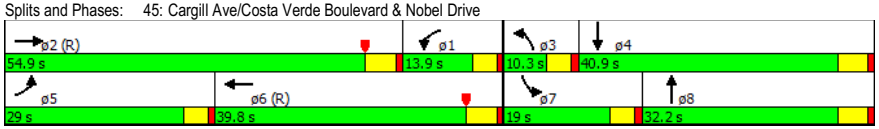
Intersection Summary			
HCM 2000 Control Delay	36.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	67.8%	ICU Level of Service	C
Analysis Period (min)	15		

dr Defacto Right Lane. Recode with 1 though lane as a right lane.
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	363	775	53	845	35	60	185	35
Future Volume (vph)	363	775	53	845	35	60	185	35
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	5	2	1	6	3	8	7	4
Permitted Phases								
Detector Phase	5	2	1	6	3	8	7	4
Switch Phase								
Minimum Initial (s)	4.0	25.0	4.0	25.0	4.0	25.0	4.0	25.0
Minimum Split (s)	8.4	32.2	8.4	39.2	8.4	32.2	8.4	39.2
Total Split (s)	29.0	54.9	13.9	39.8	10.3	32.2	19.0	40.9
Total Split (%)	24.2%	45.8%	11.6%	33.2%	8.6%	26.8%	15.8%	34.1%
Yellow Time (s)	3.4	4.2	3.4	4.2	3.4	4.2	3.4	4.2
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.2	4.4	5.2	4.4	5.2	4.4	5.2
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	Max	None	Max

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 120
Control Type: Actuated-Coordinated

Splits and Phases: 45: Cargill Ave/Costa Verde Boulevard & Nobel Drive



45: Cargill Ave/Costa Verde Boulevard & Nobel Drive

Timing Plan: Midday Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	363	775	52	53	845	167	35	60	46	185	35	216
Future Volume (vph)	363	775	52	53	845	167	35	60	46	185	35	216
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.2		4.4	5.2		4.4	5.2		4.4	5.2	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	1.00		1.00	1.00	
Frt	1.00	0.99		1.00	0.98		1.00	0.93		1.00	0.87	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	5037		1770	4959		1770	1741		1770	1622	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	5037		1770	4959		1770	1741		1770	1622	
Peak-hour factor, PHF	0.91	0.91	0.91	0.92	0.92	0.92	0.73	0.73	0.73	0.81	0.81	0.81
Adj. Flow (vph)	399	852	57	58	918	182	48	82	63	228	43	267
RTOR Reduction (vph)	0	6	0	0	25	0	0	23	0	0	182	0
Lane Group Flow (vph)	399	903	0	58	1075	0	48	122	0	228	128	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases												
Actuated Green, G (s)	24.6	50.7		7.6	33.7		4.7	27.9		14.6	37.8	
Effective Green, g (s)	24.6	50.7		7.6	33.7		4.7	27.9		14.6	37.8	
Actuated g/C Ratio	0.21	0.42		0.06	0.28		0.04	0.23		0.12	0.31	
Clearance Time (s)	4.4	5.2		4.4	5.2		4.4	5.2		4.4	5.2	
Vehicle Extension (s)	2.0	4.5		2.0	4.5		2.0	4.5		2.0	4.5	
Lane Grp Cap (vph)	362	2128		112	1392		69	404		215	510	
v/s Ratio Prot	c0.23	0.18		0.03	c0.22		0.03	c0.07		c0.13	0.08	
v/s Ratio Perm												
v/c Ratio	1.10	0.42		0.52	0.77		0.70	0.30		1.06	0.25	
Uniform Delay, d1	47.7	24.4		54.4	39.6		56.9	38.0		52.7	30.6	
Progression Factor	1.11	0.47		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	70.7	0.4		1.7	4.2		21.7	1.9		78.3	1.2	
Delay (s)	123.7	11.8		56.1	43.8		78.7	39.9		131.0	31.8	
Level of Service	F	B		E	D		E	D		F	C	
Approach Delay (s)		45.9			44.4			49.6			73.8	
Approach LOS		D			D			D			E	

Intersection Summary			
HCM 2000 Control Delay	50.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	19.2
Intersection Capacity Utilization	82.4%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

46: Lombard Place & Nobel Drive

Timing Plan: Midday Peak

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	304	884	12	764	6	0	147	3
Future Volume (vph)	304	884	12	764	6	0	147	3
Turn Type	Prot	NA	Prot	NA	Perm	NA	Perm	NA
Protected Phases	5	2	1	6		8		4
Permitted Phases					8		4	
Detector Phase	5	2	1	6	8	8	4	4
Switch Phase								
Minimum Initial (s)	4.0	7.0	4.0	7.0	4.0	4.0	4.0	4.0
Minimum Split (s)	9.5	19.0	9.5	28.9	32.9	32.9	32.9	32.9
Total Split (s)	34.4	65.0	34.4	64.9	44.9	44.9	44.9	44.9
Total Split (%)	23.8%	45.0%	23.8%	45.0%	31.1%	31.1%	31.1%	31.1%
Yellow Time (s)	3.4	4.0	3.4	3.9	3.9	3.9	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.4	5.0	4.4	4.9		4.9	4.9	4.9
Lead/Lag	Lead	Lag	Lead	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes				
Recall Mode	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 144.3
Actuated Cycle Length: 101.3
Natural Cycle: 90
Control Type: Actuated-Uncoordinated

Splits and Phases: 46: Lombard Place & Nobel Drive

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	304	884	9	12	764	164	6	0	10	147	3	242
Future Volume (vph)	304	884	9	12	764	164	6	0	10	147	3	242
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.0		4.4	4.9			4.9		4.9	4.9	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00		1.00	1.00	
Frt	1.00	1.00		1.00	0.97			0.92		1.00	0.85	
Flt Protected	0.95	1.00		0.95	1.00			0.98		0.95	1.00	
Satd. Flow (prot)	1770	3534		1770	3446			1675		1770	1587	
Flt Permitted	0.95	1.00		0.95	1.00			0.72		0.74	1.00	
Satd. Flow (perm)	1770	3534		1770	3446			1225		1385	1587	
Peak-hour factor, PHF	0.95	0.95	0.95	0.93	0.93	0.93	0.75	0.75	0.75	0.76	0.76	0.76
Adj. Flow (vph)	320	931	9	13	822	176	8	0	13	193	4	318
RTOR Reduction (vph)	0	0	0	0	13	0	0	17	0	0	256	0
Lane Group Flow (vph)	320	940	0	13	985	0	0	4	0	193	66	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8			4		
Actuated Green, G (s)	25.0	66.8		2.4	44.3			20.1		20.1	20.1	
Effective Green, g (s)	25.0	66.8		2.4	44.3			20.1		20.1	20.1	
Actuated g/C Ratio	0.24	0.64		0.02	0.43			0.19		0.19	0.19	
Clearance Time (s)	4.4	5.0		4.4	4.9			4.9		4.9	4.9	
Vehicle Extension (s)	3.0	3.7		3.0	4.4			2.0		2.0	2.0	
Lane Grp Cap (vph)	427	2278		41	1473			237		268	307	
v/s Ratio Prot	c0.18	0.27		0.01	c0.29						0.04	
v/s Ratio Perm								0.00		c0.14		
v/c Ratio	0.75	0.41		0.32	0.67			0.02		0.72	0.21	
Uniform Delay, d1	36.4	8.9		49.8	23.8			33.8		39.1	35.1	
Progression Factor	1.00	1.00		1.00	1.00			1.00		1.00	1.00	
Incremental Delay, d2	7.1	0.2		4.4	1.4			0.0		7.8	0.1	
Delay (s)	43.5	9.1		54.2	25.1			33.8		46.9	35.2	
Level of Service	D	A		D	C			C		D	D	
Approach Delay (s)		17.8			25.5			33.8			39.6	
Approach LOS		B			C			C			D	

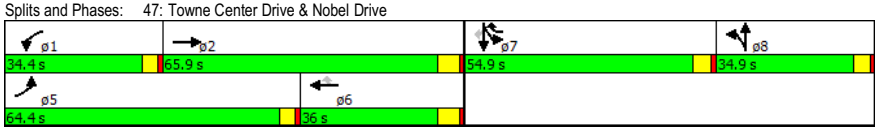
Intersection Summary			
HCM 2000 Control Delay	24.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	103.6	Sum of lost time (s)	14.3
Intersection Capacity Utilization	70.2%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	396	533	23	556	94	51	43	64	398
Future Volume (vph)	396	533	23	556	94	51	43	64	398
Turn Type	Prot	NA	Prot	NA	pm+ov	NA	Split	NA	Perm
Protected Phases	5	2	1	6	7	8	7	7	
Permitted Phases					6				7
Detector Phase	5	2	1	6	7	8	7	7	7
Switch Phase									
Minimum Initial (s)	4.0	7.0	4.0	7.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.4	12.9	8.4	13.0	8.9	8.9	8.9	8.9	8.9
Total Split (s)	64.4	65.9	34.4	36.0	54.9	34.9	54.9	54.9	54.9
Total Split (%)	33.9%	34.6%	18.1%	18.9%	28.9%	18.3%	28.9%	28.9%	28.9%
Yellow Time (s)	3.4	4.9	3.4	5.0	3.9	3.9	3.9	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.9	4.4	6.0	4.9	4.9	4.9	4.9	4.9
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 190.2
Actuated Cycle Length: 74.3
Natural Cycle: 55
Control Type: Actuated-Uncoordinated

Splits and Phases: 47: Towne Center Drive & Nobel Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	396	533	43	23	556	94	30	51	43	43	64	398
Future Volume (vph)	396	533	43	23	556	94	30	51	43	43	64	398
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.9		4.4	6.0	4.9		4.9		4.9	4.9	4.9
Lane Util. Factor	0.97	0.95		1.00	0.91	1.00		0.95		1.00	1.00	1.00
Frt	1.00	0.99		1.00	1.00	0.85		0.95		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.99		0.95	1.00	1.00
Satd. Flow (prot)	3433	3499		1770	5085	1583		3315		1770	1863	1583
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.99		0.95	1.00	1.00
Satd. Flow (perm)	3433	3499		1770	5085	1583		3315		1770	1863	1583
Peak-hour factor, PHF	0.96	0.96	0.96	0.85	0.85	0.85	0.78	0.78	0.78	0.91	0.91	0.91
Adj. Flow (vph)	412	555	45	27	654	111	38	65	55	47	70	437
RTOR Reduction (vph)	0	3	0	0	0	47	0	40	0	0	0	366
Lane Group Flow (vph)	413	597	0	27	654	64	0	118	0	47	70	71
Turn Type	Prot	NA		Prot	NA	pm+ov	Split	NA		Split	NA	Perm
Protected Phases	5	2		1	6	7	8	8		7	7	
Permitted Phases						6						7
Actuated Green, G (s)	15.2	33.7		2.4	20.8	33.3		7.8		12.5	12.5	12.5
Effective Green, g (s)	15.2	33.7		2.4	20.8	33.3		7.8		12.5	12.5	12.5
Actuated g/C Ratio	0.20	0.44		0.03	0.27	0.44		0.10		0.16	0.16	0.16
Clearance Time (s)	4.4	5.9		4.4	6.0	4.9		4.9		4.9	4.9	4.9
Vehicle Extension (s)	2.0	4.9		2.0	3.3	4.0		2.0		4.0	4.0	4.0
Lane Grp Cap (vph)	682	1541		55	1382	689		338		289	304	258
v/s Ratio Prot	c0.12	0.17		0.02	c0.13	0.02		c0.04		0.03	0.04	
v/s Ratio Perm						0.03						c0.05
v/c Ratio	0.61	0.39		0.49	0.47	0.09		0.35		0.16	0.23	0.28
Uniform Delay, d1	27.9	14.4		36.4	23.3	12.7		32.0		27.5	27.8	28.0
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00
Incremental Delay, d2	1.0	0.3		2.5	0.3	0.1		0.2		0.4	0.5	0.8
Delay (s)	29.0	14.8		38.9	23.6	12.8		32.2		27.9	28.3	28.8
Level of Service	C	B		D	C	B		C		C	C	C
Approach Delay (s)		20.6			22.6			32.2			28.7	
Approach LOS		C			C			C			C	

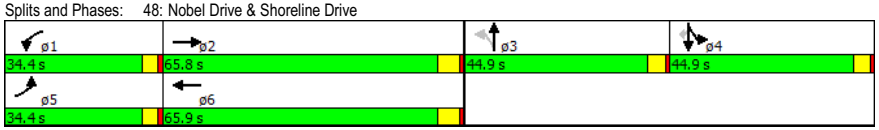
Intersection Summary			
HCM 2000 Control Delay	23.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.45		
Actuated Cycle Length (s)	76.5	Sum of lost time (s)	20.2
Intersection Capacity Utilization	52.2%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	36	565	15	622	17	4	93	3	31
Future Volume (vph)	36	565	15	622	17	4	93	3	31
Turn Type	Prot	NA	Prot	NA	Perm	NA	Split	NA	Perm
Protected Phases	5	2	1	6		3	4	4	
Permitted Phases					3				4
Detector Phase	5	2	1	6	3	3	4	4	4
Switch Phase									
Minimum Initial (s)	4.0	10.0	4.0	10.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.4	15.8	8.4	30.9	8.9	8.9	33.9	33.9	33.9
Total Split (s)	34.4	65.8	34.4	65.9	44.9	44.9	44.9	44.9	44.9
Total Split (%)	18.1%	34.6%	18.1%	34.7%	23.6%	23.6%	23.6%	23.6%	23.6%
Yellow Time (s)	3.4	4.8	3.4	4.9	3.9	3.9	3.9	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.8	4.4	5.9		4.9	4.9	4.9	4.9
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 190.1
Actuated Cycle Length: 73.2
Natural Cycle: 85
Control Type: Actuated-Uncoordinated

Splits and Phases: 48: Nobel Drive & Shoreline Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	36	565	18	15	622	83	17	4	22	93	3	31
Future Volume (vph)	36	565	18	15	622	83	17	4	22	93	3	31
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.8		4.4	5.9			4.9		4.9	4.9	4.9
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00		1.00	1.00	0.88
Frt	1.00	1.00		1.00	0.98			0.93		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.98		0.95	1.00	1.00
Satd. Flow (prot)	1770	5062		1770	4996			1700		1770	1863	2787
Flt Permitted	0.95	1.00		0.95	1.00			0.22		0.95	1.00	1.00
Satd. Flow (perm)	1770	5062		1770	4996			376		1770	1863	2787
Peak-hour factor, PHF	0.93	0.93	0.93	0.87	0.87	0.87	0.62	0.62	0.62	0.93	0.93	0.93
Adj. Flow (vph)	39	608	19	17	715	95	27	6	35	100	3	33
RTOR Reduction (vph)	0	1	0	0	8	0	0	20	0	0	0	30
Lane Group Flow (vph)	39	626	0	17	802	0	0	48	0	100	3	3
Turn Type	Prot	NA		Prot	NA		Perm	NA		Split	NA	Perm
Protected Phases	5	2		1	6			3		4	4	
Permitted Phases							3					4
Actuated Green, G (s)	3.7	31.6		1.9	29.7			14.9		7.9	7.9	7.9
Effective Green, g (s)	3.7	31.6		1.9	29.7			14.9		7.9	7.9	7.9
Actuated g/C Ratio	0.05	0.41		0.02	0.39			0.20		0.10	0.10	0.10
Clearance Time (s)	4.4	5.8		4.4	5.9			4.9		4.9	4.9	4.9
Vehicle Extension (s)	2.0	4.6		2.0	4.4			2.0		2.0	2.0	2.0
Lane Grp Cap (vph)	85	2096		44	1944			73		183	192	288
v/s Ratio Prot	c0.02	0.12		0.01	c0.16					c0.06	0.00	
v/s Ratio Perm								c0.13				0.00
v/c Ratio	0.46	0.30		0.39	0.41			0.66		0.55	0.02	0.01
Uniform Delay, d1	35.3	14.9		36.6	17.0			28.3		32.5	30.7	30.7
Progression Factor	1.00	1.00		1.00	1.00			1.00		1.00	1.00	1.00
Incremental Delay, d2	1.4	0.1		2.0	0.2			15.0		1.8	0.0	0.0
Delay (s)	36.8	15.1		38.7	17.2			43.3		34.3	30.7	30.7
Level of Service	D	B		D	B			D		C	C	C
Approach Delay (s)		16.4			17.6			43.3			33.3	
Approach LOS		B			B			D			C	

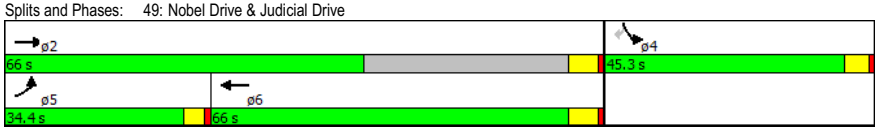
Intersection Summary			
HCM 2000 Control Delay	19.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	76.3	Sum of lost time (s)	20.1
Intersection Capacity Utilization	41.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBT	SBL	SBR
Lane Configurations					
Traffic Volume (vph)	43	745	632	363	29
Future Volume (vph)	43	745	632	363	29
Turn Type	Prot	NA	NA	Prot	Perm
Protected Phases	5	2	6	4	
Permitted Phases					4
Detector Phase	5	2	6	4	4
Switch Phase					
Minimum Initial (s)	4.0	10.0	10.0	7.0	7.0
Minimum Split (s)	8.4	16.0	36.0	39.3	39.3
Total Split (s)	34.4	66.0	66.0	45.3	45.3
Total Split (%)	23.6%	45.3%	45.3%	31.1%	31.1%
Yellow Time (s)	3.4	5.0	5.0	4.3	4.3
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	6.0	6.0	5.3	5.3
Lead/Lag	Lead		Lag		
Lead-Lag Optimize?	Yes		Yes		
Recall Mode	None	Min	Min	None	None

Intersection Summary
Cycle Length: 145.7
Actuated Cycle Length: 71.4
Natural Cycle: 85
Control Type: Actuated-Uncoordinated

Splits and Phases: 49: Nobel Drive & Judicial Drive



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	43	745	632	388	363	29
Future Volume (vph)	43	745	632	388	363	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	6.0	6.0		5.3	5.3
Lane Util. Factor	0.97	0.91	0.91		0.97	1.00
Frt	1.00	1.00	0.94		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	3433	5085	4795		3433	1583
Flt Permitted	0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)	3433	5085	4795		3433	1583
Peak-hour factor, PHF	0.90	0.90	0.85	0.85	0.87	0.87
Adj. Flow (vph)	48	828	744	456	417	33
RTOR Reduction (vph)	0	0	65	0	0	25
Lane Group Flow (vph)	48	828	1135	0	417	8
Turn Type	Prot	NA	NA		Prot	Perm
Protected Phases	5	2	6		4	
Permitted Phases						4
Actuated Green, G (s)	3.3	44.0	36.3		17.4	17.4
Effective Green, g (s)	3.3	44.0	36.3		17.4	17.4
Actuated g/C Ratio	0.05	0.61	0.50		0.24	0.24
Clearance Time (s)	4.4	6.0	6.0		5.3	5.3
Vehicle Extension (s)	2.0	5.4	5.4		4.4	4.4
Lane Grp Cap (vph)	155	3077	2394		821	378
v/s Ratio Prot	0.01	c0.16	c0.24		c0.12	
v/s Ratio Perm						0.00
v/c Ratio	0.31	0.27	0.47		0.51	0.02
Uniform Delay, d1	33.6	6.8	11.9		23.9	21.1
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	0.4	0.1	0.4		0.8	0.0
Delay (s)	34.0	6.9	12.3		24.8	21.2
Level of Service	C	A	B		C	C
Approach Delay (s)		8.4	12.3		24.5	
Approach LOS		A	B		C	

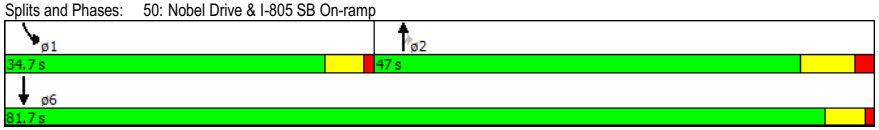
Intersection Summary			
HCM 2000 Control Delay	13.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	72.7	Sum of lost time (s)	15.7
Intersection Capacity Utilization	40.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	NBT	NBR	SBL	SBT
Lane Configurations				
Traffic Volume (vph)	363	624	46	1149
Future Volume (vph)	363	624	46	1149
Turn Type	NA	Perm	Prot	NA
Protected Phases	2		1	6
Permitted Phases		2		
Detector Phase	2	2	1	6
Switch Phase				
Minimum Initial (s)	12.0	12.0	5.0	5.0
Minimum Split (s)	39.0	39.0	9.7	9.7
Total Split (s)	47.0	47.0	34.7	81.7
Total Split (%)	57.5%	57.5%	42.5%	100.0%
Yellow Time (s)	5.0	5.0	3.7	3.7
All-Red Time (s)	2.0	2.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	4.7	4.7
Lead/Lag	Lag	Lag	Lead	
Lead-Lag Optimize?	Yes	Yes	Yes	
Recall Mode	Min	Min	None	None

Intersection Summary
Cycle Length: 81.7
Actuated Cycle Length: 84.9
Natural Cycle: 150
Control Type: Actuated-Uncoordinated

Splits and Phases: 50: Nobel Drive & I-805 SB On-ramp



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	363	624	46	1149
Future Volume (vph)	0	0	363	624	46	1149
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)			7.0	7.0	4.7	4.7
Lane Util. Factor			0.95	0.88	0.97	0.91
Frt			1.00	0.85	1.00	1.00
Flt Protected			1.00	1.00	0.95	1.00
Satd. Flow (prot)			3539	2787	3433	5085
Flt Permitted			1.00	1.00	0.95	1.00
Satd. Flow (perm)			3539	2787	3433	5085
Peak-hour factor, PHF	0.94	0.94	0.25	0.25	0.25	0.25
Adj. Flow (vph)	0	0	1452	2496	184	4596
RTOR Reduction (vph)	0	0	0	257	0	0
Lane Group Flow (vph)	0	0	1452	2239	184	4596
Turn Type			NA	Perm	Prot	NA
Protected Phases			2		1	6
Permitted Phases				2		
Actuated Green, G (s)			63.3	63.3	9.9	84.9
Effective Green, g (s)			63.3	63.3	9.9	84.9
Actuated g/C Ratio			0.75	0.75	0.12	1.00
Clearance Time (s)			7.0	7.0	4.7	4.7
Vehicle Extension (s)			3.0	3.0	3.0	3.0
Lane Grp Cap (vph)			2638	2077	400	5085
v/s Ratio Prot			0.41		0.05	c0.90
v/s Ratio Perm				c0.80		
v/c Ratio			0.55	1.08	0.46	0.90
Uniform Delay, d1			4.7	10.8	35.0	0.0
Progression Factor			1.00	1.00	1.00	1.00
Incremental Delay, d2			0.3	44.5	0.8	2.6
Delay (s)			4.9	55.3	35.8	2.6
Level of Service			A	E	D	A
Approach Delay (s)	0.0		36.8			3.9
Approach LOS	A		D			A

Intersection Summary			
HCM 2000 Control Delay	18.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	1.11		
Actuated Cycle Length (s)	84.9	Sum of lost time (s)	11.7
Intersection Capacity Utilization	42.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	WBL	WBR	NBT	SBT	ø5
Lane Configurations					
Traffic Volume (vph)	645	513	359	476	
Future Volume (vph)	645	513	359	476	
Turn Type	Prot	Prot	NA	NA	
Protected Phases	8	1	2	6	5
Permitted Phases					
Detector Phase	8	1	2	6	
Switch Phase					
Minimum Initial (s)	5.0	5.0	16.0	11.0	5.0
Minimum Split (s)	11.1	11.1	23.0	18.0	9.7
Total Split (s)	36.1	19.7	47.0	47.0	24.7
Total Split (%)	33.5%	18.3%	43.6%	43.6%	23%
Yellow Time (s)	4.1	3.7	5.0	5.0	3.7
All-Red Time (s)	2.0	1.0	2.0	2.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.1	4.7	7.0	7.0	
Lead/Lag		Lead	Lag	Lag	Lead
Lead-Lag Optimize?		Yes	Yes	Yes	Yes
Recall Mode	None	None	Min	Min	None

Intersection Summary
Cycle Length: 107.8
Actuated Cycle Length: 72.8
Natural Cycle: 70
Control Type: Actuated-Uncoordinated

Splits and Phases: 51: Nobel Drive & I-805 N Off-ramps

Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	645	513	0	359	0	0	476
Future Volume (vph)	645	513	0	359	0	0	476
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.1	4.7		7.0			7.0
Lane Util. Factor	0.97	0.88		0.95			0.91
Frt	1.00	0.85		1.00			1.00
Flt Protected	0.95	1.00		1.00			1.00
Satd. Flow (prot)	3433	2787		3539			5085
Flt Permitted	0.95	1.00		1.00			1.00
Satd. Flow (perm)	3433	2787		3539			5085
Peak-hour factor, PHF	0.86	0.86	0.92	0.93	0.93	0.25	0.25
Adj. Flow (vph)	750	597	0	386	0	0	1904
RTOR Reduction (vph)	0	543	0	0	0	0	0
Lane Group Flow (vph)	750	54	0	386	0	0	1904
Turn Type	Prot	Prot	Prot	NA			NA
Protected Phases	8	1	5	2			6
Permitted Phases							
Actuated Green, G (s)	20.1	6.6		28.3			39.6
Effective Green, g (s)	20.1	6.6		28.3			39.6
Actuated g/C Ratio	0.28	0.09		0.39			0.54
Clearance Time (s)	6.1	4.7		7.0			7.0
Vehicle Extension (s)	2.0	2.0		2.0			2.0
Lane Grp Cap (vph)	947	252		1375			2766
v/s Ratio Prot	c0.22	0.02		0.11			c0.37
v/s Ratio Perm							
v/c Ratio	0.79	0.21		0.28			0.69
Uniform Delay, d1	24.4	30.7		15.3			12.1
Progression Factor	1.00	1.00		1.00			1.00
Incremental Delay, d2	4.3	0.2		0.0			0.6
Delay (s)	28.7	30.9		15.3			12.7
Level of Service	C	C		B			B
Approach Delay (s)	29.7			15.3			12.7
Approach LOS	C			B			B

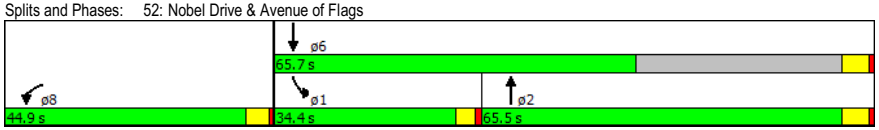
Intersection Summary			
HCM 2000 Control Delay	19.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	72.8	Sum of lost time (s)	17.8
Intersection Capacity Utilization	42.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	WBL	NBT	SBL	SBT
Lane Configurations				
Traffic Volume (vph)	41	924	43	371
Future Volume (vph)	41	924	43	371
Turn Type	Prot	NA	Prot	NA
Protected Phases	8	2	1	6
Permitted Phases				
Detector Phase	8	2	1	6
Switch Phase				
Minimum Initial (s)	4.0	7.0	4.0	7.0
Minimum Split (s)	28.9	26.5	9.5	12.7
Total Split (s)	44.9	65.5	34.4	65.7
Total Split (%)	31.0%	45.2%	23.8%	45.4%
Yellow Time (s)	3.9	4.5	3.4	4.7
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	5.5	4.4	5.7
Lead/Lag		Lag	Lead	
Lead-Lag Optimize?		Yes	Yes	
Recall Mode	None	Min	None	Min

Intersection Summary
Cycle Length: 144.8
Actuated Cycle Length: 64.3
Natural Cycle: 65
Control Type: Actuated-Uncoordinated

Splits and Phases: 52: Nobel Drive & Avenue of Flags



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	41	31	924	66	43	371
Future Volume (vph)	41	31	924	66	43	371
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9		5.5		4.4	5.7
Lane Util. Factor	1.00		0.95		1.00	0.95
Frt	0.94		0.99		1.00	1.00
Flt Protected	0.97		1.00		0.95	1.00
Satd. Flow (prot)	1706		3504		1770	3539
Flt Permitted	0.97		1.00		0.95	1.00
Satd. Flow (perm)	1706		3504		1770	3539
Peak-hour factor, PHF	0.75	0.75	0.91	0.91	0.89	0.89
Adj. Flow (vph)	55	41	1015	73	48	417
RTOR Reduction (vph)	23	0	2	0	0	0
Lane Group Flow (vph)	73	0	1086	0	48	417
Turn Type	Prot		NA		Prot	NA
Protected Phases	8		2		1	6
Permitted Phases						
Actuated Green, G (s)	6.6		41.2		4.7	50.1
Effective Green, g (s)	6.6		41.2		4.7	50.1
Actuated g/C Ratio	0.10		0.61		0.07	0.74
Clearance Time (s)	4.9		5.5		4.4	5.7
Vehicle Extension (s)	2.0		5.2		3.0	4.9
Lane Grp Cap (vph)	167		2145		123	2634
v/s Ratio Prot	c0.04		c0.31		c0.03	0.12
v/s Ratio Perm						
v/c Ratio	0.43		0.51		0.39	0.16
Uniform Delay, d1	28.6		7.3		29.9	2.5
Progression Factor	1.00		1.00		1.00	1.00
Incremental Delay, d2	0.7		0.4		2.0	0.1
Delay (s)	29.3		7.8		32.0	2.5
Level of Service	C		A		C	A
Approach Delay (s)	29.3		7.8			5.6
Approach LOS	C		A			A

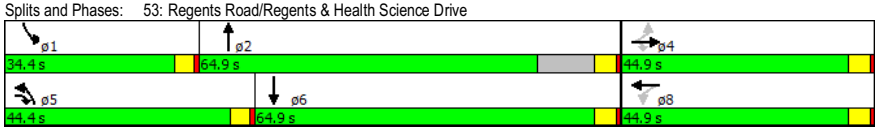
Intersection Summary			
HCM 2000 Control Delay	8.4	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	67.3	Sum of lost time (s)	14.8
Intersection Capacity Utilization	47.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBT	ø1
Lane Configurations									
Traffic Volume (vph)	80	0	430	2	2	373	166	138	
Future Volume (vph)	80	0	430	2	2	373	166	138	
Turn Type	Perm	NA	pm+ov	Perm	NA	Prot	NA	NA	
Protected Phases		4	5		8	5	2	6	1
Permitted Phases	4		4	8					
Detector Phase	4	4	5	8	8	5	2	6	
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	10.0	10.0	4.0
Minimum Split (s)	8.9	8.9	8.4	22.9	22.9	8.4	14.9	14.9	8.4
Total Split (s)	44.9	44.9	44.4	44.9	44.9	44.4	64.9	64.9	34.4
Total Split (%)	29.1%	29.1%	28.8%	29.1%	29.1%	28.8%	42.1%	42.1%	22%
Yellow Time (s)	3.9	3.9	3.4	3.9	3.9	3.4	3.9	3.9	3.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	
Total Lost Time (s)		4.9	4.4		4.9	4.4	4.9	4.9	
Lead/Lag			Lead			Lead	Lag	Lag	Lead
Lead-Lag Optimize?			Yes			Yes	Yes	Yes	Yes
Recall Mode	None	None	Min	None	None	Min	None	None	None

Intersection Summary
Cycle Length: 154.2
Actuated Cycle Length: 53.1
Natural Cycle: 60
Control Type: Actuated-Uncoordinated

Splits and Phases: 53: Regents Road/Regents & Health Science Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	80	0	430	2	2	0	373	166	2	0	138	97
Future Volume (vph)	80	0	430	2	2	0	373	166	2	0	138	97
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9	4.4		4.9		4.4	4.9			4.9	
Lane Util. Factor		1.00	1.00		1.00		1.00	0.95			0.95	
Frt		1.00	0.85		1.00		1.00	1.00			0.94	
Flt Protected		0.95	1.00		0.98		0.95	1.00			1.00	
Satd. Flow (prot)		1770	1583		1817		1770	3533			3320	
Flt Permitted		0.75	1.00		0.84		0.95	1.00			1.00	
Satd. Flow (perm)		1402	1583		1566		1770	3533			3320	
Peak-hour factor, PHF	0.78	0.78	0.78	0.50	0.50	0.50	0.92	0.92	0.92	0.81	0.81	0.81
Adj. Flow (vph)	103	0	551	4	4	0	405	180	2	0	170	120
RTOR Reduction (vph)	0	0	264	0	0	0	0	0	0	0	94	0
Lane Group Flow (vph)	0	103	287	0	8	0	405	182	0	0	196	0
Turn Type	Perm	NA	pm+ov	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4	5		8		5	2		1	6	
Permitted Phases	4		4	8								
Actuated Green, G (s)		7.9	28.0		7.9		20.1	36.0			11.5	
Effective Green, g (s)		7.9	28.0		7.9		20.1	36.0			11.5	
Actuated g/C Ratio		0.15	0.52		0.15		0.37	0.67			0.21	
Clearance Time (s)		4.9	4.4		4.9		4.4	4.9			4.9	
Vehicle Extension (s)		2.0	2.0		2.0		2.0	3.8			3.8	
Lane Grp Cap (vph)		206	825		230		662	2368			710	
v/s Ratio Prot			0.13				c0.23	0.05			c0.06	
v/s Ratio Perm		c0.07	0.05		0.01							
v/c Ratio		0.50	0.35		0.03		0.61	0.08			0.28	
Uniform Delay, d1		21.1	7.5		19.6		13.6	3.1			17.6	
Progression Factor		1.00	1.00		1.00		1.00	1.00			1.00	
Incremental Delay, d2		0.7	0.1		0.0		1.2	0.0			0.3	
Delay (s)		21.8	7.6		19.7		14.8	3.1			17.9	
Level of Service		C	A		B		B	A			B	
Approach Delay (s)		9.8			19.7			11.2			17.9	
Approach LOS		A			B			B			B	

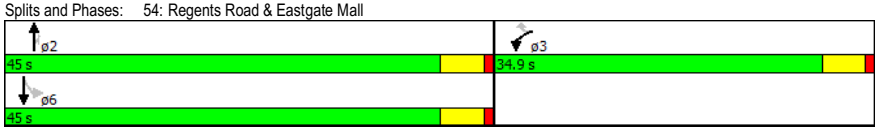
Intersection Summary				
HCM 2000 Control Delay	11.9	HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio	0.49			
Actuated Cycle Length (s)	53.7	Sum of lost time (s)	14.2	
Intersection Capacity Utilization	50.1%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	150	105	441	141	104	469
Future Volume (vph)	150	105	441	141	104	469
Turn Type	Prot	Perm	NA	Perm	Perm	NA
Protected Phases	3		2			6
Permitted Phases		3		2	6	
Detector Phase	3	3	2	2	6	6
Switch Phase						
Minimum Initial (s)	4.0	4.0	7.0	7.0	7.0	7.0
Minimum Split (s)	8.9	8.9	12.0	12.0	12.0	12.0
Total Split (s)	34.9	34.9	45.0	45.0	45.0	45.0
Total Split (%)	43.7%	43.7%	56.3%	56.3%	56.3%	56.3%
Yellow Time (s)	3.9	3.9	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	5.0	5.0	5.0	5.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None	None	Min	Min	Min	Min

Intersection Summary
Cycle Length: 79.9
Actuated Cycle Length: 33.6
Natural Cycle: 40
Control Type: Actuated-Uncoordinated

Splits and Phases: 54: Regents Road & Eastgate Mall



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	150	105	441	141	104	469
Future Volume (vph)	150	105	441	141	104	469
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9	5.0	5.0	5.0	5.0
Lane Util. Factor	1.00	1.00	0.91	0.91	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3374	1441	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.47	1.00
Satd. Flow (perm)	1770	1583	3374	1441	868	3539
Peak-hour factor, PHF	0.95	0.95	0.94	0.94	0.85	0.85
Adj. Flow (vph)	158	111	469	150	122	552
RTOR Reduction (vph)	0	85	3	72	0	0
Lane Group Flow (vph)	158	26	481	63	122	552
Turn Type	Prot	Perm	NA	Perm	Perm	NA
Protected Phases	3		2			6
Permitted Phases		3		2	6	
Actuated Green, G (s)	7.8	7.8	15.7	15.7	15.7	15.7
Effective Green, g (s)	7.8	7.8	15.7	15.7	15.7	15.7
Actuated g/C Ratio	0.23	0.23	0.47	0.47	0.47	0.47
Clearance Time (s)	4.9	4.9	5.0	5.0	5.0	5.0
Vehicle Extension (s)	2.0	2.0	3.4	3.4	3.5	3.5
Lane Grp Cap (vph)	413	369	1585	677	408	1663
v/s Ratio Prot	c0.09		0.14			c0.16
v/s Ratio Perm		0.02		0.04	0.14	
v/c Ratio	0.38	0.07	0.30	0.09	0.30	0.33
Uniform Delay, d1	10.8	10.0	5.5	4.9	5.5	5.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2	0.0	0.1	0.1	0.5	0.1
Delay (s)	11.0	10.0	5.6	5.0	5.9	5.7
Level of Service	B	B	A	A	A	A
Approach Delay (s)	10.6		5.5			5.7
Approach LOS	B		A			A

Intersection Summary			
HCM 2000 Control Delay	6.5	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.35		
Actuated Cycle Length (s)	33.4	Sum of lost time (s)	9.9
Intersection Capacity Utilization	40.2%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	9	8	59	8	78	8	477	73	481
Future Volume (vph)	9	8	59	8	78	8	477	73	481
Turn Type	Perm	NA	Perm	NA	Perm	Prot	NA	Prot	NA
Protected Phases		4		8		5	2	1	6
Permitted Phases	4		8		8				
Detector Phase	4	4	8	8	8	5	2	1	6
Switch Phase									
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	4.0	10.0	4.0	10.0
Minimum Split (s)	11.9	11.9	11.9	11.9	11.9	8.4	14.9	8.4	14.9
Total Split (s)	34.9	34.9	44.9	44.9	44.9	34.4	64.9	34.4	64.9
Total Split (%)	24.2%	24.2%	31.1%	31.1%	31.1%	23.9%	45.0%	23.9%	45.0%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.9	3.4	3.9	3.4	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.9		4.9	4.9	4.4	4.9	4.4	4.9
Lead/Lag						Lead	Lag	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	None	Min

Intersection Summary
Cycle Length: 144.2
Actuated Cycle Length: 40.6
Natural Cycle: 40
Control Type: Actuated-Uncoordinated

Splits and Phases: 55: Regents Road & Executive Drive

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	9	8	8	59	8	78	8	477	53	73	481	19
Future Volume (vph)	9	8	8	59	8	78	8	477	53	73	481	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9			4.9	4.9	4.4	4.9		4.4	4.9	
Lane Util. Factor		1.00			1.00	1.00	1.00	0.95		1.00	0.95	
Frt		0.96			1.00	0.85	1.00	0.98		1.00	0.99	
Flt Protected		0.98			0.96	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1751			1784	1583	1770	3486		1770	3519	
Flt Permitted		0.87			0.73	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1543			1367	1583	1770	3486		1770	3519	
Peak-hour factor, PHF	0.96	0.96	0.96	0.90	0.90	0.90	0.95	0.95	0.95	0.93	0.93	0.93
Adj. Flow (vph)	9	8	8	66	9	87	8	502	56	78	517	20
RTOR Reduction (vph)	0	7	0	0	0	73	0	6	0	0	1	0
Lane Group Flow (vph)	0	18	0	0	75	14	8	552	0	78	536	0
Turn Type	Perm	NA		Perm	NA	Perm	Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8		8						
Actuated Green, G (s)		7.0			7.0	7.0	0.8	19.7		4.1	23.0	
Effective Green, g (s)		7.0			7.0	7.0	0.8	19.7		4.1	23.0	
Actuated g/C Ratio		0.16			0.16	0.16	0.02	0.44		0.09	0.51	
Clearance Time (s)		4.9			4.9	4.9	4.4	4.9		4.4	4.9	
Vehicle Extension (s)		2.0			3.1	3.1	2.0	3.1		2.0	3.1	
Lane Grp Cap (vph)		240			212	246	31	1526		161	1798	
v/s Ratio Prot							0.00	c0.16		c0.04	c0.15	
v/s Ratio Perm		0.01			c0.05	0.01						
v/c Ratio		0.08			0.35	0.06	0.26	0.36		0.48	0.30	
Uniform Delay, d1		16.2			17.0	16.2	21.8	8.5		19.4	6.3	
Progression Factor		1.00			1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.0			1.1	0.1	1.6	0.2		0.8	0.1	
Delay (s)		16.3			18.0	16.3	23.4	8.6		20.3	6.4	
Level of Service		B			B	B	C	A		C	A	
Approach Delay (s)		16.3			17.1			8.8			8.2	
Approach LOS		B			B			A			A	

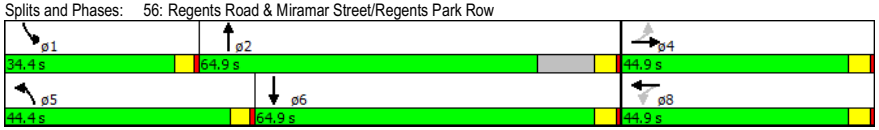
Intersection Summary			
HCM 2000 Control Delay	9.7	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.36		
Actuated Cycle Length (s)	45.0	Sum of lost time (s)	14.2
Intersection Capacity Utilization	38.8%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	36	9	142	12	89	388	69	403
Future Volume (vph)	36	9	142	12	89	388	69	403
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	7.0	4.0	7.0
Minimum Split (s)	8.9	8.9	8.9	8.9	8.4	11.9	8.4	11.9
Total Split (s)	44.9	44.9	44.9	44.9	44.4	64.9	34.4	64.9
Total Split (%)	29.1%	29.1%	29.1%	29.1%	28.8%	42.1%	22.3%	42.1%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.4	3.9	3.4	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	4.9	4.9	4.4	4.9	4.4	4.9
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 154.2
Actuated Cycle Length: 53.2
Natural Cycle: 40
Control Type: Actuated-Uncoordinated

Splits and Phases: 56: Regents Road & Miramar Street/Regents Park Row



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	36	9	108	142	12	89	89	388	125	69	403	51
Future Volume (vph)	36	9	108	142	12	89	89	388	125	69	403	51
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9		4.9	4.9		4.4	4.9		4.4	4.9	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frt	1.00	0.86		1.00	0.87		1.00	0.96		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1605		1770	1617		1770	3410		1770	3480	
Flt Permitted	0.69	1.00		0.66	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1281	1605		1226	1617		1770	3410		1770	3480	
Peak-hour factor, PHF	0.75	0.75	0.75	0.95	0.95	0.95	0.86	0.86	0.86	0.91	0.91	0.91
Adj. Flow (vph)	48	12	144	149	13	94	103	451	145	76	443	56
RTOR Reduction (vph)	0	106	0	0	69	0	0	24	0	0	7	0
Lane Group Flow (vph)	48	50	0	149	38	0	103	572	0	76	492	0
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8								
Actuated Green, G (s)	14.0	14.0		14.0	14.0		7.0	19.0		6.1	18.1	
Effective Green, g (s)	14.0	14.0		14.0	14.0		7.0	19.0		6.1	18.1	
Actuated g/C Ratio	0.26	0.26		0.26	0.26		0.13	0.36		0.11	0.34	
Clearance Time (s)	4.9	4.9		4.9	4.9		4.4	4.9		4.4	4.9	
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	3.8		2.0	3.8	
Lane Grp Cap (vph)	336	421		322	424		232	1215		202	1181	
v/s Ratio Prot		0.03			0.02		c0.06	c0.17		0.04	0.14	
v/s Ratio Perm	0.04			c0.12								
v/c Ratio	0.14	0.12		0.46	0.09		0.44	0.47		0.38	0.42	
Uniform Delay, d1	15.1	15.0		16.5	14.8		21.4	13.3		21.8	13.5	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.1	0.0		0.4	0.0		0.5	0.4		0.4	0.3	
Delay (s)	15.1	15.0		16.9	14.9		21.8	13.6		22.3	13.8	
Level of Service	B	B		B	B		C	B		C	B	
Approach Delay (s)		15.0			16.0			14.8			15.0	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM 2000 Control Delay	15.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.47		
Actuated Cycle Length (s)	53.3	Sum of lost time (s)	14.2
Intersection Capacity Utilization	44.9%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	25	6	60	18	122	20	606	47	650
Future Volume (vph)	25	6	60	18	122	20	606	47	650
Turn Type	Perm	NA	Perm	NA	pm+ov	Prot	NA	Prot	NA
Protected Phases		4		8	1	5	2	1	6
Permitted Phases	4		8		8				
Detector Phase	4	4	8	8	1	5	2	1	6
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	10.0	4.0	10.0
Minimum Split (s)	8.9	8.9	8.9	8.9	8.4	8.4	15.2	8.4	15.3
Total Split (s)	44.9	44.9	44.9	44.9	34.4	34.4	65.2	34.4	65.3
Total Split (%)	31.1%	31.1%	31.1%	31.1%	23.8%	23.8%	45.1%	23.8%	45.2%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.4	3.4	4.2	3.4	4.3
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.9		4.9	4.4	4.4	5.2	4.4	5.3
Lead/Lag					Lead	Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 144.6
Actuated Cycle Length: 44.3
Natural Cycle: 40
Control Type: Actuated-Uncoordinated

Splits and Phases: 57: Regents Road & Plaza De Palmas

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	6	9	60	18	122	20	606	54	47	650	21
Future Volume (vph)	25	6	9	60	18	122	20	606	54	47	650	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9			4.9	4.4	4.4	5.2		4.4	5.3	
Lane Util. Factor		1.00			1.00	1.00	1.00	0.91		1.00	0.95	
Frt		0.97			1.00	0.85	1.00	0.99		1.00	1.00	
Flt Protected		0.97			0.96	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1751			1794	1583	1770	5023		1770	3522	
Flt Permitted		0.76			0.74	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1378			1380	1583	1770	5023		1770	3522	
Peak-hour factor, PHF	0.77	0.77	0.77	0.94	0.94	0.94	0.90	0.90	0.90	0.89	0.89	0.89
Adj. Flow (vph)	32	8	12	64	19	130	22	673	60	53	730	24
RTOR Reduction (vph)	0	9	0	0	0	95	0	7	0	0	1	0
Lane Group Flow (vph)	0	43	0	0	83	35	22	726	0	53	753	0
Turn Type	Perm	NA		Perm	NA	pm+ov	Prot	NA		Prot	NA	
Protected Phases		4			8	1	5	2		1	6	
Permitted Phases	4			8		8						
Actuated Green, G (s)		6.4			6.4	12.9	1.0	21.5		6.5	26.9	
Effective Green, g (s)		6.4			6.4	12.9	1.0	21.5		6.5	26.9	
Actuated g/C Ratio		0.13			0.13	0.26	0.02	0.44		0.13	0.55	
Clearance Time (s)		4.9			4.9	4.4	4.4	5.2		4.4	5.3	
Vehicle Extension (s)		2.0			2.0	2.0	2.0	4.5		2.0	4.2	
Lane Grp Cap (vph)		180			180	417	36	2208		235	1937	
v/s Ratio Prot						0.01	0.01	0.14		c0.03	c0.21	
v/s Ratio Perm		0.03			c0.06	0.01						
v/c Ratio		0.24			0.46	0.08	0.61	0.33		0.23	0.39	
Uniform Delay, d1		19.1			19.7	13.6	23.8	9.0		19.0	6.3	
Progression Factor		1.00			1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.3			0.7	0.0	19.6	0.2		0.2	0.2	
Delay (s)		19.3			20.3	13.6	43.4	9.1		19.1	6.5	
Level of Service		B			C	B	D	A		B	A	
Approach Delay (s)		19.3			16.2			10.1			7.3	
Approach LOS		B			B			B			A	

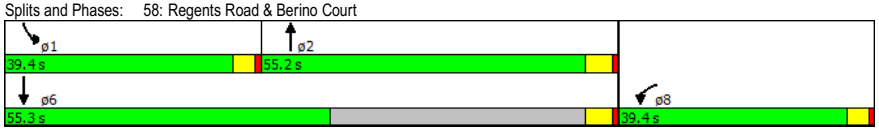
Intersection Summary			
HCM 2000 Control Delay	9.9	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	48.9	Sum of lost time (s)	14.6
Intersection Capacity Utilization	43.1%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	WBL	NBT	SBL	SBT
Lane Configurations				
Traffic Volume (vph)	16	915	116	708
Future Volume (vph)	16	915	116	708
Turn Type	Prot	NA	Prot	NA
Protected Phases	8	2	1	6
Permitted Phases				
Detector Phase	8	2	1	6
Switch Phase				
Minimum Initial (s)	4.0	7.0	4.0	7.0
Minimum Split (s)	8.4	12.2	8.4	12.3
Total Split (s)	39.4	55.2	39.4	55.3
Total Split (%)	29.4%	41.2%	29.4%	41.3%
Yellow Time (s)	3.4	4.2	3.4	4.3
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.2	4.4	5.3
Lead/Lag		Lag	Lead	
Lead-Lag Optimize?		Yes	Yes	
Recall Mode	None	None	None	None

Intersection Summary
Cycle Length: 134
Actuated Cycle Length: 47
Natural Cycle: 45
Control Type: Actuated-Uncoordinated

Splits and Phases: 58: Regents Road & Berino Court



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	16	3	915	8	116	708
Future Volume (vph)	16	3	915	8	116	708
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4		5.2		4.4	5.3
Lane Util. Factor	1.00		0.95		1.00	0.95
Frt	0.98		1.00		1.00	1.00
Flt Protected	0.96		1.00		0.95	1.00
Satd. Flow (prot)	1748		3535		1770	3539
Flt Permitted	0.96		1.00		0.95	1.00
Satd. Flow (perm)	1748		3535		1770	3539
Peak-hour factor, PHF	0.81	0.81	0.88	0.88	0.91	0.91
Adj. Flow (vph)	20	4	1040	9	127	778
RTOR Reduction (vph)	4	0	0	0	0	0
Lane Group Flow (vph)	20	0	1049	0	127	778
Turn Type	Prot		NA		Prot	NA
Protected Phases	8		2		1	6
Permitted Phases						
Actuated Green, G (s)	1.8		26.8		7.6	38.7
Effective Green, g (s)	1.8		26.8		7.6	38.7
Actuated g/C Ratio	0.04		0.53		0.15	0.77
Clearance Time (s)	4.4		5.2		4.4	5.3
Vehicle Extension (s)	2.0		3.9		2.0	3.7
Lane Grp Cap (vph)	62		1887		267	2728
v/s Ratio Prot	c0.01		c0.30		c0.07	0.22
v/s Ratio Perm						
v/c Ratio	0.32		0.56		0.48	0.29
Uniform Delay, d1	23.6		7.8		19.5	1.7
Progression Factor	1.00		1.00		1.00	1.00
Incremental Delay, d2	1.1		0.4		0.5	0.1
Delay (s)	24.7		8.2		20.0	1.8
Level of Service	C		A		B	A
Approach Delay (s)	24.7		8.2			4.3
Approach LOS	C		A			A

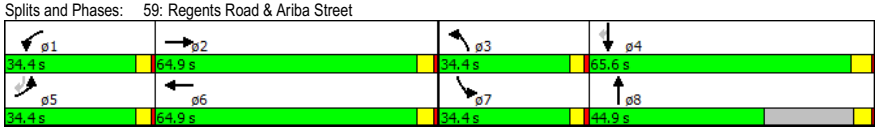
Intersection Summary			
HCM 2000 Control Delay	6.6	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	50.2	Sum of lost time (s)	14.0
Intersection Capacity Utilization	47.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	36	20	52	48	256	805	45	557	67
Future Volume (vph)	36	20	52	48	256	805	45	557	67
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA	custom
Protected Phases	5	2	1	6	3	8	7	4	
Permitted Phases									5 4
Detector Phase	5	2	1	6	3	8	7	4	5 4
Switch Phase									
Minimum Initial (s)	4.0	7.0	4.0	7.0	4.0	7.0	4.0	7.0	
Minimum Split (s)	8.4	11.9	8.4	11.9	8.4	11.9	8.4	12.6	
Total Split (s)	34.4	64.9	34.4	64.9	34.4	44.9	34.4	65.6	
Total Split (%)	17.3%	32.6%	17.3%	32.6%	17.3%	22.5%	17.3%	32.9%	
Yellow Time (s)	3.4	3.9	3.4	3.9	3.4	3.9	3.4	4.6	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.4	4.9	4.4	4.9	4.4	4.9	4.4	5.6	
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	None	None	None	None	None	

Intersection Summary
Cycle Length: 199.3
Actuated Cycle Length: 97.9
Natural Cycle: 60
Control Type: Actuated-Uncoordinated

Splits and Phases: 59: Regents Road & Ariba Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	36	20	327	52	48	17	256	805	159	45	557	67
Future Volume (vph)	36	20	327	52	48	17	256	805	159	45	557	67
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	4.9		4.4	4.9		4.4	5.6	4.4
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	1.00
Frt	1.00	0.86		1.00	0.96		1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	3039		1770	3401		1770	3452		1770	3539	1583
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1770	3039		1770	3401		1770	3452		1770	3539	1583
Peak-hour factor, PHF	0.85	0.85	0.85	0.71	0.71	0.71	0.88	0.88	0.88	0.87	0.87	0.87
Adj. Flow (vph)	42	24	385	73	68	24	291	915	181	52	640	77
RTOR Reduction (vph)	0	329	0	0	20	0	0	6	0	0	0	50
Lane Group Flow (vph)	42	80	0	73	72	0	291	1090	0	52	640	27
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	custom
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases												5 4
Actuated Green, G (s)	7.2	14.4		7.7	14.9		30.4	52.4		6.6	27.9	40.7
Effective Green, g (s)	7.2	14.4		7.7	14.9		30.4	52.4		6.6	27.9	35.1
Actuated g/C Ratio	0.07	0.14		0.08	0.15		0.30	0.53		0.07	0.28	0.35
Clearance Time (s)	4.4	4.9		4.4	4.9		4.4	4.9		4.4	5.6	
Vehicle Extension (s)	2.0	6.3		2.0	5.9		2.0	4.8		2.0	4.4	
Lane Grp Cap (vph)	127	438		136	508		539	1814		117	990	557
v/s Ratio Prot	0.02	c0.03		c0.04	0.02		c0.16	c0.32		0.03	0.18	
v/s Ratio Perm												0.02
v/c Ratio	0.33	0.18		0.54	0.14		0.54	0.60		0.44	0.65	0.05
Uniform Delay, d1	44.0	37.5		44.3	36.8		28.8	16.4		44.8	31.6	21.3
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	0.6	0.6		2.0	0.4		0.5	0.8		1.0	1.8	0.0
Delay (s)	44.5	38.1		46.3	37.2		29.4	17.2		45.8	33.3	21.3
Level of Service	D	D		D	D		C	B		D	C	C
Approach Delay (s)		38.7			41.2			19.7			33.0	
Approach LOS		D			D			B			C	

Intersection Summary			
HCM 2000 Control Delay	27.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	99.7	Sum of lost time (s)	19.3
Intersection Capacity Utilization	60.7%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	110	39	243	73	22	985	163	687
Future Volume (vph)	110	39	243	73	22	985	163	687
Turn Type	Prot	NA	Prot	NA	Perm	NA	Perm	NA
Protected Phases	5	2	1	6		8		4
Permitted Phases					8		4	
Detector Phase	5	2	1	6	8	8	4	4
Switch Phase								
Minimum Initial (s)	4.0	4.0	4.0	7.0	7.0	7.0	4.0	4.0
Minimum Split (s)	8.4	8.9	8.4	11.9	12.8	12.8	9.5	9.5
Total Split (s)	34.4	64.9	34.4	64.9	45.8	45.8	45.5	45.5
Total Split (%)	23.7%	44.7%	23.7%	44.7%	31.6%	31.6%	31.4%	31.4%
Yellow Time (s)	3.4	3.9	3.4	3.9	4.8	4.8	4.5	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	4.9	4.4	4.9	5.8	5.8	5.5	5.5
Lead/Lag	Lead	Lag	Lead	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes				
Recall Mode	None	Min	None	Min	None	None	None	None

Intersection Summary
Cycle Length: 145.1
Actuated Cycle Length: 81
Natural Cycle: 90
Control Type: Actuated-Uncoordinated

Splits and Phases: 60: Regents Road & Governor Drive

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	110	39	37	243	73	125	22	985	73	163	687	86
Future Volume (vph)	110	39	37	243	73	125	22	985	73	163	687	86
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	4.9		5.8	5.8		5.5	5.5	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	0.93		1.00	0.91		1.00	0.99		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3280		1770	3205		1770	3503		1770	3480	
Flt Permitted	0.95	1.00		0.95	1.00		0.23	1.00		0.12	1.00	
Satd. Flow (perm)	1770	3280		1770	3205		433	3503		228	3480	
Peak-hour factor, PHF	0.90	0.90	0.90	0.86	0.86	0.86	0.84	0.84	0.84	0.83	0.83	0.83
Adj. Flow (vph)	122	43	41	283	85	145	26	1173	87	196	828	104
RTOR Reduction (vph)	0	37	0	0	117	0	0	3	0	0	5	0
Lane Group Flow (vph)	122	47	0	283	113	0	26	1257	0	196	927	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8			4		
Actuated Green, G (s)	10.3	8.3		17.5	15.5		40.1	40.1		40.4	40.4	
Effective Green, g (s)	10.3	8.3		17.5	15.5		40.1	40.1		40.4	40.4	
Actuated g/C Ratio	0.13	0.10		0.22	0.19		0.50	0.50		0.50	0.50	
Clearance Time (s)	4.4	4.9		4.4	4.9		5.8	5.8		5.5	5.5	
Vehicle Extension (s)	2.0	4.5		2.0	5.0		4.6	4.6		2.0	2.0	
Lane Grp Cap (vph)	225	336		382	613		214	1734		113	1735	
v/s Ratio Prot	0.07	0.01		c0.16	c0.04			0.36			0.27	
v/s Ratio Perm							0.06			c0.86		
v/c Ratio	0.54	0.14		0.74	0.18		0.12	0.73		1.73	0.53	
Uniform Delay, d1	33.1	33.1		29.6	27.4		11.0	16.1		20.3	13.9	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.4	0.3		6.6	0.3		0.5	1.8		364.6	0.2	
Delay (s)	34.6	33.4		36.3	27.8		11.4	17.9		384.9	14.0	
Level of Service	C	C		D	C		B	B		F	B	
Approach Delay (s)		34.1			32.4			17.8			78.5	
Approach LOS		C			C			B			E	

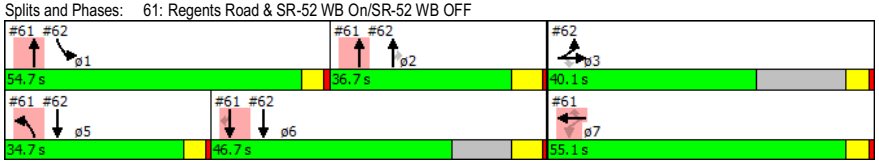
Intersection Summary			
HCM 2000 Control Delay	43.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.28		
Actuated Cycle Length (s)	81.0	Sum of lost time (s)	15.1
Intersection Capacity Utilization	72.5%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	WBT	WBR	NBL	NBT	SBT	SBR	ø1	ø2	ø3
Lane Configurations									
Traffic Volume (vph)	1	103	298	641	565	139			
Future Volume (vph)	1	103	298	641	565	139			
Turn Type	NA	Perm	Prot	NA	NA	Perm			
Protected Phases	7		5	1 2	6		1	2	3
Permitted Phases		7				6			
Detector Phase	7	7	5	1 2	6	6			
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0		13.0	13.0	5.0	13.0	5.0
Minimum Split (s)	10.1	10.1	9.7		19.2	19.2	9.7	19.2	10.1
Total Split (s)	55.1	55.1	34.7		46.7	46.7	54.7	36.7	40.1
Total Split (%)	37.6%	37.6%	23.7%		31.9%	31.9%	37%	25%	27%
Yellow Time (s)	4.1	4.1	3.7		5.2	5.2	3.7	5.2	4.1
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0			
Total Lost Time (s)	5.1	5.1	4.7		6.2	6.2			
Lead/Lag			Lead		Lag	Lag	Lead	Lag	
Lead-Lag Optimize?			Yes		Yes	Yes	Yes	Yes	
Recall Mode	None	None	None		Max	Max	None	Max	None

Intersection Summary
Cycle Length: 146.5
Actuated Cycle Length: 102.7
Natural Cycle: 55
Control Type: Actuated-Uncoordinated

Splits and Phases: 61: Regents Road & SR-52 WB On/SR-52 WB OFF



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	316	1	103	298	641	0	0	565	139
Future Volume (vph)	0	0	0	316	1	103	298	641	0	0	565	139
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					5.1	5.1	4.7	4.7			6.2	6.2
Lane Util. Factor					1.00	1.00	0.97	0.95			0.95	1.00
Frt					1.00	0.85	1.00	1.00			1.00	0.85
Flt Protected					0.95	1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)					1774	1583	3433	3539			3539	1583
Flt Permitted					0.95	1.00	0.95	1.00			1.00	1.00
Satd. Flow (perm)					1774	1583	3433	3539			3539	1583
Peak-hour factor, PHF	0.25	0.25	0.25	0.93	0.93	0.93	0.85	0.85	0.85	0.87	0.87	0.87
Adj. Flow (vph)	0	0	0	340	1	111	351	754	0	0	649	160
RTOR Reduction (vph)	0	0	0	0	0	84	0	0	0	0	0	96
Lane Group Flow (vph)	0	0	0	0	341	27	351	754	0	0	649	64
Turn Type				Perm	NA	Perm	Prot	NA			NA	Perm
Protected Phases					7		5	1 2			6	
Permitted Phases				7		7						6
Actuated Green, G (s)					25.0	25.0	20.3	66.1			41.1	41.1
Effective Green, g (s)					25.0	25.0	20.3	66.1			41.1	41.1
Actuated g/C Ratio					0.24	0.24	0.20	0.65			0.40	0.40
Clearance Time (s)					5.1	5.1	4.7				6.2	6.2
Vehicle Extension (s)					2.0	2.0	2.0				2.0	2.0
Lane Grp Cap (vph)					433	386	680	2284			1420	635
v/s Ratio Prot							c0.10	c0.21			c0.18	
v/s Ratio Perm					0.19	0.02						0.04
v/c Ratio					0.79	0.07	0.52	0.33			0.46	0.10
Uniform Delay, d1					36.2	29.8	36.7	8.2			22.5	19.1
Progression Factor					1.00	1.00	1.43	0.75			1.00	1.00
Incremental Delay, d2					8.5	0.0	0.2	0.0			1.1	0.3
Delay (s)					44.7	29.8	52.7	6.2			23.5	19.4
Level of Service					D	C	D	A			C	B
Approach Delay (s)		0.0			41.0			21.0			22.7	
Approach LOS		A			D			C			C	

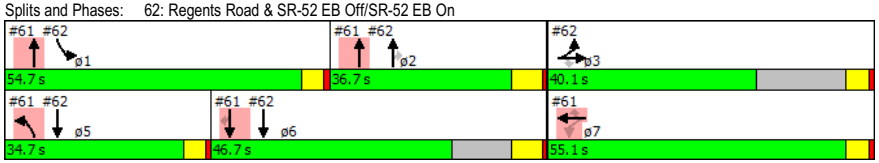
Intersection Summary			
HCM 2000 Control Delay	25.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	102.4	Sum of lost time (s)	16.0
Intersection Capacity Utilization	55.0%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	EBR	NBT	NBR	SBL	SBT	ø5	ø6	ø7
Lane Configurations										
Traffic Volume (vph)	210	2	256	742	342	132	742			
Future Volume (vph)	210	2	256	742	342	132	742			
Turn Type	Split	NA	Perm	NA	Perm	Prot	NA			
Protected Phases	3	3		2		1	5 6	5	6	7
Permitted Phases			3		2					
Detector Phase	3	3	3	2	2	1	5 6			
Switch Phase										
Minimum Initial (s)	5.0	5.0	5.0	13.0	13.0	5.0		5.0	13.0	5.0
Minimum Split (s)	10.1	10.1	10.1	19.2	19.2	9.7		9.7	19.2	10.1
Total Split (s)	40.1	40.1	40.1	36.7	36.7	54.7		34.7	46.7	55.1
Total Split (%)	27.4%	27.4%	27.4%	25.1%	25.1%	37.3%		24%	32%	38%
Yellow Time (s)	4.1	4.1	4.1	5.2	5.2	3.7		3.7	5.2	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0				
Total Lost Time (s)	5.1	5.1	5.1	6.2	6.2	4.7				
Lead/Lag				Lag	Lag	Lead		Lead	Lag	
Lead-Lag Optimize?				Yes	Yes	Yes		Yes	Yes	
Recall Mode	None	None	None	Max	Max	None		None	Max	None

Intersection Summary
Cycle Length: 146.5
Actuated Cycle Length: 102.7
Natural Cycle: 55
Control Type: Actuated-Uncoordinated

Splits and Phases: 62: Regents Road & SR-52 EB Off/SR-52 EB On



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	210	2	256	0	0	0	0	742	342	132	742	0
Future Volume (vph)	210	2	256	0	0	0	0	742	342	132	742	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1	5.1					6.2	6.2	4.7	4.7	
Lane Util. Factor	0.95	0.95	1.00					0.95	1.00	1.00	0.95	
Frt	1.00	1.00	0.85					1.00	0.85	1.00	1.00	
Flt Protected	0.95	0.95	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1681	1687	1583					3539	1583	1770	3539	
Flt Permitted	0.95	0.95	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1681	1687	1583					3539	1583	1770	3539	
Peak-hour factor, PHF	0.96	0.96	0.96	0.25	0.25	0.25	0.86	0.86	0.86	0.89	0.89	0.89
Adj. Flow (vph)	219	2	267	0	0	0	0	863	398	148	834	0
RTOR Reduction (vph)	0	0	129	0	0	0	0	0	49	0	0	0
Lane Group Flow (vph)	109	112	138	0	0	0	0	863	349	148	834	0
Turn Type	Split	NA	Perm					NA	Perm	Prot	NA	
Protected Phases	3	3						2		1	5 6	
Permitted Phases			3						2			
Actuated Green, G (s)	25.0	25.0	25.0					44.1	44.1	17.3	66.1	
Effective Green, g (s)	25.0	25.0	25.0					44.1	44.1	17.3	66.1	
Actuated g/C Ratio	0.24	0.24	0.24					0.43	0.43	0.17	0.65	
Clearance Time (s)	5.1	5.1	5.1					6.2	6.2	4.7		
Vehicle Extension (s)	2.0	2.0	2.0					2.0	2.0	2.0		
Lane Grp Cap (vph)	410	411	386					1524	681	299	2284	
v/s Ratio Prot	0.06	0.07						c0.24		c0.08	c0.24	
v/s Ratio Perm			c0.09						0.22			
v/c Ratio	0.27	0.27	0.36					0.57	0.51	0.49	0.37	
Uniform Delay, d1	31.3	31.3	32.0					21.9	21.3	38.6	8.4	
Progression Factor	1.00	1.00	1.00					1.00	1.00	1.15	0.87	
Incremental Delay, d2	0.1	0.1	0.2					1.5	2.7	0.4	0.0	
Delay (s)	31.4	31.5	32.3					23.5	24.0	45.0	7.3	
Level of Service	C	C	C					C	C	D	A	
Approach Delay (s)		31.9			0.0			23.7			13.0	
Approach LOS		C			A			C			B	

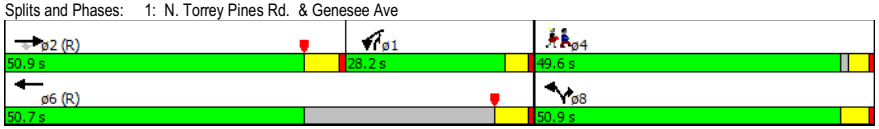
Intersection Summary			
HCM 2000 Control Delay	21.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	102.4	Sum of lost time (s)	16.0
Intersection Capacity Utilization	55.0%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	ø4
Lane Configurations							
Traffic Volume (vph)	1077	1004	433	363	693	298	
Future Volume (vph)	1077	1004	433	363	693	298	
Turn Type	NA	Perm	Prot	NA	Prot	pt+ov	
Protected Phases	2		1	6	8	8 1	4
Permitted Phases		2					
Detector Phase	2	2	1	6	8	8 1	
Switch Phase							
Minimum Initial (s)	10.0	10.0	7.0	10.0	10.0		4.0
Minimum Split (s)	43.2	43.2	11.4	24.9	23.3		41.0
Total Split (s)	50.9	50.9	28.2	50.7	50.9		49.6
Total Split (%)	39.2%	39.2%	21.7%	39.0%	39.2%		38%
Yellow Time (s)	5.2	5.2	3.4	5.0	4.3		3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	6.2	6.2	4.4	6.0	5.3		
Lead/Lag	Lead	Lead	Lag				
Lead-Lag Optimize?							
Recall Mode	C-Max	C-Max	None	C-Max	None		None

Intersection Summary
Cycle Length: 130
Actuated Cycle Length: 130
Offset: 7 (5%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 110
Control Type: Actuated-Coordinated

Splits and Phases: 1: N. Torrey Pines Rd. & Genesee Ave



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1077	1004	433	363	693	298
Future Volume (vph)	1077	1004	433	363	693	298
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.2	6.2	4.4	6.0	5.3	5.3
Lane Util. Factor	0.91	1.00	0.97	0.91	0.97	0.88
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	5085	1583	3433	5085	3433	2787
Flt Permitted	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (perm)	5085	1583	3433	5085	3433	2787
Peak-hour factor, PHF	0.95	0.95	0.80	0.80	0.90	0.90
Adj. Flow (vph)	1134	1057	541	454	770	331
RTOR Reduction (vph)	0	439	0	0	0	11
Lane Group Flow (vph)	1134	618	541	454	770	320
Turn Type	NA	Perm	Prot	NA	Prot	pt+ov
Protected Phases	2		1	6	8	8 1
Permitted Phases		2				
Actuated Green, G (s)	52.9	52.9	23.8	81.3	37.4	65.6
Effective Green, g (s)	52.9	52.9	23.8	81.3	37.4	61.2
Actuated g/C Ratio	0.41	0.41	0.18	0.63	0.29	0.47
Clearance Time (s)	6.2	6.2	4.4	6.0	5.3	
Vehicle Extension (s)	4.0	4.0	2.0	3.7	3.8	
Lane Grp Cap (vph)	2069	644	628	3180	987	1312
v/s Ratio Prot	0.22		c0.16	0.09	c0.22	0.11
v/s Ratio Perm		c0.39				
v/c Ratio	0.55	0.96	0.86	0.14	0.78	0.24
Uniform Delay, d1	29.4	37.5	51.5	10.0	42.5	20.6
Progression Factor	1.00	1.00	0.52	0.34	0.71	0.66
Incremental Delay, d2	1.0	26.9	10.9	0.1	4.0	0.1
Delay (s)	30.5	64.4	37.6	3.5	34.2	13.7
Level of Service	C	E	D	A	C	B
Approach Delay (s)	46.8			22.0	28.0	
Approach LOS	D			C	C	

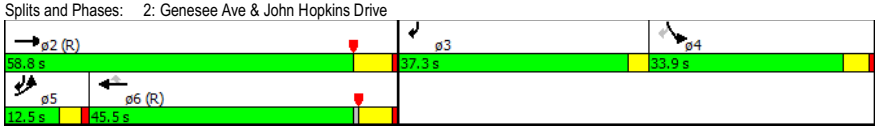
Intersection Summary			
HCM 2000 Control Delay	36.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	15.9
Intersection Capacity Utilization	83.4%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	ø3
Lane Configurations							
Traffic Volume (vph)	41	1285	707	211	1020	121	
Future Volume (vph)	41	1285	707	211	1020	121	
Turn Type	Prot	NA	NA	Perm	Prot	pt+ov	
Protected Phases	5	2	6		4	3 5	3
Permitted Phases				6		4	
Detector Phase	5	2	6	6	4	3 5	
Switch Phase							
Minimum Initial (s)	4.0	10.0	10.0	10.0	7.0		4.0
Minimum Split (s)	9.5	16.7	15.9	15.9	11.9		7.0
Total Split (s)	12.5	58.8	45.5	45.5	33.9		37.3
Total Split (%)	9.6%	45.2%	35.0%	35.0%	26.1%		29%
Yellow Time (s)	3.4	5.7	4.9	4.9	3.9		3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		0.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	4.4	6.7	5.9	5.9	4.9		
Lead/Lag	Lead		Lag	Lag	Lag		Lead
Lead-Lag Optimize?	Yes		Yes	Yes	Yes		Yes
Recall Mode	None	C-Max	C-Max	C-Max	None		None

Intersection Summary
Cycle Length: 130
Actuated Cycle Length: 130
Offset: 22 (17%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 70
Control Type: Actuated-Coordinated

Splits and Phases: 2: Genesee Ave & John Hopkins Drive



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	41	1285	707	211	1020	121
Future Volume (vph)	41	1285	707	211	1020	121
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	6.7	5.9	5.9	4.9	3.0
Lane Util. Factor	1.00	0.91	0.81	1.00	0.97	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	5085	7544	1583	3433	1583
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	5085	7544	1583	3433	1583
Peak-hour factor, PHF	0.92	0.92	0.80	0.80	0.80	0.80
Adj. Flow (vph)	45	1397	884	264	1275	151
RTOR Reduction (vph)	0	0	0	180	0	11
Lane Group Flow (vph)	45	1397	884	84	1275	140
Turn Type	Prot	NA	NA	Perm	Prot	pt+ov
Protected Phases	5	2	6		4	3 5
Permitted Phases				6		4
Actuated Green, G (s)	6.9	52.1	41.6	41.6	46.1	70.2
Effective Green, g (s)	6.9	52.1	41.6	41.6	46.1	70.2
Actuated g/C Ratio	0.05	0.40	0.32	0.32	0.35	0.54
Clearance Time (s)	4.4	6.7	5.9	5.9	4.9	
Vehicle Extension (s)	2.0	4.0	3.9	3.9	5.0	
Lane Grp Cap (vph)	93	2037	2414	506	1217	891
v/s Ratio Prot	0.03	c0.27	0.12		c0.37	c0.03
v/s Ratio Perm				0.05		0.06
v/c Ratio	0.48	0.69	0.37	0.17	1.05	0.16
Uniform Delay, d1	59.8	32.2	34.0	31.8	41.9	15.0
Progression Factor	1.04	0.59	0.93	1.38	1.00	1.00
Incremental Delay, d2	1.3	1.7	0.4	0.7	39.2	0.0
Delay (s)	63.3	20.8	32.0	44.4	81.2	15.1
Level of Service	E	C	C	D	F	B
Approach Delay (s)		22.1	34.9		74.2	
Approach LOS		C	C		E	

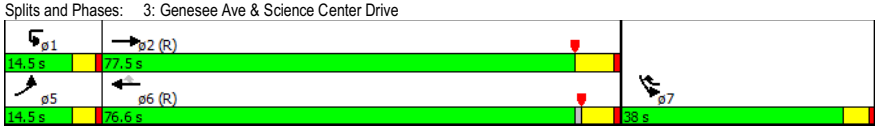
Intersection Summary			
HCM 2000 Control Delay	44.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	18.2
Intersection Capacity Utilization	63.6%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBU	WBT	WBR	SBL
Lane Configurations						
Traffic Volume (vph)	93	2167	12	842	364	343
Future Volume (vph)	93	2167	12	842	364	343
Turn Type	Prot	NA	Prot	NA	pm+ov	Prot
Protected Phases	5	2	1	6	7	7
Permitted Phases					6	
Detector Phase	5	2	1	6	7	7
Switch Phase						
Minimum Initial (s)	4.0	10.0	4.0	10.0	4.0	4.0
Minimum Split (s)	9.5	22.5	9.5	16.0	8.9	8.9
Total Split (s)	14.5	77.5	14.5	76.6	38.0	38.0
Total Split (%)	11.2%	59.6%	11.2%	58.9%	29.2%	29.2%
Yellow Time (s)	3.4	5.9	3.4	5.0	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	6.9	4.4	6.0	4.9	4.9
Lead/Lag	Lead	Lag	Lead	Lag		
Lead-Lag Optimize?	Yes	Yes	Yes	Yes		
Recall Mode	None	C-Max	None	C-Max	None	None

Intersection Summary
Cycle Length: 130
Actuated Cycle Length: 130
Offset: 55 (42%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 60
Control Type: Actuated-Coordinated

Splits and Phases: 3: Genesee Ave & Science Center Drive



Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Traffic Volume (vph)	93	2167	12	842	364	343	81
Future Volume (vph)	93	2167	12	842	364	343	81
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	6.9	4.4	6.0	4.9	4.9	
Lane Util. Factor	1.00	0.91	1.00	0.91	1.00	0.97	
Frt	1.00	1.00	1.00	1.00	0.85	0.97	
Flt Protected	0.95	1.00	0.95	1.00	1.00	0.96	
Satd. Flow (prot)	1770	5085	1770	5085	1583	3374	
Flt Permitted	0.95	1.00	0.95	1.00	1.00	0.96	
Satd. Flow (perm)	1770	5085	1770	5085	1583	3374	
Peak-hour factor, PHF	0.97	0.97	0.92	0.83	0.83	0.90	0.90
Adj. Flow (vph)	96	2234	13	1014	439	381	90
RTOR Reduction (vph)	0	0	0	0	45	18	0
Lane Group Flow (vph)	96	2234	13	1014	394	453	0
Turn Type	Prot	NA	Prot	NA	pm+ov	Prot	
Protected Phases	5	2	1	6	7	7	
Permitted Phases					6		
Actuated Green, G (s)	12.0	87.1	3.0	79.0	102.7	23.7	
Effective Green, g (s)	12.0	87.1	3.0	79.0	102.7	23.7	
Actuated g/C Ratio	0.09	0.67	0.02	0.61	0.79	0.18	
Clearance Time (s)	4.4	6.9	4.4	6.0	4.9	4.9	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	163	3406	40	3090	1250	615	
v/s Ratio Prot	c0.05	c0.44	0.01	0.20	0.06	c0.13	
v/s Ratio Perm					0.19		
v/c Ratio	0.59	0.66	0.33	0.33	0.31	0.74	
Uniform Delay, d1	56.6	12.6	62.5	12.5	3.8	50.2	
Progression Factor	1.10	0.68	1.00	1.00	1.00	1.00	
Incremental Delay, d2	2.6	0.5	4.7	0.3	0.1	4.6	
Delay (s)	65.0	9.1	67.2	12.8	4.0	54.8	
Level of Service	E	A	E	B	A	D	
Approach Delay (s)		11.4		10.6		54.8	
Approach LOS		B		B		D	

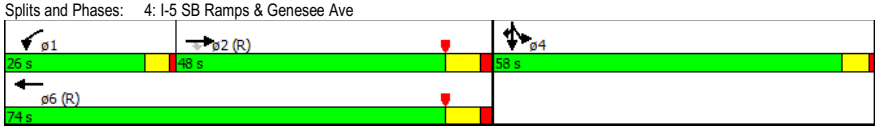
Intersection Summary			
HCM 2000 Control Delay	15.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	16.2
Intersection Capacity Utilization	71.0%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBT	EBR	WBL	WBT	SBL	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	1852	755	337	790	818	3	342
Future Volume (vph)	1852	755	337	790	818	3	342
Turn Type	NA	Perm	Prot	NA	Split	NA	Prot
Protected Phases	2		1	6	4	4	4
Permitted Phases		2					
Detector Phase	2	2	1	6	4	4	4
Switch Phase							
Minimum Initial (s)	10.0	10.0	5.0	10.0	13.0	13.0	13.0
Minimum Split (s)	25.2	25.2	9.7	28.2	18.1	18.1	18.1
Total Split (s)	48.0	48.0	26.0	74.0	58.0	58.0	58.0
Total Split (%)	36.4%	36.4%	19.7%	56.1%	43.9%	43.9%	43.9%
Yellow Time (s)	5.2	5.2	3.7	5.2	4.1	4.1	4.1
All-Red Time (s)	2.0	2.0	1.0	2.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.2	7.2	4.7	7.2	5.1	5.1	5.1
Lead/Lag	Lag	Lag	Lead				
Lead-Lag Optimize?	Yes	Yes	Yes				
Recall Mode	C-Max	C-Max	Max	C-Max	Min	Min	Min

Intersection Summary
Cycle Length: 132
Actuated Cycle Length: 132
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 70
Control Type: Actuated-Coordinated

Splits and Phases: 4: I-5 SB Ramps & Genesee Ave



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1852	755	337	790	0	0	0	0	818	3	342
Future Volume (vph)	0	1852	755	337	790	0	0	0	0	818	3	342
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		7.2	7.2	4.7	7.2					5.1	5.1	5.1
Lane Util. Factor		0.81	0.88	0.97	0.91					0.95	0.95	0.88
Frt		1.00	0.85	1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	0.95	1.00
Satd. Flow (prot)		7544	2787	3433	5085					1681	1686	2787
Flt Permitted		1.00	1.00	0.95	1.00					0.95	0.95	1.00
Satd. Flow (perm)		7544	2787	3433	5085					1681	1686	2787
Peak-hour factor, PHF	0.95	0.95	0.95	0.89	0.89	0.89	0.25	0.25	0.25	0.90	0.90	0.90
Adj. Flow (vph)	0	1949	795	379	888	0	0	0	0	909	3	380
RTOR Reduction (vph)	0	0	549	0	0	0	0	0	0	0	0	126
Lane Group Flow (vph)	0	1949	246	379	888	0	0	0	0	454	458	254
Turn Type		NA	Perm	Prot	NA					Split	NA	Prot
Protected Phases		2		1	6					4	4	4
Permitted Phases			2									
Actuated Green, G (s)		40.8	40.8	30.5	76.0					43.7	43.7	43.7
Effective Green, g (s)		40.8	40.8	30.5	76.0					43.7	43.7	43.7
Actuated g/C Ratio		0.31	0.31	0.23	0.58					0.33	0.33	0.33
Clearance Time (s)		7.2	7.2	4.7	7.2					5.1	5.1	5.1
Vehicle Extension (s)		2.0	2.0	2.0	2.0					2.0	2.0	2.0
Lane Grp Cap (vph)		2331	861	793	2927					556	558	922
v/s Ratio Prot		c0.26		c0.11	0.17					0.27	c0.27	0.09
v/s Ratio Perm			0.09									
v/c Ratio		0.84	0.29	0.48	0.30					0.82	0.82	0.28
Uniform Delay, d1		42.5	34.6	43.9	14.4					40.5	40.6	32.5
Progression Factor		1.00	1.00	0.38	0.31					1.00	1.00	1.00
Incremental Delay, d2		3.7	0.8	1.8	0.2					8.6	9.0	0.1
Delay (s)		46.2	35.4	18.4	4.7					49.1	49.5	32.6
Level of Service		D	D	B	A					D	D	C
Approach Delay (s)		43.1			8.8			0.0			44.4	
Approach LOS		D			A			A			D	

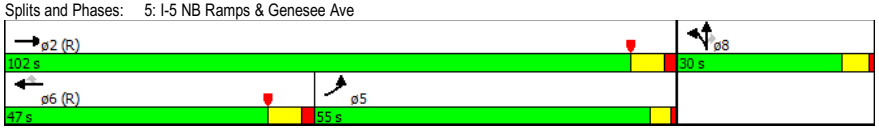
Intersection Summary			
HCM 2000 Control Delay	35.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	132.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	87.4%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Configurations							
Traffic Volume (vph)	1071	1547	743	906	406	5	85
Future Volume (vph)	1071	1547	743	906	406	5	85
Turn Type	Prot	NA	NA	Perm	Split	NA	Perm
Protected Phases	5	2	6		8	8	
Permitted Phases				6			8
Detector Phase	5	2	6	6	8	8	8
Switch Phase							
Minimum Initial (s)	11.0	10.0	10.0	10.0	5.0	5.0	5.0
Minimum Split (s)	15.2	28.2	25.2	25.2	10.1	10.1	10.1
Total Split (s)	55.0	102.0	47.0	47.0	30.0	30.0	30.0
Total Split (%)	41.7%	77.3%	35.6%	35.6%	22.7%	22.7%	22.7%
Yellow Time (s)	3.2	5.2	5.2	5.2	4.1	4.1	4.1
All-Red Time (s)	1.0	2.0	2.0	2.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.2	7.2	7.2	7.2	5.1	5.1	5.1
Lead/Lag	Lag		Lead	Lead			
Lead-Lag Optimize?	Yes		Yes	Yes			
Recall Mode	Max	C-Max	C-Max	C-Max	Min	Min	Min

Intersection Summary
Cycle Length: 132
Actuated Cycle Length: 132
Offset: 102 (77%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 75
Control Type: Actuated-Coordinated

Splits and Phases: 5: I-5 NB Ramps & Genesee Ave



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1071	1547	0	0	743	906	406	5	85	0	0	0
Future Volume (vph)	1071	1547	0	0	743	906	406	5	85	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	7.2			7.2	7.2	5.1	5.1	5.1			
Lane Util. Factor	0.97	0.91			0.86	0.88	0.95	0.95	0.88			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.95	1.00			
Satd. Flow (prot)	3433	5085			6408	2787	1681	1687	2787			
Flt Permitted	0.95	1.00			1.00	1.00	0.95	0.95	1.00			
Satd. Flow (perm)	3433	5085			6408	2787	1681	1687	2787			
Peak-hour factor, PHF	0.95	0.95	0.95	0.90	0.90	0.90	0.91	0.91	0.91	0.25	0.25	0.25
Adj. Flow (vph)	1127	1628	0	0	826	1007	446	5	93	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	441	0	0	78	0	0	0
Lane Group Flow (vph)	1127	1628	0	0	826	566	227	224	15	0	0	0
Turn Type	Prot	NA			NA	Perm	Split	NA	Perm			
Protected Phases	5	2			6		8	8				
Permitted Phases						6			8			
Actuated Green, G (s)	50.8	98.6			43.6	43.6	21.1	21.1	21.1			
Effective Green, g (s)	50.8	98.6			43.6	43.6	21.1	21.1	21.1			
Actuated g/C Ratio	0.38	0.75			0.33	0.33	0.16	0.16	0.16			
Clearance Time (s)	4.2	7.2			7.2	7.2	5.1	5.1	5.1			
Vehicle Extension (s)	2.0	2.0			2.0	2.0	2.0	2.0	2.0			
Lane Grp Cap (vph)	1321	3798			2116	920	268	269	445			
v/s Ratio Prot	c0.33	0.32			0.13		c0.14	0.13				
v/s Ratio Perm						c0.20			0.01			
v/c Ratio	0.85	0.43			0.39	0.61	0.85	0.83	0.03			
Uniform Delay, d1	37.2	6.2			34.0	37.1	53.9	53.7	46.8			
Progression Factor	0.69	0.86			0.88	1.09	1.00	1.00	1.00			
Incremental Delay, d2	4.4	0.2			0.5	2.6	20.4	18.5	0.0			
Delay (s)	30.2	5.6			30.5	43.1	74.3	72.3	46.8			
Level of Service	C	A			C	D	E	E	D			
Approach Delay (s)		15.6			37.4			68.8			0.0	
Approach LOS		B			D			E			A	

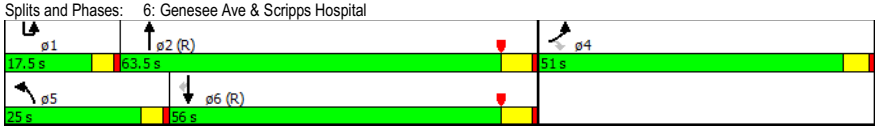
Intersection Summary			
HCM 2000 Control Delay	29.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	132.0	Sum of lost time (s)	16.5
Intersection Capacity Utilization	87.4%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	730	866	315	1089	8	1544	168
Future Volume (vph)	730	866	315	1089	8	1544	168
Turn Type	Prot	Perm	Prot	NA	Prot	NA	Perm
Protected Phases	4		5	2	1	6	
Permitted Phases		4					6
Detector Phase	4	4	5	2	1	6	6
Switch Phase							
Minimum Initial (s)	7.0	7.0	4.0	10.0	4.0	10.0	10.0
Minimum Split (s)	11.9	11.9	9.5	22.5	9.5	30.5	30.5
Total Split (s)	51.0	51.0	25.0	63.5	17.5	56.0	56.0
Total Split (%)	38.6%	38.6%	18.9%	48.1%	13.3%	42.4%	42.4%
Yellow Time (s)	3.9	3.9	3.4	4.7	3.4	4.7	4.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	4.4	5.7	4.4	5.7	5.7
Lead/Lag			Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?			Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	C-Max	None	C-Max	C-Max

Intersection Summary
Cycle Length: 132
Actuated Cycle Length: 132
Offset: 34 (26%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 130
Control Type: Actuated-Coordinated

Splits and Phases: 6: Genesee Ave & Scripps Hospital



Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	730	866	315	1089	8	1544	168
Future Volume (vph)	730	866	315	1089	8	1544	168
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9	4.4	5.7	4.4	5.7	5.7
Lane Util. Factor	0.97	1.00	1.00	0.91	1.00	0.91	1.00
Frt	1.00	0.85	1.00	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	1583	1770	5085	1770	5085	1583
Flt Permitted	0.95	1.00	0.95	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	1583	1770	5085	1770	5085	1583
Peak-hour factor, PHF	0.90	0.90	0.90	0.86	0.92	0.89	0.90
Adj. Flow (vph)	811	962	350	1266	9	1735	187
RTOR Reduction (vph)	0	174	0	0	0	0	59
Lane Group Flow (vph)	811	788	350	1266	9	1735	128
Turn Type	Prot	Perm	Prot	NA	Prot	NA	Perm
Protected Phases	4		5	2	1	6	
Permitted Phases		4					6
Actuated Green, G (s)	46.1	46.1	20.6	69.6	1.3	50.3	50.3
Effective Green, g (s)	46.1	46.1	20.6	69.6	1.3	50.3	50.3
Actuated g/C Ratio	0.35	0.35	0.16	0.53	0.01	0.38	0.38
Clearance Time (s)	4.9	4.9	4.4	5.7	4.4	5.7	5.7
Vehicle Extension (s)	2.0	2.0	2.0	5.2	2.0	4.0	4.0
Lane Grp Cap (vph)	1198	552	276	2681	17	1937	603
v/s Ratio Prot	0.24		c0.20	0.25	0.01	c0.34	
v/s Ratio Perm		c0.50					0.08
v/c Ratio	0.68	1.43	1.27	0.47	0.53	0.90	0.21
Uniform Delay, d1	36.6	43.0	55.7	19.6	65.0	38.4	27.5
Progression Factor	1.00	1.00	1.21	0.28	1.10	0.53	0.33
Incremental Delay, d2	1.2	202.9	144.2	0.5	12.4	6.6	0.8
Delay (s)	37.8	245.9	211.5	6.1	83.8	26.9	9.8
Level of Service	D	F	F	A	F	C	A
Approach Delay (s)	150.7			50.6		25.5	
Approach LOS	F			D		C	

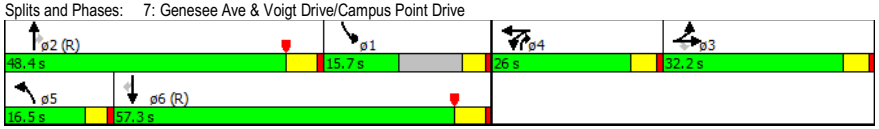
Intersection Summary			
HCM 2000 Control Delay	74.8	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.17		
Actuated Cycle Length (s)	132.0	Sum of lost time (s)	15.0
Intersection Capacity Utilization	92.3%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	293	11	427	541	21	221	857	61	54	2201	109
Future Volume (vph)	293	11	427	541	21	221	857	61	54	2201	109
Turn Type	Split	NA	Perm	Split	NA	Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	3	3		4	4	5	2	4	1	6	
Permitted Phases			3					2			6
Detector Phase	3	3	3	4	4	5	2	4	1	6	6
Switch Phase											
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	4.0	10.0	7.0	4.0	10.0	10.0
Minimum Split (s)	11.9	11.9	11.9	22.5	22.5	8.4	37.7	22.5	8.4	33.7	33.7
Total Split (s)	32.2	32.2	32.2	26.0	26.0	16.5	48.4	26.0	15.7	57.3	57.3
Total Split (%)	24.4%	24.4%	24.4%	19.7%	19.7%	12.5%	36.7%	19.7%	11.9%	43.4%	43.4%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.9	3.4	4.7	3.9	3.4	4.7	4.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	4.9	4.9	4.9	4.4	5.7	4.9	4.4	5.7	5.7
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lead	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	None	None	C-Max	C-Max

Intersection Summary
Cycle Length: 132
Actuated Cycle Length: 132
Offset: 25 (19%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 125
Control Type: Actuated-Coordinated

Splits and Phases: 7: Genesee Ave & Voigt Drive/Campus Point Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	293	11	427	541	21	286	221	857	61	54	2201	109
Future Volume (vph)	293	11	427	541	21	286	221	857	61	54	2201	109
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9	4.9	4.9	4.9		4.4	5.7	4.9	4.4	5.7	5.7
Lane Util. Factor	0.97	1.00	0.88	0.97	0.95		0.97	0.91	1.00	0.97	0.91	1.00
Frt	1.00	1.00	0.85	1.00	0.86		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	1863	2787	3433	3044		3433	5085	1583	3433	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	1863	2787	3433	3044		3433	5085	1583	3433	5085	1583
Peak-hour factor, PHF	0.90	0.90	0.90	0.87	0.87	0.87	0.92	0.92	0.92	0.94	0.94	0.94
Adj. Flow (vph)	326	12	474	622	24	329	240	932	66	57	2341	116
RTOR Reduction (vph)	0	0	250	0	256	0	0	0	29	0	0	52
Lane Group Flow (vph)	326	12	224	622	97	0	240	932	38	57	2341	64
Turn Type	Split	NA	Perm	Split	NA		Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	3	3		4	4		5	2	4	1	6	
Permitted Phases			3						2			6
Actuated Green, G (s)	20.3	20.3	20.3	21.1	21.1		12.0	53.9	75.0	16.8	58.7	58.7
Effective Green, g (s)	20.3	20.3	20.3	21.1	21.1		12.0	53.9	75.0	16.8	58.7	58.7
Actuated g/C Ratio	0.15	0.15	0.15	0.16	0.16		0.09	0.41	0.57	0.13	0.44	0.44
Clearance Time (s)	4.9	4.9	4.9	4.9	4.9		4.4	5.7	4.9	4.4	5.7	5.7
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0		2.0	3.7	2.0	2.0	4.0	4.0
Lane Grp Cap (vph)	527	286	428	548	486		312	2076	899	436	2261	703
v/s Ratio Prot	c0.09	0.01		c0.18	0.03		c0.07	0.18	0.01	0.02	c0.46	
v/s Ratio Perm			0.08						0.02			0.04
v/c Ratio	0.62	0.04	0.52	1.14	0.20		0.77	0.45	0.04	0.13	1.04	0.09
Uniform Delay, d1	52.2	47.6	51.4	55.5	48.1		58.6	28.3	12.6	51.1	36.6	21.2
Progression Factor	1.00	1.00	1.00	1.00	1.00		0.67	0.75	1.10	0.67	0.54	0.22
Incremental Delay, d2	1.5	0.0	0.5	81.4	0.1		9.5	0.7	0.0	0.0	17.8	0.0
Delay (s)	53.8	47.6	51.9	136.8	48.2		48.6	21.9	13.9	34.3	37.5	4.8
Level of Service	D	D	D	F	D		D	C	B	C	D	A
Approach Delay (s)		52.6			104.7			26.6			36.0	
Approach LOS		D			F			C			D	

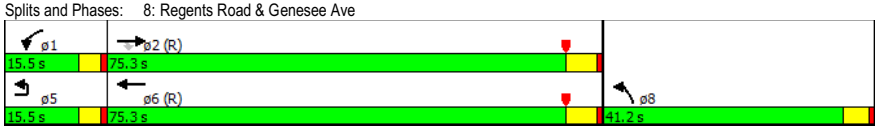
Intersection Summary			
HCM 2000 Control Delay	48.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.95		
Actuated Cycle Length (s)	132.0	Sum of lost time (s)	19.9
Intersection Capacity Utilization	86.7%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBU	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations							
Traffic Volume (vph)	48	2161	958	25	900	187	47
Future Volume (vph)	48	2161	958	25	900	187	47
Turn Type	Prot	NA	Perm	Prot	NA	Prot	custom
Protected Phases	5	2		1	6	8	
Permitted Phases			2				
Detector Phase	5	2	2	1	6	8	
Switch Phase							
Minimum Initial (s)	4.0	10.0	10.0	4.0	10.0	7.0	
Minimum Split (s)	9.5	22.7	22.7	9.5	22.5	37.9	
Total Split (s)	15.5	75.3	75.3	15.5	75.3	41.2	
Total Split (%)	11.7%	57.0%	57.0%	11.7%	57.0%	31.2%	
Yellow Time (s)	3.4	4.7	4.7	3.4	4.7	3.9	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.4	5.7	5.7	4.4	5.7	4.9	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		
Recall Mode	None	C-Max	C-Max	None	C-Max	None	

Intersection Summary
Cycle Length: 132
Actuated Cycle Length: 132
Offset: 29 (22%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 8: Regents Road & Genesee Ave



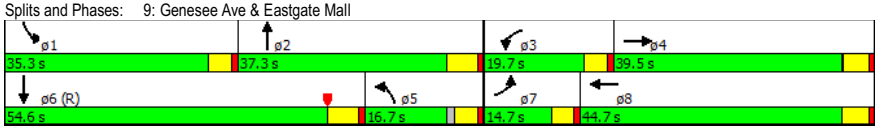
Movement	EBU	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations							
Traffic Volume (vph)	48	2161	958	25	900	187	47
Future Volume (vph)	48	2161	958	25	900	187	47
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	12	16	12
Total Lost time (s)	4.4	5.7	5.7	4.4	5.7	4.9	4.0
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	1770	5085	1583	1770	5085	2006	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (perm)	1770	5085	1583	1770	5085	2006	1583
Peak-hour factor, PHF	0.92	0.96	0.96	0.94	0.94	0.88	0.88
Adj. Flow (vph)	52	2251	998	27	957	212	53
RTOR Reduction (vph)	0	0	189	0	0	0	53
Lane Group Flow (vph)	52	2251	809	27	957	213	0
Turn Type	Prot	NA	Perm	Prot	NA	Prot	custom
Protected Phases	5	2		1	6	8	
Permitted Phases			2				
Actuated Green, G (s)	7.3	83.6	83.6	4.6	80.9	28.8	0.0
Effective Green, g (s)	7.3	83.6	83.6	4.6	80.9	28.8	0.0
Actuated g/C Ratio	0.06	0.63	0.63	0.03	0.61	0.22	0.00
Clearance Time (s)	4.4	5.7	5.7	4.4	5.7	4.9	
Vehicle Extension (s)	2.0	5.0	5.0	2.0	3.9	2.0	
Lane Grp Cap (vph)	97	3220	1002	61	3116	437	0
v/s Ratio Prot	c0.03	0.44		0.02	0.19	c0.11	
v/s Ratio Perm			c0.51				
v/c Ratio	0.54	0.70	0.81	0.44	0.31	0.49	0.00
Uniform Delay, d1	60.7	15.9	18.2	62.4	12.2	45.1	66.0
Progression Factor	0.78	1.51	2.21	0.81	1.13	1.00	1.00
Incremental Delay, d2	0.7	0.3	1.8	1.7	0.2	0.3	0.0
Delay (s)	48.3	24.3	41.8	52.4	14.0	45.5	66.0
Level of Service	D	C	D	D	B	D	E
Approach Delay (s)		30.0			15.0	49.5	
Approach LOS		C			B	D	

Intersection Summary			
HCM 2000 Control Delay	27.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	132.0	Sum of lost time (s)	15.0
Intersection Capacity Utilization	71.1%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	81	243	222	325	61	617	485	1307
Future Volume (vph)	81	243	222	325	61	617	485	1307
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	7	4	3	8	5	2	1	6
Permitted Phases								
Detector Phase	7	4	3	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	4.0	7.0	4.0	7.0	4.0	10.0	4.0	10.0
Minimum Split (s)	8.4	38.9	9.5	39.1	9.5	31.7	9.5	32.7
Total Split (s)	14.7	39.5	19.7	44.7	16.7	37.3	35.3	54.6
Total Split (%)	11.1%	29.9%	14.9%	33.9%	12.7%	28.3%	26.7%	41.4%
Yellow Time (s)	3.4	3.9	3.4	4.1	3.4	4.7	3.4	4.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	4.9	4.4	5.1	4.4	5.7	4.4	5.7
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max

Intersection Summary
Cycle Length: 132
Actuated Cycle Length: 132
Offset: 58 (44%), Referenced to phase 6:SBT, Start of Yellow
Natural Cycle: 115
Control Type: Actuated-Coordinated

Splits and Phases: 9: Genesee Ave & Eastgate Mall



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	81	243	126	222	325	177	61	617	121	485	1307	116
Future Volume (vph)	81	243	126	222	325	177	61	617	121	485	1307	116
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	5.1		4.4	5.7		4.4	5.7	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.91		0.97	0.91	
Frt	1.00	0.95		1.00	0.95		1.00	0.98		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3358		1770	3352		1770	4960		3433	5023	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	3358		1770	3352		1770	4960		3433	5023	
Peak-hour factor, PHF	0.92	0.92	0.92	0.82	0.82	0.82	0.96	0.96	0.96	0.95	0.95	0.95
Adj. Flow (vph)	88	264	137	271	396	216	64	643	126	511	1376	122
RTOR Reduction (vph)	0	57	0	0	59	0	0	19	0	0	6	0
Lane Group Flow (vph)	88	344	0	271	553	0	64	750	0	511	1492	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Actuated Green, G (s)	10.0	22.4		20.8	33.0		8.2	45.4		24.0	61.2	
Effective Green, g (s)	10.0	22.4		20.8	33.0		8.2	45.4		24.0	61.2	
Actuated g/C Ratio	0.08	0.17		0.16	0.25		0.06	0.34		0.18	0.46	
Clearance Time (s)	4.4	4.9		4.4	5.1		4.4	5.7		4.4	5.7	
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	4.2		2.0	4.3	
Lane Grp Cap (vph)	134	569		278	838		109	1705		624	2328	
v/s Ratio Prot	0.05	0.10		c0.15	c0.16		c0.04	0.15		c0.15	c0.30	
v/s Ratio Perm												
v/c Ratio	0.66	0.60		0.97	0.66		0.59	0.44		0.82	0.64	
Uniform Delay, d1	59.3	50.7		55.3	44.5		60.3	33.5		51.9	27.0	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		0.75	0.42	
Incremental Delay, d2	8.5	1.2		46.5	1.4		5.1	0.3		5.7	1.0	
Delay (s)	67.9	51.9		101.8	45.9		65.4	33.7		44.8	12.3	
Level of Service	E	D		F	D		E	C		D	B	
Approach Delay (s)		54.8			63.1			36.2			20.6	
Approach LOS		D			E			D			C	

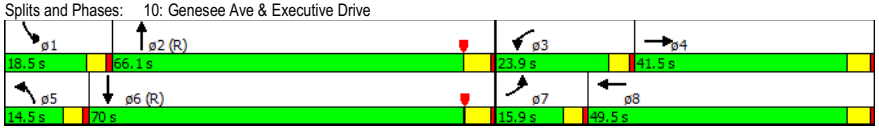
Intersection Summary			
HCM 2000 Control Delay	36.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	132.0	Sum of lost time (s)	19.6
Intersection Capacity Utilization	70.4%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	16	100	283	208	101	513	113	1924
Future Volume (vph)	16	100	283	208	101	513	113	1924
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	7	4	3	8	5	2	1	6
Permitted Phases								
Detector Phase	7	4	3	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	10.0	4.0	10.0
Minimum Split (s)	8.4	8.9	8.4	8.9	8.4	15.5	9.5	15.4
Total Split (s)	15.9	41.5	23.9	49.5	14.5	66.1	18.5	70.0
Total Split (%)	10.6%	27.7%	15.9%	33.0%	9.7%	44.1%	12.3%	46.7%
Yellow Time (s)	3.4	3.9	3.4	3.9	3.4	4.5	3.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	4.9	4.4	4.9	4.4	5.5	4.4	5.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	None	C-Max

Intersection Summary
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 100 (67%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 80
Control Type: Actuated-Coordinated

Splits and Phases: 10: Genesee Ave & Executive Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	16	100	91	283	208	102	101	513	157	113	1924	31
Future Volume (vph)	16	100	91	283	208	102	101	513	157	113	1924	31
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	4.9		4.4	5.5		4.4	5.4	
Lane Util. Factor	1.00	0.95		0.97	0.95		1.00	0.91		1.00	0.91	
Frt	1.00	0.93		1.00	0.95		1.00	0.96		1.00	1.00	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3286		3433	3364		1770	4906		1770	5073	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	3286		3433	3364		1770	4906		1770	5073	
Peak-hour factor, PHF	0.80	0.80	0.80	0.92	0.92	0.92	0.91	0.91	0.91	0.90	0.90	0.90
Adj. Flow (vph)	20	125	114	308	226	111	111	564	173	126	2138	34
RTOR Reduction (vph)	0	99	0	0	44	0	0	29	0	0	1	0
Lane Group Flow (vph)	20	140	0	308	293	0	111	708	0	126	2171	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Actuated Green, G (s)	4.3	20.2		17.1	33.0		13.4	79.1		14.4	80.2	
Effective Green, g (s)	4.3	20.2		17.1	33.0		13.4	79.1		14.4	80.2	
Actuated g/C Ratio	0.03	0.13		0.11	0.22		0.09	0.53		0.10	0.53	
Clearance Time (s)	4.4	4.9		4.4	4.9		4.4	5.5		4.4	5.4	
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	3.6		2.0	3.8	
Lane Grp Cap (vph)	50	442		391	740		158	2587		169	2712	
v/s Ratio Prot	0.01	0.04		c0.09	c0.09		0.06	0.14		c0.07	c0.43	
v/s Ratio Perm												
v/c Ratio	0.40	0.32		0.79	0.40		0.70	0.27		0.75	0.80	
Uniform Delay, d1	71.6	58.7		64.7	50.0		66.4	19.6		66.0	28.4	
Progression Factor	1.00	1.00		1.00	1.00		1.44	0.43		1.00	1.00	
Incremental Delay, d2	1.9	0.2		9.3	0.1		10.7	0.3		14.4	2.6	
Delay (s)	73.5	58.8		74.0	50.1		106.6	8.6		80.4	31.0	
Level of Service	E	E		E	D		F	A		F	C	
Approach Delay (s)		60.0			61.5			21.4			33.7	
Approach LOS		E			E			C			C	

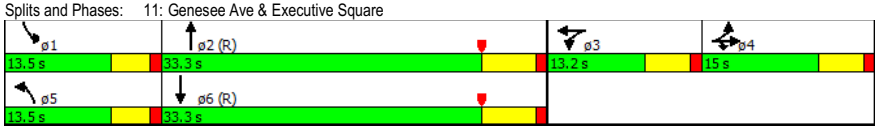
Intersection Summary			
HCM 2000 Control Delay	37.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	19.2
Intersection Capacity Utilization	73.1%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	32	1	176	8	18	34	701	10	2355
Future Volume (vph)	32	1	176	8	18	34	701	10	2355
Turn Type	Split	NA	Prot	NA	NA	Prot	NA	Prot	NA
Protected Phases	4	4	4	3		5	2	1	6
Permitted Phases									
Detector Phase	4	4	4	3		5	2	1	6
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	4.0		4.0	10.0	4.0	10.0
Minimum Split (s)	8.9	8.9	8.9	8.9		8.4	15.7	8.4	15.7
Total Split (s)	15.0	15.0	15.0	13.2		13.5	33.3	13.5	33.3
Total Split (%)	20.0%	20.0%	20.0%	17.6%		18.0%	44.4%	18.0%	44.4%
Yellow Time (s)	3.9	3.9	3.9	3.9		3.4	4.7	3.4	4.7
All-Red Time (s)	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	4.9	4.9		4.4	5.7	4.4	5.7
Lead/Lag	Lag	Lag	Lag	Lead		Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None		None	C-Max	None	C-Max

Intersection Summary
Cycle Length: 75
Actuated Cycle Length: 75
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 11: Genesee Ave & Executive Square



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	32	1	176	137	8	18	34	701	11	10	2355	18
Future Volume (vph)	32	1	176	137	8	18	34	701	11	10	2355	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9	4.9		4.9	4.0	4.4	5.7		4.4	5.7	
Lane Util. Factor	0.95	0.91	0.95		0.95	0.95	1.00	0.91		1.00	0.91	
Frt	1.00	0.86	0.85		1.00	0.85	1.00	1.00		1.00	1.00	
Flt Protected	0.95	1.00	1.00		0.96	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1450	1504		1688	1504	1770	5074		1770	5079	
Flt Permitted	0.95	1.00	1.00		0.96	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1681	1450	1504		1688	1504	1770	5074		1770	5079	
Peak-hour factor, PHF	0.80	0.80	0.80	0.80	0.80	0.80	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	40	1	220	171	10	22	37	770	12	11	2588	20
RTOR Reduction (vph)	0	99	102	0	1	21	0	1	0	0	1	0
Lane Group Flow (vph)	36	14	10	0	182	0	37	781	0	11	2607	0
Turn Type	Split	NA	Prot	Split	NA	NA	Prot	NA		Prot	NA	
Protected Phases	4	4	4	3	3		5	2		1	6	
Permitted Phases												
Actuated Green, G (s)	6.5	6.5	6.5		8.3	0.0	4.2	39.1		1.2	36.1	
Effective Green, g (s)	6.5	6.5	6.5		8.3	0.0	4.2	39.1		1.2	36.1	
Actuated g/C Ratio	0.09	0.09	0.09		0.11	0.00	0.06	0.52		0.02	0.48	
Clearance Time (s)	4.9	4.9	4.9		4.9		4.4	5.7		4.4	5.7	
Vehicle Extension (s)	2.0	2.0	2.0		2.0		2.0	3.9		2.0	2.2	
Lane Grp Cap (vph)	145	125	130		186	0	99	2645		28	2444	
v/s Ratio Prot	c0.02	0.01	0.01		c0.11		c0.02	c0.15		0.01	c0.51	
v/s Ratio Perm												
v/c Ratio	0.25	0.11	0.07		0.98	0.00	0.37	0.30		0.39	1.07	
Uniform Delay, d1	32.0	31.6	31.5		33.3	37.5	34.1	10.2		36.5	19.4	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.05	0.89		1.15	1.34	
Incremental Delay, d2	0.3	0.1	0.1		59.0	0.0	0.7	0.2		2.2	36.4	
Delay (s)	32.3	31.7	31.6		92.2	37.5	36.6	9.2		44.3	62.4	
Level of Service	C	C	C		F	D	D	A		D	E	
Approach Delay (s)		31.7			86.6			10.5			62.4	
Approach LOS		C			F			B			E	

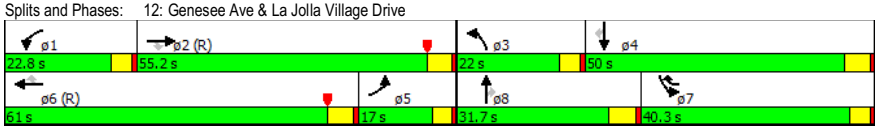
Intersection Summary				
HCM 2000 Control Delay	50.7	HCM 2000 Level of Service	D	
HCM 2000 Volume to Capacity ratio	0.90			
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	19.9	
Intersection Capacity Utilization	74.5%	ICU Level of Service	D	
Analysis Period (min)	15			

c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	233	1299	352	334	1547	125	380	370	67	564	1466	508
Future Volume (vph)	233	1299	352	334	1547	125	380	370	67	564	1466	508
Turn Type	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6	7	3	8		7	4	
Permitted Phases			2			6			8			4
Detector Phase	5	2	2	1	6	7	3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	4.0	10.0	10.0	4.0	10.0	4.0	4.0	10.0	10.0	4.0	10.0	10.0
Minimum Split (s)	8.4	15.3	15.3	8.4	15.5	8.4	8.4	15.7	15.7	8.4	15.4	15.4
Total Split (s)	17.0	55.2	55.2	22.8	61.0	40.3	22.0	31.7	31.7	40.3	50.0	50.0
Total Split (%)	11.3%	36.8%	36.8%	15.2%	40.7%	26.9%	14.7%	21.1%	21.1%	26.9%	33.3%	33.3%
Yellow Time (s)	3.4	4.3	4.3	3.4	4.5	3.4	3.4	4.7	4.7	3.4	4.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.3	5.3	4.4	5.5	4.4	4.4	5.7	5.7	4.4	5.4	5.4
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lag	Lead	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 6 (4%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 140
Control Type: Actuated-Coordinated

Splits and Phases: 12: Genesee Ave & La Jolla Village Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	233	1299	352	334	1547	125	380	370	67	564	1466	508
Future Volume (vph)	233	1299	352	334	1547	125	380	370	67	564	1466	508
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.3	5.3	4.4	5.5	4.4	4.4	5.7	5.7	4.4	5.4	5.4
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.91	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5085	1583	3433	5085	1583	3433	5085	1583	3433	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5085	1583	3433	5085	1583	3433	5085	1583	3433	5085	1583
Peak-hour factor, PHF	0.80	0.80	0.80	0.80	0.80	0.80	0.91	0.91	0.91	0.93	0.93	0.93
Adj. Flow (vph)	291	1624	440	418	1934	156	418	407	74	606	1576	546
RTOR Reduction (vph)	0	0	173	0	0	30	0	0	65	0	0	113
Lane Group Flow (vph)	291	1624	267	418	1934	126	418	407	9	606	1576	433
Turn Type	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6	7	3	8		7	4	
Permitted Phases			2			6			8			4
Actuated Green, G (s)	12.6	49.9	49.9	18.4	55.5	99.3	17.6	18.1	18.1	43.8	44.6	44.6
Effective Green, g (s)	12.6	49.9	49.9	18.4	55.5	99.3	17.6	18.1	18.1	43.8	44.6	44.6
Actuated g/C Ratio	0.08	0.33	0.33	0.12	0.37	0.66	0.12	0.12	0.12	0.29	0.30	0.30
Clearance Time (s)	4.4	5.3	5.3	4.4	5.5	4.4	4.4	5.7	5.7	4.4	5.4	5.4
Vehicle Extension (s)	2.0	6.0	6.0	2.0	5.8	2.0	2.0	3.5	3.5	2.0	4.1	4.1
Lane Grp Cap (vph)	288	1691	526	421	1881	1094	402	613	191	1002	1511	470
v/s Ratio Prot	0.08	c0.32		0.12	c0.38	0.03	c0.12	0.08		0.18	c0.31	
v/s Ratio Perm			0.17			0.05			0.01			0.27
v/c Ratio	1.01	0.96	0.51	0.99	1.03	0.11	1.04	0.66	0.05	0.60	1.04	0.92
Uniform Delay, d1	68.7	49.1	40.2	65.7	47.2	9.3	66.2	63.0	58.3	45.7	52.7	51.0
Progression Factor	0.59	0.45	0.13	0.70	0.79	0.15	0.91	0.90	1.00	0.80	0.82	0.85
Incremental Delay, d2	18.5	2.1	0.3	11.5	15.3	0.0	39.5	1.2	0.0	0.2	25.7	9.3
Delay (s)	59.0	24.4	5.7	57.5	52.6	1.4	99.7	57.9	58.4	36.8	68.8	52.7
Level of Service	E	C	A	E	D	A	F	E	E	D	E	D
Approach Delay (s)		25.2			50.2			77.4			58.5	
Approach LOS		C			D			E			E	

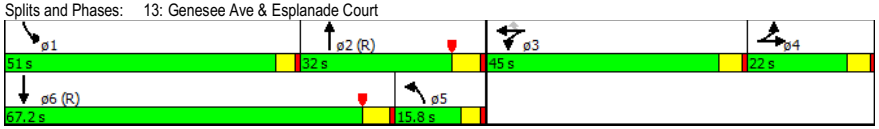
Intersection Summary				
HCM 2000 Control Delay	48.8	HCM 2000 Level of Service	D	
HCM 2000 Volume to Capacity ratio	1.04			
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	20.0	
Intersection Capacity Utilization	92.1%	ICU Level of Service	F	
Analysis Period (min)	15			

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	189	129	505	155	782	72	370	1015	968
Future Volume (vph)	189	129	505	155	782	72	370	1015	968
Turn Type	Split	NA	Split	NA	Perm	Prot	NA	Prot	NA
Protected Phases	4	4	3	3		5	2	1	6
Permitted Phases					3				
Detector Phase	4	4	3	3	3	5	2	1	6
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	10.0	4.0	10.0
Minimum Split (s)	8.9	8.9	8.9	8.9	8.9	8.4	16.0	8.4	15.7
Total Split (s)	22.0	22.0	45.0	45.0	45.0	15.8	32.0	51.0	67.2
Total Split (%)	14.7%	14.7%	30.0%	30.0%	30.0%	10.5%	21.3%	34.0%	44.8%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.9	3.4	5.0	3.4	4.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	4.9	4.9	4.9	4.4	6.0	4.4	5.7
Lead/Lag	Lag	Lag	Lead	Lead	Lead	Lag	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	None	C-Max

Intersection Summary
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 125 (83%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 100
Control Type: Actuated-Coordinated

Splits and Phases: 13: Genesee Ave & Esplanade Court



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	189	129	84	505	155	782	72	370	419	1015	968	213
Future Volume (vph)	189	129	84	505	155	782	72	370	419	1015	968	213
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9		4.9	4.9	4.9	4.4	6.0		4.4	5.7	
Lane Util. Factor	0.97	1.00		0.97	0.95	0.95	1.00	0.91		0.97	0.91	
Frt	1.00	0.94		1.00	0.90	0.85	1.00	0.92		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	3433	1752		3433	1589	1504	1770	4680		3433	4948	
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	3433	1752		3433	1589	1504	1770	4680		3433	4948	
Peak-hour factor, PHF	0.80	0.80	0.80	0.83	0.83	0.83	0.80	0.80	0.80	0.80	0.80	0.80
Adj. Flow (vph)	236	161	105	608	187	942	90	462	524	1269	1210	266
RTOR Reduction (vph)	0	16	0	0	51	400	0	136	0	0	23	0
Lane Group Flow (vph)	236	250	0	608	532	146	90	851	0	1269	1453	0
Turn Type	Split	NA		Split	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	4	4		3	3		5	2		1	6	
Permitted Phases						3						
Actuated Green, G (s)	17.1	17.1		40.1	40.1	40.1	11.4	26.0		46.6	61.5	
Effective Green, g (s)	17.1	17.1		40.1	40.1	40.1	11.4	26.0		46.6	61.5	
Actuated g/C Ratio	0.11	0.11		0.27	0.27	0.27	0.08	0.17		0.31	0.41	
Clearance Time (s)	4.9	4.9		4.9	4.9	4.9	4.4	6.0		4.4	5.7	
Vehicle Extension (s)	2.0	2.0		2.0	2.0	2.0	2.0	3.7		2.0	4.1	
Lane Grp Cap (vph)	391	199		917	424	402	134	811		1066	2028	
v/s Ratio Prot	0.07	c0.14		0.18	c0.34		0.05	c0.18		c0.37	0.29	
v/s Ratio Perm						0.10						
v/c Ratio	0.60	1.26		0.66	1.26	0.36	0.67	1.28dr		1.19	0.72	
Uniform Delay, d1	63.2	66.5		48.9	54.9	44.6	67.5	62.0		51.7	37.0	
Progression Factor	1.00	1.00		1.00	1.00	1.00	0.87	0.83		0.64	0.50	
Incremental Delay, d2	1.8	149.6		1.4	133.1	0.2	9.0	43.6		90.7	1.1	
Delay (s)	65.0	216.1		50.3	188.1	44.8	67.8	95.3		123.7	19.6	
Level of Service	E	F		D	F	D	E	F		F	B	
Approach Delay (s)		145.1			94.8			93.0			67.7	
Approach LOS		F			F			F			E	

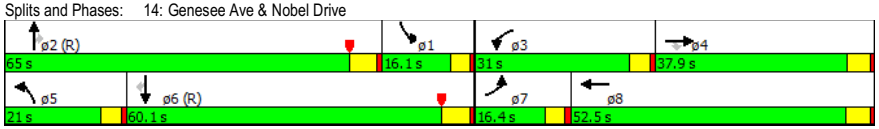
Intersection Summary			
HCM 2000 Control Delay	86.4	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.19		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	20.2
Intersection Capacity Utilization	91.9%	ICU Level of Service	F
Analysis Period (min)	15		

dr Defacto Right Lane. Recode with 1 though lane as a right lane.
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	223	513	364	500	833	317	548	211	128	1501	127
Future Volume (vph)	223	513	364	500	833	317	548	211	128	1501	127
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8	5	2		1	6	
Permitted Phases			4					2			6
Detector Phase	7	4	4	3	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	4.0	10.0	10.0	4.0	10.0	4.0	10.0	10.0	4.0	10.0	10.0
Minimum Split (s)	8.4	37.9	37.9	8.4	40.1	8.4	35.7	35.7	8.4	38.9	38.9
Total Split (s)	16.4	37.9	37.9	31.0	52.5	21.0	65.0	65.0	16.1	60.1	60.1
Total Split (%)	10.9%	25.3%	25.3%	20.7%	35.0%	14.0%	43.3%	43.3%	10.7%	40.1%	40.1%
Yellow Time (s)	3.4	3.9	3.9	3.4	4.1	3.4	4.7	4.7	3.4	4.9	4.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	4.9	4.9	4.4	5.1	4.4	5.7	5.7	4.4	5.9	5.9
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max

Intersection Summary
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 20 (13%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 14: Genesee Ave & Nobel Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	223	513	364	500	833	75	317	548	211	128	1501	127
Future Volume (vph)	223	513	364	500	833	75	317	548	211	128	1501	127
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9	4.9	4.4	5.1		4.4	5.7	5.7	4.4	5.9	5.9
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95		0.97	0.91	1.00	0.97	0.91	1.00
Frt	1.00	1.00	0.85	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	3539	1583	3433	3496		3433	5085	1583	3433	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3539	1583	3433	3496		3433	5085	1583	3433	5085	1583
Peak-hour factor, PHF	0.91	0.91	0.91	0.84	0.84	0.84	0.87	0.87	0.87	0.84	0.84	0.84
Adj. Flow (vph)	245	564	400	595	992	89	364	630	243	152	1787	151
RTOR Reduction (vph)	0	0	165	0	5	0	0	0	147	0	0	71
Lane Group Flow (vph)	245	564	235	595	1076	0	364	630	96	152	1787	80
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4						2			6
Actuated Green, G (s)	12.0	32.8	32.8	26.6	47.2		16.8	59.5	59.5	11.7	54.2	54.2
Effective Green, g (s)	12.0	32.8	32.8	26.6	47.2		16.8	59.5	59.5	11.7	54.2	54.2
Actuated g/C Ratio	0.08	0.22	0.22	0.18	0.31		0.11	0.40	0.40	0.08	0.36	0.36
Clearance Time (s)	4.4	4.9	4.9	4.4	5.1		4.4	5.7	5.7	4.4	5.9	5.9
Vehicle Extension (s)	2.0	4.0	4.0	2.0	2.1		2.0	8.0	8.0	2.0	4.0	4.0
Lane Grp Cap (vph)	274	773	346	608	1100		384	2017	627	267	1837	571
v/s Ratio Prot	0.07	0.16		c0.17	c0.31		c0.11	0.12		0.04	c0.35	
v/s Ratio Perm			0.15						0.06			0.05
v/c Ratio	0.89	0.73	0.68	0.98	0.98		0.95	0.31	0.15	0.57	0.97	0.14
Uniform Delay, d1	68.4	54.5	53.8	61.4	50.9		66.2	31.2	29.1	66.7	47.2	32.2
Progression Factor	0.91	1.11	1.25	1.00	1.00		1.03	0.42	0.10	0.93	0.88	1.16
Incremental Delay, d2	24.9	3.2	4.9	30.6	21.7		29.6	0.4	0.5	1.2	12.6	0.4
Delay (s)	87.2	63.8	72.3	92.1	72.6		97.7	13.4	3.5	63.1	54.2	37.6
Level of Service	F	E	E	F	E		F	B	A	E	D	D
Approach Delay (s)		71.4			79.5			36.3			53.6	
Approach LOS		E			E			D			D	

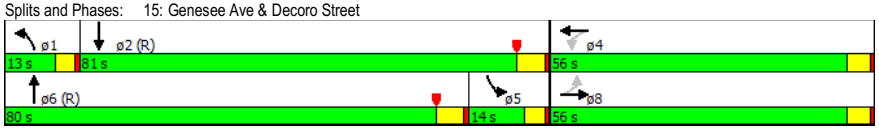
Intersection Summary				
HCM 2000 Control Delay	60.6	HCM 2000 Level of Service	E	
HCM 2000 Volume to Capacity ratio	0.99			
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	19.8	
Intersection Capacity Utilization	86.3%	ICU Level of Service	E	
Analysis Period (min)	15			

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	84	31	203	68	90	947	40	2371
Future Volume (vph)	84	31	203	68	90	947	40	2371
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		8		4	1	6	5	2
Permitted Phases	8		4					
Detector Phase	8	8	4	4	1	6	5	2
Switch Phase								
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	10.0	4.0	10.0
Minimum Split (s)	8.9	8.9	8.9	8.9	8.4	15.7	8.4	15.9
Total Split (s)	56.0	56.0	56.0	56.0	13.0	80.0	14.0	81.0
Total Split (%)	37.3%	37.3%	37.3%	37.3%	8.7%	53.3%	9.3%	54.0%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.4	4.7	3.4	4.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.9		4.9	4.4	5.7	4.4	5.9
Lead/Lag					Lead	Lead	Lag	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	None	C-Max

Intersection Summary
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 21 (14%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow
Natural Cycle: 140
Control Type: Actuated-Coordinated

Splits and Phases: 15: Genesee Ave & Decoro Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	84	31	144	203	68	73	90	947	17	40	2371	132
Future Volume (vph)	84	31	144	203	68	73	90	947	17	40	2371	132
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9			4.9		4.4	5.7		4.4	5.9	
Lane Util. Factor		1.00			1.00		1.00	0.91		1.00	0.91	
Frt		0.92			0.97		1.00	1.00		1.00	0.99	
Flt Protected		0.98			0.97		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1695			1758		1770	5072		1770	5045	
Flt Permitted		0.77			0.59		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1334			1070		1770	5072		1770	5045	
Peak-hour factor, PHF	0.85	0.85	0.85	0.80	0.80	0.80	0.85	0.85	0.85	0.90	0.90	0.90
Adj. Flow (vph)	99	36	169	254	85	91	106	1114	20	44	2634	147
RTOR Reduction (vph)	0	30	0	0	7	0	0	1	0	0	4	0
Lane Group Flow (vph)	0	274	0	0	423	0	106	1133	0	44	2777	0
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		8			4		1	6		5	2	
Permitted Phases	8			4								
Actuated Green, G (s)		51.1			51.1		8.6	76.2		7.7	75.1	
Effective Green, g (s)		51.1			51.1		8.6	76.2		7.7	75.1	
Actuated g/C Ratio		0.34			0.34		0.06	0.51		0.05	0.50	
Clearance Time (s)		4.9			4.9		4.4	5.7		4.4	5.9	
Vehicle Extension (s)		2.0			2.0		2.0	4.3		2.0	3.7	
Lane Grp Cap (vph)		454			364		101	2576		90	2525	
v/s Ratio Prot							c0.06	0.22		0.02	c0.55	
v/s Ratio Perm		0.21			c0.40							
v/c Ratio		0.60			1.16		1.05	0.44		0.49	1.10	
Uniform Delay, d1		41.0			49.5		70.7	23.4		69.2	37.5	
Progression Factor		1.00			1.00		1.18	0.28		0.93	0.88	
Incremental Delay, d2		1.6			99.5		102.5	0.5		0.5	47.6	
Delay (s)		42.6			148.9		185.9	7.1		65.2	80.5	
Level of Service		D			F		F	A		E	F	
Approach Delay (s)		42.6			148.9			22.4			80.2	
Approach LOS		D			F			C			F	

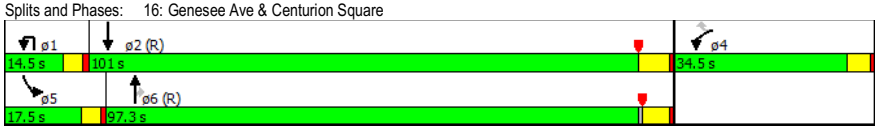
Intersection Summary			
HCM 2000 Control Delay	69.0	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.12		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	15.2
Intersection Capacity Utilization	100.4%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	ø1
Lane Configurations							
Traffic Volume (vph)	89	23	1025	46	46	2568	
Future Volume (vph)	89	23	1025	46	46	2568	
Turn Type	Prot	Perm	NA	Perm	Prot	NA	
Protected Phases	4		6		5	2	1
Permitted Phases		4		6			
Detector Phase	4	4	6	6	5	2	
Switch Phase							
Minimum Initial (s)	7.0	7.0	10.0	10.0	4.0	10.0	4.0
Minimum Split (s)	11.9	11.9	15.7	15.7	8.4	16.4	8.4
Total Split (s)	34.5	34.5	97.3	97.3	17.5	101.0	14.5
Total Split (%)	23.0%	23.0%	64.9%	64.9%	11.7%	67.3%	10%
Yellow Time (s)	3.9	3.9	4.7	4.7	3.4	5.4	3.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.9	4.9	5.7	5.7	4.4	6.4	
Lead/Lag			Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?			Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	C-Max	C-Max	None	C-Max	None

Intersection Summary
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 33 (22%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow
Natural Cycle: 65
Control Type: Actuated-Coordinated

Splits and Phases: 16: Genesee Ave & Centurion Square



Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	89	23	0	1025	46	46	2568
Future Volume (vph)	89	23	0	1025	46	46	2568
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9		5.7	5.7	4.4	6.4
Lane Util. Factor	1.00	1.00		0.91	1.00	0.97	0.91
Frt	1.00	0.85		1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00		1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583		5085	1583	3433	5085
Flt Permitted	0.95	1.00		1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583		5085	1583	3433	5085
Peak-hour factor, PHF	0.80	0.80	0.92	0.89	0.89	0.94	0.94
Adj. Flow (vph)	111	29	0	1152	52	49	2732
RTOR Reduction (vph)	0	26	0	0	12	0	0
Lane Group Flow (vph)	111	3	0	1152	40	49	2732
Turn Type	Prot	Perm	Prot	NA	Perm	Prot	NA
Protected Phases	4		1	6		5	2
Permitted Phases		4			6		
Actuated Green, G (s)	13.8	13.8		115.6	115.6	5.6	124.9
Effective Green, g (s)	13.8	13.8		115.6	115.6	5.6	124.9
Actuated g/C Ratio	0.09	0.09		0.77	0.77	0.04	0.83
Clearance Time (s)	4.9	4.9		5.7	5.7	4.4	6.4
Vehicle Extension (s)	2.0	2.0		4.2	4.2	2.0	3.4
Lane Grp Cap (vph)	162	145		3918	1219	128	4234
v/s Ratio Prot	c0.06			0.23		0.01	c0.54
v/s Ratio Perm		0.00			0.03		
v/c Ratio	0.69	0.02		0.29	0.03	0.38	0.65
Uniform Delay, d1	66.0	61.9		5.1	4.0	70.5	4.5
Progression Factor	1.00	1.00		0.65	0.84	0.74	1.70
Incremental Delay, d2	9.2	0.0		0.2	0.0	0.1	0.1
Delay (s)	75.2	62.0		3.5	3.4	52.1	7.8
Level of Service	E	E		A	A	D	A
Approach Delay (s)	72.4			3.5			8.6
Approach LOS	E			A			A

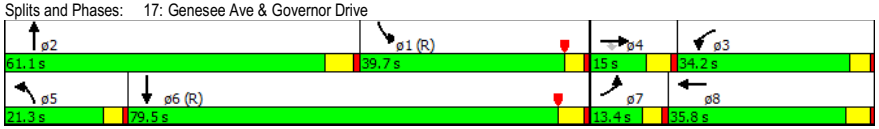
Intersection Summary			
HCM 2000 Control Delay	9.2	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	15.7
Intersection Capacity Utilization	64.9%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	100	189	98	555	230	165	689	451	1829
Future Volume (vph)	100	189	98	555	230	165	689	451	1829
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Prot	NA
Protected Phases	7	4		3	8	5	2	1	6
Permitted Phases			4						
Detector Phase	7	4	4	3	8	5	2	1	6
Switch Phase									
Minimum Initial (s)	4.0	8.0	8.0	4.0	8.0	4.0	8.0	4.0	8.0
Minimum Split (s)	8.4	13.2	13.2	8.4	13.2	8.4	13.9	8.4	13.4
Total Split (s)	13.4	15.0	15.0	34.2	35.8	21.3	61.1	39.7	79.5
Total Split (%)	8.9%	10.0%	10.0%	22.8%	23.9%	14.2%	40.7%	26.5%	53.0%
Yellow Time (s)	3.4	4.2	4.2	3.4	4.2	3.4	4.9	3.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.2	5.2	4.4	5.2	4.4	5.9	4.4	5.4
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	C-Max	C-Max

Intersection Summary
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 0 (0%), Referenced to phase 1:SBL and 6:SBT, Start of Yellow
Natural Cycle: 120
Control Type: Actuated-Coordinated

Splits and Phases: 17: Genesee Ave & Governor Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	100	189	98	555	230	125	165	689	462	451	1829	242
Future Volume (vph)	100	189	98	555	230	125	165	689	462	451	1829	242
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	16	12	12	12	12	12	12	12
Total Lost time (s)	4.4	5.2	5.2	4.4	5.2		4.4	5.9		4.4	5.4	
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95		1.00	0.91		0.97	0.91	
Frt	1.00	1.00	0.85	1.00	0.95		1.00	0.94		1.00	0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	3433	3539	1583	3433	3799		1770	4779		3433	4996	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	3433	3539	1583	3433	3799		1770	4779		3433	4996	
Peak-hour factor, PHF	0.95	0.95	0.95	0.87	0.87	0.87	0.92	0.92	0.92	0.89	0.89	0.89
Adj. Flow (vph)	105	199	103	638	264	144	179	749	502	507	2055	272
RTOR Reduction (vph)	0	0	96	0	48	0	0	89	0	0	11	0
Lane Group Flow (vph)	105	199	7	638	360	0	179	1162	0	507	2316	0
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4									
Actuated Green, G (s)	8.2	9.8	9.8	29.3	30.9		16.5	45.5		45.5	75.0	
Effective Green, g (s)	8.2	9.8	9.8	29.3	30.9		16.5	45.5		45.5	75.0	
Actuated g/C Ratio	0.05	0.07	0.07	0.20	0.21		0.11	0.30		0.30	0.50	
Clearance Time (s)	4.4	5.2	5.2	4.4	5.2		4.4	5.9		4.4	5.4	
Vehicle Extension (s)	2.0	2.3	2.3	2.0	3.8		2.0	2.9		2.0	3.5	
Lane Grp Cap (vph)	187	231	103	670	782		194	1449		1041	2498	
v/s Ratio Prot	0.03	c0.06		c0.19	0.09		c0.10	0.24		0.15	c0.46	
v/s Ratio Perm			0.00									
v/c Ratio	0.56	0.86	0.07	0.95	0.46		0.92	0.88dr		0.49	0.93	
Uniform Delay, d1	69.1	69.4	65.8	59.7	52.2		66.1	48.1		42.7	35.0	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		0.87	0.85	
Incremental Delay, d2	2.3	26.0	0.2	23.4	0.6		42.6	3.3		1.3	6.0	
Delay (s)	71.4	95.4	66.0	83.0	52.8		108.7	51.4		38.5	35.7	
Level of Service	E	F	E	F	D		F	D		D	D	
Approach Delay (s)		81.8			71.2			58.6			36.2	
Approach LOS		F			E			E			D	

Intersection Summary				
HCM 2000 Control Delay	51.4	HCM 2000 Level of Service	D	
HCM 2000 Volume to Capacity ratio	0.93			
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	19.9	
Intersection Capacity Utilization	88.5%	ICU Level of Service	E	
Analysis Period (min)	15			

dr Defacto Right Lane. Recode with 1 though lane as a right lane.
c Critical Lane Group

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	494	262	627	1873	575
Future Volume (Veh/h)	0	494	262	627	1873	575
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.81	0.81	0.91	0.91	0.91	0.91
Hourly flow rate (vph)	0	610	288	689	2058	632
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2864	1029	2058			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2864	1029	2058			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	0	0	0			
cM capacity (veh/h)	0	231	268			

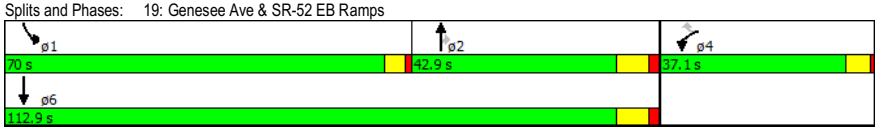
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3
Volume Total	610	288	230	230	230	1029	1029	632
Volume Left	0	288	0	0	0	0	0	0
Volume Right	610	0	0	0	0	0	0	632
cSH	231	268	1700	1700	1700	1700	1700	1700
Volume to Capacity	2.64	1.07	0.14	0.14	0.14	0.61	0.61	0.37
Queue Length 95th (ft)	1295	292	0	0	0	0	0	0
Control Delay (s)	783.3	116.9	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	F	F						
Approach Delay (s)	783.3	34.4				0.0		
Approach LOS	F							

Intersection Summary				
Average Delay	119.6			
Intersection Capacity Utilization	89.0%	ICU Level of Service		E
Analysis Period (min)	15			

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	323	206	720	286	713	1558
Future Volume (vph)	323	206	720	286	713	1558
Turn Type	Prot	Perm	NA	Perm	Prot	NA
Protected Phases	4		2		1	6
Permitted Phases		4		2		
Detector Phase	4	4	2	2	1	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	13.0	13.0	5.0	10.0
Minimum Split (s)	37.1	37.1	38.5	38.5	10.7	17.5
Total Split (s)	37.1	37.1	42.9	42.9	70.0	112.9
Total Split (%)	24.7%	24.7%	28.6%	28.6%	46.7%	75.3%
Yellow Time (s)	4.1	4.1	5.5	5.5	3.7	5.5
All-Red Time (s)	1.0	1.0	2.0	2.0	1.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.1	5.1	7.5	7.5	4.7	7.5
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	None	None	Min	Min	None	Min

Intersection Summary
Cycle Length: 150
Actuated Cycle Length: 149.9
Natural Cycle: 150
Control Type: Actuated-Uncoordinated

Splits and Phases: 19: Genesee Ave & SR-52 EB Ramps



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	323	206	720	286	713	1558
Future Volume (vph)	323	206	720	286	713	1558
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1	7.5	7.5	4.7	7.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.86	0.86	0.91	0.91	0.92	0.92
Adj. Flow (vph)	376	240	791	314	775	1693
RTOR Reduction (vph)	0	168	0	109	0	0
Lane Group Flow (vph)	376	72	791	205	775	1693
Turn Type	Prot	Perm	NA	Perm	Prot	NA
Protected Phases	4		2		1	6
Permitted Phases		4		2		
Actuated Green, G (s)	32.0	32.0	35.3	35.3	65.3	105.3
Effective Green, g (s)	32.0	32.0	35.3	35.3	65.3	105.3
Actuated g/C Ratio	0.21	0.21	0.24	0.24	0.44	0.70
Clearance Time (s)	5.1	5.1	7.5	7.5	4.7	7.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	377	337	833	372	771	2486
v/s Ratio Prot	c0.21		c0.22		c0.44	0.48
v/s Ratio Perm		0.05		0.13		
v/c Ratio	1.00	0.21	0.95	0.55	1.01	0.68
Uniform Delay, d1	58.9	48.6	56.4	50.4	42.3	12.7
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	45.3	0.3	19.7	1.8	33.7	0.8
Delay (s)	104.2	48.9	76.1	52.1	76.0	13.5
Level of Service	F	D	E	D	E	B
Approach Delay (s)	82.7		69.3			33.1
Approach LOS	F		E			C

Intersection Summary			
HCM 2000 Control Delay	50.0	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.99		
Actuated Cycle Length (s)	149.9	Sum of lost time (s)	17.3
Intersection Capacity Utilization	91.7%	ICU Level of Service	F
Analysis Period (min)	15		

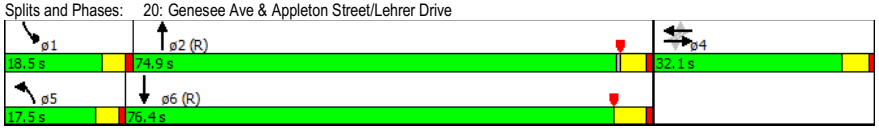
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	251	52	16	25	25	685	197	1288
Future Volume (vph)	251	52	16	25	25	685	197	1288
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		4	5	2	1	6
Permitted Phases	4		4					
Detector Phase	4	4	4	4	5	2	1	6
Switch Phase								
Minimum Initial (s)	6.0	6.0	6.0	6.0	4.0	10.0	4.0	10.0
Minimum Split (s)	10.9	10.9	10.9	10.9	8.4	14.9	8.4	15.8
Total Split (s)	32.1	32.1	32.1	32.1	17.5	74.9	18.5	76.4
Total Split (%)	25.5%	25.5%	25.5%	25.5%	13.9%	59.4%	14.7%	60.6%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.4	3.9	3.4	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.9		4.9	4.4	4.9	4.4	5.8
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	None	C-Max

Intersection Summary

Cycle Length: 126
Actuated Cycle Length: 126
Offset: 107 (85%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 20: Genesee Ave & Appleton Street/Lehrer Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	251	52	24	16	25	94	25	685	13	197	1288	310
Future Volume (vph)	251	52	24	16	25	94	25	685	13	197	1288	310
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	16	12	12	16	12	12	12	12	12	12	12
Total Lost time (s)		4.9			4.9		4.4	4.9		4.4	5.8	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frt		0.99			0.91		1.00	1.00		1.00	0.97	
Flt Protected		0.96			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		2013			1902		1770	3529		1770	3436	
Flt Permitted		0.55			0.96		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1153			1845		1770	3529		1770	3436	
Peak-hour factor, PHF	0.86	0.86	0.86	0.84	0.84	0.84	0.82	0.82	0.82	0.93	0.93	0.93
Adj. Flow (vph)	292	60	28	19	30	112	30	835	16	212	1385	333
RTOR Reduction (vph)	0	2	0	0	65	0	0	1	0	0	14	0
Lane Group Flow (vph)	0	378	0	0	96	0	30	850	0	212	1704	0
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4			4								
Actuated Green, G (s)		27.2			27.2		5.3	70.5		14.1	78.4	
Effective Green, g (s)		27.2			27.2		5.3	70.5		14.1	78.4	
Actuated g/C Ratio		0.22			0.22		0.04	0.56		0.11	0.62	
Clearance Time (s)		4.9			4.9		4.4	4.9		4.4	5.8	
Vehicle Extension (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		248			398		74	1974		198	2137	
v/s Ratio Prot							0.02	0.24		c0.12	c0.50	
v/s Ratio Perm		c0.33			0.05							
v/c Ratio		1.52			0.24		0.41	0.43		1.07	0.80	
Uniform Delay, d1		49.4			40.9		58.8	16.1		56.0	17.8	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		254.8			0.3		3.6	0.7		84.0	3.2	
Delay (s)		304.2			41.2		62.4	16.8		139.9	21.0	
Level of Service		F			D		E	B		F	C	
Approach Delay (s)		304.2			41.2			18.3			34.1	
Approach LOS		F			D			B			C	

Intersection Summary

HCM 2000 Control Delay	60.9	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.03		
Actuated Cycle Length (s)	126.0	Sum of lost time (s)	15.1
Intersection Capacity Utilization	86.2%	ICU Level of Service	E
Analysis Period (min)	15		

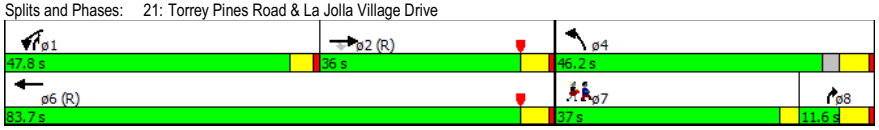
c Critical Lane Group

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	ø7	ø8
Lane Configurations								
Traffic Volume (vph)	1738	339	1399	777	126	1034		
Future Volume (vph)	1738	339	1399	777	126	1034		
Turn Type	NA	Perm	Prot	NA	Prot	pt+ov		
Protected Phases	2		1	6	4	8 1	7	8
Permitted Phases		2						
Detector Phase	2	2	1	6	4	8 1		
Switch Phase								
Minimum Initial (s)	10.0	10.0	4.0	10.0	4.0		4.0	4.0
Minimum Split (s)	15.4	15.4	8.4	15.3	9.6		37.0	9.6
Total Split (s)	36.0	36.0	47.8	83.7	46.2		37.0	11.6
Total Split (%)	27.2%	27.2%	36.1%	63.2%	34.9%		28%	9%
Yellow Time (s)	4.4	4.4	3.4	4.3	4.6		3.0	4.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		0.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0			
Total Lost Time (s)	5.4	5.4	4.4	5.3	5.6			
Lead/Lag	Lag	Lag	Lead				Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes				Yes	Yes
Recall Mode	C-Max	C-Max	None	C-Max	None		None	None

Intersection Summary

Cycle Length: 132.4
Actuated Cycle Length: 132.4
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 21: Torrey Pines Road & La Jolla Village Drive



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1738	339	1399	777	126	1034
Future Volume (vph)	1738	339	1399	777	126	1034
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.4	5.4	4.4	5.3	5.6	5.6
Lane Util. Factor	0.91	1.00	0.97	0.91	0.97	0.88
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	5085	1583	3433	5085	3433	2787
Flt Permitted	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (perm)	5085	1583	3433	5085	3433	2787
Peak-hour factor, PHF	0.90	0.90	0.89	0.89	0.91	0.91
Adj. Flow (vph)	1931	377	1572	873	138	1136
RTOR Reduction (vph)	0	148	0	0	0	0
Lane Group Flow (vph)	1931	229	1572	873	138	1136
Turn Type	NA	Perm	Prot	NA	Prot	pt+ov
Protected Phases	2		1	6	4	8 1
Permitted Phases		2				
Actuated Green, G (s)	30.0	30.0	43.7	78.2	43.3	62.4
Effective Green, g (s)	30.0	30.0	43.7	78.2	43.3	62.4
Actuated g/C Ratio	0.23	0.23	0.33	0.59	0.33	0.47
Clearance Time (s)	5.4	5.4	4.4	5.3	5.6	
Vehicle Extension (s)	5.5	5.5	2.0	8.0	2.0	
Lane Grp Cap (vph)	1152	358	1133	3003	1122	1313
v/s Ratio Prot	c0.38		c0.46	0.17	c0.04	c0.41
v/s Ratio Perm		0.14				
v/c Ratio	1.68	0.64	1.39	0.29	0.12	0.87
Uniform Delay, d1	51.2	46.3	44.4	13.4	31.2	31.2
Progression Factor	0.66	0.44	1.00	1.00	1.00	1.00
Incremental Delay, d2	305.4	2.4	179.9	0.2	0.0	6.0
Delay (s)	339.0	22.7	224.2	13.6	31.3	37.2
Level of Service	F	C	F	B	C	D
Approach Delay (s)	287.4			149.0	36.6	
Approach LOS	F			F	D	

Intersection Summary

HCM 2000 Control Delay	178.2	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.13		
Actuated Cycle Length (s)	132.4	Sum of lost time (s)	18.4
Intersection Capacity Utilization	89.9%	ICU Level of Service	E
Analysis Period (min)	15		

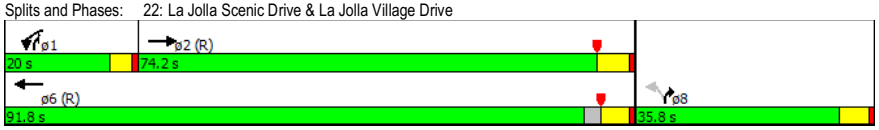
c Critical Lane Group

Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Configurations					
Traffic Volume (vph)	2614	522	2008	153	342
Future Volume (vph)	2614	522	2008	153	342
Turn Type	NA	Prot	NA	Perm	pt+ov
Protected Phases	2	1	6		8 1
Permitted Phases				8	
Detector Phase	2	1	6	8	8 1
Switch Phase					
Minimum Initial (s)	10.0	4.0	10.0	4.0	
Minimum Split (s)	15.7	8.4	15.3	9.5	
Total Split (s)	74.2	20.0	91.8	35.8	
Total Split (%)	57.1%	15.4%	70.6%	27.5%	
Yellow Time (s)	4.7	3.4	4.3	4.5	
All-Red Time (s)	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.7	4.4	5.3	5.5	
Lead/Lag	Lag	Lead			
Lead-Lag Optimize?	Yes	Yes			
Recall Mode	C-Max	None	C-Max	None	

Intersection Summary

Cycle Length: 130
Actuated Cycle Length: 130
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 130
Control Type: Actuated-Coordinated

Splits and Phases: 22: La Jolla Scenic Drive & La Jolla Village Drive



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	2614	139	522	2008	153	342
Future Volume (vph)	2614	139	522	2008	153	342
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.7		4.4	5.3	5.5	5.5
Lane Util. Factor	0.91		0.97	0.91	1.00	0.88
Frt	0.99		1.00	1.00	1.00	0.85
Flt Protected	1.00		0.95	1.00	0.95	1.00
Satd. Flow (prot)	5047		3433	5085	1770	2787
Flt Permitted	1.00		0.95	1.00	0.95	1.00
Satd. Flow (perm)	5047		3433	5085	1770	2787
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.83	0.83
Adj. Flow (vph)	2841	151	567	2183	184	412
RTOR Reduction (vph)	4	0	0	0	0	1
Lane Group Flow (vph)	2988	0	567	2183	184	411
Turn Type	NA		Prot	NA	Perm	pt+ov
Protected Phases	2		1	6		8 1
Permitted Phases					8	
Actuated Green, G (s)	68.5		26.3	99.6	19.6	51.4
Effective Green, g (s)	68.5		26.3	99.6	19.6	51.4
Actuated g/C Ratio	0.53		0.20	0.77	0.15	0.40
Clearance Time (s)	5.7		4.4	5.3	5.5	
Vehicle Extension (s)	4.0		2.0	5.9	2.0	
Lane Grp Cap (vph)	2659		694	3895	266	1101
v/s Ratio Prot	c0.59		c0.17	0.43		0.15
v/s Ratio Perm					c0.10	
v/c Ratio	1.12		0.82	0.56	0.69	0.37
Uniform Delay, d1	30.8		49.6	6.2	52.3	27.9
Progression Factor	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	61.2		7.0	0.6	6.1	0.1
Delay (s)	92.0		56.6	6.8	58.5	28.0
Level of Service	F		E	A	E	C
Approach Delay (s)	92.0			17.1	37.4	
Approach LOS	F			B	D	

Intersection Summary

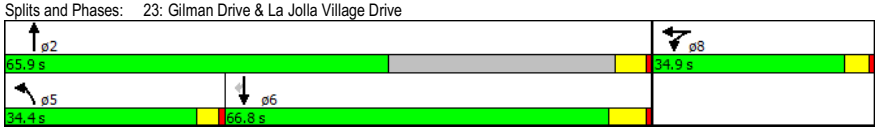
HCM 2000 Control Delay	54.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.98		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	15.6
Intersection Capacity Utilization	90.0%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	WBT	NBL	NBT	SBT	SBR
Lane Configurations					
Traffic Volume (vph)	0	182	256	1079	185
Future Volume (vph)	0	182	256	1079	185
Turn Type	NA	Prot	NA	NA	Perm
Protected Phases	8	5	2	6	
Permitted Phases					6
Detector Phase	8	5	2	6	6
Switch Phase					
Minimum Initial (s)	4.0	4.0	10.0	10.0	10.0
Minimum Split (s)	8.9	8.4	15.9	16.8	16.8
Total Split (s)	34.9	34.4	65.9	66.8	66.8
Total Split (%)	25.6%	25.3%	48.4%	49.1%	49.1%
Yellow Time (s)	3.9	3.4	4.9	5.8	5.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.4	5.9	6.8	6.8
Lead/Lag		Lead		Lag	Lag
Lead-Lag Optimize?		Yes		Yes	Yes
Recall Mode	None	None	Min	Min	Min

Intersection Summary
Cycle Length: 136.1
Actuated Cycle Length: 76.8
Natural Cycle: 50
Control Type: Actuated-Uncoordinated

Splits and Phases: 23: Gilman Drive & La Jolla Village Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	18	0	110	182	256	0	0	1079	185
Future Volume (vph)	0	0	0	18	0	110	182	256	0	0	1079	185
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.9		4.4	5.9			6.8	6.8
Lane Util. Factor					1.00		1.00	0.95			0.95	1.00
Frt					0.88		1.00	1.00			1.00	0.85
Flt Protected					0.99		0.95	1.00			1.00	1.00
Satd. Flow (prot)					1635		1770	3539			3539	1583
Flt Permitted					0.99		0.95	1.00			1.00	1.00
Satd. Flow (perm)					1635		1770	3539			3539	1583
Peak-hour factor, PHF	0.25	0.25	0.25	0.83	0.83	0.83	0.83	0.83	0.83	0.97	0.97	0.97
Adj. Flow (vph)	0	0	0	22	0	133	219	308	0	0	1112	191
RTOR Reduction (vph)	0	0	0	0	119	0	0	0	0	0	0	51
Lane Group Flow (vph)	0	0	0	0	36	0	219	308	0	0	1112	140
Turn Type				Split	NA		Prot	NA			NA	Perm
Protected Phases				8	8		5	2			6	
Permitted Phases												6
Actuated Green, G (s)					7.9		16.5	57.4			35.6	35.6
Effective Green, g (s)					7.9		16.5	57.4			35.6	35.6
Actuated g/C Ratio					0.10		0.22	0.75			0.47	0.47
Clearance Time (s)					4.9		4.4	5.9			6.8	6.8
Vehicle Extension (s)					3.0		3.0	3.0			3.0	3.0
Lane Grp Cap (vph)					169		383	2669			1655	740
v/s Ratio Prot					c0.02		c0.12	0.09			c0.31	
v/s Ratio Perm												0.09
v/c Ratio					0.21		0.57	0.12			0.67	0.19
Uniform Delay, d1					31.2		26.6	2.5			15.7	11.8
Progression Factor					1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2					0.6		2.1	0.0			1.1	0.1
Delay (s)					31.9		28.7	2.5			16.8	11.9
Level of Service					C		C	A			B	B
Approach Delay (s)		0.0			31.9			13.4			16.1	
Approach LOS		A			C			B			B	

Intersection Summary				
HCM 2000 Control Delay	16.6	HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio	0.58			
Actuated Cycle Length (s)	76.1	Sum of lost time (s)	16.1	
Intersection Capacity Utilization	Err%	ICU Level of Service	H	
Analysis Period (min)	15			

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	8	5	1015	0	0	0	0	411	127	163	972	0
Future Volume (Veh/h)	8	5	1015	0	0	0	0	411	127	163	972	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.97	0.97	0.97	0.25	0.25	0.25	0.83	0.83	0.83	0.96	0.96	0.96
Hourly flow rate (vph)	8	5	1046	0	0	0	0	495	153	170	1013	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)			13									
Median type								None			None	
Median storage veh)												
Upstream signal (ft)											483	
pX, platoon unblocked	0.77	0.77	0.77	0.77	0.77		0.77					
vC, conflicting volume	1600	2001	506	1867	1848	248	1013			648		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1179	1700	0	1525	1501	248	414			648		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	92	91	0	0	100	100	100			82		
cM capacity (veh/h)	96	57	833	0	76	753	877			934		

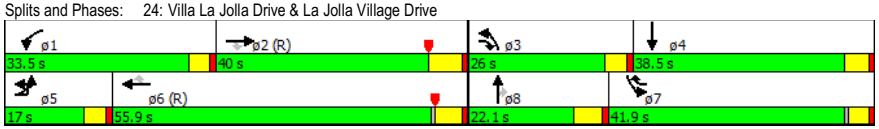
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	1054	248	248	153	170	506	506
Volume Left	8	0	0	0	170	0	0
Volume Right	1046	0	0	153	0	0	0
cSH	840	1700	1700	1700	934	1700	1700
Volume to Capacity	1.26	0.15	0.15	0.09	0.18	0.30	0.30
Queue Length 95th (ft)	934	0	0	0	17	0	0
Control Delay (s)	141.8	0.0	0.0	0.0	9.7	0.0	0.0
Lane LOS	F				A		
Approach Delay (s)	Err	0.0			1.4		
Approach LOS	F						

Intersection Summary				
Average Delay	Err			
Intersection Capacity Utilization	Err%	ICU Level of Service	H	
Analysis Period (min)	15			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	57	1885	66	603	1114	392	450	237	660	1213	721
Future Volume (vph)	57	1885	66	603	1114	392	450	237	660	1213	721
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA
Protected Phases	5	2	3	1	6	7	3	8		7	4
Permitted Phases			2			6			8		
Detector Phase	5	2	3	1	6	7	3	8	8	7	4
Switch Phase											
Minimum Initial (s)	4.0	10.0	4.0	4.0	10.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.4	16.4	22.4	8.4	15.3	8.4	22.4	9.5	9.5	8.4	8.9
Total Split (s)	17.0	40.0	26.0	33.5	55.9	41.9	26.0	22.1	22.1	41.9	38.5
Total Split (%)	12.3%	29.0%	18.8%	24.3%	40.5%	30.4%	18.8%	16.0%	16.0%	30.4%	27.9%
Yellow Time (s)	3.4	5.4	3.4	3.4	4.3	3.4	3.4	4.5	4.5	3.4	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	6.4	4.4	4.4	5.3	4.4	4.4	5.5	5.5	4.4	4.9
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	C-Max	None	None	None	None	None	None

Intersection Summary
Cycle Length: 138
Actuated Cycle Length: 138
Offset: 44 (32%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 24: Villa La Jolla Drive & La Jolla Village Drive



Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	54	57	1885	66	603	1114	392	450	237	660	1213	721
Future Volume (vph)	54	57	1885	66	603	1114	392	450	237	660	1213	721
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.4	6.4	4.4	4.4	5.3	4.4	4.4	5.5	5.5	4.4	4.9
Lane Util. Factor		1.00	0.91	1.00	0.97	0.91	1.00	0.97	0.95	0.95	0.97	1.00
Frt		1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.93	0.85	1.00	0.98
Flt Protected		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)		1770	5085	1583	3433	5085	1583	3433	1639	1504	3433	1825
Flt Permitted		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Satd. Flow (perm)		1770	5085	1583	3433	5085	1583	3433	1639	1504	3433	1825
Peak-hour factor, PHF	0.92	0.80	0.80	0.80	0.85	0.85	0.85	0.82	0.82	0.82	0.82	0.82
Adj. Flow (vph)	59	71	2356	82	709	1311	461	549	289	805	1479	879
RTOR Reduction (vph)	0	0	0	50	0	0	68	0	26	258	0	4
Lane Group Flow (vph)	0	130	2356	33	709	1311	393	549	545	265	1479	1013
Turn Type	Prot	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA
Protected Phases	5	5	2	3	1	6	7	3	8		7	4
Permitted Phases				2			6			8		
Actuated Green, G (s)		12.0	33.6	55.2	29.1	51.8	89.8	21.6	16.6	16.6	38.0	33.6
Effective Green, g (s)		12.0	33.6	55.2	29.1	51.8	89.8	21.6	16.6	16.6	38.0	33.6
Actuated g/C Ratio		0.09	0.24	0.40	0.21	0.38	0.65	0.16	0.12	0.12	0.28	0.24
Clearance Time (s)		4.4	6.4	4.4	4.4	5.3	4.4	4.4	5.5	5.5	4.4	4.9
Vehicle Extension (s)		2.0	4.4	2.0	2.0	4.7	2.0	2.0	3.3	3.3	2.0	2.0
Lane Grp Cap (vph)		153	1238	633	723	1908	1030	537	197	180	945	444
v/s Ratio Prot		0.07	c0.46	0.01	c0.21	0.26	0.10	0.16	c0.33		c0.43	c0.56
v/s Ratio Perm				0.01			0.14			0.18		
v/c Ratio		0.85	1.90	0.05	0.98	0.69	0.38	1.02	2.77	1.47	1.57	2.28
Uniform Delay, d1		62.1	52.2	25.4	54.2	36.3	11.2	58.2	60.7	60.7	50.0	52.2
Progression Factor		1.00	1.00	1.00	1.15	0.70	0.27	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2		32.1	409.4	0.0	26.3	1.8	0.1	44.6	810.1	240.7	259.5	584.0
Delay (s)		94.2	461.6	25.4	88.8	27.2	3.1	102.8	870.8	301.4	309.5	636.2
Level of Service		F	F	C	F	C	A	F	F	F	F	F
Approach Delay (s)			428.9			40.3			432.9			442.6
Approach LOS			F			D			F			F

Intersection Summary			
HCM 2000 Control Delay	328.4	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.85		
Actuated Cycle Length (s)	138.0	Sum of lost time (s)	20.7
Intersection Capacity Utilization	131.4%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	113
Future Volume (vph)	113
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.82
Adj. Flow (vph)	138
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

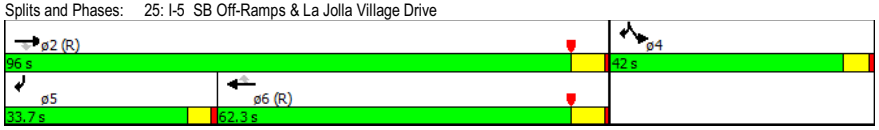
Intersection Summary

Lane Group	EBT	EBR	WBT	WBR	SBL	SBR	ø5
Lane Configurations							
Traffic Volume (vph)	2193	1349	1523	1111	774	591	
Future Volume (vph)	2193	1349	1523	1111	774	591	
Turn Type	NA	Perm	NA	Perm	Prot	custom	
Protected Phases	2		6		4	4 5	5
Permitted Phases		2		6			
Detector Phase	2	2	6	6	4	4 5	
Switch Phase							
Minimum Initial (s)	10.0	10.0	15.0	15.0	5.0		2.0
Minimum Split (s)	16.2	16.2	21.2	21.2	10.1		6.7
Total Split (s)	96.0	96.0	62.3	62.3	42.0		33.7
Total Split (%)	69.6%	69.6%	45.1%	45.1%	30.4%		24%
Yellow Time (s)	5.2	5.2	5.2	5.2	4.1		3.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	6.2	6.2	6.2	6.2	5.1		
Lead/Lag			Lag	Lag			Lead
Lead-Lag Optimize?			Yes	Yes			Yes
Recall Mode	C-Max	C-Max	C-Max	C-Max	Min		None

Intersection Summary

Cycle Length: 138
Actuated Cycle Length: 138
Offset: 59 (43%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 25: I-5 SB Off-Ramps & La Jolla Village Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	2193	1349	0	1523	1111	0	0	0	774	0	591
Future Volume (vph)	0	2193	1349	0	1523	1111	0	0	0	774	0	591
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.2	6.2		6.2	6.2				5.1		5.1
Lane Util. Factor		0.86	1.00		0.91	1.00				0.97		0.88
Frt		1.00	0.85		1.00	0.85				1.00		0.85
Flt Protected		1.00	1.00		1.00	1.00				0.95		1.00
Satd. Flow (prot)		6408	1583		5085	1583				3433		2787
Flt Permitted		1.00	1.00		1.00	1.00				0.95		1.00
Satd. Flow (perm)		6408	1583		5085	1583				3433		2787
Peak-hour factor, PHF	0.93	0.93	0.93	0.94	0.94	0.94	0.25	0.25	0.25	0.84	0.84	0.84
Adj. Flow (vph)	0	2358	1451	0	1620	1182	0	0	0	921	0	704
RTOR Reduction (vph)	0	0	381	0	0	427	0	0	0	0	0	16
Lane Group Flow (vph)	0	2358	1070	0	1620	755	0	0	0	921	0	688
Turn Type		NA	Perm		NA	Perm				Prot		custom
Protected Phases		2			6					4		4 5
Permitted Phases			2			6						
Actuated Green, G (s)		89.8	89.8		76.9	76.9				36.9		50.2
Effective Green, g (s)		89.8	89.8		76.9	76.9				36.9		50.2
Actuated g/C Ratio		0.65	0.65		0.56	0.56				0.27		0.36
Clearance Time (s)		6.2	6.2		6.2	6.2				5.1		
Vehicle Extension (s)		2.0	2.0		2.0	2.0				2.0		
Lane Grp Cap (vph)		4169	1030		2833	882				917		1013
v/s Ratio Prot		0.37			0.32					c0.27		0.25
v/s Ratio Perm			c0.68			0.48						
v/c Ratio		0.57	1.04		0.57	0.86				1.00		0.68
Uniform Delay, d1		13.3	24.1		19.9	25.9				50.6		37.1
Progression Factor		0.68	5.52		0.87	1.43				1.00		1.00
Incremental Delay, d2		0.1	21.0		0.7	8.7				30.8		1.4
Delay (s)		9.1	154.1		18.0	45.6				81.3		38.5
Level of Service		A	F		B	D				F		D
Approach Delay (s)		64.3			29.6			0.0			62.8	
Approach LOS		E			C			A			E	

Intersection Summary

HCM 2000 Control Delay	52.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.07		
Actuated Cycle Length (s)	138.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	88.7%	ICU Level of Service	E
Analysis Period (min)	15		

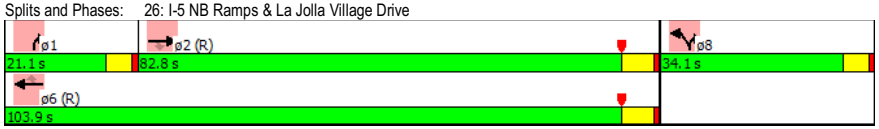
c Critical Lane Group

Lane Group	EBT	EBR	WBT	WBR	NBL	NBR	ø1
Lane Configurations							
Traffic Volume (vph)	1681	1419	2229	807	319	321	
Future Volume (vph)	1681	1419	2229	807	319	321	
Turn Type	NA	Perm	NA	Perm	Prot	custom	
Protected Phases	2		6		8	1 8	1
Permitted Phases		2		6			
Detector Phase	2	2	6	6	8	1 8	
Switch Phase							
Minimum Initial (s)	16.0	16.0	16.0	16.0	5.0		2.0
Minimum Split (s)	36.2	36.2	22.2	22.2	10.1		7.1
Total Split (s)	82.8	82.8	103.9	103.9	34.1		21.1
Total Split (%)	60.0%	60.0%	75.3%	75.3%	24.7%		15%
Yellow Time (s)	5.2	5.2	5.2	5.2	4.1		4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	6.2	6.2	6.2	6.2	5.1		
Lead/Lag	Lag	Lag					Lead
Lead-Lag Optimize?	Yes	Yes					Yes
Recall Mode	C-Max	C-Max	C-Max	C-Max	Min		None

Intersection Summary

Cycle Length: 138
Actuated Cycle Length: 138
Offset: 65 (47%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 100
Control Type: Actuated-Coordinated

Splits and Phases: 26: I-5 NB Ramps & La Jolla Village Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1681	1419	0	2229	807	319	0	321	0	0	0
Future Volume (vph)	0	1681	1419	0	2229	807	319	0	321	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.2	6.2		6.2	6.2	5.1		5.1			
Lane Util. Factor		0.91	1.00		0.91	1.00	0.97		0.88			
Frt		1.00	0.85		1.00	0.85	1.00		0.85			
Flt Protected		1.00	1.00		1.00	1.00	0.95		1.00			
Satd. Flow (prot)		5085	1583		5085	1583	3433		2787			
Flt Permitted		1.00	1.00		1.00	1.00	0.95		1.00			
Satd. Flow (perm)		5085	1583		5085	1583	3433		2787			
Peak-hour factor, PHF	0.98	0.98	0.98	0.92	0.92	0.92	0.92	0.92	0.92	0.25	0.25	0.25
Adj. Flow (vph)	0	1715	1448	0	2423	877	347	0	349	0	0	0
RTOR Reduction (vph)	0	0	321	0	0	159	0	0	22	0	0	0
Lane Group Flow (vph)	0	1715	1127	0	2423	718	347	0	327	0	0	0
Turn Type		NA	Perm		NA	Perm	Prot		custom			
Protected Phases		2			6		8		1 8			
Permitted Phases			2			6						
Actuated Green, G (s)		97.4	97.4		107.6	107.6	19.1		29.3			
Effective Green, g (s)		97.4	97.4		107.6	107.6	19.1		29.3			
Actuated g/C Ratio		0.71	0.71		0.78	0.78	0.14		0.21			
Clearance Time (s)		6.2	6.2		6.2	6.2	5.1					
Vehicle Extension (s)		2.0	2.0		2.0	2.0	2.0					
Lane Grp Cap (vph)		3588	1117		3964	1234	475		591			
v/s Ratio Prot		0.34			c0.48		c0.10		0.12			
v/s Ratio Perm			c0.71			0.45						
v/c Ratio		0.48	1.01		0.61	0.58	0.73		0.55			
Uniform Delay, d1		9.0	20.3		6.4	6.1	57.0		48.5			
Progression Factor		1.03	3.74		1.00	1.00	1.00		1.00			
Incremental Delay, d2		0.3	25.0		0.7	2.0	4.9		0.6			
Delay (s)		9.6	100.9		7.1	8.1	61.9		49.1			
Level of Service		A	F		A	A	E		D			
Approach Delay (s)		51.4			7.4			55.5			0.0	
Approach LOS		D			A			E			A	

Intersection Summary

HCM 2000 Control Delay	31.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.96		
Actuated Cycle Length (s)	138.0	Sum of lost time (s)	16.4
Intersection Capacity Utilization	93.0%	ICU Level of Service	F
Analysis Period (min)	15		

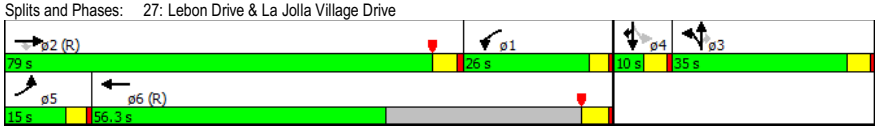
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	9	2426	312	416	2086	586	9	177	9	2	6
Future Volume (vph)	9	2426	312	416	2086	586	9	177	9	2	6
Turn Type	Prot	NA	Perm	Prot	NA	Split	NA	Perm	Perm	NA	Prot
Protected Phases	5	2		1	6	3	3			4	4
Permitted Phases			2					3	4		
Detector Phase	5	2	2	1	6	3	3	3	4	4	4
Switch Phase											
Minimum Initial (s)	4.0	10.0	10.0	4.0	10.0	7.0	7.0	7.0	4.0	4.0	4.0
Minimum Split (s)	8.4	15.3	15.3	8.4	15.7	11.9	11.9	11.9	8.9	8.9	8.9
Total Split (s)	15.0	79.0	79.0	26.0	56.3	35.0	35.0	35.0	10.0	10.0	10.0
Total Split (%)	10.0%	52.7%	52.7%	17.3%	37.5%	23.3%	23.3%	23.3%	6.7%	6.7%	6.7%
Yellow Time (s)	3.4	4.3	4.3	3.4	4.7	3.9	3.9	3.9	3.9	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	4.4	5.3	5.3	4.4	5.7	4.9	4.9	4.9		4.9	4.9
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lag	Lag	Lag	Lead	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	None	None	None	None	None	None

Intersection Summary

Cycle Length: 150
Actuated Cycle Length: 150
Offset: 3 (2%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 27: Lebon Drive & La Jolla Village Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	9	2426	312	416	2086	10	586	9	177	9	2	6
Future Volume (vph)	9	2426	312	416	2086	10	586	9	177	9	2	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.3	5.3	4.4	5.7		4.9	4.9	4.9		4.9	4.9
Lane Util. Factor	1.00	0.91	1.00	0.97	0.91		0.97	0.95	0.95		1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00		1.00	0.86	0.85		1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00		0.96	1.00
Satd. Flow (prot)	1770	5085	1583	3433	5082		3433	1530	1504		1792	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00		0.89	1.00
Satd. Flow (perm)	1770	5085	1583	3433	5082		3433	1530	1504		1663	1583
Peak-hour factor, PHF	0.94	0.94	0.94	0.85	0.85	0.85	0.83	0.83	0.83	0.80	0.80	0.80
Adj. Flow (vph)	10	2581	332	489	2454	12	706	11	213	11	2	8
RTOR Reduction (vph)	0	0	141	0	0	0	0	80	87	0	0	8
Lane Group Flow (vph)	10	2581	191	489	2466	0	706	33	24	0	14	0
Turn Type	Prot	NA	Perm	Prot	NA		Split	NA	Perm	Perm	NA	Prot
Protected Phases	5	2		1	6		3	3			4	4
Permitted Phases			2						3	4		
Actuated Green, G (s)	2.6	70.2	70.2	24.2	91.4		32.1	32.1	32.1		4.0	4.0
Effective Green, g (s)	2.6	70.2	70.2	24.2	91.4		32.1	32.1	32.1		4.0	4.0
Actuated g/C Ratio	0.02	0.47	0.47	0.16	0.61		0.21	0.21	0.21		0.03	0.03
Clearance Time (s)	4.4	5.3	5.3	4.4	5.7		4.9	4.9	4.9		4.9	4.9
Vehicle Extension (s)	2.0	6.1	6.1	2.0	5.6		6.5	6.5	6.5		2.0	2.0
Lane Grp Cap (vph)	30	2379	740	553	3096		734	327	321		44	42
v/s Ratio Prot	0.01	c0.51		c0.14	0.49		c0.21	0.02				0.00
v/s Ratio Perm			0.12						0.02		c0.01	
v/c Ratio	0.33	1.08	0.26	0.88	0.80		0.96	0.10	0.07		0.32	0.01
Uniform Delay, d1	72.8	39.9	24.1	61.5	22.2		58.3	47.4	47.1		71.7	71.1
Progression Factor	1.00	1.00	1.00	0.79	0.67		1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	2.4	46.2	0.8	1.7	0.2		24.9	0.4	0.3		1.5	0.0
Delay (s)	75.2	86.1	25.0	50.4	15.2		83.2	47.8	47.4		73.2	71.1
Level of Service	E	F	C	D	B		F	D	D		E	E
Approach Delay (s)		79.1			21.0			74.6			72.4	
Approach LOS		E			C			E			E	

Intersection Summary

HCM 2000 Control Delay	53.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.00		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	19.9
Intersection Capacity Utilization	94.3%	ICU Level of Service	F
Analysis Period (min)	15		

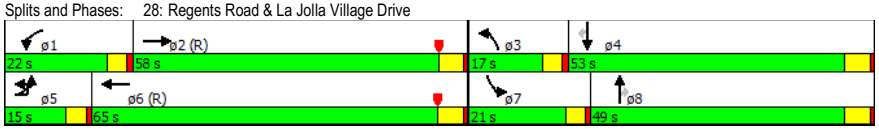
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	379	1991	655	2056	406	378	142	309	1014	763
Future Volume (vph)	379	1991	655	2056	406	378	142	309	1014	763
Turn Type	Prot	NA	Prot	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2	1	6	3	8		7	4	
Permitted Phases							8			4
Detector Phase	5	2	1	6	3	8	8	7	4	4
Switch Phase										
Minimum Initial (s)	4.0	10.0	4.0	10.0	4.0	10.0	10.0	4.0	10.0	10.0
Minimum Split (s)	8.4	41.3	8.4	35.4	8.4	41.3	41.3	8.4	35.3	35.3
Total Split (s)	15.0	58.0	22.0	65.0	17.0	49.0	49.0	21.0	53.0	53.0
Total Split (%)	10.0%	38.7%	14.7%	43.3%	11.3%	32.7%	32.7%	14.0%	35.3%	35.3%
Yellow Time (s)	3.4	4.3	3.4	4.4	3.4	4.3	4.3	3.4	4.3	4.3
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.3	4.4	5.4	4.4	5.3	5.3	4.4	5.3	5.3
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	None	None	None	None	None

Intersection Summary

Cycle Length: 150
Actuated Cycle Length: 150
Offset: 5 (3%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 28: Regents Road & La Jolla Village Drive



Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	35	379	1991	125	655	2056	102	406	378	142	309	1014
Future Volume (vph)	35	379	1991	125	655	2056	102	406	378	142	309	1014
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.4	5.3		4.4	5.4		4.4	5.3	5.3	4.4	5.3
Lane Util. Factor		0.97	0.91		0.97	0.91		0.97	0.95	1.00	1.00	0.95
Frt		1.00	0.99		1.00	0.99		1.00	1.00	0.85	1.00	1.00
Flt Protected		0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)		3433	5040		3433	5049		3433	3539	1583	1770	3539
Flt Permitted		0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (perm)		3433	5040		3433	5049		3433	3539	1583	1770	3539
Peak-hour factor, PHF	0.92	0.96	0.96	0.96	0.90	0.90	0.90	0.82	0.82	0.82	0.89	0.89
Adj. Flow (vph)	38	395	2074	130	728	2284	113	495	461	173	347	1139
RTOR Reduction (vph)	0	0	5	0	0	4	0	0	0	123	0	0
Lane Group Flow (vph)	0	433	2199	0	728	2393	0	495	461	50	347	1139
Turn Type	Prot	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA
Protected Phases	5	5	2		1	6		3	8		7	4
Permitted Phases										8		
Actuated Green, G (s)		10.6	52.7		17.6	59.6		12.6	43.7	43.7	16.6	47.7
Effective Green, g (s)		10.6	52.7		17.6	59.6		12.6	43.7	43.7	16.6	47.7
Actuated g/C Ratio		0.07	0.35		0.12	0.40		0.08	0.29	0.29	0.11	0.32
Clearance Time (s)		4.4	5.3		4.4	5.4		4.4	5.3	5.3	4.4	5.3
Vehicle Extension (s)		3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)		242	1770		402	2006		288	1031	461	195	1125
v/s Ratio Prot		0.13	0.44		c0.21	c0.47		0.14	0.13		c0.20	0.32
v/s Ratio Perm										0.03		
v/c Ratio		1.79	1.24		1.81	1.19		1.72	0.45	0.11	1.78	1.01
Uniform Delay, d1		69.7	48.6		66.2	45.2		68.7	43.3	38.9	66.7	51.1
Progression Factor		1.32	0.72		1.12	0.87		1.13	0.70	0.68	1.00	1.00
Incremental Delay, d2		359.9	110.6		368.3	88.8		337.7	0.3	0.1	370.7	29.9
Delay (s)		451.7	145.6		442.4	127.9		415.1	30.7	26.5	437.4	81.1
Level of Service		F	F		F	F		F	C	C	F	F
Approach Delay (s)			195.9			201.2			198.6			217.1
Approach LOS			F			F			F			F

Intersection Summary

HCM 2000 Control Delay	203.4	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.51		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	19.5
Intersection Capacity Utilization	128.9%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	763
Future Volume (vph)	763
Ideal Flow (vphpl)	1900
Total Lost time (s)	5.3
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1583
Flt Permitted	1.00
Satd. Flow (perm)	1583
Peak-hour factor, PHF	0.89
Adj. Flow (vph)	857
RTOR Reduction (vph)	77
Lane Group Flow (vph)	780
Turn Type	Perm
Protected Phases	
Permitted Phases	4
Actuated Green, G (s)	47.7
Effective Green, g (s)	47.7
Actuated g/C Ratio	0.32
Clearance Time (s)	5.3
Vehicle Extension (s)	3.0
Lane Grp Cap (vph)	503
v/s Ratio Prot	
v/s Ratio Perm	c0.49
v/c Ratio	1.55
Uniform Delay, d1	51.1
Progression Factor	1.00
Incremental Delay, d2	257.5
Delay (s)	308.6
Level of Service	F
Approach Delay (s)	
Approach LOS	

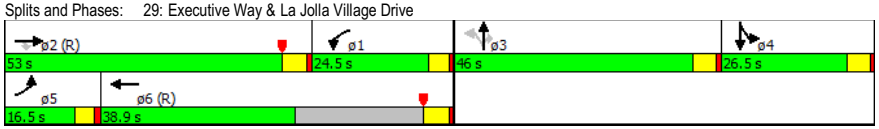
Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	88	1558	382	521	1519	313	62	479	424	199
Future Volume (vph)	88	1558	382	521	1519	313	62	479	424	199
Turn Type	Prot	NA	Perm	Prot	NA	Perm	NA	Perm	Split	NA
Protected Phases	5	2		1	6		3		4	4
Permitted Phases			2			3		3		
Detector Phase	5	2	2	1	6	3	3	3	4	4
Switch Phase										
Minimum Initial (s)	4.0	10.0	10.0	4.0	10.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.4	15.3	15.3	8.4	15.3	45.9	45.9	45.9	8.9	8.9
Total Split (s)	16.5	53.0	53.0	24.5	38.9	46.0	46.0	46.0	26.5	26.5
Total Split (%)	11.0%	35.3%	35.3%	16.3%	25.9%	30.7%	30.7%	30.7%	17.7%	17.7%
Yellow Time (s)	3.4	4.3	4.3	3.4	4.3	3.9	3.9	3.9	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.3	5.3	4.4	5.3	4.9	4.9	4.9	4.9	4.9
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lead	Lead	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	None	None	None	None	None

Intersection Summary

Cycle Length: 150
Actuated Cycle Length: 150
Offset: 81 (54%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 140
Control Type: Actuated-Coordinated

Splits and Phases: 29: Executive Way & La Jolla Village Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	88	1558	382	521	1519	114	313	62	479	424	199	292
Future Volume (vph)	88	1558	382	521	1519	114	313	62	479	424	199	292
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.3	5.3	4.4	5.3		4.9	4.9	4.9	4.9	4.9	
Lane Util. Factor	1.00	0.91	1.00	0.97	0.91		0.95	0.95	1.00	1.00	0.95	
Frt	1.00	1.00	0.85	1.00	0.99		1.00	1.00	0.85	1.00	0.91	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	0.97	1.00	0.95	1.00	
Satd. Flow (prot)	1770	5085	1583	3433	5032		1681	1711	1583	1770	3223	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.10	0.08	1.00	0.95	1.00	
Satd. Flow (perm)	1770	5085	1583	3433	5032		172	145	1583	1770	3223	
Peak-hour factor, PHF	0.83	0.83	0.83	0.80	0.80	0.80	0.89	0.89	0.89	0.84	0.84	0.84
Adj. Flow (vph)	106	1877	460	651	1899	142	352	70	538	505	237	348
RTOR Reduction (vph)	0	0	228	0	6	0	0	0	182	0	177	0
Lane Group Flow (vph)	106	1877	232	651	2036	0	201	221	356	505	408	0
Turn Type	Prot	NA	Perm	Prot	NA		Perm	NA	Perm	Split	NA	
Protected Phases	5	2		1	6			3		4	4	
Permitted Phases			2				3		3			
Actuated Green, G (s)	11.3	47.7	47.7	20.1	56.5		41.1	41.1	41.1	21.6	21.6	
Effective Green, g (s)	11.3	47.7	47.7	20.1	56.5		41.1	41.1	41.1	21.6	21.6	
Actuated g/C Ratio	0.08	0.32	0.32	0.13	0.38		0.27	0.27	0.27	0.14	0.14	
Clearance Time (s)	4.4	5.3	5.3	4.4	5.3		4.9	4.9	4.9	4.9	4.9	
Vehicle Extension (s)	2.0	5.8	5.8	2.0	5.5		2.0	2.0	2.0	6.1	6.1	
Lane Grp Cap (vph)	133	1617	503	460	1895		47	39	433	254	464	
v/s Ratio Prot	0.06	c0.37		c0.19	0.40					c0.29	0.13	
v/s Ratio Perm			0.15				1.17	c1.52	0.22			
v/c Ratio	0.80	1.16	0.46	1.42	1.07		4.28	5.67	0.82	1.99	0.88	
Uniform Delay, d1	68.2	51.1	40.9	65.0	46.8		54.4	54.4	51.0	64.2	62.9	
Progression Factor	0.65	0.94	1.34	0.62	0.44		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	16.3	76.8	1.8	188.0	34.8		1522.9	2154.6	11.3	458.5	19.0	
Delay (s)	60.6	124.7	56.6	228.2	55.2		1577.3	2209.1	62.4	522.7	81.9	
Level of Service	E	F	E	F	E		F	F	E	F	F	
Approach Delay (s)		109.1			97.1			873.7			286.1	
Approach LOS		F			F			F			F	

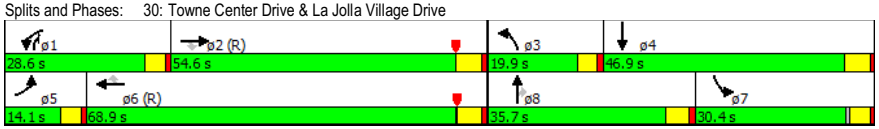
Intersection Summary			
HCM 2000 Control Delay	233.6	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	2.72		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	19.5
Intersection Capacity Utilization	95.8%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	46	2299	144	412	1844	176	185	73	626	775	402
Future Volume (vph)	46	2299	144	412	1844	176	185	73	626	775	402
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA
Protected Phases	5	2		1	6		3	8	1	7	4
Permitted Phases			2			6			8		
Detector Phase	5	2	2	1	6	6	3	8	1	7	4
Switch Phase											
Minimum Initial (s)	4.0	10.0	10.0	4.0	10.0	10.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.4	33.5	33.5	8.4	15.3	15.3	8.4	9.0	8.4	8.4	9.3
Total Split (s)	14.1	54.6	54.6	28.6	68.9	68.9	19.9	35.7	28.6	30.4	46.9
Total Split (%)	9.4%	36.4%	36.4%	19.1%	45.9%	45.9%	13.3%	23.8%	19.1%	20.3%	31.3%
Yellow Time (s)	3.4	4.5	4.5	3.4	4.3	4.3	3.4	4.0	3.4	3.4	4.3
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.5	5.5	4.4	5.3	5.3	4.4	5.0	4.4	4.4	5.3
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lead	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	Max	None	None	None

Intersection Summary
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 93 (62%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 30: Towne Center Drive & La Jolla Village Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	46	2299	144	412	1844	176	185	73	626	775	402	111
Future Volume (vph)	46	2299	144	412	1844	176	185	73	626	775	402	111
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.5	5.5	4.4	5.3	5.3	4.4	5.0	4.4	4.4	5.3	
Lane Util. Factor	0.97	0.91	1.00	0.97	0.86	0.86	0.97	1.00	0.88	0.97	0.95	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.97	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	3433	5085	1583	3433	4799	1362	3433	1863	2787	3433	3424	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	3433	5085	1583	3433	4799	1362	3433	1863	2787	3433	3424	
Peak-hour factor, PHF	0.84	0.84	0.84	0.80	0.80	0.80	0.80	0.80	0.80	0.87	0.87	0.87
Adj. Flow (vph)	55	2737	171	515	2305	220	231	91	782	891	462	128
RTOR Reduction (vph)	0	0	100	0	1	65	0	0	36	0	16	0
Lane Group Flow (vph)	55	2737	71	515	2326	133	231	91	747	891	574	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	
Protected Phases	5	2		1	6		3	8	1	7	4	
Permitted Phases			2			6			8			
Actuated Green, G (s)	6.6	49.1	49.1	24.2	66.9	66.9	14.3	30.7	54.9	26.7	42.8	
Effective Green, g (s)	6.6	49.1	49.1	24.2	66.9	66.9	14.3	30.7	54.9	26.7	42.8	
Actuated g/C Ratio	0.04	0.33	0.33	0.16	0.45	0.45	0.10	0.20	0.37	0.18	0.29	
Clearance Time (s)	4.4	5.5	5.5	4.4	5.3	5.3	4.4	5.0	4.4	4.4	5.3	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	151	1664	518	553	2140	607	327	381	1020	611	976	
v/s Ratio Prot	0.02	c0.54		c0.15	c0.48		0.07	0.05	c0.12	c0.26	0.17	
v/s Ratio Perm			0.04			0.10			0.15			
v/c Ratio	0.36	1.64	0.14	0.93	1.09	0.22	0.71	0.24	0.73	1.46	0.59	
Uniform Delay, d1	69.7	50.5	35.5	62.1	41.5	25.5	65.8	49.9	41.2	61.6	46.0	
Progression Factor	1.31	0.39	0.13	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.1	290.4	0.0	22.6	47.8	0.8	6.8	1.5	2.7	215.2	0.9	
Delay (s)	91.4	310.0	4.7	84.7	89.4	26.3	72.6	51.4	43.9	276.9	46.9	
Level of Service	F	F	A	F	F	C	E	D	D	F	D	
Approach Delay (s)		288.3			84.5			50.5			185.3	
Approach LOS		F			F			D			F	

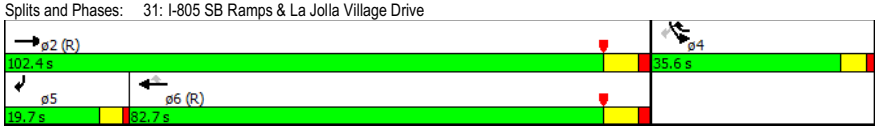
Intersection Summary			
HCM 2000 Control Delay	167.8	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.28		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	19.6
Intersection Capacity Utilization	100.3%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBT	WBT	WBR	SBL	SBR
Lane Configurations					
Traffic Volume (vph)	2324	1758	657	62	644
Future Volume (vph)	2324	1758	657	62	644
Turn Type	NA	NA	pm+ov	Prot	custom
Protected Phases	2	6	4	4	5
Permitted Phases			6		4
Detector Phase	2	6	4	4	5
Switch Phase					
Minimum Initial (s)	15.0	15.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	10.6	10.6	9.7
Total Split (s)	102.4	82.7	35.6	35.6	19.7
Total Split (%)	74.2%	59.9%	25.8%	25.8%	14.3%
Yellow Time (s)	5.5	5.5	4.1	4.1	3.7
All-Red Time (s)	2.0	2.0	1.5	1.5	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.5	7.5	5.6	5.6	4.7
Lead/Lag		Lag			Lead
Lead-Lag Optimize?		Yes			Yes
Recall Mode	C-Max	C-Max	None	None	None

Intersection Summary
Cycle Length: 138
Actuated Cycle Length: 138
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 100
Control Type: Actuated-Coordinated

Splits and Phases: 31: I-805 SB Ramps & La Jolla Village Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	2324	1227	0	1758	657	0	0	0	62	0	644
Future Volume (vph)	0	2324	1227	0	1758	657	0	0	0	62	0	644
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		7.5			7.5	5.6				5.6		4.7
Lane Util. Factor		0.91			0.91	1.00				0.97		0.88
Frt		0.95			1.00	0.85				1.00		0.85
Flt Protected		1.00			1.00	1.00				0.95		1.00
Satd. Flow (prot)		4822			5085	1583				3433		2787
Flt Permitted		1.00			1.00	1.00				0.95		1.00
Satd. Flow (perm)		4822			5085	1583				3433		2787
Peak-hour factor, PHF	0.92	0.92	0.92	0.83	0.83	0.83	0.25	0.25	0.25	0.85	0.85	0.85
Adj. Flow (vph)	0	2526	1334	0	2118	792	0	0	0	73	0	758
RTOR Reduction (vph)	0	33	0	0	0	284	0	0	0	0	0	26
Lane Group Flow (vph)	0	3827	0	0	2118	508	0	0	0	73	0	732
Turn Type		NA			NA	pm+ov				Prot		custom
Protected Phases		2			6	4				4		5
Permitted Phases						6						4
Actuated Green, G (s)		117.3			81.0	88.6				7.6		39.2
Effective Green, g (s)		117.3			81.0	88.6				7.6		39.2
Actuated g/C Ratio		0.85			0.59	0.64				0.06		0.28
Clearance Time (s)		7.5			7.5	5.6				5.6		4.7
Vehicle Extension (s)		2.0			2.0	2.0				2.0		2.0
Lane Grp Cap (vph)		4098			2984	1016				189		791
v/s Ratio Prot		c0.79			0.42	0.03				0.02		c0.21
v/s Ratio Perm						0.29						0.05
v/c Ratio		0.93			0.71	0.50				0.39		0.93
Uniform Delay, d1		7.5			20.2	13.0				62.9		48.0
Progression Factor		1.00			0.62	0.85				1.00		1.00
Incremental Delay, d2		5.3			1.1	0.1				0.5		16.3
Delay (s)		12.8			13.6	11.2				63.4		64.3
Level of Service		B			B	B				E		E
Approach Delay (s)		12.8			12.9			0.0			64.2	
Approach LOS		B			B			A			E	

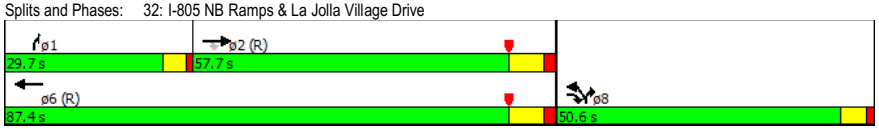
Intersection Summary			
HCM 2000 Control Delay	18.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.97		
Actuated Cycle Length (s)	138.0	Sum of lost time (s)	17.8
Intersection Capacity Utilization	85.3%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBT	EBR	WBT	NBL	NBR	ø1
Lane Configurations						
Traffic Volume (vph)	1067	1363	1806	481	208	
Future Volume (vph)	1067	1363	1806	481	208	
Turn Type	NA	pm+ov	NA	Prot	custom	
Protected Phases	2	8	6	8	1 8	1
Permitted Phases		2				
Detector Phase	2	8	6	8	1 8	
Switch Phase						
Minimum Initial (s)	16.0	5.0	15.0	5.0		5.0
Minimum Split (s)	23.5	10.6	24.5	10.6		10.2
Total Split (s)	57.7	50.6	87.4	50.6		29.7
Total Split (%)	41.8%	36.7%	63.3%	36.7%		22%
Yellow Time (s)	5.5	4.1	5.5	4.1		3.7
All-Red Time (s)	2.0	1.5	2.0	1.5		1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		
Total Lost Time (s)	7.5	5.6	7.5	5.6		
Lead/Lag	Lag					Lead
Lead-Lag Optimize?	Yes					Yes
Recall Mode	C-Max	None	C-Max	None		None

Intersection Summary
Cycle Length: 138
Actuated Cycle Length: 138
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 50
Control Type: Actuated-Coordinated

Splits and Phases: 32: I-805 NB Ramps & La Jolla Village Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1067	1363	0	1806	454	481	0	208	0	0	0
Future Volume (vph)	0	1067	1363	0	1806	454	481	0	208	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		7.5	5.6		7.5		5.6		4.7			
Lane Util. Factor		0.91	1.00		0.86		0.97		0.88			
Frt		1.00	0.85		0.97		1.00		0.85			
Flt Protected		1.00	1.00		1.00		0.95		1.00			
Satd. Flow (prot)		5085	1583		6215		3433		2787			
Flt Permitted		1.00	1.00		1.00		0.95		1.00			
Satd. Flow (perm)		5085	1583		6215		3433		2787			
Peak-hour factor, PHF	0.91	0.91	0.91	0.85	0.85	0.85	0.85	0.85	0.85	0.25	0.25	0.25
Adj. Flow (vph)	0	1173	1498	0	2125	534	566	0	245	0	0	0
RTOR Reduction (vph)	0	0	180	0	33	0	0	0	23	0	0	0
Lane Group Flow (vph)	0	1173	1318	0	2626	0	566	0	222	0	0	0
Turn Type		NA	pm+ov		NA		Prot		custom			
Protected Phases		2	8		6		8		1 8			
Permitted Phases			2									
Actuated Green, G (s)		70.2	115.2		79.9		45.0		55.6			
Effective Green, g (s)		70.2	115.2		79.9		45.0		50.0			
Actuated g/C Ratio		0.51	0.83		0.58		0.33		0.36			
Clearance Time (s)		7.5	5.6		7.5		5.6					
Vehicle Extension (s)		2.0	2.0		2.0		2.0					
Lane Grp Cap (vph)		2586	1321		3598		1119		1009			
v/s Ratio Prot		0.23	c0.33		c0.42		0.16		0.08			
v/s Ratio Perm			0.51									
v/c Ratio		0.45	1.00		0.73		0.51		0.22			
Uniform Delay, d1		21.7	11.3		21.2		37.5		30.5			
Progression Factor		0.79	6.38		1.00		1.00		1.00			
Incremental Delay, d2		0.3	15.7		1.3		0.1		0.0			
Delay (s)		17.3	87.5		22.5		37.7		30.5			
Level of Service		B	F		C		D		C			
Approach Delay (s)		56.7			22.5			35.5			0.0	
Approach LOS		E			C			D			A	

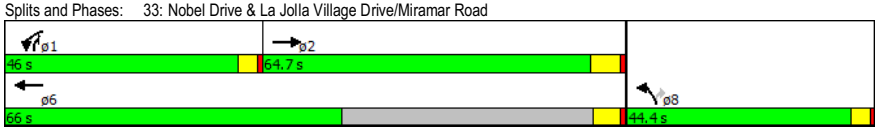
Intersection Summary			
HCM 2000 Control Delay	39.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.00		
Actuated Cycle Length (s)	138.0	Sum of lost time (s)	17.8
Intersection Capacity Utilization	89.1%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Configurations					
Traffic Volume (vph)	1428	1096	1664	149	605
Future Volume (vph)	1428	1096	1664	149	605
Turn Type	NA	Prot	NA	Prot	pm+ov
Protected Phases	2	1	6	8	1
Permitted Phases					8
Detector Phase	2	1	6	8	1
Switch Phase					
Minimum Initial (s)	10.0	4.0	10.0	7.0	4.0
Minimum Split (s)	16.3	8.4	16.0	11.4	8.4
Total Split (s)	64.7	46.0	66.0	44.4	46.0
Total Split (%)	41.7%	29.7%	42.6%	28.6%	29.7%
Yellow Time (s)	5.3	3.4	5.0	3.4	3.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.3	4.4	6.0	4.4	4.4
Lead/Lag	Lag	Lead			Lead
Lead-Lag Optimize?	Yes	Yes			Yes
Recall Mode	Min	None	Min	None	None

Intersection Summary
Cycle Length: 155.1
Actuated Cycle Length: 131.8
Natural Cycle: 90
Control Type: Actuated-Uncoordinated

Splits and Phases: 33: Nobel Drive & La Jolla Village Drive/Miramar Road



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1428	38	1096	1664	149	605
Future Volume (vph)	1428	38	1096	1664	149	605
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.3		4.4	6.0	4.4	4.4
Lane Util. Factor	0.86		0.97	0.86	1.00	0.88
Frt	1.00		1.00	1.00	1.00	0.85
Flt Protected	1.00		0.95	1.00	0.95	1.00
Satd. Flow (prot)	6383		3433	6408	1770	2787
Flt Permitted	1.00		0.95	1.00	0.95	1.00
Satd. Flow (perm)	6383		3433	6408	1770	2787
Peak-hour factor, PHF	0.80	0.80	0.80	0.80	0.85	0.85
Adj. Flow (vph)	1785	48	1370	2080	175	712
RTOR Reduction (vph)	2	0	0	0	0	1
Lane Group Flow (vph)	1831	0	1370	2080	175	711
Turn Type	NA		Prot	NA	Prot	pm+ov
Protected Phases	2		1	6	8	1
Permitted Phases						8
Actuated Green, G (s)	57.6		41.7	104.0	17.4	59.1
Effective Green, g (s)	57.6		41.7	104.0	17.4	59.1
Actuated g/C Ratio	0.44		0.32	0.79	0.13	0.45
Clearance Time (s)	6.3		4.4	6.0	4.4	4.4
Vehicle Extension (s)	5.0		2.0	5.4	2.0	2.0
Lane Grp Cap (vph)	2789		1086	5056	233	1342
v/s Ratio Prot	c0.29		c0.40	0.32	c0.10	0.17
v/s Ratio Perm						0.09
v/c Ratio	0.66		1.26	0.41	0.75	0.53
Uniform Delay, d1	29.3		45.1	4.3	55.1	26.3
Progression Factor	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	0.8		125.2	0.1	11.4	0.2
Delay (s)	30.0		170.2	4.5	66.5	26.5
Level of Service	C		F	A	E	C
Approach Delay (s)	30.0			70.3	34.4	
Approach LOS	C			E	C	

Intersection Summary			
HCM 2000 Control Delay	53.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	131.8	Sum of lost time (s)	15.1
Intersection Capacity Utilization	73.4%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBU	WBT	WBR	SBL
Lane Configurations						
Traffic Volume (vph)	382	1458	9	2416	379	718
Future Volume (vph)	382	1458	9	2416	379	718
Turn Type	Prot	NA	Prot	NA	Perm	Prot
Protected Phases	5	2	1	6		7
Permitted Phases					6	
Detector Phase	5	2	1	6	6	7
Switch Phase						
Minimum Initial (s)	4.0	10.0	4.0	10.0	10.0	10.0
Minimum Split (s)	8.4	16.3	8.4	29.4	29.4	38.4
Total Split (s)	34.4	66.3	24.4	65.4	65.4	44.4
Total Split (%)	23.9%	46.0%	16.9%	45.4%	45.4%	30.8%
Yellow Time (s)	3.4	5.3	3.4	4.4	4.4	3.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	6.3	4.4	5.4	5.4	4.4
Lead/Lag	Lead	Lag	Lead	Lag	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	Min	None	Min	Min	None

Intersection Summary
Cycle Length: 144.2
Actuated Cycle Length: 138.5
Natural Cycle: 140
Control Type: Actuated-Uncoordinated

Splits and Phases: 34: Miramar Road & Eastgate Mall

Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Traffic Volume (vph)	382	1458	9	2416	379	718	550
Future Volume (vph)	382	1458	9	2416	379	718	550
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	6.3	4.4	5.4	5.4	4.4	
Lane Util. Factor	0.97	0.91	1.00	0.86	1.00	0.97	
Frt	1.00	1.00	1.00	1.00	0.85	0.93	
Flt Protected	0.95	1.00	0.95	1.00	1.00	0.97	
Satd. Flow (prot)	3433	5085	1770	6408	1583	3286	
Flt Permitted	0.95	1.00	0.95	1.00	1.00	0.97	
Satd. Flow (perm)	3433	5085	1770	6408	1583	3286	
Peak-hour factor, PHF	0.80	0.80	0.92	0.86	0.86	0.80	0.80
Adj. Flow (vph)	478	1822	10	2809	441	898	688
RTOR Reduction (vph)	0	0	0	0	243	96	0
Lane Group Flow (vph)	478	1823	10	2809	198	1490	0
Turn Type	Prot	NA	Prot	NA	Perm	Prot	
Protected Phases	5	2	1	6		7	
Permitted Phases					6		
Actuated Green, G (s)	24.2	85.4	1.5	63.6	63.6	40.0	
Effective Green, g (s)	24.2	85.4	1.5	63.6	63.6	40.0	
Actuated g/C Ratio	0.17	0.60	0.01	0.45	0.45	0.28	
Clearance Time (s)	4.4	6.3	4.4	5.4	5.4	4.4	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	585	3058	18	2870	709	925	
v/s Ratio Prot	c0.14	0.36	0.01	c0.44		c0.45	
v/s Ratio Perm					0.12		
v/c Ratio	0.82	0.60	0.56	0.98	0.28	1.61	
Uniform Delay, d1	56.8	17.6	69.9	38.5	24.7	51.0	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	8.7	0.3	32.3	12.1	0.2	280.1	
Delay (s)	65.4	17.9	102.2	50.7	24.9	331.1	
Level of Service	E	B	F	D	C	F	
Approach Delay (s)		27.8		47.3		331.1	
Approach LOS		C		D		F	

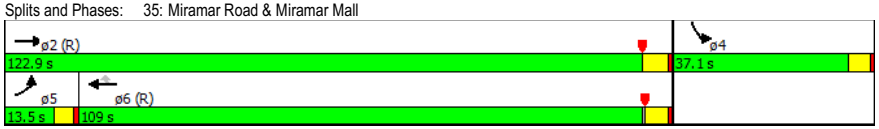
Intersection Summary			
HCM 2000 Control Delay	104.0	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.15		
Actuated Cycle Length (s)	142.0	Sum of lost time (s)	15.1
Intersection Capacity Utilization	95.6%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBT	WBR	SBL
Lane Configurations					
Traffic Volume (vph)	35	2293	2931	128	147
Future Volume (vph)	35	2293	2931	128	147
Turn Type	Prot	NA	NA	Perm	Prot
Protected Phases	5	2	6		4
Permitted Phases				6	
Detector Phase	5	2	6	6	4
Switch Phase					
Minimum Initial (s)	4.0	10.0	10.0	10.0	4.0
Minimum Split (s)	8.4	15.8	15.4	15.4	8.9
Total Split (s)	13.5	122.9	109.0	109.0	37.1
Total Split (%)	8.4%	76.8%	68.1%	68.1%	23.2%
Yellow Time (s)	3.4	4.8	4.4	4.4	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.8	5.4	5.4	4.9
Lead/Lag	Lead		Lag	Lag	
Lead-Lag Optimize?	Yes		Yes	Yes	
Recall Mode	None	C-Max	C-Max	C-Max	None

Intersection Summary
Cycle Length: 160
Actuated Cycle Length: 160
Offset: 91 (57%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 100
Control Type: Actuated-Coordinated

Splits and Phases: 35: Miramar Road & Miramar Mall



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	35	2293	2931	128	147	101
Future Volume (vph)	35	2293	2931	128	147	101
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.8	5.4	5.4	4.9	
Lane Util. Factor	1.00	0.91	0.91	1.00	1.00	
Frt	1.00	1.00	1.00	0.85	0.94	
Flt Protected	0.95	1.00	1.00	1.00	0.97	
Satd. Flow (prot)	1770	5085	5085	1583	1710	
Flt Permitted	0.95	1.00	1.00	1.00	0.97	
Satd. Flow (perm)	1770	5085	5085	1583	1710	
Peak-hour factor, PHF	0.89	0.89	0.87	0.87	0.93	0.93
Adj. Flow (vph)	39	2576	3369	147	158	109
RTOR Reduction (vph)	0	0	0	33	16	0
Lane Group Flow (vph)	39	2576	3369	114	251	0
Turn Type	Prot	NA	NA	Perm	Prot	
Protected Phases	5	2	6		4	
Permitted Phases				6		
Actuated Green, G (s)	6.6	122.4	111.8	111.8	26.9	
Effective Green, g (s)	6.6	122.4	111.8	111.8	26.9	
Actuated g/C Ratio	0.04	0.77	0.70	0.70	0.17	
Clearance Time (s)	4.4	5.8	5.4	5.4	4.9	
Vehicle Extension (s)	2.0	4.6	5.2	5.2	2.0	
Lane Grp Cap (vph)	73	3890	3553	1106	287	
v/s Ratio Prot	0.02	c0.51	c0.66		c0.15	
v/s Ratio Perm				0.07		
v/c Ratio	0.53	0.66	0.95	0.10	0.88	
Uniform Delay, d1	75.2	9.0	21.5	7.8	64.9	
Progression Factor	1.00	1.00	0.97	0.59	1.00	
Incremental Delay, d2	3.7	0.9	4.7	0.1	23.7	
Delay (s)	78.9	9.9	25.6	4.7	88.6	
Level of Service	E	A	C	A	F	
Approach Delay (s)		10.9	24.7		88.6	
Approach LOS		B	C		F	

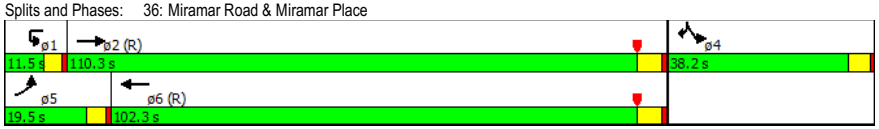
Intersection Summary			
HCM 2000 Control Delay	21.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.93		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	14.7
Intersection Capacity Utilization	79.5%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBU	WBT	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	30	2336	9	3038	181	62
Future Volume (vph)	30	2336	9	3038	181	62
Turn Type	Prot	NA	Prot	NA	Prot	Prot
Protected Phases	5	2	1	6	4	4
Permitted Phases						
Detector Phase	5	2	1	6	4	4
Switch Phase						
Minimum Initial (s)	4.0	10.0	4.0	10.0	4.0	4.0
Minimum Split (s)	8.4	15.7	8.4	28.7	37.9	37.9
Total Split (s)	19.5	110.3	11.5	102.3	38.2	38.2
Total Split (%)	12.2%	68.9%	7.2%	63.9%	23.9%	23.9%
Yellow Time (s)	3.4	4.7	3.4	4.7	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.7	4.4	5.7	4.9	4.9
Lead/Lag	Lead	Lag	Lead	Lag		
Lead-Lag Optimize?	Yes	Yes	Yes	Yes		
Recall Mode	None	C-Max	None	C-Max	None	None

Intersection Summary
Cycle Length: 160
Actuated Cycle Length: 160
Offset: 54 (34%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 140
Control Type: Actuated-Coordinated

Splits and Phases: 36: Miramar Road & Miramar Place



Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Traffic Volume (vph)	30	2336	9	3038	86	181	62
Future Volume (vph)	30	2336	9	3038	86	181	62
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.7	4.4	5.7		4.9	4.9
Lane Util. Factor	1.00	0.91	1.00	0.91		0.97	0.91
Frt	1.00	1.00	1.00	1.00		0.99	0.85
Flt Protected	0.95	1.00	0.95	1.00		0.95	1.00
Satd. Flow (prot)	1770	5085	1770	5064		3429	1441
Flt Permitted	0.95	1.00	0.95	1.00		0.95	1.00
Satd. Flow (perm)	1770	5085	1770	5064		3429	1441
Peak-hour factor, PHF	0.89	0.89	0.92	0.96	0.96	0.82	0.82
Adj. Flow (vph)	34	2625	10	3165	90	221	76
RTOR Reduction (vph)	0	0	0	1	0	2	60
Lane Group Flow (vph)	34	2625	10	3254	0	227	8
Turn Type	Prot	NA	Prot	NA		Prot	Prot
Protected Phases	5	2	1	6		4	4
Permitted Phases							
Actuated Green, G (s)	7.4	123.9	2.6	119.1		18.5	18.5
Effective Green, g (s)	7.4	123.9	2.6	119.1		18.5	18.5
Actuated g/C Ratio	0.05	0.77	0.02	0.74		0.12	0.12
Clearance Time (s)	4.4	5.7	4.4	5.7		4.9	4.9
Vehicle Extension (s)	3.0	4.8	2.0	5.4		3.0	3.0
Lane Grp Cap (vph)	81	3937	28	3769		396	166
v/s Ratio Prot	c0.02	c0.52	0.01	c0.64		c0.07	0.01
v/s Ratio Perm							
v/c Ratio	0.42	0.67	0.36	0.86		0.57	0.05
Uniform Delay, d1	74.2	8.4	77.9	14.6		67.0	62.9
Progression Factor	0.91	0.74	0.93	0.67		1.00	1.00
Incremental Delay, d2	2.6	0.7	0.3	0.3		2.0	0.1
Delay (s)	69.9	6.9	73.0	10.1		69.0	63.0
Level of Service	E	A	E	B		E	E
Approach Delay (s)		7.7		10.3		67.7	
Approach LOS		A		B		E	

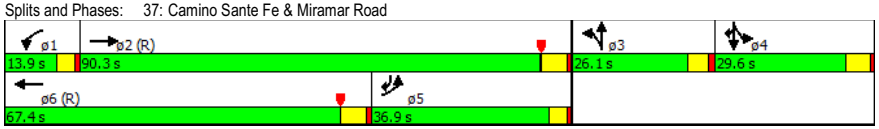
Intersection Summary			
HCM 2000 Control Delay	11.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	15.0
Intersection Capacity Utilization	75.3%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	937	1678	49	1349	133	53	208	15	1670
Future Volume (vph)	937	1678	49	1349	133	53	208	15	1670
Turn Type	Prot	NA	Prot	NA	Split	NA	Split	NA	pt+ov
Protected Phases	5	2	1	6	3	3	4	4	4 5
Permitted Phases									
Detector Phase	5	2	1	6	3	3	4	4	4 5
Switch Phase									
Minimum Initial (s)	12.0	10.0	4.0	10.0	4.0	4.0	4.0	4.0	
Minimum Split (s)	16.4	15.8	8.4	15.7	8.9	8.9	9.5	9.5	
Total Split (s)	36.9	90.3	13.9	67.4	26.1	26.1	29.6	29.6	
Total Split (%)	23.1%	56.4%	8.7%	42.1%	16.3%	16.3%	18.5%	18.5%	
Yellow Time (s)	3.4	4.8	3.4	4.7	3.9	3.9	4.5	4.5	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.4	5.8	4.4	5.7	4.9	4.9	5.5	5.5	
Lead/Lag	Lag	Lag	Lead	Lead	Lead	Lead	Lag	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	C-Max	None	C-Max	None	None	None	None	

Intersection Summary
Cycle Length: 160
Actuated Cycle Length: 160
Offset: 41 (26%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 37: Camino Sante Fe & Miramar Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	937	1678	132	49	1349	83	133	53	23	208	15	1670
Future Volume (vph)	937	1678	132	49	1349	83	133	53	23	208	15	1670
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.8		4.4	5.7		4.9	4.9		5.5	5.5	5.5
Lane Util. Factor	0.97	0.91		0.97	0.91		1.00	1.00		0.95	0.95	0.88
Frt	1.00	0.99		1.00	0.99		1.00	0.95		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	0.96	1.00
Satd. Flow (prot)	3433	5030		3433	5041		1770	1777		1681	1696	2787
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	0.96	1.00
Satd. Flow (perm)	3433	5030		3433	5041		1770	1777		1681	1696	2787
Peak-hour factor, PHF	0.94	0.94	0.94	0.91	0.91	0.91	0.80	0.80	0.80	0.95	0.95	0.95
Adj. Flow (vph)	997	1785	140	54	1482	91	166	66	29	219	16	1758
RTOR Reduction (vph)	0	5	0	0	4	0	0	10	0	0	0	67
Lane Group Flow (vph)	997	1920	0	54	1569	0	166	85	0	116	119	1691
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	pt+ov
Protected Phases	5	2		1	6		3	3		4	4	4 5
Permitted Phases												
Actuated Green, G (s)	33.4	88.1		6.0	60.8		18.2	18.2		27.1	27.1	60.5
Effective Green, g (s)	33.4	88.1		6.0	60.8		18.2	18.2		27.1	27.1	60.5
Actuated g/C Ratio	0.21	0.55		0.04	0.38		0.11	0.11		0.17	0.17	0.38
Clearance Time (s)	4.4	5.8		4.4	5.7		4.9	4.9		5.5	5.5	
Vehicle Extension (s)	2.0	4.8		2.0	5.4		2.0	2.0		2.8	2.8	
Lane Grp Cap (vph)	716	2769		128	1915		201	202		284	287	1053
v/s Ratio Prot	0.29	0.38		0.02	c0.31		c0.09	0.05		0.07	0.07	c0.61
v/s Ratio Perm												
v/c Ratio	1.39	0.69		0.42	0.82		0.83	0.42		0.41	0.41	1.61
Uniform Delay, d1	63.3	26.1		75.3	44.7		69.4	66.0		59.3	59.4	49.8
Progression Factor	0.88	0.67		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	183.4	1.2		0.8	4.1		22.3	0.5		0.9	0.9	277.3
Delay (s)	239.0	18.7		76.1	48.7		91.7	66.5		60.2	60.2	327.1
Level of Service	F	B		E	D		F	E		E	E	F
Approach Delay (s)		93.8			49.6			82.5			295.6	
Approach LOS		F			D			F			F	

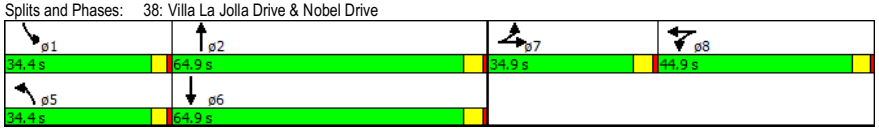
Intersection Summary			
HCM 2000 Control Delay	141.9	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.16		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	20.6
Intersection Capacity Utilization	107.1%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	4	132	10	4	719	465	891
Future Volume (vph)	4	132	10	4	719	465	891
Turn Type	NA	Split	NA	Prot	NA	Prot	NA
Protected Phases	7	8	8	5	2	1	6
Permitted Phases							
Detector Phase	7	8	8	5	2	1	6
Switch Phase							
Minimum Initial (s)	6.0	6.0	6.0	4.0	7.0	6.0	10.0
Minimum Split (s)	10.9	10.9	10.9	8.4	11.9	10.4	14.9
Total Split (s)	34.9	44.9	44.9	34.4	64.9	34.4	64.9
Total Split (%)	19.5%	25.1%	25.1%	19.2%	36.2%	19.2%	36.2%
Yellow Time (s)	3.9	3.9	3.9	3.4	3.9	3.4	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	4.9	4.4	4.9	4.4	4.9
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	Min	None	Min

Intersection Summary
Cycle Length: 179.1
Actuated Cycle Length: 130.9
Natural Cycle: 70
Control Type: Actuated-Uncoordinated

Splits and Phases: 38: Villa La Jolla Drive & Nobel Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	4	3	132	10	318	4	719	191	465	891	17
Future Volume (vph)	25	4	3	132	10	318	4	719	191	465	891	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9		4.9	4.9		4.4	4.9		4.4	4.9	
Lane Util. Factor		1.00		0.97	1.00		1.00	0.95		0.97	0.95	
Frt		0.99		1.00	0.85		1.00	0.97		1.00	1.00	
Flt Protected		0.96		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1769		3433	1592		1770	3428		3433	3529	
Flt Permitted		0.96		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1769		3433	1592		1770	3428		3433	3529	
Peak-hour factor, PHF	0.80	0.80	0.80	0.94	0.94	0.94	0.86	0.86	0.86	0.95	0.95	0.95
Adj. Flow (vph)	31	5	4	140	11	338	5	836	222	489	938	18
RTOR Reduction (vph)	0	3	0	0	293	0	0	11	0	0	0	0
Lane Group Flow (vph)	0	37	0	140	56	0	5	1047	0	489	956	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	7	7		8	8		5	2		1	6	
Permitted Phases												
Actuated Green, G (s)		14.6		18.0	18.0		1.0	57.2		25.6	81.8	
Effective Green, g (s)		14.6		18.0	18.0		1.0	57.2		25.6	81.8	
Actuated g/C Ratio		0.11		0.13	0.13		0.01	0.43		0.19	0.61	
Clearance Time (s)		4.9		4.9	4.9		4.4	4.9		4.4	4.9	
Vehicle Extension (s)		2.0		2.0	2.0		2.0	4.3		2.0	3.7	
Lane Grp Cap (vph)		192		459	213		13	1457		653	2146	
v/s Ratio Prot		c0.02		c0.04	0.04		0.00	c0.31		c0.14	0.27	
v/s Ratio Perm												
v/c Ratio		0.19		0.31	0.26		0.38	0.72		0.75	0.45	
Uniform Delay, d1		54.6		52.6	52.3		66.4	32.0		51.4	14.2	
Progression Factor		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.2		0.1	0.2		6.8	1.9		4.1	0.2	
Delay (s)		54.8		52.7	52.5		73.2	33.9		55.5	14.3	
Level of Service		D		D	D		E	C		E	B	
Approach Delay (s)		54.8			52.6			34.1			28.3	
Approach LOS		D			D			C			C	

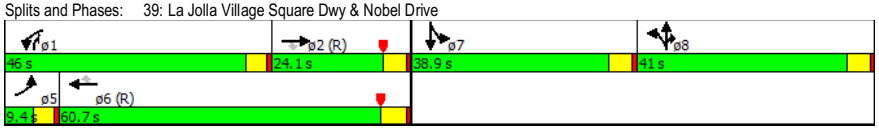
Intersection Summary			
HCM 2000 Control Delay	34.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	134.5	Sum of lost time (s)	19.1
Intersection Capacity Utilization	73.5%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	6	394	115	1246	292	376	83	82	1083	325	102
Future Volume (vph)	6	394	115	1246	292	376	83	82	1083	325	102
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Split	NA	pt+ov	Split	NA
Protected Phases	5	2		1	6		8	8	8 1	7	7
Permitted Phases			2			6					
Detector Phase	5	2	2	1	6	6	8	8	8 1	7	7
Switch Phase											
Minimum Initial (s)	4.0	7.0	7.0	4.0	7.0	7.0	8.0	8.0		8.0	8.0
Minimum Split (s)	9.4	12.0	12.0	8.4	12.4	12.4	12.9	12.9		38.9	38.9
Total Split (s)	9.4	24.1	24.1	46.0	60.7	60.7	41.0	41.0		38.9	38.9
Total Split (%)	6.3%	16.1%	16.1%	30.7%	40.5%	40.5%	27.3%	27.3%		25.9%	25.9%
Yellow Time (s)	3.4	4.0	4.0	3.4	4.4	4.4	3.9	3.9		3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	4.4	5.0	5.0	4.4	5.4	5.4	4.9	4.9		4.9	4.9
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lag	Lag		Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	None		None	None

Intersection Summary
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 75 (50%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 39: La Jolla Village Square Dwy & Nobel Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	6	394	115	1246	292	376	83	82	1083	325	102	1
Future Volume (vph)	6	394	115	1246	292	376	83	82	1083	325	102	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.0	5.0	4.4	5.4	5.4	4.9	4.9	4.9	4.9	4.9	
Lane Util. Factor	1.00	0.95	1.00	0.97	0.95	1.00	0.95	0.95	1.00	0.95	0.95	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.97	
Satd. Flow (prot)	1770	3539	1583	3433	3539	1583	1681	1762	1583	1681	1723	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.97	
Satd. Flow (perm)	1770	3539	1583	3433	3539	1583	1681	1762	1583	1681	1723	
Peak-hour factor, PHF	0.80	0.80	0.80	0.90	0.90	0.90	0.88	0.88	0.88	0.86	0.86	0.86
Adj. Flow (vph)	8	492	144	1384	324	418	94	93	1231	378	119	1
RTOR Reduction (vph)	0	0	106	0	0	253	0	0	35	0	0	0
Lane Group Flow (vph)	8	493	38	1384	324	165	85	102	1196	246	252	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Split	NA	pt+ov	Split	NA	
Protected Phases	5	2		1	6		8	8	8 1	7	7	
Permitted Phases			2			6						
Actuated Green, G (s)	1.0	19.1	19.1	41.6	59.3	59.3	36.1	36.1	82.6	34.0	34.0	
Effective Green, g (s)	1.0	19.1	19.1	41.6	59.3	59.3	36.1	36.1	82.6	34.0	34.0	
Actuated g/C Ratio	0.01	0.13	0.13	0.28	0.40	0.40	0.24	0.24	0.55	0.23	0.23	
Clearance Time (s)	4.4	5.0	5.0	4.4	5.4	5.4	4.9	4.9		4.9	4.9	
Vehicle Extension (s)	2.0	4.1	4.1	2.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)	11	450	201	952	1399	625	404	424	871	381	390	
v/s Ratio Prot	0.00	c0.14		c0.40	0.09		0.05	0.06	c0.76	c0.15	0.15	
v/s Ratio Perm			0.02			0.10						
v/c Ratio	0.73	1.10	0.19	1.45	0.23	0.26	0.21	0.24	1.37	0.65	0.65	
Uniform Delay, d1	74.4	65.5	58.5	54.2	30.2	30.6	45.6	45.9	33.7	52.5	52.5	
Progression Factor	1.00	1.00	1.00	1.13	1.07	2.34	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	110.3	70.8	2.0	209.2	0.3	0.9	0.4	0.4	174.9	4.2	4.1	
Delay (s)	184.7	136.3	60.6	270.6	32.5	72.6	45.9	46.3	208.6	56.7	56.6	
Level of Service	F	F	E	F	C	E	D	D	F	E	E	
Approach Delay (s)		120.0			195.4			187.2			56.7	
Approach LOS		F			F			F			E	

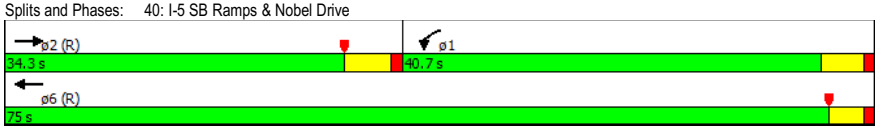
Intersection Summary				
HCM 2000 Control Delay	167.8	HCM 2000 Level of Service	F	
HCM 2000 Volume to Capacity ratio	1.22			
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	19.6	
Intersection Capacity Utilization	102.0%	ICU Level of Service	G	
Analysis Period (min)	15			

c Critical Lane Group

Lane Group	EBT	WBL	WBT
Lane Configurations			
Traffic Volume (vph)	1079	831	1943
Future Volume (vph)	1079	831	1943
Turn Type	NA	Prot	NA
Protected Phases	2	1	6
Permitted Phases			
Detector Phase	2	1	6
Switch Phase			
Minimum Initial (s)	13.0	5.0	1.0
Minimum Split (s)	18.1	9.7	5.5
Total Split (s)	34.3	40.7	75.0
Total Split (%)	45.7%	54.3%	100.0%
Yellow Time (s)	4.1	3.7	3.0
All-Red Time (s)	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0
Total Lost Time (s)	5.1	4.7	4.0
Lead/Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	
Recall Mode	C-Max	None	C-Max

Intersection Summary
Cycle Length: 75
Actuated Cycle Length: 75
Offset: 61 (81%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 40: I-5 SB Ramps & Nobel Drive



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1079	859	831	1943	0	0
Future Volume (vph)	1079	859	831	1943	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1		4.7	4.0		
Lane Util. Factor	0.95		0.97	0.95		
Frt	0.93		1.00	1.00		
Flt Protected	1.00		0.95	1.00		
Satd. Flow (prot)	3304		3433	3539		
Flt Permitted	1.00		0.95	1.00		
Satd. Flow (perm)	3304		3433	3539		
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.25	0.25
Adj. Flow (vph)	1136	904	875	2045	0	0
RTOR Reduction (vph)	59	0	0	0	0	0
Lane Group Flow (vph)	1981	0	875	2045	0	0
Turn Type	NA		Prot	NA		
Protected Phases	2		1	6		
Permitted Phases						
Actuated Green, G (s)	29.2		36.0	75.0		
Effective Green, g (s)	29.2		36.0	75.0		
Actuated g/C Ratio	0.39		0.48	1.00		
Clearance Time (s)	5.1		4.7	4.0		
Vehicle Extension (s)	3.0		3.0	3.0		
Lane Grp Cap (vph)	1286		1647	3539		
v/s Ratio Prot	c0.60		0.25	c0.58		
v/s Ratio Perm						
v/c Ratio	1.54		0.53	0.58		
Uniform Delay, d1	22.9		13.6	0.0		
Progression Factor	1.26		0.86	1.00		
Incremental Delay, d2	243.5		0.1	0.2		
Delay (s)	272.4		11.8	0.2		
Level of Service	F		B	A		
Approach Delay (s)	272.4			3.7	0.0	
Approach LOS	F			A	A	

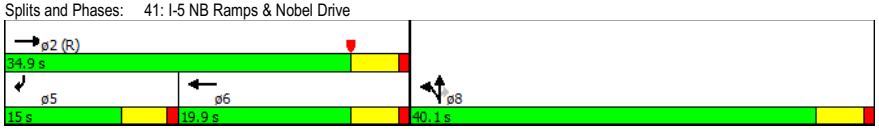
Intersection Summary			
HCM 2000 Control Delay	114.2	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.05		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	9.8
Intersection Capacity Utilization	89.3%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBT	WBT	NBL	NBT	NBR	SBR
Lane Configurations						
Traffic Volume (vph)	1151	2033	365	45	283	308
Future Volume (vph)	1151	2033	365	45	283	308
Turn Type	NA	NA	Split	NA	Perm	Prot
Protected Phases	2	6	8	8		5
Permitted Phases					8	
Detector Phase	2	6	8	8	8	5
Switch Phase						
Minimum Initial (s)	11.0	13.0	5.0	5.0	5.0	5.0
Minimum Split (s)	16.1	18.1	10.1	10.1	10.1	10.0
Total Split (s)	34.9	19.9	40.1	40.1	40.1	15.0
Total Split (%)	46.5%	26.5%	53.5%	53.5%	53.5%	20.0%
Yellow Time (s)	4.1	4.1	4.1	4.1	4.1	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.1	5.1	5.1	5.1	5.1	5.0
Lead/Lag		Lag				Lead
Lead-Lag Optimize?		Yes				Yes
Recall Mode	C-Max	None	Min	Min	Min	None

Intersection Summary
Cycle Length: 75
Actuated Cycle Length: 75
Offset: 70 (93%), Referenced to phase 2:EBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 41: I-5 NB Ramps & Nobel Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1151	0	0	2033	12	365	45	283	0	0	308
Future Volume (vph)	0	1151	0	0	2033	12	365	45	283	0	0	308
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.1			5.1		5.1	5.1	5.1			5.0
Lane Util. Factor		0.95			0.91		0.95	0.95	1.00			1.00
Frt		1.00			1.00		1.00	1.00	0.85			0.86
Flt Protected		1.00			1.00		0.95	0.96	1.00			1.00
Satd. Flow (prot)		3539			5081		1681	1703	1583			1611
Flt Permitted		1.00			1.00		0.95	0.96	1.00			1.00
Satd. Flow (perm)		3539			5081		1681	1703	1583			1611
Peak-hour factor, PHF	0.93	0.93	0.93	0.95	0.95	0.95	0.87	0.87	0.87	0.84	0.84	0.84
Adj. Flow (vph)	0	1238	0	0	2140	13	420	52	325	0	0	367
RTOR Reduction (vph)	0	0	0	0	1	0	0	0	76	0	0	203
Lane Group Flow (vph)	0	1238	0	0	2152	0	235	237	249	0	0	164
Turn Type		NA			NA		Split	NA	Perm			Prot
Protected Phases		2			6		8	8				5
Permitted Phases									8			
Actuated Green, G (s)		45.4			29.1		19.4	19.4	19.4			11.3
Effective Green, g (s)		45.4			29.1		19.4	19.4	19.4			11.3
Actuated g/C Ratio		0.61			0.39		0.26	0.26	0.26			0.15
Clearance Time (s)		5.1			5.1		5.1	5.1	5.1			5.0
Vehicle Extension (s)		2.0			2.0		2.0	2.0	2.0			2.0
Lane Grp Cap (vph)		2142			1971		434	440	409			242
v/s Ratio Prot		c0.35			c0.42		0.14	0.14				0.10
v/s Ratio Perm									c0.16			
v/c Ratio		0.58			1.09		0.54	0.54	0.61			0.68
Uniform Delay, d1		9.0			22.9		24.0	23.9	24.5			30.1
Progression Factor		0.15			1.31		1.00	1.00	1.00			1.00
Incremental Delay, d2		0.1			49.2		0.7	0.6	1.8			5.8
Delay (s)		1.4			79.3		24.7	24.6	26.2			35.9
Level of Service		A			E		C	C	C			D
Approach Delay (s)		1.4			79.3			25.3			35.9	
Approach LOS		A			E			C			D	

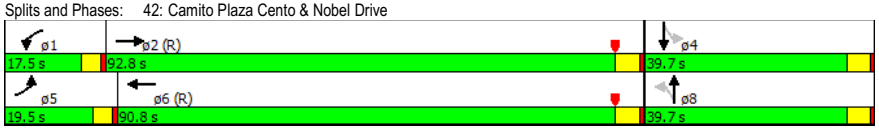
Intersection Summary			
HCM 2000 Control Delay	45.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.86		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	15.2
Intersection Capacity Utilization	82.6%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	86	1418	30	1695	113	10	9	3
Future Volume (vph)	86	1418	30	1695	113	10	9	3
Turn Type	Prot	NA	Prot	NA	Perm	NA	Perm	NA
Protected Phases	5	2	1	6		8		4
Permitted Phases					8		4	
Detector Phase	5	2	1	6	8	8	4	4
Switch Phase								
Minimum Initial (s)	4.0	10.0	4.0	10.0	6.0	6.0	6.0	6.0
Minimum Split (s)	9.5	25.2	9.5	25.2	37.9	37.9	37.9	37.9
Total Split (s)	19.5	92.8	17.5	90.8	39.7	39.7	39.7	39.7
Total Split (%)	13.0%	61.9%	11.7%	60.5%	26.5%	26.5%	26.5%	26.5%
Yellow Time (s)	3.4	4.2	3.4	4.2	3.9	3.9	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	4.4	5.2	4.4	5.2		4.9		4.9
Lead/Lag	Lead	Lag	Lead	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes				
Recall Mode	None	C-Max	None	C-Max	None	None	None	None

Intersection Summary
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 101 (67%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 42: Camito Plaza Cento & Nobel Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	86	1418	52	30	1695	37	113	10	75	9	3	52
Future Volume (vph)	86	1418	52	30	1695	37	113	10	75	9	3	52
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.2		4.4	5.2			4.9			4.9	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Frt	1.00	0.99		1.00	1.00			0.95			0.89	
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.99	
Satd. Flow (prot)	1770	5058		1770	5069			1719			1647	
Flt Permitted	0.95	1.00		0.95	1.00			0.75			0.95	
Satd. Flow (perm)	1770	5058		1770	5069			1318			1573	
Peak-hour factor, PHF	0.96	0.96	0.96	0.95	0.95	0.95	0.82	0.82	0.82	0.80	0.80	0.80
Adj. Flow (vph)	90	1477	54	32	1784	39	138	12	91	11	4	65
RTOR Reduction (vph)	0	2	0	0	1	0	0	15	0	0	52	0
Lane Group Flow (vph)	90	1529	0	32	1822	0	0	226	0	0	28	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8			4		
Actuated Green, G (s)	12.3	100.8		5.7	94.2			29.0			29.0	
Effective Green, g (s)	12.3	100.8		5.7	94.2			29.0			29.0	
Actuated g/C Ratio	0.08	0.67		0.04	0.63			0.19			0.19	
Clearance Time (s)	4.4	5.2		4.4	5.2			4.9			4.9	
Vehicle Extension (s)	3.0	5.0		3.0	4.5			2.5			2.0	
Lane Grp Cap (vph)	145	3398		67	3183			254			304	
v/s Ratio Prot	c0.05	0.30		0.02	c0.36							
v/s Ratio Perm								c0.17			0.02	
v/c Ratio	0.62	0.45		0.48	0.57			0.89			0.09	
Uniform Delay, d1	66.6	11.6		70.7	16.2			58.9			49.7	
Progression Factor	0.88	0.83		1.00	1.00			1.00			1.00	
Incremental Delay, d2	6.9	0.4		5.3	0.8			28.8			0.0	
Delay (s)	65.5	10.0		76.0	17.0			87.8			49.7	
Level of Service	E	A		E	B			F			D	
Approach Delay (s)		13.1			18.0			87.8			49.7	
Approach LOS		B			B			F			D	

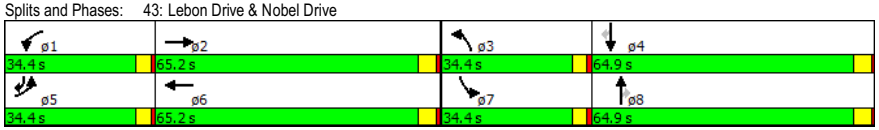
Intersection Summary			
HCM 2000 Control Delay	21.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	14.5
Intersection Capacity Utilization	68.5%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	130	881	131	1026	194	191	63	109	315	294
Future Volume (vph)	130	881	131	1026	194	191	63	109	315	294
Turn Type	Prot	NA	Prot	NA	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	5	2	1	6	3	8		7	4	5
Permitted Phases							8			4
Detector Phase	5	2	1	6	3	8	8	7	4	5
Switch Phase										
Minimum Initial (s)	4.0	10.0	4.0	10.0	4.0	8.0	8.0	10.0	10.0	4.0
Minimum Split (s)	8.4	15.2	8.4	15.2	8.4	12.9	12.9	14.4	14.9	8.4
Total Split (s)	34.4	65.2	34.4	65.2	34.4	64.9	64.9	34.4	64.9	34.4
Total Split (%)	17.3%	32.8%	17.3%	32.8%	17.3%	32.6%	32.6%	17.3%	32.6%	17.3%
Yellow Time (s)	3.4	4.2	3.4	4.2	3.4	3.9	3.9	3.4	3.9	3.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.2	4.4	5.2	4.4	4.9	4.9	4.4	4.9	4.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 198.9
Actuated Cycle Length: 129.7
Natural Cycle: 60
Control Type: Actuated-Uncoordinated

Splits and Phases: 43: Lebon Drive & Nobel Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	130	881	227	131	1026	73	194	191	63	109	315	294
Future Volume (vph)	130	881	227	131	1026	73	194	191	63	109	315	294
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.2		4.4	5.2		4.4	4.9	4.9	4.4	4.9	4.4
Lane Util. Factor	0.97	0.91		1.00	0.91		0.97	0.95	1.00	0.97	0.95	1.00
Frt	1.00	0.97		1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	4929		1770	5035		3433	3539	1583	3433	3539	1583
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	4929		1770	5035		3433	3539	1583	3433	3539	1583
Peak-hour factor, PHF	0.88	0.88	0.88	0.91	0.91	0.91	0.96	0.96	0.96	0.80	0.80	0.80
Adj. Flow (vph)	148	1001	258	144	1127	80	202	199	66	136	394	368
RTOR Reduction (vph)	0	20	0	0	3	0	0	0	49	0	0	45
Lane Group Flow (vph)	148	1239	0	144	1204	0	202	199	17	136	394	323
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	5	2		1	6		3	8		7	4	5
Permitted Phases									8			4
Actuated Green, G (s)	10.7	49.6		15.9	54.8		12.9	33.2	33.2	11.4	31.7	42.4
Effective Green, g (s)	10.7	49.6		15.9	54.8		12.9	33.2	33.2	11.4	31.7	42.4
Actuated g/C Ratio	0.08	0.38		0.12	0.42		0.10	0.26	0.26	0.09	0.25	0.33
Clearance Time (s)	4.4	5.2		4.4	5.2		4.4	4.9	4.9	4.4	4.9	4.4
Vehicle Extension (s)	2.0	4.5		2.0	4.5		2.0	6.4	6.4	2.0	5.5	2.0
Lane Grp Cap (vph)	284	1895		218	2138		343	910	407	303	869	520
v/s Ratio Prot	0.04	c0.25		c0.08	0.24		c0.06	0.06		0.04	0.11	c0.05
v/s Ratio Perm									0.01			0.15
v/c Ratio	0.52	0.65		0.66	0.56		0.59	0.22	0.04	0.45	0.45	0.62
Uniform Delay, d1	56.7	32.6		54.0	28.0		55.5	37.7	36.0	55.8	41.3	36.5
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.8	1.0		5.7	0.5		1.7	0.4	0.1	0.4	0.9	1.7
Delay (s)	57.5	33.6		59.7	28.5		57.2	38.1	36.1	56.2	42.2	38.2
Level of Service	E	C		E	C		E	D	D	E	D	D
Approach Delay (s)		36.1			31.9			46.1			42.7	
Approach LOS		D			C			D			D	

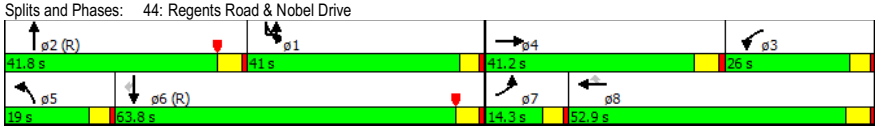
Intersection Summary			
HCM 2000 Control Delay	37.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	129.0	Sum of lost time (s)	18.9
Intersection Capacity Utilization	60.1%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	213	887	518	1047	137	152	600	403	1046	284
Future Volume (vph)	213	887	518	1047	137	152	600	403	1046	284
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Prot	NA	Perm
Protected Phases	7	4	3	8		5	2	1	6	
Permitted Phases					8					6
Detector Phase	7	4	3	8	8	5	2	1	6	6
Switch Phase										
Minimum Initial (s)	4.0	10.0	4.0	10.0	10.0	4.0	10.0	4.0	10.0	10.0
Minimum Split (s)	8.4	41.2	8.4	41.2	41.2	8.4	41.2	8.4	41.2	41.2
Total Split (s)	14.3	41.2	26.0	52.9	52.9	19.0	41.8	41.0	63.8	63.8
Total Split (%)	9.5%	27.5%	17.3%	35.3%	35.3%	12.7%	27.9%	27.3%	42.5%	42.5%
Yellow Time (s)	3.4	4.2	3.4	4.2	4.2	3.4	4.2	3.4	4.2	4.2
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.2	4.4	5.2	5.2	4.4	5.2	4.4	5.2	5.2
Lead/Lag	Lead	Lead	Lag	Lag	Lag	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Min	None	Min	Min	None	C-Max	None	C-Max	C-Max

Intersection Summary
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 49 (33%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 44: Regents Road & Nobel Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	213	887	135	518	1047	137	152	600	267	23	403	1046
Future Volume (vph)	213	887	135	518	1047	137	152	600	267	23	403	1046
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.2		4.4	5.2	5.2	4.4	5.2			4.4	5.2
Lane Util. Factor	0.97	0.91		0.97	0.95	1.00	1.00	0.91			1.00	0.95
Frt	1.00	0.98		1.00	1.00	0.85	1.00	0.95			1.00	1.00
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00			0.95	1.00
Satd. Flow (prot)	3433	4984		3433	3539	1583	1770	4851			1770	3539
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00			0.95	1.00
Satd. Flow (perm)	3433	4984		3433	3539	1583	1770	4851			1770	3539
Peak-hour factor, PHF	0.94	0.94	0.94	0.91	0.91	0.91	0.95	0.95	0.95	0.92	0.82	0.82
Adj. Flow (vph)	227	944	144	569	1151	151	160	632	281	25	491	1276
RTOR Reduction (vph)	0	14	0	0	0	80	0	54	0	0	0	0
Lane Group Flow (vph)	227	1074	0	569	1151	71	160	859	0	0	516	1276
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA		Prot	Prot	NA
Protected Phases	7	4		3	8		5	2		1	1	6
Permitted Phases						8						
Actuated Green, G (s)	9.9	35.6		22.0	47.7	47.7	14.6	36.6			36.6	58.6
Effective Green, g (s)	9.9	35.6		22.0	47.7	47.7	14.6	36.6			36.6	58.6
Actuated g/C Ratio	0.07	0.24		0.15	0.32	0.32	0.10	0.24			0.24	0.39
Clearance Time (s)	4.4	5.2		4.4	5.2	5.2	4.4	5.2			4.4	5.2
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0			3.0	3.0
Lane Grp Cap (vph)	226	1182		503	1125	503	172	1183			431	1382
v/s Ratio Prot	0.07	c0.22		c0.17	c0.33		c0.09	0.18			c0.29	c0.36
v/s Ratio Perm						0.04						
v/c Ratio	1.00	0.91		1.13	1.02	0.14	0.93	0.73			1.20	0.92
Uniform Delay, d1	70.0	55.6		64.0	51.1	36.5	67.2	52.1			56.7	43.6
Progression Factor	1.00	1.00		0.70	0.63	0.13	1.00	1.00			0.73	0.87
Incremental Delay, d2	61.0	10.2		77.6	29.9	0.1	48.6	3.9			96.6	4.6
Delay (s)	131.1	65.8		122.3	61.9	5.0	115.8	56.0			138.1	42.3
Level of Service	F	E		F	E	A	F	E			F	D
Approach Delay (s)		77.1			75.7			64.9				62.7
Approach LOS		E			E			E				E

Intersection Summary			
HCM 2000 Control Delay	69.8	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.04		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	19.2
Intersection Capacity Utilization	92.2%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	284
Future Volume (vph)	284
Ideal Flow (vphpl)	1900
Total Lost time (s)	5.2
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1583
Flt Permitted	1.00
Satd. Flow (perm)	1583
Peak-hour factor, PHF	0.82
Adj. Flow (vph)	346
RTOR Reduction (vph)	72
Lane Group Flow (vph)	274
Turn Type	Perm
Protected Phases	
Permitted Phases	6
Actuated Green, G (s)	58.6
Effective Green, g (s)	58.6
Actuated g/C Ratio	0.39
Clearance Time (s)	5.2
Vehicle Extension (s)	3.0
Lane Grp Cap (vph)	618
v/s Ratio Prot	
v/s Ratio Perm	0.17
v/c Ratio	0.44
Uniform Delay, d1	33.7
Progression Factor	0.74
Incremental Delay, d2	0.8
Delay (s)	25.6
Level of Service	C
Approach Delay (s)	
Approach LOS	

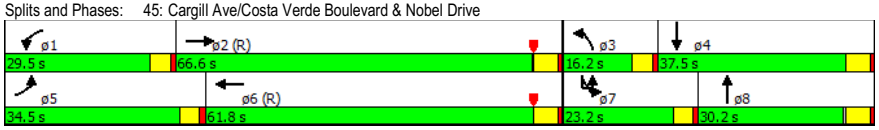
Intersection Summary

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	391	898	90	1061	61	57	204	71
Future Volume (vph)	391	898	90	1061	61	57	204	71
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	5	2	1	6	3	8	7	4
Permitted Phases								
Detector Phase	5	2	1	6	3	8	7	4
Switch Phase								
Minimum Initial (s)	4.0	25.0	4.0	25.0	4.0	25.0	4.0	25.0
Minimum Split (s)	8.4	30.2	8.4	30.2	8.4	30.2	8.4	30.2
Total Split (s)	34.5	66.6	29.5	61.8	16.2	30.2	23.2	37.5
Total Split (%)	23.0%	44.4%	19.7%	41.2%	10.8%	20.1%	15.5%	25.0%
Yellow Time (s)	3.4	4.2	3.4	4.2	3.4	4.2	3.4	4.2
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.2	4.4	5.2	4.4	5.2	4.4	5.2
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	Max	None	Max

Intersection Summary

Cycle Length: 150
Actuated Cycle Length: 150
Offset: 145 (97%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 130
Control Type: Actuated-Coordinated

Splits and Phases: 45: Cargill Ave/Costa Verde Boulevard & Nobel Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	391	898	72	90	1061	158	61	57	50	4	204	71
Future Volume (vph)	391	898	72	90	1061	158	61	57	50	4	204	71
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.2		4.4	5.2		4.4	5.2			4.4	5.2
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	1.00			1.00	1.00
Frt	1.00	0.99		1.00	0.98		1.00	0.93			1.00	0.88
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			0.95	1.00
Satd. Flow (prot)	1770	5029		1770	4986		1770	1733			1770	1646
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00			0.95	1.00
Satd. Flow (perm)	1770	5029		1770	4986		1770	1733			1770	1646
Peak-hour factor, PHF	0.95	0.95	0.95	0.88	0.88	0.88	0.83	0.83	0.83	0.92	0.87	0.87
Adj. Flow (vph)	412	945	76	102	1206	180	73	69	60	4	234	82
RTOR Reduction (vph)	0	5	0	0	13	0	0	21	0	0	0	81
Lane Group Flow (vph)	412	1016	0	102	1373	0	73	108	0	0	238	283
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	Prot	NA
Protected Phases	5	2		1	6		3	8		7	7	4
Permitted Phases												
Actuated Green, G (s)	30.1	73.7		13.0	56.6		9.8	25.3			18.8	34.3
Effective Green, g (s)	30.1	73.7		13.0	56.6		9.8	25.3			18.8	34.3
Actuated g/C Ratio	0.20	0.49		0.09	0.38		0.07	0.17			0.13	0.23
Clearance Time (s)	4.4	5.2		4.4	5.2		4.4	5.2			4.4	5.2
Vehicle Extension (s)	2.0	4.5		2.0	4.5		2.0	4.5			2.0	4.5
Lane Grp Cap (vph)	355	2470		153	1881		115	292			221	376
v/s Ratio Prot	c0.23	0.20		0.06	c0.28		0.04	0.06			c0.13	c0.17
v/s Ratio Perm												
v/c Ratio	1.16	0.41		0.67	0.73		0.63	0.37			1.08	0.75
Uniform Delay, d1	59.9	24.3		66.4	40.1		68.4	55.3			65.6	53.9
Progression Factor	1.27	0.31		1.47	0.23		1.00	1.00			1.00	1.00
Incremental Delay, d2	82.2	0.2		3.6	1.1		8.1	3.6			82.5	13.0
Delay (s)	158.6	7.6		101.0	10.2		76.5	58.9			148.1	66.9
Level of Service	F	A		F	B		E	E			F	E
Approach Delay (s)		51.0			16.4			65.2				99.0
Approach LOS		D			B			E				F

Intersection Summary

HCM 2000 Control Delay	45.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	19.2
Intersection Capacity Utilization	94.0%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	245
Future Volume (vph)	245
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.87
Adj. Flow (vph)	282
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

Intersection Summary

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	299	741	26	1710	22	6	101	0
Future Volume (vph)	299	741	26	1710	22	6	101	0
Turn Type	Prot	NA	Prot	NA	Perm	NA	Perm	NA
Protected Phases	5	2	1	6		8		4
Permitted Phases					8		4	
Detector Phase	5	2	1	6	8	8	4	4
Switch Phase								
Minimum Initial (s)	4.0	7.0	4.0	7.0	4.0	4.0	4.0	4.0
Minimum Split (s)	9.5	19.0	9.5	28.9	32.9	32.9	32.9	32.9
Total Split (s)	31.2	100.3	11.0	80.1	33.0	33.0	33.0	33.0
Total Split (%)	21.6%	69.5%	7.6%	55.5%	22.9%	22.9%	22.9%	22.9%
Yellow Time (s)	3.4	4.0	3.4	3.9	3.9	3.9	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.4	5.0	4.4	4.9		4.9	4.9	4.9
Lead/Lag	Lead	Lag	Lead	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes				
Recall Mode	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 144.3
Actuated Cycle Length: 135.1
Natural Cycle: 150
Control Type: Actuated-Uncoordinated

Splits and Phases: 46: Lombard Place & Nobel Drive

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	299	741	26	26	1710	121	22	6	8	101	0	278
Future Volume (vph)	299	741	26	26	1710	121	22	6	8	101	0	278
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.0		4.4	4.9			4.9		4.9	4.9	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00		1.00	1.00	
Frt	1.00	0.99		1.00	0.99			0.97		1.00	0.85	
Flt Protected	0.95	1.00		0.95	1.00			0.97		0.95	1.00	
Satd. Flow (prot)	1770	3521		1770	3504			1755		1770	1583	
Flt Permitted	0.95	1.00		0.95	1.00			0.17		0.76	1.00	
Satd. Flow (perm)	1770	3521		1770	3504			314		1423	1583	
Peak-hour factor, PHF	0.89	0.89	0.89	0.90	0.90	0.90	0.80	0.80	0.80	0.80	0.80	0.80
Adj. Flow (vph)	336	833	29	29	1900	134	28	8	10	126	0	348
RTOR Reduction (vph)	0	1	0	0	3	0	0	8	0	0	221	0
Lane Group Flow (vph)	336	861	0	29	2031	0	0	38	0	126	127	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8			4		
Actuated Green, G (s)	26.9	100.3		3.8	77.3			18.5		18.5	18.5	
Effective Green, g (s)	26.9	100.3		3.8	77.3			18.5		18.5	18.5	
Actuated g/C Ratio	0.20	0.73		0.03	0.56			0.14		0.14	0.14	
Clearance Time (s)	4.4	5.0		4.4	4.9			4.9		4.9	4.9	
Vehicle Extension (s)	2.0	3.7		2.0	4.4			2.0		2.0	2.0	
Lane Grp Cap (vph)	347	2579		49	1978			42		192	213	
v/s Ratio Prot	c0.19	0.24		0.02	c0.58						0.08	
v/s Ratio Perm								c0.12		0.09		
v/c Ratio	0.97	0.33		0.59	1.03			0.91		0.66	0.59	
Uniform Delay, d1	54.6	6.5		65.8	29.8			58.4		56.2	55.7	
Progression Factor	1.00	1.00		1.00	1.00			1.00		1.00	1.00	
Incremental Delay, d2	39.2	0.1		12.1	27.4			101.4		6.0	2.9	
Delay (s)	93.8	6.6		77.9	57.2			159.8		62.2	58.6	
Level of Service	F	A		E	E			F		E	E	
Approach Delay (s)		31.0			57.5			159.8			59.6	
Approach LOS		C			E			F			E	

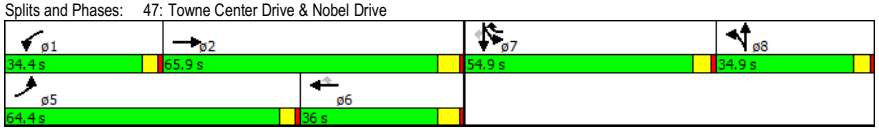
Intersection Summary			
HCM 2000 Control Delay	50.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.00		
Actuated Cycle Length (s)	136.9	Sum of lost time (s)	14.3
Intersection Capacity Utilization	100.5%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	371	500	234	1126	39	31	49	262	691
Future Volume (vph)	371	500	234	1126	39	31	49	262	691
Turn Type	Prot	NA	Prot	NA	pm+ov	NA	Split	NA	Perm
Protected Phases	5	2	1	6	7	8	7	7	
Permitted Phases					6				7
Detector Phase	5	2	1	6	7	8	7	7	7
Switch Phase									
Minimum Initial (s)	4.0	7.0	4.0	7.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.4	12.9	8.4	13.0	8.9	8.9	8.9	8.9	8.9
Total Split (s)	64.4	65.9	34.4	36.0	54.9	34.9	54.9	54.9	54.9
Total Split (%)	33.9%	34.6%	18.1%	18.9%	28.9%	18.3%	28.9%	28.9%	28.9%
Yellow Time (s)	3.4	4.9	3.4	5.0	3.9	3.9	3.9	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.9	4.4	6.0	4.9	4.9	4.9	4.9	4.9
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 190.2
Actuated Cycle Length: 126.8
Natural Cycle: 90
Control Type: Actuated-Uncoordinated

Splits and Phases: 47: Towne Center Drive & Nobel Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	371	500	71	234	1126	39	49	31	24	49	262	691
Future Volume (vph)	371	500	71	234	1126	39	49	31	24	49	262	691
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.9		4.4	6.0	4.9		4.9		4.9	4.9	4.9
Lane Util. Factor	0.97	0.95		1.00	0.91	1.00		0.95		1.00	1.00	1.00
Frt	1.00	0.98		1.00	1.00	0.85		0.97		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.98		0.95	1.00	1.00
Satd. Flow (prot)	3433	3473		1770	5085	1583		3338		1770	1863	1583
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.98		0.95	1.00	1.00
Satd. Flow (perm)	3433	3473		1770	5085	1583		3338		1770	1863	1583
Peak-hour factor, PHF	0.90	0.90	0.90	0.87	0.87	0.87	0.80	0.80	0.80	0.86	0.86	0.86
Adj. Flow (vph)	412	556	79	269	1294	45	61	39	30	57	305	803
RTOR Reduction (vph)	0	7	0	0	0	18	0	17	0	0	0	502
Lane Group Flow (vph)	412	628	0	269	1294	27	0	113	0	57	305	301
Turn Type	Prot	NA		Prot	NA	pm+ov	Split	NA		Split	NA	Perm
Protected Phases	5	2		1	6	7	8	8		7	7	
Permitted Phases						6						7
Actuated Green, G (s)	21.2	33.9		27.5	40.1	75.4		9.3		35.3	35.3	35.3
Effective Green, g (s)	21.2	33.9		27.5	40.1	75.4		9.3		35.3	35.3	35.3
Actuated g/C Ratio	0.17	0.27		0.22	0.32	0.60		0.07		0.28	0.28	0.28
Clearance Time (s)	4.4	5.9		4.4	6.0	4.9		4.9		4.9	4.9	4.9
Vehicle Extension (s)	2.0	4.9		2.0	3.3	4.0		2.0		4.0	4.0	4.0
Lane Grp Cap (vph)	577	933		386	1617	946		246		495	521	443
v/s Ratio Prot	0.12	0.18		c0.15	c0.25	0.01		c0.03		0.03	0.16	
v/s Ratio Perm						0.01						c0.19
v/c Ratio	0.71	0.67		0.70	0.80	0.03		0.46		0.12	0.59	0.68
Uniform Delay, d1	49.6	41.2		45.5	39.3	10.4		56.0		33.8	39.1	40.4
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00
Incremental Delay, d2	3.5	2.5		4.4	3.0	0.0		0.5		0.1	2.0	4.5
Delay (s)	53.1	43.6		49.8	42.3	10.4		56.5		33.9	41.1	44.9
Level of Service	D	D		D	D	B		E		C	D	D
Approach Delay (s)		47.3			42.7			56.5			43.3	
Approach LOS		D			D			E			D	

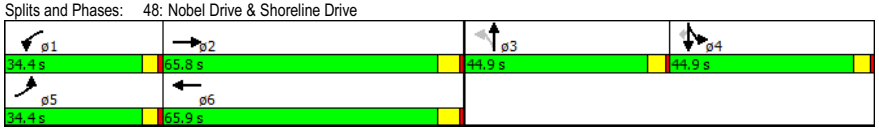
Intersection Summary			
HCM 2000 Control Delay	44.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	126.1	Sum of lost time (s)	20.2
Intersection Capacity Utilization	81.0%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	73	425	47	1236	21	6	74	8	46
Future Volume (vph)	73	425	47	1236	21	6	74	8	46
Turn Type	Prot	NA	Prot	NA	Perm	NA	Split	NA	Perm
Protected Phases	5	2	1	6		3	4	4	
Permitted Phases					3				4
Detector Phase	5	2	1	6	3	3	4	4	4
Switch Phase									
Minimum Initial (s)	4.0	10.0	4.0	10.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.4	15.8	8.4	30.9	8.9	8.9	33.9	33.9	33.9
Total Split (s)	34.4	65.8	34.4	65.9	44.9	44.9	44.9	44.9	44.9
Total Split (%)	18.1%	34.6%	18.1%	34.7%	23.6%	23.6%	23.6%	23.6%	23.6%
Yellow Time (s)	3.4	4.8	3.4	4.9	3.9	3.9	3.9	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.8	4.4	5.9		4.9	4.9	4.9	4.9
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 190.1
Actuated Cycle Length: 145.2
Natural Cycle: 85
Control Type: Actuated-Uncoordinated

Splits and Phases: 48: Nobel Drive & Shoreline Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	73	425	48	47	1236	227	21	6	13	4	74	8
Future Volume (vph)	73	425	48	47	1236	227	21	6	13	4	74	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.8		4.4	5.9			4.9			4.9	4.9
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	1.00
Frt	1.00	0.98		1.00	0.98			0.96			1.00	1.00
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.95	1.00
Satd. Flow (prot)	1770	5008		1770	4967			1734			1770	1863
Flt Permitted	0.95	1.00		0.95	1.00			0.22			0.73	1.00
Satd. Flow (perm)	1770	5008		1770	4967			393			1358	1863
Peak-hour factor, PHF	0.91	0.91	0.91	0.88	0.88	0.88	0.93	0.93	0.93	0.92	0.80	0.80
Adj. Flow (vph)	80	467	53	53	1405	258	23	6	14	4	92	10
RTOR Reduction (vph)	0	6	0	0	12	0	0	11	0	0	0	0
Lane Group Flow (vph)	80	514	0	53	1651	0	0	32	0	0	97	10
Turn Type	Prot	NA		Prot	NA		Perm	NA			Split	NA
Protected Phases	5	2		1	6			3			4	4
Permitted Phases							3					
Actuated Green, G (s)	11.0	65.3		7.6	61.8			13.9			40.4	40.4
Effective Green, g (s)	11.0	65.3		7.6	61.8			13.9			40.4	40.4
Actuated g/C Ratio	0.07	0.44		0.05	0.42			0.09			0.27	0.27
Clearance Time (s)	4.4	5.8		4.4	5.9			4.9			4.9	4.9
Vehicle Extension (s)	2.0	4.6		2.0	4.4			2.0			2.0	2.0
Lane Grp Cap (vph)	132	2221		91	2085			37			372	511
v/s Ratio Prot	c0.05	c0.10		0.03	c0.33							0.01
v/s Ratio Perm								c0.08			c0.07	
v/c Ratio	0.61	0.23		0.58	0.79			0.87			0.26	0.02
Uniform Delay, d1	66.0	25.4		68.2	37.1			65.7			41.7	39.0
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	1.00
Incremental Delay, d2	5.3	0.1		6.0	2.4			93.3			0.1	0.0
Delay (s)	71.3	25.5		74.2	39.5			159.0			41.9	39.0
Level of Service	E	C		E	D			F			D	D
Approach Delay (s)		31.6			40.6			159.0				40.7
Approach LOS		C			D			F				D

Intersection Summary			
HCM 2000 Control Delay	40.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	147.2	Sum of lost time (s)	20.1
Intersection Capacity Utilization	54.6%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

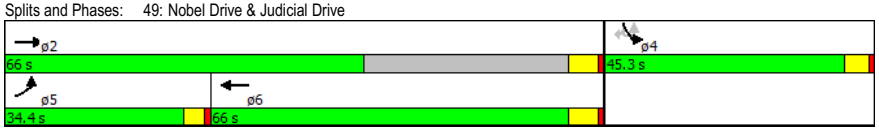
Movement	SBR
Lane Configurations	
Traffic Volume (vph)	46
Future Volume (vph)	46
Ideal Flow (vphpl)	1900
Total Lost time (s)	4.9
Lane Util. Factor	0.88
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	2787
Flt Permitted	1.00
Satd. Flow (perm)	2787
Peak-hour factor, PHF	0.80
Adj. Flow (vph)	58
RTOR Reduction (vph)	42
Lane Group Flow (vph)	16
Turn Type	Perm
Protected Phases	
Permitted Phases	4
Actuated Green, G (s)	40.4
Effective Green, g (s)	40.4
Actuated g/C Ratio	0.27
Clearance Time (s)	4.9
Vehicle Extension (s)	2.0
Lane Grp Cap (vph)	764
v/s Ratio Prot	
v/s Ratio Perm	0.01
v/c Ratio	0.02
Uniform Delay, d1	39.0
Progression Factor	1.00
Incremental Delay, d2	0.0
Delay (s)	39.0
Level of Service	D
Approach Delay (s)	
Approach LOS	

Intersection Summary

Lane Group	EBL	EBT	WBT	SBL	SBR
Lane Configurations					
Traffic Volume (vph)	24	515	1428	800	120
Future Volume (vph)	24	515	1428	800	120
Turn Type	Prot	NA	NA	Prot	Perm
Protected Phases	5	2	6	4	
Permitted Phases					4
Detector Phase	5	2	6	4	4
Switch Phase					
Minimum Initial (s)	4.0	10.0	10.0	7.0	7.0
Minimum Split (s)	11.4	16.0	16.0	12.3	12.3
Total Split (s)	34.4	66.0	66.0	45.3	45.3
Total Split (%)	23.6%	45.3%	45.3%	31.1%	31.1%
Yellow Time (s)	3.4	5.0	5.0	4.3	4.3
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	6.0	6.0	5.3	5.3
Lead/Lag	Lead		Lag		
Lead-Lag Optimize?	Yes		Yes		
Recall Mode	None	Min	Min	None	None

Intersection Summary
Cycle Length: 145.7
Actuated Cycle Length: 117.5
Natural Cycle: 80
Control Type: Actuated-Uncoordinated

Splits and Phases: 49: Nobel Drive & Judicial Drive



Movement	EBL	EBT	WBT	WBR	SBU	SBL	SBR
Lane Configurations							
Traffic Volume (vph)	24	515	1428	319	4	800	120
Future Volume (vph)	24	515	1428	319	4	800	120
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	6.0	6.0			5.3	5.3
Lane Util. Factor	0.97	0.91	0.91			0.97	1.00
Frt	1.00	1.00	0.97			1.00	0.85
Flt Protected	0.95	1.00	1.00			0.95	1.00
Satd. Flow (prot)	3433	5085	4946			3433	1583
Flt Permitted	0.95	1.00	1.00			0.95	1.00
Satd. Flow (perm)	3433	5085	4946			3433	1583
Peak-hour factor, PHF	0.94	0.94	0.92	0.92	0.92	0.84	0.84
Adj. Flow (vph)	26	548	1552	347	4	952	143
RTOR Reduction (vph)	0	0	21	0	0	0	72
Lane Group Flow (vph)	26	548	1878	0	0	956	71
Turn Type	Prot	NA	NA		Perm	Prot	Perm
Protected Phases	5	2	6			4	
Permitted Phases					4		4
Actuated Green, G (s)	3.4	67.9	60.1			40.1	40.1
Effective Green, g (s)	3.4	67.9	60.1			40.1	40.1
Actuated g/C Ratio	0.03	0.57	0.50			0.34	0.34
Clearance Time (s)	4.4	6.0	6.0			5.3	5.3
Vehicle Extension (s)	2.0	5.4	5.4			4.4	4.4
Lane Grp Cap (vph)	97	2894	2491			1153	532
v/s Ratio Prot	0.01	c0.11	c0.38				
v/s Ratio Perm						0.28	0.04
v/c Ratio	0.27	0.19	0.75			0.83	0.13
Uniform Delay, d1	56.7	12.4	23.7			36.4	27.5
Progression Factor	1.00	1.00	1.00			1.00	1.00
Incremental Delay, d2	0.5	0.1	1.7			5.5	0.2
Delay (s)	57.3	12.5	25.3			41.9	27.7
Level of Service	E	B	C			D	C
Approach Delay (s)		14.5	25.3			40.1	
Approach LOS		B	C			D	

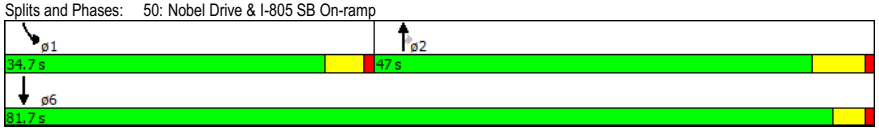
Intersection Summary			
HCM 2000 Control Delay	28.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	119.3	Sum of lost time (s)	15.7
Intersection Capacity Utilization	67.1%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	NBT	NBR	SBL	SBT
Lane Configurations				
Traffic Volume (vph)	623	545	138	1761
Future Volume (vph)	623	545	138	1761
Turn Type	NA	Perm	Prot	NA
Protected Phases	2		1	6
Permitted Phases		2		
Detector Phase	2	2	1	6
Switch Phase				
Minimum Initial (s)	12.0	12.0	5.0	1.0
Minimum Split (s)	19.0	19.0	9.7	5.5
Total Split (s)	47.0	47.0	34.7	81.7
Total Split (%)	57.5%	57.5%	42.5%	100.0%
Yellow Time (s)	5.0	5.0	3.7	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	4.7	4.0
Lead/Lag	Lag	Lag	Lead	
Lead-Lag Optimize?	Yes	Yes	Yes	
Recall Mode	Min	Min	None	Min

Intersection Summary
Cycle Length: 81.7
Actuated Cycle Length: 65
Natural Cycle: 40
Control Type: Actuated-Uncoordinated

Splits and Phases: 50: Nobel Drive & I-805 SB On-ramp



Movement	WBL	WBR	NBT	NBR	SBU	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	0	0	623	545	4	138	1761
Future Volume (vph)	0	0	623	545	4	138	1761
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			6.0	6.0		4.7	4.0
Lane Util. Factor			0.95	0.88		0.97	0.91
Frt			1.00	0.85		1.00	1.00
Flt Protected			1.00	1.00		0.95	1.00
Satd. Flow (prot)			3539	2787		3433	5085
Flt Permitted			1.00	1.00		0.13	1.00
Satd. Flow (perm)			3539	2787		480	5085
Peak-hour factor, PHF	0.25	0.25	0.97	0.97	0.92	0.93	0.93
Adj. Flow (vph)	0	0	642	562	4	148	1894
RTOR Reduction (vph)	0	0	0	353	0	0	0
Lane Group Flow (vph)	0	0	642	209	0	152	1894
Turn Type			NA	Perm		Prot	NA
Protected Phases			2			1	6
Permitted Phases				2			
Actuated Green, G (s)			24.2	24.2		30.1	65.0
Effective Green, g (s)			24.2	24.2		30.1	65.0
Actuated g/C Ratio			0.37	0.37		0.46	1.00
Clearance Time (s)			6.0	6.0		4.7	4.0
Vehicle Extension (s)			3.0	3.0		3.0	3.0
Lane Grp Cap (vph)			1317	1037		222	5085
v/s Ratio Prot			c0.18				0.37
v/s Ratio Perm				0.08		c0.32	
v/c Ratio			0.49	0.20		0.68	0.37
Uniform Delay, d1			15.6	13.8		13.7	0.0
Progression Factor			1.00	1.00		1.00	1.00
Incremental Delay, d2			0.3	0.1		8.4	0.0
Delay (s)			15.9	13.9		22.2	0.0
Level of Service			B	B		C	A
Approach Delay (s)	0.0		15.0				1.7
Approach LOS	A		B				A

Intersection Summary			
HCM 2000 Control Delay	6.6	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	10.7
Intersection Capacity Utilization	53.2%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	WBL	WBR	NBT	SBT	ø5
Lane Configurations					
Traffic Volume (vph)	822	227	651	970	
Future Volume (vph)	822	227	651	970	
Turn Type	Prot	Prot	NA	NA	
Protected Phases	8	1	2	6	5
Permitted Phases					
Detector Phase	8	1	2	6	
Switch Phase					
Minimum Initial (s)	5.0	5.0	16.0	11.0	5.0
Minimum Split (s)	11.1	11.1	23.0	18.0	9.7
Total Split (s)	36.1	19.7	47.0	47.0	24.7
Total Split (%)	33.5%	18.3%	43.6%	43.6%	23%
Yellow Time (s)	4.1	3.7	5.0	5.0	3.7
All-Red Time (s)	2.0	1.0	2.0	2.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.1	4.7	7.0	7.0	
Lead/Lag		Lead	Lag	Lag	Lead
Lead-Lag Optimize?		Yes	Yes	Yes	Yes
Recall Mode	None	None	Min	Min	None

Intersection Summary
Cycle Length: 107.8
Actuated Cycle Length: 78.9
Natural Cycle: 80
Control Type: Actuated-Uncoordinated

Splits and Phases: 51: Nobel Drive & I-805 N Off-ramps

Movement	WBL	WBR	NBU	NBT	NBR	SBU	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	822	227	0	651	0	4	0	970
Future Volume (vph)	822	227	0	651	0	4	0	970
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.1	4.7		7.0				7.0
Lane Util. Factor	0.97	0.88		0.95				0.91
Frt	1.00	0.85		1.00				1.00
Flt Protected	0.95	1.00		1.00				1.00
Satd. Flow (prot)	3433	2787		3539				5084
Flt Permitted	0.95	1.00		1.00				0.94
Satd. Flow (perm)	3433	2787		3539				4768
Peak-hour factor, PHF	0.86	0.86	0.92	0.95	0.95	0.92	0.91	0.91
Adj. Flow (vph)	956	264	0	685	0	4	0	1066
RTOR Reduction (vph)	0	210	0	0	0	0	0	0
Lane Group Flow (vph)	956	54	0	685	0	0	0	1070
Turn Type	Prot	Prot	Prot	NA				NA
Protected Phases	8	1	5	2				6
Permitted Phases								
Actuated Green, G (s)	29.7	6.4		24.9				36.0
Effective Green, g (s)	29.7	6.4		24.9				36.0
Actuated g/C Ratio	0.38	0.08		0.32				0.46
Clearance Time (s)	6.1	4.7		7.0				7.0
Vehicle Extension (s)	2.0	2.0		2.0				2.0
Lane Grp Cap (vph)	1293	226		1118				2178
v/s Ratio Prot	c0.28	0.02		c0.19				
v/s Ratio Perm								c0.22
v/c Ratio	0.74	0.24		0.61				0.49
Uniform Delay, d1	21.2	33.9		22.9				15.0
Progression Factor	1.00	1.00		1.00				1.00
Incremental Delay, d2	1.9	0.2		0.7				0.1
Delay (s)	23.1	34.1		23.6				15.1
Level of Service	C	C		C				B
Approach Delay (s)	25.5			23.6				15.1
Approach LOS	C			C				B

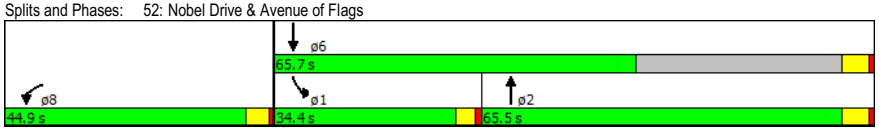
Intersection Summary			
HCM 2000 Control Delay	21.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	78.8	Sum of lost time (s)	17.8
Intersection Capacity Utilization	53.2%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	WBL	NBT	SBL	SBT
Lane Configurations				
Traffic Volume (vph)	10	1089	12	895
Future Volume (vph)	10	1089	12	895
Turn Type	Prot	NA	Prot	NA
Protected Phases	8	2	1	6
Permitted Phases				
Detector Phase	8	2	1	6
Switch Phase				
Minimum Initial (s)	4.0	7.0	4.0	7.0
Minimum Split (s)	28.9	26.5	9.5	12.7
Total Split (s)	44.9	65.5	34.4	65.7
Total Split (%)	31.0%	45.2%	23.8%	45.4%
Yellow Time (s)	3.9	4.5	3.4	4.7
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	5.5	4.4	5.7
Lead/Lag		Lag	Lead	
Lead-Lag Optimize?		Yes	Yes	
Recall Mode	None	Min	None	Min

Intersection Summary
Cycle Length: 144.8
Actuated Cycle Length: 57.9
Natural Cycle: 70
Control Type: Actuated-Uncoordinated

Splits and Phases: 52: Nobel Drive & Avenue of Flags



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	10	8	1089	8	12	895
Future Volume (vph)	10	8	1089	8	12	895
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9		5.5		4.4	5.7
Lane Util. Factor	1.00		0.95		1.00	0.95
Frt	0.94		1.00		1.00	1.00
Flt Protected	0.97		1.00		0.95	1.00
Satd. Flow (prot)	1705		3535		1770	3539
Flt Permitted	0.97		1.00		0.95	1.00
Satd. Flow (perm)	1705		3535		1770	3539
Peak-hour factor, PHF	0.80	0.80	0.91	0.91	0.94	0.94
Adj. Flow (vph)	12	10	1197	9	13	952
RTOR Reduction (vph)	10	0	0	0	0	0
Lane Group Flow (vph)	13	0	1206	0	13	952
Turn Type	Prot		NA		Prot	NA
Protected Phases	8		2		1	6
Permitted Phases						
Actuated Green, G (s)	1.9		47.0		1.0	52.2
Effective Green, g (s)	1.9		47.0		1.0	52.2
Actuated g/C Ratio	0.03		0.73		0.02	0.81
Clearance Time (s)	4.9		5.5		4.4	5.7
Vehicle Extension (s)	2.0		5.2		3.0	4.9
Lane Grp Cap (vph)	50		2567		27	2855
v/s Ratio Prot	c0.01		c0.34		0.01	c0.27
v/s Ratio Perm						
v/c Ratio	0.27		0.47		0.48	0.33
Uniform Delay, d1	30.7		3.7		31.6	1.7
Progression Factor	1.00		1.00		1.00	1.00
Incremental Delay, d2	1.0		0.3		12.9	0.1
Delay (s)	31.8		4.0		44.5	1.8
Level of Service	C		A		D	A
Approach Delay (s)	31.8		4.0			2.4
Approach LOS	C		A			A

Intersection Summary			
HCM 2000 Control Delay	3.6	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.47		
Actuated Cycle Length (s)	64.7	Sum of lost time (s)	14.8
Intersection Capacity Utilization	42.4%	ICU Level of Service	A
Analysis Period (min)	15		

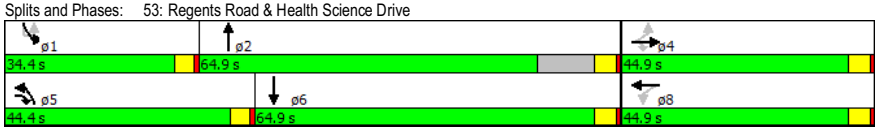
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBU	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	74	5	449	8	0	272	150	4	8	937
Future Volume (vph)	74	5	449	8	0	272	150	4	8	937
Turn Type	Perm	NA	pm+ov	Perm	NA	Prot	NA	custom	Prot	NA
Protected Phases		4	5		8	5	2		1	6
Permitted Phases	4		4	8				1		
Detector Phase	4	4	5	8	8	5	2	1	1	6
Switch Phase										
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	10.0	4.0	4.0	10.0
Minimum Split (s)	8.9	8.9	8.4	22.9	22.9	8.4	14.9	8.4	8.4	14.9
Total Split (s)	44.9	44.9	44.4	44.9	44.9	44.4	64.9	34.4	34.4	64.9
Total Split (%)	29.1%	29.1%	28.8%	29.1%	29.1%	28.8%	42.1%	22.3%	22.3%	42.1%
Yellow Time (s)	3.9	3.9	3.4	3.9	3.9	3.4	3.9	3.4	3.4	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)		4.9	4.4		4.9	4.4	4.9		4.4	4.9
Lead/Lag			Lead			Lead	Lag	Lead	Lead	Lag
Lead-Lag Optimize?			Yes			Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	Min	None	None	Min	None	None	None	None

Intersection Summary

Cycle Length: 154.2
Actuated Cycle Length: 103.6
Natural Cycle: 80
Control Type: Actuated-Uncoordinated

Splits and Phases: 53: Regents Road & Health Science Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	74	5	449	8	0	5	272	150	14	4	8	937
Future Volume (vph)	74	5	449	8	0	5	272	150	14	4	8	937
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9	4.4		4.9		4.4	4.9			4.4	4.9
Lane Util. Factor		1.00	1.00		1.00		1.00	0.95			1.00	0.95
Frt		1.00	0.85		0.95		1.00	0.99			1.00	1.00
Flt Protected		0.96	1.00		0.97		0.95	1.00			0.95	1.00
Satd. Flow (prot)		1779	1583		1715		1770	3493			1770	3522
Flt Permitted		0.73	1.00		0.83		0.95	1.00			0.62	1.00
Satd. Flow (perm)		1355	1583		1460		1770	3493			1164	3522
Peak-hour factor, PHF	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.92	0.82	0.82
Adj. Flow (vph)	92	6	561	10	0	6	340	188	18	4	10	1143
RTOR Reduction (vph)	0	0	12	0	14	0	0	3	0	0	0	1
Lane Group Flow (vph)	0	99	549	0	2	0	340	203	0	0	14	1180
Turn Type	Perm	NA	pm+ov	Perm	NA		Prot	NA		custom	Prot	NA
Protected Phases		4	5		8		5	2			1	6
Permitted Phases	4		4	8						1		
Actuated Green, G (s)		12.9	42.7		12.9		29.8	69.2			6.4	45.8
Effective Green, g (s)		12.9	42.7		12.9		29.8	69.2			6.4	45.8
Actuated g/C Ratio		0.13	0.42		0.13		0.29	0.67			0.06	0.45
Clearance Time (s)		4.9	4.4		4.9		4.4	4.9			4.4	4.9
Vehicle Extension (s)		2.0	2.0		2.0		2.0	3.8			2.0	3.8
Lane Grp Cap (vph)		170	658		183		513	2353			72	1570
v/s Ratio Prot			c0.24				0.19	0.06				c0.33
v/s Ratio Perm		0.07	0.10		0.00						0.01	
v/c Ratio		0.58	0.83		0.01		0.66	0.09			0.19	0.75
Uniform Delay, d1		42.4	26.8		39.3		32.0	5.8			45.7	23.7
Progression Factor		1.00	1.00		1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2		3.3	8.6		0.0		2.5	0.0			0.5	2.2
Delay (s)		45.6	35.4		39.3		34.5	5.8			46.2	25.9
Level of Service		D	D		D		C	A			D	C
Approach Delay (s)		37.0			39.3			23.7				26.1
Approach LOS		D			D			C				C

Intersection Summary

HCM 2000 Control Delay	28.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	102.7	Sum of lost time (s)	14.2
Intersection Capacity Utilization	69.9%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

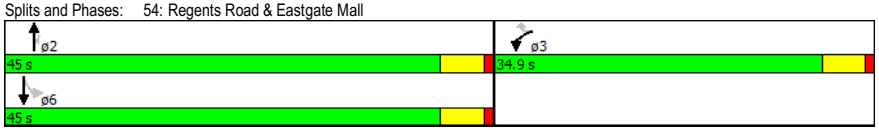
Movement	SBR
Lane Configurations	
Traffic Volume (vph)	31
Future Volume (vph)	31
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.82
Adj. Flow (vph)	38
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

Intersection Summary

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	457	89	354	155	223	1202
Future Volume (vph)	457	89	354	155	223	1202
Turn Type	Prot	Perm	NA	Perm	Perm	NA
Protected Phases	3		2			6
Permitted Phases		3		2	6	
Detector Phase	3	3	2	2	6	6
Switch Phase						
Minimum Initial (s)	4.0	4.0	7.0	7.0	7.0	7.0
Minimum Split (s)	8.9	8.9	12.0	12.0	12.0	12.0
Total Split (s)	34.9	34.9	45.0	45.0	45.0	45.0
Total Split (%)	43.7%	43.7%	56.3%	56.3%	56.3%	56.3%
Yellow Time (s)	3.9	3.9	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	5.0	5.0	5.0	5.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None	None	Min	Min	Min	Min

Intersection Summary
Cycle Length: 79.9
Actuated Cycle Length: 71.2
Natural Cycle: 50
Control Type: Actuated-Uncoordinated

Splits and Phases: 54: Regents Road & Eastgate Mall



Movement	WBL	WBR	NBT	NBR	SBU	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	457	89	354	155	4	223	1202
Future Volume (vph)	457	89	354	155	4	223	1202
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9	5.0	5.0		5.0	5.0
Lane Util. Factor	1.00	1.00	0.95	1.00		1.00	0.95
Frt	1.00	0.85	1.00	0.85		1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583		1770	3539
Flt Permitted	0.95	1.00	1.00	1.00		0.49	1.00
Satd. Flow (perm)	1770	1583	3539	1583		918	3539
Peak-hour factor, PHF	0.87	0.87	0.80	0.80	0.92	0.88	0.88
Adj. Flow (vph)	525	102	442	194	4	253	1366
RTOR Reduction (vph)	0	66	0	95	0	0	0
Lane Group Flow (vph)	525	36	443	99	0	257	1366
Turn Type	Prot	Perm	NA	Perm		Perm	NA
Protected Phases	3		2				6
Permitted Phases		3		2		6	
Actuated Green, G (s)	24.8	24.8	36.3	36.3		36.3	36.3
Effective Green, g (s)	24.8	24.8	36.3	36.3		36.3	36.3
Actuated g/C Ratio	0.35	0.35	0.51	0.51		0.51	0.51
Clearance Time (s)	4.9	4.9	5.0	5.0		5.0	5.0
Vehicle Extension (s)	2.0	2.0	3.4	3.4		3.5	3.5
Lane Grp Cap (vph)	618	552	1809	809		469	1809
v/s Ratio Prot	c0.30		0.13				c0.39
v/s Ratio Perm		0.02		0.06		0.28	
v/c Ratio	0.85	0.06	0.24	0.12		0.55	0.76
Uniform Delay, d1	21.4	15.4	9.7	9.0		11.8	13.8
Progression Factor	1.00	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	10.2	0.0	0.1	0.1		1.5	1.9
Delay (s)	31.6	15.4	9.8	9.1		13.2	15.7
Level of Service	C	B	A	A		B	B
Approach Delay (s)	28.9		9.6				15.3
Approach LOS	C		A				B

Intersection Summary			
HCM 2000 Control Delay	17.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	71.0	Sum of lost time (s)	9.9
Intersection Capacity Utilization	66.8%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBU	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	24	7	156	9	139	5	398	4	88	1474
Future Volume (vph)	24	7	156	9	139	5	398	4	88	1474
Turn Type	Perm	NA	Perm	NA	Perm	Prot	NA	custom	Prot	NA
Protected Phases		4		8		5	2		1	6
Permitted Phases	4		8		8			1		
Detector Phase	4	4	8	8	8	5	2	1	1	6
Switch Phase										
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	4.0	10.0	4.0	4.0	10.0
Minimum Split (s)	11.9	11.9	11.9	11.9	11.9	8.4	14.9	8.4	8.4	14.9
Total Split (s)	34.9	34.9	44.9	44.9	44.9	34.4	64.9	34.4	34.4	64.9
Total Split (%)	24.2%	24.2%	31.1%	31.1%	31.1%	23.9%	45.0%	23.9%	23.9%	45.0%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.9	3.4	3.9	3.4	3.4	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)		4.9		4.9	4.9	4.4	4.9		4.4	4.9
Lead/Lag						Lead	Lag	Lead	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	None	None	Min

Intersection Summary
Cycle Length: 144.2
Actuated Cycle Length: 91.3
Natural Cycle: 60
Control Type: Actuated-Uncoordinated

Splits and Phases: 55: Regents Road & Executive Drive

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	24	7	8	156	9	139	5	398	35	4	88	1474
Future Volume (vph)	24	7	8	156	9	139	5	398	35	4	88	1474
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9			4.9	4.9	4.4	4.9			4.4	4.9
Lane Util. Factor		1.00			1.00	1.00	1.00	0.95			1.00	0.95
Frt		0.97			1.00	0.85	1.00	0.99			1.00	1.00
Flt Protected		0.97			0.95	1.00	0.95	1.00			0.95	1.00
Satd. Flow (prot)		1758			1779	1583	1770	3496			1770	3524
Flt Permitted		0.74			0.70	1.00	0.95	1.00			0.13	1.00
Satd. Flow (perm)		1346			1307	1583	1770	3496			246	3524
Peak-hour factor, PHF	0.80	0.80	0.80	0.81	0.81	0.81	0.80	0.80	0.80	0.92	0.96	0.96
Adj. Flow (vph)	30	9	10	193	11	172	6	498	44	4	92	1535
RTOR Reduction (vph)	0	7	0	0	0	137	0	5	0	0	0	1
Lane Group Flow (vph)	0	42	0	0	204	35	6	537	0	0	96	1578
Turn Type	Perm	NA		Perm	NA	Perm	Prot	NA		custom	Prot	NA
Protected Phases		4			8		5	2			1	6
Permitted Phases	4			8		8				1		
Actuated Green, G (s)		19.1			19.1	19.1	1.0	31.3			30.3	60.6
Effective Green, g (s)		19.1			19.1	19.1	1.0	31.3			30.3	60.6
Actuated g/C Ratio		0.20			0.20	0.20	0.01	0.33			0.32	0.64
Clearance Time (s)		4.9			4.9	4.9	4.4	4.9			4.4	4.9
Vehicle Extension (s)		2.0			3.1	3.1	2.0	3.1			2.0	3.1
Lane Grp Cap (vph)		270			263	318	18	1153			78	2250
v/s Ratio Prot							0.00	0.15				c0.45
v/s Ratio Perm		0.03			c0.16	0.02					c0.39	
v/c Ratio		0.15			0.78	0.11	0.33	0.47			1.23	0.70
Uniform Delay, d1		31.2			35.9	31.0	46.6	25.2			32.3	11.2
Progression Factor		1.00			1.00	1.00	1.00	1.00			1.00	1.00
Incremental Delay, d2		0.1			13.4	0.2	3.9	0.3			176.3	1.0
Delay (s)		31.3			49.3	31.1	50.6	25.5			208.6	12.2
Level of Service		C			D	C	D	C			F	B
Approach Delay (s)		31.3			41.0			25.8				23.5
Approach LOS		C			D			C				C

Intersection Summary			
HCM 2000 Control Delay	26.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	94.9	Sum of lost time (s)	14.2
Intersection Capacity Utilization	70.3%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	42
Future Volume (vph)	42
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.96
Adj. Flow (vph)	44
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

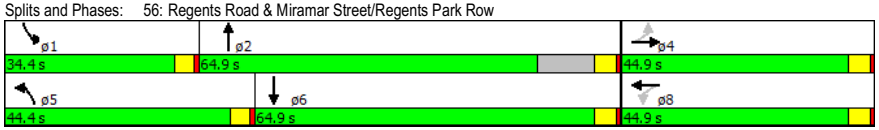
Intersection Summary

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	30	9	128	8	174	368	38	1308
Future Volume (vph)	30	9	128	8	174	368	38	1308
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	7.0	4.0	7.0
Minimum Split (s)	8.9	8.9	8.9	8.9	8.4	11.9	8.4	11.9
Total Split (s)	44.9	44.9	44.9	44.9	44.4	64.9	34.4	64.9
Total Split (%)	29.1%	29.1%	29.1%	29.1%	28.8%	42.1%	22.3%	42.1%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.4	3.9	3.4	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	4.9	4.9	4.4	4.9	4.4	4.9
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 154.2
Actuated Cycle Length: 134.3
Natural Cycle: 90
Control Type: Actuated-Uncoordinated

Splits and Phases: 56: Regents Road & Miramar Street/Regents Park Row



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	30	9	249	128	8	49	174	368	71	4	38	1308
Future Volume (vph)	30	9	249	128	8	49	174	368	71	4	38	1308
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9		4.9	4.9		4.4	4.9			4.4	4.9
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95			1.00	0.95
Frt	1.00	0.86		1.00	0.87		1.00	0.98			1.00	0.99
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			0.95	1.00
Satd. Flow (prot)	1770	1593		1770	1623		1770	3453			1770	3519
Flt Permitted	0.71	1.00		0.38	1.00		0.95	1.00			0.13	1.00
Satd. Flow (perm)	1324	1593		712	1623		1770	3453			248	3519
Peak-hour factor, PHF	0.87	0.87	0.87	0.80	0.80	0.80	0.84	0.84	0.84	0.92	0.89	0.89
Adj. Flow (vph)	34	10	286	160	10	61	207	438	85	4	43	1470
RTOR Reduction (vph)	0	201	0	0	43	0	0	12	0	0	0	2
Lane Group Flow (vph)	34	95	0	160	28	0	207	511	0	0	47	1525
Turn Type	Perm	NA		Perm	NA		Prot	NA			Prot	NA
Protected Phases		4			8		5	2			1	6
Permitted Phases	4			8								
Actuated Green, G (s)	40.1	40.1		40.1	40.1		19.9	50.0			30.0	60.1
Effective Green, g (s)	40.1	40.1		40.1	40.1		19.9	50.0			30.0	60.1
Actuated g/C Ratio	0.30	0.30		0.30	0.30		0.15	0.37			0.22	0.45
Clearance Time (s)	4.9	4.9		4.9	4.9		4.4	4.9			4.4	4.9
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	3.8			2.0	3.8
Lane Grp Cap (vph)	395	475		212	484		262	1285			55	1574
v/s Ratio Prot		0.06			0.02		0.12	0.15				c0.43
v/s Ratio Perm	0.03			c0.22							c0.19	
v/c Ratio	0.09	0.20		0.75	0.06		0.79	0.40			0.85	0.97
Uniform Delay, d1	33.9	35.1		42.6	33.6		55.2	31.1			50.1	36.2
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2	0.0	0.1		12.7	0.0		14.0	0.3			68.6	15.8
Delay (s)	33.9	35.2		55.3	33.6		69.2	31.3			118.6	52.0
Level of Service	C	D		E	C		E	C			F	D
Approach Delay (s)		35.1			48.6			42.0				54.0
Approach LOS		D			D			D				D

Intersection Summary

HCM 2000 Control Delay	48.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	134.3	Sum of lost time (s)	14.2
Intersection Capacity Utilization	86.3%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	51
Future Volume (vph)	51
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.89
Adj. Flow (vph)	57
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

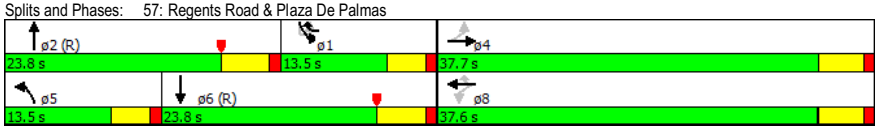
Intersection Summary

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBU	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	21	15	58	15	50	50	471	4	79	1842
Future Volume (vph)	21	15	58	15	50	50	471	4	79	1842
Turn Type	Perm	NA	Perm	NA	pm+ov	Prot	NA	custom	Prot	NA
Protected Phases		4		8	1!	5	2		1	6
Permitted Phases	4		8		8			1!		
Detector Phase	4	4	8	8	1	5	2	1	1	6
Switch Phase										
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	10.0	4.0	4.0	10.0
Minimum Split (s)	8.9	8.9	8.9	8.9	8.4	8.4	15.2	8.4	8.4	15.3
Total Split (s)	37.7	37.7	37.6	37.6	13.5	13.5	23.8	13.5	13.5	23.8
Total Split (%)	50.3%	50.3%	50.1%	50.1%	18.0%	18.0%	31.7%	18.0%	18.0%	31.7%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.4	3.4	4.2	3.4	3.4	4.3
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)		4.9		4.9	4.4	4.4	5.2		4.4	5.3
Lead/Lag					Lag	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	None	None	C-Max

Intersection Summary

Cycle Length: 75
Actuated Cycle Length: 75
Offset: 64 (85%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 75
Control Type: Actuated-Coordinated
! Phase conflict between lane groups.

Splits and Phases: 57: Regents Road & Plaza De Palmas



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	21	15	16	58	15	50	50	471	16	4	79	1842
Future Volume (vph)	21	15	16	58	15	50	50	471	16	4	79	1842
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9			4.9	4.4	4.4	5.2			4.4	5.3
Lane Util. Factor		1.00			1.00	1.00	1.00	0.91			1.00	0.95
Frt		0.96			1.00	0.85	1.00	1.00			1.00	1.00
Flt Protected		0.98			0.96	1.00	0.95	1.00			0.95	1.00
Satd. Flow (prot)		1749			1792	1583	1770	5060			1770	3523
Flt Permitted		0.87			0.73	1.00	0.95	1.00			0.41	1.00
Satd. Flow (perm)		1555			1369	1583	1770	5060			765	3523
Peak-hour factor, PHF	0.82	0.82	0.82	0.80	0.80	0.80	0.80	0.80	0.80	0.92	0.93	0.93
Adj. Flow (vph)	26	18	20	72	19	62	62	589	20	4	85	1981
RTOR Reduction (vph)	0	16	0	0	0	40	0	3	0	0	0	2
Lane Group Flow (vph)	0	48	0	0	92	23	63	606	0	0	89	2040
Turn Type	Perm	NA		Perm	NA	pm+ov	Prot	NA		custom	Prot	NA
Protected Phases		4			8	1!	5	2			1	6
Permitted Phases	4			8		8				1!		
Actuated Green, G (s)		16.4			16.4	27.3	4.9	33.2			10.9	39.1
Effective Green, g (s)		16.4			16.4	27.3	4.9	33.2			10.9	39.1
Actuated g/C Ratio		0.22			0.22	0.36	0.07	0.44			0.15	0.52
Clearance Time (s)		4.9			4.9	4.4	4.4	5.2			4.4	5.3
Vehicle Extension (s)		2.0			2.0	2.0	2.0	4.5			2.0	4.2
Lane Grp Cap (vph)		340			299	669	115	2239			111	1836
v/s Ratio Prot						0.00	c0.04	0.12				c0.58
v/s Ratio Perm		0.03			c0.07	0.01					0.12	
v/c Ratio		0.14			0.31	0.03	0.55	0.27			0.80	1.11
Uniform Delay, d1		23.6			24.5	15.4	34.0	13.2			31.0	17.9
Progression Factor		1.00			1.00	1.00	0.92	0.50			1.01	1.20
Incremental Delay, d2		0.1			0.2	0.0	1.9	0.2			3.6	50.9
Delay (s)		23.7			24.8	15.4	33.1	6.7			34.9	72.4
Level of Service		C			C	B	C	A			C	E
Approach Delay (s)		23.7			20.9			9.2				70.9
Approach LOS		C			C			A				E

Intersection Summary			
HCM 2000 Control Delay	53.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	14.6
Intersection Capacity Utilization	77.8%	ICU Level of Service	D
Analysis Period (min)	15		

! Phase conflict between lane groups.
c Critical Lane Group

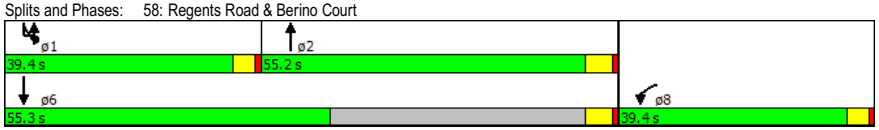
Movement	SBR
Lane Configurations	
Traffic Volume (vph)	57
Future Volume (vph)	57
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.93
Adj. Flow (vph)	61
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

Intersection Summary

Lane Group	WBL	NBT	SBL	SBT
Lane Configurations				
Traffic Volume (vph)	42	898	81	1314
Future Volume (vph)	42	898	81	1314
Turn Type	Prot	NA	Prot	NA
Protected Phases	8	2	1	6
Permitted Phases				
Detector Phase	8	2	1	6
Switch Phase				
Minimum Initial (s)	4.0	7.0	4.0	7.0
Minimum Split (s)	8.4	12.2	8.4	12.3
Total Split (s)	39.4	55.2	39.4	55.3
Total Split (%)	29.4%	41.2%	29.4%	41.3%
Yellow Time (s)	3.4	4.2	3.4	4.3
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.2	4.4	5.3
Lead/Lag		Lag	Lead	
Lead-Lag Optimize?		Yes	Yes	
Recall Mode	None	None	None	None

Intersection Summary
Cycle Length: 134
Actuated Cycle Length: 93
Natural Cycle: 60
Control Type: Actuated-Uncoordinated

Splits and Phases: 58: Regents Road & Berino Court



Movement	WBL	WBR	NBT	NBR	SBU	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	42	21	898	41	105	81	1314
Future Volume (vph)	42	21	898	41	105	81	1314
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4		5.2			4.4	5.3
Lane Util. Factor	1.00		0.95			1.00	0.95
Frt	0.96		0.99			1.00	1.00
Flt Protected	0.97		1.00			0.95	1.00
Satd. Flow (prot)	1722		3516			1770	3539
Flt Permitted	0.97		1.00			0.95	1.00
Satd. Flow (perm)	1722		3516			1770	3539
Peak-hour factor, PHF	0.80	0.80	0.84	0.84	0.92	0.93	0.93
Adj. Flow (vph)	52	26	1069	49	114	87	1413
RTOR Reduction (vph)	14	0	2	0	0	0	0
Lane Group Flow (vph)	65	0	1116	0	0	201	1413
Turn Type	Prot		NA		Prot	Prot	NA
Protected Phases	8		2		1	1	6
Permitted Phases							
Actuated Green, G (s)	20.4		42.2			16.7	63.2
Effective Green, g (s)	20.4		42.2			16.7	63.2
Actuated g/C Ratio	0.22		0.45			0.18	0.68
Clearance Time (s)	4.4		5.2			4.4	5.3
Vehicle Extension (s)	2.0		3.9			2.0	3.7
Lane Grp Cap (vph)	376		1590			316	2397
v/s Ratio Prot	c0.04		c0.32			0.11	c0.40
v/s Ratio Perm							
v/c Ratio	0.17		0.70			0.64	0.59
Uniform Delay, d1	29.6		20.5			35.5	8.1
Progression Factor	1.00		1.00			1.00	1.00
Incremental Delay, d2	0.1		1.5			3.1	0.4
Delay (s)	29.7		22.0			38.6	8.5
Level of Service	C		C			D	A
Approach Delay (s)	29.7		22.0				12.2
Approach LOS	C		C				B

Intersection Summary			
HCM 2000 Control Delay	16.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	93.3	Sum of lost time (s)	14.0
Intersection Capacity Utilization	51.7%	ICU Level of Service	A
Analysis Period (min)	15		

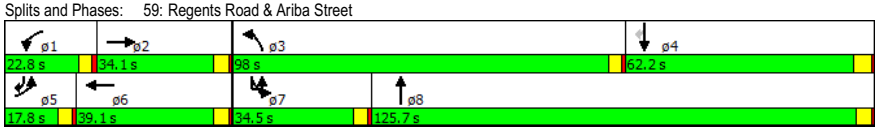
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	36	42	115	52	691	794	58	831	392
Future Volume (vph)	36	42	115	52	691	794	58	831	392
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA	pm+ov
Protected Phases	5	2	1	6	3	8	7	4	5
Permitted Phases									4
Detector Phase	5	2	1	6	3	8	7	4	5
Switch Phase									
Minimum Initial (s)	4.0	7.0	4.0	7.0	4.0	7.0	4.0	7.0	4.0
Minimum Split (s)	8.4	32.9	8.4	36.9	8.4	28.9	8.4	37.6	8.4
Total Split (s)	17.8	34.1	22.8	39.1	98.0	125.7	34.5	62.2	17.8
Total Split (%)	8.2%	15.7%	10.5%	18.0%	45.1%	57.9%	15.9%	28.7%	8.2%
Yellow Time (s)	3.4	3.9	3.4	3.9	3.4	3.9	3.4	4.6	3.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	4.9	4.4	4.9	4.4	4.9	4.4	5.6	4.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 217.1
Actuated Cycle Length: 211.7
Natural Cycle: 145
Control Type: Actuated-Uncoordinated

Splits and Phases: 59: Regents Road & Ariba Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	36	42	456	115	52	9	691	794	253	86	58	831
Future Volume (vph)	36	42	456	115	52	9	691	794	253	86	58	831
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	4.9		4.4	4.9			4.4	5.6
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95			1.00	0.95
Frt	1.00	0.86		1.00	0.98		1.00	0.96			1.00	1.00
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			0.95	1.00
Satd. Flow (prot)	1770	3053		1770	3459		1770	3411			1770	3539
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00			0.95	1.00
Satd. Flow (perm)	1770	3053		1770	3459		1770	3411			1770	3539
Peak-hour factor, PHF	0.90	0.90	0.90	0.84	0.84	0.84	0.91	0.91	0.91	0.92	0.91	0.91
Adj. Flow (vph)	40	47	507	137	62	11	759	873	278	93	64	913
RTOR Reduction (vph)	0	449	0	0	7	0	0	13	0	0	0	0
Lane Group Flow (vph)	40	105	0	137	66	0	759	1138	0	0	157	913
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	Prot	NA
Protected Phases	5	2		1	6		3	8		7	7	4
Permitted Phases												
Actuated Green, G (s)	9.2	24.3		17.9	33.0		93.6	128.1			22.8	56.6
Effective Green, g (s)	9.2	24.3		17.9	33.0		93.6	128.1			22.8	56.6
Actuated g/C Ratio	0.04	0.11		0.08	0.16		0.44	0.61			0.11	0.27
Clearance Time (s)	4.4	4.9		4.4	4.9		4.4	4.9			4.4	5.6
Vehicle Extension (s)	2.0	6.3		2.0	5.9		2.0	4.8			2.0	4.4
Lane Grp Cap (vph)	76	350		149	539		782	2064			190	946
v/s Ratio Prot	0.02	c0.03		c0.08	0.02		c0.43	0.33			0.09	c0.26
v/s Ratio Perm												
v/c Ratio	0.53	0.30		0.92	0.12		0.97	0.55			0.83	0.97
Uniform Delay, d1	99.1	85.9		96.2	76.9		57.7	24.8			92.5	76.6
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2	3.0	1.5		49.1	0.3		24.9	0.5			23.4	21.3
Delay (s)	102.1	87.4		145.3	77.2		82.6	25.3			115.9	97.8
Level of Service	F	F		F	E		F	C			F	F
Approach Delay (s)		88.4			121.6			48.1				89.1
Approach LOS		F			F			D				F

Intersection Summary

HCM 2000 Control Delay	72.0	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	211.7	Sum of lost time (s)	19.3
Intersection Capacity Utilization	99.7%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

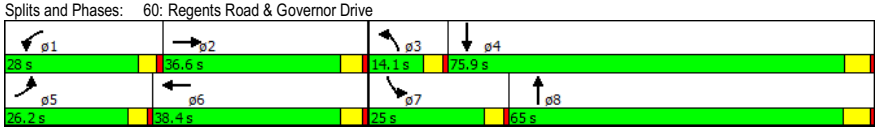
Movement	SBR
Lane Configurations	
Traffic Volume (vph)	392
Future Volume (vph)	392
Ideal Flow (vphpl)	1900
Total Lost time (s)	4.4
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1583
Flt Permitted	1.00
Satd. Flow (perm)	1583
Peak-hour factor, PHF	0.91
Adj. Flow (vph)	431
RTOR Reduction (vph)	169
Lane Group Flow (vph)	262
Turn Type	pm+ov
Protected Phases	5
Permitted Phases	4
Actuated Green, G (s)	65.8
Effective Green, g (s)	65.8
Actuated g/C Ratio	0.31
Clearance Time (s)	4.4
Vehicle Extension (s)	2.0
Lane Grp Cap (vph)	492
v/s Ratio Prot	0.02
v/s Ratio Perm	0.14
v/c Ratio	0.53
Uniform Delay, d1	60.3
Progression Factor	1.00
Incremental Delay, d2	0.6
Delay (s)	60.8
Level of Service	E
Approach Delay (s)	
Approach LOS	

Intersection Summary

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	184	53	314	200	41	1386	271	1075
Future Volume (vph)	184	53	314	200	41	1386	271	1075
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	5	2	1	6	3	8	7	4
Permitted Phases								
Detector Phase	5	2	1	6	3	8	7	4
Switch Phase								
Minimum Initial (s)	4.0	4.0	4.0	7.0	5.0	7.0	5.0	4.0
Minimum Split (s)	8.4	32.9	8.4	33.9	9.5	34.8	9.5	35.5
Total Split (s)	26.2	36.6	28.0	38.4	14.1	65.0	25.0	75.9
Total Split (%)	16.9%	23.7%	18.1%	24.8%	9.1%	42.0%	16.2%	49.1%
Yellow Time (s)	3.4	3.9	3.4	3.9	3.5	4.8	3.5	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	4.9	4.4	4.9	4.5	5.8	4.5	5.5
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Min	None	Min	None	None	None	None

Intersection Summary
Cycle Length: 154.6
Actuated Cycle Length: 141.1
Natural Cycle: 150
Control Type: Actuated-Uncoordinated

Splits and Phases: 60: Regents Road & Governor Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	184	53	21	314	200	168	41	1386	137	271	1075	56
Future Volume (vph)	184	53	21	314	200	168	41	1386	137	271	1075	56
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	4.9		4.5	5.8		4.5	5.5	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	0.96		1.00	0.93		1.00	0.99		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3389		1770	3296		1770	3492		1770	3513	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	3389		1770	3296		1770	3492		1770	3513	
Peak-hour factor, PHF	0.80	0.80	0.80	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	230	66	26	349	222	187	46	1540	152	301	1194	62
RTOR Reduction (vph)	0	23	0	0	108	0	0	5	0	0	2	0
Lane Group Flow (vph)	230	69	0	349	301	0	46	1687	0	301	1254	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases												
Actuated Green, G (s)	20.9	18.0		23.7	20.8		7.0	60.3		20.5	74.1	
Effective Green, g (s)	20.9	18.0		23.7	20.8		7.0	60.3		20.5	74.1	
Actuated g/C Ratio	0.15	0.13		0.17	0.15		0.05	0.42		0.14	0.52	
Clearance Time (s)	4.4	4.9		4.4	4.9		4.5	5.8		4.5	5.5	
Vehicle Extension (s)	2.0	4.5		2.0	5.0		3.0	4.6		3.0	2.0	
Lane Grp Cap (vph)	260	429		295	482		87	1481		255	1831	
v/s Ratio Prot	0.13	0.02		c0.20	c0.09		0.03	c0.48		c0.17	0.36	
v/s Ratio Perm												
v/c Ratio	0.88	0.16		1.18	0.63		0.53	1.14		1.18	0.68	
Uniform Delay, d1	59.4	55.3		59.2	57.0		65.9	40.9		60.8	25.3	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	27.3	0.3		111.5	3.6		5.7	71.4		114.1	0.9	
Delay (s)	86.7	55.6		170.7	60.6		71.6	112.3		174.9	26.2	
Level of Service	F	E		F	E		E	F		F	C	
Approach Delay (s)		77.8			111.3			111.3			54.9	
Approach LOS		E			F			F			D	

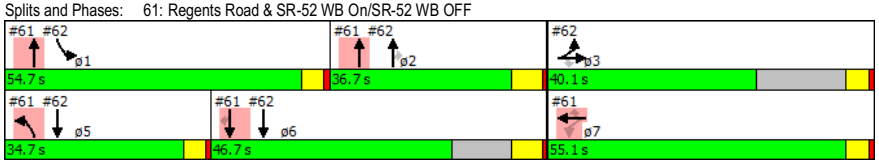
Intersection Summary			
HCM 2000 Control Delay	88.7	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.08		
Actuated Cycle Length (s)	142.1	Sum of lost time (s)	19.6
Intersection Capacity Utilization	95.1%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	WBT	WBR	NBL	NBT	SBT	SBR	ø1	ø2	ø3
Lane Configurations									
Traffic Volume (vph)	1	202	265	793	742	243			
Future Volume (vph)	1	202	265	793	742	243			
Turn Type	NA	Perm	Prot	NA	NA	Perm			
Protected Phases	7		5	1 2	6		1	2	3
Permitted Phases		7				6			
Detector Phase	7	7	5	1 2	6	6			
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0		13.0	13.0	5.0	13.0	5.0
Minimum Split (s)	10.1	10.1	9.7		19.2	19.2	9.7	19.2	10.1
Total Split (s)	55.1	55.1	34.7		46.7	46.7	54.7	36.7	40.1
Total Split (%)	37.6%	37.6%	23.7%		31.9%	31.9%	37%	25%	27%
Yellow Time (s)	4.1	4.1	3.7		5.2	5.2	3.7	5.2	4.1
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0			
Total Lost Time (s)	5.1	5.1	4.7		6.2	6.2			
Lead/Lag			Lead		Lag	Lag	Lead	Lag	
Lead-Lag Optimize?			Yes		Yes	Yes	Yes	Yes	
Recall Mode	None	None	None		Max	Max	None	Max	None

Intersection Summary
Cycle Length: 146.5
Actuated Cycle Length: 134.2
Natural Cycle: 70
Control Type: Actuated-Uncoordinated

Splits and Phases: 61: Regents Road & SR-52 WB On/SR-52 WB OFF



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	529	1	202	265	793	0	0	742	243
Future Volume (vph)	0	0	0	529	1	202	265	793	0	0	742	243
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					5.1	5.1	4.7	4.7			6.2	6.2
Lane Util. Factor					1.00	1.00	0.97	0.95			0.95	1.00
Frt					1.00	0.85	1.00	1.00			1.00	0.85
Flt Protected					0.95	1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)					1774	1583	3433	3539			3539	1583
Flt Permitted					0.95	1.00	0.95	1.00			1.00	1.00
Satd. Flow (perm)					1774	1583	3433	3539			3539	1583
Peak-hour factor, PHF	0.25	0.25	0.25	0.92	0.92	0.92	0.88	0.88	0.88	0.86	0.86	0.86
Adj. Flow (vph)	0	0	0	575	1	220	301	901	0	0	863	283
RTOR Reduction (vph)	0	0	0	0	0	88	0	0	0	0	0	156
Lane Group Flow (vph)	0	0	0	0	576	132	301	901	0	0	863	127
Turn Type				Perm	NA	Perm	Prot	NA			NA	Perm
Protected Phases					7		5	1 2			6	
Permitted Phases				7		7						6
Actuated Green, G (s)					47.6	47.6	30.0	75.3			40.6	40.6
Effective Green, g (s)					47.6	47.6	30.0	75.3			40.6	40.6
Actuated g/C Ratio					0.35	0.35	0.22	0.56			0.30	0.30
Clearance Time (s)					5.1	5.1	4.7				6.2	6.2
Vehicle Extension (s)					2.0	2.0	2.0				2.0	2.0
Lane Grp Cap (vph)					629	561	767	1985			1070	478
v/s Ratio Prot							0.09	c0.25			c0.24	
v/s Ratio Perm					0.32	0.08						0.08
v/c Ratio					0.92	0.23	0.39	0.45			0.81	0.27
Uniform Delay, d1					41.4	30.5	44.3	17.3			43.2	35.5
Progression Factor					1.00	1.00	1.48	1.02			1.00	1.00
Incremental Delay, d2					17.8	0.1	0.1	0.0			6.5	1.4
Delay (s)					59.1	30.6	65.9	17.7			49.7	36.8
Level of Service					E	C	E	B			D	D
Approach Delay (s)		0.0			51.2			29.7			46.5	
Approach LOS		A			D			C			D	

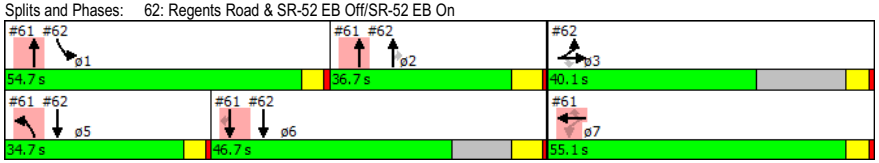
Intersection Summary			
HCM 2000 Control Delay	41.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	134.2	Sum of lost time (s)	16.0
Intersection Capacity Utilization	80.8%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	EBR	NBT	NBR	SBL	SBT	ø5	ø6	ø7
Lane Configurations										
Traffic Volume (vph)	319	3	598	738	196	122	1289			
Future Volume (vph)	319	3	598	738	196	122	1289			
Turn Type	Split	NA	Perm	NA	Perm	Prot	NA			
Protected Phases	3	3		2		1	5 6	5	6	7
Permitted Phases			3		2					
Detector Phase	3	3	3	2	2	1	5 6			
Switch Phase										
Minimum Initial (s)	5.0	5.0	5.0	13.0	13.0	5.0		5.0	13.0	5.0
Minimum Split (s)	10.1	10.1	10.1	19.2	19.2	9.7		9.7	19.2	10.1
Total Split (s)	40.1	40.1	40.1	36.7	36.7	54.7		34.7	46.7	55.1
Total Split (%)	27.4%	27.4%	27.4%	25.1%	25.1%	37.3%		24%	32%	38%
Yellow Time (s)	4.1	4.1	4.1	5.2	5.2	3.7		3.7	5.2	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0				
Total Lost Time (s)	5.1	5.1	5.1	6.2	6.2	4.7				
Lead/Lag				Lag	Lag	Lead		Lead	Lag	
Lead-Lag Optimize?				Yes	Yes	Yes		Yes	Yes	
Recall Mode	None	None	None	Max	Max	None		None	Max	None

Intersection Summary
Cycle Length: 146.5
Actuated Cycle Length: 134.2
Natural Cycle: 70
Control Type: Actuated-Uncoordinated

Splits and Phases: 62: Regents Road & SR-52 EB Off/SR-52 EB On



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	319	3	598	0	0	0	0	738	196	122	1289	0
Future Volume (vph)	319	3	598	0	0	0	0	738	196	122	1289	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1	5.1					6.2	6.2	4.7	4.7	
Lane Util. Factor	0.95	0.95	1.00					0.95	1.00	1.00	0.95	
Frt	1.00	1.00	0.85					1.00	0.85	1.00	1.00	
Flt Protected	0.95	0.95	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1681	1687	1583					3539	1583	1770	3539	
Flt Permitted	0.95	0.95	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1681	1687	1583					3539	1583	1770	3539	
Peak-hour factor, PHF	0.89	0.89	0.89	0.25	0.25	0.25	0.88	0.88	0.88	0.91	0.91	0.91
Adj. Flow (vph)	358	3	672	0	0	0	0	839	223	134	1416	0
RTOR Reduction (vph)	0	0	61	0	0	0	0	0	58	0	0	0
Lane Group Flow (vph)	179	182	611	0	0	0	0	839	165	134	1416	0
Turn Type	Split	NA	Perm					NA	Perm	Prot	NA	
Protected Phases	3	3						2		1	5 6	
Permitted Phases			3						2			
Actuated Green, G (s)	47.6	47.6	47.6					43.0	43.0	27.6	75.3	
Effective Green, g (s)	47.6	47.6	47.6					43.0	43.0	27.6	75.3	
Actuated g/C Ratio	0.35	0.35	0.35					0.32	0.32	0.21	0.56	
Clearance Time (s)	5.1	5.1	5.1					6.2	6.2	4.7		
Vehicle Extension (s)	2.0	2.0	2.0					2.0	2.0	2.0		
Lane Grp Cap (vph)	596	598	561					1133	507	364	1985	
v/s Ratio Prot	0.11	0.11						c0.24		0.08	c0.40	
v/s Ratio Perm			c0.39						0.10			
v/c Ratio	0.30	0.30	1.09					0.74	0.32	0.37	0.71	
Uniform Delay, d1	31.3	31.3	43.3					40.6	34.6	45.8	21.6	
Progression Factor	1.00	1.00	1.00					1.00	1.00	1.26	0.88	
Incremental Delay, d2	0.1	0.1	64.7					4.4	1.7	0.2	0.7	
Delay (s)	31.4	31.4	108.0					45.0	36.3	58.0	19.7	
Level of Service	C	C	F					D	D	E	B	
Approach Delay (s)		81.2			0.0			43.2			23.0	
Approach LOS		F			A			D			C	

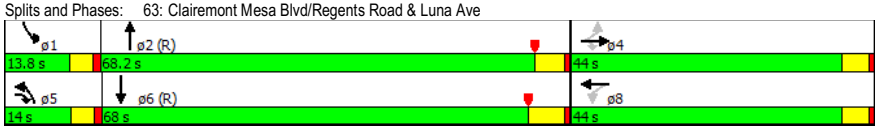
Intersection Summary			
HCM 2000 Control Delay	45.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	134.2	Sum of lost time (s)	16.0
Intersection Capacity Utilization	80.8%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	439	10	134	6	12	131	462	51	1299
Future Volume (vph)	439	10	134	6	12	131	462	51	1299
Turn Type	Perm	NA	pm+ov	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4	5		8	5	2	1	6
Permitted Phases	4		4	8					
Detector Phase	4	4	5	8	8	5	2	1	6
Switch Phase									
Minimum Initial (s)	10.0	10.0	4.0	1.0	1.0	4.0	10.0	4.0	4.0
Minimum Split (s)	36.9	36.9	8.4	33.9	33.9	8.4	22.3	8.4	23.2
Total Split (s)	44.0	44.0	14.0	44.0	44.0	14.0	68.2	13.8	68.0
Total Split (%)	34.9%	34.9%	11.1%	34.9%	34.9%	11.1%	54.1%	11.0%	54.0%
Yellow Time (s)	3.9	3.9	3.4	3.9	3.9	3.4	4.3	3.4	5.2
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.9	4.4		4.9	4.4	5.3	4.4	6.2
Lead/Lag			Lead			Lead	Lag	Lead	Lag
Lead-Lag Optimize?			Yes			Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	None	C-Max

Intersection Summary
Cycle Length: 126
Actuated Cycle Length: 126
Offset: 24 (19%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 140
Control Type: Actuated-Coordinated

Splits and Phases: 63: Clairemont Mesa Blvd/Regents Road & Luna Ave



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	439	10	134	6	12	24	131	462	5	51	1299	539
Future Volume (vph)	439	10	134	6	12	24	131	462	5	51	1299	539
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9	4.4		4.9		4.4	5.3		4.4	6.2	
Lane Util. Factor		1.00	1.00		1.00		1.00	0.95		1.00	0.95	
Frt		1.00	0.85		0.92		1.00	1.00		1.00	0.96	
Flt Protected		0.95	1.00		0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1776	1583		1706		1770	3533		1770	3384	
Flt Permitted		0.73	1.00		0.85		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1360	1583		1462		1770	3533		1770	3384	
Peak-hour factor, PHF	0.94	0.94	0.94	0.81	0.81	0.81	0.87	0.87	0.87	0.94	0.94	0.94
Adj. Flow (vph)	467	11	143	7	15	30	151	531	6	54	1382	573
RTOR Reduction (vph)	0	0	17	0	21	0	0	0	0	0	36	0
Lane Group Flow (vph)	0	478	126	0	31	0	151	537	0	54	1919	0
Turn Type	Perm	NA	pm+ov	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4	5		8		5	2		1	6	
Permitted Phases	4		4	8								
Actuated Green, G (s)		39.1	48.7		39.1		9.6	65.5		6.8	61.8	
Effective Green, g (s)		39.1	48.7		39.1		9.6	65.5		6.8	61.8	
Actuated g/C Ratio		0.31	0.39		0.31		0.08	0.52		0.05	0.49	
Clearance Time (s)		4.9	4.4		4.9		4.4	5.3		4.4	6.2	
Vehicle Extension (s)		4.0	2.0		2.0		2.0	4.4		2.0	3.2	
Lane Grp Cap (vph)		422	611		453		134	1836		95	1659	
v/s Ratio Prot			0.02				c0.09	c0.15		0.03	c0.57	
v/s Ratio Perm		c0.35	0.06		0.02							
v/c Ratio		1.13	0.21		0.07		1.13	0.29		0.57	1.16	
Uniform Delay, d1		43.5	25.8		30.6		58.2	17.1		58.2	32.1	
Progression Factor		1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		85.2	0.1		0.0		115.9	0.4		4.6	77.9	
Delay (s)		128.7	25.8		30.6		174.1	17.5		62.8	110.0	
Level of Service		F	C		C		F	B		E	F	
Approach Delay (s)		105.0			30.6			51.9			108.7	
Approach LOS		F			C			D			F	

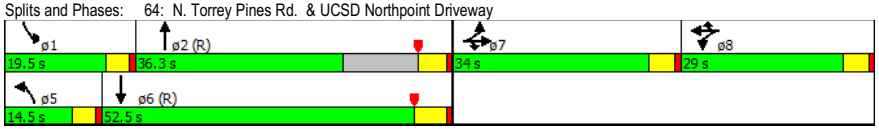
Intersection Summary			
HCM 2000 Control Delay	95.2	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.14		
Actuated Cycle Length (s)	126.0	Sum of lost time (s)	15.5
Intersection Capacity Utilization	104.8%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	29	82	138	13	147	20	532	124	1529
Future Volume (vph)	29	82	138	13	147	20	532	124	1529
Turn Type	NA	Prot	Split	NA	Prot	Prot	NA	Prot	NA
Protected Phases	7	7	8	8	8	5	2	1	6
Permitted Phases									
Detector Phase	7	7	8	8	8	5	2	1	6
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	10.0	4.0	10.0
Minimum Split (s)	8.9	8.9	8.9	8.9	8.9	8.4	15.3	8.4	15.9
Total Split (s)	34.0	34.0	29.0	29.0	29.0	14.5	36.3	19.5	52.5
Total Split (%)	26.2%	26.2%	22.3%	22.3%	22.3%	11.2%	27.9%	15.0%	40.4%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.9	3.4	4.3	3.4	4.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	4.9	4.9	4.9	4.4	5.3	4.4	5.9
Lead/Lag	Lead	Lead	Lag	Lag	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	None	C-Max

Intersection Summary
Cycle Length: 130
Actuated Cycle Length: 130
Offset: 72 (55%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 64: N. Torrey Pines Rd. & UCSD Northpoint Driveway



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	56	29	82	138	13	147	20	532	85	124	1529	9
Future Volume (vph)	56	29	82	138	13	147	20	532	85	124	1529	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9	4.9	4.9	4.9	4.9	4.4	5.3		4.4	5.9	
Lane Util. Factor		1.00	1.00	1.00	1.00	1.00	1.00	0.95		0.97	0.95	
Frt		1.00	0.85	1.00	1.00	0.85	1.00	0.98		1.00	1.00	
Flt Protected		0.97	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1803	1583	1770	1863	1583	1770	3466		3433	3536	
Flt Permitted		0.97	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1803	1583	1770	1863	1583	1770	3466		3433	3536	
Peak-hour factor, PHF	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.92	0.92	0.92
Adj. Flow (vph)	70	36	102	172	16	184	25	665	106	135	1662	10
RTOR Reduction (vph)	0	0	86	0	0	160	0	7	0	0	0	0
Lane Group Flow (vph)	0	106	17	173	16	24	25	764	0	135	1672	0
Turn Type	Split	NA	Prot	Split	NA	Prot	Prot	NA		Prot	NA	
Protected Phases	7	7	7	8	8	8	5	2		1	6	
Permitted Phases												
Actuated Green, G (s)		20.9	20.9	17.1	17.1	17.1	4.5	63.0		9.5	67.4	
Effective Green, g (s)		20.9	20.9	17.1	17.1	17.1	4.5	63.0		9.5	67.4	
Actuated g/C Ratio		0.16	0.16	0.13	0.13	0.13	0.03	0.48		0.07	0.52	
Clearance Time (s)		4.9	4.9	4.9	4.9	4.9	4.4	5.3		4.4	5.9	
Vehicle Extension (s)		2.0	2.0	2.0	2.0	2.0	2.0	4.8		2.0	4.7	
Lane Grp Cap (vph)		289	254	232	245	208	61	1679		250	1833	
v/s Ratio Prot		c0.06	0.01	c0.10	0.01	0.02	0.01	0.22		c0.04	c0.47	
v/s Ratio Perm												
v/c Ratio		0.37	0.07	0.75	0.07	0.12	0.41	0.45		0.54	0.91	
Uniform Delay, d1		48.6	46.3	54.4	49.4	49.8	61.4	22.1		58.1	28.6	
Progression Factor		1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.10	0.73	
Incremental Delay, d2		0.3	0.0	10.8	0.0	0.1	1.6	0.9		0.7	4.8	
Delay (s)		48.9	46.3	65.2	49.5	49.9	63.1	23.0		64.6	25.7	
Level of Service		D	D	E	D	D	E	C		E	C	
Approach Delay (s)		47.6			57.0			24.3			28.7	
Approach LOS		D			E			C			C	

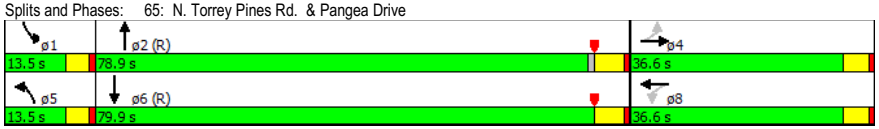
Intersection Summary			
HCM 2000 Control Delay	32.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	20.1
Intersection Capacity Utilization	72.9%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	10	1	79	1	27	510	57	1886
Future Volume (vph)	10	1	79	1	27	510	57	1886
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	7.0	7.0	7.0	7.0	4.0	10.0	4.0	10.0
Minimum Split (s)	11.9	11.9	11.9	11.9	8.4	15.3	8.4	15.3
Total Split (s)	36.6	36.6	36.6	36.6	13.5	78.9	13.5	79.9
Total Split (%)	28.2%	28.2%	28.2%	28.2%	10.4%	60.7%	10.4%	61.5%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.4	4.3	3.4	4.3
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.9	4.9	4.9	4.4	5.3	4.4	5.3
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	None	C-Max

Intersection Summary
Cycle Length: 130
Actuated Cycle Length: 130
Offset: 103 (79%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 75
Control Type: Actuated-Coordinated

Splits and Phases: 65: N. Torrey Pines Rd. & Pangea Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	1	20	79	1	40	27	510	57	57	1886	28
Future Volume (vph)	10	1	20	79	1	40	27	510	57	57	1886	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9		4.9	4.9		4.4	5.3		4.4	5.3	
Lane Util. Factor		1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frt		0.91		1.00	0.85		1.00	0.98		1.00	1.00	
Flt Protected		0.98		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1674		1770	1589		1770	3486		1770	3531	
Flt Permitted		0.92		0.80	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1561		1484	1589		1770	3486		1770	3531	
Peak-hour factor, PHF	0.80	0.80	0.80	0.84	0.84	0.84	0.89	0.89	0.89	0.93	0.93	0.93
Adj. Flow (vph)	12	1	25	94	1	48	30	573	64	61	2028	30
RTOR Reduction (vph)	0	21	0	0	40	0	0	5	0	0	1	0
Lane Group Flow (vph)	0	18	0	94	9	0	30	632	0	61	2057	0
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8								
Actuated Green, G (s)		22.2		22.2	22.2		4.7	86.0		7.2	88.5	
Effective Green, g (s)		22.2		22.2	22.2		4.7	86.0		7.2	88.5	
Actuated g/C Ratio		0.17		0.17	0.17		0.04	0.66		0.06	0.68	
Clearance Time (s)		4.9		4.9	4.9		4.4	5.3		4.4	5.3	
Vehicle Extension (s)		2.0		2.0	2.0		2.0	5.7		2.0	5.5	
Lane Grp Cap (vph)		266		253	271		63	2306		98	2403	
v/s Ratio Prot					0.01		0.02	0.18		c0.03	c0.58	
v/s Ratio Perm		0.01		c0.06								
v/c Ratio		0.07		0.37	0.03		0.48	0.27		0.62	0.86	
Uniform Delay, d1		45.2		47.7	45.0		61.4	9.1		60.1	15.9	
Progression Factor		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.0		0.3	0.0		2.1	0.3		8.5	4.2	
Delay (s)		45.3		48.1	45.0		63.5	9.4		68.6	20.1	
Level of Service		D		D	D		E	A		E	C	
Approach Delay (s)		45.3			47.0			11.8			21.5	
Approach LOS		D			D			B			C	

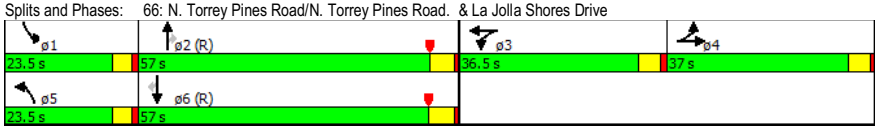
Intersection Summary			
HCM 2000 Control Delay	20.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	14.6
Intersection Capacity Utilization	72.6%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	118	41	108	42	196	612	89	127	1852	227
Future Volume (vph)	118	41	108	42	196	612	89	127	1852	227
Turn Type	Split	NA	Split	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	4	4	3	3	5	2		1	6	
Permitted Phases							2			6
Detector Phase	4	4	3	3	5	2	2	1	6	6
Switch Phase										
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	10.0	10.0	4.0	10.0	10.0
Minimum Split (s)	8.9	8.9	8.9	8.9	8.4	15.4	15.4	8.4	15.5	15.5
Total Split (s)	37.0	37.0	36.5	36.5	23.5	57.0	57.0	23.5	57.0	57.0
Total Split (%)	24.0%	24.0%	23.7%	23.7%	15.3%	37.0%	37.0%	15.3%	37.0%	37.0%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.4	4.4	4.4	3.4	4.5	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	4.9	4.9	4.4	5.4	5.4	4.4	5.5	5.5
Lead/Lag	Lag	Lag	Lead	Lead	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max

Intersection Summary
Cycle Length: 154
Actuated Cycle Length: 154
Offset: 97 (63%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 120
Control Type: Actuated-Coordinated

Splits and Phases: 66: N. Torrey Pines Road/N. Torrey Pines Road. & La Jolla Shores Drive



66: N. Torrey Pines Road/N. Torrey Pines Road. & La Jolla Shores Drive

Timing Plan: Evening Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	118	41	146	108	42	37	196	612	89	127	1852	227
Future Volume (vph)	118	41	146	108	42	37	196	612	89	127	1852	227
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9		4.9	4.9		4.4	5.4	5.4	4.4	5.5	5.5
Lane Util. Factor	0.95	0.95		0.97	1.00		1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	0.89		1.00	0.93		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1681	1570		3433	1732		1770	3539	1583	1770	3539	1583
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1681	1570		3433	1732		1770	3539	1583	1770	3539	1583
Peak-hour factor, PHF	0.80	0.80	0.80	0.83	0.83	0.83	0.80	0.80	0.80	0.91	0.91	0.91
Adj. Flow (vph)	148	51	182	130	51	45	245	765	111	140	2035	249
RTOR Reduction (vph)	0	70	0	0	21	0	0	0	43	0	0	0
Lane Group Flow (vph)	133	179	0	130	75	0	245	765	68	140	2035	249
Turn Type	Split	NA		Split	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	4	4		3	3		5	2		1	6	
Permitted Phases									2			6
Actuated Green, G (s)	21.7	21.7		26.7	26.7		27.9	70.2	70.2	15.8	58.0	58.0
Effective Green, g (s)	21.7	21.7		26.7	26.7		27.9	70.2	70.2	15.8	58.0	58.0
Actuated g/C Ratio	0.14	0.14		0.17	0.17		0.18	0.46	0.46	0.10	0.38	0.38
Clearance Time (s)	4.9	4.9		4.9	4.9		4.4	5.4	5.4	4.4	5.5	5.5
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	4.0	4.0	2.0	3.9	3.9
Lane Grp Cap (vph)	236	221		595	300		320	1613	721	181	1332	596
v/s Ratio Prot	0.08	c0.11		0.04	c0.04		c0.14	0.22		0.08	c0.57	
v/s Ratio Perm									0.04			0.16
v/c Ratio	0.56	0.81		0.22	0.25		0.77	0.47	0.09	0.77	1.53	0.42
Uniform Delay, d1	61.7	64.1		54.7	55.0		59.9	29.1	23.8	67.4	48.0	35.5
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.8	18.1		0.1	0.2		9.4	1.0	0.3	16.9	241.3	2.1
Delay (s)	63.6	82.3		54.8	55.1		69.4	30.1	24.1	84.3	289.3	37.7
Level of Service	E	F		D	E		E	C	C	F	F	D
Approach Delay (s)		75.7			54.9			38.1			251.6	
Approach LOS		E			D			D			F	

Intersection Summary			
HCM 2000 Control Delay	167.1	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.00		
Actuated Cycle Length (s)	154.0	Sum of lost time (s)	19.7
Intersection Capacity Utilization	91.8%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

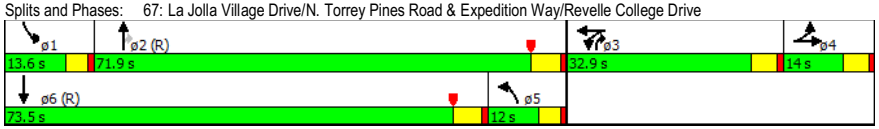
67: La Jolla Village Drive/N. Torrey Pines Road & Expedition Way/Revelle College Drive

Timing Plan: Evening Peak

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	43	28	113	18	90	819	66	47	2012
Future Volume (vph)	43	28	113	18	90	819	66	47	2012
Turn Type	Split	NA	Split	NA	Prot	NA	pm+ov	Prot	NA
Protected Phases	4	4	3	3	5	2	3	1	6
Permitted Phases							2		
Detector Phase	4	4	3	3	5	2	3	1	6
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	10.0	4.0	4.0	10.0
Minimum Split (s)	8.9	8.9	32.9	32.9	8.4	37.6	32.9	8.4	29.4
Total Split (s)	14.0	14.0	32.9	32.9	12.0	71.9	32.9	13.6	73.5
Total Split (%)	10.6%	10.6%	24.8%	24.8%	9.1%	54.3%	24.8%	10.3%	55.5%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.4	4.6	3.9	3.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	4.9	4.9	4.4	5.6	4.9	4.4	5.4
Lead/Lag	Lag	Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	None	None	C-Max

Intersection Summary
Cycle Length: 132.4
Actuated Cycle Length: 132.4
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 67: La Jolla Village Drive/N. Torrey Pines Road & Expedition Way/Revelle College Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	43	28	168	113	18	38	90	819	66	47	2012	21
Future Volume (vph)	43	28	168	113	18	38	90	819	66	47	2012	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9		4.9	4.9		4.4	5.6	4.9	4.4	5.4	
Lane Util. Factor	0.95	0.95		0.97	1.00		1.00	0.95	1.00	1.00	0.95	
Frt	1.00	0.87		1.00	0.90		1.00	1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1681	1546		3433	1673		1770	3539	1583	1770	3534	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1681	1546		3433	1673		1770	3539	1583	1770	3534	
Peak-hour factor, PHF	0.81	0.81	0.81	0.94	0.94	0.94	0.80	0.80	0.80	0.97	0.97	0.97
Adj. Flow (vph)	53	35	207	120	19	40	112	1024	82	48	2074	22
RTOR Reduction (vph)	0	136	0	0	35	0	0	0	25	0	0	0
Lane Group Flow (vph)	48	111	0	120	24	0	113	1024	58	48	2096	0
Turn Type	Split	NA		Split	NA		Prot	NA	pm+ov	Prot	NA	
Protected Phases	4	4		3	3		5	2	3	1	6	
Permitted Phases									2			
Actuated Green, G (s)	13.5	13.5		15.8	15.8		8.4	76.7	92.5	6.6	75.1	
Effective Green, g (s)	13.5	13.5		15.8	15.8		8.4	76.7	92.5	6.6	75.1	
Actuated g/C Ratio	0.10	0.10		0.12	0.12		0.06	0.58	0.70	0.05	0.57	
Clearance Time (s)	4.9	4.9		4.9	4.9		4.4	5.6	4.9	4.4	5.4	
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	4.0	2.0	2.0	4.2	
Lane Grp Cap (vph)	171	157		409	199		112	2050	1105	88	2004	
v/s Ratio Prot	0.03	c0.07		c0.03	0.01		c0.06	0.29	0.01	0.03	c0.59	
v/s Ratio Perm									0.03			
v/c Ratio	0.28	0.71		0.29	0.12		1.01	0.50	0.05	0.55	1.05	
Uniform Delay, d1	55.0	57.6		53.2	52.1		62.0	16.5	6.2	61.4	28.7	
Progression Factor	1.00	1.00		1.00	1.00		1.00	0.91	2.87	1.00	1.00	
Incremental Delay, d2	0.3	11.3		0.1	0.1		86.9	0.9	0.0	3.7	33.3	
Delay (s)	55.3	68.9		53.4	52.2		148.8	15.9	17.9	65.1	61.9	
Level of Service	E	E		D	D		F	B	B	E	E	
Approach Delay (s)		66.7			53.0			28.3			62.0	
Approach LOS		E			D			C			E	

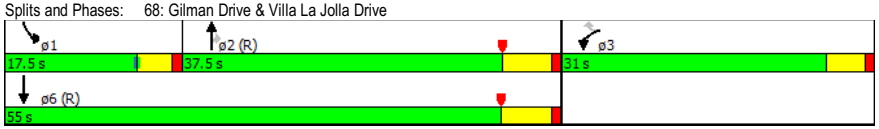
Intersection Summary				
HCM 2000 Control Delay	51.2	HCM 2000 Level of Service	D	
HCM 2000 Volume to Capacity ratio	0.90			
Actuated Cycle Length (s)	132.4	Sum of lost time (s)	19.8	
Intersection Capacity Utilization	88.0%	ICU Level of Service	E	
Analysis Period (min)	15			

c Critical Lane Group

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	185	390	430	107	617	1716
Future Volume (vph)	185	390	430	107	617	1716
Turn Type	Prot	Perm	NA	Perm	Prot	NA
Protected Phases	3		2		1	6
Permitted Phases		3		2		
Detector Phase	3	3	2	2	1	6
Switch Phase						
Minimum Initial (s)	4.0	4.0	7.0	7.0	4.0	7.0
Minimum Split (s)	8.9	8.9	12.9	12.9	8.4	13.0
Total Split (s)	31.0	31.0	37.5	37.5	17.5	55.0
Total Split (%)	36.0%	36.0%	43.6%	43.6%	20.3%	64.0%
Yellow Time (s)	3.9	3.9	4.9	4.9	3.4	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	5.9	5.9	4.4	6.0
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	None	None	C-Max	C-Max	None	C-Max

Intersection Summary
Cycle Length: 86
Actuated Cycle Length: 86
Offset: 18 (21%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 65
Control Type: Actuated-Coordinated

Splits and Phases: 68: Gilman Drive & Villa La Jolla Drive



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	185	390	430	107	617	1716
Future Volume (vph)	185	390	430	107	617	1716
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9	5.9	5.9	4.4	6.0
Lane Util. Factor	0.97	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	3433	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	3433	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.86	0.86	0.93	0.93	0.88	0.88
Adj. Flow (vph)	215	453	462	115	701	1950
RTOR Reduction (vph)	0	382	0	73	0	0
Lane Group Flow (vph)	215	71	462	42	701	1950
Turn Type	Prot	Perm	NA	Perm	Prot	NA
Protected Phases	3		2		1	6
Permitted Phases		3		2		
Actuated Green, G (s)	13.4	13.4	31.6	31.6	25.8	61.7
Effective Green, g (s)	13.4	13.4	31.6	31.6	25.8	61.7
Actuated g/C Ratio	0.16	0.16	0.37	0.37	0.30	0.72
Clearance Time (s)	4.9	4.9	5.9	5.9	4.4	6.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	534	246	1300	581	531	2539
v/s Ratio Prot	c0.06		0.13		c0.40	c0.55
v/s Ratio Perm		0.04		0.03		
v/c Ratio	0.40	0.29	0.36	0.07	1.32	0.77
Uniform Delay, d1	32.7	32.1	19.8	17.7	30.1	7.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.5	0.6	0.8	0.2	156.9	2.3
Delay (s)	33.2	32.7	20.6	17.9	187.0	9.9
Level of Service	C	C	C	B	F	A
Approach Delay (s)	32.9		20.0			56.8
Approach LOS	C		C			E

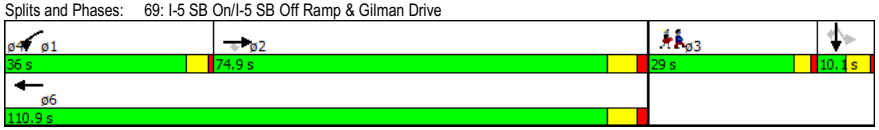
Intersection Summary			
HCM 2000 Control Delay	47.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.93		
Actuated Cycle Length (s)	86.0	Sum of lost time (s)	15.2
Intersection Capacity Utilization	64.0%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBT	EBR	WBL	WBT	SBT	SBR	ø3
Lane Configurations							
Traffic Volume (vph)	311	1439	450	608	12	41	
Future Volume (vph)	311	1439	450	608	12	41	
Turn Type	NA	Perm	Prot	NA	NA	Perm	
Protected Phases	2		1	6	4		3
Permitted Phases		2				4	
Detector Phase	2	2	1	6	4	4	
Switch Phase							
Minimum Initial (s)	13.0	13.0	5.0	12.0	5.0	5.0	1.0
Minimum Split (s)	20.2	20.2	9.7	19.2	10.1	10.1	29.0
Total Split (s)	74.9	74.9	36.0	110.9	10.1	10.1	29.0
Total Split (%)	49.9%	49.9%	24.0%	73.9%	6.7%	6.7%	19%
Yellow Time (s)	5.2	5.2	3.7	5.2	4.1	4.1	3.0
All-Red Time (s)	2.0	2.0	1.0	2.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	7.2	7.2	4.7	7.2	5.1	5.1	
Lead/Lag	Lag	Lag	Lead		Lag	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes
Recall Mode	Min	Min	None	Min	None	None	None

Intersection Summary
Cycle Length: 150
Actuated Cycle Length: 121
Natural Cycle: 150
Control Type: Actuated-Uncoordinated

Splits and Phases: 69: I-5 SB On/I-5 SB Off Ramp & Gilman Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	311	1439	450	608	0	0	0	0	37	12	41
Future Volume (vph)	0	311	1439	450	608	0	0	0	0	37	12	41
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		7.2	7.2	4.7	7.2						5.1	5.1
Lane Util. Factor		1.00	0.88	1.00	0.95						1.00	1.00
Frt		1.00	0.85	1.00	1.00						1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00						0.96	1.00
Satd. Flow (prot)		1863	2787	1770	3539						1795	1583
Flt Permitted		1.00	1.00	0.95	1.00						0.96	1.00
Satd. Flow (perm)		1863	2787	1770	3539						1795	1583
Peak-hour factor, PHF	0.89	0.89	0.89	0.92	0.92	0.92	0.25	0.25	0.25	0.80	0.80	0.80
Adj. Flow (vph)	0	349	1617	489	661	0	0	0	0	46	15	51
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	49
Lane Group Flow (vph)	0	349	1617	489	661	0	0	0	0	0	61	2
Turn Type		NA	Perm	Prot	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases			2							4		4
Actuated Green, G (s)		67.7	67.7	31.3	103.7						5.0	5.0
Effective Green, g (s)		67.7	67.7	31.3	103.7						5.0	5.0
Actuated g/C Ratio		0.56	0.56	0.26	0.86						0.04	0.04
Clearance Time (s)		7.2	7.2	4.7	7.2						5.1	5.1
Vehicle Extension (s)		2.0	2.0	2.0	2.0						2.0	2.0
Lane Grp Cap (vph)		1042	1559	457	3033						74	65
v/s Ratio Prot		0.19		c0.28	0.19							
v/s Ratio Perm			c0.58								0.03	0.00
v/c Ratio		0.33	1.04	1.07	0.22						0.82	0.03
Uniform Delay, d1		14.4	26.6	44.9	1.5						57.6	55.7
Progression Factor		1.00	1.00	1.00	1.00						1.00	1.00
Incremental Delay, d2		0.1	33.0	62.1	0.0						48.0	0.1
Delay (s)		14.5	59.7	106.9	1.5						105.6	55.8
Level of Service		B	E	F	A						F	E
Approach Delay (s)		51.7			46.3			0.0			82.9	
Approach LOS		D			D			A			F	

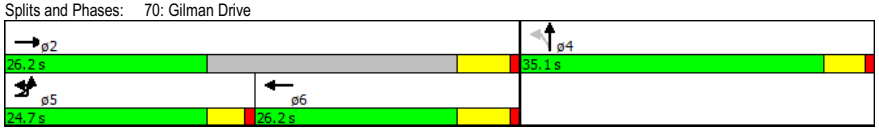
Intersection Summary			
HCM 2000 Control Delay	50.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.08		
Actuated Cycle Length (s)	121.0	Sum of lost time (s)	21.0
Intersection Capacity Utilization	100.2%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBT	NBL	NBT
Lane Configurations					
Traffic Volume (vph)	39	130	386	641	2
Future Volume (vph)	39	130	386	641	2
Turn Type	Prot	NA	NA	Perm	NA
Protected Phases	5	2	6		4
Permitted Phases				4	
Detector Phase	5	2	6	4	4
Switch Phase					
Minimum Initial (s)	5.0	12.0	12.0	5.0	5.0
Minimum Split (s)	9.7	18.2	18.2	10.1	10.1
Total Split (s)	24.7	26.2	26.2	35.1	35.1
Total Split (%)	28.7%	30.5%	30.5%	40.8%	40.8%
Yellow Time (s)	3.7	5.2	5.2	4.1	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.7	6.2	6.2	5.1	5.1
Lead/Lag	Lead		Lag		
Lead-Lag Optimize?	Yes		Yes		
Recall Mode	None	Min	Min	None	None

Intersection Summary
Cycle Length: 86
Actuated Cycle Length: 61.7
Natural Cycle: 60
Control Type: Actuated-Uncoordinated

Splits and Phases: 70: Gilman Drive



Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	88	39	130	0	0	386	4	641	2	190	0	0
Future Volume (vph)	88	39	130	0	0	386	4	641	2	190	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.7	6.2			6.2		5.1	5.1			
Lane Util. Factor		1.00	1.00			0.95		0.95	0.95			
Frt		1.00	1.00			1.00		1.00	0.93			
Flt Protected		0.95	1.00			1.00		0.95	0.97			
Satd. Flow (prot)		1770	1863			3534		1681	1603			
Flt Permitted		0.95	1.00			1.00		0.95	0.97			
Satd. Flow (perm)		1770	1863			3534		1681	1603			
Peak-hour factor, PHF	0.92	0.90	0.90	0.90	0.89	0.89	0.89	0.93	0.93	0.93	0.25	0.25
Adj. Flow (vph)	96	43	144	0	0	434	4	689	2	204	0	0
RTOR Reduction (vph)	0	0	0	0	0	1	0	0	36	0	0	0
Lane Group Flow (vph)	0	139	144	0	0	437	0	462	397	0	0	0
Turn Type	Prot	Prot	NA			NA		Perm	NA			
Protected Phases	5	5	2			6			4			
Permitted Phases								4				
Actuated Green, G (s)		8.0	27.3			14.6		23.3	23.3			
Effective Green, g (s)		8.0	27.3			14.6		23.3	23.3			
Actuated g/C Ratio		0.13	0.44			0.24		0.38	0.38			
Clearance Time (s)		4.7	6.2			6.2		5.1	5.1			
Vehicle Extension (s)		2.0	2.0			2.0		2.0	2.0			
Lane Grp Cap (vph)		228	821			833		632	603			
v/s Ratio Prot		c0.08	0.08			c0.12						
v/s Ratio Perm								c0.27	0.25			
v/c Ratio		0.61	0.18			0.52		0.73	0.66			
Uniform Delay, d1		25.5	10.5			20.6		16.6	16.0			
Progression Factor		1.00	1.00			1.00		1.00	1.00			
Incremental Delay, d2		3.1	0.0			0.3		3.8	2.0			
Delay (s)		28.6	10.5			20.9		20.4	18.0			
Level of Service		C	B			C		C	B			
Approach Delay (s)			19.4			20.9			19.2			0.0
Approach LOS			B			C			B			A

Intersection Summary			
HCM 2000 Control Delay	19.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	61.9	Sum of lost time (s)	16.0
Intersection Capacity Utilization	100.2%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

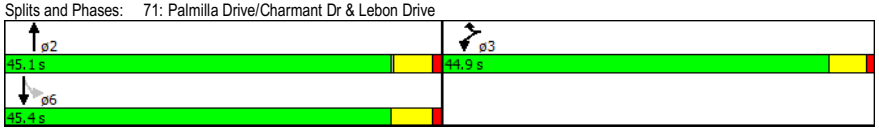
Movement	SBR
Lane Configurations	
Traffic Volume (vph)	0
Future Volume (vph)	0
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.25
Adj. Flow (vph)	0
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

Intersection Summary

Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Configurations					
Traffic Volume (vph)	388	7	152	6	132
Future Volume (vph)	388	7	152	6	132
Turn Type	Prot	Prot	NA	Perm	NA
Protected Phases	3	3	2		6
Permitted Phases				6	
Detector Phase	3	3	2	6	6
Switch Phase					
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	11.9	11.9	12.1	12.4	12.4
Total Split (s)	44.9	44.9	45.1	45.4	45.4
Total Split (%)	49.7%	49.7%	49.9%	50.3%	50.3%
Yellow Time (s)	3.9	3.9	4.1	4.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	5.1	5.4	5.4
Lead/Lag					
Lead-Lag Optimize?					
Recall Mode	Min	Min	None	None	None

Intersection Summary
Cycle Length: 90.3
Actuated Cycle Length: 38.9
Natural Cycle: 40
Control Type: Actuated-Uncoordinated

Splits and Phases: 71: Palmilla Drive/Charmant Dr & Lebon Drive



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	388	7	152	399	6	132
Future Volume (vph)	388	7	152	399	6	132
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9	5.1		5.4	5.4
Lane Util. Factor	0.97	0.91	0.95		1.00	0.95
Frt	1.00	0.85	0.89		1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	3441	1441	3155		1770	3539
Flt Permitted	0.95	1.00	1.00		0.41	1.00
Satd. Flow (perm)	3441	1441	3155		756	3539
Peak-hour factor, PHF	0.87	0.87	0.85	0.85	0.80	0.80
Adj. Flow (vph)	446	8	179	469	8	165
RTOR Reduction (vph)	0	5	269	0	0	0
Lane Group Flow (vph)	447	2	379	0	8	165
Turn Type	Prot	Prot	NA		Perm	NA
Protected Phases	3	3	2			6
Permitted Phases					6	
Actuated Green, G (s)	11.3	11.3	15.9		15.6	15.6
Effective Green, g (s)	11.3	11.3	15.9		15.6	15.6
Actuated g/C Ratio	0.30	0.30	0.43		0.42	0.42
Clearance Time (s)	4.9	4.9	5.1		5.4	5.4
Vehicle Extension (s)	2.0	2.0	3.8		3.4	3.4
Lane Grp Cap (vph)	1045	437	1348		317	1484
v/s Ratio Prot	c0.13	0.00	c0.12			0.05
v/s Ratio Perm					0.01	
v/c Ratio	0.43	0.00	0.28		0.03	0.11
Uniform Delay, d1	10.4	9.0	6.9		6.3	6.6
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	0.1	0.0	0.1		0.0	0.0
Delay (s)	10.5	9.0	7.1		6.4	6.6
Level of Service	B	A	A		A	A
Approach Delay (s)	10.4		7.1			6.6
Approach LOS	B		A			A

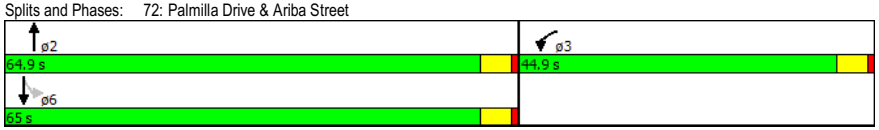
Intersection Summary			
HCM 2000 Control Delay	8.2	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.35		
Actuated Cycle Length (s)	37.2	Sum of lost time (s)	10.3
Intersection Capacity Utilization	36.6%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	WBL	NBT	SBL	SBT
Lane Configurations				
Traffic Volume (vph)	384	151	296	139
Future Volume (vph)	384	151	296	139
Turn Type	Prot	NA	Perm	NA
Protected Phases	3	2		6
Permitted Phases			6	
Detector Phase	3	2	6	6
Switch Phase				
Minimum Initial (s)	6.0	7.0	7.0	7.0
Minimum Split (s)	10.9	11.9	12.0	12.0
Total Split (s)	44.9	64.9	65.0	65.0
Total Split (%)	40.9%	59.1%	59.1%	59.1%
Yellow Time (s)	3.9	3.9	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	5.0	5.0
Lead/Lag				
Lead-Lag Optimize?				
Recall Mode	None	Min	Min	Min

Intersection Summary
Cycle Length: 109.9
Actuated Cycle Length: 68.1
Natural Cycle: 55
Control Type: Actuated-Uncoordinated

Splits and Phases: 72: Palmilla Drive & Ariba Street



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	384	586	151	137	296	139
Future Volume (vph)	384	586	151	137	296	139
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9		4.9		5.0	5.0
Lane Util. Factor	0.97		0.95		1.00	0.95
Frt	0.91		0.93		1.00	1.00
Flt Protected	0.98		1.00		0.95	1.00
Satd. Flow (prot)	3222		3287		1770	3539
Flt Permitted	0.98		1.00		0.55	1.00
Satd. Flow (perm)	3222		3287		1031	3539
Peak-hour factor, PHF	0.82	0.82	0.88	0.88	0.85	0.85
Adj. Flow (vph)	468	715	172	156	348	164
RTOR Reduction (vph)	250	0	80	0	0	0
Lane Group Flow (vph)	933	0	248	0	348	164
Turn Type	Prot		NA		Perm	NA
Protected Phases	3		2			6
Permitted Phases					6	
Actuated Green, G (s)	24.6		32.3		32.2	32.2
Effective Green, g (s)	24.6		32.3		32.2	32.2
Actuated g/C Ratio	0.37		0.48		0.48	0.48
Clearance Time (s)	4.9		4.9		5.0	5.0
Vehicle Extension (s)	2.0		4.0		3.8	3.8
Lane Grp Cap (vph)	1188		1591		497	1708
v/s Ratio Prot	c0.29		0.08			0.05
v/s Ratio Perm					c0.34	
v/c Ratio	0.86dr		0.16		0.70	0.10
Uniform Delay, d1	18.7		9.6		13.5	9.4
Progression Factor	1.00		1.00		1.00	1.00
Incremental Delay, d2	3.2		0.1		4.7	0.0
Delay (s)	21.9		9.7		18.2	9.4
Level of Service	C		A		B	A
Approach Delay (s)	21.9		9.7			15.3
Approach LOS	C		A			B

Intersection Summary			
HCM 2000 Control Delay	18.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	66.7	Sum of lost time (s)	9.9
Intersection Capacity Utilization	66.8%	ICU Level of Service	C
Analysis Period (min)	15		

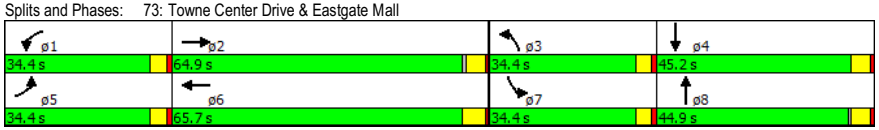
dr Defacto Right Lane. Recode with 1 though lane as a right lane.
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	19	454	291	249	148	78	206	648
Future Volume (vph)	19	454	291	249	148	78	206	648
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	5	2	1	6	3	8	7	4
Permitted Phases								
Detector Phase	5	2	1	6	3	8	7	4
Switch Phase								
Minimum Initial (s)	4.0	7.0	4.0	7.0	4.0	7.0	4.0	7.0
Minimum Split (s)	8.4	11.9	8.4	12.7	8.4	12.2	8.4	12.7
Total Split (s)	34.4	64.9	34.4	65.7	34.4	44.9	34.4	45.2
Total Split (%)	19.1%	36.1%	19.1%	36.6%	19.1%	25.0%	19.1%	25.2%
Yellow Time (s)	3.4	3.9	3.4	4.7	3.4	4.2	3.4	4.2
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	4.9	4.4	5.7	4.4	5.2	4.4	5.2
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 179.7
Actuated Cycle Length: 152.4
Natural Cycle: 90
Control Type: Actuated-Uncoordinated

Splits and Phases: 73: Towne Center Drive & Eastgate Mall



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	19	454	378	291	249	6	148	78	146	206	648	91
Future Volume (vph)	19	454	378	291	249	6	148	78	146	206	648	91
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	5.7		4.4	5.2		4.4	5.2	
Lane Util. Factor	0.97	0.95		1.00	0.95		0.97	0.95		0.97	0.95	
Frt	1.00	0.93		1.00	1.00		1.00	0.90		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	3433	3298		1770	3526		3433	3194		3433	3474	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	3433	3298		1770	3526		3433	3194		3433	3474	
Peak-hour factor, PHF	0.87	0.87	0.87	0.91	0.91	0.91	0.88	0.88	0.88	0.80	0.80	0.80
Adj. Flow (vph)	22	522	434	320	274	7	168	89	166	258	810	114
RTOR Reduction (vph)	0	83	0	0	0	0	0	127	0	0	6	0
Lane Group Flow (vph)	22	873	0	320	281	0	168	128	0	258	918	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases												
Actuated Green, G (s)	3.5	52.9		30.2	78.8		12.0	36.2		16.0	40.2	
Effective Green, g (s)	3.5	52.9		30.2	78.8		12.0	36.2		16.0	40.2	
Actuated g/C Ratio	0.02	0.34		0.20	0.51		0.08	0.23		0.10	0.26	
Clearance Time (s)	4.4	4.9		4.4	5.7		4.4	5.2		4.4	5.2	
Vehicle Extension (s)	2.0	5.1		2.0	4.8		2.0	5.1		2.0	4.8	
Lane Grp Cap (vph)	77	1131		346	1801		267	749		356	905	
v/s Ratio Prot	0.01	c0.26		c0.18	0.08		0.05	0.04		c0.08	c0.26	
v/s Ratio Perm												
v/c Ratio	0.29	0.77		0.92	0.16		0.63	0.17		0.72	1.01	
Uniform Delay, d1	74.1	45.3		60.9	20.0		68.9	47.0		67.0	57.0	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.7	3.9		29.3	0.1		3.3	0.2		6.1	33.6	
Delay (s)	74.9	49.2		90.2	20.1		72.3	47.3		73.1	90.6	
Level of Service	E	D		F	C		E	D		E	F	
Approach Delay (s)		49.8			57.4			57.2			86.7	
Approach LOS		D			E			E			F	

Intersection Summary

HCM 2000 Control Delay	65.9	HCM 2000 Level of Service	E	
HCM 2000 Volume to Capacity ratio	0.89			
Actuated Cycle Length (s)	154.2	Sum of lost time (s)	19.7	
Intersection Capacity Utilization	81.6%	ICU Level of Service	D	
Analysis Period (min)	15			

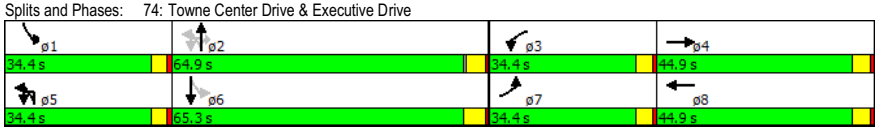
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	64	135	309	425	52	122	119	79	32	994
Future Volume (vph)	64	135	309	425	52	122	119	79	32	994
Turn Type	Prot	NA	Prot	NA	pm+pt	pm+pt	NA	Perm	pm+pt	NA
Protected Phases	7	4	3	8	5	5	2		1	6
Permitted Phases					2	2		2	6	
Detector Phase	7	4	3	8	5	5	2	2	1	6
Switch Phase										
Minimum Initial (s)	4.0	4.0	4.0	7.0	4.0	4.0	7.0	7.0	4.0	7.0
Minimum Split (s)	8.4	8.9	8.4	11.9	8.4	8.4	11.9	11.9	8.4	12.3
Total Split (s)	34.4	44.9	34.4	44.9	34.4	34.4	64.9	64.9	34.4	65.3
Total Split (%)	19.2%	25.1%	19.2%	25.1%	19.2%	19.2%	36.3%	36.3%	19.2%	36.5%
Yellow Time (s)	3.4	3.9	3.4	3.9	3.4	3.4	3.9	3.9	3.4	4.3
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	4.9	4.4	4.9		4.4	4.9	4.9	4.4	5.3
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min

Intersection Summary

Cycle Length: 179
Actuated Cycle Length: 146.6
Natural Cycle: 80
Control Type: Actuated-Uncoordinated

Splits and Phases: 74: Towne Center Drive & Executive Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	64	135	145	309	425	40	52	122	119	79	32	994
Future Volume (vph)	64	135	145	309	425	40	52	122	119	79	32	994
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	4.9			4.4	4.9	4.9	4.4	5.3
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.92		1.00	0.99			1.00	1.00	0.85	1.00	0.98
Flt Protected	0.95	1.00		0.95	1.00			0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	3264		1770	3493			1770	3539	1583	1770	3485
Flt Permitted	0.95	1.00		0.95	1.00			0.06	1.00	1.00	0.67	1.00
Satd. Flow (perm)	1770	3264		1770	3493			113	3539	1583	1245	3485
Peak-hour factor, PHF	0.86	0.86	0.86	0.94	0.94	0.94	0.92	0.90	0.90	0.90	0.89	0.89
Adj. Flow (vph)	74	157	169	329	452	43	57	136	132	88	36	1117
RTOR Reduction (vph)	0	125	0	0	4	0	0	0	0	42	0	4
Lane Group Flow (vph)	74	201	0	329	491	0	0	193	132	46	36	1239
Turn Type	Prot	NA		Prot	NA		pm+pt	pm+pt	NA	Perm	pm+pt	NA
Protected Phases	7	4		3	8		5	5	2		1	6
Permitted Phases							2	2		2	6	
Actuated Green, G (s)	10.5	17.1		30.2	36.8			86.0	76.8	76.8	66.1	61.3
Effective Green, g (s)	10.5	17.1		30.2	36.8			86.0	76.8	76.8	66.1	61.3
Actuated g/C Ratio	0.07	0.12		0.20	0.25			0.58	0.52	0.52	0.45	0.42
Clearance Time (s)	4.4	4.9		4.4	4.9			4.4	4.9	4.9	4.4	5.3
Vehicle Extension (s)	2.0	5.3		2.0	5.4			2.0	3.8	3.8	2.0	3.8
Lane Grp Cap (vph)	126	378		362	871			289	1842	824	575	1448
v/s Ratio Prot	0.04	0.06		c0.19	c0.14			c0.09	0.04		0.00	c0.36
v/s Ratio Perm								0.30		0.03	0.03	
v/c Ratio	0.59	0.53		0.91	0.56			0.67	0.07	0.06	0.06	0.86
Uniform Delay, d1	66.4	61.4		57.3	48.3			40.1	17.6	17.4	22.9	39.1
Progression Factor	1.00	1.00		1.00	1.00			1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	4.4	2.9		25.2	1.5			4.5	0.0	0.0	0.0	5.3
Delay (s)	70.8	64.3		82.5	49.9			44.5	17.6	17.5	22.9	44.4
Level of Service	E	E		F	D			D	B	B	C	D
Approach Delay (s)		65.5			62.9				30.2			43.8
Approach LOS		E			E				C			D

Intersection Summary

HCM 2000 Control Delay	50.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	147.5	Sum of lost time (s)	19.0
Intersection Capacity Utilization	82.0%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

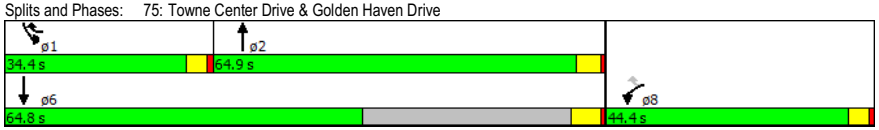
Movement	SBR
Lane Configurations	
Traffic Volume (vph)	112
Future Volume (vph)	112
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.89
Adj. Flow (vph)	126
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

Intersection Summary

Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Configurations					
Traffic Volume (vph)	369	317	210	172	638
Future Volume (vph)	369	317	210	172	638
Turn Type	Prot	pm+ov	NA	Prot	NA
Protected Phases	8	1	2	1	6
Permitted Phases		8			
Detector Phase	8	1	2	1	6
Switch Phase					
Minimum Initial (s)	4.0	4.0	10.0	4.0	10.0
Minimum Split (s)	8.4	8.4	14.9	8.4	15.8
Total Split (s)	44.4	34.4	64.9	34.4	64.8
Total Split (%)	30.9%	23.9%	45.2%	23.9%	45.1%
Yellow Time (s)	3.4	3.4	3.9	3.4	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	4.4	4.9	4.4	5.8
Lead/Lag		Lead	Lag	Lead	
Lead-Lag Optimize?		Yes	Yes	Yes	
Recall Mode	None	None	None	None	None

Intersection Summary
Cycle Length: 143.7
Actuated Cycle Length: 66.4
Natural Cycle: 50
Control Type: Actuated-Uncoordinated

Splits and Phases: 75: Towne Center Drive & Golden Haven Drive



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	369	317	210	181	172	638
Future Volume (vph)	369	317	210	181	172	638
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	0%		0%			-7%
Total Lost time (s)	4.4	4.4	4.9		4.4	5.8
Lane Util. Factor	1.00	1.00	0.95		1.00	0.95
Frt	1.00	0.85	0.93		1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1770	1583	3293		1832	3663
Flt Permitted	0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)	1770	1583	3293		1832	3663
Peak-hour factor, PHF	0.90	0.90	0.85	0.85	0.93	0.93
Adj. Flow (vph)	410	352	247	213	185	686
RTOR Reduction (vph)	0	164	139	0	0	0
Lane Group Flow (vph)	410	188	321	0	185	686
Turn Type	Prot	pm+ov	NA		Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8				
Actuated Green, G (s)	22.5	35.1	16.9		12.6	33.0
Effective Green, g (s)	22.5	35.1	16.9		12.6	33.0
Actuated g/C Ratio	0.34	0.53	0.26		0.19	0.50
Clearance Time (s)	4.4	4.4	4.9		4.4	5.8
Vehicle Extension (s)	2.0	2.0	5.0		2.0	5.0
Lane Grp Cap (vph)	606	951	847		351	1839
v/s Ratio Prot	c0.23	0.04	0.10		c0.10	c0.19
v/s Ratio Perm		0.08				
v/c Ratio	0.68	0.20	0.38		0.53	0.37
Uniform Delay, d1	18.5	8.0	20.1		23.9	10.0
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	2.4	0.0	0.6		0.7	0.3
Delay (s)	20.8	8.0	20.7		24.5	10.3
Level of Service	C	A	C		C	B
Approach Delay (s)	14.9		20.7			13.3
Approach LOS	B		C			B

Intersection Summary			
HCM 2000 Control Delay	15.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.55		
Actuated Cycle Length (s)	65.7	Sum of lost time (s)	13.7
Intersection Capacity Utilization	53.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	22	293	430	363	99	40	68	18	104
Future Volume (vph)	22	293	430	363	99	40	68	18	104
Turn Type	Perm	NA	Perm	NA	pm+pt	NA	Perm	pm+pt	NA
Protected Phases		4		8	5	2		1	6
Permitted Phases	4		8		2		2	6	
Detector Phase	4	4	8	8	5	2	2	1	6
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	7.0	7.0	4.0	7.0
Minimum Split (s)	8.9	8.9	8.4	8.4	8.4	11.9	11.9	8.4	11.9
Total Split (s)	44.9	44.9	44.4	44.4	34.4	64.9	64.9	34.4	64.9
Total Split (%)	31.1%	31.1%	30.8%	30.8%	23.9%	45.0%	45.0%	23.9%	45.0%
Yellow Time (s)	3.9	3.9	3.4	3.4	3.4	3.9	3.9	3.4	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	4.4	4.4	4.4	4.9	4.9	4.4	4.9
Lead/Lag					Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Min	Min	None	Min

Intersection Summary
Cycle Length: 144.2
Actuated Cycle Length: 78.2
Natural Cycle: 150
Control Type: Actuated-Uncoordinated

Splits and Phases: 76: Executive Way & Executive Drive

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	22	293	772	430	363	12	99	40	68	18	104	68
Future Volume (vph)	22	293	772	430	363	12	99	40	68	18	104	68
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9		4.4	4.4		4.4	4.9	4.9	4.4	4.9	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.89		1.00	1.00		1.00	1.00	0.85	1.00	0.94	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3154		1770	3522		1770	1863	1583	1770	1752	
Flt Permitted	0.48	1.00		0.10	1.00		0.39	1.00	1.00	0.72	1.00	
Satd. Flow (perm)	902	3154		187	3522		722	1863	1583	1349	1752	
Peak-hour factor, PHF	0.80	0.80	0.80	0.87	0.87	0.87	0.80	0.80	0.80	0.80	0.80	0.80
Adj. Flow (vph)	28	366	965	494	417	14	124	50	85	22	130	85
RTOR Reduction (vph)	0	229	0	0	1	0	0	0	60	0	22	0
Lane Group Flow (vph)	28	1102	0	494	430	0	124	50	25	23	193	0
Turn Type	Perm	NA		Perm	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2		2	6		
Actuated Green, G (s)	40.3	40.3		40.8	40.8		30.7	24.2	24.2	19.2	17.1	
Effective Green, g (s)	40.3	40.3		40.8	40.8		30.7	24.2	24.2	19.2	17.1	
Actuated g/C Ratio	0.50	0.50		0.50	0.50		0.38	0.30	0.30	0.24	0.21	
Clearance Time (s)	4.9	4.9		4.4	4.4		4.4	4.9	4.9	4.4	4.9	
Vehicle Extension (s)	2.0	2.0		2.3	2.3		2.0	2.9	2.9	2.0	2.6	
Lane Grp Cap (vph)	449	1573		94	1778		393	557	474	331	370	
v/s Ratio Prot		0.35			0.12		c0.04	0.03		0.00	c0.11	
v/s Ratio Perm	0.03			c2.64			0.08		0.02	0.01		
v/c Ratio	0.06	0.93dr		5.26	0.24		0.32	0.09	0.05	0.07	0.52	
Uniform Delay, d1	10.5	15.6		20.0	11.3		17.2	20.4	20.1	23.8	28.2	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.0	1.2		1938.3	0.0		0.2	0.1	0.0	0.0	1.1	
Delay (s)	10.5	16.8		1958.3	11.3		17.3	20.4	20.2	23.8	29.3	
Level of Service	B	B		F	B		B	C	C	C	C	
Approach Delay (s)		16.6			1051.1			18.9			28.8	
Approach LOS		B			F			B			C	

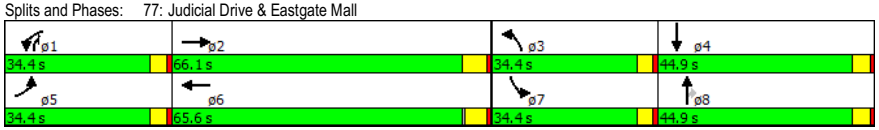
Intersection Summary			
HCM 2000 Control Delay	362.0	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	3.39		
Actuated Cycle Length (s)	80.8	Sum of lost time (s)	14.2
Intersection Capacity Utilization	87.5%	ICU Level of Service	E
Analysis Period (min)	15		

dr Defacto Right Lane. Recode with 1 though lane as a right lane.
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	14	693	269	245	174	11	545	117	166
Future Volume (vph)	14	693	269	245	174	11	545	117	166
Turn Type	Prot	NA	Prot	NA	Prot	NA	pm+ov	Prot	NA
Protected Phases	5	2	1	6	3	8	1	7	4
Permitted Phases							8		
Detector Phase	5	2	1	6	3	8	1	7	4
Switch Phase									
Minimum Initial (s)	4.0	7.0	4.0	7.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.4	13.1	8.4	12.6	8.4	8.9	8.4	8.4	8.9
Total Split (s)	34.4	66.1	34.4	65.6	34.4	44.9	34.4	34.4	44.9
Total Split (%)	19.1%	36.8%	19.1%	36.5%	19.1%	25.0%	19.1%	19.1%	25.0%
Yellow Time (s)	3.4	5.1	3.4	4.6	3.4	3.9	3.4	3.4	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	6.1	4.4	5.6	4.4	4.9	4.4	4.4	4.9
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 179.8
Actuated Cycle Length: 151.1
Natural Cycle: 90
Control Type: Actuated-Uncoordinated

Splits and Phases: 77: Judicial Drive & Eastgate Mall



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	14	693	186	269	245	12	174	11	545	117	166	94
Future Volume (vph)	14	693	186	269	245	12	174	11	545	117	166	94
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	6.1		4.4	5.6		4.4	4.9	4.4	4.4	4.9	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.97		1.00	0.99		1.00	1.00	0.85	1.00	0.95	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3427		1770	3515		1770	1863	1583	1770	1762	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	3427		1770	3515		1770	1863	1583	1770	1762	
Peak-hour factor, PHF	0.89	0.89	0.89	0.97	0.97	0.97	0.85	0.85	0.85	0.87	0.87	0.87
Adj. Flow (vph)	16	779	209	277	253	12	205	13	641	134	191	108
RTOR Reduction (vph)	0	13	0	0	1	0	0	0	113	0	12	0
Lane Group Flow (vph)	16	975	0	277	264	0	205	13	528	134	287	0
Turn Type	Prot	NA		Prot	NA		Prot	NA	pm+ov	Prot	NA	
Protected Phases	5	2		1	6		3	8	1	7	4	
Permitted Phases									8			
Actuated Green, G (s)	3.8	50.9		30.9	78.5		21.9	15.3	46.2	39.1	32.5	
Effective Green, g (s)	3.8	50.9		30.9	78.5		21.9	15.3	46.2	39.1	32.5	
Actuated g/C Ratio	0.02	0.33		0.20	0.50		0.14	0.10	0.30	0.25	0.21	
Clearance Time (s)	4.4	6.1		4.4	5.6		4.4	4.9	4.4	4.4	4.9	
Vehicle Extension (s)	2.0	2.7		2.0	3.0		2.0	2.0	2.0	2.0	2.0	
Lane Grp Cap (vph)	43	1118		350	1768		248	182	468	443	367	
v/s Ratio Prot	0.01	c0.28		0.16	0.07		c0.12	0.01	c0.22	0.08	c0.16	
v/s Ratio Perm									0.11			
v/c Ratio	0.37	0.87		0.79	0.15		0.83	0.07	1.13	0.30	0.78	
Uniform Delay, d1	74.9	49.5		59.5	20.8		65.2	63.9	54.9	47.4	58.4	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	2.0	7.6		10.8	0.0		18.8	0.1	81.9	0.1	9.6	
Delay (s)	76.9	57.1		70.3	20.9		84.0	64.0	136.8	47.5	68.0	
Level of Service	E	E		E	C		F	E	F	D	E	
Approach Delay (s)		57.4			46.1			123.1			61.7	
Approach LOS		E			D			F			E	

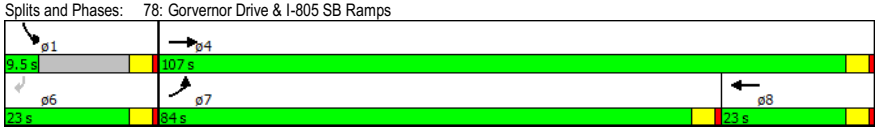
Intersection Summary			
HCM 2000 Control Delay	75.8	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.93		
Actuated Cycle Length (s)	156.0	Sum of lost time (s)	19.8
Intersection Capacity Utilization	80.6%	ICU Level of Service	D
Analysis Period (min)	15		

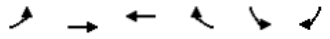
c Critical Lane Group

Lane Group	EBL	EBT	WBT	SBL	SBR
Lane Configurations					
Traffic Volume (vph)	880	306	356	16	188
Future Volume (vph)	880	306	356	16	188
Turn Type	Prot	NA	NA	Prot	Perm
Protected Phases	7	4	8	1	
Permitted Phases					6
Detector Phase	7	4	8	1	6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5
Total Split (s)	84.0	107.0	23.0	9.5	23.0
Total Split (%)	64.6%	82.3%	17.7%	7.3%	17.7%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead		Lag		
Lead-Lag Optimize?	Yes		Yes		
Recall Mode	None	None	None	None	Min

Intersection Summary
Cycle Length: 130
Actuated Cycle Length: 59.5
Natural Cycle: 70
Control Type: Actuated-Uncoordinated

Splits and Phases: 78: Gorvernor Drive & I-805 SB Ramps

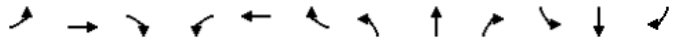




Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	880	306	356	38	16	188
Future Volume (vph)	880	306	356	38	16	188
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5		4.5	4.5
Lane Util. Factor	0.97	1.00	0.95		1.00	1.00
Frt	1.00	1.00	0.99		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	3433	1863	3488		1770	1583
Flt Permitted	0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)	3433	1863	3488		1770	1583
Peak-hour factor, PHF	0.95	0.95	0.80	0.80	0.88	0.88
Adj. Flow (vph)	926	322	445	48	18	214
RTOR Reduction (vph)	0	0	5	0	0	189
Lane Group Flow (vph)	926	322	488	0	18	25
Turn Type	Prot	NA	NA		Prot	Perm
Protected Phases	7	4	8		1	
Permitted Phases						6
Actuated Green, G (s)	22.3	43.5	16.7		6.8	6.8
Effective Green, g (s)	22.3	43.5	16.7		6.8	6.8
Actuated g/C Ratio	0.38	0.73	0.28		0.11	0.11
Clearance Time (s)	4.5	4.5	4.5		4.5	4.5
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	1290	1366	982		202	181
v/s Ratio Prot	c0.27	0.17	c0.14		0.01	
v/s Ratio Perm						c0.02
v/c Ratio	0.72	0.24	0.50		0.09	0.14
Uniform Delay, d1	15.8	2.5	17.8		23.5	23.6
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	1.9	0.1	0.4		0.2	0.3
Delay (s)	17.7	2.6	18.2		23.7	23.9
Level of Service	B	A	B		C	C
Approach Delay (s)		13.8	18.2		23.9	
Approach LOS		B	B		C	

Intersection Summary			
HCM 2000 Control Delay	16.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.55		
Actuated Cycle Length (s)	59.3	Sum of lost time (s)	13.5
Intersection Capacity Utilization	51.6%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	320	0	0	0	23	5	438	6	3	0	0	0
Future Volume (Veh/h)	320	0	0	0	23	5	438	6	3	0	0	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.94	0.94	0.94	0.25	0.25	0.25
Hourly flow rate (vph)	400	0	0	0	29	6	466	6	3	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	960	941	0	940	940	8	0			9		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	960	941	0	940	940	8	0			9		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	0	100	100	100	85	99	71			100		
cM capacity (veh/h)	162	188	1085	190	188	1075	1623			1611		

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	400	35	475
Volume Left	400	0	466
Volume Right	0	6	3
cSH	162	219	1623
Volume to Capacity	2.47	0.16	0.29
Queue Length 95th (ft)	853	14	30
Control Delay (s)	722.4	24.5	8.0
Lane LOS	F	C	A
Approach Delay (s)	722.4	24.5	8.0
Approach LOS	F	C	

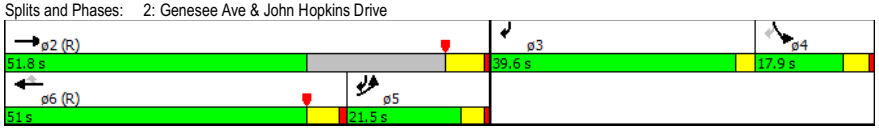
Intersection Summary			
Average Delay	322.6		
Intersection Capacity Utilization	55.8%	ICU Level of Service	B
Analysis Period (min)	15		

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	ø3
Lane Configurations							
Traffic Volume (vph)	86	720	1476	1473	163	23	
Future Volume (vph)	86	720	1476	1473	163	23	
Turn Type	Prot	NA	NA	Perm	Prot	pt+ov	
Protected Phases	5	2	6		4	3 5	3
Permitted Phases				6		4	
Detector Phase	5	2	6	6	4	3 5	
Switch Phase							
Minimum Initial (s)	4.0	10.0	10.0	10.0	7.0		4.0
Minimum Split (s)	9.5	16.7	15.9	15.9	11.9		7.0
Total Split (s)	21.5	51.8	51.0	51.0	17.9		39.6
Total Split (%)	16.5%	39.8%	39.2%	39.2%	13.8%		30%
Yellow Time (s)	3.4	5.7	4.9	4.9	3.9		3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		0.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	4.4	6.7	5.9	5.9	4.9		
Lead/Lag	Lag		Lead	Lead	Lag		Lead
Lead-Lag Optimize?	Yes		Yes	Yes	Yes		Yes
Recall Mode	None	C-Min	C-Min	C-Min	None		None

Intersection Summary

Cycle Length: 130
Actuated Cycle Length: 130
Offset: 16 (12%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 2: Genesee Ave & John Hopkins Drive



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	86	720	1476	1473	163	23
Future Volume (vph)	86	720	1476	1473	163	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	6.7	5.9	5.9	4.9	3.0
Lane Util. Factor	1.00	0.91	0.86	0.88	0.97	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	5085	6408	2787	3433	1583
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	5085	6408	2787	3433	1583
Peak-hour factor, PHF	0.89	0.89	0.94	0.94	0.80	0.80
Adj. Flow (vph)	97	809	1570	1567	204	29
RTOR Reduction (vph)	0	0	0	0	0	1
Lane Group Flow (vph)	97	809	1570	1567	204	28
Turn Type	Prot	NA	NA	Perm	Prot	pt+ov
Protected Phases	5	2	6		4	3 5
Permitted Phases				6		4
Actuated Green, G (s)	11.5	92.5	77.4	77.4	13.8	38.8
Effective Green, g (s)	11.5	92.5	77.4	77.4	13.8	34.4
Actuated g/C Ratio	0.09	0.71	0.60	0.60	0.11	0.26
Clearance Time (s)	4.4	6.7	5.9	5.9	4.9	
Vehicle Extension (s)	2.0	4.0	3.9	3.9	5.0	
Lane Grp Cap (vph)	156	3618	3815	1659	364	455
v/s Ratio Prot	c0.05	0.16	0.25		c0.06	c0.01
v/s Ratio Perm				c0.56		0.01
v/c Ratio	0.62	0.22	0.41	0.94	0.56	0.06
Uniform Delay, d1	57.2	6.4	14.1	24.3	55.2	35.7
Progression Factor	0.80	0.52	1.16	1.00	1.00	1.00
Incremental Delay, d2	5.4	0.1	0.2	7.6	3.2	0.0
Delay (s)	51.4	3.5	16.5	31.9	58.4	35.7
Level of Service	D	A	B	C	E	D
Approach Delay (s)		8.6	24.2		55.6	
Approach LOS		A	C		E	

Intersection Summary

HCM 2000 Control Delay	22.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	18.2
Intersection Capacity Utilization	64.9%	ICU Level of Service	C
Analysis Period (min)	15		

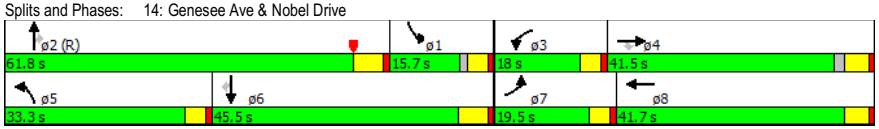
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	104	703	147	147	387	276	1768	327	62	271	44
Future Volume (vph)	104	703	147	147	387	276	1768	327	62	271	44
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8	5	2		1	6	
Permitted Phases			4					2			6
Detector Phase	7	4	4	3	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	4.0	10.0	10.0	4.0	10.0	4.0	10.0	10.0	4.0	10.0	10.0
Minimum Split (s)	8.4	14.9	14.9	8.4	15.1	8.4	15.7	15.7	8.4	15.9	15.9
Total Split (s)	19.5	41.5	41.5	18.0	41.7	33.3	61.8	61.8	15.7	45.5	45.5
Total Split (%)	13.9%	29.6%	29.6%	12.9%	29.8%	23.8%	44.1%	44.1%	11.2%	32.5%	32.5%
Yellow Time (s)	3.4	3.9	3.9	3.4	4.1	3.4	4.7	4.7	3.4	4.9	4.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	4.9	4.9	4.4	5.1	4.4	5.7	5.7	4.4	5.9	5.9
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	None	None	None

Intersection Summary

Cycle Length: 140
Actuated Cycle Length: 140
Offset: 65 (46%), Referenced to phase 2:NBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 14: Genesee Ave & Nobel Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	104	703	147	147	387	50	276	1768	327	62	271	44
Future Volume (vph)	104	703	147	147	387	50	276	1768	327	62	271	44
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9	4.9	4.4	5.1		4.4	5.7	5.7	4.4	5.9	5.9
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95		0.97	0.91	1.00	0.97	0.91	1.00
Frt	1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	3539	1583	3433	3478		3433	5085	1583	3433	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3539	1583	3433	3478		3433	5085	1583	3433	5085	1583
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.94	0.94	0.94	0.80	0.80	0.80
Adj. Flow (vph)	124	837	175	162	425	55	294	1881	348	78	339	55
RTOR Reduction (vph)	0	0	111	0	7	0	0	0	75	0	0	34
Lane Group Flow (vph)	124	837	64	162	473	0	294	1881	273	78	339	21
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4						2			6
Actuated Green, G (s)	9.4	40.1	40.1	11.0	41.5		16.4	61.9	61.9	7.6	52.9	52.9
Effective Green, g (s)	9.4	40.1	40.1	11.0	41.5		16.4	61.9	61.9	7.6	52.9	52.9
Actuated g/C Ratio	0.07	0.29	0.29	0.08	0.30		0.12	0.44	0.44	0.05	0.38	0.38
Clearance Time (s)	4.4	4.9	4.9	4.4	5.1		4.4	5.7	5.7	4.4	5.9	5.9
Vehicle Extension (s)	2.0	4.0	4.0	2.0	2.1		2.0	8.0	8.0	2.0	4.0	4.0
Lane Grp Cap (vph)	230	1013	453	269	1030		402	2248	699	186	1921	598
v/s Ratio Prot	0.04	c0.24		c0.05	0.14		0.09	c0.37		c0.02	0.07	
v/s Ratio Perm			0.04						0.17			0.01
v/c Ratio	0.54	0.83	0.14	0.60	0.46		0.73	0.84	0.39	0.42	0.18	0.03
Uniform Delay, d1	63.2	46.7	37.2	62.4	40.1		59.7	34.6	26.3	64.1	29.0	27.5
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.09	0.53	0.37	0.99	1.21	3.74
Incremental Delay, d2	1.2	5.9	0.2	2.6	0.1		4.3	2.9	1.2	0.6	0.1	0.0
Delay (s)	64.4	52.6	37.4	65.0	40.3		69.5	21.3	10.9	64.0	35.3	102.8
Level of Service	E	D	D	E	D		E	C	B	E	D	F
Approach Delay (s)		51.5			46.5			25.5			47.9	
Approach LOS		D			D			C			D	

Intersection Summary

HCM 2000 Control Delay	36.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	19.8
Intersection Capacity Utilization	77.3%	ICU Level of Service	D
Analysis Period (min)	15		

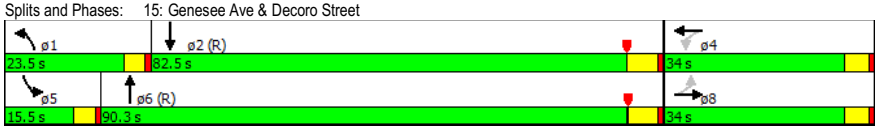
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	79	53	112	34	29	66	80	2194	37	667
Future Volume (vph)	79	53	112	34	29	66	80	2194	37	667
Turn Type	Perm	NA	NA	Perm	NA	NA	Prot	NA	Prot	NA
Protected Phases		8			4		1	6	5	2
Permitted Phases	8			4						
Detector Phase	8	8		4	4		1	6	5	2
Switch Phase										
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	10.0	4.0	10.0
Minimum Split (s)	8.9	8.9		8.9	8.9		8.4	15.7	8.4	15.9
Total Split (s)	34.0	34.0		34.0	34.0		23.5	90.3	15.5	82.5
Total Split (%)	24.3%	24.3%		24.3%	24.3%		16.8%	64.5%	11.1%	58.9%
Yellow Time (s)	3.9	3.9		3.9	3.9		3.4	4.7	3.4	4.9
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0			0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)		4.9			4.9		4.4	5.7	4.4	5.9
Lead/Lag							Lead	Lag	Lead	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	C-Max	None	C-Max

Intersection Summary

Cycle Length: 140
Actuated Cycle Length: 140
Offset: 44 (31%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow
Natural Cycle: 60
Control Type: Actuated-Coordinated

Splits and Phases: 15: Genesee Ave & Decoro Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	79	53	112	34	29	66	80	2194	90	37	667	107
Future Volume (vph)	79	53	112	34	29	66	80	2194	90	37	667	107
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9	4.0		4.9	4.0	4.4	5.7		4.4	5.9	
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.91		1.00	0.91	
Frt		1.00	0.85		1.00	0.85	1.00	0.99		1.00	0.98	
Flt Protected		0.97	1.00		0.97	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1809	1583		1814	1583	1770	5055		1770	4980	
Flt Permitted		0.76	1.00		0.58	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1423	1583		1072	1583	1770	5055		1770	4980	
Peak-hour factor, PHF	0.84	0.84	0.84	0.85	0.85	0.85	0.93	0.93	0.93	0.80	0.80	0.80
Adj. Flow (vph)	94	63	133	40	34	78	86	2359	97	46	834	134
RTOR Reduction (vph)	0	0	133	0	0	78	0	2	0	0	11	0
Lane Group Flow (vph)	0	157	0	0	74	0	86	2454	0	46	957	0
Turn Type	Perm	NA	NA	Perm	NA	NA	Prot	NA		Prot	NA	
Protected Phases		8			4		1	6		5	2	
Permitted Phases	8			4								
Actuated Green, G (s)		19.9	0.0		19.9	0.0	11.2	98.1		7.0	93.7	
Effective Green, g (s)		19.9	0.0		19.9	0.0	11.2	98.1		7.0	93.7	
Actuated g/C Ratio		0.14	0.00		0.14	0.00	0.08	0.70		0.05	0.67	
Clearance Time (s)		4.9			4.9		4.4	5.7		4.4	5.9	
Vehicle Extension (s)		2.0			2.0		2.0	4.3		2.0	3.7	
Lane Grp Cap (vph)		202	0		152	0	141	3542		88	3333	
v/s Ratio Prot							c0.05	c0.49		0.03	0.19	
v/s Ratio Perm		c0.11			0.07							
v/c Ratio		0.78	0.00		0.49	0.00	0.61	0.69		0.52	0.29	
Uniform Delay, d1		57.9	70.0		55.3	70.0	62.3	12.2		64.9	9.5	
Progression Factor		1.00	1.00		1.00	1.00	0.91	0.69		1.04	1.51	
Incremental Delay, d2		15.6	0.0		0.9	0.0	3.6	0.8		2.5	0.2	
Delay (s)		73.5	70.0		56.2	70.0	60.6	9.2		69.8	14.5	
Level of Service		E	E		E	E	E	A		E	B	
Approach Delay (s)		71.9			63.3			10.9			17.0	
Approach LOS		E			E			B			B	

Intersection Summary

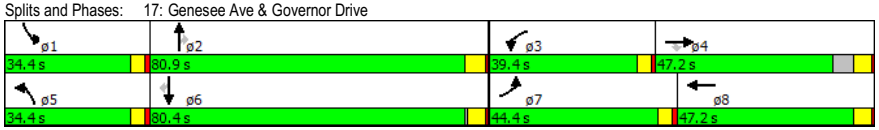
HCM 2000 Control Delay	18.9	HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio	0.71			
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	15.2	
Intersection Capacity Utilization	74.1%	ICU Level of Service	D	
Analysis Period (min)	15			

c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	243	223	119	427	162	63	1787	406	218	684	142
Future Volume (vph)	243	223	119	427	162	63	1787	406	218	684	142
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8	5	2		1	6	
Permitted Phases			4					2			6
Detector Phase	7	4	4	3	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	4.0	8.0	8.0	4.0	8.0	4.0	8.0	8.0	4.0	8.0	8.0
Minimum Split (s)	8.4	13.2	13.2	8.4	13.2	8.4	13.9	13.9	8.4	13.4	13.4
Total Split (s)	44.4	47.2	47.2	39.4	47.2	34.4	80.9	80.9	34.4	80.4	80.4
Total Split (%)	21.5%	22.8%	22.8%	19.0%	22.8%	16.6%	39.1%	39.1%	16.6%	38.9%	38.9%
Yellow Time (s)	3.4	4.2	4.2	3.4	4.2	3.4	4.9	4.9	3.4	4.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.2	5.2	4.4	5.2	4.4	5.9	5.9	4.4	5.4	5.4
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	Min

Intersection Summary
Cycle Length: 206.9
Actuated Cycle Length: 184.8
Natural Cycle: 90
Control Type: Actuated-Uncoordinated

Splits and Phases: 17: Genesee Ave & Governor Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	243	223	119	427	162	279	63	1787	406	218	684	142
Future Volume (vph)	243	223	119	427	162	279	63	1787	406	218	684	142
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	16	12	12	12	12	12	12	12
Total Lost time (s)	4.4	5.2	5.2	4.4	5.2		4.4	5.9	5.9	4.4	5.4	5.4
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95		1.00	0.91	1.00	0.97	0.91	1.00
Frt	1.00	1.00	0.85	1.00	0.91		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	3539	1583	3433	3631		1770	5085	1583	3433	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3539	1583	3433	3631		1770	5085	1583	3433	5085	1583
Peak-hour factor, PHF	0.80	0.80	0.80	0.80	0.80	0.80	0.90	0.90	0.90	0.85	0.85	0.85
Adj. Flow (vph)	304	279	149	534	202	349	70	1986	451	256	805	167
RTOR Reduction (vph)	0	0	83	0	138	0	0	0	110	0	0	45
Lane Group Flow (vph)	304	279	66	534	414	0	70	1986	341	256	805	122
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4						2			6
Actuated Green, G (s)	20.8	39.1	39.1	32.6	50.9		11.7	75.1	75.1	18.2	82.1	82.1
Effective Green, g (s)	20.8	39.1	39.1	32.6	50.9		11.7	75.1	75.1	18.2	82.1	82.1
Actuated g/C Ratio	0.11	0.21	0.21	0.18	0.28		0.06	0.41	0.41	0.10	0.44	0.44
Clearance Time (s)	4.4	5.2	5.2	4.4	5.2		4.4	5.9	5.9	4.4	5.4	5.4
Vehicle Extension (s)	2.0	2.3	2.3	2.0	3.8		2.0	2.9	2.9	2.0	3.5	3.5
Lane Grp Cap (vph)	386	748	334	605	999		112	2065	642	337	2257	702
v/s Ratio Prot	0.09	0.08		c0.16	c0.11		0.04	c0.39		c0.07	0.16	
v/s Ratio Perm			0.04						0.22			0.08
v/c Ratio	0.79	0.37	0.20	0.88	0.41		0.62	0.96	0.53	0.76	0.36	0.17
Uniform Delay, d1	79.9	62.4	60.0	74.3	54.8		84.5	53.5	41.6	81.2	34.0	31.0
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	9.4	0.2	0.2	13.9	0.4		7.6	12.1	0.8	8.5	0.1	0.1
Delay (s)	89.3	62.6	60.2	88.2	55.2		92.0	65.6	42.4	89.7	34.1	31.1
Level of Service	F	E	E	F	E		F	E	D	F	C	C
Approach Delay (s)		73.2			71.4			62.1			45.3	
Approach LOS		E			E			E			D	

Intersection Summary					
HCM 2000 Control Delay	61.7	HCM 2000 Level of Service		E	
HCM 2000 Volume to Capacity ratio	0.80				
Actuated Cycle Length (s)	184.9	Sum of lost time (s)		19.9	
Intersection Capacity Utilization	77.7%	ICU Level of Service		D	
Analysis Period (min)	15				
c Critical Lane Group					

Lane Group	EBR	NBL	NBT	SBT	SBR
Lane Configurations					
Traffic Volume (vph)	156	348	1256	1019	297
Future Volume (vph)	156	348	1256	1019	297
Turn Type	Perm	Prot	NA	NA	Perm
Protected Phases		5	2	6	
Permitted Phases	4				6
Detector Phase	4	5	2	6	6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	36.5	9.5	22.5	32.5	32.5
Total Split (s)	36.5	55.0	127.5	72.5	72.5
Total Split (%)	22.3%	33.5%	77.7%	44.2%	44.2%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5
Lead/Lag		Lead		Lag	Lag
Lead-Lag Optimize?		Yes		Yes	Yes
Recall Mode	None	None	Min	Min	Min

Intersection Summary
Cycle Length: 164
Actuated Cycle Length: 100.1
Natural Cycle: 110
Control Type: Actuated-Uncoordinated

Splits and Phases: 18: Genesee Ave & SR-52 Ramp

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	156	348	1256	1019	297
Future Volume (vph)	0	156	348	1256	1019	297
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5	4.5	4.5	4.5	4.5
Lane Util. Factor		0.88	1.00	0.91	0.95	1.00
Frt		0.85	1.00	1.00	1.00	0.85
Flt Protected		1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)		2787	1770	5085	3539	1583
Flt Permitted		1.00	0.95	1.00	1.00	1.00
Satd. Flow (perm)		2787	1770	5085	3539	1583
Peak-hour factor, PHF	0.80	0.80	0.83	0.83	0.83	0.83
Adj. Flow (vph)	0	195	419	1513	1228	358
RTOR Reduction (vph)	0	184	0	0	0	79
Lane Group Flow (vph)	0	11	419	1513	1228	279
Turn Type		Perm	Prot	NA	NA	Perm
Protected Phases			5	2	6	
Permitted Phases		4				6
Actuated Green, G (s)		5.8	32.0	84.9	48.4	48.4
Effective Green, g (s)		5.8	32.0	84.9	48.4	48.4
Actuated g/C Ratio		0.06	0.32	0.85	0.49	0.49
Clearance Time (s)		4.5	4.5	4.5	4.5	4.5
Vehicle Extension (s)		3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)		162	568	4330	1718	768
v/s Ratio Prot			c0.24	0.30	c0.35	
v/s Ratio Perm		c0.00				0.18
v/c Ratio		0.07	0.74	0.35	0.71	0.36
Uniform Delay, d1		44.4	30.1	1.6	20.2	16.0
Progression Factor		1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2		0.2	5.0	0.0	1.4	0.3
Delay (s)		44.6	35.1	1.6	21.6	16.3
Level of Service		D	D	A	C	B
Approach Delay (s)	44.6			8.9	20.4	
Approach LOS	D			A	C	

Intersection Summary			
HCM 2000 Control Delay	15.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	99.7	Sum of lost time (s)	13.5
Intersection Capacity Utilization	54.9%	ICU Level of Service	A
Analysis Period (min)	15		

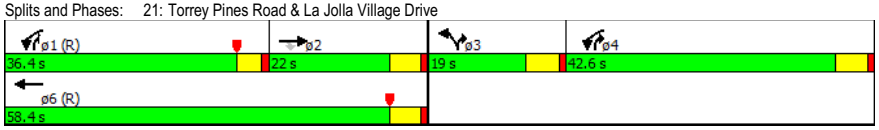
c Critical Lane Group

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	ø1	ø4
Lane Configurations								
Traffic Volume (vph)	391	62	1289	1735	272	1263		
Future Volume (vph)	391	62	1289	1735	272	1263		
Turn Type	NA	Perm	Prot	NA	Prot	custom		
Protected Phases	2		1 4	6	3	1 3 4	1	4
Permitted Phases		2						
Detector Phase	2	2	1 4	6	3	1 3 4		
Switch Phase								
Minimum Initial (s)	10.0	10.0		10.0	4.0		4.0	4.0
Minimum Split (s)	15.4	15.4		15.3	9.6		8.4	42.6
Total Split (s)	22.0	22.0		58.4	19.0		36.4	42.6
Total Split (%)	18.3%	18.3%		48.7%	15.8%		30%	36%
Yellow Time (s)	4.4	4.4		4.3	4.6		3.4	4.6
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			
Total Lost Time (s)	5.4	5.4		5.3	5.6			
Lead/Lag	Lag	Lag			Lead		Lead	Lag
Lead-Lag Optimize?	Yes	Yes			Yes		Yes	Yes
Recall Mode	None	None		C-Max	None		C-Max	None

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 1:WBL and 6:WBT, Start of Yellow
Natural Cycle: 100
Control Type: Actuated-Coordinated

Splits and Phases: 21: Torrey Pines Road & La Jolla Village Drive



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	391	62	1289	1735	272	1263
Future Volume (vph)	391	62	1289	1735	272	1263
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.4	5.4	4.4	5.3	5.6	4.4
Lane Util. Factor	0.91	1.00	0.97	0.91	0.97	0.88
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	5085	1583	3433	5085	3433	2787
Flt Permitted	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (perm)	5085	1583	3433	5085	3433	2787
Peak-hour factor, PHF	0.83	0.83	0.93	0.93	0.84	0.84
Adj. Flow (vph)	471	75	1386	1866	324	1504
RTOR Reduction (vph)	0	65	0	0	0	0
Lane Group Flow (vph)	471	10	1386	1866	324	1504
Turn Type	NA	Perm	Prot	NA	Prot	custom
Protected Phases	2		1 4	6	3	1 3 4
Permitted Phases		2				
Actuated Green, G (s)	16.6	16.6	74.6	54.5	13.4	93.6
Effective Green, g (s)	16.6	16.6	69.0	54.5	13.4	82.4
Actuated g/C Ratio	0.14	0.14	0.58	0.45	0.11	0.69
Clearance Time (s)	5.4	5.4		5.3	5.6	
Vehicle Extension (s)	5.5	5.5		8.0	2.0	
Lane Grp Cap (vph)	703	218	1973	2309	383	1913
v/s Ratio Prot	0.09		0.40	c0.37	c0.09	c0.54
v/s Ratio Perm		0.01				
v/c Ratio	0.67	0.05	0.70	0.81	0.85	0.79
Uniform Delay, d1	49.1	44.8	18.2	28.2	52.3	12.8
Progression Factor	0.69	0.77	1.37	0.91	1.00	1.00
Incremental Delay, d2	3.4	0.2	0.3	1.0	15.1	2.0
Delay (s)	37.2	34.5	25.3	26.6	67.4	14.8
Level of Service	D	C	C	C	E	B
Approach Delay (s)	36.9			26.1	24.1	
Approach LOS	D			C	C	

Intersection Summary

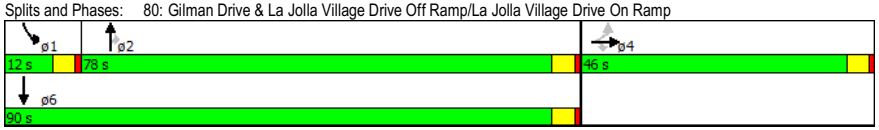
HCM 2000 Control Delay	26.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	21.0
Intersection Capacity Utilization	65.7%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBT	EBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	4	430	1180	144	23	168
Future Volume (vph)	4	430	1180	144	23	168
Turn Type	NA	Perm	NA	Perm	Prot	NA
Protected Phases	4		2		1	6
Permitted Phases		4		2		
Detector Phase	4	4	2	2	1	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	40.5	40.5	22.5	22.5	9.5	24.5
Total Split (s)	46.0	46.0	78.0	78.0	12.0	90.0
Total Split (%)	33.8%	33.8%	57.4%	57.4%	8.8%	66.2%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	None	None	Min	Min	None	Min

Intersection Summary
Cycle Length: 136
Actuated Cycle Length: 64.6
Natural Cycle: 90
Control Type: Actuated-Uncoordinated

Splits and Phases: 80: Gilman Drive & La Jolla Village Drive Off Ramp/La Jolla Village Drive On Ramp



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	24	4	430	0	0	0	0	1180	144	23	168	0
Future Volume (vph)	24	4	430	0	0	0	0	1180	144	23	168	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5	4.5					4.5	4.5	4.5	4.5	
Lane Util. Factor		0.95	0.95					0.95	1.00	1.00	0.95	
Frt		0.87	0.85					1.00	0.85	1.00	1.00	
Flt Protected		0.99	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1529	1504					3539	1583	1770	3539	
Flt Permitted		0.99	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		1529	1504					3539	1583	1770	3539	
Peak-hour factor, PHF	0.64	0.64	0.64	0.25	0.25	0.25	0.92	0.92	0.92	1.00	1.00	1.00
Adj. Flow (vph)	38	6	672	0	0	0	0	1283	157	23	168	0
RTOR Reduction (vph)	0	216	281	0	0	0	0	0	30	0	0	0
Lane Group Flow (vph)	0	144	75	0	0	0	0	1283	127	23	168	0
Turn Type	Perm	NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2			
Actuated Green, G (s)		13.9	13.9					36.4	36.4	2.0	42.9	
Effective Green, g (s)		13.9	13.9					36.4	36.4	2.0	42.9	
Actuated g/C Ratio		0.21	0.21					0.55	0.55	0.03	0.65	
Clearance Time (s)		4.5	4.5					4.5	4.5	4.5	4.5	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		322	317					1957	875	53	2307	
v/s Ratio Prot								c0.36		c0.01	0.05	
v/s Ratio Perm		0.09	0.05						0.08			
v/c Ratio		0.45	0.24					0.66	0.15	0.43	0.07	
Uniform Delay, d1		22.6	21.5					10.3	7.1	31.3	4.2	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		1.0	0.4					0.8	0.1	5.6	0.0	
Delay (s)		23.6	21.9					11.1	7.2	36.9	4.2	
Level of Service		C	C					B	A	D	A	
Approach Delay (s)		22.8			0.0			10.7			8.1	
Approach LOS		C			A			B			A	

Intersection Summary			
HCM 2000 Control Delay	14.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	65.8	Sum of lost time (s)	13.5
Intersection Capacity Utilization	66.7%	ICU Level of Service	C
Analysis Period (min)	15		

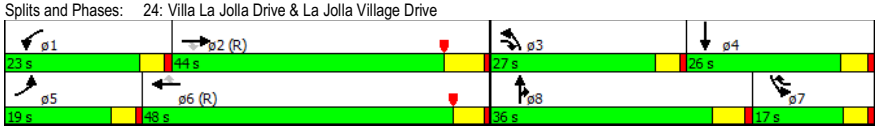
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	214	1185	35	470	1791	750	358	346	463	458	103
Future Volume (vph)	214	1185	35	470	1791	750	358	346	463	458	103
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	Prot	Prot	NA
Protected Phases	5	2	3	1	6	7	3	8	8	7	4
Permitted Phases			2			6					
Detector Phase	5	2	3	1	6	7	3	8	8	7	4
Switch Phase											
Minimum Initial (s)	4.0	10.0	4.0	4.0	10.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.4	16.4	8.4	8.4	15.3	8.4	8.4	9.5	9.5	8.4	8.9
Total Split (s)	19.0	44.0	27.0	23.0	48.0	17.0	27.0	36.0	36.0	17.0	26.0
Total Split (%)	15.8%	36.7%	22.5%	19.2%	40.0%	14.2%	22.5%	30.0%	30.0%	14.2%	21.7%
Yellow Time (s)	3.4	5.4	3.4	3.4	4.3	3.4	3.4	4.5	4.5	3.4	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	6.4	4.4	4.4	5.3	4.4	4.4	5.5	5.5	4.4	4.9
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	C-Max	None	None	None	None	None	None

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 120
Control Type: Actuated-Coordinated

Splits and Phases: 24: Villa La Jolla Drive & La Jolla Village Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	214	1185	35	470	1791	750	358	346	463	458	103	38
Future Volume (vph)	214	1185	35	470	1791	750	358	346	463	458	103	38
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	6.4	4.4	4.4	5.3	4.4	4.4	5.5	5.5	4.4	4.9	
Lane Util. Factor	1.00	0.91	1.00	0.97	0.91	0.88	0.97	0.95	0.95	0.97	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.97	0.85	1.00	0.96	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	5085	1583	3433	5085	2787	3433	1718	1504	3433	1787	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	5085	1583	3433	5085	2787	3433	1718	1504	3433	1787	
Peak-hour factor, PHF	0.87	0.87	0.87	0.91	0.91	0.91	0.80	0.80	0.80	0.80	0.80	0.80
Adj. Flow (vph)	246	1362	40	516	1968	824	448	432	579	572	129	48
RTOR Reduction (vph)	0	0	21	0	0	94	0	7	186	0	11	0
Lane Group Flow (vph)	246	1362	19	516	1968	730	448	530	289	573	166	0
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	Prot	Prot	NA	
Protected Phases	5	2	3	1	6	7	3	8	8	7	4	
Permitted Phases			2			6						
Actuated Green, G (s)	14.6	37.6	57.0	18.6	42.7	55.3	19.4	30.5	30.5	12.6	24.3	
Effective Green, g (s)	14.6	37.6	57.0	18.6	42.7	55.3	19.4	30.5	30.5	12.6	24.3	
Actuated g/C Ratio	0.12	0.31	0.48	0.16	0.36	0.46	0.16	0.25	0.25	0.10	0.20	
Clearance Time (s)	4.4	6.4	4.4	4.4	5.3	4.4	4.4	5.5	5.5	4.4	4.9	
Vehicle Extension (s)	2.0	4.4	2.0	2.0	4.7	2.0	2.0	3.3	3.3	2.0	2.0	
Lane Grp Cap (vph)	215	1593	751	532	1809	1284	555	436	382	360	361	
v/s Ratio Prot	c0.14	0.27	0.00	0.15	c0.39	0.06	0.13	c0.31	0.19	c0.17	0.09	
v/s Ratio Perm			0.01			0.20						
v/c Ratio	1.14	0.85	0.03	0.97	1.09	0.57	0.81	1.21	0.76	1.59	0.46	
Uniform Delay, d1	52.7	38.6	16.7	50.4	38.6	23.6	48.5	44.8	41.3	53.7	42.1	
Progression Factor	0.76	1.19	1.00	0.84	0.97	1.01	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	93.0	3.8	0.0	6.2	40.6	0.0	8.0	116.0	8.5	279.1	0.3	
Delay (s)	133.2	49.8	16.7	48.8	78.2	24.0	56.5	160.7	49.8	332.8	42.4	
Level of Service	F	D	B	D	E	C	E	F	D	F	D	
Approach Delay (s)		61.4			60.1			92.7			264.3	
Approach LOS		E			E			F			F	

Intersection Summary

HCM 2000 Control Delay	88.4	HCM 2000 Level of Service	F	
HCM 2000 Volume to Capacity ratio	1.21			
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	20.7	
Intersection Capacity Utilization	103.5%	ICU Level of Service	G	
Analysis Period (min)	15			

c Critical Lane Group

Lane Group	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Traffic Volume (vph)	581	2256	3	2202	812	156	210
Future Volume (vph)	581	2256	3	2202	812	156	210
Turn Type	Prot	NA	Prot	NA	Perm	Prot	Perm
Protected Phases	5	2	1	6		7	
Permitted Phases					6		7
Detector Phase	5	2	1	6	6	7	7
Switch Phase							
Minimum Initial (s)	4.0	10.0	4.0	10.0	10.0	10.0	10.0
Minimum Split (s)	8.4	16.3	8.4	15.4	15.4	14.4	14.4
Total Split (s)	34.4	66.3	24.4	65.4	65.4	44.4	44.4
Total Split (%)	23.9%	46.0%	16.9%	45.4%	45.4%	30.8%	30.8%
Yellow Time (s)	3.4	5.3	3.4	4.4	4.4	3.4	3.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	6.3	4.4	5.4	5.4	4.4	4.4
Lead/Lag	Lead	Lag	Lead	Lag	Lag		
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		
Recall Mode	None	Min	None	Min	Min	None	None

Intersection Summary

Cycle Length: 144.2
Actuated Cycle Length: 115.2
Natural Cycle: 90
Control Type: Actuated-Uncoordinated

Splits and Phases: 34: Miramar Road & Eastgate Mall

Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Traffic Volume (vph)	581	2256	3	2202	812	156	210
Future Volume (vph)	581	2256	3	2202	812	156	210
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	6.3	4.4	5.4	5.4	4.4	4.4
Lane Util. Factor	0.97	0.91	1.00	0.86	1.00	0.97	1.00
Frt	1.00	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)	3433	5085	1770	6408	1583	3433	1583
Flt Permitted	0.95	1.00	0.95	1.00	1.00	0.95	1.00
Satd. Flow (perm)	3433	5085	1770	6408	1583	3433	1583
Peak-hour factor, PHF	0.87	0.87	0.92	0.92	0.92	0.80	0.80
Adj. Flow (vph)	668	2593	3	2393	883	195	262
RTOR Reduction (vph)	0	0	0	0	310	0	233
Lane Group Flow (vph)	668	2593	3	2393	573	195	30
Turn Type	Prot	NA	Prot	NA	Perm	Prot	Perm
Protected Phases	5	2	1	6		7	
Permitted Phases					6		7
Actuated Green, G (s)	27.1	88.9	1.0	63.7	63.7	13.7	13.7
Effective Green, g (s)	27.1	88.9	1.0	63.7	63.7	13.7	13.7
Actuated g/C Ratio	0.23	0.75	0.01	0.54	0.54	0.12	0.12
Clearance Time (s)	4.4	6.3	4.4	5.4	5.4	4.4	4.4
Vehicle Extension (s)	2.0	5.0	2.0	6.1	6.1	4.5	4.5
Lane Grp Cap (vph)	783	3808	14	3438	849	396	182
v/s Ratio Prot	c0.19	c0.51	0.00	0.37		c0.06	
v/s Ratio Perm					0.36		0.02
v/c Ratio	0.85	0.68	0.21	0.70	0.67	0.49	0.17
Uniform Delay, d1	43.9	7.6	58.5	20.3	20.0	49.2	47.4
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	8.6	0.7	2.8	1.0	3.3	1.7	0.8
Delay (s)	52.5	8.3	61.2	21.3	23.3	50.9	48.1
Level of Service	D	A	E	C	C	D	D
Approach Delay (s)		17.4		21.9		49.3	
Approach LOS		B		C		D	

Intersection Summary

HCM 2000 Control Delay	21.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	118.7	Sum of lost time (s)	15.1
Intersection Capacity Utilization	75.0%	ICU Level of Service	D
Analysis Period (min)	15		

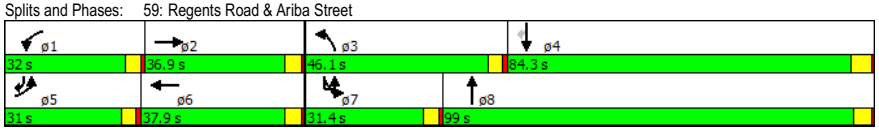
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	113	14	121	57	423	883	29	531	124
Future Volume (vph)	113	14	121	57	423	883	29	531	124
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA	pm+ov
Protected Phases	5	2	1	6	3	8	7	4	5
Permitted Phases									4
Detector Phase	5	2	1	6	3	8	7	4	5
Switch Phase									
Minimum Initial (s)	4.0	7.0	4.0	7.0	4.0	7.0	4.0	7.0	4.0
Minimum Split (s)	8.4	11.9	8.4	11.9	8.4	11.9	8.4	12.6	8.4
Total Split (s)	31.0	36.9	32.0	37.9	46.1	99.0	31.4	84.3	31.0
Total Split (%)	15.6%	18.5%	16.1%	19.0%	23.1%	49.7%	15.8%	42.3%	15.6%
Yellow Time (s)	3.4	3.9	3.4	3.9	3.4	3.9	3.4	4.6	3.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	4.9	4.4	4.9	4.4	4.9	4.4	5.6	4.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 199.3
Actuated Cycle Length: 163.3
Natural Cycle: 80
Control Type: Actuated-Uncoordinated

Splits and Phases: 59: Regents Road & Ariba Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	113	14	394	121	57	53	423	883	193	99	29	531
Future Volume (vph)	113	14	394	121	57	53	423	883	193	99	29	531
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	4.9		4.4	4.9			4.4	5.6
Lane Util. Factor	1.00	0.95		1.00	0.95		0.97	0.95			1.00	0.95
Frt	1.00	0.86		1.00	0.93		1.00	0.97			1.00	1.00
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			0.95	1.00
Satd. Flow (prot)	1770	3027		1770	3283		3433	3444			1770	3539
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00			0.95	1.00
Satd. Flow (perm)	1770	3027		1770	3283		3433	3444			1770	3539
Peak-hour factor, PHF	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.92	0.80	0.80
Adj. Flow (vph)	141	18	492	151	71	66	529	1104	241	108	36	664
RTOR Reduction (vph)	0	335	0	0	55	0	0	9	0	0	0	0
Lane Group Flow (vph)	141	176	0	151	82	0	529	1336	0	0	144	664
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	Prot	NA
Protected Phases	5	2		1	6		3	8		7	7	4
Permitted Phases												
Actuated Green, G (s)	18.3	26.4		19.2	27.3		31.3	79.6			18.6	66.2
Effective Green, g (s)	18.3	26.4		19.2	27.3		31.3	79.6			18.6	66.2
Actuated g/C Ratio	0.11	0.16		0.12	0.17		0.19	0.49			0.11	0.41
Clearance Time (s)	4.4	4.9		4.4	4.9		4.4	4.9			4.4	5.6
Vehicle Extension (s)	2.0	6.3		2.0	5.9		2.0	4.8			2.0	4.4
Lane Grp Cap (vph)	199	492		209	551		661	1688			202	1442
v/s Ratio Prot	0.08	c0.06		c0.09	0.03		c0.15	c0.39			0.08	0.19
v/s Ratio Perm												
v/c Ratio	0.71	0.36		0.72	0.15		0.80	0.79			0.71	0.46
Uniform Delay, d1	69.5	60.5		69.0	57.6		62.6	34.5			69.3	35.1
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2	9.1	1.4		10.0	0.3		6.5	3.0			9.5	0.4
Delay (s)	78.5	61.8		79.0	58.0		69.1	37.5			78.8	35.5
Level of Service	E	E		E	E		E	D			E	D
Approach Delay (s)		65.4			69.0			46.4				39.4
Approach LOS		E			E			D				D

Intersection Summary

HCM 2000 Control Delay	49.6	HCM 2000 Level of Service	D	
HCM 2000 Volume to Capacity ratio	0.72			
Actuated Cycle Length (s)	162.4	Sum of lost time (s)	19.3	
Intersection Capacity Utilization	73.0%	ICU Level of Service	D	
Analysis Period (min)	15			

c Critical Lane Group

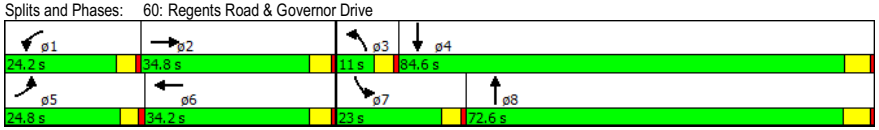
Movement	SBR
Lane Configurations	
Traffic Volume (vph)	124
Future Volume (vph)	124
Ideal Flow (vphpl)	1900
Total Lost time (s)	4.4
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1583
Flt Permitted	1.00
Satd. Flow (perm)	1583
Peak-hour factor, PHF	0.80
Adj. Flow (vph)	155
RTOR Reduction (vph)	74
Lane Group Flow (vph)	81
Turn Type	pm+ov
Protected Phases	5
Permitted Phases	4
Actuated Green, G (s)	84.5
Effective Green, g (s)	84.5
Actuated g/C Ratio	0.52
Clearance Time (s)	4.4
Vehicle Extension (s)	2.0
Lane Grp Cap (vph)	823
v/s Ratio Prot	0.01
v/s Ratio Perm	0.04
v/c Ratio	0.10
Uniform Delay, d1	19.7
Progression Factor	1.00
Incremental Delay, d2	0.0
Delay (s)	19.7
Level of Service	B
Approach Delay (s)	
Approach LOS	

Intersection Summary

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	171	66	307	64	23	1231	340	551
Future Volume (vph)	171	66	307	64	23	1231	340	551
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	5	2	1	6	3	8	7	4
Permitted Phases								
Detector Phase	5	2	1	6	3	8	7	4
Switch Phase								
Minimum Initial (s)	4.0	4.0	4.0	7.0	5.0	7.0	5.0	4.0
Minimum Split (s)	8.4	32.9	8.4	33.9	9.5	34.8	9.5	35.5
Total Split (s)	24.8	34.8	24.2	34.2	11.0	72.6	23.0	84.6
Total Split (%)	16.0%	22.5%	15.7%	22.1%	7.1%	47.0%	14.9%	54.7%
Yellow Time (s)	3.4	3.9	3.4	3.9	3.5	4.8	3.5	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	4.9	4.4	4.9	4.5	5.8	4.5	5.5
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Min	None	Min	None	None	None	None

Intersection Summary
Cycle Length: 154.6
Actuated Cycle Length: 144.9
Natural Cycle: 150
Control Type: Actuated-Uncoordinated

Splits and Phases: 60: Regents Road & Governor Drive



60: Regents Road & Governor Drive

Timing Plan: Morning Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	171	66	39	307	64	97	23	1231	135	340	551	155
Future Volume (vph)	171	66	39	307	64	97	23	1231	135	340	551	155
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	4.9		4.5	5.8		4.5	5.5	
Lane Util. Factor	1.00	0.95		0.97	0.95		1.00	0.95		0.97	0.95	
Frt	1.00	0.94		1.00	0.91		1.00	0.99		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3342		3433	3220		1770	3487		3433	3423	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	3342		3433	3220		1770	3487		3433	3423	
Peak-hour factor, PHF	0.80	0.80	0.80	0.80	0.80	0.80	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	214	82	49	384	80	121	26	1368	150	378	612	172
RTOR Reduction (vph)	0	42	0	0	104	0	0	5	0	0	15	0
Lane Group Flow (vph)	214	90	0	384	97	0	26	1513	0	378	769	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases												
Actuated Green, G (s)	19.6	21.2		18.5	20.1		3.7	69.3		18.2	84.1	
Effective Green, g (s)	19.6	21.2		18.5	20.1		3.7	69.3		18.2	84.1	
Actuated g/C Ratio	0.13	0.14		0.13	0.14		0.03	0.47		0.12	0.57	
Clearance Time (s)	4.4	4.9		4.4	4.9		4.5	5.8		4.5	5.5	
Vehicle Extension (s)	2.0	4.5		2.0	5.0		3.0	4.6		3.0	2.0	
Lane Grp Cap (vph)	236	482		432	440		44	1646		425	1960	
v/s Ratio Prot	c0.12	0.03		0.11	c0.03		0.01	c0.43		c0.11	0.22	
v/s Ratio Perm												
v/c Ratio	0.91	0.19		0.89	0.22		0.59	0.92		0.89	0.39	
Uniform Delay, d1	62.7	55.2		63.1	56.4		70.8	36.1		63.3	17.3	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	33.7	0.3		19.0	0.5		19.5	9.0		19.7	0.0	
Delay (s)	96.4	55.5		82.1	56.9		90.3	45.1		83.0	17.3	
Level of Service	F	E		F	E		F	D		F	B	
Approach Delay (s)		80.8			73.4			45.9			38.7	
Approach LOS		F			E			D			D	

Intersection Summary			
HCM 2000 Control Delay	51.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	146.8	Sum of lost time (s)	19.6
Intersection Capacity Utilization	79.7%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

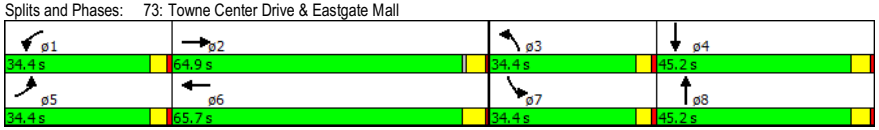
73: Towne Center Drive & Eastgate Mall

Timing Plan: Morning Peak

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	102	251	96	541	254	592	12	48
Future Volume (vph)	102	251	96	541	254	592	12	48
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	5	2	1	6	3	8	7	4
Permitted Phases								
Detector Phase	5	2	1	6	3	8	7	4
Switch Phase								
Minimum Initial (s)	4.0	7.0	4.0	7.0	4.0	7.0	4.0	7.0
Minimum Split (s)	8.4	11.9	8.4	12.7	8.4	12.2	8.4	12.7
Total Split (s)	34.4	64.9	34.4	65.7	34.4	45.2	34.4	45.2
Total Split (%)	19.1%	36.1%	19.1%	36.6%	19.1%	25.2%	19.1%	25.2%
Yellow Time (s)	3.4	3.9	3.4	4.7	3.4	4.2	3.4	4.2
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	4.9	4.4	5.7	4.4	5.2	4.4	5.2
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 179.7
Actuated Cycle Length: 95.9
Natural Cycle: 65
Control Type: Actuated-Uncoordinated

Splits and Phases: 73: Towne Center Drive & Eastgate Mall



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	102	251	148	96	541	114	254	592	321	12	48	8
Future Volume (vph)	102	251	148	96	541	114	254	592	321	12	48	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	5.7		4.4	5.2		4.4	5.2	
Lane Util. Factor	0.97	0.95		0.97	0.95		0.97	0.95		0.97	0.95	
Frt	1.00	0.94		1.00	0.97		1.00	0.95		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	3433	3343		3433	3447		3433	3353		3433	3463	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	3433	3343		3433	3447		3433	3353		3433	3463	
Peak-hour factor, PHF	0.94	0.94	0.94	0.96	0.96	0.96	0.86	0.86	0.86	0.80	0.80	0.80
Adj. Flow (vph)	109	267	157	100	564	119	295	688	373	15	60	10
RTOR Reduction (vph)	0	51	0	0	11	0	0	31	0	0	8	0
Lane Group Flow (vph)	109	373	0	100	672	0	295	1030	0	15	62	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases												
Actuated Green, G (s)	7.9	29.4		7.6	28.3		20.7	40.7		1.9	21.9	
Effective Green, g (s)	7.9	29.4		7.6	28.3		20.7	40.7		1.9	21.9	
Actuated g/C Ratio	0.08	0.30		0.08	0.29		0.21	0.41		0.02	0.22	
Clearance Time (s)	4.4	4.9		4.4	5.7		4.4	5.2		4.4	5.2	
Vehicle Extension (s)	2.0	5.1		2.0	4.8		2.0	5.1		2.0	4.8	
Lane Grp Cap (vph)	275	997		264	990		721	1385		66	769	
v/s Ratio Prot	c0.03	0.11		0.03	c0.20		c0.09	c0.31		0.00	0.02	
v/s Ratio Perm												
v/c Ratio	0.40	0.37		0.38	0.68		0.41	0.74		0.23	0.08	
Uniform Delay, d1	43.0	27.3		43.2	31.1		33.6	24.5		47.6	30.3	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.3	0.5		0.3	2.3		0.1	2.7		0.6	0.1	
Delay (s)	43.4	27.8		43.5	33.4		33.8	27.2		48.2	30.4	
Level of Service	D	C		D	C		C	C		D	C	
Approach Delay (s)		31.0			34.7			28.6			33.6	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM 2000 Control Delay	31.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	98.5	Sum of lost time (s)	19.7
Intersection Capacity Utilization	61.3%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	88	344	60	342	388	127	153	21	41
Future Volume (vph)	88	344	60	342	388	127	153	21	41
Turn Type	pm+pt	NA	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA
Protected Phases	7	4	3	8	5	2		1	6
Permitted Phases	4		8		2		2	6	
Detector Phase	7	4	3	8	5	2	2	1	6
Switch Phase									
Minimum Initial (s)	5.0	4.0	5.0	4.0	4.0	7.0	7.0	4.0	7.0
Minimum Split (s)	9.5	8.9	9.5	8.4	8.4	11.9	11.9	8.4	11.9
Total Split (s)	9.5	44.9	9.5	44.4	34.4	64.9	64.9	34.4	64.9
Total Split (%)	6.2%	29.2%	6.2%	28.9%	22.4%	42.2%	42.2%	22.4%	42.2%
Yellow Time (s)	3.5	3.9	3.5	3.4	3.4	3.9	3.9	3.4	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.9	4.5	4.4	4.4	4.9	4.9	4.4	4.9
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Min	Min	None	Min

Intersection Summary
Cycle Length: 153.7
Actuated Cycle Length: 74.1
Natural Cycle: 55
Control Type: Actuated-Uncoordinated

Splits and Phases: 76: Executive Way & Executive Drive

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	88	344	82	60	342	45	388	127	153	21	41	41
Future Volume (vph)	88	344	82	60	342	45	388	127	153	21	41	41
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.9		4.5	4.4		4.4	4.9	4.9	4.4	4.9	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.97		1.00	0.98		1.00	1.00	0.85	1.00	0.93	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3437		1770	3477		1770	1863	1583	1770	1723	
Flt Permitted	0.37	1.00		0.31	1.00		0.53	1.00	1.00	0.66	1.00	
Satd. Flow (perm)	681	3437		575	3477		983	1863	1583	1231	1723	
Peak-hour factor, PHF	0.85	0.85	0.85	0.90	0.90	0.90	0.84	0.84	0.84	0.80	0.80	0.80
Adj. Flow (vph)	104	405	96	67	380	50	462	151	182	26	51	51
RTOR Reduction (vph)	0	14	0	0	7	0	0	0	95	0	31	0
Lane Group Flow (vph)	104	487	0	67	423	0	462	151	87	26	71	0
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		
Actuated Green, G (s)	19.8	16.0		20.3	16.5		43.2	37.0	37.0	16.0	14.2	
Effective Green, g (s)	19.8	16.0		20.3	16.5		43.2	37.0	37.0	16.0	14.2	
Actuated g/C Ratio	0.26	0.21		0.26	0.21		0.56	0.48	0.48	0.21	0.18	
Clearance Time (s)	4.5	4.9		4.5	4.4		4.4	4.9	4.9	4.4	4.9	
Vehicle Extension (s)	3.0	2.0		3.0	2.3		2.0	2.9	2.9	2.0	2.6	
Lane Grp Cap (vph)	227	711		209	742		799	891	757	267	316	
v/s Ratio Prot	c0.02	c0.14		0.02	0.12		c0.18	0.08		0.00	0.04	
v/s Ratio Perm	0.09			0.07			c0.14		0.06	0.02		
v/c Ratio	0.46	0.68		0.32	0.57		0.58	0.17	0.12	0.10	0.22	
Uniform Delay, d1	22.9	28.3		22.1	27.2		10.4	11.4	11.1	24.7	26.9	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	1.5	2.2		0.9	0.7		0.6	0.1	0.1	0.1	0.3	
Delay (s)	24.3	30.5		23.0	28.0		11.0	11.5	11.2	24.7	27.1	
Level of Service	C	C		C	C		B	B	B	C	C	
Approach Delay (s)		29.4			27.3			11.1			26.7	
Approach LOS		C			C			B			C	

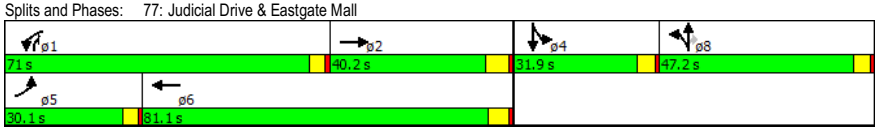
Intersection Summary			
HCM 2000 Control Delay	21.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	77.3	Sum of lost time (s)	18.7
Intersection Capacity Utilization	56.4%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	135	332	455	571	256	240	288	4	17
Future Volume (vph)	135	332	455	571	256	240	288	4	17
Turn Type	Prot	NA	Prot	NA	Split	NA	pm+ov	Split	NA
Protected Phases	5	2	1	6	8	8	1	4	4
Permitted Phases							8		
Detector Phase	5	2	1	6	8	8	1	4	4
Switch Phase									
Minimum Initial (s)	4.0	7.0	4.0	7.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.4	13.1	8.4	12.6	8.9	8.9	8.4	8.9	8.9
Total Split (s)	30.1	40.2	71.0	81.1	47.2	47.2	71.0	31.9	31.9
Total Split (%)	15.8%	21.1%	37.3%	42.6%	24.8%	24.8%	37.3%	16.8%	16.8%
Yellow Time (s)	3.4	5.1	3.4	4.6	3.9	3.9	3.4	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	6.1	4.4	5.6	4.9	4.9	4.4	4.9	4.9
Lead/Lag	Lead	Lag	Lead	Lag			Lead		
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes		
Recall Mode	None	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 190.3
Actuated Cycle Length: 138.5
Natural Cycle: 90
Control Type: Actuated-Uncoordinated

Splits and Phases: 77: Judicial Drive & Eastgate Mall



77: Judicial Drive & Eastgate Mall

Timing Plan: Morning Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	135	332	60	455	571	79	256	240	288	4	17	12
Future Volume (vph)	135	332	60	455	571	79	256	240	288	4	17	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	6.1		4.4	5.6		4.9	4.9	4.4	4.9	4.9	
Lane Util. Factor	1.00	0.95		1.00	0.95		0.95	0.91	0.95	1.00	1.00	
Frt	1.00	0.98		1.00	0.98		1.00	0.98	0.85	1.00	0.94	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3457		1770	3475		1681	1661	1504	1770	1746	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	3457		1770	3475		1681	1661	1504	1770	1746	
Peak-hour factor, PHF	0.93	0.93	0.93	0.84	0.84	0.84	0.94	0.94	0.94	0.80	0.80	0.80
Adj. Flow (vph)	145	357	65	542	680	94	272	255	306	5	21	15
RTOR Reduction (vph)	0	8	0	0	5	0	0	2	108	0	14	0
Lane Group Flow (vph)	145	414	0	542	769	0	245	314	164	5	22	0
Turn Type	Prot	NA		Prot	NA		Split	NA	pm+ov	Split	NA	
Protected Phases	5	2		1	6		8	8	1	4	4	
Permitted Phases									8			
Actuated Green, G (s)	17.3	24.1		49.8	57.1		33.0	33.0	82.8	10.5	10.5	
Effective Green, g (s)	17.3	24.1		49.8	57.1		33.0	33.0	82.8	10.5	10.5	
Actuated g/C Ratio	0.13	0.18		0.36	0.41		0.24	0.24	0.60	0.08	0.08	
Clearance Time (s)	4.4	6.1		4.4	5.6		4.9	4.9	4.4	4.9	4.9	
Vehicle Extension (s)	2.0	2.7		2.0	3.0		2.0	2.0	2.0	2.0	2.0	
Lane Grp Cap (vph)	222	605		640	1440		402	398	904	134	133	
v/s Ratio Prot	0.08	c0.12		c0.31	0.22		0.15	c0.19	0.07	0.00	c0.01	
v/s Ratio Perm									0.04			
v/c Ratio	0.65	0.68		0.85	0.53		0.61	0.79	0.18	0.04	0.17	
Uniform Delay, d1	57.3	53.2		40.4	30.3		46.6	49.1	12.3	58.9	59.5	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	5.2	3.0		9.7	0.4		1.8	9.2	0.0	0.0	0.2	
Delay (s)	62.5	56.3		50.1	30.7		48.4	58.3	12.3	59.0	59.7	
Level of Service	E	E		D	C		D	E	B	E	E	
Approach Delay (s)		57.9			38.7			40.4			59.6	
Approach LOS		E			D			D			E	

Intersection Summary				
HCM 2000 Control Delay	43.5	HCM 2000 Level of Service	D	
HCM 2000 Volume to Capacity ratio	0.74			
Actuated Cycle Length (s)	137.7	Sum of lost time (s)	20.3	
Intersection Capacity Utilization	72.1%	ICU Level of Service	C	
Analysis Period (min)	15			

c Critical Lane Group

79: I-805 NB Ramps/I-805 SB Ramps & Gorvernor Drive

Timing Plan: Morning Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Right Turn Channelized												
Traffic Volume (veh/h)	364	23	0	0	33	15	442	14	23	0	0	0
Future Volume (veh/h)	364	23	0	0	33	15	442	14	23	0	0	0
Peak Hour Factor	0.96	0.96	0.96	0.55	0.55	0.55	0.95	0.95	0.95	1.00	1.00	1.00
Hourly flow rate (vph)	379	24	0	0	60	27	465	15	24	0	0	0
Approach Volume (veh/h)		403			87			504			0	
Crossing Volume (veh/h)		0			859			403			525	
High Capacity (veh/h)		1385			699			1008			915	
High v/c (veh/h)		0.29			0.12			0.50			0.00	
Low Capacity (veh/h)		1161			548			821			738	
Low v/c (veh/h)		0.35			0.16			0.61			0.00	

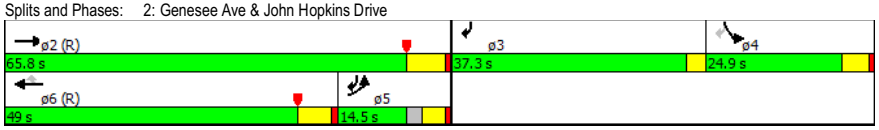
Intersection Summary				
Maximum v/c High	0.50			
Maximum v/c Low	0.61			
Intersection Capacity Utilization	61.3%	ICU Level of Service	B	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	ø3
Lane Configurations							
Traffic Volume (vph)	139	362	1601	495	507	54	
Future Volume (vph)	139	362	1601	495	507	54	
Turn Type	Prot	NA	NA	Perm	Prot	pt+ov	
Protected Phases	5	2	6		4	3 5	3
Permitted Phases				6		4	
Detector Phase	5	2	6	6	4	3 5	
Switch Phase							
Minimum Initial (s)	4.0	10.0	10.0	10.0	7.0		4.0
Minimum Split (s)	9.5	16.7	15.9	15.9	11.9		7.0
Total Split (s)	14.5	65.8	49.0	49.0	24.9		37.3
Total Split (%)	11.3%	51.4%	38.3%	38.3%	19.5%		29%
Yellow Time (s)	3.4	5.7	4.9	4.9	3.9		3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		0.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	4.4	6.7	5.9	5.9	4.9		
Lead/Lag	Lag		Lead	Lead	Lag		Lead
Lead-Lag Optimize?	Yes		Yes	Yes	Yes		Yes
Recall Mode	None	C-Max	C-Max	C-Max	None		None

Intersection Summary

Cycle Length: 128
Actuated Cycle Length: 128
Offset: 58 (45%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 70
Control Type: Actuated-Coordinated

Splits and Phases: 2: Genesee Ave & John Hopkins Drive



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	139	362	1601	495	507	54
Future Volume (vph)	139	362	1601	495	507	54
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	6.7	5.9	5.9	4.9	3.0
Lane Util. Factor	1.00	0.91	0.86	0.88	0.97	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	5085	6408	2787	3433	1583
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	5085	6408	2787	3433	1583
Peak-hour factor, PHF	0.80	0.80	0.90	0.90	0.79	0.79
Adj. Flow (vph)	174	452	1779	550	642	68
RTOR Reduction (vph)	0	0	0	231	0	1
Lane Group Flow (vph)	174	453	1779	319	642	67
Turn Type	Prot	NA	NA	Perm	Prot	pt+ov
Protected Phases	5	2	6		4	3 5
Permitted Phases				6		4
Actuated Green, G (s)	12.4	71.2	55.2	55.2	39.0	59.0
Effective Green, g (s)	12.4	71.2	55.2	55.2	39.0	54.6
Actuated g/C Ratio	0.10	0.56	0.43	0.43	0.30	0.43
Clearance Time (s)	4.4	6.7	5.9	5.9	4.9	
Vehicle Extension (s)	2.0	4.0	3.9	3.9	5.0	
Lane Grp Cap (vph)	171	2828	2763	1201	1045	712
v/s Ratio Prot	c0.10	0.09	c0.28		c0.19	c0.01
v/s Ratio Perm				0.11		0.03
v/c Ratio	1.02	0.16	0.64	0.27	0.61	0.09
Uniform Delay, d1	57.8	13.8	28.7	23.4	38.1	21.9
Progression Factor	0.94	0.74	1.40	2.55	1.00	1.00
Incremental Delay, d2	73.4	0.1	0.9	0.4	1.6	0.0
Delay (s)	127.7	10.4	41.2	60.1	39.6	22.0
Level of Service	F	B	D	E	D	C
Approach Delay (s)		42.9	45.6		37.9	
Approach LOS		D	D		D	

Intersection Summary

HCM 2000 Control Delay	43.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	128.0	Sum of lost time (s)	18.2
Intersection Capacity Utilization	58.0%	ICU Level of Service	B
Analysis Period (min)	15		

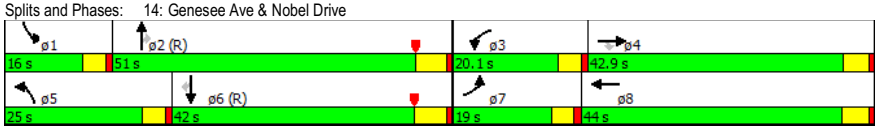
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	228	582	249	223	664	343	590	218	157	854	117
Future Volume (vph)	228	582	249	223	664	343	590	218	157	854	117
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8	5	2		1	6	
Permitted Phases			4					2			6
Detector Phase	7	4	4	3	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	4.0	10.0	10.0	4.0	10.0	4.0	10.0	10.0	4.0	10.0	10.0
Minimum Split (s)	8.4	37.9	37.9	8.4	40.1	8.4	35.7	35.7	8.4	38.9	38.9
Total Split (s)	19.0	42.9	42.9	20.1	44.0	25.0	51.0	51.0	16.0	42.0	42.0
Total Split (%)	14.6%	33.0%	33.0%	15.5%	33.8%	19.2%	39.2%	39.2%	12.3%	32.3%	32.3%
Yellow Time (s)	3.4	3.9	3.9	3.4	4.1	3.4	4.7	4.7	3.4	4.9	4.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	4.9	4.9	4.4	5.1	4.4	5.7	5.7	4.4	5.9	5.9
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max

Intersection Summary

Cycle Length: 130
Actuated Cycle Length: 130
Offset: 83 (64%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 110
Control Type: Actuated-Coordinated

Splits and Phases: 14: Genesee Ave & Nobel Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	228	582	249	223	664	79	343	590	218	157	854	117
Future Volume (vph)	228	582	249	223	664	79	343	590	218	157	854	117
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9	4.9	4.4	5.1		4.4	5.7	5.7	4.4	5.9	5.9
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95		0.97	0.91	1.00	0.97	0.91	1.00
Frt	1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	3539	1583	3433	3483		3433	5085	1583	3433	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3539	1583	3433	3483		3433	5085	1583	3433	5085	1583
Peak-hour factor, PHF	0.90	0.90	0.90	0.87	0.87	0.87	0.87	0.87	0.87	0.92	0.92	0.92
Adj. Flow (vph)	253	647	277	256	763	91	394	678	251	171	928	127
RTOR Reduction (vph)	0	0	202	0	7	0	0	0	152	0	0	85
Lane Group Flow (vph)	253	647	75	256	847	0	394	678	99	171	928	42
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4						2			6
Actuated Green, G (s)	13.1	35.4	35.4	13.5	35.6		18.3	51.5	51.5	10.2	43.2	43.2
Effective Green, g (s)	13.1	35.4	35.4	13.5	35.6		18.3	51.5	51.5	10.2	43.2	43.2
Actuated g/C Ratio	0.10	0.27	0.27	0.10	0.27		0.14	0.40	0.40	0.08	0.33	0.33
Clearance Time (s)	4.4	4.9	4.9	4.4	5.1		4.4	5.7	5.7	4.4	5.9	5.9
Vehicle Extension (s)	2.0	4.0	4.0	2.0	2.1		2.0	8.0	8.0	2.0	4.0	4.0
Lane Grp Cap (vph)	345	963	431	356	953		483	2014	627	269	1689	526
v/s Ratio Prot	0.07	0.18		c0.07	c0.24		c0.11	0.13		0.05	c0.18	
v/s Ratio Perm			0.05						0.06			0.03
v/c Ratio	0.73	0.67	0.18	0.72	0.89		0.82	0.34	0.16	0.64	0.55	0.08
Uniform Delay, d1	56.8	42.1	36.1	56.4	45.3		54.2	27.3	25.3	58.1	35.5	29.8
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.03	0.40	0.51	1.22	0.61	0.51
Incremental Delay, d2	6.8	2.0	0.3	5.7	9.9		9.1	0.4	0.5	3.4	1.2	0.3
Delay (s)	63.5	44.2	36.4	62.1	55.2		65.1	11.2	13.5	74.4	22.9	15.6
Level of Service	E	D	D	E	E		E	B	B	E	C	B
Approach Delay (s)		46.5			56.8			27.7			29.3	
Approach LOS		D			E			C			C	

Intersection Summary

HCM 2000 Control Delay	39.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	19.8
Intersection Capacity Utilization	70.2%	ICU Level of Service	C
Analysis Period (min)	15		

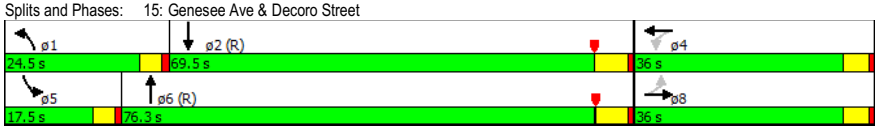
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	27	4	4	4	4	187	4	975	164	1033
Future Volume (vph)	27	4	4	4	4	187	4	975	164	1033
Turn Type	Perm	NA	NA	Perm	NA	NA	Prot	NA	Prot	NA
Protected Phases		8			4		1	6	5	2
Permitted Phases	8			4						
Detector Phase	8	8		4	4		1	6	5	2
Switch Phase										
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	10.0	4.0	10.0
Minimum Split (s)	8.9	8.9		8.9	8.9		8.4	15.7	8.4	15.9
Total Split (s)	36.0	36.0		36.0	36.0		24.5	76.3	17.5	69.5
Total Split (%)	27.7%	27.7%		27.7%	27.7%		18.8%	58.7%	13.5%	53.5%
Yellow Time (s)	3.9	3.9		3.9	3.9		3.4	4.7	3.4	4.9
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0			0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)		4.9			4.9		4.4	5.7	4.4	5.9
Lead/Lag							Lead	Lag	Lead	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	C-Max	None	C-Max

Intersection Summary

Cycle Length: 130
Actuated Cycle Length: 130
Offset: 97 (75%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow
Natural Cycle: 45
Control Type: Actuated-Coordinated

Splits and Phases: 15: Genesee Ave & Decoro Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	27	4	4	4	4	187	13	4	975	7	164	1033
Future Volume (vph)	27	4	4	4	4	187	13	4	975	7	164	1033
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9	4.0		4.9	4.0		4.4	5.7		4.4	5.9
Lane Util. Factor		1.00	1.00		1.00	1.00		1.00	0.91		1.00	0.91
Frt		1.00	0.85		1.00	0.85		1.00	1.00		1.00	0.99
Flt Protected		0.96	1.00		0.98	1.00		0.95	1.00		0.95	1.00
Satd. Flow (prot)		1784	1583		1817	1583		1770	5080		1770	5059
Flt Permitted		0.74	1.00		0.83	1.00		0.09	1.00		0.95	1.00
Satd. Flow (perm)		1386	1583		1553	1583		166	5080		1770	5059
Peak-hour factor, PHF	0.73	0.73	0.73	0.88	0.88	0.88	0.92	0.91	0.91	0.91	0.96	0.96
Adj. Flow (vph)	37	5	5	5	5	212	14	4	1071	8	171	1076
RTOR Reduction (vph)	0	0	5	0	0	213	0	0	0	0	0	3
Lane Group Flow (vph)	0	42	0	0	10	0	0	18	1079	0	171	1111
Turn Type	Perm	NA	NA	Perm	NA	NA		Prot	NA		Prot	NA
Protected Phases		8			4			1	6		5	2
Permitted Phases	8			4								
Actuated Green, G (s)		7.3	0.0		7.3	0.0		44.9	88.5		19.2	62.6
Effective Green, g (s)		7.3	0.0		7.3	0.0		44.9	88.5		19.2	62.6
Actuated g/C Ratio		0.06	0.00		0.06	0.00		0.35	0.68		0.15	0.48
Clearance Time (s)		4.9			4.9			4.4	5.7		4.4	5.9
Vehicle Extension (s)		2.0			2.0			2.0	4.3		2.0	3.7
Lane Grp Cap (vph)		77	0		87	0		57	3458		261	2436
v/s Ratio Prot									0.21		c0.10	c0.22
v/s Ratio Perm		c0.03			0.01			c0.11				
v/c Ratio		0.55	0.00		0.11	0.00		0.32	0.31		0.66	0.46
Uniform Delay, d1		59.7	65.0		58.3	65.0		31.3	8.4		52.3	22.4
Progression Factor		1.00	1.00		1.00	1.00		1.00	1.52		0.84	0.67
Incremental Delay, d2		4.2	0.0		0.2	0.0		1.1	0.2		3.8	0.5
Delay (s)		63.9	65.0		58.5	65.0		32.4	13.0		47.6	15.5
Level of Service		E	E		E	E		C	B		D	B
Approach Delay (s)		64.0			64.7				13.3			19.7
Approach LOS		E			E				B			B

Intersection Summary

HCM 2000 Control Delay	21.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.46		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	15.2
Intersection Capacity Utilization	49.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

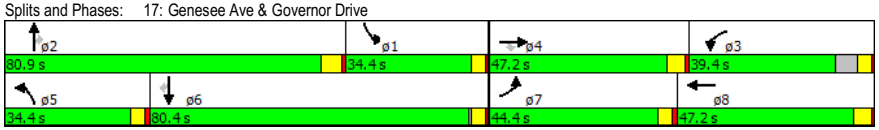
Movement	SBR
Lane Configurations	
Traffic Volume (vph)	36
Future Volume (vph)	36
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.96
Adj. Flow (vph)	38
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	74	175	76	399	142	93	570	328	270	564	57
Future Volume (vph)	74	175	76	399	142	93	570	328	270	564	57
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8	5	2		1	6	
Permitted Phases			4					2			6
Detector Phase	7	4	4	3	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	4.0	8.0	8.0	4.0	8.0	4.0	8.0	8.0	4.0	5.0	5.0
Minimum Split (s)	8.4	13.2	13.2	8.4	13.2	8.4	13.9	13.9	8.4	37.5	37.5
Total Split (s)	44.4	47.2	47.2	39.4	47.2	34.4	80.9	80.9	34.4	80.4	80.4
Total Split (%)	21.5%	22.8%	22.8%	19.0%	22.8%	16.6%	39.1%	39.1%	16.6%	38.9%	38.9%
Yellow Time (s)	3.4	4.2	4.2	3.4	4.2	3.4	4.9	4.9	3.4	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.2	5.2	4.4	5.2	4.4	5.9	5.9	4.4	4.5	4.5
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lead	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	Min

Intersection Summary
Cycle Length: 206.9
Actuated Cycle Length: 85
Natural Cycle: 80
Control Type: Actuated-Uncoordinated

Splits and Phases: 17: Genesee Ave & Governor Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	74	175	76	399	142	158	93	570	328	270	564	57
Future Volume (vph)	74	175	76	399	142	158	93	570	328	270	564	57
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	16	12	12	12	12	12	12	12
Total Lost time (s)	4.4	5.2	5.2	4.4	5.2		4.4	5.9	5.9	4.4	4.5	4.5
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95		1.00	0.91	1.00	0.97	0.91	1.00
Frt	1.00	1.00	0.85	1.00	0.92		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	3539	1583	3433	3694		1770	5085	1583	3433	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3539	1583	3433	3694		1770	5085	1583	3433	5085	1583
Peak-hour factor, PHF	0.94	0.94	0.94	0.83	0.83	0.83	0.93	0.93	0.93	0.83	0.83	0.83
Adj. Flow (vph)	79	186	81	481	171	190	100	613	353	325	680	69
RTOR Reduction (vph)	0	0	71	0	90	0	0	0	194	0	0	40
Lane Group Flow (vph)	79	186	10	481	271	0	100	613	159	325	680	29
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4						2			6
Actuated Green, G (s)	7.2	10.7	10.7	18.8	22.3		10.7	20.6	20.6	14.5	25.8	25.8
Effective Green, g (s)	7.2	10.7	10.7	18.8	22.3		10.7	20.6	20.6	14.5	25.8	25.8
Actuated g/C Ratio	0.09	0.13	0.13	0.22	0.26		0.13	0.24	0.24	0.17	0.31	0.31
Clearance Time (s)	4.4	5.2	5.2	4.4	5.2		4.4	5.9	5.9	4.4	4.5	4.5
Vehicle Extension (s)	2.0	2.3	2.3	2.0	3.8		2.0	2.9	2.9	2.0	3.0	3.0
Lane Grp Cap (vph)	292	448	200	763	974		224	1239	385	589	1552	483
v/s Ratio Prot	0.02	c0.05		c0.14	c0.07		0.06	c0.12		c0.09	0.13	
v/s Ratio Perm			0.01						0.10			0.02
v/c Ratio	0.27	0.42	0.05	0.63	0.28		0.45	0.49	0.41	0.55	0.44	0.06
Uniform Delay, d1	36.2	34.0	32.4	29.7	24.7		34.2	27.5	26.9	32.0	23.5	20.8
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2	0.4	0.1	1.3	0.2		0.5	0.3	0.7	0.6	0.2	0.1
Delay (s)	36.4	34.4	32.5	31.0	24.9		34.7	27.8	27.5	32.7	23.7	20.8
Level of Service	D	C	C	C	C		C	C	C	C	C	C
Approach Delay (s)		34.4			28.4			28.3			26.3	
Approach LOS		C			C			C			C	

Intersection Summary				
HCM 2000 Control Delay	28.3	HCM 2000 Level of Service	C	
HCM 2000 Volume to Capacity ratio	0.53			
Actuated Cycle Length (s)	84.5	Sum of lost time (s)	19.9	
Intersection Capacity Utilization	53.3%	ICU Level of Service	A	
Analysis Period (min)	15			
c Critical Lane Group				

Lane Group	EBR	NBL	NBT	SBT	SBR
Lane Configurations					
Traffic Volume (vph)	247	114	792	642	324
Future Volume (vph)	247	114	792	642	324
Turn Type	Perm	Prot	NA	NA	Perm
Protected Phases		5	2	6	
Permitted Phases	4				6
Detector Phase	4	5	2	6	6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	36.5	9.5	22.5	32.5	32.5
Total Split (s)	38.0	26.0	74.0	48.0	48.0
Total Split (%)	33.9%	23.2%	66.1%	42.9%	42.9%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5
Lead/Lag		Lead		Lag	Lag
Lead-Lag Optimize?		Yes		Yes	Yes
Recall Mode	None	None	Min	Min	Min

Intersection Summary
Cycle Length: 112
Actuated Cycle Length: 46.4
Natural Cycle: 80
Control Type: Actuated-Uncoordinated

Splits and Phases: 18: Genesee Ave & SR-52 Ramp

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	247	114	792	642	324
Future Volume (vph)	0	247	114	792	642	324
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5	4.5	4.5	4.5	4.5
Lane Util. Factor		0.88	1.00	0.91	0.95	1.00
Frt		0.85	1.00	1.00	1.00	0.85
Flt Protected		1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)		2787	1770	5085	3539	1583
Flt Permitted		1.00	0.95	1.00	1.00	1.00
Satd. Flow (perm)		2787	1770	5085	3539	1583
Peak-hour factor, PHF	0.87	0.87	0.83	0.83	0.87	0.87
Adj. Flow (vph)	0	284	137	954	738	372
RTOR Reduction (vph)	0	249	0	0	0	214
Lane Group Flow (vph)	0	35	137	954	738	158
Turn Type		Perm	Prot	NA	NA	Perm
Protected Phases			5	2	6	
Permitted Phases		4				6
Actuated Green, G (s)		5.8	7.8	32.2	19.9	19.9
Effective Green, g (s)		5.8	7.8	32.2	19.9	19.9
Actuated g/C Ratio		0.12	0.17	0.69	0.42	0.42
Clearance Time (s)		4.5	4.5	4.5	4.5	4.5
Vehicle Extension (s)		3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)		343	293	3483	1498	670
v/s Ratio Prot			c0.08	0.19	c0.21	
v/s Ratio Perm		c0.01				0.10
v/c Ratio		0.10	0.47	0.27	0.49	0.24
Uniform Delay, d1		18.3	17.7	2.9	9.9	8.7
Progression Factor		1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2		0.1	1.2	0.0	0.3	0.2
Delay (s)		18.4	18.9	2.9	10.1	8.9
Level of Service		B	B	A	B	A
Approach Delay (s)	18.4			4.9	9.7	
Approach LOS	B			A	A	

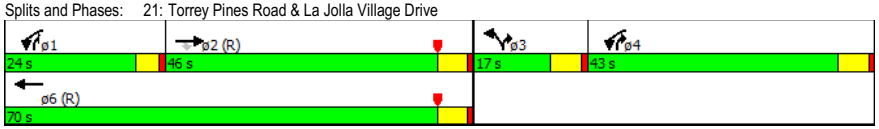
Intersection Summary			
HCM 2000 Control Delay	8.6	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.42		
Actuated Cycle Length (s)	47.0	Sum of lost time (s)	13.5
Intersection Capacity Utilization	33.9%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	ø1	ø4
Lane Configurations								
Traffic Volume (vph)	795	162	755	725	139	719		
Future Volume (vph)	795	162	755	725	139	719		
Turn Type	NA	Perm	Prot	NA	Prot	custom		
Protected Phases	2		1 4	6	3	1 3 4	1	4
Permitted Phases		2						
Detector Phase	2	2	1 4	6	3	1 3 4		
Switch Phase								
Minimum Initial (s)	10.0	10.0		10.0	4.0		4.0	4.0
Minimum Split (s)	15.4	15.4		33.3	9.6		8.4	42.6
Total Split (s)	46.0	46.0		70.0	17.0		24.0	43.0
Total Split (%)	35.4%	35.4%		53.8%	13.1%		18%	33%
Yellow Time (s)	4.4	4.4		4.3	4.6		3.4	4.6
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			
Total Lost Time (s)	5.4	5.4		5.3	5.6			
Lead/Lag	Lag	Lag			Lead		Lead	Lag
Lead-Lag Optimize?	Yes	Yes			Yes		Yes	Yes
Recall Mode	C-Max	C-Max		C-Max	None		None	None

Intersection Summary
Cycle Length: 130
Actuated Cycle Length: 130
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 21: Torrey Pines Road & La Jolla Village Drive



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	795	162	755	725	139	719
Future Volume (vph)	795	162	755	725	139	719
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.4	5.4	4.4	5.3	5.6	4.4
Lane Util. Factor	0.91	1.00	0.97	0.91	0.97	0.88
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	5085	1583	3433	5085	3433	2787
Flt Permitted	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (perm)	5085	1583	3433	5085	3433	2787
Peak-hour factor, PHF	0.76	0.76	0.91	0.91	0.82	0.82
Adj. Flow (vph)	1046	213	830	797	170	877
RTOR Reduction (vph)	0	122	0	0	0	0
Lane Group Flow (vph)	1046	91	830	797	170	877
Turn Type	NA	Perm	Prot	NA	Prot	custom
Protected Phases	2		1 4	6	3	1 3 4
Permitted Phases		2				
Actuated Green, G (s)	55.4	55.4	47.8	68.2	11.4	64.8
Effective Green, g (s)	55.4	55.4	42.2	68.2	11.4	53.6
Actuated g/C Ratio	0.43	0.43	0.32	0.52	0.09	0.41
Clearance Time (s)	5.4	5.4		5.3	5.6	
Vehicle Extension (s)	5.5	5.5		8.0	2.0	
Lane Grp Cap (vph)	2166	674	1114	2667	301	1149
v/s Ratio Prot	c0.21		0.24	0.16	0.05	c0.31
v/s Ratio Perm		0.06				
v/c Ratio	0.48	0.13	0.75	0.30	0.56	0.76
Uniform Delay, d1	27.0	22.7	39.1	17.4	56.9	32.8
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.8	0.4	2.4	0.3	1.4	2.8
Delay (s)	27.7	23.1	41.5	17.7	58.4	35.5
Level of Service	C	C	D	B	E	D
Approach Delay (s)	26.9			29.9	39.2	
Approach LOS	C			C	D	

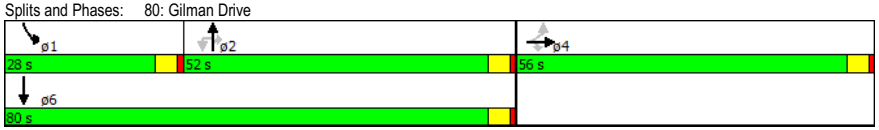
Intersection Summary			
HCM 2000 Control Delay	31.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	21.0
Intersection Capacity Utilization	53.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBT	EBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	5	327	2	412	68	74	212
Future Volume (vph)	5	327	2	412	68	74	212
Turn Type	NA	Perm	Perm	NA	Perm	Prot	NA
Protected Phases	4			2		1	6
Permitted Phases		4	2		2		
Detector Phase	4	4	2	2	2	1	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	40.5	40.5	22.5	22.5	22.5	9.5	24.5
Total Split (s)	56.0	56.0	52.0	52.0	52.0	28.0	80.0
Total Split (%)	41.2%	41.2%	38.2%	38.2%	38.2%	20.6%	58.8%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5		4.5	4.5	4.5	4.5
Lead/Lag			Lag	Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	Yes	
Recall Mode	None	None	Min	Min	Min	None	Min

Intersection Summary
Cycle Length: 136
Actuated Cycle Length: 36.2
Natural Cycle: 75
Control Type: Actuated-Uncoordinated

Splits and Phases: 80: Gilman Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	17	5	327	0	0	0	2	0	412	68	74	212
Future Volume (vph)	17	5	327	0	0	0	2	0	412	68	74	212
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5	4.5						4.5	4.5	4.5	4.5
Lane Util. Factor		0.95	0.95						0.95	1.00	1.00	0.95
Frt		0.87	0.85						1.00	0.85	1.00	1.00
Flt Protected		1.00	1.00						1.00	1.00	0.95	1.00
Satd. Flow (prot)		1529	1504						3538	1583	1770	3539
Flt Permitted		1.00	1.00						0.95	1.00	0.95	1.00
Satd. Flow (perm)		1529	1504						3375	1583	1770	3539
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	18	5	355	0	0	0	2	0	448	74	80	230
RTOR Reduction (vph)	0	134	150	0	0	0	0	0	0	43	0	0
Lane Group Flow (vph)	0	56	38	0	0	0	0	0	450	31	80	230
Turn Type	Perm	NA	Perm				Perm		NA	Perm	Prot	NA
Protected Phases		4							2		1	6
Permitted Phases	4		4				2			2		
Actuated Green, G (s)		7.5	7.5						12.2	12.2	4.2	20.9
Effective Green, g (s)		7.5	7.5						12.2	12.2	4.2	20.9
Actuated g/C Ratio		0.20	0.20						0.33	0.33	0.11	0.56
Clearance Time (s)		4.5	4.5						4.5	4.5	4.5	4.5
Vehicle Extension (s)		3.0	3.0						3.0	3.0	3.0	3.0
Lane Grp Cap (vph)		306	301						1100	516	198	1977
v/s Ratio Prot											c0.05	0.06
v/s Ratio Perm		0.04	0.03						c0.13	0.02		
v/c Ratio		0.18	0.13						0.41	0.06	0.40	0.12
Uniform Delay, d1		12.4	12.3						9.8	8.7	15.4	3.9
Progression Factor		1.00	1.00						1.00	1.00	1.00	1.00
Incremental Delay, d2		0.3	0.2						0.2	0.0	1.3	0.0
Delay (s)		12.7	12.4						10.0	8.7	16.8	3.9
Level of Service		B	B						B	A	B	A
Approach Delay (s)		12.6			0.0				9.9			7.2
Approach LOS		B			A				A			A

Intersection Summary			
HCM 2000 Control Delay	10.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.34		
Actuated Cycle Length (s)	37.4	Sum of lost time (s)	13.5
Intersection Capacity Utilization	37.1%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	0
Future Volume (vph)	0
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.92
Adj. Flow (vph)	0
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

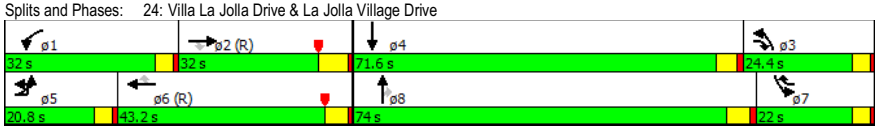
Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	68	1019	165	917	947	824	182	1115	651	695	297
Future Volume (vph)	68	1019	165	917	947	824	182	1115	651	695	297
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA
Protected Phases	5	2	3	1	6	7	3	8		7	4
Permitted Phases			2			6			8		
Detector Phase	5	2	3	1	6	7	3	8	8	7	4
Switch Phase											
Minimum Initial (s)	4.0	10.0	4.0	4.0	10.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.4	16.4	22.4	8.4	15.3	8.4	22.4	9.5	9.5	8.4	8.9
Total Split (s)	20.8	32.0	24.4	32.0	43.2	22.0	24.4	74.0	74.0	22.0	71.6
Total Split (%)	13.0%	20.0%	15.3%	20.0%	27.0%	13.8%	15.3%	46.3%	46.3%	13.8%	44.8%
Yellow Time (s)	3.4	5.4	3.4	3.4	4.3	3.4	3.4	4.5	4.5	3.4	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	6.4	4.4	4.4	5.3	4.4	4.4	5.5	5.5	4.4	4.9
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	C-Max	None	None	None	None	None	None

Intersection Summary

Cycle Length: 160
Actuated Cycle Length: 160
Offset: 4 (3%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 24: Villa La Jolla Drive & La Jolla Village Drive



Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	65	68	1019	165	917	947	824	182	1115	651	695	297
Future Volume (vph)	65	68	1019	165	917	947	824	182	1115	651	695	297
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.4	6.4	4.4	4.4	5.3	4.4	4.4	5.5	5.5	4.4	4.9
Lane Util. Factor		1.00	0.91	1.00	0.97	0.91	0.88	0.97	0.95	0.95	0.97	1.00
Frt		1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99	0.85	1.00	0.97
Flt Protected		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)		1770	5085	1583	3433	5085	2787	3433	1755	1504	3433	1812
Flt Permitted		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Satd. Flow (perm)		1770	5085	1583	3433	5085	2787	3433	1755	1504	3433	1812
Peak-hour factor, PHF	0.92	0.93	0.93	0.93	0.95	0.95	0.95	0.89	0.89	0.89	0.88	0.88
Adj. Flow (vph)	71	73	1096	177	965	997	867	204	1253	731	790	338
RTOR Reduction (vph)	0	0	0	87	0	0	116	0	1	130	0	7
Lane Group Flow (vph)	0	144	1096	90	965	997	751	204	1325	528	790	406
Turn Type	Prot	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA
Protected Phases	5	5	2	3	1	6	7	3	8		7	4
Permitted Phases				2			6			8		
Actuated Green, G (s)		15.3	25.6	70.3	27.6	39.0	56.6	44.7	68.5	68.5	17.6	42.0
Effective Green, g (s)		15.3	25.6	70.3	27.6	39.0	56.6	44.7	68.5	68.5	17.6	42.0
Actuated g/C Ratio		0.10	0.16	0.44	0.17	0.24	0.35	0.28	0.43	0.43	0.11	0.26
Clearance Time (s)		4.4	6.4	4.4	4.4	5.3	4.4	4.4	5.5	5.5	4.4	4.9
Vehicle Extension (s)		2.0	4.4	2.0	2.0	4.7	2.0	2.0	3.3	3.3	2.0	2.0
Lane Grp Cap (vph)		169	813	695	592	1239	985	959	751	643	377	475
v/s Ratio Prot		0.08	c0.22	0.04	c0.28	0.20	0.08	0.06	c0.75		c0.23	0.22
v/s Ratio Perm				0.02			0.19			0.35		
v/c Ratio		0.85	1.35	0.13	1.63	0.80	0.76	0.21	1.76	0.82	2.10	0.86
Uniform Delay, d1		71.2	67.2	26.7	66.2	56.9	45.7	44.2	45.8	40.4	71.2	56.1
Progression Factor		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2		30.7	164.8	0.0	291.2	5.6	3.2	0.0	349.3	8.4	501.9	13.6
Delay (s)		101.9	232.0	26.7	357.4	62.5	48.9	44.2	395.1	48.8	573.1	69.7
Level of Service		F	F	C	F	E	D	D	F	D	F	E
Approach Delay (s)			193.1			158.9			258.2			400.3
Approach LOS			F			F			F			F

Intersection Summary

HCM 2000 Control Delay	231.7	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.70		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	20.7
Intersection Capacity Utilization	154.8%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

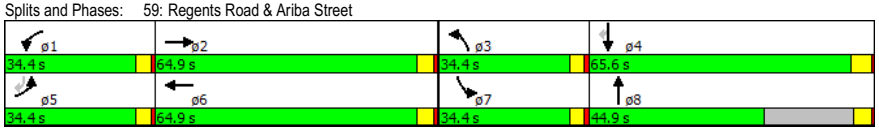
Movement	SBR
Lane Configurations	
Traffic Volume (vph)	66
Future Volume (vph)	66
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.88
Adj. Flow (vph)	75
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

Intersection Summary

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	36	20	52	48	256	805	45	557	67
Future Volume (vph)	36	20	52	48	256	805	45	557	67
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA	custom
Protected Phases	5	2	1	6	3	8	7	4	
Permitted Phases									5 4
Detector Phase	5	2	1	6	3	8	7	4	5 4
Switch Phase									
Minimum Initial (s)	4.0	7.0	4.0	7.0	4.0	7.0	4.0	7.0	
Minimum Split (s)	8.4	11.9	8.4	11.9	8.4	11.9	8.4	12.6	
Total Split (s)	34.4	64.9	34.4	64.9	34.4	44.9	34.4	65.6	
Total Split (%)	17.3%	32.6%	17.3%	32.6%	17.3%	22.5%	17.3%	32.9%	
Yellow Time (s)	3.4	3.9	3.4	3.9	3.4	3.9	3.4	4.6	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.4	4.9	4.4	4.9	4.4	4.9	4.4	5.6	
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	None	None	None	None	None	

Intersection Summary
Cycle Length: 199.3
Actuated Cycle Length: 86.2
Natural Cycle: 55
Control Type: Actuated-Uncoordinated

Splits and Phases: 59: Regents Road & Ariba Street



59: Regents Road & Ariba Street

Timing Plan: Midday Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	36	20	327	52	48	17	256	805	159	45	557	67
Future Volume (vph)	36	20	327	52	48	17	256	805	159	45	557	67
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	4.9		4.4	4.9		4.4	5.6	4.4
Lane Util. Factor	1.00	0.95		1.00	0.95		0.97	0.95		1.00	0.95	1.00
Frt	1.00	0.86		1.00	0.96		1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	3039		1770	3401		3433	3452		1770	3539	1583
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1770	3039		1770	3401		3433	3452		1770	3539	1583
Peak-hour factor, PHF	0.85	0.85	0.85	0.71	0.71	0.71	0.88	0.88	0.88	0.87	0.87	0.87
Adj. Flow (vph)	42	24	385	73	68	24	291	915	181	52	640	77
RTOR Reduction (vph)	0	322	0	0	20	0	0	6	0	0	0	41
Lane Group Flow (vph)	42	87	0	73	72	0	291	1090	0	52	640	36
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	custom
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases												5 4
Actuated Green, G (s)	7.0	14.5		7.3	14.8		12.8	41.4		6.3	34.2	46.8
Effective Green, g (s)	7.0	14.5		7.3	14.8		12.8	41.4		6.3	34.2	41.2
Actuated g/C Ratio	0.08	0.16		0.08	0.17		0.15	0.47		0.07	0.39	0.47
Clearance Time (s)	4.4	4.9		4.4	4.9		4.4	4.9		4.4	5.6	
Vehicle Extension (s)	2.0	6.3		2.0	5.9		2.0	4.8		2.0	4.4	
Lane Grp Cap (vph)	140	500		146	571		498	1622		126	1373	740
v/s Ratio Prot	0.02	c0.03		c0.04	0.02		c0.08	c0.32		0.03	0.18	
v/s Ratio Perm												0.02
v/c Ratio	0.30	0.17		0.50	0.13		0.58	0.67		0.41	0.47	0.05
Uniform Delay, d1	38.2	31.7		38.7	31.2		35.2	18.1		39.1	20.1	12.8
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	0.4	0.5		1.0	0.3		1.1	1.4		0.8	0.4	0.0
Delay (s)	38.7	32.2		39.6	31.4		36.3	19.5		39.9	20.5	12.8
Level of Service	D	C		D	C		D	B		D	C	B
Approach Delay (s)		32.8			35.1			23.0			21.1	
Approach LOS		C			D			C			C	

Intersection Summary				
HCM 2000 Control Delay	24.8	HCM 2000 Level of Service	C	
HCM 2000 Volume to Capacity ratio	0.56			
Actuated Cycle Length (s)	88.1	Sum of lost time (s)	19.3	
Intersection Capacity Utilization	60.7%	ICU Level of Service	B	
Analysis Period (min)	15			

c Critical Lane Group

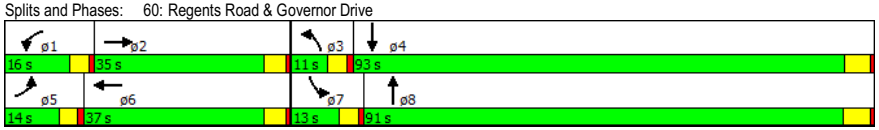
60: Regents Road & Governor Drive

Timing Plan: Midday Peak

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	110	39	243	73	22	985	163	687
Future Volume (vph)	110	39	243	73	22	985	163	687
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	5	2	1	6	3	8	7	4
Permitted Phases								
Detector Phase	5	2	1	6	3	8	7	4
Switch Phase								
Minimum Initial (s)	4.0	4.0	4.0	7.0	5.0	7.0	5.0	4.0
Minimum Split (s)	8.4	8.9	8.4	11.9	9.5	12.8	9.5	9.5
Total Split (s)	14.0	35.0	16.0	37.0	11.0	91.0	13.0	93.0
Total Split (%)	9.0%	22.6%	10.3%	23.9%	7.1%	58.7%	8.4%	60.0%
Yellow Time (s)	3.4	3.9	3.4	3.9	3.5	4.8	3.5	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	4.9	4.4	4.9	4.5	5.8	4.5	5.5
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Min	None	Min	None	None	None	None

Intersection Summary
Cycle Length: 155
Actuated Cycle Length: 97.3
Natural Cycle: 60
Control Type: Actuated-Uncoordinated

Splits and Phases: 60: Regents Road & Governor Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	110	39	37	243	73	125	22	985	73	163	687	86
Future Volume (vph)	110	39	37	243	73	125	22	985	73	163	687	86
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	4.9		4.5	5.8		4.5	5.5	
Lane Util. Factor	1.00	0.95		0.97	0.95		1.00	0.95		0.97	0.95	
Frt	1.00	0.93		1.00	0.91		1.00	0.99		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3280		3433	3205		1770	3503		3433	3480	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	3280		3433	3205		1770	3503		3433	3480	
Peak-hour factor, PHF	0.90	0.90	0.90	0.86	0.86	0.86	0.84	0.84	0.84	0.83	0.83	0.83
Adj. Flow (vph)	122	43	41	283	85	145	26	1173	87	196	828	104
RTOR Reduction (vph)	0	37	0	0	115	0	0	4	0	0	6	0
Lane Group Flow (vph)	122	47	0	283	115	0	26	1256	0	196	926	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases												
Actuated Green, G (s)	9.8	9.3		11.8	11.3		3.6	49.7		8.6	55.0	
Effective Green, g (s)	9.8	9.3		11.8	11.3		3.6	49.7		8.6	55.0	
Actuated g/C Ratio	0.10	0.09		0.12	0.11		0.04	0.50		0.09	0.56	
Clearance Time (s)	4.4	4.9		4.4	4.9		4.5	5.8		4.5	5.5	
Vehicle Extension (s)	2.0	4.5		2.0	5.0		3.0	4.6		3.0	2.0	
Lane Grp Cap (vph)	175	308		409	365		64	1758		298	1933	
v/s Ratio Prot	0.07	0.01		c0.08	c0.04		0.01	c0.36		c0.06	0.27	
v/s Ratio Perm												
v/c Ratio	0.70	0.15		0.69	0.31		0.41	0.71		0.66	0.48	
Uniform Delay, d1	43.2	41.2		41.9	40.3		46.7	19.1		43.8	13.3	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	9.4	0.4		4.1	1.0		4.2	1.6		5.2	0.1	
Delay (s)	52.5	41.6		45.9	41.3		50.8	20.8		48.9	13.4	
Level of Service	D	D		D	D		D	C		D	B	
Approach Delay (s)		48.1			43.9			21.4			19.6	
Approach LOS		D			D			C			B	

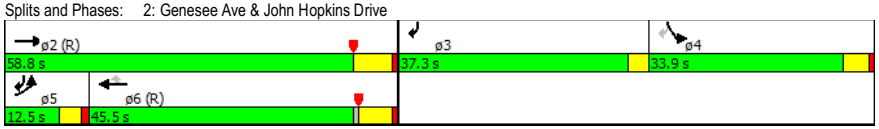
Intersection Summary			
HCM 2000 Control Delay	26.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	99.0	Sum of lost time (s)	19.6
Intersection Capacity Utilization	62.7%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	ø3
Lane Configurations							
Traffic Volume (vph)	41	1285	707	211	1020	121	
Future Volume (vph)	41	1285	707	211	1020	121	
Turn Type	Prot	NA	NA	Perm	Prot	pt+ov	
Protected Phases	5	2	6		4	3 5	3
Permitted Phases				6		4	
Detector Phase	5	2	6	6	4	3 5	
Switch Phase							
Minimum Initial (s)	4.0	10.0	10.0	10.0	7.0		4.0
Minimum Split (s)	9.5	16.7	15.9	15.9	11.9		7.0
Total Split (s)	12.5	58.8	45.5	45.5	33.9		37.3
Total Split (%)	9.6%	45.2%	35.0%	35.0%	26.1%		29%
Yellow Time (s)	3.4	5.7	4.9	4.9	3.9		3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		0.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	4.4	6.7	5.9	5.9	4.9		
Lead/Lag	Lead		Lag	Lag	Lag		Lead
Lead-Lag Optimize?	Yes		Yes	Yes	Yes		Yes
Recall Mode	None	C-Max	C-Max	C-Max	None		None

Intersection Summary
Cycle Length: 130
Actuated Cycle Length: 130
Offset: 22 (17%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 70
Control Type: Actuated-Coordinated

Splits and Phases: 2: Genesee Ave & John Hopkins Drive



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	41	1285	707	211	1020	121
Future Volume (vph)	41	1285	707	211	1020	121
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	6.7	5.9	5.9	4.9	3.0
Lane Util. Factor	1.00	0.91	0.86	0.88	0.97	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	5085	6408	2787	3433	1583
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	5085	6408	2787	3433	1583
Peak-hour factor, PHF	0.92	0.92	0.80	0.80	0.80	0.80
Adj. Flow (vph)	45	1397	884	264	1275	151
RTOR Reduction (vph)	0	0	0	180	0	11
Lane Group Flow (vph)	45	1397	884	84	1275	140
Turn Type	Prot	NA	NA	Perm	Prot	pt+ov
Protected Phases	5	2	6		4	3 5
Permitted Phases				6		4
Actuated Green, G (s)	6.9	52.1	41.6	41.6	46.1	70.2
Effective Green, g (s)	6.9	52.1	41.6	41.6	46.1	70.2
Actuated g/C Ratio	0.05	0.40	0.32	0.32	0.35	0.54
Clearance Time (s)	4.4	6.7	5.9	5.9	4.9	
Vehicle Extension (s)	2.0	4.0	3.9	3.9	5.0	
Lane Grp Cap (vph)	93	2037	2050	891	1217	891
v/s Ratio Prot	0.03	c0.27	0.14		c0.37	c0.03
v/s Ratio Perm				0.03		0.06
v/c Ratio	0.48	0.69	0.43	0.09	1.05	0.16
Uniform Delay, d1	59.8	32.2	34.9	31.0	41.9	15.0
Progression Factor	1.04	0.59	0.92	1.42	1.00	1.00
Incremental Delay, d2	1.3	1.7	0.6	0.2	39.2	0.0
Delay (s)	63.3	20.8	32.7	44.1	81.2	15.1
Level of Service	E	C	C	D	F	B
Approach Delay (s)		22.1	35.3		74.2	
Approach LOS		C	D		E	

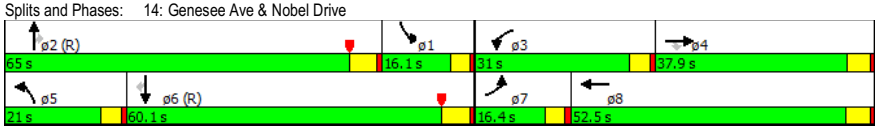
Intersection Summary			
HCM 2000 Control Delay	44.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	18.2
Intersection Capacity Utilization	63.6%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	223	513	364	500	833	317	548	211	128	1501	127
Future Volume (vph)	223	513	364	500	833	317	548	211	128	1501	127
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8	5	2		1	6	
Permitted Phases			4					2			6
Detector Phase	7	4	4	3	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	4.0	10.0	10.0	4.0	10.0	4.0	10.0	10.0	4.0	10.0	10.0
Minimum Split (s)	8.4	37.9	37.9	8.4	40.1	8.4	35.7	35.7	8.4	38.9	38.9
Total Split (s)	16.4	37.9	37.9	31.0	52.5	21.0	65.0	65.0	16.1	60.1	60.1
Total Split (%)	10.9%	25.3%	25.3%	20.7%	35.0%	14.0%	43.3%	43.3%	10.7%	40.1%	40.1%
Yellow Time (s)	3.4	3.9	3.9	3.4	4.1	3.4	4.7	4.7	3.4	4.9	4.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	4.9	4.9	4.4	5.1	4.4	5.7	5.7	4.4	5.9	5.9
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max

Intersection Summary
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 20 (13%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 14: Genesee Ave & Nobel Drive



14: Genesee Ave & Nobel Drive

Timing Plan: Evening Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	223	513	364	500	833	75	317	548	211	128	1501	127
Future Volume (vph)	223	513	364	500	833	75	317	548	211	128	1501	127
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9	4.9	4.4	5.1		4.4	5.7	5.7	4.4	5.9	5.9
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95		0.97	0.91	1.00	0.97	0.91	1.00
Frt	1.00	1.00	0.85	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	3539	1583	3433	3496		3433	5085	1583	3433	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3539	1583	3433	3496		3433	5085	1583	3433	5085	1583
Peak-hour factor, PHF	0.91	0.91	0.91	0.84	0.84	0.84	0.87	0.87	0.87	0.84	0.84	0.84
Adj. Flow (vph)	245	564	400	595	992	89	364	630	243	152	1787	151
RTOR Reduction (vph)	0	0	165	0	5	0	0	0	147	0	0	71
Lane Group Flow (vph)	245	564	235	595	1076	0	364	630	96	152	1787	80
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4						2			6
Actuated Green, G (s)	12.0	32.8	32.8	26.6	47.2		16.8	59.5	59.5	11.7	54.2	54.2
Effective Green, g (s)	12.0	32.8	32.8	26.6	47.2		16.8	59.5	59.5	11.7	54.2	54.2
Actuated g/C Ratio	0.08	0.22	0.22	0.18	0.31		0.11	0.40	0.40	0.08	0.36	0.36
Clearance Time (s)	4.4	4.9	4.9	4.4	5.1		4.4	5.7	5.7	4.4	5.9	5.9
Vehicle Extension (s)	2.0	4.0	4.0	2.0	2.1		2.0	8.0	8.0	2.0	4.0	4.0
Lane Grp Cap (vph)	274	773	346	608	1100		384	2017	627	267	1837	571
v/s Ratio Prot	0.07	0.16		c0.17	c0.31		c0.11	0.12		0.04	c0.35	
v/s Ratio Perm			0.15						0.06			0.05
v/c Ratio	0.89	0.73	0.68	0.98	0.98		0.95	0.31	0.15	0.57	0.97	0.14
Uniform Delay, d1	68.4	54.5	53.8	61.4	50.9		66.2	31.2	29.1	66.7	47.2	32.2
Progression Factor	0.91	1.11	1.25	1.00	1.00		1.18	0.29	0.09	0.93	0.88	1.16
Incremental Delay, d2	24.9	3.2	4.9	30.6	21.7		30.7	0.4	0.5	1.2	12.6	0.4
Delay (s)	87.2	63.8	72.3	92.1	72.6		108.7	9.4	3.2	63.1	54.2	37.6
Level of Service	F	E	E	F	E		F	A	A	E	D	D
Approach Delay (s)		71.4			79.5			37.4			53.6	
Approach LOS		E			E			D			D	

Intersection Summary				
HCM 2000 Control Delay	60.8	HCM 2000 Level of Service	E	
HCM 2000 Volume to Capacity ratio	0.99			
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	19.8	
Intersection Capacity Utilization	86.3%	ICU Level of Service	E	
Analysis Period (min)	15			

c Critical Lane Group

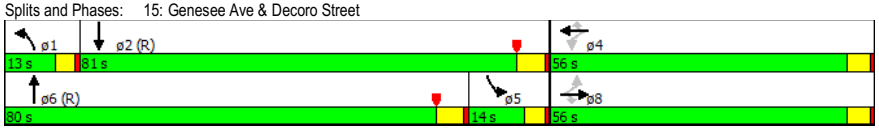
15: Genesee Ave & Decoro Street

Timing Plan: Evening Peak

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	84	31	144	203	68	73	90	947	40	2371
Future Volume (vph)	84	31	144	203	68	73	90	947	40	2371
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA	Prot	NA
Protected Phases		8			4		1	6	5	2
Permitted Phases	8		8	4		4				
Detector Phase	8	8	8	4	4	4	1	6	5	2
Switch Phase										
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	10.0	4.0	10.0
Minimum Split (s)	8.9	8.9	8.9	8.9	8.9	8.9	8.4	15.7	8.4	15.9
Total Split (s)	56.0	56.0	56.0	56.0	56.0	56.0	13.0	80.0	14.0	81.0
Total Split (%)	37.3%	37.3%	37.3%	37.3%	37.3%	37.3%	8.7%	53.3%	9.3%	54.0%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.9	3.9	3.4	4.7	3.4	4.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.9	4.9		4.9	4.9	4.4	5.7	4.4	5.9
Lead/Lag							Lead	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	None	C-Max

Intersection Summary
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 21 (14%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow
Natural Cycle: 110
Control Type: Actuated-Coordinated

Splits and Phases: 15: Genesee Ave & Decoro Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	84	31	144	203	68	73	90	947	17	40	2371	132
Future Volume (vph)	84	31	144	203	68	73	90	947	17	40	2371	132
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9	4.9		4.9	4.9	4.4	5.7		4.4	5.9	
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.91		1.00	0.91	
Frt		1.00	0.85		1.00	0.85	1.00	1.00		1.00	0.99	
Flt Protected		0.96	1.00		0.96	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1797	1583		1795	1583	1770	5072		1770	5045	
Flt Permitted		0.35	1.00		0.64	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)		651	1583		1191	1583	1770	5072		1770	5045	
Peak-hour factor, PHF	0.85	0.85	0.85	0.80	0.80	0.80	0.85	0.85	0.85	0.90	0.90	0.90
Adj. Flow (vph)	99	36	169	254	85	91	106	1114	20	44	2634	147
RTOR Reduction (vph)	0	0	85	0	0	64	0	1	0	0	4	0
Lane Group Flow (vph)	0	135	84	0	339	27	106	1133	0	44	2777	0
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA		Prot	NA	
Protected Phases		8			4		1	6		5	2	
Permitted Phases	8		8	4		4						
Actuated Green, G (s)		45.2	45.2		45.2	45.2	12.0	82.1		7.7	77.6	
Effective Green, g (s)		45.2	45.2		45.2	45.2	12.0	82.1		7.7	77.6	
Actuated g/C Ratio		0.30	0.30		0.30	0.30	0.08	0.55		0.05	0.52	
Clearance Time (s)		4.9	4.9		4.9	4.9	4.4	5.7		4.4	5.9	
Vehicle Extension (s)		2.0	2.0		2.0	2.0	2.0	4.3		2.0	3.7	
Lane Grp Cap (vph)		196	477		358	477	141	2776		90	2609	
v/s Ratio Prot							c0.06	0.22		0.02	c0.55	
v/s Ratio Perm		0.21	0.05		c0.28	0.02						
v/c Ratio		0.69	0.18		0.95	0.06	0.75	0.41		0.49	1.06	
Uniform Delay, d1		46.2	38.7		51.2	37.3	67.5	19.8		69.2	36.2	
Progression Factor		1.00	1.00		1.00	1.00	1.27	0.18		0.93	0.91	
Incremental Delay, d2		7.8	0.1		33.4	0.0	17.6	0.4		0.5	32.6	
Delay (s)		54.0	38.7		84.6	37.3	103.2	4.0		65.2	65.4	
Level of Service		D	D		F	D	F	A		E	E	
Approach Delay (s)		45.5			74.6			12.5			65.4	
Approach LOS		D			E			B			E	

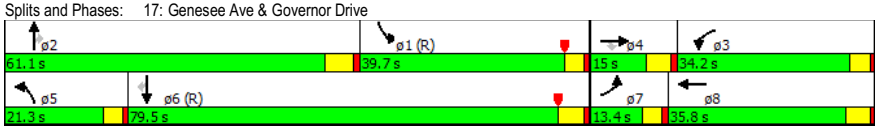
Intersection Summary			
HCM 2000 Control Delay	51.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.00		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	15.2
Intersection Capacity Utilization	87.9%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	100	189	98	555	230	165	689	462	451	1829	242
Future Volume (vph)	100	189	98	555	230	165	689	462	451	1829	242
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8	5	2		1	6	
Permitted Phases			4					2			6
Detector Phase	7	4	4	3	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	4.0	8.0	8.0	4.0	8.0	4.0	8.0	8.0	4.0	8.0	8.0
Minimum Split (s)	8.4	13.2	13.2	8.4	13.2	8.4	13.9	13.9	8.4	13.4	13.4
Total Split (s)	13.4	15.0	15.0	34.2	35.8	21.3	61.1	61.1	39.7	79.5	79.5
Total Split (%)	8.9%	10.0%	10.0%	22.8%	23.9%	14.2%	40.7%	40.7%	26.5%	53.0%	53.0%
Yellow Time (s)	3.4	4.2	4.2	3.4	4.2	3.4	4.9	4.9	3.4	4.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.2	5.2	4.4	5.2	4.4	5.9	5.9	4.4	5.4	5.4
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lead	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	C-Max	C-Max	C-Max

Intersection Summary
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 0 (0%), Referenced to phase 1:SBL and 6:SBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 17: Genesee Ave & Governor Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	100	189	98	555	230	125	165	689	462	451	1829	242
Future Volume (vph)	100	189	98	555	230	125	165	689	462	451	1829	242
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	16	12	12	12	12	12	12	12
Total Lost time (s)	4.4	5.2	5.2	4.4	5.2		4.4	5.9	5.9	4.4	5.4	5.4
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95		1.00	0.91	1.00	0.97	0.91	1.00
Frt	1.00	1.00	0.85	1.00	0.95		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	3539	1583	3433	3799		1770	5085	1583	3433	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3539	1583	3433	3799		1770	5085	1583	3433	5085	1583
Peak-hour factor, PHF	0.95	0.95	0.95	0.87	0.87	0.87	0.92	0.92	0.92	0.89	0.89	0.89
Adj. Flow (vph)	105	199	103	638	264	144	179	749	502	507	2055	272
RTOR Reduction (vph)	0	0	96	0	48	0	0	0	327	0	0	40
Lane Group Flow (vph)	105	199	7	638	360	0	179	749	175	507	2055	232
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4						2			6
Actuated Green, G (s)	8.2	9.8	9.8	29.3	30.9		16.5	32.3	32.3	58.7	75.0	75.0
Effective Green, g (s)	8.2	9.8	9.8	29.3	30.9		16.5	32.3	32.3	58.7	75.0	75.0
Actuated g/C Ratio	0.05	0.07	0.07	0.20	0.21		0.11	0.22	0.22	0.39	0.50	0.50
Clearance Time (s)	4.4	5.2	5.2	4.4	5.2		4.4	5.9	5.9	4.4	5.4	5.4
Vehicle Extension (s)	2.0	2.3	2.3	2.0	3.8		2.0	2.9	2.9	2.0	3.5	3.5
Lane Grp Cap (vph)	187	231	103	670	782		194	1094	340	1343	2542	791
v/s Ratio Prot	0.03	c0.06		c0.19	0.09		c0.10	0.15		0.15	c0.40	
v/s Ratio Perm			0.00						0.11			0.15
v/c Ratio	0.56	0.86	0.07	0.95	0.46		0.92	0.68	0.51	0.38	0.81	0.29
Uniform Delay, d1	69.1	69.4	65.8	59.7	52.2		66.1	54.2	51.9	32.6	31.5	22.0
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	0.86	0.85	0.88
Incremental Delay, d2	2.3	26.0	0.2	23.4	0.6		42.6	1.8	1.2	0.6	2.2	0.7
Delay (s)	71.4	95.4	66.0	83.0	52.8		108.7	55.9	53.2	28.7	28.9	20.1
Level of Service	E	F	E	F	D		F	E	D	C	C	C
Approach Delay (s)		81.8			71.2			61.6			28.0	
Approach LOS		F			E			E			C	

Intersection Summary				
HCM 2000 Control Delay	48.1	HCM 2000 Level of Service	D	
HCM 2000 Volume to Capacity ratio	0.86			
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	19.9	
Intersection Capacity Utilization	83.1%	ICU Level of Service	E	
Analysis Period (min)	15			
c Critical Lane Group				

Lane Group	EBR	NBL	NBT	SBT	SBR
Lane Configurations					
Traffic Volume (vph)	494	262	627	1873	575
Future Volume (vph)	494	262	627	1873	575
Turn Type	Perm	Prot	NA	NA	Perm
Protected Phases		5	2	6	
Permitted Phases	4				6
Detector Phase	4	5	2	6	6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	36.5	9.5	22.5	32.5	32.5
Total Split (s)	36.5	27.5	113.5	86.0	86.0
Total Split (%)	24.3%	18.3%	75.7%	57.3%	57.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5
Lead/Lag		Lead		Lag	Lag
Lead-Lag Optimize?		Yes		Yes	Yes
Recall Mode	None	None	Min	Min	Min

Intersection Summary
Cycle Length: 150
Actuated Cycle Length: 133.9
Natural Cycle: 150
Control Type: Actuated-Uncoordinated

Splits and Phases: 18: Genesee Ave & SR-52 Ramp

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	494	262	627	1873	575
Future Volume (vph)	0	494	262	627	1873	575
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5	4.5	4.5	4.5	4.5
Lane Util. Factor		0.88	1.00	0.91	0.95	1.00
Frt		0.85	1.00	1.00	1.00	0.85
Flt Protected		1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)		2787	1770	5085	3539	1583
Flt Permitted		1.00	0.95	1.00	1.00	1.00
Satd. Flow (perm)		2787	1770	5085	3539	1583
Peak-hour factor, PHF	0.81	0.81	0.91	0.91	0.91	0.91
Adj. Flow (vph)	0	610	288	689	2058	632
RTOR Reduction (vph)	0	380	0	0	0	88
Lane Group Flow (vph)	0	230	288	689	2058	544
Turn Type		Perm	Prot	NA	NA	Perm
Protected Phases			5	2	6	
Permitted Phases		4				6
Actuated Green, G (s)		15.6	23.1	109.3	81.7	81.7
Effective Green, g (s)		15.6	23.1	109.3	81.7	81.7
Actuated g/C Ratio		0.12	0.17	0.82	0.61	0.61
Clearance Time (s)		4.5	4.5	4.5	4.5	4.5
Vehicle Extension (s)		3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)		324	305	4150	2159	965
v/s Ratio Prot			c0.16	0.14	c0.58	
v/s Ratio Perm		c0.08				0.34
v/c Ratio		0.71	0.94	0.17	0.95	0.56
Uniform Delay, d1		57.0	54.8	2.6	24.3	15.5
Progression Factor		1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2		7.1	36.7	0.0	10.4	0.8
Delay (s)		64.1	91.5	2.6	34.8	16.3
Level of Service		E	F	A	C	B
Approach Delay (s)	64.1			28.8	30.4	
Approach LOS	E			C	C	

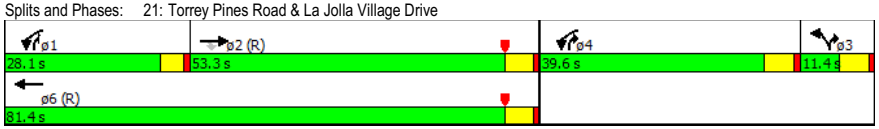
Intersection Summary			
HCM 2000 Control Delay	34.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.92		
Actuated Cycle Length (s)	133.9	Sum of lost time (s)	13.5
Intersection Capacity Utilization	76.6%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	ø1	ø4
Lane Configurations								
Traffic Volume (vph)	1738	339	1399	777	126	1034		
Future Volume (vph)	1738	339	1399	777	126	1034		
Turn Type	NA	Perm	Prot	NA	Prot	custom		
Protected Phases	2		1 4	6	3	1 3 4	1	4
Permitted Phases		2						
Detector Phase	2	2	1 4	6	3	1 3 4		
Switch Phase								
Minimum Initial (s)	10.0	10.0		10.0	4.0		4.0	4.0
Minimum Split (s)	15.4	15.4		15.3	9.6		8.4	39.6
Total Split (s)	53.3	53.3		81.4	11.4		28.1	39.6
Total Split (%)	40.3%	40.3%		61.5%	8.6%		21%	30%
Yellow Time (s)	4.4	4.4		4.3	4.6		3.4	4.6
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			
Total Lost Time (s)	5.4	5.4		5.3	5.6			
Lead/Lag	Lag	Lag			Lag		Lead	Lead
Lead-Lag Optimize?					Yes			Yes
Recall Mode	C-Max	C-Max		C-Max	None		None	None

Intersection Summary
Cycle Length: 132.4
Actuated Cycle Length: 132.4
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 140
Control Type: Actuated-Coordinated

Splits and Phases: 21: Torrey Pines Road & La Jolla Village Drive



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1738	339	1399	777	126	1034
Future Volume (vph)	1738	339	1399	777	126	1034
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.4	5.4	4.4	5.3	5.6	4.4
Lane Util. Factor	0.91	1.00	0.97	0.91	0.97	0.88
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	5085	1583	3433	5085	3433	2787
Flt Permitted	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (perm)	5085	1583	3433	5085	3433	2787
Peak-hour factor, PHF	0.90	0.90	0.89	0.89	0.91	0.91
Adj. Flow (vph)	1931	377	1572	873	138	1136
RTOR Reduction (vph)	0	68	0	0	0	0
Lane Group Flow (vph)	1931	309	1572	873	138	1136
Turn Type	NA	Perm	Prot	NA	Prot	custom
Protected Phases	2		1 4	6	3	1 3 4
Permitted Phases		2				
Actuated Green, G (s)	47.9	47.9	57.7	76.1	5.8	74.7
Effective Green, g (s)	47.9	47.9	57.7	76.1	5.8	63.5
Actuated g/C Ratio	0.36	0.36	0.44	0.57	0.04	0.48
Clearance Time (s)	5.4	5.4		5.3	5.6	
Vehicle Extension (s)	5.5	5.5		8.0	2.0	
Lane Grp Cap (vph)	1839	572	1496	2922	150	1336
v/s Ratio Prot	c0.38		c0.46	0.17	c0.04	0.41
v/s Ratio Perm		0.19				
v/c Ratio	1.05	0.54	1.05	0.30	0.92	0.85
Uniform Delay, d1	42.2	33.5	37.4	14.5	63.1	30.3
Progression Factor	0.58	0.34	1.00	1.00	1.00	1.00
Incremental Delay, d2	27.2	1.0	37.9	0.3	49.7	5.2
Delay (s)	51.7	12.3	75.2	14.7	112.7	35.5
Level of Service	D	B	E	B	F	D
Approach Delay (s)	45.2			53.6	43.8	
Approach LOS	D			D	D	

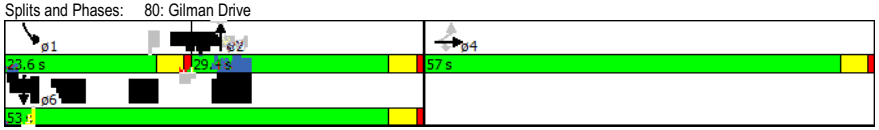
Intersection Summary			
HCM 2000 Control Delay	48.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.04		
Actuated Cycle Length (s)	132.4	Sum of lost time (s)	21.0
Intersection Capacity Utilization	89.9%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBT	EBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	5	1015	411	127	163	972
Future Volume (vph)	5	1015	411	127	163	972
Turn Type	NA	Perm	NA	Perm	Prot	NA
Protected Phases	4		2		1	6
Permitted Phases		4		2		
Detector Phase	4	4	2	2	1	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	40.5	40.5	22.5	22.5	9.5	24.5
Total Split (s)	57.0	57.0	29.4	29.4	23.6	53.0
Total Split (%)	51.8%	51.8%	26.7%	26.7%	21.5%	48.2%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	None	None	Min	Min	None	Min

Intersection Summary
Cycle Length: 110
Actuated Cycle Length: 81.8
Natural Cycle: 75
Control Type: Actuated-Uncoordinated

Splits and Phases: 80: Gilman Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	5	1015	0	0	0	0	411	127	163	972	0
Future Volume (vph)	8	5	1015	0	0	0	0	411	127	163	972	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5	4.5					4.5	4.5	4.5	4.5	
Lane Util. Factor		0.95	0.95					0.95	1.00	1.00	0.95	
Frt		0.85	0.85					1.00	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1510	1504					3539	1583	1770	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		1510	1504					3539	1583	1770	3539	
Peak-hour factor, PHF	0.97	0.97	0.97	0.25	0.25	0.25	0.83	0.83	0.83	0.96	0.96	0.96
Adj. Flow (vph)	8	5	1046	0	0	0	0	495	153	170	1012	0
RTOR Reduction (vph)	0	28	34	0	0	0	0	0	96	0	0	0
Lane Group Flow (vph)	0	498	499	0	0	0	0	495	57	170	1013	0
Turn Type	Perm	NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2			
Actuated Green, G (s)		35.4	35.4					18.5	18.5	13.6	36.6	
Effective Green, g (s)		35.4	35.4					18.5	18.5	13.6	36.6	
Actuated g/C Ratio		0.44	0.44					0.23	0.23	0.17	0.45	
Clearance Time (s)		4.5	4.5					4.5	4.5	4.5	4.5	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		659	657					808	361	297	1599	
v/s Ratio Prot								0.14		0.10	c0.29	
v/s Ratio Perm		0.33	c0.33						0.04			
v/c Ratio		0.76	0.76					0.61	0.16	0.57	0.63	
Uniform Delay, d1		19.2	19.2					28.0	25.0	31.0	17.0	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		4.9	5.1					1.4	0.2	2.7	0.8	
Delay (s)		24.1	24.3					29.4	25.2	33.7	17.9	
Level of Service		C	C					C	C	C	B	
Approach Delay (s)		24.2			0.0			28.4			20.1	
Approach LOS		C			A			C			C	

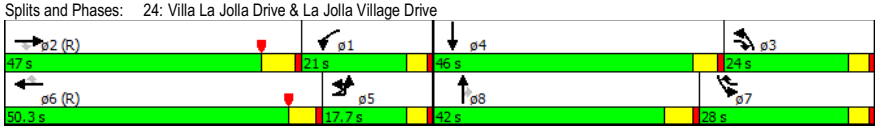
Intersection Summary			
HCM 2000 Control Delay	23.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	81.0	Sum of lost time (s)	13.5
Intersection Capacity Utilization	76.3%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	57	1885	66	603	1114	392	450	237	660	1213	721
Future Volume (vph)	57	1885	66	603	1114	392	450	237	660	1213	721
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA
Protected Phases	5	2	3	1	6	7	3	8		7	4
Permitted Phases			2			6			8		
Detector Phase	5	2	3	1	6	7	3	8	8	7	4
Switch Phase											
Minimum Initial (s)	4.0	10.0	4.0	4.0	10.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.4	16.4	22.4	8.4	15.3	8.4	22.4	9.5	9.5	8.4	8.9
Total Split (s)	17.7	47.0	24.0	21.0	50.3	28.0	24.0	42.0	42.0	28.0	46.0
Total Split (%)	12.8%	34.1%	17.4%	15.2%	36.4%	20.3%	17.4%	30.4%	30.4%	20.3%	33.3%
Yellow Time (s)	3.4	5.4	3.4	3.4	4.3	3.4	3.4	4.5	4.5	3.4	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	6.4	4.4	4.4	5.3	4.4	4.4	5.5	5.5	4.4	4.9
Lead/Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	C-Max	None	None	None	None	None	None

Intersection Summary
Cycle Length: 138
Actuated Cycle Length: 138
Offset: 44 (32%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 24: Villa La Jolla Drive & La Jolla Village Drive



Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	54	57	1885	66	603	1114	392	450	237	660	1213	721
Future Volume (vph)	54	57	1885	66	603	1114	392	450	237	660	1213	721
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.4	6.4	4.4	4.4	5.3	4.4	4.4	5.5	5.5	4.4	4.9
Lane Util. Factor		1.00	0.91	1.00	0.97	0.91	0.88	0.97	0.95	0.95	0.97	1.00
Frt		1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.93	0.85	1.00	0.98
Flt Protected		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)		1770	5085	1583	3433	5085	2787	3433	1639	1504	3433	1825
Flt Permitted		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Satd. Flow (perm)		1770	5085	1583	3433	5085	2787	3433	1639	1504	3433	1825
Peak-hour factor, PHF	0.92	0.80	0.80	0.80	0.85	0.85	0.85	0.82	0.82	0.82	0.82	0.82
Adj. Flow (vph)	59	71	2356	82	709	1311	461	549	289	805	1479	879
RTOR Reduction (vph)	0	0	0	31	0	0	232	0	26	145	0	4
Lane Group Flow (vph)	0	130	2356	52	709	1311	229	549	545	378	1479	1013
Turn Type	Prot	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA
Protected Phases	5	5	2	3	1	6	7	3	8		7	4
Permitted Phases				2			6			8		
Actuated Green, G (s)		13.3	40.6	60.2	16.6	45.0	68.6	19.6	36.5	36.5	23.6	41.1
Effective Green, g (s)		13.3	40.6	60.2	16.6	45.0	68.6	19.6	36.5	36.5	23.6	41.1
Actuated g/C Ratio		0.10	0.29	0.44	0.12	0.33	0.50	0.14	0.26	0.26	0.17	0.30
Clearance Time (s)		4.4	6.4	4.4	4.4	5.3	4.4	4.4	5.5	5.5	4.4	4.9
Vehicle Extension (s)		2.0	4.4	2.0	2.0	4.7	2.0	2.0	3.3	3.3	2.0	2.0
Lane Grp Cap (vph)		170	1496	741	412	1658	1474	487	433	397	587	543
v/s Ratio Prot		0.07	c0.46	0.01	c0.21	0.26	0.03	0.16	0.33		c0.43	c0.56
v/s Ratio Perm				0.02			0.06			0.25		
v/c Ratio		0.76	1.57	0.07	1.72	0.79	0.16	1.13	1.26	0.95	2.52	1.87
Uniform Delay, d1		60.8	48.7	22.6	60.7	42.2	18.9	59.2	50.8	49.9	57.2	48.5
Progression Factor		1.00	1.00	1.00	0.96	0.77	0.49	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2		16.7	261.9	0.0	333.2	3.4	0.0	80.6	134.2	33.0	688.9	396.3
Delay (s)		77.5	310.6	22.6	391.4	36.1	9.3	139.8	185.0	82.9	746.1	444.8
Level of Service		E	F	C	F	D	A	F	F	F	F	F
Approach Delay (s)			289.5			132.7			137.4			623.3
Approach LOS			F			F			F			F

Intersection Summary			
HCM 2000 Control Delay	310.6	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.92		
Actuated Cycle Length (s)	138.0	Sum of lost time (s)	20.7
Intersection Capacity Utilization	131.4%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	113
Future Volume (vph)	113
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.82
Adj. Flow (vph)	138
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

Intersection Summary

Lane Group	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Traffic Volume (vph)	382	1458	9	2416	379	718	550
Future Volume (vph)	382	1458	9	2416	379	718	550
Turn Type	Prot	NA	Prot	NA	Perm	Prot	Perm
Protected Phases	5	2	1	6		7	
Permitted Phases					6		7
Detector Phase	5	2	1	6	6	7	7
Switch Phase							
Minimum Initial (s)	4.0	10.0	4.0	10.0	10.0	10.0	10.0
Minimum Split (s)	8.4	16.3	8.4	29.4	29.4	38.4	38.4
Total Split (s)	34.4	66.3	24.4	65.4	65.4	44.4	44.4
Total Split (%)	23.9%	46.0%	16.9%	45.4%	45.4%	30.8%	30.8%
Yellow Time (s)	3.4	5.3	3.4	4.4	4.4	3.4	3.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	6.3	4.4	5.4	5.4	4.4	4.4
Lead/Lag	Lead	Lag	Lead	Lag	Lag		
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		
Recall Mode	None	Min	None	Min	Min	None	None

Intersection Summary

Cycle Length: 144.2
Actuated Cycle Length: 138.5
Natural Cycle: 120
Control Type: Actuated-Uncoordinated

Splits and Phases: 34: Miramar Road & Eastgate Mall

Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Traffic Volume (vph)	382	1458	9	2416	379	718	550
Future Volume (vph)	382	1458	9	2416	379	718	550
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	6.3	4.4	5.4	5.4	4.4	4.4
Lane Util. Factor	0.97	0.91	1.00	0.86	1.00	0.97	1.00
Frt	1.00	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)	3433	5085	1770	6408	1583	3433	1583
Flt Permitted	0.95	1.00	0.95	1.00	1.00	0.95	1.00
Satd. Flow (perm)	3433	5085	1770	6408	1583	3433	1583
Peak-hour factor, PHF	0.80	0.80	0.92	0.86	0.86	0.80	0.80
Adj. Flow (vph)	478	1822	10	2809	441	898	688
RTOR Reduction (vph)	0	0	0	0	243	0	237
Lane Group Flow (vph)	478	1823	10	2809	198	898	451
Turn Type	Prot	NA	Prot	NA	Perm	Prot	Perm
Protected Phases	5	2	1	6		7	
Permitted Phases					6		7
Actuated Green, G (s)	24.2	85.4	1.5	63.6	63.6	40.0	40.0
Effective Green, g (s)	24.2	85.4	1.5	63.6	63.6	40.0	40.0
Actuated g/C Ratio	0.17	0.60	0.01	0.45	0.45	0.28	0.28
Clearance Time (s)	4.4	6.3	4.4	5.4	5.4	4.4	4.4
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	585	3058	18	2870	709	967	445
v/s Ratio Prot	c0.14	0.36	0.01	c0.44		0.26	
v/s Ratio Perm					0.12		c0.28
v/c Ratio	0.82	0.60	0.56	0.98	0.28	0.93	1.01
Uniform Delay, d1	56.8	17.6	69.9	38.5	24.7	49.6	51.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	8.7	0.3	32.3	12.1	0.2	14.5	46.1
Delay (s)	65.4	17.9	102.2	50.7	24.9	64.2	97.1
Level of Service	E	B	F	D	C	E	F
Approach Delay (s)		27.8		47.3		78.4	
Approach LOS		C		D		E	

Intersection Summary

HCM 2000 Control Delay	47.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.97		
Actuated Cycle Length (s)	142.0	Sum of lost time (s)	15.1
Intersection Capacity Utilization	78.2%	ICU Level of Service	D
Analysis Period (min)	15		

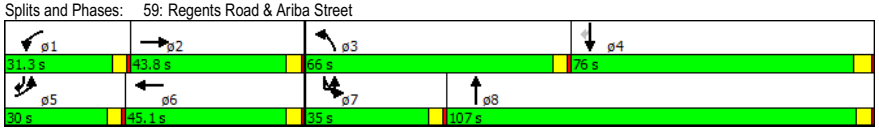
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	36	42	115	52	691	794	58	831	392
Future Volume (vph)	36	42	115	52	691	794	58	831	392
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA	pm+ov
Protected Phases	5	2	1	6	3	8	7	4	5
Permitted Phases									4
Detector Phase	5	2	1	6	3	8	7	4	5
Switch Phase									
Minimum Initial (s)	4.0	7.0	4.0	7.0	4.0	7.0	4.0	7.0	4.0
Minimum Split (s)	8.4	32.9	8.4	36.9	8.4	28.9	8.4	37.6	8.4
Total Split (s)	30.0	43.8	31.3	45.1	66.0	107.0	35.0	76.0	30.0
Total Split (%)	13.8%	20.2%	14.4%	20.8%	30.4%	49.3%	16.1%	35.0%	13.8%
Yellow Time (s)	3.4	3.9	3.4	3.9	3.4	3.9	3.4	4.6	3.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	4.9	4.4	4.9	4.4	4.9	4.4	5.6	4.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 217.1
Actuated Cycle Length: 155.8
Natural Cycle: 115
Control Type: Actuated-Uncoordinated

Splits and Phases: 59: Regents Road & Ariba Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	36	42	456	115	52	9	691	794	253	86	58	831
Future Volume (vph)	36	42	456	115	52	9	691	794	253	86	58	831
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	4.9		4.4	4.9			4.4	5.6
Lane Util. Factor	1.00	0.95		1.00	0.95		0.97	0.95			1.00	0.95
Frt	1.00	0.86		1.00	0.98		1.00	0.96			1.00	1.00
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			0.95	1.00
Satd. Flow (prot)	1770	3053		1770	3459		3433	3411			1770	3539
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00			0.95	1.00
Satd. Flow (perm)	1770	3053		1770	3459		3433	3411			1770	3539
Peak-hour factor, PHF	0.90	0.90	0.90	0.84	0.84	0.84	0.91	0.91	0.91	0.92	0.91	0.91
Adj. Flow (vph)	40	47	507	137	62	11	759	873	278	93	64	913
RTOR Reduction (vph)	0	392	0	0	6	0	0	14	0	0	0	0
Lane Group Flow (vph)	40	162	0	137	67	0	759	1137	0	0	157	913
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	Prot	NA
Protected Phases	5	2		1	6		3	8		7	7	4
Permitted Phases												
Actuated Green, G (s)	8.5	23.1		17.8	32.4		42.0	75.5			19.9	52.7
Effective Green, g (s)	8.5	23.1		17.8	32.4		42.0	75.5			19.9	52.7
Actuated g/C Ratio	0.05	0.15		0.11	0.21		0.27	0.49			0.13	0.34
Clearance Time (s)	4.4	4.9		4.4	4.9		4.4	4.9			4.4	5.6
Vehicle Extension (s)	2.0	6.3		2.0	5.9		2.0	4.8			2.0	4.4
Lane Grp Cap (vph)	97	455		203	723		930	1662			227	1204
v/s Ratio Prot	0.02	c0.05		c0.08	0.02		c0.22	0.33			0.09	c0.26
v/s Ratio Perm												
v/c Ratio	0.41	0.36		0.67	0.09		0.82	0.68			0.69	0.76
Uniform Delay, d1	70.8	59.2		65.8	49.4		52.8	30.5			64.6	45.4
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2	1.0	1.5		6.8	0.2		5.3	1.5			7.1	3.1
Delay (s)	71.8	60.7		72.6	49.5		58.1	32.0			71.7	48.5
Level of Service	E	E		E	D		E	C			E	D
Approach Delay (s)		61.4			64.6			42.4				46.7
Approach LOS		E			E			D				D

Intersection Summary

HCM 2000 Control Delay	47.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	154.9	Sum of lost time (s)	19.3
Intersection Capacity Utilization	81.1%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	392
Future Volume (vph)	392
Ideal Flow (vphpl)	1900
Total Lost time (s)	4.4
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1583
Flt Permitted	1.00
Satd. Flow (perm)	1583
Peak-hour factor, PHF	0.91
Adj. Flow (vph)	431
RTOR Reduction (vph)	184
Lane Group Flow (vph)	247
Turn Type	pm+ov
Protected Phases	5
Permitted Phases	4
Actuated Green, G (s)	61.2
Effective Green, g (s)	61.2
Actuated g/C Ratio	0.40
Clearance Time (s)	4.4
Vehicle Extension (s)	2.0
Lane Grp Cap (vph)	625
v/s Ratio Prot	0.02
v/s Ratio Perm	0.13
v/c Ratio	0.39
Uniform Delay, d1	33.6
Progression Factor	1.00
Incremental Delay, d2	0.1
Delay (s)	33.7
Level of Service	C
Approach Delay (s)	
Approach LOS	

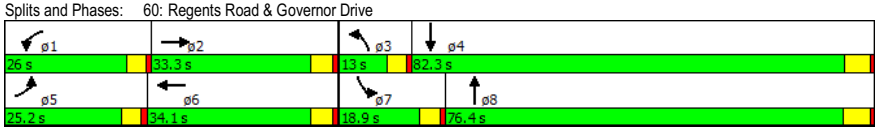
Intersection Summary

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	184	53	314	200	41	1386	271	1075
Future Volume (vph)	184	53	314	200	41	1386	271	1075
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	5	2	1	6	3	8	7	4
Permitted Phases								
Detector Phase	5	2	1	6	3	8	7	4
Switch Phase								
Minimum Initial (s)	4.0	4.0	4.0	7.0	5.0	7.0	5.0	4.0
Minimum Split (s)	8.4	32.9	8.4	33.9	9.5	34.8	9.5	35.5
Total Split (s)	25.2	33.3	26.0	34.1	13.0	76.4	18.9	82.3
Total Split (%)	16.3%	21.5%	16.8%	22.1%	8.4%	49.4%	12.2%	53.2%
Yellow Time (s)	3.4	3.9	3.4	3.9	3.5	4.8	3.5	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	4.9	4.4	4.9	4.5	5.8	4.5	5.5
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Min	None	Min	None	None	None	None

Intersection Summary

Cycle Length: 154.6
Actuated Cycle Length: 146.5
Natural Cycle: 150
Control Type: Actuated-Uncoordinated

Splits and Phases: 60: Regents Road & Governor Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	184	53	21	314	200	168	41	1386	137	271	1075	56
Future Volume (vph)	184	53	21	314	200	168	41	1386	137	271	1075	56
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	4.9		4.5	5.8		4.5	5.5	
Lane Util. Factor	1.00	0.95		0.97	0.95		1.00	0.95		0.97	0.95	
Frt	1.00	0.96		1.00	0.93		1.00	0.99		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3389		3433	3296		1770	3492		3433	3513	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	3389		3433	3296		1770	3492		3433	3513	
Peak-hour factor, PHF	0.80	0.80	0.80	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	230	66	26	349	222	187	46	1540	152	301	1194	62
RTOR Reduction (vph)	0	22	0	0	105	0	0	5	0	0	2	0
Lane Group Flow (vph)	230	70	0	349	304	0	46	1687	0	301	1254	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases												
Actuated Green, G (s)	20.7	23.3		18.5	21.1		6.6	71.7		14.4	79.8	
Effective Green, g (s)	20.7	23.3		18.5	21.1		6.6	71.7		14.4	79.8	
Actuated g/C Ratio	0.14	0.16		0.13	0.14		0.04	0.49		0.10	0.54	
Clearance Time (s)	4.4	4.9		4.4	4.9		4.5	5.8		4.5	5.5	
Vehicle Extension (s)	2.0	4.5		2.0	5.0		3.0	4.6		3.0	2.0	
Lane Grp Cap (vph)	248	535		430	471		79	1697		335	1900	
v/s Ratio Prot	c0.13	0.02		0.10	c0.09		0.03	c0.48		c0.09	0.36	
v/s Ratio Perm												
v/c Ratio	0.93	0.13		0.81	0.65		0.58	0.99		0.90	0.66	
Uniform Delay, d1	62.7	53.4		62.8	59.7		69.1	37.7		65.8	24.2	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	37.1	0.2		10.6	4.1		10.5	20.4		25.2	0.6	
Delay (s)	99.8	53.6		73.4	63.8		79.6	58.1		91.1	24.8	
Level of Service	F	D		E	E		E	E		F	C	
Approach Delay (s)		86.6			68.2			58.7			37.6	
Approach LOS		F			E			E			D	

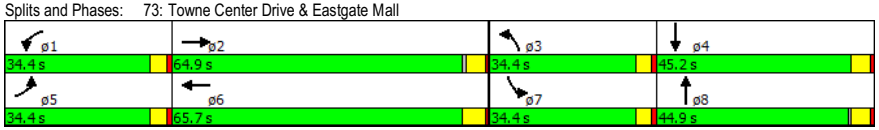
Intersection Summary			
HCM 2000 Control Delay	54.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.91		
Actuated Cycle Length (s)	147.5	Sum of lost time (s)	19.6
Intersection Capacity Utilization	87.9%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	19	454	291	249	148	78	206	648
Future Volume (vph)	19	454	291	249	148	78	206	648
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	5	2	1	6	3	8	7	4
Permitted Phases								
Detector Phase	5	2	1	6	3	8	7	4
Switch Phase								
Minimum Initial (s)	4.0	7.0	4.0	7.0	4.0	7.0	4.0	7.0
Minimum Split (s)	8.4	11.9	8.4	12.7	8.4	12.2	8.4	12.7
Total Split (s)	34.4	64.9	34.4	65.7	34.4	44.9	34.4	45.2
Total Split (%)	19.1%	36.1%	19.1%	36.6%	19.1%	25.0%	19.1%	25.2%
Yellow Time (s)	3.4	3.9	3.4	4.7	3.4	4.2	3.4	4.2
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	4.9	4.4	5.7	4.4	5.2	4.4	5.2
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 179.7
Actuated Cycle Length: 137.1
Natural Cycle: 75
Control Type: Actuated-Uncoordinated

Splits and Phases: 73: Towne Center Drive & Eastgate Mall



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	19	454	378	291	249	6	148	78	146	206	648	91
Future Volume (vph)	19	454	378	291	249	6	148	78	146	206	648	91
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	5.7		4.4	5.2		4.4	5.2	
Lane Util. Factor	0.97	0.95		0.97	0.95		0.97	0.95		0.97	0.95	
Frt	1.00	0.93		1.00	1.00		1.00	0.90		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	3433	3298		3433	3526		3433	3194		3433	3474	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	3433	3298		3433	3526		3433	3194		3433	3474	
Peak-hour factor, PHF	0.87	0.87	0.87	0.91	0.91	0.91	0.88	0.88	0.88	0.80	0.80	0.80
Adj. Flow (vph)	22	522	434	320	274	7	168	89	166	258	810	114
RTOR Reduction (vph)	0	81	0	0	1	0	0	122	0	0	6	0
Lane Group Flow (vph)	22	875	0	320	280	0	168	133	0	258	918	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases												
Actuated Green, G (s)	3.3	50.0		17.8	63.7		11.5	36.9		15.2	40.6	
Effective Green, g (s)	3.3	50.0		17.8	63.7		11.5	36.9		15.2	40.6	
Actuated g/C Ratio	0.02	0.36		0.13	0.46		0.08	0.27		0.11	0.29	
Clearance Time (s)	4.4	4.9		4.4	5.7		4.4	5.2		4.4	5.2	
Vehicle Extension (s)	2.0	5.1		2.0	4.8		2.0	5.1		2.0	4.8	
Lane Grp Cap (vph)	81	1188		440	1618		284	849		375	1016	
v/s Ratio Prot	0.01	c0.27		c0.09	0.08		0.05	0.04		c0.08	c0.26	
v/s Ratio Perm												
v/c Ratio	0.27	0.74		0.73	0.17		0.59	0.16		0.69	0.90	
Uniform Delay, d1	66.6	38.7		58.2	22.1		61.4	39.0		59.5	47.2	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.7	3.0		5.0	0.1		2.2	0.2		4.2	11.7	
Delay (s)	67.2	41.6		63.2	22.2		63.6	39.2		63.7	58.9	
Level of Service	E	D		E	C		E	D		E	E	
Approach Delay (s)		42.2			44.0			48.9			60.0	
Approach LOS		D			D			D			E	

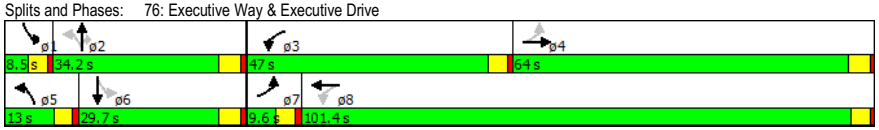
Intersection Summary			
HCM 2000 Control Delay	50.0	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	138.8	Sum of lost time (s)	19.7
Intersection Capacity Utilization	73.8%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	22	293	430	363	99	40	68	18	104
Future Volume (vph)	22	293	430	363	99	40	68	18	104
Turn Type	pm+pt	NA	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA
Protected Phases	7	4	3	8	5	2		1	6
Permitted Phases	4		8		2		2	6	
Detector Phase	7	4	3	8	5	2	2	1	6
Switch Phase									
Minimum Initial (s)	5.0	4.0	5.0	4.0	4.0	7.0	7.0	4.0	7.0
Minimum Split (s)	9.5	8.9	9.5	8.4	8.4	11.9	11.9	8.4	11.9
Total Split (s)	9.6	64.0	47.0	101.4	13.0	34.2	34.2	8.5	29.7
Total Split (%)	6.2%	41.6%	30.6%	66.0%	8.5%	22.3%	22.3%	5.5%	19.3%
Yellow Time (s)	3.5	3.9	3.5	3.4	3.4	3.9	3.9	3.4	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.9	4.5	4.4	4.4	4.9	4.9	4.4	4.9
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Min	Min	None	Min

Intersection Summary
Cycle Length: 153.7
Actuated Cycle Length: 143.4
Natural Cycle: 90
Control Type: Actuated-Uncoordinated

Splits and Phases: 76: Executive Way & Executive Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	22	293	772	430	363	12	99	40	68	18	104	68
Future Volume (vph)	22	293	772	430	363	12	99	40	68	18	104	68
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.9		4.5	4.4		4.4	4.9	4.9	4.4	4.9	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.89		1.00	1.00		1.00	1.00	0.85	1.00	0.94	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3154		1770	3522		1770	1863	1583	1770	1752	
Flt Permitted	0.50	1.00		0.06	1.00		0.25	1.00	1.00	0.72	1.00	
Satd. Flow (perm)	933	3154		118	3522		468	1863	1583	1349	1752	
Peak-hour factor, PHF	0.80	0.80	0.80	0.87	0.87	0.87	0.80	0.80	0.80	0.80	0.80	0.80
Adj. Flow (vph)	28	366	965	494	417	14	124	50	85	22	130	85
RTOR Reduction (vph)	0	171	0	0	1	0	0	0	68	0	15	0
Lane Group Flow (vph)	28	1160	0	494	430	0	124	50	17	23	200	0
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		
Actuated Green, G (s)	61.0	58.1		102.0	94.6		36.0	29.3	29.3	25.3	23.0	
Effective Green, g (s)	61.0	58.1		102.0	94.6		36.0	29.3	29.3	25.3	23.0	
Actuated g/C Ratio	0.41	0.39		0.69	0.64		0.24	0.20	0.20	0.17	0.16	
Clearance Time (s)	4.5	4.9		4.5	4.4		4.4	4.9	4.9	4.4	4.9	
Vehicle Extension (s)	3.0	2.0		3.0	2.3		2.0	2.9	2.9	2.0	2.6	
Lane Grp Cap (vph)	402	1244		517	2261		190	370	314	238	273	
v/s Ratio Prot	0.00	0.37		c0.25	0.12		c0.04	0.03		0.00	c0.11	
v/s Ratio Perm	0.03			c0.41			0.12		0.01	0.02		
v/c Ratio	0.07	1.22dr		0.96	0.19		0.65	0.14	0.05	0.10	0.73	
Uniform Delay, d1	25.7	42.7		46.4	10.7		46.2	48.6	47.8	51.2	59.2	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.1	12.4		28.4	0.0		6.0	0.2	0.1	0.1	9.3	
Delay (s)	25.8	55.1		74.8	10.8		52.2	48.7	47.8	51.3	68.5	
Level of Service	C	E		E	B		D	D	D	D	E	
Approach Delay (s)		54.5			45.0			50.1			66.8	
Approach LOS		D			D			D			E	

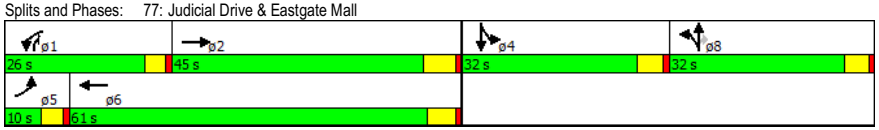
Intersection Summary			
HCM 2000 Control Delay	52.0	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.92		
Actuated Cycle Length (s)	147.3	Sum of lost time (s)	18.7
Intersection Capacity Utilization	87.5%	ICU Level of Service	E
Analysis Period (min)	15		

dr Defacto Right Lane. Recode with 1 though lane as a right lane.
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	14	693	269	245	174	11	545	117	166
Future Volume (vph)	14	693	269	245	174	11	545	117	166
Turn Type	Prot	NA	Prot	NA	Split	NA	pm+ov	Split	NA
Protected Phases	5	2	1	6	8	8	1	4	4
Permitted Phases							8		
Detector Phase	5	2	1	6	8	8	1	4	4
Switch Phase									
Minimum Initial (s)	4.0	7.0	4.0	7.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.4	13.1	8.4	12.6	8.9	8.9	8.4	8.9	8.9
Total Split (s)	10.0	45.0	26.0	61.0	32.0	32.0	26.0	32.0	32.0
Total Split (%)	7.4%	33.3%	19.3%	45.2%	23.7%	23.7%	19.3%	23.7%	23.7%
Yellow Time (s)	3.4	5.1	3.4	4.6	3.9	3.9	3.4	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	6.1	4.4	5.6	4.9	4.9	4.4	4.9	4.9
Lead/Lag	Lead	Lag	Lead	Lag			Lead		
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes		
Recall Mode	None	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 135
Actuated Cycle Length: 121
Natural Cycle: 90
Control Type: Actuated-Uncoordinated

Splits and Phases: 77: Judicial Drive & Eastgate Mall



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	14	693	186	269	245	12	174	11	545	117	166	94
Future Volume (vph)	14	693	186	269	245	12	174	11	545	117	166	94
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	6.1		4.4	5.6		4.9	4.9	4.4	4.9	4.9	
Lane Util. Factor	1.00	0.95		1.00	0.95		0.95	0.91	0.95	1.00	1.00	
Frt	1.00	0.97		1.00	0.99		1.00	0.86	0.85	1.00	0.95	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3427		1770	3515		1681	1462	1504	1770	1762	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	3427		1770	3515		1681	1462	1504	1770	1762	
Peak-hour factor, PHF	0.89	0.89	0.89	0.97	0.97	0.97	0.85	0.85	0.85	0.87	0.87	0.87
Adj. Flow (vph)	16	779	209	277	253	12	205	13	641	134	191	108
RTOR Reduction (vph)	0	17	0	0	2	0	0	258	140	0	15	0
Lane Group Flow (vph)	16	971	0	277	263	0	184	84	193	134	284	0
Turn Type	Prot	NA		Prot	NA		Split	NA	pm+ov	Split	NA	
Protected Phases	5	2		1	6		8	8	1	4	4	
Permitted Phases									8			
Actuated Green, G (s)	2.1	41.0		21.7	61.1		17.9	17.9	39.6	22.8	22.8	
Effective Green, g (s)	2.1	41.0		21.7	61.1		17.9	17.9	39.6	22.8	22.8	
Actuated g/C Ratio	0.02	0.33		0.18	0.49		0.14	0.14	0.32	0.18	0.18	
Clearance Time (s)	4.4	6.1		4.4	5.6		4.9	4.9	4.4	4.9	4.9	
Vehicle Extension (s)	2.0	2.7		2.0	3.0		2.0	2.0	2.0	2.0	2.0	
Lane Grp Cap (vph)	30	1135		310	1736		243	211	481	326	324	
v/s Ratio Prot	0.01	c0.28		c0.16	0.07		c0.11	0.06	0.07	0.08	c0.16	
v/s Ratio Perm									0.06			
v/c Ratio	0.53	0.86		0.89	0.15		0.76	0.40	0.40	0.41	0.88	
Uniform Delay, d1	60.3	38.6		49.9	17.1		50.8	48.0	32.8	44.5	49.1	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	8.8	6.5		25.5	0.0		11.3	0.4	0.2	0.3	21.5	
Delay (s)	69.1	45.0		75.4	17.2		62.1	48.4	33.0	44.8	70.6	
Level of Service	E	D		E	B		E	D	C	D	E	
Approach Delay (s)		45.4			46.9			45.4			62.6	
Approach LOS		D			D			D			E	

Intersection Summary				
HCM 2000 Control Delay	48.3	HCM 2000 Level of Service	D	
HCM 2000 Volume to Capacity ratio	0.85			
Actuated Cycle Length (s)	123.7	Sum of lost time (s)	20.3	
Intersection Capacity Utilization	82.1%	ICU Level of Service	E	
Analysis Period (min)	15			

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Right Turn Channelized												
Traffic Volume (veh/h)	320	0	0	0	23	5	438	6	3	0	0	0
Future Volume (veh/h)	320	0	0	0	23	5	438	6	3	0	0	0
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.94	0.94	0.94	0.25	0.25	0.25
Hourly flow rate (vph)	400	0	0	0	29	6	466	6	3	0	0	0
Approach Volume (veh/h)		400			35			475			0	
Crossing Volume (veh/h)		0			872			400			495	
High Capacity (veh/h)		1385			691			1011			937	
High v/c (veh/h)		0.29			0.05			0.47			0.00	
Low Capacity (veh/h)		1161			542			823			758	
Low v/c (veh/h)		0.34			0.06			0.58			0.00	

Intersection Summary				
Maximum v/c High	0.47			
Maximum v/c Low	0.58			
Intersection Capacity Utilization	55.8%	ICU Level of Service	B	

AM Peak-Hour Arterial Segment Analysis Summary Genesee Avenue

ROADWAY SEGMENT	DIRECTION	URBAN STREET CLASS	EXISTING				HORIZON YEAR											
							Alt A Regents Bridge 6-lane Genesee			Alt B Regents Bridge 4-lane Genesee			Alt C No Bridge 6-lane Genesee			Alt D No Bridge 4-lane Genesee		
			TRAVEL TIME (S)		SIMULATION		SIMULATION			SIMULATION			SIMULATION			SIMULATION		
			FIELD	SIMULATION	SPEED (a)	LOS (b)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)
Genesee Ave																		
SR-52 EB Ramps to Governor Dr	NB	I	217	140	19.9	**E**	204.3	**F**		212.1	F		249.9	**F**		330.2	**F**	
	SB	I	68	67	41.4	B	66.9	B		66.9	B		67.0	B		67.6	B	
Governor Dr to Centurion Sq	NB	I	65	91	22.1	D	71.4	C		92.6	D		136.6	**F**		294.8	**F**	
	SB	I	99	82	24.6	D	80.5	D		80.5	D		89.4	D		88.0	D	
Centurion Sq to Decoro St	NB	I	58	42	25.3	D	41.7	D		61.4	E		51.1	**E**		168.1	**F**	
	SB	I	30	39	27.3	C	35.4	C		36.2	C		35.7	C		36.7	C	
Decoro St to Nobel Dr	NB	I	43	40	17.2	**E**	41.2	**E**		114.2	F		46.7	**F**		179.7	**F**	
	SB	I	59	37	18.7	**E**	39.7	**E**		42.5	E		42.6	**E**		46.6	**F**	
Nobel Dr to Esplanade Ct	NB	I	21	35	21.1	D	47.0	**F**		53.6	F		47.1	**F**		80.7	**F**	
	SB	I	40	41	18.0	**E**	58.6	**F**		57.5	F		60.0	**F**		62.1	**F**	
Esplanade Ct to La Jolla Village Dr	NB	I	29	45	15.0	**F**	216.2	**F**		214.0	F		273.0	**F**		273.4	**F**	
	SB	I	47	25	26.7	D	22.2	C		22.3	C		21.6	C		22.4	C	
La Jolla Village Dr to Executive Sq	NB	I	15	17	22.2	D	18.1	**E**		18.2	E		20.4	**F**		20.4	**F**	
	SB	I	17	45	8.2	**F**	70.5	**F**		70.5	F		70.3	**F**		70.4	**F**	
Executive Square to Executive Dr	NB	I	8	19	14.4	**F**	30.4	**F**		30.0	F		30.7	**F**		30.4	**F**	
	SB	I	6	11	25.2	D	13.1	D		13.3	D		13.2	D		13.3	D	
Executive Dr to Eastgate Mall	NB	I	57	42	14.0	**F**	55.8	**F**		53.4	F		56.1	**F**		57.5	**F**	
	SB	I	13	23	25.9	D	22.0	D		22.0	D		22.3	D		22.3	D	
Eastgate Mall to Regents Rd	NB	I	38	49	25.6	D	50.4	D		50.7	D		47.6	D		47.8	D	
	SB	I	30	57	22.1	D	81.9	**F**		80.9	F		84.8	**F**		85.2	**F**	
Regents Rd to Campus Point Dr	NB	I	13	32	17.6	**E**	47.4	**F**		47.3	F		48.3	**F**		48.1	**F**	
	SB	I	14	47	11.8	**F**	46.8	**F**		47.5	F		43.2	**F**		43.1	**F**	
Campus Point Dr to Scripps Hospital	NB	I	16	24	32.3	C	23.3	C		23.3	C		23.2	C		23.2	C	
	SB	I	56	32	24.0	D	57.0	**F**		56.7	F		55.3	**F**		55.6	**F**	
Scripps Hospital to I-5 NB Ramps	NB	I	140	61	19.3	**E**	69.2	**E**		69.4	E		68.7	**E**		68.8	**E**	
	SB	I	32	51	23.3	D	62.9	**E**		62.3	E		62.8	**E**		62.7	**E**	
I-5 NB Ramps to I-5 SB Ramps	NB	I	26	110	3.5	**F**	52.1	**F**		52.0	F		52.7	**F**		52.8	**F**	
	SB	I	39	28	14.0	**F**	67.6	**F**		71.6	F		68.5	**F**		67.3	**F**	
I-5 SB Ramps to Science Center Dr	NB	I	24	42	27.0	D	48.0	D		48.0	D		48.0	D		48.0	D	
	SB	I	38	59	19.3	**E**	54.8	**E**		55.0	E		55.0	**E**		55.3	**E**	
Science Center Dr to John Hopkins Dr	NB	I	38	46	28.5	C	51.4	D		51.4	D		51.3	D		51.2	D	
	SB	I	30	34	38.1	B	34.5	B		34.4	B		34.4	B		34.3	B	
John Hopkins Drive to N. Torrey Pines Rd	NB	I	13	11	29.1	C	13.5	D		13.5	D		13.9	D		14.0	D	
	SB	I	8	14	23.6	D	13.1	D		13.0	D		13.2	D		12.9	D	
Total	*NB*	*I*	*821*	*845*	*19.0*	**E**	*1081.4*	**F**	**No**	*1205.1*	*F*	**No**	*1265.3*	**F**	**No**	*1789.1*	**F**	**No**
	SB	*I*	*626*	*677*	*23.3*	*D*	*827.5*	**E**	**Yes**	*833.1*	*E*	**Yes**	*839.3*	**E**	**Yes**	*845.8*	**E**	**Yes**

Notes: (a) Travel time in miles per hour (mph).

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(c) A significant impact resulted in a change from LOS D or better to LOS E or LOS F, or a decrease of speeds of more than 1.0 mph at LOS E and LOS F.

MID Peak-Hour Arterial Segment Analysis Summary Genesee Avenue

ROADWAY SEGMENT	DIRECTION	URBAN STREET CLASS	EXISTING				HORIZON YEAR											
							Alt A Regents Bridge 6-lane Genesee			Alt B Regents Bridge 4-lane Genesee			Alt C No Bridge 6-lane Genesee			Alt D No Bridge 4-lane Genesee		
			TRAVEL TIME (S)		SIMULATION		SIMULATION			SIMULATION			SIMULATION			SIMULATION		
			FIELD	SIMULATION	SPEED (a)	LOS (b)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)
Genesee Ave																		
SR-52 EB Ramps to Governor Dr	NB	I	85	93	30.0	C	92.2	C		93.6	C		102.5	C		103.0	C	
	SB	I	62	68	41.4	B	67.1	B		67.1	B		67.1	B		67.7	B	
Governor Dr to Centurion Sq	NB	I	52	55	36.8	B	60.0	C		51.9	B		51.9	A		53.3	A	
	SB	I	76	74	27.0	D	70.3	C		71.4	C		79.9	D		81.3	D	
Centurion Sq to Decoro St	NB	I	25	46	23.1	D	44.8	D		51.1	E		49.4	D		53.4	D	
	SB	I	40	33	32.3	C	32.1	C		30.3	B		31.0	B		33.5	C	
Decoro St to Nobel Dr	NB	I	57	29	23.5	D	30.8	D		34.9	E		31.1	C		34.0	D	
	SB	I	18	26	26.8	D	34.9	**E**		23.9	C		23.5	C		27.0	D	
Nobel Dr to Esplanade Ct	NB	I	26	42	17.4	**E**	84.6	**F**		83.5	F		69.7	**F**		120.5	**F**	
	SB	I	32	46	15.9	**F**	45.0	**E**		44.5	E		53.2	**F**		49.0	**F**	
Esplanade Ct to La Jolla Village Dr	NB	I	75	86	7.8	**F**	81.8	**F**		81.5	F		88.4	**F**		89.0	**F**	
	SB	I	48	37	18.0	**E**	43.9	**F**		43.5	F		44.2	**F**		46.3	**F**	
La Jolla Village Dr to Executive Sq	NB	I	12	20	18.9	**E**	29.4	**F**		29.3	F		32.1	**F**		30.6	**F**	
	SB	I	59	52	7.1	**F**	49.2	**F**		49.6	F		51.9	**F**		51.6	**F**	
Executive Square to Executive Dr	NB	I	43	15	18.0	**E**	16.8	**E**		16.8	E		17.4	**E**		17.3	**E**	
	SB	I	9	17	16.4	**E**	29.3	**F**		29.2	F		28.6	**F**		30.5	**F**	
Executive Dr to Eastgate Mall	NB	I	17	25	23.8	D	19.9	C		19.9	C		20.6	B		20.6	B	
	SB	I	16	20	29.3	C	21.2	C		21.3	C		21.5	C		21.5	C	
Eastgate Mall to Regents Rd	NB	I	34	48	26.0	D	48.3	D		48.3	D		45.4	C		45.8	C	
	SB	I	29	44	28.8	C	57.5	D		57.4	D		58.4	D		59.1	D	
Regents Rd to Campus Point Dr	NB	I	13	26	21.5	D	34.4	**E**		34.4	E		34.3	**E**		34.1	**E**	
	SB	I	13	21	26.8	D	22.4	D		22.4	D		21.7	D		21.3	D	
Campus Point Dr to Scripps Hospital	NB	I	16	34	22.9	D	46.9	**E**		46.8	E		47.6	**E**		47.6	**E**	
	SB	I	17	38	20.2	**E**	41.9	**E**		41.9	E		41.3	**E**		41.5	**E**	
Scripps Hospital to I-5 NB Ramps	NB	I	49	61	19.2	**E**	62.9	**E**		62.6	E		63.2	D		63.0	D	
	SB	I	40	46	25.6	D	64.6	**E**		64.7	E		64.8	**E**		65.0	**E**	
I-5 NB Ramps to I-5 SB Ramps	NB	I	26	26	15.0	**F**	12.8	C		13.2	C		12.9	B		13.2	B	
	SB	I	13	13	30.5	C	21.6	**E**		21.8	E		21.9	**E**		22.1	**E**	
I-5 SB Ramps to Science Center Dr	NB	I	29	37	30.7	C	37.2	C		37.3	C		37.2	B		37.1	B	
	SB	I	67	56	20.0	**E**	57.1	**E**		57.6	E		57.0	**E**		57.9	**E**	
Science Center Dr to John Hopkins Dr	NB	I	49	53	24.7	D	65.0	**E**		65.1	E		81.7	**E**		80.2	**E**	
	SB	I	28	39	32.9	C	39.4	C		39.4	C		40.3	C		40.2	C	
John Hopkins Drive to N. Torrey Pines Rd	NB	I	9	10	32.4	C	11.6	C		11.7	C		11.7	C		12.8	C	
	SB	I	12	15	21.6	D	18.9	**E**		18.7	E		18.4	**E**		17.1	**E**	
Total	*NB*	*I*	*617*	*705*	*22.8*	*D*	*779.4*	**E**	**Yes**	*781.9*	*E*	**Yes**	*797.1*	**E**	**Yes**	*855.5*	**E**	**Yes**
	SB	*I*	*579*	*630*	*24.9*	*D*	*716.4*	*D*	**No**	*704.7*	*D*	**No**	*724.7*	*D*	**No**	*732.6*	*D*	**No**

Notes: (a) Travel time in miles per hour (mph).

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PM Peak-Hour Arterial Segment Analysis Summary Genesee Avenue

ROADWAY SEGMENT	DIRECTION	URBAN STREET CLASS	EXISTING				HORIZON YEAR											
							Alt A Regents Bridge 6-lane Genesee			Alt B Regents Bridge 4-lane Genesee			Alt C No Bridge 6-lane Genesee			Alt D No Bridge 4-lane Genesee		
			TRAVEL TIME (S)		SIMULATION		SIMULATION			SIMULATION			SIMULATION			SIMULATION		
			FIELD	SIMULATION	SPEED (a)	LOS (b)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)
Genesee Ave																		
SR-52 EB Ramps to Governor Dr	NB	I	110	144	19.3	**E**	109.5	D		135.0	E		113.7	D		119.2	D	
	SB	I	60	80	35.0	B	76.5	B		76.2	B		77.7	B		76.5	B	
Governor Dr to Centurion Sq	NB	I	44	51	39.5	B	48.0	B		50.9	B		51.2	B		54.7	B	
	SB	I	214	106	18.8	**E**	80.1	D		152.5	F		216.6	**F**		167.3	**F**	
Centurion Sq to Decoro St	NB	I	43	44	24.2	D	36.3	C		50.7	E		35.9	C		39.4	D	
	SB	I	88	46	23.3	D	37.7	C		49.8	D		55.9	**E**		161.3	**F**	
Decoro St to Nobel Dr	NB	I	20	46	14.8	**F**	33.4	**E**		35.6	E		28.1	D		32.1	D	
	SB	I	70	142	4.9	**F**	99.4	**F**		253.4	F		265.0	**F**		483.0	**F**	
Nobel Dr to Esplanade Ct	NB	I	17	61	12.1	**F**	102.2	**F**		102.9	F		98.3	**F**		149.1	**F**	
	SB	I	100	37	19.9	**E**	75.4	**F**		71.0	F		142.7	**F**		121.1	**F**	
Esplanade Ct to La Jolla Village Dr	NB	I	86	76	8.8	**F**	78.2	**F**		78.2	F		77.9	**F**		76.6	**F**	
	SB	I	35	37	18.1	**E**	38.6	**E**		38.5	E		40.2	**E**		42.5	**F**	
La Jolla Village Dr to Executive Sq	NB	I	29	19	20.0	**E**	18.9	**E**		19.0	E		18.3	**E**		18.3	**E**	
	SB	I	88	51	7.3	**F**	78.4	**F**		76.6	F		115.3	**F**		117.2	**F**	
Executive Square to Executive Dr	NB	I	37	20	13.8	**F**	16.7	**E**		16.6	E		16.8	**E**		16.6	**E**	
	SB	I	71	25	11.0	**F**	53.7	**F**		51.0	F		37.8	**F**		37.9	**F**	
Executive Dr to Eastgate Mall	NB	I	15	49	12.2	**F**	51.4	**F**		51.4	F		50.9	**F**		51.4	**F**	
	SB	I	126	35	16.7	**E**	49.0	**F**		48.8	F		51.5	**F**		51.9	**F**	
Eastgate Mall to Regents Rd	NB	I	37	53	23.8	D	49.4	D		49.2	D		49.5	D		49.0	D	
	SB	I	42	42	30.2	C	46.5	C		46.5	C		46.8	D		46.7	D	
Regents Rd to Campus Point Dr	NB	I	15	27	20.8	**E**	39.4	**F**		39.6	F		38.4	**F**		38.3	**F**	
	SB	I	16	24	23.0	D	42.2	**F**		42.2	F		42.2	**F**		42.2	**F**	
Campus Point Dr to Scripps Hospital	NB	I	21	27	28.5	C	27.8	C		27.9	C		27.9	C		28.0	C	
	SB	I	45	58	13.1	**F**	62.5	**F**		61.8	F		57.6	**F**		56.2	**F**	
Scripps Hospital to I-5 NB Ramps	NB	I	77	61	19.1	**E**	63.3	**E**		63.2	E		63.6	**E**		63.5	**E**	
	SB	I	33	49	23.9	D	59.5	**E**		59.3	E		60.1	**E**		60.6	**E**	
I-5 NB Ramps to I-5 SB Ramps	NB	I	12	14	28.5	C	15.8	D		15.9	D		16.0	D		16.9	D	
	SB	I	13	11	34.2	B	16.7	D		16.8	D		16.8	D		17.1	D	
I-5 SB Ramps to Science Center Dr	NB	I	33	41	27.7	C	43.4	D		43.4	D		43.3	D		43.3	D	
	SB	I	137	95	11.9	**F**	76.2	**F**		76.1	F		76.0	**F**		75.3	**F**	
Science Center Dr to John Hopkins Dr	NB	I	50	55	23.6	D	65.0	**E**		65.0	E		64.9	**E**		64.9	**E**	
	SB	I	70	37	35.1	B	42.0	C		41.9	C		41.6	C		41.0	C	
John Hopkins Drive to N. Torrey Pines Rd	NB	I	9	13	25.1	D	12.7	D		12.7	D		12.7	D		12.4	D	
	SB	I	8	28	11.6	**F**	29.9	**F**		29.8	F		29.2	**F**		29.9	**F**	
Total	*NB*	*I*	*655*	*800*	*20.0*	**E**	*811.4*	**E**	**No**	*857.2*	*E*	**No**	*807.4*	**E**	**No**	*873.7*	**E**	**No**
	SB	*I*	*1216*	*875*	*17.9*	**E**	*964.3*	**E**	**No**	*1192.2*	*F*	**No**	*1373.0*	**F**	**No**	*1627.7*	**F**	**No**

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AM Peak-Hour Arterial Segment Analysis Summary Genesee Avenue

ROADWAY SEGMENT	DIRECTION	URBAN STREET CLASS	EXISTING				HORIZON YEAR WITH RECOMMENDED MITIGATIONS											
							Alt A Regents Bridge 6-lane Genesee			Alt B Regents Bridge 4-lane Genesee			Alt C No Bridge 6-lane Genesee			Alt D No Bridge 4-lane Genesee		
			TRAVEL TIME (S)		SIMULATION		SIMULATION			SIMULATION			SIMULATION			SIMULATION		
			FIELD	SIMULATION	SPEED (a)	LOS (b)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)
Genesee Ave																		
SR-52 EB Ramps to Governor Dr	NB	I	217	140	19.9	**E**	34.3	B		34.7	B		34.2	B		34.6	B	
	SB	I	68	67	41.4	B	37.5	C		37.5	C		37.6	C		38.2	C	
Governor Dr to Centurion Sq	NB	I	65	91	22.1	D	40.0	B		87.1	E		121.0	**F**		119.7	**F**	
	SB	I	99	82	24.6	D	63.7	D		68.5	D		66.2	D		70.2	D	
Centurion Sq to Decoro St	NB	I	58	42	25.3	D	71.4	C		92.6	D		136.6	**F**		294.8	**F**	
	SB	I	30	39	27.3	C	44.6	A		76.6	D		113.7	**E**		112.9	**E**	
Decoro St to Nobel Dr	NB	I	43	40	17.2	**E**	40.3	D		41.5	D		48.8	D		118.8	**F**	
	SB	I	59	37	18.7	**E**	35.7	C		37.3	C		35.7	C		36.7	C	
Nobel Dr to Esplanade Ct	NB	I	21	35	21.1	D	41.5	**E**		43.3	F		49.4	**F**		182.2	**F**	
	SB	I	40	41	18.0	**E**	37.3	**E**		34.3	E		39.6	**E**		39.5	**E**	
Esplanade Ct to La Jolla Village Dr	NB	I	29	45	15.0	**F**	47.0	**F**		57.8	F		47.1	**F**		80.8	**F**	
	SB	I	47	25	26.7	D	58.6	**F**		57.2	F		60.0	**F**		62.1	**F**	
La Jolla Village Dr to Executive Sq	NB	I	15	17	22.2	D	216.2	**F**		213.9	F		273.0	**F**		273.4	**F**	
	SB	I	17	45	8.2	**F**	22.2	C		22.3	C		21.6	C		22.4	C	
Executive Square to Executive Dr	NB	I	8	19	14.4	**F**	18.1	**E**		18.2	E		20.4	**F**		20.4	**F**	
	SB	I	6	11	25.2	D	70.5	**F**		70.5	F		70.3	**F**		70.4	**F**	
Executive Dr to Eastgate Mall	NB	I	57	42	14.0	**F**	30.4	**F**		30.0	F		30.7	**F**		30.4	**F**	
	SB	I	13	23	25.9	D	13.1	D		13.3	D		13.2	D		13.3	D	
Eastgate Mall to Regents Rd	NB	I	38	49	25.6	D	55.8	**F**		53.4	F		56.1	**F**		57.5	**F**	
	SB	I	30	57	22.1	D	22.0	D		22.0	D		22.3	D		22.3	D	
Regents Rd to Campus Point Dr	NB	I	13	32	17.6	**E**	50.4	D		50.7	D		47.6	D		47.8	D	
	SB	I	14	47	11.8	**F**	81.9	**F**		81.2	F		84.8	**F**		85.2	**F**	
Campus Point Dr to Scripps Hospital	NB	I	16	24	32.3	C	47.4	**F**		47.3	F		48.3	**F**		48.1	**F**	
	SB	I	56	32	24.0	D	46.8	**F**		47.4	F		43.2	**F**		43.1	**F**	
Scripps Hospital to I-5 NB Ramps	NB	I	140	61	19.3	**E**	23.3	C		23.3	C		23.2	C		23.2	C	
	SB	I	32	51	23.3	D	57.0	**F**		56.7	F		55.3	**F**		55.6	**F**	
I-5 NB Ramps to I-5 SB Ramps	NB	I	26	110	3.5	**F**	69.2	**E**		69.4	E		68.7	**E**		68.8	**E**	
	SB	I	39	28	14.0	**F**	62.9	**E**		62.3	E		62.8	**E**		62.7	**E**	
I-5 SB Ramps to Science Center Dr	NB	I	24	42	27.0	D	52.1	**F**		52.0	F		52.7	**F**		52.8	**F**	
	SB	I	38	59	19.3	**E**	67.6	**F**		71.6	F		68.5	**F**		67.3	**F**	
Science Center Dr to John Hopkins Dr	NB	I	38	46	28.5	C	48.0	D		48.0	D		48.0	D		48.0	D	
	SB	I	30	34	38.1	B	54.8	**E**		55.0	E		55.0	**E**		55.3	**E**	
John Hopkins Drive to N. Torrey Pines Rd	NB	I	13	11	29.1	C	52.2	D		52.2	D		52.1	D		52.0	D	
	SB	I	8	14	23.6	D	34.5	B		34.4	D		34.4	B		34.3	B	
Total	*NB*	*I*	*821*	*845*	*19.0*	**E**	*950.4*	**E**	**No**	*1028.2*	*F*	**No**	*1171.1*	**F**	**No**	*1566.5*	**F**	**No**
	SB	*I*	*626*	*677*	*23.3*	*D*	*823.8*	**E**	**Yes**	*861.1*	*E*	**Yes**	*897.4*	**E**	**Yes**	*904.4*	**E**	**Yes**

Notes: (a) Travel time in miles per hour (mph).

(b) The arterial LOS is based on average through-vehicle travel speed for the segment or for the entire street under consideration and is influenced both by the number of signals per mile and by the intersection control delay.

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MID Peak-Hour Arterial Segment Analysis Summary Genesee Avenue

ROADWAY SEGMENT	DIRECTION	URBAN STREET CLASS	EXISTING				HORIZON YEAR WITH RECOMMENDED MITIGATIONS											
							Alt A Regents Bridge 6-lane Genesee			Alt B Regents Bridge 4-lane Genesee			Alt C No Bridge 6-lane Genesee			Alt D No Bridge 4-lane Genesee		
			TRAVEL TIME (S)		SIMULATION		SIMULATION			SIMULATION			SIMULATION			SIMULATION		
			FIELD	SIMULATION	SPEED (a)	LOS (b)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)
Genesee Ave																		
SR-52 EB Ramps to Governor Dr	NB	I	85	93	30.0	C	35.6	B		35.8	C		35.3	B		35.6	B	
	SB	I	62	68	41.4	B	37.7	C		37.7	C		37.7	C		38.3	C	
Governor Dr to Centurion Sq	NB	I	52	55	36.8	B	70.2	D		69.1	D		82.5	**E**		77.3	**E**	
	SB	I	76	74	27.0	D	51.8	C		54.0	C		53.6	C		54.7	C	
Centurion Sq to Decoro St	NB	I	25	46	23.1	D	60.0	C		51.9	B		51.9	B		53.3	B	
	SB	I	40	33	32.3	C	70.3	C		65.2	C		74.2	C		76.0	D	
Decoro St to Nobel Dr	NB	I	57	29	23.5	D	43.8	D		47.2	D		48.9	D		52.0	**E**	
	SB	I	18	26	26.8	D	32.1	C		30.3	B		30.8	B		32.8	C	
Nobel Dr to Esplanade Ct	NB	I	26	42	17.4	**E**	31.0	D		34.6	E		30.5	D		32.6	D	
	SB	I	32	46	15.9	**F**	34.9	**E**		22.4	C		23.4	C		26.3	D	
Esplanade Ct to La Jolla Village Dr	NB	I	75	86	7.8	**F**	84.5	**F**		82.8	F		68.4	**F**		119.2	**F**	
	SB	I	48	37	18.0	**E**	45.0	**E**		44.5	E		53.2	**F**		49.0	**F**	
La Jolla Village Dr to Executive Sq	NB	I	12	20	18.9	**E**	81.8	**F**		81.5	F		87.5	**F**		88.1	**F**	
	SB	I	59	52	7.1	**F**	43.9	**F**		43.5	F		44.2	**F**		46.3	**F**	
Executive Square to Executive Dr	NB	I	43	15	18.0	**E**	29.4	**F**		29.3	F		31.6	**F**		30.1	**F**	
	SB	I	9	17	16.4	**E**	49.2	**F**		49.6	F		51.9	**F**		51.6	**F**	
Executive Dr to Eastgate Mall	NB	I	17	25	23.8	D	16.8	**E**		16.8	E		17.0	**E**		16.9	**E**	
	SB	I	16	20	29.3	C	29.3	**F**		29.2	F		28.6	**F**		30.5	**F**	
Eastgate Mall to Regents Rd	NB	I	34	48	26.0	D	19.9	C		19.9	C		19.8	C		19.8	C	
	SB	I	29	44	28.8	C	21.2	C		21.3	C		21.5	C		21.5	C	
Regents Rd to Campus Point Dr	NB	I	13	26	21.5	D	48.3	D		48.3	D		45.8	C		46.2	C	
	SB	I	13	21	26.8	D	57.5	D		57.4	D		58.4	D		58.5	D	
Campus Point Dr to Scripps Hospital	NB	I	16	34	22.9	D	34.4	**E**		34.4	E		33.5	**E**		33.3	**E**	
	SB	I	17	38	20.2	**E**	22.4	D		22.4	D		21.7	D		21.8	D	
Scripps Hospital to I-5 NB Ramps	NB	I	49	61	19.2	**E**	46.9	**E**		46.8	E		46.6	**E**		46.6	**E**	
	SB	I	40	46	25.6	D	41.9	**E**		41.9	E		41.3	**E**		41.5	**E**	
I-5 NB Ramps to I-5 SB Ramps	NB	I	26	26	15.0	**F**	62.9	**E**		62.6	E		63.2	**E**		63.0	**E**	
	SB	I	13	13	30.5	C	64.6	**E**		64.7	E		64.8	**E**		65.0	**E**	
I-5 SB Ramps to Science Center Dr	NB	I	29	37	30.7	C	12.8	C		13.2	C		12.9	C		13.2	C	
	SB	I	67	56	20.0	**E**	21.6	**E**		21.8	E		22.0	**E**		22.1	**E**	
Science Center Dr to John Hopkins Dr	NB	I	49	53	24.7	D	37.2	C		37.3	C		37.2	C		37.1	C	
	SB	I	28	39	32.9	C	57.1	**E**		57.6	E		57.7	**E**		57.9	**E**	
John Hopkins Drive to N. Torrey Pines Rd	NB	I	9	10	32.4	C	67.0	**E**		67.1	E		65.4	**E**		64.4	**E**	
	SB	I	12	15	21.6	D	39.4	C		39.4	C		39.4	C		40.2	C	
Total	*NB*	*I*	*617*	*705*	*22.8*	*D*	*792.6*	**E**	**Yes**	*789.0*	*E*	**Yes**	*788.0*	**E**	**Yes**	*838.9*	**E**	**Yes**
	SB	*I*	*579*	*630*	*24.9*	*D*	*738.8*	*D*	**No**	*721.8*	*D*	**No**	*742.8*	*D*	**No**	*751.1*	*D*	**No**

Notes: (a) Travel time in miles per hour (mph).

(b) The arterial LOS is based on average through-vehicle travel speed for the segment or for the entire street under consideration and is influenced both by the number of signals per mile and by the intersection control delay.

(c) A significant impact resulted in a change from LOS D or better to LOS E or LOS F, or a decrease of speeds of more than 1.0 mph at LOS E and LOS F.

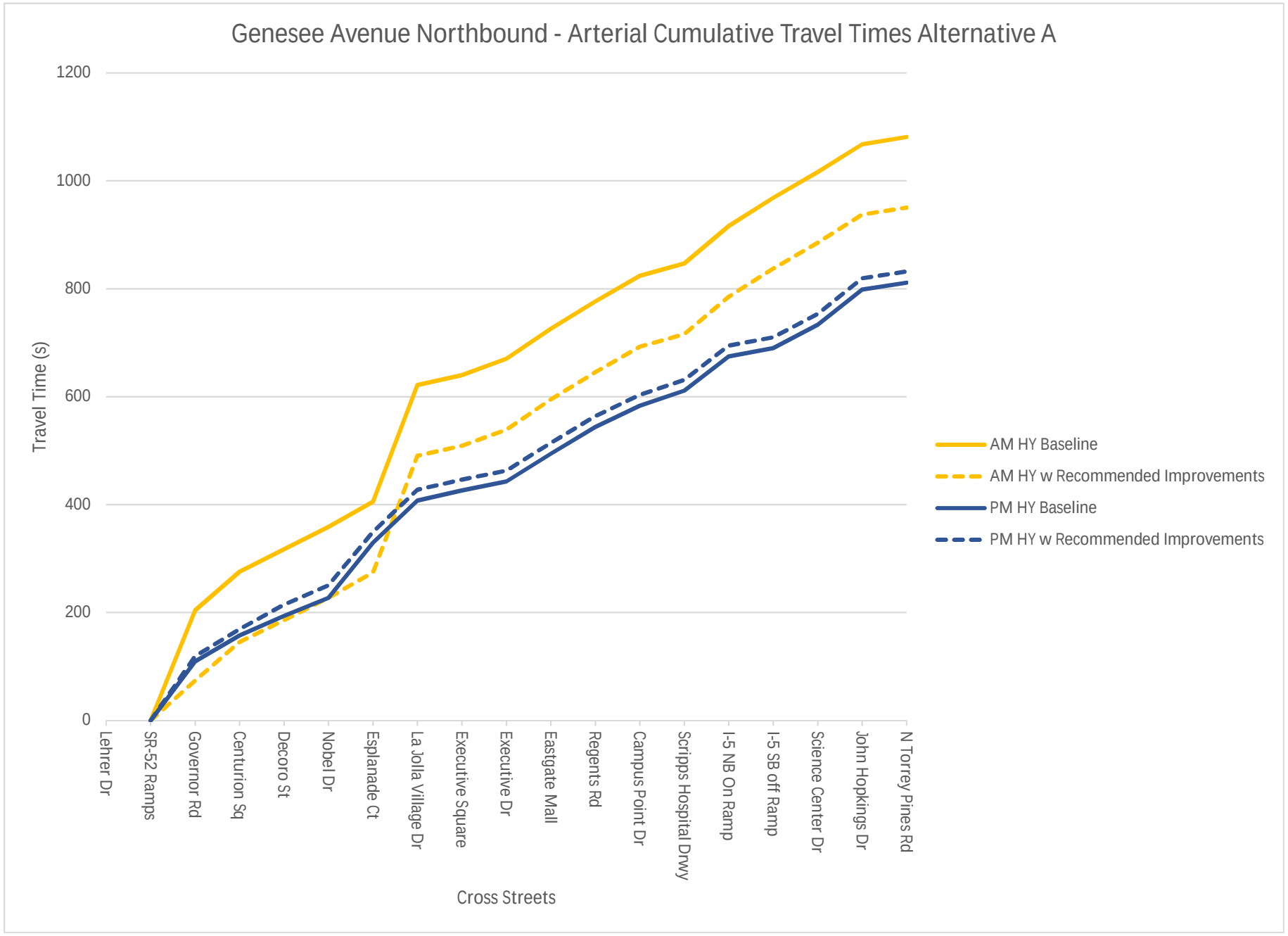
PM Peak-Hour Arterial Segment Analysis Summary Genesee Avenue

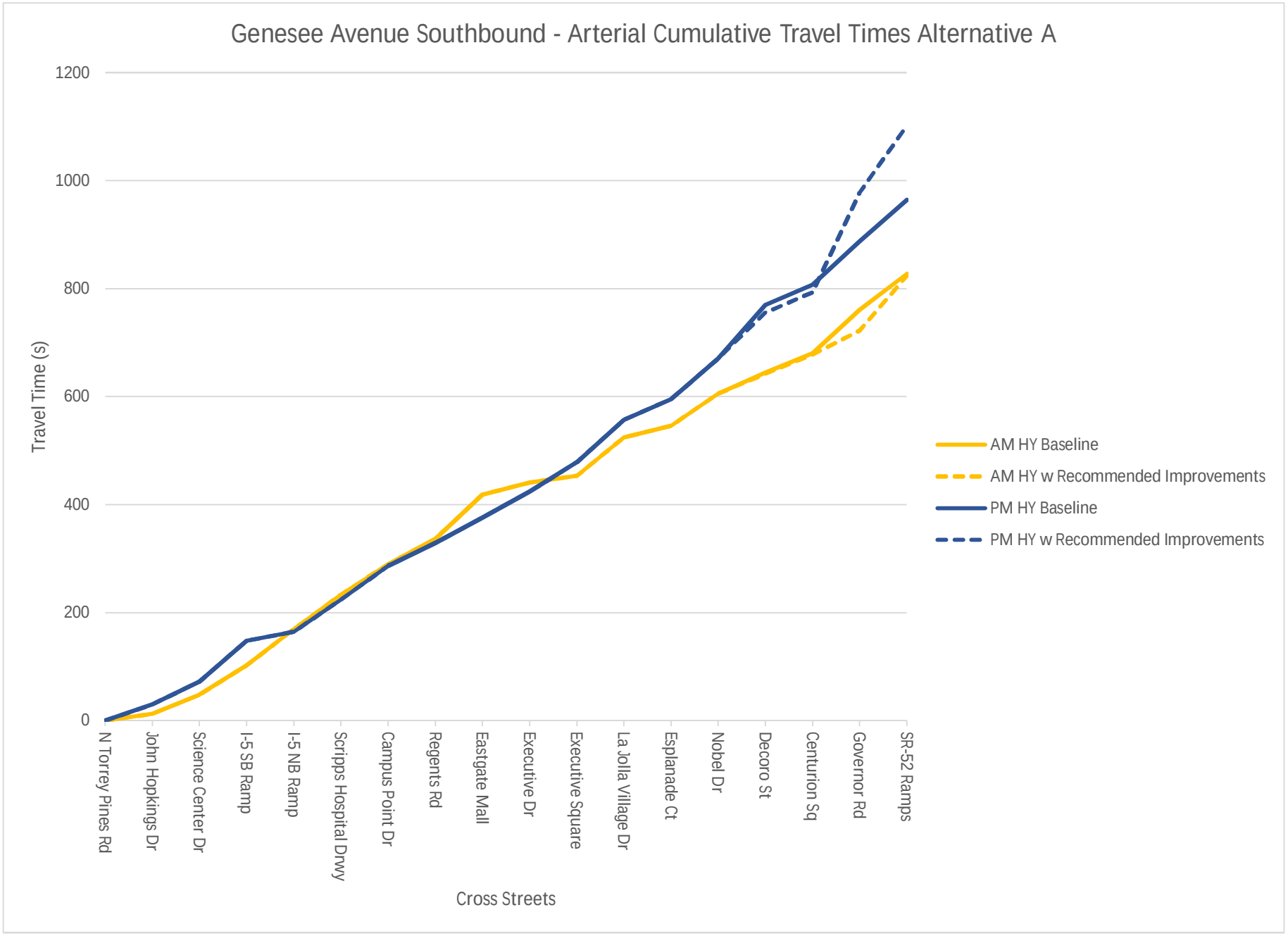
ROADWAY SEGMENT	DIRECTION	URBAN STREET CLASS	EXISTING				HORIZON YEAR WITH RECOMMENDED MITIGATIONS											
							Alt A Regents Bridge 6-lane Genesee			Alt B Regents Bridge 4-lane Genesee			Alt C No Bridge 6-lane Genesee			Alt D No Bridge 4-lane Genesee		
			TRAVEL TIME (S)		SIMULATION		SIMULATION			SIMULATION			SIMULATION			SIMULATION		
			FIELD	SIMULATION	SPEED (a)	LOS (b)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)
Genesee Ave																		
SR-52 EB Ramps to Governor Dr	NB	I	110	144	19.3	**E**	35.8	C		35.5	B		34.6	B		34.9	B	
	SB	I	60	80	35.0	B	47.1	D		46.8	D		48.3	D		47.1	D	
Governor Dr to Centurion Sq	NB	I	44	51	39.5	B	83.6	**E**		79.0	E		131.6	**F**		130.1	**F**	
	SB	I	214	106	18.8	**E**	76.6	**E**		69.4	D		79.2	**E**		69.2	D	
Centurion Sq to Decoro St	NB	I	43	44	24.2	D	50.0	B		50.9	B		50.9	B		54.7	B	
	SB	I	88	46	23.3	D	184.7	**F**		79.4	D		70.6	C		60.7	C	
Decoro St to Nobel Dr	NB	I	20	46	14.8	**F**	45.4	D		42.5	D		39.3	C		39.2	C	
	SB	I	70	142	4.9	**F**	38.0	C		49.1	D		48.2	D		159.2	**F**	
Nobel Dr to Esplanade Ct	NB	I	17	61	12.1	**F**	35.9	**E**		41.0	E		39.2	**E**		43.0	**F**	
	SB	I	100	37	19.9	**E**	84.6	**F**		69.1	F		180.4	**F**		428.3	**F**	
Esplanade Ct to La Jolla Village Dr	NB	I	86	76	8.8	**F**	98.7	**F**		126.6	F		81.2	**F**		143.5	**F**	
	SB	I	35	37	18.1	**E**	75.4	**F**		79.1	F		142.7	**F**		121.1	**F**	
La Jolla Village Dr to Executive Sq	NB	I	29	19	20.0	**E**	78.2	**F**		78.2	F		77.7	**F**		76.6	**F**	
	SB	I	88	51	7.3	**F**	38.6	**E**		38.5	E		40.2	**E**		42.5	**F**	
Executive Square to Executive Dr	NB	I	37	20	13.8	**F**	18.9	**E**		19.0	E		18.3	**E**		18.3	**E**	
	SB	I	71	25	11.0	**F**	78.4	**F**		76.6	F		115.3	**F**		117.2	**F**	
Executive Dr to Eastgate Mall	NB	I	15	49	12.2	**F**	16.7	**E**		16.6	E		16.8	**E**		16.6	**E**	
	SB	I	126	35	16.7	**E**	53.7	**F**		51.0	F		37.8	**F**		37.9	**F**	
Eastgate Mall to Regents Rd	NB	I	37	53	23.8	D	51.4	**F**		51.4	F		50.9	**F**		51.4	**F**	
	SB	I	42	42	30.2	C	49.0	**F**		48.8	F		51.5	**F**		51.9	**F**	
Regents Rd to Campus Point Dr	NB	I	15	27	20.8	**E**	49.4	D		49.2	D		49.5	D		49.0	D	
	SB	I	16	24	23.0	D	46.5	C		46.5	C		46.8	D		46.7	D	
Campus Point Dr to Scripps Hospital	NB	I	21	27	28.5	C	39.4	**F**		39.6	F		38.4	**F**		38.3	**F**	
	SB	I	45	58	13.1	**F**	42.2	**F**		42.2	F		42.2	**F**		42.2	**F**	
Scripps Hospital to I-5 NB Ramps	NB	I	77	61	19.1	**E**	27.8	C		27.9	C		27.9	C		28.0	C	
	SB	I	33	49	23.9	D	62.5	**F**		61.8	F		57.6	**F**		56.2	**F**	
I-5 NB Ramps to I-5 SB Ramps	NB	I	12	14	28.5	C	63.3	**E**		63.2	E		63.6	**E**		63.5	**E**	
	SB	I	13	11	34.2	B	59.5	**E**		59.3	E		60.1	**E**		60.6	**E**	
I-5 SB Ramps to Science Center Dr	NB	I	33	41	27.7	C	15.8	D		15.9	D		16.0	D		16.9	D	
	SB	I	137	95	11.9	**F**	16.7	D		16.8	D		16.8	D		17.1	D	
Science Center Dr to John Hopkins Dr	NB	I	50	55	23.6	D	43.4	D		43.4	D		43.3	D		43.3	D	
	SB	I	70	37	35.1	B	76.2	**F**		76.1	F		76.0	**F**		75.3	**F**	
John Hopkins Drive to N. Torrey Pines Rd	NB	I	9	13	25.1	D	65.7	**E**		65.7	E		65.6	**E**		65.6	**E**	
	SB	I	8	28	11.6	**F**	42.0	C		41.9	C		41.6	C		41.0	C	
Total	*NB*	*I*	*655*	*800*	*20.0*	**E**	*832.1*	*D*	**No**	*858.3*	*D*	**No**	*857.5*	*D*	**No**	*925.3*	*D*	**No**
	SB	*I*	*1216*	*875*	*17.9*	**E**	*1101.6*	*D*	**No**	*982.2*	*D*	**No**	*1184.5*	*D*	**No**	*1504.1*	*D*	**No**

Notes: (a) Travel time in miles per hour (mph).

(b) The arterial LOS is based on average through-vehicle travel speed for the segment or for the entire street under consideration and is influenced both by the number of signals per mile and by the intersection control delay.

(c) A significant impact resulted in a change from LOS D or better to LOS E or LOS F, or a decrease of speeds of more than 1.0 mph at LOS E and LOS F.


Genesee Avenue Northbound - Arterial Cumulative Travel Times Alternative A
Travel Time (s)
1200
1000
800
600
400
200
0
Lehrer Dr
SR-52 Ramps
Governor Rd
Centurion Sq
Decoro St
Nobel Dr
Esplanade Ct
La Jolla Village Dr
Executive Square
Executive Dr
Eastgate Mall
Regents Rd
Campus Point Dr
Scripps Hospital Drwy
I-5 NB On Ramp
I-5 SB off Ramp
Science Center Dr
John Hopkings Dr
N Torrey Pines Rd
Cross Streets
AM HY Baseline
AM HY w Recommended Improvements
PM HY Baseline
PM HY w Recommended Improvements


Genesee Avenue Southbound - Arterial Cumulative Travel Times Alternative A
Travel Time (s)
1200
1000
800
600
400
200
0
N Torrey Pines Rd
John Hopkings Dr
Science Center Dr
I-5 SB Ramp
I-5 NB Ramp
Scripps Hospital Drwy
Campus Point Dr
Regents Rd
Eastgate Mall
Executive Dr
Executive Square
La Jolla Village Dr
Esplanade Ct
Nobel Dr
Decoro St
Centurion Sq
Governor Rd
SR-52 Ramps
Cross Streets
AM HY Baseline
AM HY w Recommended Improvements
PM HY Baseline
PM HY w Recommended Improvements

AM Peak-Hour Arterial Segment Analysis Summary La Jolla Village Drive

ROADWAY SEGMENT	DIRECTION	URBAN STREET CLASS	EXISTING				HORIZON YEAR											
							Alt A Regents Bridge 6-lane Genesee			Alt B Regents Bridge 4-lane Genesee			Alt C No Bridge 6-lane Genesee			Alt D No Bridge 4-lane Genesee		
			TRAVEL TIME (S)		SIMULATION		SIMULATION			SIMULATION			SIMULATION			SIMULATION		
			FIELD	SIMULATION	SPEED (a)	LOS (b)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)
La Jolla Village Drive																		
Torrey Pines Rd to La Jolla Scenic Dr	EB	I	10	27	11.3	**F**	41.8	**F**		41.7	**F**		40.7	**F**		40.4	**F**	
	WB	I	9	14	22.0	D	16.8	**E**		16.9	**E**		15.8	**E**		15.6	**E**	
La Jolla Scenic Dr to Villa La Jolla Dr	EB	I	33	67	23.5	D	90.6	**E**		91.8	**E**		158.0	**F**		95.1	**E**	
	WB	I	47	60	26.4	D	65.2	D		65.3	D		51.8	C		61.9	D	
Villa La Jolla Dr to I-5 SB Off-Ramp	EB	I	28	25	26.6	D	26.8	D		26.8	D		19.9	C		26.6	D	
	WB	I	58	83	8.0	**F**	189.4	**F**		191.8	**F**		192.4	**F**		200.9	**F**	
I-5 SB Off-Ramp to I-5 NB Ramps	EB	I	35	44	14.8	**F**	54.3	**F**		55.0	**F**		46.4	**F**		57.1	**F**	
	WB	I	66	63	10.5	**F**	93.5	**F**		94.5	**F**		94.1	**F**		95.4	**F**	
I-5 NB Ramps to Lebon Dr	EB	I	53	56	17.4	**E**	62.4	**F**		62.7	**F**		63.1	**F**		63.3	**F**	
	WB	I	36	41	24.2	D	42.9	D		43.0	D		43.6	D		43.5	D	
Lebon Dr to Regents Rd	EB	I	29	74	16.1	**E**	92.4	**F**		92.5	**F**		81.4	**F**		82.5	**F**	
	WB	I	29	48	24.8	D	49.8	D		50.0	D		50.7	D		49.7	D	
Regents Rd to Genesee Ave	EB	I	58	89	10.4	**F**	78.0	**F**		78.1	**F**		70.5	**F**		70.8	**F**	
	WB	I	39	48	19.1	**E**	68.2	**F**		67.9	**F**		56.4	**E**		58.7	**F**	
Genesee Ave to Executive Way	EB	I	40	34	28.3	C	44.4	D		44.5	D		47.3	**E**		47.5	**E**	
	WB	I	68	160	6.0	**F**	156.0	**F**		156.8	**F**		132.6	**F**		134.3	**F**	
Executive Way to Towne Center Dr	EB	I	16	20	25.4	D	28.9	**E**		30.4	**E**		32.9	**F**		31.9	**F**	
	WB	I	33	35	14.4	**F**	153.9	**F**		149.5	**F**		139.3	**F**		138.5	**F**	
Towne Center Dr to I-805 SB Ramps	EB	I	62	52	26.9	D	44.5	C		46.9	C		49.8	C		47.3	C	
	WB	I	80	117	11.9	**F**	296.8	**F**		311.5	**F**		313.7	**F**		308.8	**F**	
I-805 SB Ramps to I-805 NB Ramps	EB	I	17	51	14.0	**F**	53.1	**F**		51.8	**F**		50.8	**F**		52.8	**F**	
	WB	I	54	183	3.9	**F**	192.3	**F**		209.1	**F**		239.2	**F**		209.9	**F**	
I-805 NB Ramps to Nobel Dr	EB	I	34	51	26.6	D	58.9	D		58.3	D		60.6	D		59.8	D	
	WB	I	45	50	27.5	C	49.6	C		49.7	C		49.9	C		50.2	C	
Miramar Road																		
Nobel Dr to Eastgate Mall	EB	I	25	35	28.8	C	35.7	C		35.3	C		35.7	C		35.7	C	
	WB	I	21	29	34.5	B	29.5	B		29.1	B		30.3	C		30.2	C	
Eastgate Mall to Miramar Mall	EB	I	16	28	27.2	C	30.9	D		30.3	D		30.8	D		30.8	D	
	WB	I	29	44	17.5	**E**	45.9	**E**		46.7	**E**		46.0	**E**		45.9	**E**	
Miramar Mall to Miramar Place	EB	I	34	34	27.0	C	34.2	D		33.9	D		34.2	D		34.2	D	
	WB	I	19	50	18.0	**E**	63.0	**F**		60.1	**F**		62.7	**F**		63.1	**F**	
Miramar Place to Camino Sante Fe	EB	I	36	41	30.3	C	42.3	C		42.3	C		42.5	C		42.5	C	
	WB	I	30	52	23.7	D	55.5	D		54.0	D		55.4	D		55.4	D	
Total	*EB*	*I*	*526*	*725*	*20.8*	**E**	*819.2*	**E**	**No**	*822.3*	**E**	**No**	*864.6*	**E**	**No**	*818.3*	**E**	**No**
	WB	*I*	*663*	*1074*	*14.0*	**F**	*1568.3*	**F**	**No**	*1595.9*	**F**	**No**	*1573.9*	**F**	**No**	*1562.0*	**F**	**No**

Notes:

Notes: (a) Travel time in miles per hour (mph).

(b) The arterial LOS is based on average through-vehicle travel speed for the segment or for the entire street under consideration and is influenced both by the number of signals per mile and by the intersection control delay.

(c) A significant impact resulted in a change from LOS D or better to LOS E or LOS F, or a decrease of speeds of more than 1.0 mph at LOS E and LOS F.

MID Peak-Hour Arterial Segment Analysis Summary La Jolla Village Drive

ROADWAY SEGMENT	DIRECTION	URBAN STREET CLASS	EXISTING				HORIZON YEAR											
							Alt A Regents Bridge 6-lane Genesee			Alt B Regents Bridge 4-lane Genesee			Alt C No Bridge 6-lane Genesee			Alt D No Bridge 4-lane Genesee		
			TRAVEL TIME (S)		SIMULATION		SIMULATION			SIMULATION			SIMULATION			SIMULATION		
			FIELD	SIMULATION	SPEED (a)	LOS (b)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)
La Jolla Village Drive																		
Torrey Pines Rd to La Jolla Scenic Dr	EB	I	10	15	19.6	**E**	27.8	**F**		27.6	**F**		29.2	**F**		29.1	**F**	
	WB	I	9	14	21.2	D	15.8	**E**		15.8	**E**		16.1	**E**		16.1	**E**	
La Jolla Scenic Dr to Villa La Jolla Dr	EB	I	33	92	15.0	**F**	96.5	**F**		96.5	**F**		97.0	**F**		97.1	**F**	
	WB	I	47	7	25.8	D	9.1	**E**		9.0	D		9.4	**E**		9.2	**E**	
Villa La Jolla Dr to I-5 SB Off-Ramp	EB	I	28	29	22.9	D	28.7	D		28.7	D		28.6	D		28.6	D	
	WB	I	58	51	13.0	**F**	52.9	**F**		52.9	**F**		53.0	**F**		53.2	**F**	
I-5 SB Off-Ramp to I-5 NB Ramps	EB	I	35	29	22.9	D	32.2	**E**		32.6	**E**		32.9	**E**		33.0	**E**	
	WB	I	66	66	10.0	**F**	152.0	**F**		147.5	**F**		156.8	**F**		154.7	**F**	
I-5 NB Ramps to Lebon Dr	EB	I	53	42	23.6	D	46.7	D		47.0	**E**		45.9	D		46.5	D	
	WB	I	36	34	29.1	C	36.2	C		36.3	C		36.1	C		36.1	C	
Lebon Dr to Regents Rd	EB	I	29	65	18.3	**E**	88.7	**F**		89.4	**F**		84.3	**F**		85.9	**F**	
	WB	I	29	38	31.1	C	59.1	**E**		59.7	**E**		61.2	**E**		61.1	**E**	
Regents Rd to Genesee Ave	EB	I	58	79	11.7	**F**	62.8	**F**		62.6	**F**		63.6	**F**		62.7	**F**	
	WB	I	39	48	19.2	**E**	58.2	**F**		58.1	**F**		57.3	**E**		57.5	**E**	
Genesee Ave to Executive Way	EB	I	40	48	19.8	**E**	55.0	**E**		54.9	**E**		55.5	**E**		55.3	**E**	
	WB	I	68	50	18.9	**E**	64.5	**F**		64.3	**F**		63.2	**F**		63.9	**F**	
Executive Way to Towne Center Dr	EB	I	16	23	21.8	D	29.0	**E**		29.6	**E**		31.2	**E**		30.7	**E**	
	WB	I	33	30	16.8	**E**	42.8	**F**		42.6	**F**		41.4	**F**		41.2	**F**	
Towne Center Dr to I-805 SB Ramps	EB	I	62	14	36.0	B	15.0	B		15.0	B		15.0	B		15.0	B	
	WB	I	80	39	22.2	D	41.6	**E**		41.7	**E**		41.6	**E**		41.6	**E**	
Total	*EB*	*I*	*364*	*435*	*18.4*	**E**	*482.4*	**E**	**No**	*483.9*	**E**	**No**	*483.2*	**E**	**No**	*483.9*	**E**	**No**
	WB	*I*	*465*	*377*	*19.0*	**E**	*537.0*	**F**	**No**	*1184.0*	**E**	**No**	*536.1*	**F**	**No**	*534.6*	**F**	**No**

Notes:

Notes: (a) Travel time in miles per hour (mph).

(b) The arterial LOS is based on average through-vehicle travel speed for the segment or for the entire street under consideration and is influenced both by the number of signals per mile and by the intersection control delay.

(c) A significant impact resulted in a change from LOS D or better to LOS E or LOS F, or a decrease of speeds of more than 1.0 mph at LOS E and LOS F.

PM Peak-Hour Arterial Segment Analysis Summary La Jolla Village Drive

ROADWAY SEGMENT	DIRECTION	URBAN STREET CLASS	EXISTING				HORIZON YEAR											
							Alt A Regents Bridge 6-lane Genesee			Alt B Regents Bridge 4-lane Genesee			Alt C No Bridge 6-lane Genesee			Alt D No Bridge 4-lane Genesee		
			TRAVEL TIME (S)		SIMULATION		SIMULATION			SIMULATION			SIMULATION			SIMULATION		
			FIELD	SIMULATION	SPEED (a)	LOS (b)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)
La Jolla Village Drive																		
Torrey Pines Rd to La Jolla Scenic Dr	EB	I	10	34	8.9	**F**	100.2	**F**		99.3	**F**		70.0	**F**		70.0	**F**	
	WB	I	11	21	14.7	**F**	22.2	**F**		22.2	**F**		22.3	**F**		22.3	**F**	
La Jolla Scenic Dr to Villa La Jolla Dr	EB	I	55	447	3.5	**F**	478.5	**F**		479.5	**F**		481.5	**F**		481.5	**F**	
	WB	I	39	46	34.3	B	47.3	C		47.4	C		45.2	B		45.2	B	
Villa La Jolla Dr to I-5 SB Off-Ramp	EB	I	25	24	28.0	C	28.2	D		28.7	D		28.0	D		28.0	D	
	WB	I	20	50	13.3	**F**	46.6	**F**		46.3	**F**		47.1	**F**		47.1	**F**	
I-5 SB Off-Ramp to I-5 NB Ramps	EB	I	13	28	23.9	D	29.0	D		29.0	D		30.6	D		30.6	D	
	WB	I	25	35	18.8	**E**	37.2	**E**		37.5	**E**		35.8	**E**		35.8	**E**	
I-5 NB Ramps to Lebon Dr	EB	I	42	68	14.4	**F**	93.0	**F**		90.4	**F**		95.7	**F**		95.7	**F**	
	WB	I	31	33	29.5	C	36.0	C		36.1	C		37.2	D		37.2	D	
Lebon Dr to Regents Rd	EB	I	73	79	15.0	**F**	174.1	**F**		174.7	**F**		182.7	**F**		182.7	**F**	
	WB	I	48	57	20.8	**E**	46.0	D		46.7	D		46.8	D		46.8	D	
Regents Rd to Genesee Ave	EB	I	27	50	18.5	**E**	51.8	**E**		51.8	**E**		43.7	D		43.7	D	
	WB	I	100	78	11.8	**F**	150.7	**F**		150.3	**F**		147.0	**F**		147.0	**F**	
Genesee Ave to Executive Way	EB	I	55	78	12.2	**F**	146.9	**F**		144.7	**F**		124.3	**F**		124.3	**F**	
	WB	I	38	48	20.0	**E**	79.7	**F**		79.6	**F**		67.5	**F**		67.5	**F**	
Executive Way to Towne Center Dr	EB	I	29	200	2.5	**F**	326.5	**F**		330.4	**F**		320.9	**F**		320.9	**F**	
	WB	I	15	58	8.6	**F**	71.7	**F**		67.2	**F**		50.3	**F**		50.3	**F**	
Towne Center Dr to I-805 SB Ramps	EB	I	29	47	29.2	C	49.5	C		51.0	C		61.0	D		61.0	D	
	WB	I	36	83	16.7	**E**	117.7	**F**		118.6	**F**		113.1	**F**		113.1	**F**	
I-805 SB Ramps to I-805 NB Ramps	EB	I	12	38	19.0	**E**	38.0	**E**		38.2	**E**		38.0	**E**		38.0	**E**	
	WB	I	16	29	24.7	D	34.7	**E**		35.6	**E**		34.2	**E**		34.2	**E**	
I-805 NB Ramps to Nobel Dr	EB	I	45	61	22.2	D	63.6	D		84.2	**E**		96.9	**F**		96.9	**F**	
	WB	I	38	54	25.1	D	54.6	D		54.6	D		55.2	D		55.2	D	
Miramar Road																		
Nobel Dr to Eastgate Mall	EB	I	22	47	21.2	D	43.7	D		43.8	D		43.7	D		43.7	D	
	WB	I	22	31	32.8	C	31.4	C		31.5	C		34.1	C		34.1	C	
Eastgate Mall to Miramar Mall	EB	I	15	27	28.0	C	31.6	D		30.5	D		31.6	D		31.6	D	
	WB	I	61	196	3.9	**F**	79.8	**F**		83.8	**F**		79.8	**F**		79.8	**F**	
Miramar Mall to Miramar Place	EB	I	25	31	29.3	C	32.6	C		32.4	C		32.6	C		32.6	C	
	WB	I	36	41	21.9	D	51.1	**E**		49.2	**E**		50.4	**E**		50.4	**E**	
Miramar Place to Camino Sante Fe	EB	I	69	54	23.0	D	49.8	D		49.7	D		50.4	D		50.4	D	
	WB	I	31	37	33.3	C	43.0	C		41.6	C		43.3	C		43.3	C	
Total	*EB*	*I*	*546*	*1313*	*11.5*	**F**	*1737.0*	**F**	**No**	*1758.3*	**F**	**No**	*1731.6*	**F**	**No**	*1731.6*	**F**	**No**
	WB	*I*	*567*	*897*	*16.8*	**E**	*949.7*	**F**	**No**	*948.2*	**F**	**No**	*909.3*	**E**	**No**	*909.3*	**E**	**No**

Notes:

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AM Peak-Hour Arterial Segment Analysis Summary La Jolla Village Drive

ROADWAY SEGMENT	DIRECTION	URBAN STREET CLASS	EXISTING				HORIZON YEAR WITH RECOMMENDED MITIGATIONS											
							Alt A Regents Bridge 6-lane Genesee			Alt B Regents Bridge 4-lane Genesee			Alt C No Bridge 6-lane Genesee			Alt D No Bridge 4-lane Genesee		
			TRAVEL TIME (S)		SIMULATION		SIMULATION			SIMULATION			SIMULATION			SIMULATION		
			FIELD	SIMULATION	SPEED (a)	LOS (b)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)
La Jolla Village Drive																		
Torrey Pines Rd to La Jolla Scenic Dr	EB	I	10	27	11.3	**F**	56.1	**F**		55.9	**F**		62.0	**F**		61.7	**F**	
	WB	I	9	14	22.0	D	35.9	**F**		27.7	**F**		28.0	**F**		27.8	**F**	
La Jolla Scenic Dr to Villa La Jolla Dr	EB	I	33	67	23.5	D	89.8	**E**		66.6	D		73.7	D		68.0	D	
	WB	I	47	60	26.4	D	54.3	C		67.9	D		59.2	D		64.5	D	
Villa La Jolla Dr to I-5 SB Off-Ramp	EB	I	28	25	26.6	D	21.3	C		24.3	C		20.0	C		24.0	C	
	WB	I	58	83	8.0	**F**	96.0	**F**		97.7	**F**		95.5	**F**		103.3	**F**	
I-5 SB Off-Ramp to I-5 NB Ramps	EB	I	35	44	14.8	**F**	55.6	**F**		50.8	**F**		43.7	**F**		53.2	**F**	
	WB	I	66	63	10.5	**F**	93.5	**F**		94.5	**F**		94.1	**F**		95.4	**F**	
I-5 NB Ramps to Lebon Dr	EB	I	53	56	17.4	**E**	62.4	**F**		62.7	**F**		63.1	**F**		63.3	**F**	
	WB	I	36	41	24.2	D	42.9	D		43.0	D		43.6	D		43.5	D	
Lebon Dr to Regents Rd	EB	I	29	74	16.1	**E**	92.4	**F**		92.5	**F**		81.4	**F**		82.5	**F**	
	WB	I	29	48	24.8	D	49.8	D		50.0	D		50.7	D		49.7	D	
Regents Rd to Genesee Ave	EB	I	58	89	10.4	**F**	78.0	**F**		78.1	**F**		70.5	**F**		70.8	**F**	
	WB	I	39	48	19.1	**E**	68.2	**F**		67.9	**F**		56.4	**E**		58.7	**F**	
Genesee Ave to Executive Way	EB	I	40	34	28.3	C	44.4	D		44.5	D		47.3	**E**		47.5	**E**	
	WB	I	68	160	6.0	**F**	156.0	**F**		156.8	**F**		132.6	**F**		134.3	**F**	
Executive Way to Towne Center Dr	EB	I	16	20	25.4	D	28.9	**E**		30.4	**E**		32.9	**F**		31.9	**F**	
	WB	I	33	35	14.4	**F**	153.9	**F**		149.5	**F**		139.3	**F**		138.5	**F**	
Towne Center Dr to I-805 SB Ramps	EB	I	62	52	26.9	D	44.5	C		46.9	C		49.8	C		47.3	C	
	WB	I	80	117	11.9	**F**	296.8	**F**		311.5	**F**		313.7	**F**		308.8	**F**	
I-805 SB Ramps to I-805 NB Ramps	EB	I	17	51	14.0	**F**	53.1	**F**		51.8	**F**		50.8	**F**		52.8	**F**	
	WB	I	54	183	3.9	**F**	192.3	**F**		209.1	**F**		239.2	**F**		209.9	**F**	
I-805 NB Ramps to Nobel Dr	EB	I	34	51	26.6	D	58.9	D		58.3	D		60.6	D		59.8	D	
	WB	I	45	50	27.5	C	49.6	C		49.7	C		49.9	C		50.2	C	
Miramar Road																		
Nobel Dr to Eastgate Mall	EB	I	25	35	28.8	C	34.4	C		34.3	C		34.5	C		34.5	C	
	WB	I	21	29	34.5	B	29.5	B		29.1	B		30.3	C		30.2	C	
Eastgate Mall to Miramar Mall	EB	I	16	28	27.2	C	30.9	D		30.3	D		30.8	D		30.8	D	
	WB	I	29	44	17.5	**E**	44.3	**E**		45.4	**E**		44.4	**E**		44.3	**E**	
Miramar Mall to Miramar Place	EB	I	34	34	27.0	C	34.2	D		33.9	D		34.2	D		34.2	D	
	WB	I	19	50	18.0	**E**	63.0	**F**		60.1	**F**		62.7	**F**		63.1	**F**	
Miramar Place to Camino Sante Fe	EB	I	36	41	30.3	C	42.3	C		42.3	C		42.5	C		42.5	C	
	WB	I	30	52	23.7	D	55.5	D		54.0	D		55.4	D		55.4	D	
Total	*EB*	*I*	*526*	*725*	*20.8*	**E**	*827.2*	**E**	**No**	*803.6*	**E**	**No**	*797.8*	**E**	**No**	*804.8*	**E**	**No**
	WB	*I*	*663*	*1074*	*14.0*	**F**	*1481.5*	**F**	**No**	*1513.9*	**F**	**No**	*1495.0*	**F**	**No**	*1477.6*	**F**	**No**

Notes:

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MID Peak-Hour Arterial Segment Analysis Summary La Jolla Village Drive

ROADWAY SEGMENT	DIRECTION	URBAN STREET CLASS	EXISTING				HORIZON YEAR WITH RECOMMENDED MITIGATIONS											
							Alt A Regents Bridge 6-lane Genesee			Alt B Regents Bridge 4-lane Genesee			Alt C No Bridge 6-lane Genesee			Alt D No Bridge 4-lane Genesee		
			TRAVEL TIME (S)		SIMULATION		SIMULATION			SIMULATION			SIMULATION			SIMULATION		
			FIELD	SIMULATION	SPEED (a)	LOS (b)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)
La Jolla Village Drive																		
Torrey Pines Rd to La Jolla Scenic Dr	EB	I	10	15	19.6	**E**	27.3	**F**		27.0	**F**		29.2	**F**		29.1	**F**	
	WB	I	9	14	21.2	D	26.9	**F**		26.8	**F**		27.1	**F**		27.1	**F**	
La Jolla Scenic Dr to Villa La Jolla Dr	EB	I	33	92	15.0	**F**	249.2	**F**		249.2	**F**		255.1	**F**		256.1	**F**	
	WB	I	47	7	25.8	D	9.1	**E**		9.0	D		9.4	**E**		9.2	**E**	
Villa La Jolla Dr to I-5 SB Off-Ramp	EB	I	28	29	22.9	D	28.7	D		28.7	D		28.6	D		28.6	D	
	WB	I	58	51	13.0	**F**	82.1	**F**		82.2	**F**		82.6	**F**		83.1	**F**	
I-5 SB Off-Ramp to I-5 NB Ramps	EB	I	35	29	22.9	D	32.2	**E**		32.6	**E**		32.9	**E**		33.0	**E**	
	WB	I	66	66	10.0	**F**	152.0	**F**		147.5	**F**		156.8	**F**		154.7	**F**	
I-5 NB Ramps to Lebon Dr	EB	I	53	42	23.6	D	46.7	D		47.0	**E**		45.9	D		46.5	D	
	WB	I	36	34	29.1	C	36.2	C		36.3	C		36.1	C		36.1	C	
Lebon Dr to Regents Rd	EB	I	29	65	18.3	**E**	88.7	**F**		89.4	**F**		84.3	**F**		85.9	**F**	
	WB	I	29	38	31.1	C	59.1	**E**		59.7	**E**		61.2	**E**		61.1	**E**	
Regents Rd to Genesee Ave	EB	I	58	79	11.7	**F**	62.8	**F**		62.6	**F**		63.6	**F**		62.7	**F**	
	WB	I	39	48	19.2	**E**	58.2	**F**		58.1	**F**		57.3	**E**		57.5	**E**	
Genesee Ave to Executive Way	EB	I	40	48	19.8	**E**	55.0	**E**		54.9	**E**		55.5	**E**		55.3	**E**	
	WB	I	68	50	18.9	**E**	64.5	**F**		64.3	**F**		63.2	**F**		63.9	**F**	
Executive Way to Towne Center Dr	EB	I	16	23	21.8	D	29.0	**E**		29.6	**E**		31.2	**E**		30.7	**E**	
	WB	I	33	30	16.8	**E**	42.8	**F**		42.6	**F**		41.4	**F**		41.2	**F**	
Towne Center Dr to I-805 SB Ramps	EB	I	62	14	36.0	B	15.0	B		15.0	B		15.0	B		15.0	B	
	WB	I	80	39	22.2	D	41.6	**E**		41.7	**E**		41.6	**E**		41.6	**E**	
Total	*EB*	*I*	*364*	*435*	*18.4*	**E**	*634.6*	**F**	**No**	*660.3*	**F**	**No**	*641.3*	**F**	**No**	*642.9*	**F**	**No**
	WB	*I*	*465*	*377*	*19.0*	**E**	*572.5*	**F**	**No**	*562.0*	**F**	**No**	*570.2*	**F**	**No**	*569.0*	**F**	**No**

Notes:

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PM Peak-Hour Arterial Segment Analysis Summary La Jolla Village Drive

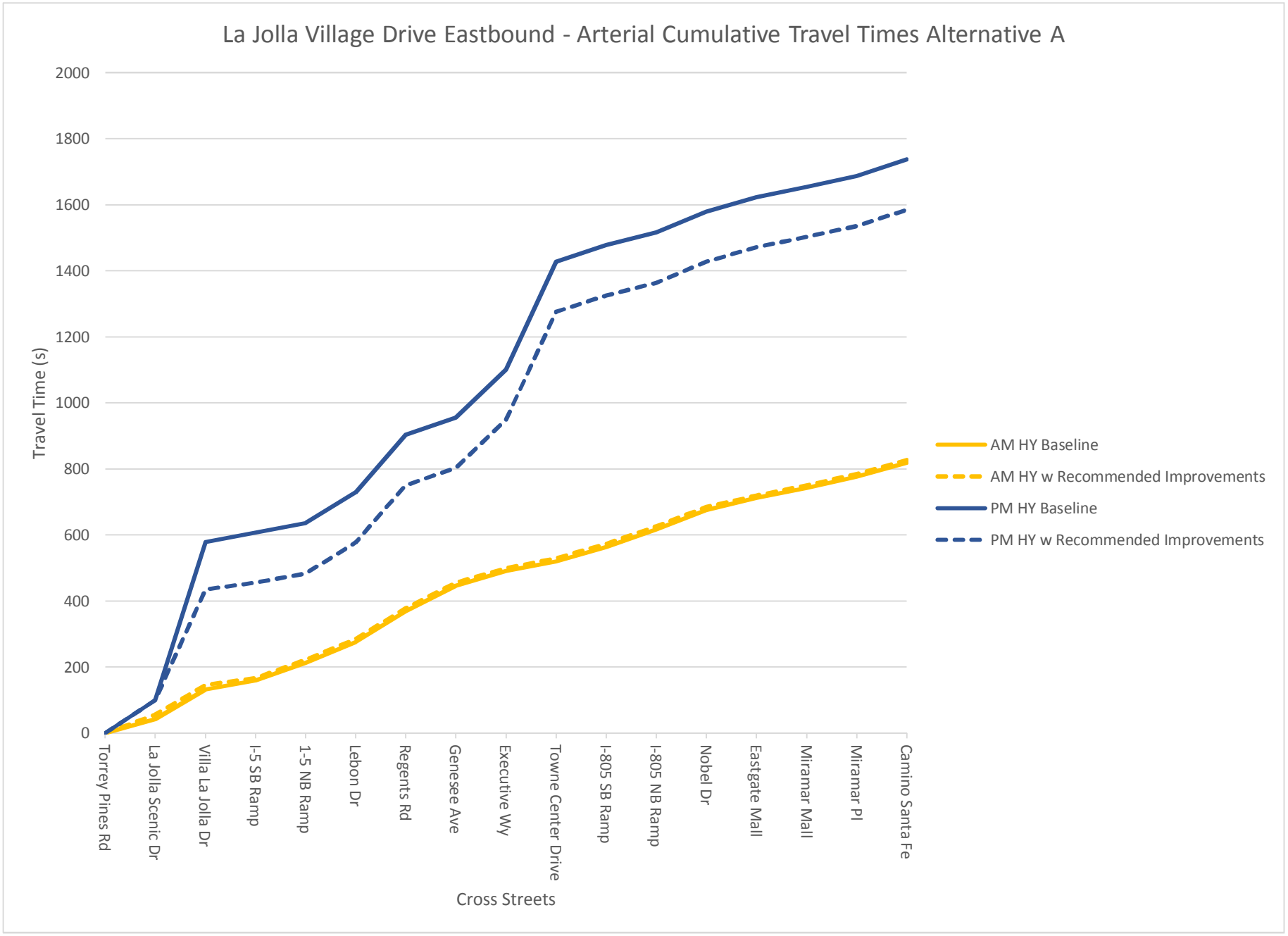
ROADWAY SEGMENT	DIRECTION	URBAN STREET CLASS	EXISTING				HORIZON YEAR WITH RECOMMENDED MITIGATIONS											
							Alt A Regents Bridge 6-lane Genesee			Alt B Regents Bridge 4-lane Genesee			Alt C No Bridge 6-lane Genesee			Alt D No Bridge 4-lane Genesee		
			TRAVEL TIME (S)		SIMULATION		SIMULATION			SIMULATION			SIMULATION			SIMULATION		
			FIELD	SIMULATION	SPEED (a)	LOS (b)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)
La Jolla Village Drive																		
Torrey Pines Rd to La Jolla Scenic Dr	EB	I	10	34	8.9	**F**	100.2	**F**		99.3	**F**		70.0	**F**		70.0	**F**	
	WB	I	11	21	14.7	**F**	23.5	**F**		23.5	**F**		23.5	**F**		23.5	**F**	
La Jolla Scenic Dr to Villa La Jolla Dr	EB	I	55	447	3.5	**F**	335.2	**F**		336.0	**F**		340.0	**F**		340.0	**F**	
	WB	I	39	46	34.3	B	47.3	C		47.4	C		45.2	B		45.2	B	
Villa La Jolla Dr to I-5 SB Off-Ramp	EB	I	25	24	28.0	C	20.7	C		20.8	C		24.3	C		24.3	C	
	WB	I	20	50	13.3	**F**	55.5	**F**		55.2	**F**		54.1	**F**		54.1	**F**	
I-5 SB Off-Ramp to I-5 NB Ramps	EB	I	13	28	23.9	D	27.7	D		27.8	D		29.5	D		29.5	D	
	WB	I	25	35	18.8	**E**	37.2	**E**		37.5	**E**		35.8	**E**		35.8	**E**	
I-5 NB Ramps to Lebon Dr	EB	I	42	68	14.4	**F**	93.0	**F**		90.4	**F**		95.7	**F**		95.7	**F**	
	WB	I	31	33	29.5	C	36.0	C		36.1	C		37.2	D		37.2	D	
Lebon Dr to Regents Rd	EB	I	73	79	15.0	**F**	174.1	**F**		174.7	**F**		182.7	**F**		182.7	**F**	
	WB	I	48	57	20.8	**E**	46.0	D		46.7	D		46.8	D		46.8	D	
Regents Rd to Genesee Ave	EB	I	27	50	18.5	**E**	51.8	**E**		51.8	**E**		43.7	D		43.7	D	
	WB	I	100	78	11.8	**F**	150.7	**F**		150.3	**F**		147.0	**F**		147.0	**F**	
Genesee Ave to Executive Way	EB	I	55	78	12.2	**F**	146.9	**F**		144.7	**F**		124.3	**F**		124.3	**F**	
	WB	I	38	48	20.0	**E**	79.7	**F**		79.6	**F**		67.5	**F**		67.5	**F**	
Executive Way to Towne Center Dr	EB	I	29	200	2.5	**F**	326.5	**F**		330.4	**F**		320.9	**F**		320.9	**F**	
	WB	I	15	58	8.6	**F**	71.7	**F**		67.2	**F**		50.3	**F**		50.3	**F**	
Towne Center Dr to I-805 SB Ramps	EB	I	29	47	29.2	C	49.5	C		51.0	C		61.0	D		61.0	D	
	WB	I	36	83	16.7	**E**	117.7	**F**		118.6	**F**		113.1	**F**		113.1	**F**	
I-805 SB Ramps to I-805 NB Ramps	EB	I	12	38	19.0	**E**	38.0	**E**		38.2	**E**		38.0	**E**		38.0	**E**	
	WB	I	16	29	24.7	D	34.7	**E**		35.6	**E**		34.2	**E**		34.2	**E**	
I-805 NB Ramps to Nobel Dr	EB	I	45	61	22.2	D	63.6	D		84.2	**E**		96.9	**F**		96.9	**F**	
	WB	I	38	54	25.1	D	54.6	D		54.6	D		55.2	D		55.2	D	
Miramar Road																		
Nobel Dr to Eastgate Mall	EB	I	22	47	21.2	D	43.7	D		43.8	D		43.2	D		43.2	D	
	WB	I	22	31	32.8	C	31.4	C		31.5	C		34.1	C		34.1	C	
Eastgate Mall to Miramar Mall	EB	I	15	27	28.0	C	31.6	D		30.5	D		31.6	D		31.6	D	
	WB	I	61	196	3.9	**F**	79.8	**F**		83.8	**F**		76.4	**F**		76.4	**F**	
Miramar Mall to Miramar Place	EB	I	25	31	29.3	C	32.6	C		32.4	C		32.6	C		32.6	C	
	WB	I	36	41	21.9	D	51.1	**E**		49.2	**E**		50.4	**E**		50.4	**E**	
Miramar Place to Camino Sante Fe	EB	I	69	54	23.0	D	49.8	D		49.7	D		50.4	D		50.4	D	
	WB	I	31	37	33.3	C	43.0	C		41.6	C		43.3	C		43.3	C	
Total	*EB*	*I*	*546*	*1313*	*11.5*	**F**	*1584.9*	**F**	**No**	*1605.7*	**F**	**No**	*1584.8*	**F**	**No**	*1584.8*	**F**	**No**
	WB	*I*	*567*	*897*	*16.8*	**E**	*959.9*	**F**	**No**	*958.4*	**F**	**No**	*914.1*	**E**	**No**	*914.1*	**E**	**No**

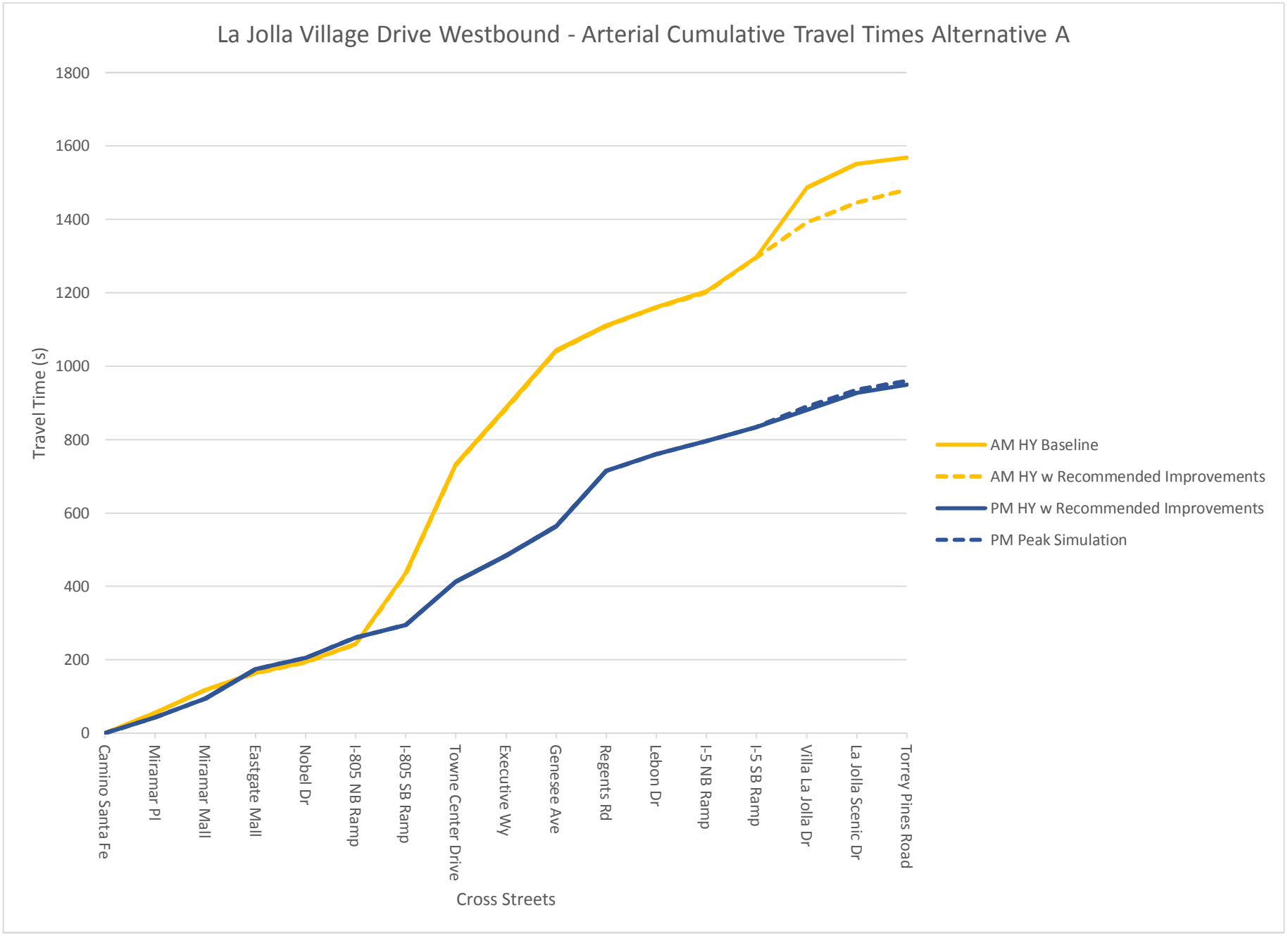
Notes:

Notes: (a) Travel time in miles per hour (mph).

(b) The arterial LOS is based on average through-vehicle travel speed for the segment or for the entire street under consideration and is influenced both by the number of signals per mile and by the intersection control delay.

(c) A significant impact resulted in a change from LOS D or better to LOS E or LOS F, or a decrease of speeds of more than 1.0 mph at LOS E and LOS F.


La Jolla Village Drive Eastbound - Arterial Cumulative Travel Times Alternative A
2000
1800
1600
1400
1200
1000
800
600
400
200
0
Travel Time (s)
Torrey Pines Rd
La Jolla Scenic Dr
Villa La Jolla Dr
I-5 SB Ramp
1-5 NB Ramp
Lebon Dr
Regents Rd
Genesee Ave
Executive Wy
Towne Center Drive
I-805 SB Ramp
I-805 NB Ramp
Nobel Dr
Eastgate Mall
Miramar Mall
Miramar Pl
Camino Santa Fe
Cross Streets
AM HY Baseline
AM HY w Recommended Improvements
PM HY Baseline
PM HY w Recommended Improvements


La Jolla Village Drive Westbound - Arterial Cumulative Travel Times Alternative A
1800
1600
1400
1200
1000
800
600
400
200
0
Travel Time (s)
Camino Santa Fe
Miramar Pl
Miramar Mall
Eastgate Mall
Nobel Dr
I-805 NB Ramp
I-805 SB Ramp
Towne Center Drive
Executive Wy
Genesee Ave
Regents Rd
Lebon Dr
I-5 NB Ramp
I-5 SB Ramp
Villa La Jolla Dr
La Jolla Scenic Dr
Torrey Pines Road
Cross Streets
AM HY Baseline
AM HY w Recommended Improvements
PM HY w Recommended Improvements
PM Peak Simulation

AM Peak-Hour Arterial Segment Analysis Summary Nobel Dr

ROADWAY SEGMENT	DIRECTION	URBAN STREET CLASS	EXISTING				HORIZON YEAR											
							Alt A Regents Bridge 6-lane Genesee			Alt B Regents Bridge 4-lane Genesee			Alt C No Bridge 6-lane Genesee			Alt D No Bridge 4-lane Genesee		
			TRAVEL TIME (S)		SIMULATION		SIMULATION			SIMULATION			SIMULATION			SIMULATION		
			FIELD	SIMULATION	SPEED (a)	LOS (b)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)
Nobel Drive																		
Villa La Jolla Dr to La Jolla Village Sq	EB		27.0	41.9	10.6	**F**	56.2	**F**		56.1	**F**		55.7	**F**		56.4	**F**	
	WB		35.0	25.2	17.6	D	28.8	**E**		28.7	**E**		28.7	**E**		28.7	**E**	
La Jolla Village Sq to I-5 SB On-Ramp	EB	II	11	11.7	18.8	D	11.9	D		11.9	D		11.9	D		12.2	D	
	WB	II	14	26.3	8.4	**F**	24.9	**F**		24.8	**F**		25.0	**F**		25.0	**F**	
I-5 SB On-Ramp to I-5 NB Off-Ramp	EB	II	11	16.8	15.7	**E**	17.2	**E**		17.5	**E**		18.1	**E**		19.2	**E**	
	WB	II	8	9.3	28.3	B	9.5	C		9.4	C		9.4	C		9.4	C	
I-5 NB Off-Ramp to Caminito Plaza Centro	EB	II	30	33.7	11.5	**F**	28.7	**E**		28.7	**E**		28.6	**E**		28.6	**E**	
	WB	II	14	28.4	13.7	**E**	31.6	**F**		30.7	**F**		33.2	**F**		35.2	**F**	
Caminito Plaza Centro to Lebon Dr	EB	II	42	43.6	11.0	**F**	46.7	**F**		46.7	**F**		46.5	**F**		46.6	**F**	
	WB	II	23	30.2	15.9	**E**	28.3	**E**		28.2	**E**		28.3	**E**		28.1	D	
Lebon Dr to Regents Rd	EB	II	52	54.8	22.6	C	65.6	D		65.7	D		64.0	D		64.2	D	
	WB	II	61	60.7	20.4	D	65.8	D		65.8	D		62.9	D		63.2	D	
Regents Rd to Costa Verde Blvd	EB	II	29	42.4	14.5	**E**	30.3	D		30.4	D		34.0	D		34.2	D	
	WB	II	49	54.9	11.2	**F**	34.3	D		34.4	D		33.5	D		33.5	D	
Coste Verde Blvd to Genesee Ave	EB	II	46	73.0	8.4	**F**	73.9	**F**		73.0	**F**		74.4	**F**		73.7	**F**	
	WB	II	23	46.0	13.4	**E**	59.6	**F**		59.9	**F**		59.1	**F**		59.5	**F**	
Genesee Ave to Lombard Pl	EB	II	24	24.3	17.0	D	25.3	**E**		25.3	**E**		25.3	**E**		25.3	**E**	
	WB	II	52	60.0	6.9	**F**	53.8	**F**		56.4	**F**		51.1	**F**		52.1	**F**	
Lombard Pl to Towne Center Dr	EB	II	32	45.5	17.8	D	51.3	**E**		51.3	**E**		51.3	**E**		51.3	**E**	
	WB	II	25	41.1	19.7	D	41.8	D		41.8	D		42.9	D		42.2	D	
Towne Center Dr to Shoreline Dr	EB	II	48	77.8	22.3	C	77.5	C		77.6	C		77.5	C		78.2	C	
	WB	II	72	70.0	24.8	C	75.5	C		75.4	C		75.6	C		74.8	C	
Shoreline Dr to Judicial Dr	EB	II	26	36.4	29.5	B	36.7	B		36.6	B		36.7	B		36.9	B	
	WB	II	34	58.0	18.5	D	59.8	D		59.7	D		59.8	D		60.4	D	
Judicial Dr to I-805 SB On-Ramp	EB	II	15	21.8	23.7	C	16.8	B		16.8	B		18.0	B		16.8	B	
	WB	II	19	21.8	23.7	C	24.4	D		24.8	D		24.9	D		25.1	D	
I-805 SB On-Ramp to I-805 NB Off-Ramp	EB	II	20	35.2	14.0	**E**	47.0	**F**		44.7	**F**		44.8	**F**		46.4	**F**	
	WB	II	17	15.1	32.7	B	15.2	B		15.2	B		15.2	B		15.2	B	
I-805 NB Off-Ramp to Avenue of Flags	EB	II	17	24.0	30.3	B	24.0	B		24.0	B		24.0	B		24.0	B	
	WB	II	30	31.4	23.2	C	36.3	D		35.8	D		35.8	D		36.6	D	
Avenue of Flags to Miramar Rd	EB	II	55	88.8	10.7	**F**	97.7	**F**		97.2	**F**		101.8	**F**		101.0	**F**	
	WB	II	25	28.1	33.8	B	28.0	B		28.0	B		28.0	B		28.0	B	
Total	*EB*	*II*	*458*	*671.7*	*16.6*	**E**	*706.8*	*B*	**No**	*703.5*	*B*	**No**	*712.6*	*B*	**No**	*715.0*	*B*	**No**
	WB	*II*	*466*	*606.5*	*17.2*	*D*	*617.6*	*B*	**No**	*619.0*	*B*	**No**	*613.4*	*B*	**No**	*617.0*	*B*	**No**

Notes: (a) Travel time in miles per hour (mph).

(b) The arterial LOS is based on average through-vehicle travel speed for the segment or for the entire street under consideration and is influenced both by the number of signals per mile and by the intersection control delay.

(c) A significant impact resulted in a change from LOS D or better to LOS E or LOS F, or a decrease of speeds of more than 1.0 mph at LOS E and LOS F.

MID Peak-Hour Arterial Segment Analysis Summary Nobel Dr

ROADWAY SEGMENT	DIRECTION	URBAN STREET CLASS	EXISTING				HORIZON YEAR											
							Alt A Regents Bridge 6-lane Genesee			Alt B Regents Bridge 4-lane Genesee			Alt C No Bridge 6-lane Genesee			Alt D No Bridge 4-lane Genesee		
			TRAVEL TIME (S)		SIMULATION		SIMULATION			SIMULATION			SIMULATION			SIMULATION		
			FIELD	SIMULATION	SPEED (a)	LOS (b)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)
Nobel Drive																		
Villa La Jolla Dr to La Jolla Village Sq	EB		24	44.4	10.0	**F**	53.1	**F**		53.1	**F**		53.7	**F**		53.7	**F**	
	WB		18	25.8	17.2	D	29.5	**E**		29.5	**E**		29.3	**E**		29.3	**E**	
La Jolla Village Sq to I-5 SB On-Ramp	EB	II	24	39.7	5.5	**F**	41.8	**F**		40.4	**F**		46.1	**F**		46.2	**F**	
	WB	II	18	23.8	9.3	**F**	35.8	**F**		35.6	**F**		37.1	**F**		38.7	**F**	
I-5 SB On-Ramp to I-5 NB Off-Ramp	EB	II	13	10.0	26.3	C	29.0	**F**		28.8	**F**		29.1	**F**		25.1	**F**	
	WB	II	9	9.5	27.7	C	11.3	C		11.3	C		11.1	C		11.0	C	
I-5 NB Off-Ramp to Caminito Plaza Centro	EB	II	12	16.9	22.4	C	28.5	**E**		28.2	**E**		28.8	**E**		29.2	**F**	
	WB	II	23	22.2	17.1	D	29.1	**E**		29.2	**F**		31.1	**F**		34.2	**F**	
Caminito Plaza Centro to Lebon Dr	EB	II	33	33.6	14.5	**E**	35.0	**E**		34.8	**E**		35.1	**E**		35.0	**E**	
	WB	II	23	26.0	18.8	D	30.5	**E**		30.2	**E**		30.6	**E**		30.2	**E**	
Lebon Dr to Regents Rd	EB	II	50	49.5	25.0	C	71.3	D		71.4	D		56.1	C		56.2	C	
	WB	II	54	54.9	22.6	C	58.9	D		58.8	D		57.8	D		57.9	D	
Regents Rd to Costa Verde Blvd	EB	II	31	51.1	12.0	**F**	32.7	D		32.8	D		34.3	D		34.3	D	
	WB	II	32	35.7	17.2	D	38.2	**E**		38.3	**E**		31.5	D		31.9	D	
Coste Verde Blvd to Genesee Ave	EB	II	50	63.7	9.7	**F**	65.4	**F**		62.3	**F**		68.4	**F**		68.6	**F**	
	WB	II	38	47.3	13.0	**E**	62.9	**F**		63.1	**F**		62.4	**F**		62.9	**F**	
Genesee Ave to Lombard Pl	EB	II	14	24.8	17.5	D	27.2	**E**		27.2	**E**		25.7	**E**		25.8	**E**	
	WB	II	52	74.4	5.8	**F**	70.5	**F**		70.5	**F**		63.8	**F**		68.0	**F**	
Lombard Pl to Towne Center Dr	EB	II	23	38.5	20.5	D	44.2	D		44.2	D		44.1	D		45.8	D	
	WB	II	39	47.8	16.5	**E**	56.1	**E**		56.0	**E**		56.4	**E**		56.8	**E**	
Towne Center Dr to Shoreline Dr	EB	II	44	52.9	32.8	B	62.4	C		62.5	C		63.1	C		63.1	C	
	WB	II	72	66.0	26.3	C	70.1	C		70.0	C		70.1	C		69.9	C	
Shoreline Dr to Judicial Dr	EB	II	33	35.4	30.4	B	36.9	B		36.8	B		36.8	B		36.8	B	
	WB	II	31	42.1	25.5	C	52.8	D		52.8	D		53.9	D		54.1	D	
Judicial Dr to I-805 SB On-Ramp	EB	II	19	22.1	23.4	C	21.5	C		21.5	C		22.8	C		19.8	C	
	WB	II	17	26.0	19.9	D	27.0	D		28.0	D		28.0	D		28.1	D	
I-805 SB On-Ramp to I-805 NB Off-Ramp	EB	II	28	30.1	16.4	**E**	32.2	**E**		31.2	**E**		31.2	**E**		31.6	**E**	
	WB	II	12	15.1	32.7	B	18.3	C		18.2	C		18.2	C		18.8	C	
I-805 NB Off-Ramp to Avenue of Flags	EB	II	20	28.3	25.8	C	31.6	C		31.5	C		32.5	C		32.6	C	
	WB	II	26	29.1	25.1	C	36.4	D		35.1	D		35.4	D		35.7	D	
Avenue of Flags to Miramar Rd	EB	II	46	73.6	12.8	**F**	77.7	**F**		77.5	**F**		81.7	**F**		81.6	**F**	
	WB	II	25	29.7	31.8	B	30.4	B		30.3	B		30.3	B		30.3	B	
Total	*EB*	*II*	*440*	*614.6*	*18.4*	*D*	*690.5*	*B*	**No**	*684.2*	*B*	**No**	*689.5*	*B*	**No**	*685.4*	*B*	**No**
	WB	*II*	*471*	*575.4*	*19.1*	*D*	*657.8*	*B*	**No**	*656.9*	*B*	**No**	*647.0*	*B*	**No**	*657.8*	*B*	**No**

Notes: (a) Travel time in miles per hour (mph).

(b) The arterial LOS is based on average through-vehicle travel speed for the segment or for the entire street under consideration and is influenced both by the number of signals per mile and by the intersection control delay.

(c) A significant impact resulted in a change from LOS D or better to LOS E or LOS F, or a decrease of speeds of more than 1.0 mph at LOS E and LOS F.

PM Peak-Hour Arterial Segment Analysis Summary Nobel Dr

ROADWAY SEGMENT	DIRECTION	URBAN STREET CLASS	EXISTING				HORIZON YEAR											
							Alt A Regents Bridge 6-lane Genesee			Alt B Regents Bridge 4-lane Genesee			Alt C No Bridge 6-lane Genesee			Alt D No Bridge 4-lane Genesee		
			TRAVEL TIME (S)		SIMULATION		SIMULATION			SIMULATION			SIMULATION			SIMULATION		
			FIELD	SIMULATION	SPEED (a)	LOS (b)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)
Nobel Drive																		
Villa La Jolla Dr to La Jolla Village Sq	EB		37	49.0	9.1	**F**	145.0	**F**		140.6	**F**		197.8	**F**		198.6	**F**	
	WB		34	27.1	16.4	**E**	29.8	**E**		29.7	**E**		29.7	**E**		29.6	**E**	
La Jolla Village Sq to I-5 SB On-Ramp	EB	II	37	31.1	7.1	**F**	265.1	**F**		264.0	**F**		281.6	**F**		293.0	**F**	
	WB	II	34	28.6	7.7	**F**	38.3	**F**		39.0	**F**		29.5	**F**		28.4	**F**	
I-5 SB On-Ramp to I-5 NB Off-Ramp	EB	II	9	10.5	25.1	C	11.3	C		23.6	**F**		19.7	**E**		21.2	**F**	
	WB	II	9	9.7	27.1	C	13.5	D		13.4	D		10.2	C		10.0	C	
I-5 NB Off-Ramp to Caminito Plaza Centro	EB	II	37	20.1	19.3	D	24.0	**E**		22.5	D		21.9	D		20.8	D	
	WB	II	26	36.0	10.8	**F**	94.1	**F**		106.1	**F**		44.3	**F**		44.5	**F**	
Caminito Plaza Centro to Lebon Dr	EB	II	42	47.5	10.1	**F**	51.8	**F**		52.0	**F**		52.1	**F**		52.0	**F**	
	WB	II	19	28.1	17.1	D	34.8	**E**		34.4	**E**		35.0	**E**		34.5	**E**	
Lebon Dr to Regents Rd	EB	II	85	81.3	15.2	**E**	100.4	**F**		100.6	**F**		106.2	**F**		111.3	**F**	
	WB	II	58	62.6	19.8	D	67.3	D		67.3	D		64.5	D		64.6	D	
Regents Rd to Costa Verde Blvd	EB	II	30	61.4	10.0	**F**	29.0	D		28.9	D		27.0	C		27.3	C	
	WB	II	52	81.0	7.6	**F**	82.0	**F**		83.6	**F**		151.6	**F**		163.1	**F**	
Coste Verde Blvd to Genesee Ave	EB	II	54	69.5	8.8	**F**	85.7	**F**		82.4	**F**		88.3	**F**		88.8	**F**	
	WB	II	18	69.1	8.9	**F**	31.5	D		33.5	D		29.9	D		30.6	D	
Genesee Ave to Lombard Pl	EB	II	26	24.0	17.6	D	24.3	D		24.3	D		24.2	D		24.0	D	
	WB	II	71	78.4	5.4	**F**	85.9	**F**		88.7	**F**		65.4	**F**		68.2	**F**	
Lombard Pl to Towne Center Dr	EB	II	48	57.6	13.9	**E**	73.5	**F**		81.7	**F**		73.9	**F**		74.7	**F**	
	WB	II	50	52.4	15.2	**E**	85.9	**F**		83.7	**F**		87.0	**F**		81.8	**F**	
Towne Center Dr to Shoreline Dr	EB	II	43	59.0	29.4	B	69.3	C		69.3	C		69.3	C		69.7	C	
	WB	II	72	73.9	23.5	C	88.6	D		99.7	D		89.7	D		89.2	D	
Shoreline Dr to Judicial Dr	EB	II	32	38.1	28.2	B	42.3	C		42.2	C		42.3	C		42.4	C	
	WB	II	39	51.2	21.0	D	71.4	**E**		71.2	**E**		71.4	**E**		73.9	**E**	
Judicial Dr to I-805 SB On-Ramp	EB	II	19	22.8	22.6	C	32.7	**E**		32.8	**E**		33.0	**E**		31.4	**E**	
	WB	II	23	31.6	16.3	**E**	40.5	**F**		40.4	**F**		40.7	**F**		41.6	**F**	
I-805 SB On-Ramp to I-805 NB Off-Ramp	EB	II	34	32.7	15.1	**E**	40.8	**F**		36.6	**E**		35.7	**E**		37.6	**E**	
	WB	II	12	15.1	32.7	B	15.2	B		15.2	B		15.2	B		15.2	B	
I-805 NB Off-Ramp to Avenue of Flags	EB	II	21	24.0	30.0	B	24.9	B		24.9	B		24.8	B		24.9	B	
	WB	II	23	30.9	23.3	C	45.0	**E**		40.6	D		40.0	D		41.5	D	
Avenue of Flags to Miramar Rd	EB	II	37	102.3	9.4	**F**	102.8	**F**		103.7	**F**		105.4	**F**		105.1	**F**	
	WB	II	25	28.4	33.7	B	29.1	B		29.1	B		29.1	B		29.1	B	
Total	*EB*	*II*	*554*	*730.9*	*15.4*	**E**	*1122.9*	*D*	**No**	*1130.1*	*D*	**No**	*1203.2*	*D*	**No**	*1222.8*	*D*	**No**
	WB	*II*	*531*	*704.1*	*14.8*	**E**	*852.9*	*C*	**No**	*875.6*	*C*	**No**	*833.2*	*C*	**No**	*845.8*	*C*	**No**

Notes: (a) Travel time in miles per hour (mph).

(b) The arterial LOS is based on average through-vehicle travel speed for the segment or for the entire street under consideration and is influenced both by the number of signals per mile and by the intersection control delay.

(c) A significant impact resulted in a change from LOS D or better to LOS E or LOS F, or a decrease of speeds of more than 1.0 mph at LOS E and LOS F.

AM Peak-Hour Arterial Segment Analysis Summary Nobel Dr

ROADWAY SEGMENT	DIRECTION	URBAN STREET CLASS	EXISTING				HORIZON YEAR WITH RECOMMENDED MITIGATIONS											
							Alt A Regents Bridge 6-lane Genesee			Alt B Regents Bridge 4-lane Genesee			Alt C No Bridge 6-lane Genesee			Alt D No Bridge 4-lane Genesee		
			TRAVEL TIME (S)		SIMULATION		SIMULATION			SIMULATION			SIMULATION			SIMULATION		
			FIELD	SIMULATION	SPEED (a)	LOS (b)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)
Nobel Drive																		
Villa La Jolla Dr to La Jolla Village Sq	EB		27.0	41.9	10.6	**F**	56.2	**F**		56.1	**F**		55.7	**F**		56.4	**F**	
	WB		35.0	25.2	17.6	D	28.8	**E**		28.7	**E**		28.7	**E**		28.7	**E**	
La Jolla Village Sq to I-5 SB On-Ramp	EB	II	11	11.7	18.8	D	11.9	D		11.9	D		11.9	D		12.2	D	
	WB	II	14	26.3	8.4	**F**	24.9	**F**		24.8	**F**		25.0	**F**		25.0	**F**	
I-5 SB On-Ramp to I-5 NB Off-Ramp	EB	II	11	16.8	15.7	**E**	17.2	**E**		17.5	**E**		18.1	**E**		19.2	**E**	
	WB	II	8	9.3	28.3	B	9.5	C		9.4	C		9.4	C		9.4	C	
I-5 NB Off-Ramp to Caminito Plaza Centro	EB	II	30	33.7	11.5	**F**	28.7	**E**		28.7	**E**		28.6	**E**		28.6	**E**	
	WB	II	14	28.4	13.7	**E**	31.6	**F**		30.7	**F**		33.2	**F**		35.2	**F**	
Caminito Plaza Centro to Lebon Dr	EB	II	42	43.6	11.0	**F**	46.7	**F**		46.7	**F**		46.5	**F**		46.6	**F**	
	WB	II	23	30.2	15.9	**E**	28.3	**E**		28.2	**E**		28.3	**E**		28.1	D	
Lebon Dr to Regents Rd	EB	II	52	54.8	22.6	C	65.6	D		65.7	D		64.0	D		64.2	D	
	WB	II	61	60.7	20.4	D	65.8	D		65.8	D		62.9	D		63.2	D	
Regents Rd to Costa Verde Blvd	EB	II	29	42.4	14.5	**E**	30.3	D		30.4	D		34.0	D		34.2	D	
	WB	II	49	54.9	11.2	**F**	34.3	D		34.4	D		33.5	D		33.5	D	
Coste Verde Blvd to Genesee Ave	EB	II	46	73.0	8.4	**F**	73.9	**F**		73.8	**F**		74.4	**F**		73.7	**F**	
	WB	II	23	46.0	13.4	**E**	59.6	**F**		59.9	**F**		59.1	**F**		59.5	**F**	
Genesee Ave to Lombard Pl	EB	II	24	24.3	17.0	D	25.3	**E**		25.3	**E**		25.3	**E**		25.3	**E**	
	WB	II	52	60.0	6.9	**F**	53.8	**F**		56.7	**F**		51.1	**F**		52.1	**F**	
Lombard Pl to Towne Center Dr	EB	II	32	45.5	17.8	D	51.3	**E**		51.3	**E**		51.3	**E**		51.3	**E**	
	WB	II	25	41.1	19.7	D	41.8	D		41.8	D		42.9	D		42.2	D	
Towne Center Dr to Shoreline Dr	EB	II	48	77.8	22.3	C	77.5	C		77.6	C		77.5	C		78.2	C	
	WB	II	72	70.0	24.8	C	75.5	C		75.4	C		75.6	C		74.8	C	
Shoreline Dr to Judicial Dr	EB	II	26	36.4	29.5	B	36.7	B		36.6	B		36.7	B		36.9	B	
	WB	II	34	58.0	18.5	D	59.8	D		59.7	D		59.8	D		60.4	D	
Judicial Dr to I-805 SB On-Ramp	EB	II	15	21.8	23.7	C	16.8	B		16.8	B		18.0	B		16.8	B	
	WB	II	19	21.8	23.7	C	24.4	D		24.8	D		24.9	D		25.1	D	
I-805 SB On-Ramp to I-805 NB Off-Ramp	EB	II	20	35.2	14.0	**E**	47.0	**F**		44.7	**F**		44.8	**F**		46.4	**F**	
	WB	II	17	15.1	32.7	B	15.2	B		15.2	B		15.2	B		15.2	B	
I-805 NB Off-Ramp to Avenue of Flags	EB	II	17	24.0	30.3	B	24.0	B		24.0	B		24.0	B		24.0	B	
	WB	II	30	31.4	23.2	C	36.3	D		35.8	D		35.8	D		36.6	D	
Avenue of Flags to Miramar Rd	EB	II	55	88.8	10.7	**F**	97.7	**F**		97.2	**F**		101.8	**F**		101.0	**F**	
	WB	II	25	28.1	33.8	B	28.0	B		28.0	B		28.0	B		28.0	B	
Total	*EB*	*II*	*458*	*671.7*	*16.6*	**E**	*706.8*	**E**	**No**	*704.3*	*B*	**No**	*712.6*	*B*	**No**	*715.0*	*B*	**No**
	WB	*II*	*466*	*606.5*	*17.2*	*D*	*617.6*	*D*	**No**	*619.3*	*B*	**No**	*613.4*	*B*	**No**	*617.0*	*B*	**No**

Notes: (a) Travel time in miles per hour (mph).

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(c) A significant impact resulted in a change from LOS D or better to LOS E or LOS F, or a decrease of speeds of more than 1.0 mph at LOS E and LOS F.

MID Peak-Hour Arterial Segment Analysis Summary Nobel Dr

ROADWAY SEGMENT	DIRECTION	URBAN STREET CLASS	EXISTING				HORIZON YEAR WITH RECOMMENDED MITIGATIONS											
							Alt A Regents Bridge 6-lane Genesee			Alt B Regents Bridge 4-lane Genesee			Alt C No Bridge 6-lane Genesee			Alt D No Bridge 4-lane Genesee		
			TRAVEL TIME (S)		SIMULATION		SIMULATION			SIMULATION			SIMULATION			SIMULATION		
			FIELD	SIMULATION	SPEED (a)	LOS (b)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)
Nobel Drive																		
Villa La Jolla Dr to La Jolla Village Sq	EB		24	44.4	10.0	**F**	53.1	**F**		53.1	**F**		53.7	**F**		53.7	**F**	
	WB		18	25.8	17.2	D	-	-		29.5	**E**		29.3	**E**		29.3	**E**	
La Jolla Village Sq to I-5 SB On-Ramp	EB	II	24	39.7	5.5	**F**	41.8	**F**		40.4	**F**		46.1	**F**		46.2	**F**	
	WB	II	18	23.8	9.3	**F**	35.8	**F**		35.6	**F**		37.1	**F**		38.7	**F**	
I-5 SB On-Ramp to I-5 NB Off-Ramp	EB	II	13	10.0	26.3	C	29.0	**F**		28.8	**F**		29.1	**F**		25.1	**F**	
	WB	II	9	9.5	27.7	C	11.3	C		11.3	C		11.1	C		11.0	C	
I-5 NB Off-Ramp to Caminito Plaza Centro	EB	II	12	16.9	22.4	C	26.7	**E**		26.4	**E**		28.8	**E**		29.2	**F**	
	WB	II	23	22.2	17.1	D	29.1	**E**		29.2	**F**		31.1	**F**		34.2	**F**	
Caminito Plaza Centro to Lebon Dr	EB	II	33	33.6	14.5	**E**	35.0	**E**		34.8	**E**		35.1	**E**		35.0	**E**	
	WB	II	23	26.0	18.8	D	29.3	**E**		29.0	**E**		30.6	**E**		30.2	**E**	
Lebon Dr to Regents Rd	EB	II	50	49.5	25.0	C	71.3	D		71.4	D		56.1	C		56.2	C	
	WB	II	54	54.9	22.6	C	58.9	D		58.8	D		57.8	D		57.9	D	
Regents Rd to Costa Verde Blvd	EB	II	31	51.1	12.0	**F**	32.7	D		32.8	D		34.3	D		34.3	D	
	WB	II	32	35.7	17.2	D	38.2	**E**		38.3	**E**		31.5	D		31.9	D	
Coste Verde Blvd to Genesee Ave	EB	II	50	63.7	9.7	**F**	65.4	**F**		62.3	**F**		68.4	**F**		68.6	**F**	
	WB	II	38	47.3	13.0	**E**	62.9	**F**		63.1	**F**		62.4	**F**		62.9	**F**	
Genesee Ave to Lombard Pl	EB	II	14	24.8	17.5	D	27.1	**E**		27.2	**E**		25.7	**E**		25.8	**E**	
	WB	II	52	74.4	5.8	**F**	70.5	**F**		70.5	**F**		63.8	**F**		68.0	**F**	
Lombard Pl to Towne Center Dr	EB	II	23	38.5	20.5	D	44.2	D		44.2	D		44.1	D		45.8	D	
	WB	II	39	47.8	16.5	**E**	56.1	**E**		56.0	**E**		56.4	**E**		56.8	**E**	
Towne Center Dr to Shoreline Dr	EB	II	44	52.9	32.8	B	62.4	C		62.5	C		63.1	C		63.1	C	
	WB	II	72	66.0	26.3	C	70.1	C		70.0	C		70.1	C		69.9	C	
Shoreline Dr to Judicial Dr	EB	II	33	35.4	30.4	B	36.9	B		36.8	B		36.8	B		36.8	B	
	WB	II	31	42.1	25.5	C	52.8	D		52.8	D		53.9	D		54.1	D	
Judicial Dr to I-805 SB On-Ramp	EB	II	19	22.1	23.4	C	21.5	C		21.5	C		22.8	C		19.8	C	
	WB	II	17	26.0	19.9	D	27.0	D		28.0	D		28.0	D		28.1	D	
I-805 SB On-Ramp to I-805 NB Off-Ramp	EB	II	28	30.1	16.4	**E**	32.2	**E**		31.2	**E**		31.2	**E**		31.6	**E**	
	WB	II	12	15.1	32.7	B	18.3	C		18.2	C		18.2	C		18.8	C	
I-805 NB Off-Ramp to Avenue of Flags	EB	II	20	28.3	25.8	C	31.6	C		31.5	C		32.5	C		32.6	C	
	WB	II	26	29.1	25.1	C	36.4	D		35.1	D		35.4	D		35.7	D	
Avenue of Flags to Miramar Rd	EB	II	46	73.6	12.8	**F**	77.7	**F**		77.5	**F**		81.7	**F**		81.6	**F**	
	WB	II	25	29.7	31.8	B	30.4	B		30.3	B		30.3	B		30.3	B	
Total	*EB*	*II*	*440*	*614.6*	*18.4*	*D*	*635.5*	**E**	**Yes**	*682.4*	*B*	**No**	*689.5*	*B*	**No**	*685.4*	*B*	**No**
	WB	*II*	*471*	*575.4*	*19.1*	*D*	*626.2*	**E**	**Yes**	*655.7*	*B*	**No**	*647.0*	*B*	**No**	*657.8*	*B*	**No**

Notes: (a) Travel time in miles per hour (mph).

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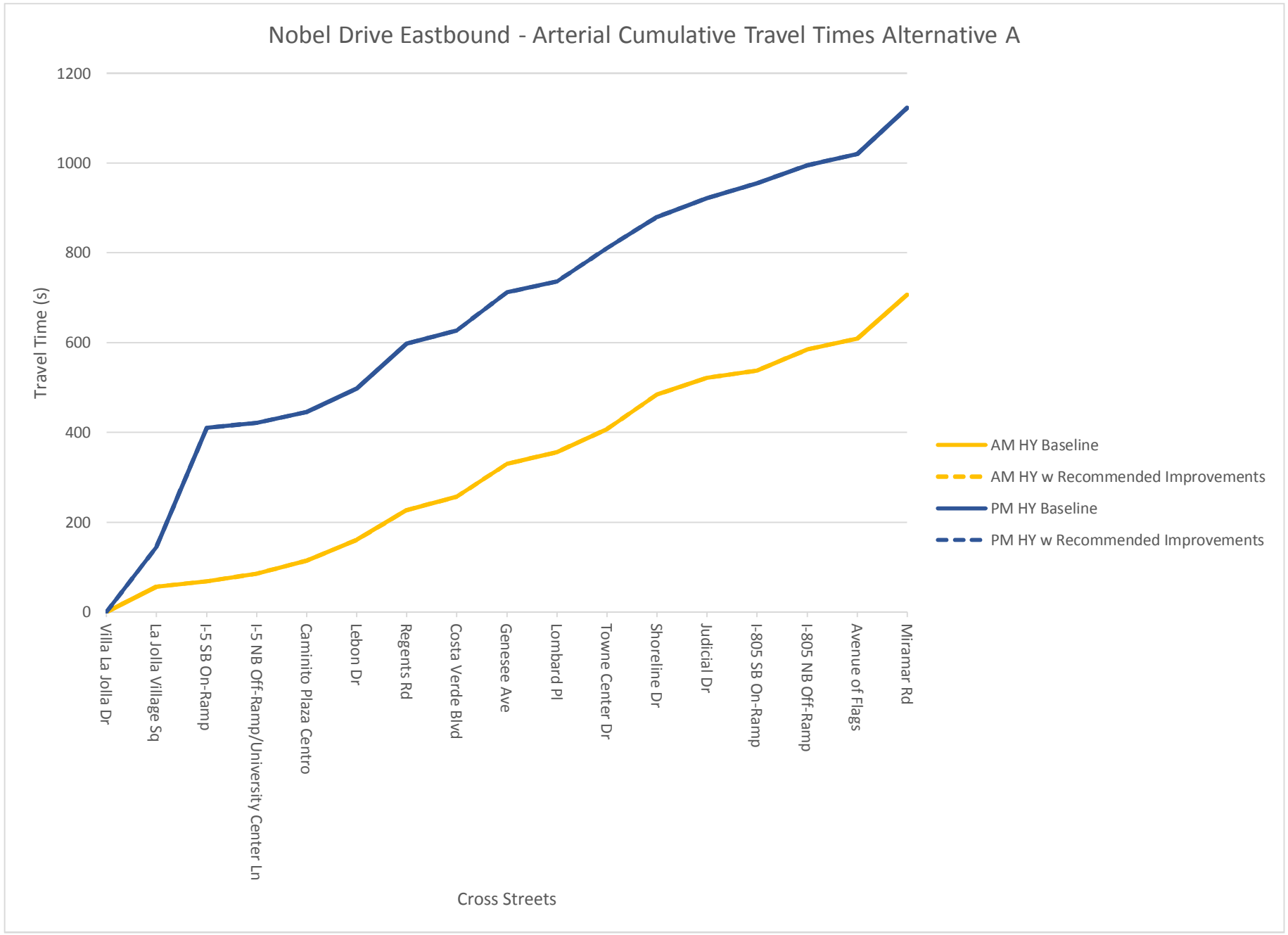
PM Peak-Hour Arterial Segment Analysis Summary Nobel Dr

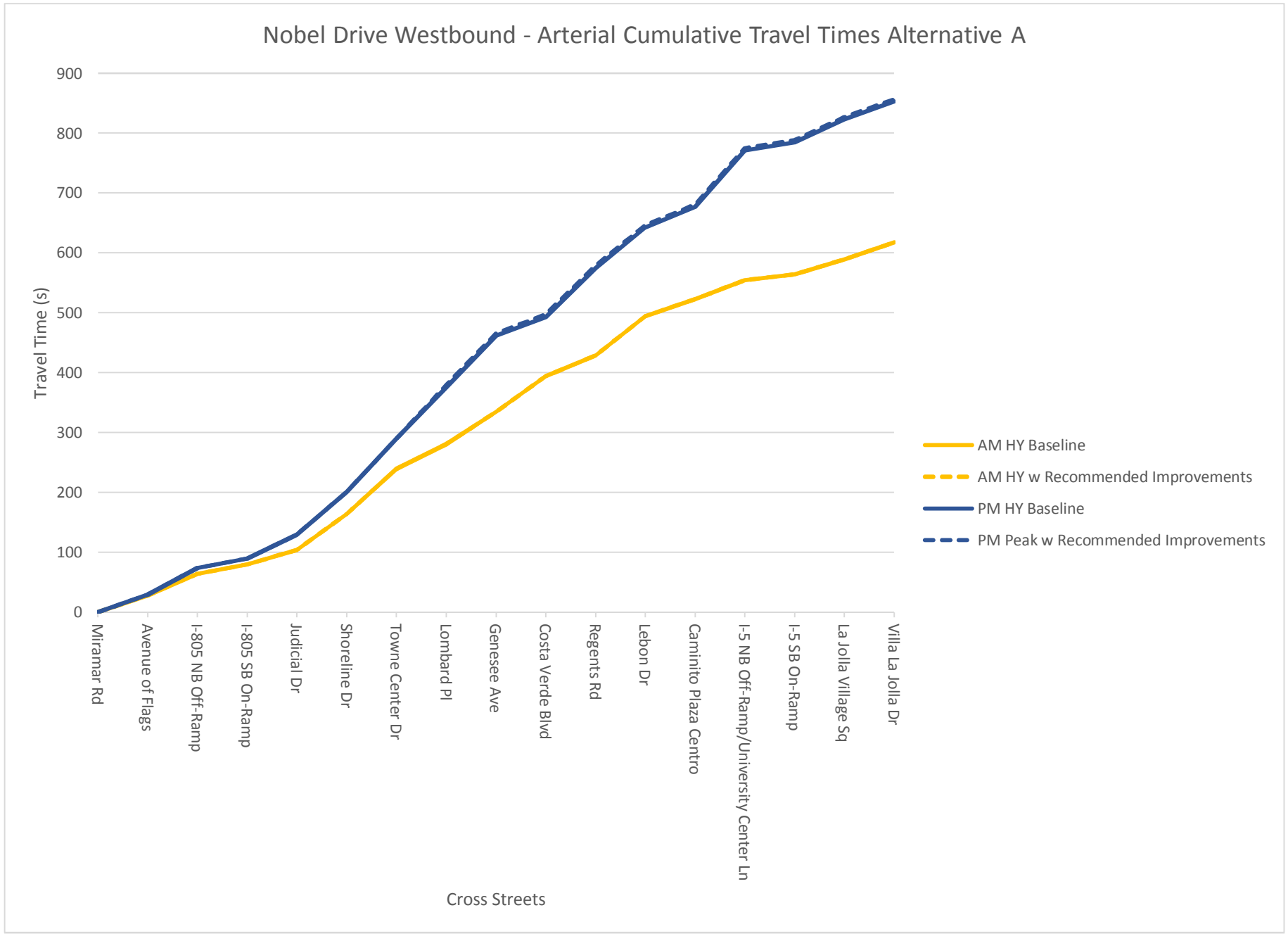
ROADWAY SEGMENT	DIRECTION	URBAN STREET CLASS	EXISTING				HORIZON YEAR WITH RECOMMENDED MITIGATIONS											
							Alt A Regents Bridge 6-lane Genesee			Alt B Regents Bridge 4-lane Genesee			Alt C No Bridge 6-lane Genesee			Alt D No Bridge 4-lane Genesee		
			TRAVEL TIME (S)		SIMULATION		SIMULATION			SIMULATION			SIMULATION			SIMULATION		
			FIELD	SIMULATION	SPEED (a)	LOS (b)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)
Nobel Drive																		
Villa La Jolla Dr to La Jolla Village Sq	EB		37	49.0	9.1	**F**	145.0	**F**		140.6	**F**		197.8	**F**		198.6	**F**	
	WB		34	27.1	16.4	**E**	29.8	**E**		29.7	**E**		29.7	**E**		29.6	**E**	
La Jolla Village Sq to I-5 SB On-Ramp	EB	II	37	31.1	7.1	**F**	265.1	**F**		264.0	**F**		281.6	**F**		293.0	**F**	
	WB	II	34	28.6	7.7	**F**	38.3	**F**		38.4	**F**		29.5	**F**		28.4	**F**	
I-5 SB On-Ramp to I-5 NB Off-Ramp	EB	II	9	10.5	25.1	C	11.3	C		16.1	**E**		19.7	**E**		21.2	**F**	
	WB	II	9	9.7	27.1	C	13.5	D		13.5	D		10.2	C		10.0	C	
I-5 NB Off-Ramp to Caminito Plaza Centro	EB	II	37	20.1	19.3	D	24.0	**E**		23.9	**E**		21.9	D		20.8	D	
	WB	II	26	36.0	10.8	**F**	94.1	**F**		98.3	**F**		44.3	**F**		44.5	**F**	
Caminito Plaza Centro to Lebon Dr	EB	II	42	47.5	10.1	**F**	51.8	**F**		52.0	**F**		52.1	**F**		52.0	**F**	
	WB	II	19	28.1	17.1	D	34.8	**E**		34.4	**E**		35.0	**E**		34.5	**E**	
Lebon Dr to Regents Rd	EB	II	85	81.3	15.2	**E**	100.4	**F**		100.6	**F**		106.2	**F**		111.3	**F**	
	WB	II	58	62.6	19.8	D	67.3	D		67.3	D		64.5	D		64.6	D	
Regents Rd to Costa Verde Blvd	EB	II	30	61.4	10.0	**F**	29.0	D		28.9	D		27.0	C		27.3	C	
	WB	II	52	81.0	7.6	**F**	82.0	**F**		82.4	**F**		151.6	**F**		163.1	**F**	
Coste Verde Blvd to Genesee Ave	EB	II	54	69.5	8.8	**F**	85.7	**F**		85.6	**F**		88.3	**F**		88.8	**F**	
	WB	II	18	69.1	8.9	**F**	31.5	D		48.5	**F**		29.9	D		30.6	D	
Genesee Ave to Lombard Pl	EB	II	26	24.0	17.6	D	24.4	D		24.3	D		24.2	D		24.0	D	
	WB	II	71	78.4	5.4	**F**	85.9	**F**		88.7	**F**		65.4	**F**		68.2	**F**	
Lombard Pl to Towne Center Dr	EB	II	48	57.6	13.9	**E**	73.5	**F**		81.7	**F**		73.9	**F**		74.7	**F**	
	WB	II	50	52.4	15.2	**E**	89.7	**F**		83.7	**F**		87.0	**F**		81.8	**F**	
Towne Center Dr to Shoreline Dr	EB	II	43	59.0	29.4	B	69.3	C		69.3	C		69.3	C		69.7	C	
	WB	II	72	73.9	23.5	C	88.6	D		99.7	D		89.7	D		89.2	D	
Shoreline Dr to Judicial Dr	EB	II	32	38.1	28.2	B	42.3	C		42.2	C		42.3	C		42.4	C	
	WB	II	39	51.2	21.0	D	71.4	**E**		71.2	**E**		71.4	**E**		73.9	**E**	
Judicial Dr to I-805 SB On-Ramp	EB	II	19	22.8	22.6	C	32.7	**E**		32.8	**E**		33.0	**E**		31.4	**E**	
	WB	II	23	31.6	16.3	**E**	40.5	**F**		40.4	**F**		40.7	**F**		41.6	**F**	
I-805 SB On-Ramp to I-805 NB Off-Ramp	EB	II	34	32.7	15.1	**E**	40.8	**F**		36.6	**E**		35.7	**E**		37.6	**E**	
	WB	II	12	15.1	32.7	B	15.2	B		15.2	B		15.2	B		15.2	B	
I-805 NB Off-Ramp to Avenue of Flags	EB	II	21	24.0	30.0	B	24.9	B		24.9	B		24.8	B		24.9	B	
	WB	II	23	30.9	23.3	C	45.0	**E**		40.6	D		40.0	D		41.5	D	
Avenue of Flags to Miramar Rd	EB	II	37	102.3	9.4	**F**	102.8	**F**		103.7	**F**		105.4	**F**		105.1	**F**	
	WB	II	25	28.4	33.7	B	29.1	B		29.1	B		29.1	B		29.1	B	
Total	*EB*	*II*	*554*	*730.9*	*15.4*	**E**	*1123.0*	*D*	**No**	*1127.2*	*D*	**No**	*1203.2*	*D*	**No**	*1222.8*	*D*	**No**
	WB	*II*	*531*	*704.1*	*14.8*	**E**	*856.7*	**F**	**No**	*881.1*	*C*	**No**	*833.2*	*C*	**No**	*845.8*	*C*	**No**

Notes: (a) Travel time in miles per hour (mph).

(b) The arterial LOS is based on average through-vehicle travel speed for the segment or for the entire street under consideration and is influenced both by the number of signals per mile and by the intersection control delay.

(c) A significant impact resulted in a change from LOS D or better to LOS E or LOS F, or a decrease of speeds of more than 1.0 mph at LOS E and LOS F.


Nobel Drive Eastbound - Arterial Cumulative Travel Times Alternative A
Travel Time (s)
1200
1000
800
600
400
200
0
Villa La Jolla Dr
La Jolla Village Sq
I-5 SB On-Ramp
I-5 NB Off-Ramp/University Center Ln
Caminito Plaza Centro
Lebon Dr
Regents Rd
Costa Verde Blvd
Genesee Ave
Lombard Pl
Towne Center Dr
Shoreline Dr
Judicial Dr
I-805 SB On-Ramp
I-805 NB Off-Ramp
Avenue of Flags
Miramar Rd
Cross Streets
AM HY Baseline
AM HY w Recommended Improvements
PM HY Baseline
PM HY w Recommended Improvements


Nobel Drive Westbound - Arterial Cumulative Travel Times Alternative A
Travel Time (s)
900
800
700
600
500
400
300
200
100
0
Miramar Rd
Avenue of Flags
I-805 NB Off-Ramp
I-805 SB On-Ramp
Judicial Dr
Shoreline Dr
Towne Center Dr
Lombard Pl
Genesee Ave
Costa Verde Blvd
Regents Rd
Lebon Dr
Caminito Plaza Centro
I-5 NB Off-Ramp/University Center Ln
I-5 SB On-Ramp
La Jolla Village Sq
Villa La Jolla Dr
Cross Streets
AM HY Baseline
AM HY w Recommended Improvements
PM HY Baseline
PM Peak w Recommended Improvements

AM Peak-Hour Arterial Segment Analysis Summary Regents Road

ROADWAY SEGMENT	DIRECTION	URBAN STREET CLASS	HORIZON YEAR			
			Alt A Regents Bridge 6-lane Genesee		Alt B Regents Bridge 4-lane Genesee	
			SIMULATION		SIMULATION	
			TIME (a)	LOS (b)	TIME (a)	LOS (b)
Regents Road						
Luna Ave to SR-52 EB Ramps	NB	II	105.3	C	106.4	C
	SB	II	103.6	C	104.0	C
SR-52 EB Ramps to SR-52 WB Ramps	NB	II	14.4	C	19.1	**E**
	SB	II	15.9	D	16.1	D
SR-52 WB Ramps to Governor Dr	NB	II	166.7	**E**	173.0	**E**
	SB	II	92.3	C	76.5	B
Governor Dr to Ariba St	NB	II	138.8	D	139.4	D
	SB	II	98.5	B	94.7	B
Ariba St to Berino Ct	NB	II	87.2	**F**	92.8	**F**
	SB	II	67.6	**F**	67.4	**F**
Berino Ct to Nobel Dr	NB	II	65.9	D	66.0	D
	SB	II	41.2	B	41.1	B
Nobel Dr to Plaza De Palmas	NB	II	29.5	D	29.5	D
	SB	II	54.7	**F**	54.7	**F**
Plaza De Palmas to La Jolla Village Dr	NB	II	69.3	**F**	69.5	**F**
	SB	II	24.4	D	24.4	D
La Jolla Village Dr to Regents Park Row	NB	II	31.3	**F**	34.0	**F**
	SB	II	42.3	**F**	42.7	**F**
Regents Park Row to Executive Dr	NB	II	36.1	**E**	36.1	**E**
	SB	II	35.6	D	36.5	**E**
Executive Dr to Eastgate Mall	*NB*	II	29.6	**E**	29.8	**E**
	SB	II	19.3	C	19.2	C
Eastgate Mall to Health Science Dr	NB	II	19.7	C	19.7	C
	SB	II	25.4	D	25.5	D
Health Science Dr to Genesee Ave	NB	II	83.3	**F**	83.1	**F**
	SB	II	33.1	**E**	33.2	**E**
Total	*NB*	*II*	*877.1*	**E**	*898.4*	**E**
	SB	*II*	*653.9*	*D*	*636.0*	*D*

Notes: (a) Travel time in miles per hour (mph).

(b) The arterial LOS is based on average through-vehicle travel speed for the segment or for the entire street under consideration and is influenced both by the number of signals per mile and by the intersection control delay.

MID Peak-Hour Arterial Segment Analysis Summary Regents Road

ROADWAY SEGMENT	DIRECTION	URBAN STREET CLASS	HORIZON YEAR			
			Alt A Regents Bridge 6-lane Genesee		Alt B Regents Bridge 4-lane Genesee	
			SIMULATION		SIMULATION	
			TIME (a)	LOS (b)	TIME (a)	LOS (b)
Regents Road						
Luna Ave to SR-52 EB Ramps	NB	II	77.8	B	78.6	B
	SB	II	70.7	A	70.6	A
SR-52 EB Ramps to SR-52 WB Ramps	NB	II	15.3	D	15.4	D
	SB	II	17.2	D	17.5	D
SR-52 WB Ramps to Governor Dr	NB	II	68.5	A	70.4	B
	SB	II	73.8	B	74.4	B
Governor Dr to Ariba St	NB	II	92.2	B	92.2	B
	SB	II	89.3	B	90.4	B
Ariba St to Berino Ct	NB	II	28.9	D	28.9	D
	SB	II	55.1	**F**	55.1	**F**
Berino Ct to Nobel Dr	NB	II	71.8	**E**	72.3	**E**
	SB	II	34.1	B	34.1	B
Nobel Dr to Plaza De Palmas	NB	II	27.7	D	27.8	D
	SB	II	59.9	**F**	59.9	**F**
Plaza De Palmas to La Jolla Village Dr	NB	II	69.1	**F**	68.2	**F**
	SB	II	21.7	D	21.7	D
La Jolla Village Dr to Regents Park Row	NB	II	26	**F**	26.3	**F**
	SB	II	55.5	**F**	55	**F**
Regents Park Row to Executive Dr	*NB*	II	32.5	D	33.4	D
	SB	II	37.8	**E**	37	**E**
Executive Dr to Eastgate Mall	*NB*	II	21.4	D	21.4	D
	SB	II	21.7	D	21.4	D
Eastgate Mall to Health Science Dr	NB	II	19.6	C	19.6	C
	SB	II	22	D	22	D
Health Science Dr to Genesee Ave	NB	II	86.7	**F**	86.6	**F**
	SB	II	33.3	**E**	33.4	**E**
Total	*NB*	*II*	*637.5*	*D*	*641.1*	*D*
	SB	*II*	*592.1*	*C*	*592.5*	*C*

Notes: (a) Travel time in miles per hour (mph).

(b) The arterial LOS is based on average through-vehicle travel speed for the segment or for the entire street under consideration and is influenced both by the number of signals per mile and by the intersection control delay.

PM Peak-Hour Arterial Segment Analysis Summary Regents Road

ROADWAY SEGMENT	DIRECTION	URBAN STREET CLASS	HORIZON YEAR			
			Alt A Regents Bridge 6-lane Genesee		Alt B Regents Bridge 4-lane Genesee	
			SIMULATION		SIMULATION	
			TIME (a)	LOS (b)	TIME (a)	LOS (b)
Regents Road						
Luna Ave to SR-52 EB Ramps	NB	II	98.2	C	104.3	C
	SB	II	177.2	**E**	165.4	**E**
SR-52 EB Ramps to SR-52 WB Ramps	NB	II	24.5	**E**	24.9	**E**
	SB	II	27.8	**F**	28.7	**F**
SR-52 WB Ramps to Governor Dr	NB	II	161.8	**E**	171.5	**E**
	SB	II	99.5	C	106.3	C
Governor Dr to Ariba St	NB	II	100.3	B	100.4	B
	SB	II	103.0	B	110.3	C
Ariba St to Berino Ct	NB	II	46.5	**E**	46.6	**E**
	SB	II	116.8	**F**	169.9	**F**
Berino Ct to Nobel Dr	NB	II	84.8	**E**	85.0	**E**
	SB	II	44.0	C	45.3	C
Nobel Dr to Plaza De Palmas	NB	II	24.2	D	24.2	D
	SB	II	59.3	**F**	59.6	**F**
Plaza De Palmas to La Jolla Village Dr	NB	II	46.8	**F**	46.9	**F**
	SB	II	50.3	**F**	51.0	**F**
La Jolla Village Dr to Regents Park Row	NB	II	41.3	**F**	25.8	**F**
	SB	II	89.9	**F**	93.0	**F**
Regents Park Row to Executive Dr	NB	II	49.8	**F**	50.0	**F**
	SB	II	74.3	**F**	88.0	**F**
Executive Dr to Eastgate Mall	*NB*	II	25.8	**E**	25.9	**E**
	SB	II	28.1	**E**	28.4	**E**
Eastgate Mall to Health Science Dr	NB	II	24.3	D	24.5	D
	SB	II	33.4	**E**	33.8	**E**
Health Science Dr to Genesee Ave	NB	II	67.1	**F**	67.3	**F**
	SB	II	48.0	**F**	48.2	**F**
Total	*NB*	*II*	*795.4*	**E**	*797.3*	**E**
	SB	*II*	*951.6*	**E**	*1027.9*	**E**

Notes: (a) Travel time in miles per hour (mph).

(b) The arterial LOS is based on average through-vehicle travel speed for the segment or for the entire street under consideration and is influenced both by the number of signals per mile and by the intersection control delay.

AM Peak-Hour Arterial Segment Analysis Summary Regents Road

ROADWAY SEGMENT	DIRECTION	URBAN STREET CLASS	HORIZON YEAR WITH RECOMMENDED MITIGATIONS			
			Alt A Regents Bridge 6-lane Genesee		Alt B Regents Bridge 4-lane Genesee	
			SIMULATION		SIMULATION	
			TIME (a)	LOS (b)	TIME (a)	LOS (b)
Regents Road						
Luna Ave to SR-52 EB Ramps	NB	II	105.4	C	106.5	C
	SB	II	103.6	C	89.0	B
SR-52 EB Ramps to SR-52 WB Ramps	NB	II	14.4	C	14.3	C
	SB	II	15.9	D	16.1	D
SR-52 WB Ramps to Governor Dr	NB	II	98.5	C	101.6	C
	SB	II	92.3	C	97.4	C
Governor Dr to Ariba St	NB	II	115.0	C	115.0	C
	SB	II	98.5	B	97.0	B
Ariba St to Berino Ct	NB	II	87.2	**F**	92.8	**F**
	SB	II	67.6	**F**	57.9	**F**
Berino Ct to Nobel Dr	NB	II	65.9	D	66.0	D
	SB	II	41.2	B	41.1	B
Nobel Dr to Plaza De Palmas	NB	II	29.5	D	29.5	D
	SB	II	54.7	**F**	54.7	**F**
Plaza De Palmas to La Jolla Village Dr	NB	II	69.3	**F**	69.5	**F**
	SB	II	24.4	D	24.4	D
La Jolla Village Dr to Regents Park Row	NB	II	31.3	**F**	34.0	**F**
	SB	II	42.3	**F**	42.7	**F**
Regents Park Row to Executive Dr	NB	II	36.1	**E**	36.1	**E**
	SB	II	35.6	D	36.5	**E**
Executive Dr to Eastgate Mall	*NB*	II	29.6	**E**	29.8	**E**
	SB	II	19.3	C	19.2	C
Eastgate Mall to Health Science Dr	NB	II	19.7	C	19.7	C
	SB	II	25.4	D	25.5	D
Health Science Dr to Genesee Ave	NB	II	83.3	**F**	83.1	**F**
	SB	II	33.1	**E**	33.2	**E**
Total	*NB*	*II*	*785.2*	*D*	*797.9*	**E**
	SB	*II*	*607.3*	*C*	*634.7*	*D*

Notes: (a) Travel time in miles per hour (mph).

(b) The arterial LOS is based on average through-vehicle travel speed for the segment or for the entire street under consideration and is influenced both by the number of signals per mile and by the intersection control delay.

MID Peak-Hour Arterial Segment Analysis Summary Regents Road

ROADWAY SEGMENT	DIRECTION	URBAN STREET CLASS	HORIZON YEAR WITH RECOMMENDED MITIGATIONS			
			Alt A Regents Bridge 6-lane Genesee		Alt B Regents Bridge 4-lane Genesee	
			SIMULATION		SIMULATION	
			TIME (a)	LOS (b)	TIME (a)	LOS (b)
Regents Road						
Luna Ave to SR-52 EB Ramps	NB	II	77.9	B	78.7	B
	SB	II	55.7	A	55.7	A
SR-52 EB Ramps to SR-52 WB Ramps	NB	II	15.3	D	15.4	D
	SB	II	17.2	D	17.5	D
SR-52 WB Ramps to Governor Dr	NB	II	71.4	B	71.1	B
	SB	II	74.4	B	80.3	B
Governor Dr to Ariba St	NB	II	94.7	B	94.7	B
	SB	II	91.1	B	90.9	B
Ariba St to Berino Ct	NB	II	28.9	D	31.9	D
	SB	II	42.4	**E**	45.8	**E**
Berino Ct to Nobel Dr	NB	II	71.8	**E**	81.5	**E**
	SB	II	34.1	B	43.3	C
Nobel Dr to Plaza De Palmas	NB	II	27.7	D	30.3	D
	SB	II	59.9	**F**	61.9	**F**
Plaza De Palmas to La Jolla Village Dr	NB	II	69.1	**F**	70.3	**F**
	SB	II	21.7	D	24	D
La Jolla Village Dr to Regents Park Row	NB	II	26	**F**	27.7	**F**
	SB	II	55.5	**F**	57	**F**
Regents Park Row to Executive Dr	*NB*	II	32.5	D	34.9	D
	SB	II	37.8	**E**	38.4	**E**
Executive Dr to Eastgate Mall	*NB*	II	21.4	D	23.3	D
	SB	II	21.7	D	23.3	D
Eastgate Mall to Health Science Dr	NB	II	19.6	C	21.6	D
	SB	II	22	D	24	D
Health Science Dr to Genesee Ave	NB	II	86.7	**F**	87.9	**F**
	SB	II	33.3	**E**	34.7	**E**
Total	*NB*	*II*	*643.0*	*D*	*669.3*	*D*
	SB	*II*	*566.8*	*C*	*596.8*	*C*

Notes: (a) Travel time in miles per hour (mph).

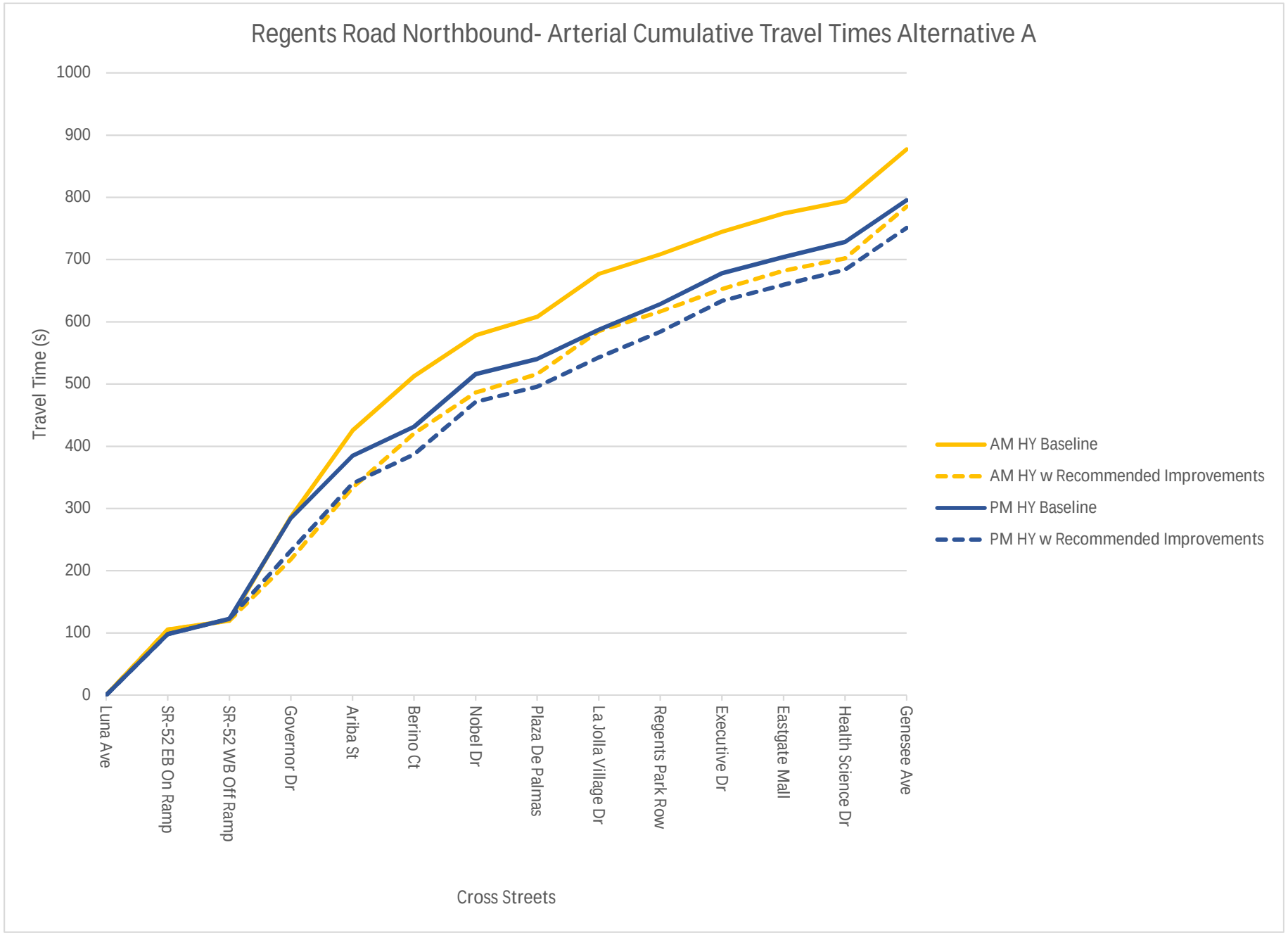
(b) The arterial LOS is based on average through-vehicle travel speed for the segment or for the entire street under consideration and is influenced both by the number of signals per mile and by the intersection control delay.

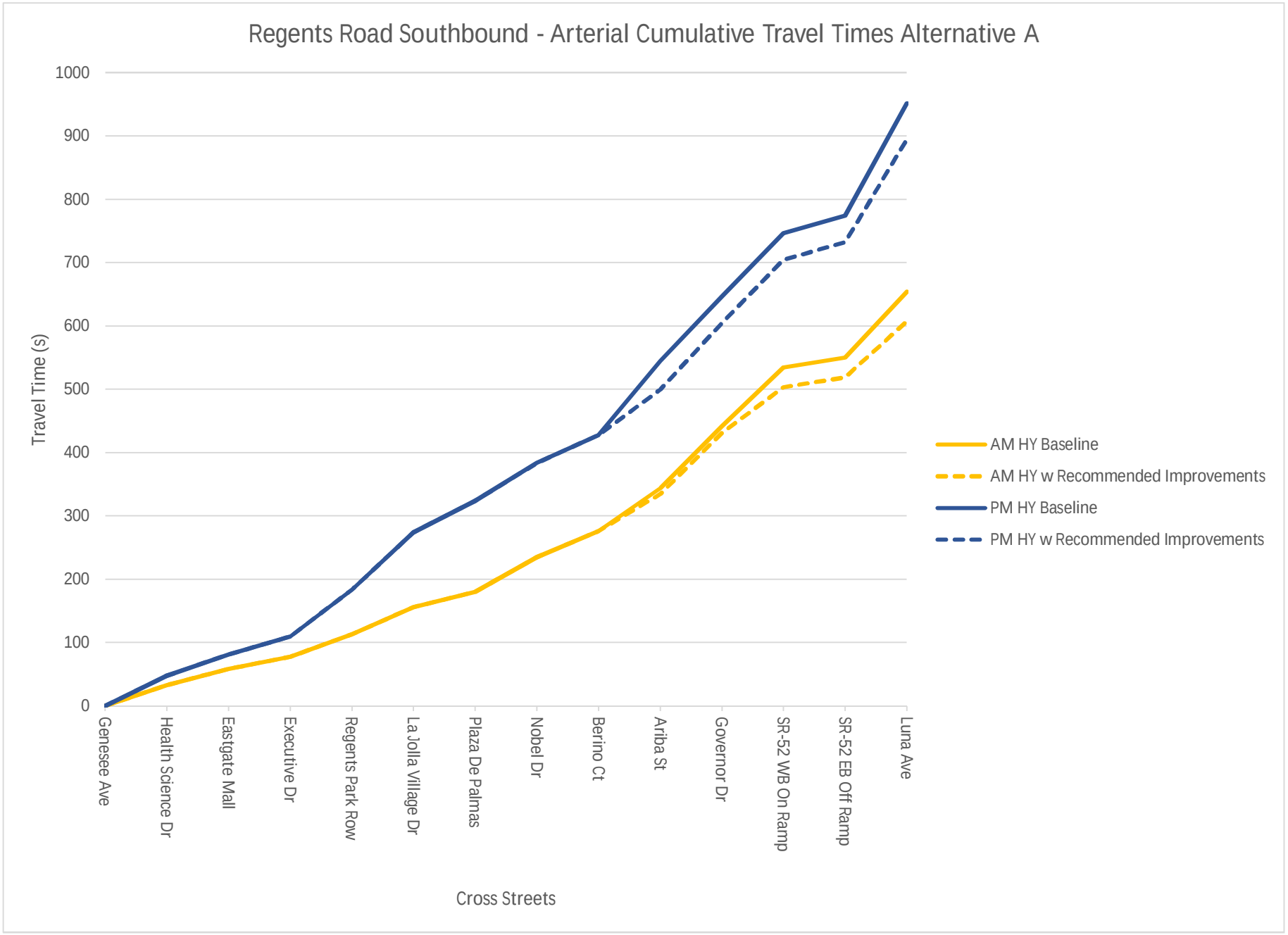
PM Peak-Hour Arterial Segment Analysis Summary Regents Road

ROADWAY SEGMENT	DIRECTION	URBAN STREET CLASS	HORIZON YEAR WITH RECOMMENDED MITIGATIONS			
			Alt A Regents Bridge 6-lane Genesee SIMULATION		Alt B Regents Bridge 4-lane Genesee SIMULATION	
			TIME (a)	LOS (b)	TIME (a)	LOS (b)
Regents Road						
Luna Ave to SR-52 EB Ramps	NB	II	98.3	C	100.0	C
	SB	II	177.2	**E**	165.1	**E**
SR-52 EB Ramps to SR-52 WB Ramps	NB	II	24.5	**E**	24.9	**E**
	SB	II	27.8	**F**	28.7	**F**
SR-52 WB Ramps to Governor Dr	NB	II	109.1	C	101.9	C
	SB	II	99.5	C	106.0	C
Governor Dr to Ariba St	NB	II	108.4	C	106.3	C
	SB	II	103.0	B	106.0	C
Ariba St to Berino Ct	NB	II	46.5	**E**	46.6	**E**
	SB	II	116.8	**F**	73.9	**F**
Berino Ct to Nobel Dr	NB	II	84.8	**E**	85.0	**E**
	SB	II	44.0	C	45.3	C
Nobel Dr to Plaza De Palmas	NB	II	24.2	D	24.2	D
	SB	II	59.3	**F**	59.6	**F**
Plaza De Palmas to La Jolla Village Dr	NB	II	46.8	**F**	46.5	**F**
	SB	II	50.3	**F**	51.0	**F**
La Jolla Village Dr to Regents Park Row	NB	II	41.3	**F**	25.8	**F**
	SB	II	89.9	**F**	93.0	**F**
Regents Park Row to Executive Dr	NB	II	49.8	**F**	50.0	**F**
	SB	II	74.3	**F**	88.0	**F**
Executive Dr to Eastgate Mall	*NB*	II	25.8	**E**	25.9	**E**
	SB	II	28.1	**E**	28.4	**E**
Eastgate Mall to Health Science Dr	NB	II	24.3	D	24.5	D
	SB	II	33.4	**E**	33.8	**E**
Health Science Dr to Genesee Ave	NB	II	67.1	**F**	67.3	**F**
	SB	II	48.0	**F**	48.2	**F**
Total	*NB*	*II*	*750.9*	*D*	*728.9*	*D*
	SB	*II*	*894.5*	**E**	*927.0*	**E**

Notes: (a) Travel time in miles per hour (mph).

(b) The arterial LOS is based on average through-vehicle travel speed for the segment or for the entire street under consideration and is influenced both by the number of signals per mile and by the intersection control delay.


Regents Road Northbound- Arterial Cumulative Travel Times Alternative A
1000
900
800
700
600
500
400
300
200
100
0
Travel Time (s)
Luna Ave
SR-52 EB On Ramp
SR-52 WB Off Ramp
Governor Dr
Ariba St
Berino Ct
Nobel Dr
Plaza De Palmas
La Jolla Village Dr
Regents Park Row
Executive Dr
Eastgate Mall
Health Science Dr
Genesee Ave
Cross Streets
AM HY Baseline
AM HY w Recommended Improvements
PM HY Baseline
PM HY w Recommended Improvements


Regents Road Southbound - Arterial Cumulative Travel Times Alternative A
Travel Time (s)
1000
900
800
700
600
500
400
300
200
100
0
Genesee Ave
Health Science Dr
Eastgate Mall
Executive Dr
Regents Park Row
La Jolla Village Dr
Plaza De Palmas
Nobel Dr
Berino Ct
Ariba St
Governor Dr
SR-52 WB On Ramp
SR-52 EB Off Ramp
Luna Ave
Cross Streets
AM HY Baseline
AM HY w Recommended Improvements
PM HY Baseline
PM HY w Recommended Improvements

APPENDIX H

ALTERNATIVE B SUPPORTING INFORMATION

- Intersection LOS Worksheets
- Detailed Arterial Analysis Worksheets

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	ø4
Lane Configurations							
Traffic Volume (vph)	523	430	369	1210	597	235	
Future Volume (vph)	523	430	369	1210	597	235	
Turn Type	NA	Perm	Prot	NA	Prot	pt+ov	
Protected Phases	2		1	6	8	8 1	4
Permitted Phases		2					
Detector Phase	2	2	1	6	8	8 1	
Switch Phase							
Minimum Initial (s)	10.0	10.0	7.0	10.0	10.0		4.0
Minimum Split (s)	43.2	43.2	11.4	24.0	23.3		8.0
Total Split (s)	45.8	45.8	37.4	84.7	45.3		42.8
Total Split (%)	35.2%	35.2%	28.8%	65.2%	34.8%		33%
Yellow Time (s)	5.2	5.2	3.4	5.0	4.3		3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	6.2	6.2	4.4	6.0	5.3		
Lead/Lag	Lag	Lag	Lead				
Lead-Lag Optimize?							
Recall Mode	C-Max	C-Max	None	C-Max	None		None

Intersection Summary

Cycle Length: 130
Actuated Cycle Length: 130
Offset: 30 (23%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 80
Control Type: Actuated-Coordinated

Splits and Phases: 1: N. Torrey Pines Rd. & Genesee Ave

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	523	430	369	1210	597	235
Future Volume (vph)	523	430	369	1210	597	235
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.2	6.2	4.4	6.0	5.3	5.3
Lane Util. Factor	0.91	1.00	0.97	0.91	0.97	0.88
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	5085	1583	3433	5085	3433	2787
Flt Permitted	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (perm)	5085	1583	3433	5085	3433	2787
Peak-hour factor, PHF	0.85	0.85	0.91	0.91	0.85	0.85
Adj. Flow (vph)	615	506	405	1330	702	276
RTOR Reduction (vph)	0	271	0	0	0	79
Lane Group Flow (vph)	615	235	405	1330	702	197
Turn Type	NA	Perm	Prot	NA	Prot	pt+ov
Protected Phases	2		1	6	8	8 1
Permitted Phases		2				
Actuated Green, G (s)	60.4	60.4	19.8	84.8	33.9	59.0
Effective Green, g (s)	60.4	60.4	19.8	84.8	33.9	59.0
Actuated g/C Ratio	0.46	0.46	0.15	0.65	0.26	0.45
Clearance Time (s)	6.2	6.2	4.4	6.0	5.3	
Vehicle Extension (s)	4.0	4.0	2.0	3.7	3.8	
Lane Grp Cap (vph)	2362	735	522	3316	895	1264
v/s Ratio Prot	0.12		c0.12	c0.26	c0.20	0.07
v/s Ratio Perm		0.15				
v/c Ratio	0.26	0.32	0.78	0.40	0.78	0.16
Uniform Delay, d1	21.2	21.9	53.0	10.6	44.7	20.9
Progression Factor	1.00	1.00	1.08	0.29	0.81	0.26
Incremental Delay, d2	0.3	1.1	6.3	0.4	4.6	0.1
Delay (s)	21.5	23.0	63.3	3.4	40.7	5.6
Level of Service	C	C	E	A	D	A
Approach Delay (s)	22.2			17.4	30.8	
Approach LOS	C			B	C	

Intersection Summary

HCM 2000 Control Delay	22.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	15.9
Intersection Capacity Utilization	50.9%	ICU Level of Service	A
Analysis Period (min)	15		

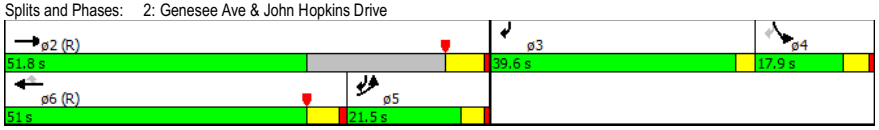
c Critical Lane Group

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	ø3
Lane Configurations							
Traffic Volume (vph)	86	723	1483	1461	161	23	
Future Volume (vph)	86	723	1483	1461	161	23	
Turn Type	Prot	NA	NA	Perm	Prot	pt+ov	
Protected Phases	5	2	6		4	3 5	3
Permitted Phases				6		4	
Detector Phase	5	2	6	6	4	3 5	
Switch Phase							
Minimum Initial (s)	4.0	10.0	10.0	10.0	7.0		4.0
Minimum Split (s)	9.5	16.7	15.9	15.9	11.9		7.0
Total Split (s)	21.5	51.8	51.0	51.0	17.9		39.6
Total Split (%)	16.5%	39.8%	39.2%	39.2%	13.8%		30%
Yellow Time (s)	3.4	5.7	4.9	4.9	3.9		3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		0.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	4.4	6.7	5.9	5.9	4.9		
Lead/Lag	Lag		Lead	Lead	Lag		Lead
Lead-Lag Optimize?	Yes		Yes	Yes	Yes		Yes
Recall Mode	None	C-Min	C-Min	C-Min	None		None

Intersection Summary

Cycle Length: 130
Actuated Cycle Length: 130
Offset: 16 (12%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 2: Genesee Ave & John Hopkins Drive



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	86	723	1483	1461	161	23
Future Volume (vph)	86	723	1483	1461	161	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	6.7	5.9	5.9	4.9	3.0
Lane Util. Factor	1.00	0.91	0.81	1.00	0.97	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	5085	7544	1583	3433	1583
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	5085	7544	1583	3433	1583
Peak-hour factor, PHF	0.89	0.89	0.94	0.94	0.80	0.80
Adj. Flow (vph)	97	812	1578	1554	201	29
RTOR Reduction (vph)	0	0	0	0	0	1
Lane Group Flow (vph)	97	812	1578	1554	201	28
Turn Type	Prot	NA	NA	Perm	Prot	pt+ov
Protected Phases	5	2	6		4	3 5
Permitted Phases				6		4
Actuated Green, G (s)	11.5	92.6	77.5	77.5	13.7	38.7
Effective Green, g (s)	11.5	92.6	77.5	77.5	13.7	34.3
Actuated g/C Ratio	0.09	0.71	0.60	0.60	0.11	0.26
Clearance Time (s)	4.4	6.7	5.9	5.9	4.9	
Vehicle Extension (s)	2.0	4.0	3.9	3.9	5.0	
Lane Grp Cap (vph)	156	3622	4497	943	361	454
v/s Ratio Prot	c0.05	0.16	0.21		c0.06	c0.01
v/s Ratio Perm				c0.98		0.01
v/c Ratio	0.62	0.22	0.35	1.65	0.56	0.06
Uniform Delay, d1	57.2	6.4	13.4	26.2	55.3	35.8
Progression Factor	0.80	0.51	1.17	1.17	1.00	1.00
Incremental Delay, d2	5.4	0.1	0.1	294.1	3.1	0.0
Delay (s)	51.3	3.4	15.8	324.9	58.4	35.8
Level of Service	D	A	B	F	E	D
Approach Delay (s)		8.5	169.2		55.6	
Approach LOS		A	F		E	

Intersection Summary

HCM 2000 Control Delay	128.9	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.28		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	18.2
Intersection Capacity Utilization	103.8%	ICU Level of Service	G
Analysis Period (min)	15		

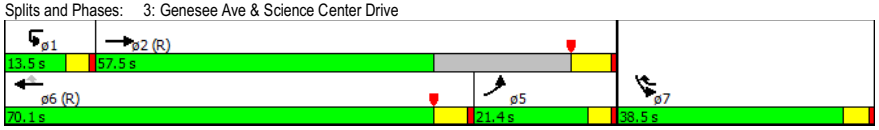
c Critical Lane Group

Lane Group	EBL	EBT	WBU	WBT	WBR	SBL
Lane Configurations						
Traffic Volume (vph)	99	809	3	2875	323	33
Future Volume (vph)	99	809	3	2875	323	33
Turn Type	Prot	NA	Prot	NA	pm+ov	Prot
Protected Phases	5	2	1	6	7	7
Permitted Phases					6	
Detector Phase	5	2	1	6	7	7
Switch Phase						
Minimum Initial (s)	4.0	10.0	4.0	10.0	4.0	4.0
Minimum Split (s)	9.5	22.5	9.5	16.0	8.9	8.9
Total Split (s)	21.4	57.5	13.5	70.1	38.5	38.5
Total Split (%)	16.5%	44.2%	10.4%	53.9%	29.6%	29.6%
Yellow Time (s)	3.4	5.9	3.4	5.0	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	6.9	4.4	6.0	4.9	4.9
Lead/Lag	Lag	Lag	Lead	Lead		
Lead-Lag Optimize?	Yes	Yes	Yes	Yes		
Recall Mode	None	C-Max	None	C-Max	None	None

Intersection Summary

Cycle Length: 130
Actuated Cycle Length: 130
Offset: 39 (30%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 70
Control Type: Actuated-Coordinated

Splits and Phases: 3: Genesee Ave & Science Center Drive



Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Traffic Volume (vph)	99	809	3	2875	323	33	18
Future Volume (vph)	99	809	3	2875	323	33	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	6.9	4.4	6.0	4.9	4.9	
Lane Util. Factor	1.00	0.91	1.00	0.91	1.00	0.97	
Frt	1.00	1.00	1.00	1.00	0.85	0.95	
Flt Protected	0.95	1.00	0.95	1.00	1.00	0.97	
Satd. Flow (prot)	1770	5085	1770	5085	1583	3313	
Flt Permitted	0.95	1.00	0.95	1.00	1.00	0.97	
Satd. Flow (perm)	1770	5085	1770	5085	1583	3313	
Peak-hour factor, PHF	0.88	0.88	0.92	0.95	0.95	0.80	0.80
Adj. Flow (vph)	112	919	3	3026	340	41	22
RTOR Reduction (vph)	0	0	0	0	94	22	0
Lane Group Flow (vph)	113	919	3	3026	246	42	0
Turn Type	Prot	NA	Prot	NA	pm+ov	Prot	
Protected Phases	5	2	1	6	7	7	
Permitted Phases					6		
Actuated Green, G (s)	20.5	105.4	1.3	87.1	94.2	7.1	
Effective Green, g (s)	20.5	105.4	1.3	87.1	94.2	7.1	
Actuated g/C Ratio	0.16	0.81	0.01	0.67	0.72	0.05	
Clearance Time (s)	4.4	6.9	4.4	6.0	4.9	4.9	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	279	4122	17	3406	1206	180	
v/s Ratio Prot	c0.06	0.18	0.00	c0.60	c0.01	0.01	
v/s Ratio Perm					0.14		
v/c Ratio	0.41	0.22	0.18	0.89	0.20	0.23	
Uniform Delay, d1	49.3	2.8	63.8	17.5	5.8	58.8	
Progression Factor	0.93	0.68	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.9	0.1	4.9	3.9	0.1	0.7	
Delay (s)	47.0	2.0	68.7	21.4	5.9	59.5	
Level of Service	D	A	E	C	A	E	
Approach Delay (s)		7.0		19.9		59.5	
Approach LOS		A		B		E	

Intersection Summary

HCM 2000 Control Delay	17.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	16.2
Intersection Capacity Utilization	77.1%	ICU Level of Service	D
Analysis Period (min)	15		

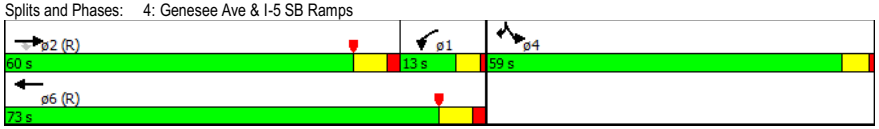
c Critical Lane Group

Lane Group	EBT	EBR	WBL	WBT	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	640	193	98	2211	1050	676
Future Volume (vph)	640	193	98	2211	1050	676
Turn Type	NA	Perm	Prot	NA	Prot	Prot
Protected Phases	2		1	6	4	4
Permitted Phases		2				
Detector Phase	2	2	1	6	4	4
Switch Phase						
Minimum Initial (s)	10.0	10.0	5.0	10.0	13.0	13.0
Minimum Split (s)	25.2	25.2	9.7	28.2	18.1	18.1
Total Split (s)	60.0	60.0	13.0	73.0	59.0	59.0
Total Split (%)	45.5%	45.5%	9.8%	55.3%	44.7%	44.7%
Yellow Time (s)	5.2	5.2	3.7	5.2	4.1	4.1
All-Red Time (s)	2.0	2.0	1.0	2.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.2	7.2	4.7	7.2	5.1	5.1
Lead/Lag	Lead	Lead	Lag			
Lead-Lag Optimize?	Yes	Yes	Yes			
Recall Mode	C-Max	C-Max	None	C-Max	Min	Min

Intersection Summary

Cycle Length: 132
Actuated Cycle Length: 132
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 4: Genesee Ave & I-5 SB Ramps



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	640	193	98	2211	0	0	0	0	1050	0	676
Future Volume (vph)	0	640	193	98	2211	0	0	0	0	1050	0	676
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		7.2	7.2	4.7	7.2					5.1		5.1
Lane Util. Factor		0.81	0.88	0.97	0.91					0.97		0.88
Frt		1.00	0.85	1.00	1.00					1.00		0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (prot)		7544	2787	3433	5085					3433		2787
Flt Permitted		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (perm)		7544	2787	3433	5085					3433		2787
Peak-hour factor, PHF	0.99	0.99	0.99	0.93	0.93	0.93	0.25	0.25	0.25	0.85	0.85	0.85
Adj. Flow (vph)	0	646	195	105	2377	0	0	0	0	1235	0	795
RTOR Reduction (vph)	0	0	114	0	0	0	0	0	0	0	0	57
Lane Group Flow (vph)	0	646	81	105	2377	0	0	0	0	1235	0	738
Turn Type		NA	Perm	Prot	NA					Prot		Prot
Protected Phases		2		1	6					4		4
Permitted Phases			2									
Actuated Green, G (s)		55.0	55.0	8.3	68.0					51.7		51.7
Effective Green, g (s)		55.0	55.0	8.3	68.0					51.7		51.7
Actuated g/C Ratio		0.42	0.42	0.06	0.52					0.39		0.39
Clearance Time (s)		7.2	7.2	4.7	7.2					5.1		5.1
Vehicle Extension (s)		2.0	2.0	2.0	2.0					2.0		2.0
Lane Grp Cap (vph)		3143	1161	215	2619					1344		1091
v/s Ratio Prot		0.09		0.03	c0.47					c0.36		0.26
v/s Ratio Perm			0.03									
v/c Ratio		0.21	0.07	0.49	0.91					0.92		0.68
Uniform Delay, d1		24.6	23.1	59.8	29.1					38.2		33.2
Progression Factor		1.00	1.00	1.16	1.27					1.00		1.00
Incremental Delay, d2		0.1	0.1	0.4	3.5					10.0		1.3
Delay (s)		24.7	23.2	69.5	40.4					48.1		34.5
Level of Service		C	C	E	D					D		C
Approach Delay (s)		24.4			41.6			0.0			42.8	
Approach LOS		C			D			A			D	

Intersection Summary

HCM 2000 Control Delay	39.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.95		
Actuated Cycle Length (s)	132.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	102.8%	ICU Level of Service	G
Analysis Period (min)	15		

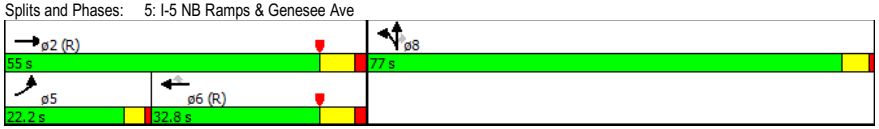
c Critical Lane Group

Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Configurations							
Traffic Volume (vph)	227	1578	634	398	1547	9	591
Future Volume (vph)	227	1578	634	398	1547	9	591
Turn Type	Prot	NA	NA	Perm	Split	NA	Perm
Protected Phases	5	2	6		8	8	
Permitted Phases				6			8
Detector Phase	5	2	6	6	8	8	8
Switch Phase							
Minimum Initial (s)	11.0	10.0	10.0	10.0	5.0	5.0	5.0
Minimum Split (s)	22.2	28.2	25.2	25.2	10.1	10.1	10.1
Total Split (s)	22.2	55.0	32.8	32.8	77.0	77.0	77.0
Total Split (%)	16.8%	41.7%	24.8%	24.8%	58.3%	58.3%	58.3%
Yellow Time (s)	3.2	5.2	5.2	5.2	4.1	4.1	4.1
All-Red Time (s)	1.0	2.0	2.0	2.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.2	7.2	7.2	7.2	5.1	5.1	5.1
Lead/Lag	Lead		Lag	Lag			
Lead-Lag Optimize?	Yes		Yes	Yes			
Recall Mode	None	C-Max	C-Max	C-Max	None	None	None

Intersection Summary

Cycle Length: 132
Actuated Cycle Length: 132
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 110
Control Type: Actuated-Coordinated

Splits and Phases: 5: I-5 NB Ramps & Genesee Ave



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	227	1578	0	0	634	398	1547	9	591	0	0	0
Future Volume (vph)	227	1578	0	0	634	398	1547	9	591	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	7.2			7.2	7.2	5.1	5.1	5.1			
Lane Util. Factor	0.97	0.91			0.81	0.88	0.95	0.95	0.88			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.95	1.00			
Satd. Flow (prot)	3433	5085			7544	2787	1681	1686	2787			
Flt Permitted	0.95	1.00			1.00	1.00	0.95	0.95	1.00			
Satd. Flow (perm)	3433	5085			7544	2787	1681	1686	2787			
Peak-hour factor, PHF	0.86	0.86	0.86	0.80	0.80	0.80	0.88	0.88	0.88	0.25	0.25	0.25
Adj. Flow (vph)	264	1835	0	0	792	498	1758	10	672	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	388	0	0	31	0	0	0
Lane Group Flow (vph)	264	1835	0	0	793	110	879	889	641	0	0	0
Turn Type	Prot	NA			NA	Perm	Split	NA	Perm			
Protected Phases	5	2			6		8	8				
Permitted Phases						6			8			
Actuated Green, G (s)	14.5	47.8			29.1	29.1	71.9	71.9	71.9			
Effective Green, g (s)	14.5	47.8			29.1	29.1	71.9	71.9	71.9			
Actuated g/C Ratio	0.11	0.36			0.22	0.22	0.54	0.54	0.54			
Clearance Time (s)	4.2	7.2			7.2	7.2	5.1	5.1	5.1			
Vehicle Extension (s)	2.0	2.0			2.0	2.0	2.0	2.0	2.0			
Lane Grp Cap (vph)	377	1841			1663	614	915	918	1518			
v/s Ratio Prot	0.08	c0.36			0.11		0.52	c0.53				
v/s Ratio Perm						0.04			0.23			
v/c Ratio	0.70	1.00			0.48	0.18	0.96	0.97	0.42			
Uniform Delay, d1	56.7	42.0			44.8	41.8	28.7	29.0	17.8			
Progression Factor	0.67	1.02			0.81	1.43	1.00	1.00	1.00			
Incremental Delay, d2	3.9	18.2			1.0	0.6	20.6	21.9	0.1			
Delay (s)	41.6	61.0			37.2	60.4	49.3	50.9	17.8			
Level of Service	D	E			D	E	D	D	B			
Approach Delay (s)		58.5			46.1			41.2			0.0	
Approach LOS		E			D			D			A	

Intersection Summary

HCM 2000 Control Delay	48.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.02		
Actuated Cycle Length (s)	132.0	Sum of lost time (s)	16.5
Intersection Capacity Utilization	102.8%	ICU Level of Service	G
Analysis Period (min)	15		

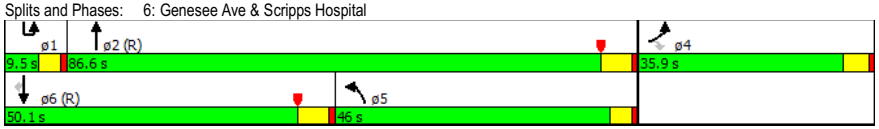
c Critical Lane Group

Lane Group	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	112	366	654	817	6	1515	929
Future Volume (vph)	112	366	654	817	6	1515	929
Turn Type	Prot	Perm	Prot	NA	Prot	NA	Perm
Protected Phases	4		5	2	1	6	
Permitted Phases		4					6
Detector Phase	4	4	5	2	1	6	6
Switch Phase							
Minimum Initial (s)	7.0	7.0	4.0	10.0	4.0	10.0	10.0
Minimum Split (s)	35.9	35.9	9.5	22.5	9.5	30.5	30.5
Total Split (s)	35.9	35.9	46.0	86.6	9.5	50.1	50.1
Total Split (%)	27.2%	27.2%	34.8%	65.6%	7.2%	38.0%	38.0%
Yellow Time (s)	3.9	3.9	3.4	4.7	3.4	4.7	4.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	4.4	5.7	4.4	5.7	5.7
Lead/Lag			Lag	Lag	Lead	Lead	Lead
Lead-Lag Optimize?			Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	C-Max	None	C-Max	C-Max

Intersection Summary

Cycle Length: 132
Actuated Cycle Length: 132
Offset: 69 (52%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 6: Genesee Ave & Scripps Hospital



Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	112	366	654	817	6	1515	929
Future Volume (vph)	112	366	654	817	6	1515	929
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9	4.4	5.7	4.4	5.7	5.7
Lane Util. Factor	0.97	1.00	1.00	0.91	1.00	0.91	1.00
Frt	1.00	0.85	1.00	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	1583	1770	5085	1770	5085	1583
Flt Permitted	0.95	1.00	0.95	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	1583	1770	5085	1770	5085	1583
Peak-hour factor, PHF	0.90	0.90	0.90	0.80	0.92	0.89	0.90
Adj. Flow (vph)	124	407	727	1021	7	1702	1032
RTOR Reduction (vph)	0	354	0	0	0	0	294
Lane Group Flow (vph)	124	53	727	1021	7	1702	738
Turn Type	Prot	Perm	Prot	NA	Prot	NA	Perm
Protected Phases	4		5	2	1	6	
Permitted Phases		4					6
Actuated Green, G (s)	17.2	17.2	45.1	98.8	1.0	54.7	54.7
Effective Green, g (s)	17.2	17.2	45.1	98.8	1.0	54.7	54.7
Actuated g/C Ratio	0.13	0.13	0.34	0.75	0.01	0.41	0.41
Clearance Time (s)	4.9	4.9	4.4	5.7	4.4	5.7	5.7
Vehicle Extension (s)	2.0	2.0	2.0	5.2	2.0	4.0	4.0
Lane Grp Cap (vph)	447	206	604	3806	13	2107	655
v/s Ratio Prot	c0.04		c0.41	0.20	0.00	0.33	
v/s Ratio Perm		0.03					c0.47
v/c Ratio	0.28	0.26	1.20	0.27	0.54	0.81	1.13
Uniform Delay, d1	51.8	51.7	43.5	5.2	65.3	34.0	38.6
Progression Factor	1.00	1.00	0.53	0.17	0.78	0.87	1.39
Incremental Delay, d2	0.1	0.2	104.3	0.1	12.5	2.1	69.3
Delay (s)	51.9	51.9	127.5	1.0	63.4	31.6	122.8
Level of Service	D	D	F	A	E	C	F
Approach Delay (s)	51.9			53.6		66.0	
Approach LOS	D			D		E	

Intersection Summary

HCM 2000 Control Delay	60.2	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.03		
Actuated Cycle Length (s)	132.0	Sum of lost time (s)	15.0
Intersection Capacity Utilization	102.2%	ICU Level of Service	G
Analysis Period (min)	15		

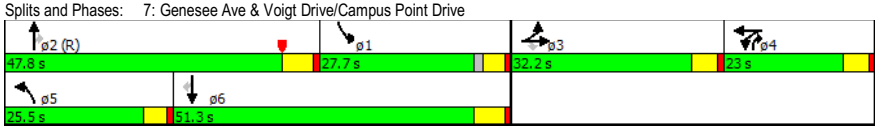
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	136	11	117	27	12	473	1329	513	350	1074	454
Future Volume (vph)	136	11	117	27	12	473	1329	513	350	1074	454
Turn Type	Split	NA	Perm	Split	NA	Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	3	3		4	4	5	2	4	1	6	
Permitted Phases			3					2			6
Detector Phase	3	3	3	4	4	5	2	4	1	6	6
Switch Phase											
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	4.0	10.0	7.0	4.0	10.0	10.0
Minimum Split (s)	11.9	11.9	11.9	22.5	22.5	22.5	37.7	22.5	22.5	33.7	33.7
Total Split (s)	32.2	32.2	32.2	23.0	23.0	25.5	47.8	23.0	27.7	51.3	51.3
Total Split (%)	24.4%	24.4%	24.4%	17.4%	17.4%	19.3%	36.2%	17.4%	21.0%	38.9%	38.9%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.9	3.4	4.7	3.9	3.4	4.7	4.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	4.9	4.9	4.9	4.4	5.7	4.9	4.4	5.7	5.7
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	None	None	None	None

Intersection Summary

Cycle Length: 132
Actuated Cycle Length: 132
Offset: 99 (75%), Referenced to phase 2:NBT, Start of Yellow
Natural Cycle: 95
Control Type: Actuated-Coordinated

Splits and Phases: 7: Genesee Ave & Voigt Drive/Campus Point Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	136	11	117	27	12	55	473	1329	513	350	1074	454
Future Volume (vph)	136	11	117	27	12	55	473	1329	513	350	1074	454
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9	4.9	4.9	4.9		4.4	5.7	4.9	4.4	5.7	5.7
Lane Util. Factor	0.97	1.00	0.88	0.97	0.95		0.97	0.91	1.00	0.97	0.91	1.00
Frt	1.00	1.00	0.85	1.00	0.88		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	1863	2787	3433	3101		3433	5085	1583	3433	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	1863	2787	3433	3101		3433	5085	1583	3433	5085	1583
Peak-hour factor, PHF	0.90	0.90	0.90	0.83	0.83	0.83	0.88	0.88	0.88	0.80	0.80	0.80
Adj. Flow (vph)	151	12	130	33	14	66	538	1510	583	438	1342	568
RTOR Reduction (vph)	0	0	114	0	60	0	0	0	211	0	0	237
Lane Group Flow (vph)	151	12	16	33	20	0	538	1510	372	438	1343	331
Turn Type	Split	NA	Perm	Split	NA		Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	3	3		4	4		5	2	4	1	6	
Permitted Phases			3						2			6
Actuated Green, G (s)	16.2	16.2	16.2	12.3	12.3		23.7	60.7	73.0	22.9	59.9	59.9
Effective Green, g (s)	16.2	16.2	16.2	12.3	12.3		23.7	60.7	73.0	22.9	59.9	59.9
Actuated g/C Ratio	0.12	0.12	0.12	0.09	0.09		0.18	0.46	0.55	0.17	0.45	0.45
Clearance Time (s)	4.9	4.9	4.9	4.9	4.9		4.4	5.7	4.9	4.4	5.7	5.7
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0		2.0	3.7	2.0	2.0	4.0	4.0
Lane Grp Cap (vph)	421	228	342	319	288		616	2338	934	595	2307	718
v/s Ratio Prot	c0.04	0.01		0.01	0.01		c0.16	c0.30	c0.04	c0.13	0.26	
v/s Ratio Perm			0.01						0.20			0.21
v/c Ratio	0.36	0.05	0.05	0.10	0.07		0.87	0.65	0.40	0.74	0.58	0.46
Uniform Delay, d1	53.1	51.1	51.1	54.8	54.6		52.7	27.4	16.9	51.7	26.8	24.9
Progression Factor	1.00	1.00	1.00	1.00	1.00		0.76	0.98	1.46	1.15	1.16	2.47
Incremental Delay, d2	0.2	0.0	0.0	0.1	0.0		10.1	1.1	0.1	3.1	0.3	0.5
Delay (s)	53.3	51.2	51.1	54.9	54.7		50.3	28.0	24.8	62.8	31.3	62.1
Level of Service	D	D	D	D	D		D	C	C	E	C	E
Approach Delay (s)		52.3			54.7			31.9			44.6	
Approach LOS		D			D			C			D	

Intersection Summary

HCM 2000 Control Delay	39.0	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	132.0	Sum of lost time (s)	19.9
Intersection Capacity Utilization	59.9%	ICU Level of Service	B
Analysis Period (min)	15		

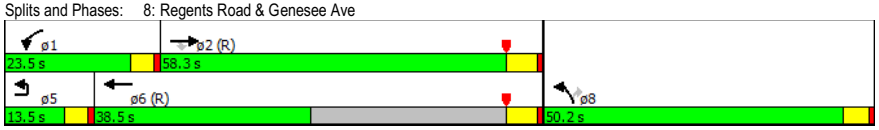
c Critical Lane Group

Lane Group	EBU	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations							
Traffic Volume (vph)	98	874	186	89	1761	325	66
Future Volume (vph)	98	874	186	89	1761	325	66
Turn Type	Prot	NA	Perm	Prot	NA	Prot	Perm
Protected Phases	5	2		1	6	8	
Permitted Phases			2				8
Detector Phase	5	2	2	1	6	8	8
Switch Phase							
Minimum Initial (s)	4.0	10.0	10.0	4.0	10.0	7.0	7.0
Minimum Split (s)	9.5	22.7	22.7	9.5	22.5	37.9	37.9
Total Split (s)	13.5	58.3	58.3	23.5	38.5	50.2	50.2
Total Split (%)	10.2%	44.2%	44.2%	17.8%	29.2%	38.0%	38.0%
Yellow Time (s)	3.4	4.7	4.7	3.4	4.7	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.7	5.7	4.4	5.7	4.9	4.9
Lead/Lag	Lead	Lag	Lag	Lead	Lag		
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		
Recall Mode	None	C-Max	C-Max	None	C-Max	None	None

Intersection Summary

Cycle Length: 132
Actuated Cycle Length: 132
Offset: 60 (45%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 8: Regents Road & Genesee Ave



Movement	EBU	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations							
Traffic Volume (vph)	98	874	186	89	1761	325	66
Future Volume (vph)	98	874	186	89	1761	325	66
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	12	16	12
Total Lost time (s)	4.4	5.7	5.7	4.4	5.7	4.9	4.9
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	1770	5085	1583	1770	5085	2006	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (perm)	1770	5085	1583	1770	5085	2006	1583
Peak-hour factor, PHF	0.92	0.80	0.80	0.90	0.90	0.80	0.80
Adj. Flow (vph)	107	1092	232	99	1957	406	82
RTOR Reduction (vph)	0	0	103	0	0	0	63
Lane Group Flow (vph)	107	1093	130	99	1957	406	20
Turn Type	Prot	NA	Perm	Prot	NA	Prot	Perm
Protected Phases	5	2		1	6	8	
Permitted Phases			2				8
Actuated Green, G (s)	13.0	73.7	73.7	11.7	72.4	31.6	31.6
Effective Green, g (s)	13.0	73.7	73.7	11.7	72.4	31.6	31.6
Actuated g/C Ratio	0.10	0.56	0.56	0.09	0.55	0.24	0.24
Clearance Time (s)	4.4	5.7	5.7	4.4	5.7	4.9	4.9
Vehicle Extension (s)	2.0	5.0	5.0	2.0	3.9	2.0	2.0
Lane Grp Cap (vph)	174	2839	883	156	2789	480	378
v/s Ratio Prot	c0.06	0.21		0.06	c0.38	c0.20	
v/s Ratio Perm			0.08				0.01
v/c Ratio	0.61	0.38	0.15	0.63	0.70	0.85	0.05
Uniform Delay, d1	57.1	16.4	14.0	58.1	21.9	47.9	38.7
Progression Factor	0.70	1.49	5.43	1.29	0.70	1.00	1.00
Incremental Delay, d2	3.8	0.3	0.3	1.6	0.4	12.4	0.0
Delay (s)	43.6	24.7	76.5	76.6	15.7	60.3	38.7
Level of Service	D	C	E	E	B	E	D
Approach Delay (s)		34.5			18.7	56.6	
Approach LOS		C			B	E	

Intersection Summary

HCM 2000 Control Delay	29.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	132.0	Sum of lost time (s)	15.0
Intersection Capacity Utilization	70.0%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	100	258	72	378	342	1571	200	519
Future Volume (vph)	100	258	72	378	342	1571	200	519
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	7	4	3	8	5	2	1	6
Permitted Phases								
Detector Phase	7	4	3	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	4.0	7.0	4.0	7.0	4.0	10.0	4.0	10.0
Minimum Split (s)	15.0	38.9	9.5	39.1	9.5	31.7	9.5	32.7
Total Split (s)	15.0	39.7	14.4	39.1	40.0	62.9	15.0	37.9
Total Split (%)	11.4%	30.1%	10.9%	29.6%	30.3%	47.7%	11.4%	28.7%
Yellow Time (s)	3.4	3.9	3.4	4.1	3.4	4.7	3.4	4.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	4.9	4.4	5.1	4.4	5.7	4.4	5.7
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max

Intersection Summary

Cycle Length: 132
Actuated Cycle Length: 132
Offset: 101 (77%), Referenced to phase 6:SBT, Start of Yellow
Natural Cycle: 130
Control Type: Actuated-Coordinated

Splits and Phases: 9: Genesee Ave & Eastgate Mall

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	100	258	111	72	378	408	342	1571	274	200	519	163
Future Volume (vph)	100	258	111	72	378	408	342	1571	274	200	519	163
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	5.1		4.4	5.7		4.4	5.7	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.91		0.97	0.91	
Frt	1.00	0.95		1.00	0.92		1.00	0.98		1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3379		1770	3264		1770	4972		3433	4903	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	3379		1770	3264		1770	4972		3433	4903	
Peak-hour factor, PHF	0.80	0.80	0.80	0.82	0.82	0.82	0.86	0.86	0.86	0.80	0.80	0.80
Adj. Flow (vph)	125	322	139	88	461	498	398	1827	319	250	649	204
RTOR Reduction (vph)	0	0	0	0	135	0	0	19	0	0	43	0
Lane Group Flow (vph)	125	462	0	88	824	0	398	2127	0	250	810	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Actuated Green, G (s)	10.5	35.6		9.2	34.1		35.6	57.2		10.6	32.2	
Effective Green, g (s)	10.5	35.6		9.2	34.1		35.6	57.2		10.6	32.2	
Actuated g/C Ratio	0.08	0.27		0.07	0.26		0.27	0.43		0.08	0.24	
Clearance Time (s)	4.4	4.9		4.4	5.1		4.4	5.7		4.4	5.7	
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	4.2		2.0	4.3	
Lane Grp Cap (vph)	140	911		123	843		477	2154		275	1196	
v/s Ratio Prot	c0.07	0.14		0.05	c0.25		0.22	c0.43		c0.07	0.17	
v/s Ratio Perm												
v/c Ratio	0.89	0.51		0.72	0.98		0.83	0.99		0.91	0.68	
Uniform Delay, d1	60.2	40.8		60.1	48.6		45.4	37.0		60.2	45.2	
Progression Factor	1.00	1.00		1.00	1.00		0.66	0.58		0.75	1.06	
Incremental Delay, d2	44.6	0.2		15.1	25.2		9.0	14.1		29.5	2.9	
Delay (s)	104.8	40.9		75.3	73.7		39.1	35.5		75.0	51.0	
Level of Service	F	D		E	E		D	D		E	D	
Approach Delay (s)		54.5			73.9			36.1			56.4	
Approach LOS		D			E			D			E	

Intersection Summary

HCM 2000 Control Delay	49.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.97		
Actuated Cycle Length (s)	132.0	Sum of lost time (s)	19.6
Intersection Capacity Utilization	87.6%	ICU Level of Service	E
Analysis Period (min)	15		

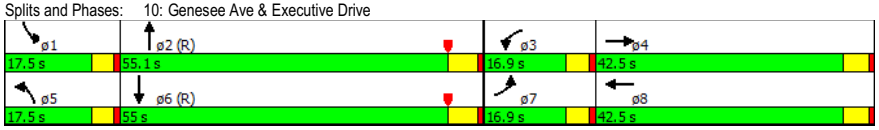
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	18	100	85	68	82	1767	46	533
Future Volume (vph)	18	100	85	68	82	1767	46	533
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	7	4	3	8	5	2	1	6
Permitted Phases								
Detector Phase	7	4	3	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	10.0	4.0	10.0
Minimum Split (s)	8.4	8.9	8.4	8.9	8.4	15.5	9.5	15.4
Total Split (s)	16.9	42.5	16.9	42.5	17.5	55.1	17.5	55.0
Total Split (%)	12.8%	32.2%	12.8%	32.2%	13.3%	41.7%	13.3%	41.7%
Yellow Time (s)	3.4	3.9	3.4	3.9	3.4	4.5	3.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	4.9	4.4	4.9	4.4	5.5	4.4	5.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	None	C-Max

Intersection Summary

Cycle Length: 132
Actuated Cycle Length: 132
Offset: 127 (96%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 70
Control Type: Actuated-Coordinated

Splits and Phases: 10: Genesee Ave & Executive Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	18	100	43	85	68	94	82	1767	485	46	533	16
Future Volume (vph)	18	100	43	85	68	94	82	1767	485	46	533	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	4.9		4.4	5.5		4.4	5.4	
Lane Util. Factor	1.00	0.95		0.97	0.95		1.00	0.91		1.00	0.91	
Frt	1.00	0.95		1.00	0.91		1.00	0.97		1.00	1.00	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3379		3433	3231		1770	4921		1770	5063	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	3379		3433	3231		1770	4921		1770	5063	
Peak-hour factor, PHF	0.92	0.92	0.92	0.80	0.80	0.80	0.91	0.91	0.91	0.80	0.80	0.80
Adj. Flow (vph)	20	109	47	106	85	118	90	1942	533	58	666	20
RTOR Reduction (vph)	0	40	0	0	97	0	0	25	0	0	2	0
Lane Group Flow (vph)	20	116	0	106	106	0	90	2450	0	58	684	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Actuated Green, G (s)	4.2	19.7		8.5	24.0		11.1	76.9		7.7	73.6	
Effective Green, g (s)	4.2	19.7		8.5	24.0		11.1	76.9		7.7	73.6	
Actuated g/C Ratio	0.03	0.15		0.06	0.18		0.08	0.58		0.06	0.56	
Clearance Time (s)	4.4	4.9		4.4	4.9		4.4	5.5		4.4	5.4	
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	3.6		2.0	3.8	
Lane Grp Cap (vph)	56	504		221	587		148	2866		103	2823	
v/s Ratio Prot	0.01	c0.03		c0.03	c0.03		c0.05	c0.50		0.03	0.14	
v/s Ratio Perm												
v/c Ratio	0.36	0.23		0.48	0.18		0.61	0.85		0.56	0.24	
Uniform Delay, d1	62.6	49.5		59.6	45.7		58.4	22.9		60.5	14.9	
Progression Factor	1.00	1.00		1.00	1.00		1.29	0.70		1.23	0.28	
Incremental Delay, d2	1.4	0.1		0.6	0.1		3.6	2.6		3.1	0.2	
Delay (s)	64.0	49.6		60.2	45.7		79.1	18.8		77.6	4.4	
Level of Service	E	D		E	D		E	B		E	A	
Approach Delay (s)		51.2			50.7			20.9			10.1	
Approach LOS		D			D			C			B	

Intersection Summary

HCM 2000 Control Delay	22.6	HCM 2000 Level of Service	C	
HCM 2000 Volume to Capacity ratio	0.70			
Actuated Cycle Length (s)	132.0	Sum of lost time (s)	19.2	
Intersection Capacity Utilization	72.5%	ICU Level of Service	C	
Analysis Period (min)	15			

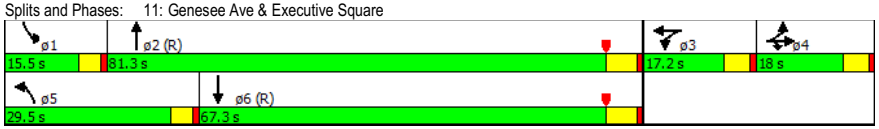
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	15	2	38	4	11	300	2440	14	612
Future Volume (vph)	15	2	38	4	11	300	2440	14	612
Turn Type	Split	NA	Prot	NA	NA	Prot	NA	Prot	NA
Protected Phases	4	4	4	3		5	2	1	6
Permitted Phases									
Detector Phase	4	4	4	3		5	2	1	6
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	4.0		4.0	10.0	4.0	10.0
Minimum Split (s)	8.9	8.9	8.9	8.9		8.4	15.7	8.4	15.7
Total Split (s)	18.0	18.0	18.0	17.2		29.5	81.3	15.5	67.3
Total Split (%)	13.6%	13.6%	13.6%	13.0%		22.3%	61.6%	11.7%	51.0%
Yellow Time (s)	3.9	3.9	3.9	3.9		3.4	4.7	3.4	4.7
All-Red Time (s)	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	4.9	4.9		4.4	5.7	4.4	5.7
Lead/Lag	Lag	Lag	Lag	Lead		Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None		None	C-Max	None	C-Max

Intersection Summary

Cycle Length: 132
Actuated Cycle Length: 132
Offset: 14 (11%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 80
Control Type: Actuated-Coordinated

Splits and Phases: 11: Genesee Ave & Executive Square



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	2	38	10	4	11	300	2440	223	14	612	20
Future Volume (vph)	15	2	38	10	4	11	300	2440	223	14	612	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9	4.9		4.9	4.0	4.4	5.7		4.4	5.7	
Lane Util. Factor	0.95	0.91	0.95		0.95	0.95	1.00	0.91		1.00	0.91	
Frt	1.00	0.88	0.85		0.99	0.85	1.00	0.99		1.00	1.00	
Flt Protected	0.95	1.00	1.00		0.97	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1477	1504		1698	1504	1770	5021		1770	5061	
Flt Permitted	0.95	1.00	1.00		0.97	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1681	1477	1504		1698	1504	1770	5021		1770	5061	
Peak-hour factor, PHF	0.87	0.87	0.87	0.80	0.80	0.80	0.96	0.96	0.96	0.80	0.80	0.80
Adj. Flow (vph)	17	2	44	12	5	14	312	2542	232	18	765	25
RTOR Reduction (vph)	0	19	23	0	1	13	0	4	0	0	2	0
Lane Group Flow (vph)	15	5	1	0	18	0	313	2770	0	18	788	0
Turn Type	Split	NA	Prot	Split	NA	NA	Prot	NA		Prot	NA	
Protected Phases	4	4	4	3	3		5	2		1	6	
Permitted Phases												
Actuated Green, G (s)	4.9	4.9	4.9		3.0	0.0	29.4	101.3		2.9	74.8	
Effective Green, g (s)	4.9	4.9	4.9		3.0	0.0	29.4	101.3		2.9	74.8	
Actuated g/C Ratio	0.04	0.04	0.04		0.02	0.00	0.22	0.77		0.02	0.57	
Clearance Time (s)	4.9	4.9	4.9		4.9		4.4	5.7		4.4	5.7	
Vehicle Extension (s)	2.0	2.0	2.0		2.0		2.0	3.9		2.0	2.2	
Lane Grp Cap (vph)	62	54	55		38	0	394	3853		38	2867	
v/s Ratio Prot	c0.01	0.00	0.00		c0.01		c0.18	c0.55		0.01	0.16	
v/s Ratio Perm												
v/c Ratio	0.24	0.09	0.02		0.47	0.00	0.79	0.72		0.47	0.27	
Uniform Delay, d1	61.7	61.4	61.2		63.7	66.0	48.4	8.0		63.8	14.7	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.20	0.25	
Incremental Delay, d2	0.7	0.3	0.0		3.4	0.0	9.9	1.2		3.3	0.2	
Delay (s)	62.5	61.6	61.3		67.1	66.0	58.3	9.1		79.6	3.9	
Level of Service	E	E	E		E	E	E	A		E	A	
Approach Delay (s)		61.7			66.6			14.1			5.6	
Approach LOS		E			E			B			A	

Intersection Summary

HCM 2000 Control Delay	13.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	132.0	Sum of lost time (s)	19.9
Intersection Capacity Utilization	75.6%	ICU Level of Service	D
Analysis Period (min)	15		

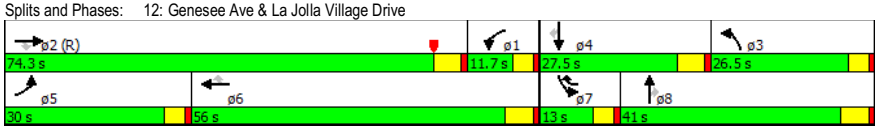
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	761	1680	147	97	1857	351	330	1551	91	198	287	132
Future Volume (vph)	761	1680	147	97	1857	351	330	1551	91	198	287	132
Turn Type	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6	7	3	8		7	4	
Permitted Phases			2			6			8			4
Detector Phase	5	2	2	1	6	7	3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	4.0	10.0	10.0	4.0	10.0	4.0	4.0	10.0	10.0	4.0	10.0	10.0
Minimum Split (s)	8.4	15.3	15.3	8.4	15.5	8.4	8.4	15.7	15.7	8.4	15.4	15.4
Total Split (s)	30.0	74.3	74.3	11.7	56.0	13.0	26.5	41.0	41.0	13.0	27.5	27.5
Total Split (%)	21.4%	53.1%	53.1%	8.4%	40.0%	9.3%	18.9%	29.3%	29.3%	9.3%	19.6%	19.6%
Yellow Time (s)	3.4	4.3	4.3	3.4	4.5	3.4	3.4	4.7	4.7	3.4	4.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.3	5.3	4.4	5.5	4.4	4.4	5.7	5.7	4.4	5.4	5.4
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lead	Lag	Lag	Lag	Lead	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 140
Actuated Cycle Length: 140
Offset: 21 (15%), Referenced to phase 2:EBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 12: Genesee Ave & La Jolla Village Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	761	1680	147	97	1857	351	330	1551	91	198	287	132
Future Volume (vph)	761	1680	147	97	1857	351	330	1551	91	198	287	132
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.3	5.3	4.4	5.5	4.4	4.4	5.7	5.7	4.4	5.4	5.4
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.91	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5085	1583	3433	5085	1583	3433	5085	1583	3433	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5085	1583	3433	5085	1583	3433	5085	1583	3433	5085	1583
Peak-hour factor, PHF	0.87	0.87	0.87	0.82	0.82	0.82	0.89	0.89	0.89	0.80	0.80	0.80
Adj. Flow (vph)	875	1931	169	118	2265	428	371	1743	102	248	359	165
RTOR Reduction (vph)	0	0	71	0	0	56	0	0	76	0	0	145
Lane Group Flow (vph)	875	1931	98	118	2265	372	371	1743	26	248	359	20
Turn Type	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6	7	3	8		7	4	
Permitted Phases			2			6			8			4
Actuated Green, G (s)	25.6	69.0	69.0	7.3	50.5	59.1	27.0	35.3	35.3	8.6	17.2	17.2
Effective Green, g (s)	25.6	69.0	69.0	7.3	50.5	59.1	27.0	35.3	35.3	8.6	17.2	17.2
Actuated g/C Ratio	0.18	0.49	0.49	0.05	0.36	0.42	0.19	0.25	0.25	0.06	0.12	0.12
Clearance Time (s)	4.4	5.3	5.3	4.4	5.5	4.4	4.4	5.7	5.7	4.4	5.4	5.4
Vehicle Extension (s)	2.0	6.0	6.0	2.0	5.8	2.0	2.0	3.5	3.5	2.0	4.1	4.1
Lane Grp Cap (vph)	627	2506	780	179	1834	668	662	1282	399	210	624	194
v/s Ratio Prot	c0.25	0.38		0.03	c0.45	0.03	0.11	c0.34		c0.07	0.07	
v/s Ratio Perm			0.06			0.20			0.02			0.01
v/c Ratio	1.40	0.77	0.13	0.66	1.24	0.56	0.56	1.36	0.06	1.18	0.58	0.10
Uniform Delay, d1	57.2	29.0	19.2	65.1	44.8	30.6	51.1	52.4	39.8	65.7	58.0	54.6
Progression Factor	0.95	1.69	3.78	0.61	0.47	0.08	0.66	0.67	0.35	1.00	1.00	1.00
Incremental Delay, d2	186.0	1.9	0.3	0.6	106.2	0.1	0.3	164.0	0.0	119.5	1.6	0.3
Delay (s)	240.4	51.0	72.7	40.1	127.4	2.4	33.8	198.9	14.0	185.2	59.5	54.9
Level of Service	F	D	E	D	F	A	C	F	B	F	E	D
Approach Delay (s)		107.9			104.7			162.8			98.9	
Approach LOS		F			F			F			F	

Intersection Summary

HCM 2000 Control Delay	120.0	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.30		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	109.9%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	172	33	127	53	449	53	1749	337	193
Future Volume (vph)	172	33	127	53	449	53	1749	337	193
Turn Type	Split	NA	Split	NA	Perm	Prot	NA	Prot	NA
Protected Phases	4	4	3	3		5	2	1	6
Permitted Phases					3				
Detector Phase	4	4	3	3	3	5	2	1	6
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	10.0	4.0	10.0
Minimum Split (s)	8.9	8.9	8.9	8.9	8.9	8.4	16.0	8.4	15.7
Total Split (s)	18.0	18.0	41.9	41.9	41.9	16.5	63.6	16.5	63.3
Total Split (%)	12.9%	12.9%	29.9%	29.9%	29.9%	11.8%	45.4%	11.8%	45.2%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.9	3.4	5.0	3.4	4.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	4.9	4.9	4.9	4.4	6.0	4.4	5.7
Lead/Lag	Lag	Lag	Lead	Lead	Lead	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	None	C-Max

Intersection Summary

Cycle Length: 140
Actuated Cycle Length: 140
Offset: 75 (54%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 13: Genesee Ave & Esplanade Court

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	172	33	30	127	53	449	53	1749	260	337	193	109
Future Volume (vph)	172	33	30	127	53	449	53	1749	260	337	193	109
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9		4.9	4.9	4.9	4.4	6.0		4.4	5.7	
Lane Util. Factor	0.97	1.00		0.97	0.95	0.95	1.00	0.91		0.97	0.91	
Frt	1.00	0.93		1.00	0.88	0.85	1.00	0.98		1.00	0.95	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	3433	1728		3433	1559	1504	1770	4986		3433	4811	
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	3433	1728		3433	1559	1504	1770	4986		3433	4811	
Peak-hour factor, PHF	0.80	0.80	0.80	0.80	0.80	0.80	0.92	0.92	0.92	0.87	0.87	0.87
Adj. Flow (vph)	215	41	38	159	66	561	58	1901	283	387	222	125
RTOR Reduction (vph)	0	24	0	0	109	137	0	14	0	0	58	0
Lane Group Flow (vph)	215	55	0	159	209	172	58	2170	0	387	289	0
Turn Type	Split	NA		Split	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	4	4		3	3		5	2		1	6	
Permitted Phases						3						
Actuated Green, G (s)	12.0	12.0		25.5	25.5	25.5	7.8	60.2		22.1	74.8	
Effective Green, g (s)	12.0	12.0		25.5	25.5	25.5	7.8	60.2		22.1	74.8	
Actuated g/C Ratio	0.09	0.09		0.18	0.18	0.18	0.06	0.43		0.16	0.53	
Clearance Time (s)	4.9	4.9		4.9	4.9	4.9	4.4	6.0		4.4	5.7	
Vehicle Extension (s)	2.0	2.0		2.0	2.0	2.0	2.0	3.7		2.0	4.1	
Lane Grp Cap (vph)	294	148		625	283	273	98	2143		541	2570	
v/s Ratio Prot	c0.06	0.03		0.05	c0.13		0.03	c0.44		c0.11	0.06	
v/s Ratio Perm						0.11						
v/c Ratio	0.73	0.37		0.25	0.74	0.63	0.59	1.01		0.72	0.11	
Uniform Delay, d1	62.4	60.4		49.1	54.1	52.9	64.5	39.9		56.0	16.2	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.26	0.42		1.27	0.23	
Incremental Delay, d2	7.8	0.6		0.1	8.4	3.2	1.7	13.5		3.5	0.1	
Delay (s)	70.3	61.0		49.2	62.5	56.1	83.2	30.2		74.6	3.8	
Level of Service	E	E		D	E	E	F	C		E	A	
Approach Delay (s)		67.8			57.3			31.6			41.1	
Approach LOS		E			E			C			D	

Intersection Summary

HCM 2000 Control Delay	40.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	20.2
Intersection Capacity Utilization	82.9%	ICU Level of Service	E
Analysis Period (min)	15		

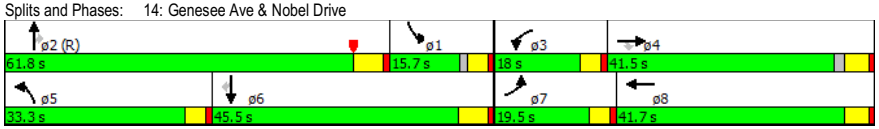
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	134	706	133	114	395	253	1710	251	66	265	52
Future Volume (vph)	134	706	133	114	395	253	1710	251	66	265	52
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8	5	2		1	6	
Permitted Phases			4					2			6
Detector Phase	7	4	4	3	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	4.0	10.0	10.0	4.0	10.0	4.0	10.0	10.0	4.0	10.0	10.0
Minimum Split (s)	8.4	14.9	14.9	8.4	15.1	8.4	15.7	15.7	8.4	15.9	15.9
Total Split (s)	19.5	41.5	41.5	18.0	41.7	33.3	61.8	61.8	15.7	45.5	45.5
Total Split (%)	13.9%	29.6%	29.6%	12.9%	29.8%	23.8%	44.1%	44.1%	11.2%	32.5%	32.5%
Yellow Time (s)	3.4	3.9	3.9	3.4	4.1	3.4	4.7	4.7	3.4	4.9	4.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	4.9	4.9	4.4	5.1	4.4	5.7	5.7	4.4	5.9	5.9
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	None	None	None

Intersection Summary

Cycle Length: 140
Actuated Cycle Length: 140
Offset: 65 (46%), Referenced to phase 2:NBT, Start of Yellow
Natural Cycle: 120
Control Type: Actuated-Coordinated

Splits and Phases: 14: Genesee Ave & Nobel Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	134	706	133	114	395	54	253	1710	251	66	265	52
Future Volume (vph)	134	706	133	114	395	54	253	1710	251	66	265	52
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9	4.9	4.4	5.1		4.4	5.7	5.7	4.4	5.9	5.9
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95		0.97	0.95	1.00	0.97	0.91	1.00
Frt	1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	3539	1583	3433	3476		3433	3539	1583	3433	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3539	1583	3433	3476		3433	3539	1583	3433	5085	1583
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.94	0.94	0.94	0.80	0.80	0.80
Adj. Flow (vph)	160	840	158	125	434	59	269	1819	267	82	331	65
RTOR Reduction (vph)	0	0	99	0	7	0	0	0	54	0	0	40
Lane Group Flow (vph)	160	840	59	125	486	0	269	1819	213	83	331	25
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4						2			6
Actuated Green, G (s)	10.9	40.7	40.7	9.5	39.1		15.4	62.5	62.5	7.9	54.8	54.8
Effective Green, g (s)	10.9	40.7	40.7	9.5	39.1		15.4	62.5	62.5	7.9	54.8	54.8
Actuated g/C Ratio	0.08	0.29	0.29	0.07	0.28		0.11	0.45	0.45	0.06	0.39	0.39
Clearance Time (s)	4.4	4.9	4.9	4.4	5.1		4.4	5.7	5.7	4.4	5.9	5.9
Vehicle Extension (s)	2.0	4.0	4.0	2.0	2.1		2.0	8.0	8.0	2.0	4.0	4.0
Lane Grp Cap (vph)	267	1028	460	232	970		377	1579	706	193	1990	619
v/s Ratio Prot	c0.05	c0.24		0.04	0.14		0.08	c0.51		c0.02	0.07	
v/s Ratio Perm			0.04						0.13			0.02
v/c Ratio	0.60	0.82	0.13	0.54	0.50		0.71	1.15	0.30	0.43	0.17	0.04
Uniform Delay, d1	62.4	46.2	36.6	63.1	42.3		60.2	38.8	24.8	63.9	27.7	26.3
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	0.59	0.35	1.00	1.23	3.20
Incremental Delay, d2	2.4	5.4	0.2	1.2	0.2		1.6	70.8	0.3	0.6	0.1	0.0
Delay (s)	64.8	51.6	36.8	64.3	42.5		61.5	93.8	9.1	64.5	34.2	84.3
Level of Service	E	D	D	E	D		E	F	A	E	C	F
Approach Delay (s)		51.4			46.9			80.5			46.2	
Approach LOS		D			D			F			D	

Intersection Summary

HCM 2000 Control Delay	65.1	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.96		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	19.8
Intersection Capacity Utilization	89.6%	ICU Level of Service	E
Analysis Period (min)	15		

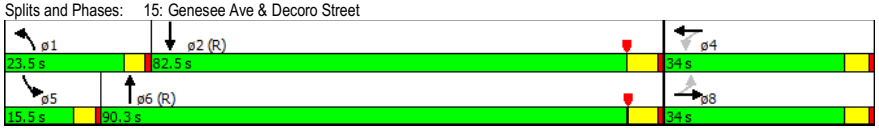
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	81	54	32	30	76	2007	38	602
Future Volume (vph)	81	54	32	30	76	2007	38	602
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		8		4	1	6	5	2
Permitted Phases	8		4					
Detector Phase	8	8	4	4	1	6	5	2
Switch Phase								
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	10.0	4.0	10.0
Minimum Split (s)	8.9	8.9	8.9	8.9	8.4	15.7	8.4	15.9
Total Split (s)	34.0	34.0	34.0	34.0	23.5	90.3	15.5	82.5
Total Split (%)	24.3%	24.3%	24.3%	24.3%	16.8%	64.5%	11.1%	58.9%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.4	4.7	3.4	4.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.9		4.9	4.4	5.7	4.4	5.9
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	None	C-Max

Intersection Summary

Cycle Length: 140
Actuated Cycle Length: 140
Offset: 44 (31%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow
Natural Cycle: 130
Control Type: Actuated-Coordinated

Splits and Phases: 15: Genesee Ave & Decoro Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	81	54	110	32	30	62	76	2007	83	38	602	109
Future Volume (vph)	81	54	110	32	30	62	76	2007	83	38	602	109
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9			4.9		4.4	5.7		4.4	5.9	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frt		0.94			0.93		1.00	0.99		1.00	0.98	
Flt Protected		0.98			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1721			1715		1770	3518		1770	3458	
Flt Permitted		0.76			0.77		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1329			1343		1770	3518		1770	3458	
Peak-hour factor, PHF	0.84	0.84	0.84	0.85	0.85	0.85	0.93	0.93	0.93	0.80	0.80	0.80
Adj. Flow (vph)	96	64	131	38	35	73	82	2158	89	48	752	136
RTOR Reduction (vph)	0	21	0	0	25	0	0	2	0	0	9	0
Lane Group Flow (vph)	0	270	0	0	121	0	82	2245	0	48	880	0
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		8			4		1	6		5	2	
Permitted Phases	8			4								
Actuated Green, G (s)		29.1			29.1		10.9	88.8		7.1	84.8	
Effective Green, g (s)		29.1			29.1		10.9	88.8		7.1	84.8	
Actuated g/C Ratio		0.21			0.21		0.08	0.63		0.05	0.61	
Clearance Time (s)		4.9			4.9		4.4	5.7		4.4	5.9	
Vehicle Extension (s)		2.0			2.0		2.0	4.3		2.0	3.7	
Lane Grp Cap (vph)		276			279		137	2231		89	2094	
v/s Ratio Prot							c0.05	c0.64		0.03	0.25	
v/s Ratio Perm		c0.20			0.09							
v/c Ratio		0.98			0.43		0.60	1.01		0.54	0.42	
Uniform Delay, d1		55.1			48.3		62.4	25.6		64.9	14.6	
Progression Factor		1.00			1.00		0.94	0.76		0.97	1.50	
Incremental Delay, d2		47.1			0.4		2.0	14.1		3.1	0.6	
Delay (s)		102.2			48.7		60.7	33.6		66.0	22.5	
Level of Service		F			D		E	C		E	C	
Approach Delay (s)		102.2			48.7			34.6			24.7	
Approach LOS		F			D			C			C	

Intersection Summary

HCM 2000 Control Delay	38.0	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.99		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	15.2
Intersection Capacity Utilization	92.6%	ICU Level of Service	F
Analysis Period (min)	15		

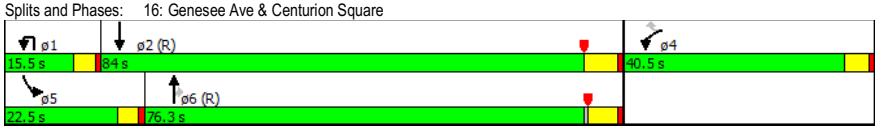
c Critical Lane Group

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	ø1
Lane Configurations							
Traffic Volume (vph)	314	225	1813	288	181	595	
Future Volume (vph)	314	225	1813	288	181	595	
Turn Type	Prot	Perm	NA	Perm	Prot	NA	
Protected Phases	4		6		5	2	1
Permitted Phases		4		6			
Detector Phase	4	4	6	6	5	2	
Switch Phase							
Minimum Initial (s)	7.0	7.0	10.0	10.0	4.0	10.0	4.0
Minimum Split (s)	34.9	34.9	28.7	28.7	8.4	16.4	8.4
Total Split (s)	40.5	40.5	76.3	76.3	22.5	84.0	15.5
Total Split (%)	28.9%	28.9%	54.5%	54.5%	16.1%	60.0%	11%
Yellow Time (s)	3.9	3.9	4.7	4.7	3.4	5.4	3.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.9	4.9	5.7	5.7	4.4	6.4	
Lead/Lag			Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?			Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	C-Max	C-Max	None	C-Max	None

Intersection Summary

Cycle Length: 140
Actuated Cycle Length: 140
Offset: 43 (31%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow
Natural Cycle: 120
Control Type: Actuated-Coordinated

Splits and Phases: 16: Genesee Ave & Centurion Square



Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	314	225	0	1813	288	181	595
Future Volume (vph)	314	225	0	1813	288	181	595
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9		5.7	5.7	4.4	6.4
Lane Util. Factor	1.00	1.00		0.95	1.00	0.97	0.95
Frt	1.00	0.85		1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00		1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583		3539	1583	3433	3539
Flt Permitted	0.95	1.00		1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583		3539	1583	3433	3539
Peak-hour factor, PHF	0.80	0.80	0.92	0.93	0.93	0.81	0.81
Adj. Flow (vph)	392	281	0	1949	310	223	735
RTOR Reduction (vph)	0	139	0	0	63	0	0
Lane Group Flow (vph)	393	142	0	1949	247	223	735
Turn Type	Prot	Perm	Prot	NA	Perm	Prot	NA
Protected Phases	4		1	6		5	2
Permitted Phases		4			6		
Actuated Green, G (s)	33.4	33.4		78.2	78.2	13.4	95.3
Effective Green, g (s)	33.4	33.4		78.2	78.2	13.4	95.3
Actuated g/C Ratio	0.24	0.24		0.56	0.56	0.10	0.68
Clearance Time (s)	4.9	4.9		5.7	5.7	4.4	6.4
Vehicle Extension (s)	2.0	2.0		4.2	4.2	2.0	3.4
Lane Grp Cap (vph)	422	377		1976	884	328	2409
v/s Ratio Prot	c0.22			c0.55		c0.06	0.21
v/s Ratio Perm		0.09			0.16		
v/c Ratio	0.93	0.38		0.99	0.28	0.68	0.31
Uniform Delay, d1	52.2	44.6		30.4	16.2	61.2	9.0
Progression Factor	1.00	1.00		1.00	1.00	1.14	0.72
Incremental Delay, d2	27.0	0.2		17.3	0.8	3.9	0.3
Delay (s)	79.2	44.8		47.6	17.0	73.6	6.8
Level of Service	E	D		D	B	E	A
Approach Delay (s)	64.8			43.4			22.4
Approach LOS	E			D			C

Intersection Summary

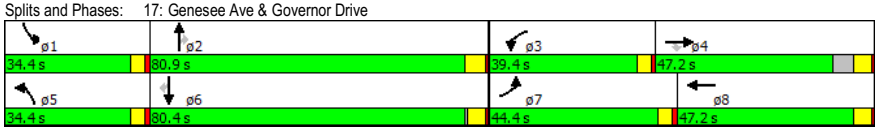
HCM 2000 Control Delay	42.0	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	15.7
Intersection Capacity Utilization	85.2%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	228	220	103	399	161	54	1594	382	220	603	132
Future Volume (vph)	228	220	103	399	161	54	1594	382	220	603	132
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8	5	2		1	6	
Permitted Phases			4					2			6
Detector Phase	7	4	4	3	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	4.0	8.0	8.0	4.0	8.0	4.0	8.0	8.0	4.0	8.0	8.0
Minimum Split (s)	8.4	13.2	13.2	8.4	13.2	8.4	13.9	13.9	8.4	13.4	13.4
Total Split (s)	44.4	47.2	47.2	39.4	47.2	34.4	80.9	80.9	34.4	80.4	80.4
Total Split (%)	21.5%	22.8%	22.8%	19.0%	22.8%	16.6%	39.1%	39.1%	16.6%	38.9%	38.9%
Yellow Time (s)	3.4	4.2	4.2	3.4	4.2	3.4	4.9	4.9	3.4	4.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.2	5.2	4.4	5.2	4.4	5.9	5.9	4.4	5.4	5.4
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	Min

Intersection Summary
Cycle Length: 206.9
Actuated Cycle Length: 183
Natural Cycle: 110
Control Type: Actuated-Uncoordinated

Splits and Phases: 17: Genesee Ave & Governor Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	228	220	103	399	161	281	54	1594	382	220	603	132
Future Volume (vph)	228	220	103	399	161	281	54	1594	382	220	603	132
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	16	12	12	12	12	12	12	12
Total Lost time (s)	4.4	5.2	5.2	4.4	5.2		4.4	5.9	5.9	4.4	5.4	5.4
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95		1.00	0.95	1.00	0.97	0.95	1.00
Frt	1.00	1.00	0.85	1.00	0.90		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	3539	1583	3433	3629		1770	3539	1583	3433	3539	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3539	1583	3433	3629		1770	3539	1583	3433	3539	1583
Peak-hour factor, PHF	0.80	0.80	0.80	0.80	0.80	0.80	0.90	0.90	0.90	0.85	0.85	0.85
Adj. Flow (vph)	285	275	129	499	201	351	60	1771	424	259	709	155
RTOR Reduction (vph)	0	0	72	0	140	0	0	0	48	0	0	44
Lane Group Flow (vph)	285	275	57	499	412	0	60	1771	376	259	709	111
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4						2			6
Actuated Green, G (s)	19.7	39.1	39.1	30.6	50.0		10.7	75.2	75.2	18.2	83.2	83.2
Effective Green, g (s)	19.7	39.1	39.1	30.6	50.0		10.7	75.2	75.2	18.2	83.2	83.2
Actuated g/C Ratio	0.11	0.21	0.21	0.17	0.27		0.06	0.41	0.41	0.10	0.45	0.45
Clearance Time (s)	4.4	5.2	5.2	4.4	5.2		4.4	5.9	5.9	4.4	5.4	5.4
Vehicle Extension (s)	2.0	2.3	2.3	2.0	3.8		2.0	2.9	2.9	2.0	3.5	3.5
Lane Grp Cap (vph)	369	756	338	574	991		103	1454	650	341	1608	719
v/s Ratio Prot	0.08	0.08		c0.15	c0.11		0.03	c0.50		c0.08	0.20	
v/s Ratio Perm			0.04						0.24			0.07
v/c Ratio	0.77	0.36	0.17	0.87	0.42		0.58	1.22	0.58	0.76	0.44	0.15
Uniform Delay, d1	79.5	61.3	58.7	74.3	54.5		84.0	53.9	41.7	80.3	34.0	29.3
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	8.8	0.2	0.1	12.8	0.4		5.3	104.6	1.2	8.4	0.2	0.1
Delay (s)	88.3	61.5	58.8	87.1	54.9		89.3	158.5	42.9	88.6	34.3	29.4
Level of Service	F	E	E	F	D		F	F	D	F	C	C
Approach Delay (s)		72.1			70.2			134.9			46.1	
Approach LOS		E			E			F			D	

Intersection Summary					
HCM 2000 Control Delay	93.7	HCM 2000 Level of Service	F		
HCM 2000 Volume to Capacity ratio	0.92				
Actuated Cycle Length (s)	183.0	Sum of lost time (s)	19.9		
Intersection Capacity Utilization	86.9%	ICU Level of Service	E		
Analysis Period (min)	15				
c Critical Lane Group					

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	144	404	1139	1002	193
Future Volume (Veh/h)	0	144	404	1139	1002	193
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.80	0.80	0.83	0.83	0.83	0.83
Hourly flow rate (vph)	0	180	487	1372	1207	233
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2867	604	1207			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2867	604	1207			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	59	15			
cM capacity (veh/h)	2	442	574			

Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	180	487	686	686	604	604	233
Volume Left	0	487	0	0	0	0	0
Volume Right	180	0	0	0	0	0	233
cSH	442	574	1700	1700	1700	1700	1700
Volume to Capacity	0.41	0.85	0.40	0.40	0.35	0.35	0.14
Queue Length 95th (ft)	49	228	0	0	0	0	0
Control Delay (s)	18.6	36.9	0.0	0.0	0.0	0.0	0.0
Lane LOS	C	E					
Approach Delay (s)	18.6	9.7			0.0		
Approach LOS	C						

Intersection Summary				
Average Delay		6.1		
Intersection Capacity Utilization		56.7%	ICU Level of Service	B
Analysis Period (min)		15		

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	126	145	1447	705	397	729
Future Volume (vph)	126	145	1447	705	397	729
Turn Type	Prot	Perm	NA	Perm	Prot	NA
Protected Phases	4		2		1	6
Permitted Phases		4		2		
Detector Phase	4	4	2	2	1	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	13.0	13.0	5.0	10.0
Minimum Split (s)	37.1	37.1	38.5	38.5	10.7	17.5
Total Split (s)	37.1	37.1	73.9	73.9	39.0	112.9
Total Split (%)	24.7%	24.7%	49.3%	49.3%	26.0%	75.3%
Yellow Time (s)	4.1	4.1	5.5	5.5	3.7	5.5
All-Red Time (s)	1.0	1.0	2.0	2.0	1.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.1	5.1	7.5	7.5	4.7	7.5
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	None	None	Min	Min	None	Min

Intersection Summary
Cycle Length: 150
Actuated Cycle Length: 134.9
Natural Cycle: 150
Control Type: Actuated-Uncoordinated

Splits and Phases: 19: Genesee Ave & SR-52 EB Ramps

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	126	145	1447	705	397	729
Future Volume (vph)	126	145	1447	705	397	729
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1	7.5	7.5	4.7	7.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.83	0.83	0.83	0.83	0.84	0.84
Adj. Flow (vph)	152	175	1743	849	473	868
RTOR Reduction (vph)	0	153	0	121	0	0
Lane Group Flow (vph)	152	22	1743	728	473	868
Turn Type	Prot	Perm	NA	Perm	Prot	NA
Protected Phases	4		2		1	6
Permitted Phases		4		2		
Actuated Green, G (s)	16.8	16.8	66.5	66.5	34.3	105.5
Effective Green, g (s)	16.8	16.8	66.5	66.5	34.3	105.5
Actuated g/C Ratio	0.12	0.12	0.49	0.49	0.25	0.78
Clearance Time (s)	5.1	5.1	7.5	7.5	4.7	7.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	220	197	1744	780	450	2767
v/s Ratio Prot	c0.09		c0.49		c0.27	0.25
v/s Ratio Perm		0.01		0.46		
v/c Ratio	0.69	0.11	1.00	0.93	1.05	0.31
Uniform Delay, d1	56.6	52.4	34.2	32.1	50.3	4.2
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	9.0	0.2	21.2	17.9	56.5	0.1
Delay (s)	65.6	52.7	55.4	50.0	106.8	4.3
Level of Service	E	D	E	D	F	A
Approach Delay (s)	58.7		53.7			40.5
Approach LOS	E		D			D

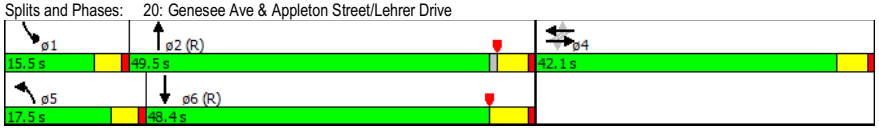
Intersection Summary			
HCM 2000 Control Delay	49.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.97		
Actuated Cycle Length (s)	134.9	Sum of lost time (s)	17.3
Intersection Capacity Utilization	83.4%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	471	8	14	19	7	1352	60	643
Future Volume (vph)	471	8	14	19	7	1352	60	643
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		4	5	2	1	6
Permitted Phases	4		4					
Detector Phase	4	4	4	4	5	2	1	6
Switch Phase								
Minimum Initial (s)	6.0	6.0	6.0	6.0	4.0	10.0	4.0	10.0
Minimum Split (s)	10.9	10.9	10.9	10.9	8.4	14.9	8.4	15.8
Total Split (s)	42.1	42.1	42.1	42.1	17.5	49.5	15.5	48.4
Total Split (%)	39.0%	39.0%	39.0%	39.0%	16.2%	45.8%	14.4%	44.8%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.4	3.9	3.4	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.9		4.9	4.4	4.9	4.4	5.8
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	None	C-Max

Intersection Summary
Cycle Length: 108
Actuated Cycle Length: 108
Offset: 7 (6%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 20: Genesee Ave & Appleton Street/Lehrer Drive



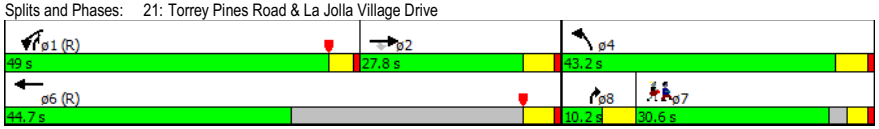
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	471	8	18	14	19	345	7	1352	5	60	643	101
Future Volume (vph)	471	8	18	14	19	345	7	1352	5	60	643	101
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	16	12	12	16	12	12	12	12	12	12	12
Total Lost time (s)		4.9			4.9		4.4	4.9		4.4	5.8	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frt		1.00			0.88		1.00	1.00		1.00	0.98	
Flt Protected		0.95			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		2006			1847		1770	3537		1770	3467	
Flt Permitted		0.33			0.98		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		684			1813		1770	3537		1770	3467	
Peak-hour factor, PHF	0.83	0.83	0.83	0.89	0.89	0.89	0.80	0.80	0.80	0.80	0.80	0.80
Adj. Flow (vph)	567	10	22	16	21	388	9	1690	6	75	804	126
RTOR Reduction (vph)	0	1	0	0	150	0	0	0	0	0	9	0
Lane Group Flow (vph)	0	598	0	0	275	0	9	1696	0	75	921	0
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4			4								
Actuated Green, G (s)		37.2			37.2		1.5	48.5		8.1	54.2	
Effective Green, g (s)		37.2			37.2		1.5	48.5		8.1	54.2	
Actuated g/C Ratio		0.34			0.34		0.01	0.45		0.07	0.50	
Clearance Time (s)		4.9			4.9		4.4	4.9		4.4	5.8	
Vehicle Extension (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		235			624		24	1588		132	1739	
v/s Ratio Prot							0.01	c0.48		c0.04	0.27	
v/s Ratio Perm		c0.87			0.15							
v/c Ratio		2.54			0.44		0.38	1.07		0.57	0.53	
Uniform Delay, d1		35.4			27.4		52.8	29.8		48.3	18.2	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		706.9			0.5		9.6	43.2		5.5	1.2	
Delay (s)		742.3			27.9		62.4	73.0		53.8	19.4	
Level of Service		F			C		E	E		D	B	
Approach Delay (s)		742.3			27.9			72.9			22.0	
Approach LOS		F			C			E			C	

Intersection Summary			
HCM 2000 Control Delay	161.5	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.62		
Actuated Cycle Length (s)	108.0	Sum of lost time (s)	15.1
Intersection Capacity Utilization	107.5%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	ø7	ø8
Lane Configurations								
Traffic Volume (vph)	389	64	1292	1723	279	1262		
Future Volume (vph)	389	64	1292	1723	279	1262		
Turn Type	NA	Perm	Prot	NA	Prot	pt+ov		
Protected Phases	2		1	6	4	8 1	7	8
Permitted Phases		2						
Detector Phase	2	2	1	6	4	8 1		
Switch Phase								
Minimum Initial (s)	10.0	10.0	4.0	10.0	4.0		4.0	4.0
Minimum Split (s)	15.4	15.4	8.4	15.3	9.6		8.0	9.6
Total Split (s)	27.8	27.8	49.0	44.7	43.2		30.6	10.2
Total Split (%)	23.2%	23.2%	40.8%	37.3%	36.0%		26%	9%
Yellow Time (s)	4.4	4.4	3.4	4.3	4.6		3.0	4.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	0.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0			
Total Lost Time (s)	5.4	5.4	4.4	5.3	5.6			
Lead/Lag	Lag	Lag	Lead				Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes				Yes	Yes
Recall Mode	None	None	C-Max	C-Max	None		None	None

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 116 (97%), Referenced to phase 1:WBL and 6:WBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 21: Torrey Pines Road & La Jolla Village Drive



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	389	64	1292	1723	279	1262
Future Volume (vph)	389	64	1292	1723	279	1262
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.4	5.4	4.4	5.3	5.6	4.6
Lane Util. Factor	0.91	1.00	0.97	0.91	0.97	0.88
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	5085	1583	3433	5085	3433	2787
Flt Permitted	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (perm)	5085	1583	3433	5085	3433	2787
Peak-hour factor, PHF	0.83	0.83	0.93	0.93	0.84	0.84
Adj. Flow (vph)	469	77	1389	1853	332	1502
RTOR Reduction (vph)	0	63	0	0	0	0
Lane Group Flow (vph)	469	14	1389	1853	332	1502
Turn Type	NA	Perm	Prot	NA	Prot	pt+ov
Protected Phases	2		1	6	4	8 1
Permitted Phases		2				
Actuated Green, G (s)	22.4	22.4	49.0	75.9	33.2	56.0
Effective Green, g (s)	22.4	22.4	49.0	75.9	33.2	56.0
Actuated g/C Ratio	0.19	0.19	0.41	0.63	0.28	0.47
Clearance Time (s)	5.4	5.4	4.4	5.3	5.6	
Vehicle Extension (s)	5.5	5.5	2.0	8.0	2.0	
Lane Grp Cap (vph)	949	295	1401	3216	949	1300
v/s Ratio Prot	0.09		0.40	c0.36	c0.10	c0.54
v/s Ratio Perm		0.01				
v/c Ratio	0.49	0.05	0.99	0.58	0.35	1.16
Uniform Delay, d1	43.7	40.1	35.3	12.7	34.8	32.0
Progression Factor	0.65	0.72	1.06	0.58	1.00	1.00
Incremental Delay, d2	1.0	0.2	11.8	0.2	0.1	79.0
Delay (s)	29.4	28.9	49.3	7.7	34.8	111.0
Level of Service	C	C	D	A	C	F
Approach Delay (s)	29.4			25.5	97.2	
Approach LOS	C			C	F	

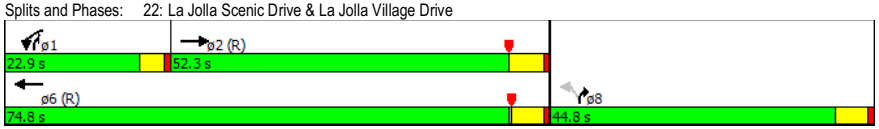
Intersection Summary				
HCM 2000 Control Delay	49.3	HCM 2000 Level of Service	D	
HCM 2000 Volume to Capacity ratio	0.86			
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	18.4	
Intersection Capacity Utilization	66.0%	ICU Level of Service	C	
Analysis Period (min)	15			

c Critical Lane Group

Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Configurations					
Traffic Volume (vph)	1556	476	2430	629	500
Future Volume (vph)	1556	476	2430	629	500
Turn Type	NA	Prot	NA	Perm	pt+ov
Protected Phases	2	1	6		8 1
Permitted Phases				8	
Detector Phase	2	1	6	8	8 1
Switch Phase					
Minimum Initial (s)	10.0	4.0	10.0	4.0	
Minimum Split (s)	15.7	8.4	15.3	9.5	
Total Split (s)	52.3	22.9	74.8	44.8	
Total Split (%)	43.6%	19.1%	62.3%	37.3%	
Yellow Time (s)	4.7	3.4	4.3	4.5	
All-Red Time (s)	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.7	4.4	5.3	5.5	
Lead/Lag	Lag	Lead			
Lead-Lag Optimize?	Yes	Yes			
Recall Mode	C-Max	None	C-Max	None	

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 34 (28%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 110
Control Type: Actuated-Coordinated

Splits and Phases: 22: La Jolla Scenic Drive & La Jolla Village Drive



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1556	66	476	2430	629	500
Future Volume (vph)	1556	66	476	2430	629	500
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.7		4.4	5.3	5.5	5.5
Lane Util. Factor	0.91		0.97	0.91	1.00	0.88
Frt	0.99		1.00	1.00	1.00	0.85
Flt Protected	1.00		0.95	1.00	0.95	1.00
Satd. Flow (prot)	5054		3433	5085	1770	2787
Flt Permitted	1.00		0.95	1.00	0.95	1.00
Satd. Flow (perm)	5054		3433	5085	1770	2787
Peak-hour factor, PHF	0.88	0.88	0.96	0.96	0.85	0.85
Adj. Flow (vph)	1768	75	496	2531	740	588
RTOR Reduction (vph)	4	0	0	0	0	1
Lane Group Flow (vph)	1839	0	496	2531	740	587
Turn Type	NA		Prot	NA	Perm	pt+ov
Protected Phases	2		1	6		8 1
Permitted Phases					8	
Actuated Green, G (s)	46.6		18.5	69.9	39.3	63.3
Effective Green, g (s)	46.6		18.5	69.9	39.3	63.3
Actuated g/C Ratio	0.39		0.15	0.58	0.33	0.53
Clearance Time (s)	5.7		4.4	5.3	5.5	
Vehicle Extension (s)	4.0		2.0	5.9	2.0	
Lane Grp Cap (vph)	1962		529	2962	579	1470
v/s Ratio Prot	c0.36		0.14	c0.50		0.21
v/s Ratio Perm					c0.42	
v/c Ratio	0.94		0.94	0.85	1.28	0.40
Uniform Delay, d1	35.3		50.2	20.8	40.4	17.0
Progression Factor	0.83		0.69	1.13	1.00	1.00
Incremental Delay, d2	3.4		14.2	1.7	138.1	0.1
Delay (s)	32.7		48.8	25.2	178.4	17.0
Level of Service	C		D	C	F	B
Approach Delay (s)	32.7			29.1	107.0	
Approach LOS	C			C	F	

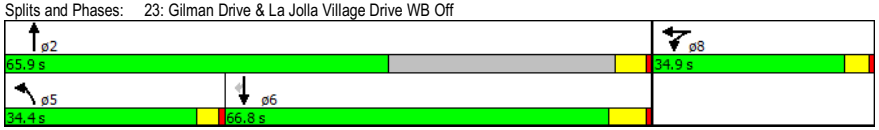
Intersection Summary			
HCM 2000 Control Delay	46.8	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.07		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	15.6
Intersection Capacity Utilization	93.0%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	WBT	NBL	NBT	SBT	SBR
Lane Configurations					
Traffic Volume (vph)	0	587	730	152	64
Future Volume (vph)	0	587	730	152	64
Turn Type	NA	Prot	NA	NA	Perm
Protected Phases	8	5	2	6	
Permitted Phases					6
Detector Phase	8	5	2	6	6
Switch Phase					
Minimum Initial (s)	4.0	4.0	10.0	10.0	10.0
Minimum Split (s)	8.9	8.4	15.9	16.8	16.8
Total Split (s)	34.9	34.4	65.9	66.8	66.8
Total Split (%)	25.6%	25.3%	48.4%	49.1%	49.1%
Yellow Time (s)	3.9	3.4	4.9	5.8	5.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.4	5.9	6.8	6.8
Lead/Lag		Lead		Lag	Lag
Lead-Lag Optimize?		Yes		Yes	Yes
Recall Mode	None	None	Min	Min	Min

Intersection Summary
Cycle Length: 136.1
Actuated Cycle Length: 67.6
Natural Cycle: 60
Control Type: Actuated-Uncoordinated

Splits and Phases: 23: Gilman Drive & La Jolla Village Drive WB Off



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	18	0	177	587	730	0	0	152	64
Future Volume (vph)	0	0	0	18	0	177	587	730	0	0	152	64
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.9		4.4	5.9			6.8	6.8
Lane Util. Factor					1.00		1.00	0.95			0.95	1.00
Frt					0.88		1.00	1.00			1.00	0.85
Flt Protected					1.00		0.95	1.00			1.00	1.00
Satd. Flow (prot)					1627		1770	3539			3539	1583
Flt Permitted					1.00		0.95	1.00			1.00	1.00
Satd. Flow (perm)					1627		1770	3539			3539	1583
Peak-hour factor, PHF	0.25	0.25	0.25	0.90	0.90	0.90	0.90	0.90	0.90	0.83	0.83	0.83
Adj. Flow (vph)	0	0	0	20	0	197	652	811	0	0	183	77
RTOR Reduction (vph)	0	0	0	0	167	0	0	0	0	0	0	65
Lane Group Flow (vph)	0	0	0	0	50	0	652	811	0	0	183	12
Turn Type				Split	NA		Prot	NA			NA	Perm
Protected Phases				8	8		5	2			6	
Permitted Phases												6
Actuated Green, G (s)					10.1		30.6	46.5			10.6	10.6
Effective Green, g (s)					10.1		30.6	46.5			10.6	10.6
Actuated g/C Ratio					0.15		0.45	0.69			0.16	0.16
Clearance Time (s)					4.9		4.4	5.9			6.8	6.8
Vehicle Extension (s)					3.0		3.0	3.0			3.0	3.0
Lane Grp Cap (vph)					243		803	2441			556	248
v/s Ratio Prot					c0.03		c0.37	c0.23			0.05	
v/s Ratio Perm												0.01
v/c Ratio					0.20		0.81	0.33			0.33	0.05
Uniform Delay, d1					25.1		15.9	4.2			25.2	24.1
Progression Factor					1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2					0.4		6.3	0.1			0.3	0.1
Delay (s)					25.5		22.2	4.3			25.6	24.2
Level of Service					C		C	A			C	C
Approach Delay (s)		0.0			25.5			12.3			25.2	
Approach LOS		A			C			B			C	

Intersection Summary				
HCM 2000 Control Delay	15.5	HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio	0.61			
Actuated Cycle Length (s)	67.4	Sum of lost time (s)	16.1	
Intersection Capacity Utilization	Err%	ICU Level of Service	H	
Analysis Period (min)	15			

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	25	4	432	0	0	0	0	1181	143	23	167	0
Future Volume (Veh/h)	25	4	432	0	0	0	0	1181	143	23	167	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.64	0.64	0.64	0.25	0.25	0.25	0.92	0.92	0.92	1.00	1.00	1.00
Hourly flow rate (vph)	39	6	675	0	0	0	0	1284	155	23	167	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)			13									
Median type								None			None	
Median storage veh)												
Upstream signal (ft)											483	
pX, platoon unblocked	0.99	0.99	0.99	0.99	0.99		0.99					
vC, conflicting volume	855	1652	84	1754	1497	642	167			1439		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	838	1642	61	1744	1485	642	145			1439		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	84	94	31	100	100	100	100			95		
cM capacity (veh/h)	247	93	984	16	117	417	1424			468		

Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	714	642	642	155	23	84	84
Volume Left	39	0	0	0	23	0	0
Volume Right	675	0	0	155	0	0	0
cSH	1041	1700	1700	1700	468	1700	1700
Volume to Capacity	0.69	0.38	0.38	0.09	0.05	0.05	0.05
Queue Length 95th (ft)	144	0	0	0	4	0	0
Control Delay (s)	16.6	0.0	0.0	0.0	13.1	0.0	0.0
Lane LOS	C				B		
Approach Delay (s)	Err	0.0			1.6		
Approach LOS	F						

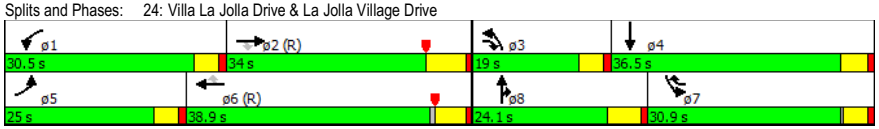
Intersection Summary					
Average Delay	Err				
Intersection Capacity Utilization	Err%	ICU Level of Service		H	
Analysis Period (min)	15				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	216	1186	35	471	1794	746	360	345	465	455	103
Future Volume (vph)	216	1186	35	471	1794	746	360	345	465	455	103
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	Prot	Prot	NA
Protected Phases	5	2	3	1	6	7	3	8	8	7	4
Permitted Phases			2			6					
Detector Phase	5	2	3	1	6	7	3	8	8	7	4
Switch Phase											
Minimum Initial (s)	4.0	10.0	4.0	4.0	10.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.4	16.4	8.4	8.4	15.3	8.4	8.4	9.5	9.5	8.4	8.9
Total Split (s)	25.0	34.0	19.0	30.5	38.9	30.9	19.0	24.1	24.1	30.9	36.5
Total Split (%)	20.8%	28.3%	15.8%	25.4%	32.4%	25.8%	15.8%	20.1%	20.1%	25.8%	30.4%
Yellow Time (s)	3.4	5.4	3.4	3.4	4.3	3.4	3.4	4.5	4.5	3.4	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	6.4	4.4	4.4	5.3	4.4	4.4	5.5	5.5	4.4	4.9
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	C-Max	None	None	None	None	None	None

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 65 (54%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 140
Control Type: Actuated-Coordinated

Splits and Phases: 24: Villa La Jolla Drive & La Jolla Village Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	216	1186	35	471	1794	746	360	345	465	455	103	37
Future Volume (vph)	216	1186	35	471	1794	746	360	345	465	455	103	37
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	6.4	4.4	4.4	5.3	4.4	4.4	5.5	5.5	4.4	4.9	
Lane Util. Factor	1.00	0.91	1.00	0.97	0.91	1.00	0.97	0.95	0.95	0.97	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.97	0.85	1.00	0.96	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	5085	1583	3433	5085	1583	3433	1718	1504	3433	1789	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	5085	1583	3433	5085	1583	3433	1718	1504	3433	1789	
Peak-hour factor, PHF	0.87	0.87	0.87	0.91	0.91	0.91	0.80	0.80	0.80	0.80	0.80	0.80
Adj. Flow (vph)	248	1363	40	518	1971	820	450	431	581	569	129	46
RTOR Reduction (vph)	0	0	25	0	0	50	0	8	275	0	11	0
Lane Group Flow (vph)	248	1363	15	518	1971	770	450	528	201	569	164	0
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	Prot	Prot	NA	
Protected Phases	5	2	3	1	6	7	3	8	8	7	4	
Permitted Phases			2			6						
Actuated Green, G (s)	19.1	31.7	46.3	22.0	35.7	62.7	14.6	18.6	18.6	27.0	31.6	
Effective Green, g (s)	19.1	31.7	46.3	22.0	35.7	62.7	14.6	18.6	18.6	27.0	31.6	
Actuated g/C Ratio	0.16	0.26	0.39	0.18	0.30	0.52	0.12	0.16	0.16	0.22	0.26	
Clearance Time (s)	4.4	6.4	4.4	4.4	5.3	4.4	4.4	5.5	5.5	4.4	4.9	
Vehicle Extension (s)	2.0	4.4	2.0	2.0	4.7	2.0	2.0	3.3	3.3	2.0	2.0	
Lane Grp Cap (vph)	281	1343	610	629	1512	827	417	266	233	772	471	
v/s Ratio Prot	0.14	0.27	0.00	c0.15	c0.39	c0.21	0.13	c0.31	0.13	0.17	c0.09	
v/s Ratio Perm			0.01			0.28						
v/c Ratio	0.88	1.01	0.03	0.82	1.30	0.93	1.08	1.99	0.86	0.74	0.35	
Uniform Delay, d1	49.4	44.1	22.9	47.1	42.1	26.6	52.7	50.7	49.5	43.2	35.8	
Progression Factor	1.41	0.60	1.00	1.06	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	17.3	22.9	0.0	0.8	137.1	2.2	66.9	457.1	26.9	3.2	0.2	
Delay (s)	87.1	49.2	22.9	51.0	179.3	28.9	119.6	507.8	76.4	46.4	36.0	
Level of Service	F	D	C	D	F	C	F	F	E	D	D	
Approach Delay (s)		54.3			121.9			247.9			43.9	
Approach LOS		D			F			F			D	

Intersection Summary

HCM 2000 Control Delay	123.9	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.23		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	20.7
Intersection Capacity Utilization	103.5%	ICU Level of Service	G
Analysis Period (min)	15		

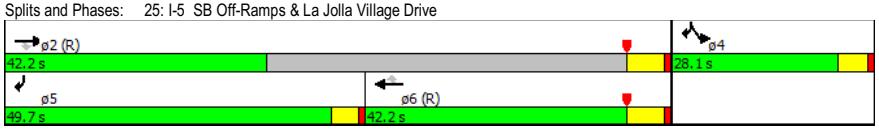
c Critical Lane Group

Lane Group	EBT	EBR	WBT	WBR	SBL	SBR	ø5
Lane Configurations							
Traffic Volume (vph)	1782	369	1512	329	558	1440	
Future Volume (vph)	1782	369	1512	329	558	1440	
Turn Type	NA	Perm	NA	Perm	Prot	custom	
Protected Phases	2		6		4	4 5	5
Permitted Phases		2		6			
Detector Phase	2	2	6	6	4	4 5	
Switch Phase							
Minimum Initial (s)	10.0	10.0	15.0	15.0	5.0		2.0
Minimum Split (s)	16.2	16.2	21.2	21.2	10.1		6.7
Total Split (s)	42.2	42.2	42.2	42.2	28.1		49.7
Total Split (%)	35.2%	35.2%	35.2%	35.2%	23.4%		41%
Yellow Time (s)	5.2	5.2	5.2	5.2	4.1		3.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	6.2	6.2	6.2	6.2	5.1		
Lead/Lag			Lag	Lag			Lead
Lead-Lag Optimize?			Yes	Yes			Yes
Recall Mode	C-Max	C-Max	C-Max	C-Max	Min		None

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 70 (58%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 25: I-5 SB Off-Ramps & La Jolla Village Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1782	369	0	1512	329	0	0	0	558	0	1440
Future Volume (vph)	0	1782	369	0	1512	329	0	0	0	558	0	1440
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.2	6.2		6.2	6.2				5.1		5.1
Lane Util. Factor		0.86	1.00		0.91	1.00				0.97		0.88
Frt		1.00	0.85		1.00	0.85				1.00		0.85
Flt Protected		1.00	1.00		1.00	1.00				0.95		1.00
Satd. Flow (prot)		6408	1583		5085	1583				3433		2787
Flt Permitted		1.00	1.00		1.00	1.00				0.95		1.00
Satd. Flow (perm)		6408	1583		5085	1583				3433		2787
Peak-hour factor, PHF	0.93	0.93	0.93	0.94	0.94	0.94	0.25	0.25	0.25	0.84	0.84	0.84
Adj. Flow (vph)	0	1916	397	0	1609	350	0	0	0	664	0	1714
RTOR Reduction (vph)	0	0	113	0	0	196	0	0	0	0	0	11
Lane Group Flow (vph)	0	1916	284	0	1609	154	0	0	0	664	0	1703
Turn Type		NA	Perm		NA	Perm				Prot		custom
Protected Phases		2			6					4		4 5
Permitted Phases			2			6						
Actuated Green, G (s)		85.7	85.7		36.0	36.0				23.0		73.1
Effective Green, g (s)		85.7	85.7		36.0	36.0				23.0		73.1
Actuated g/C Ratio		0.71	0.71		0.30	0.30				0.19		0.61
Clearance Time (s)		6.2	6.2		6.2	6.2				5.1		
Vehicle Extension (s)		2.0	2.0		2.0	2.0				2.0		
Lane Grp Cap (vph)		4576	1130		1525	474				657		1697
v/s Ratio Prot		0.30			c0.32					0.19		c0.61
v/s Ratio Perm			0.18			0.10						
v/c Ratio		0.42	0.25		1.06	0.32				1.01		1.00
Uniform Delay, d1		7.0	6.0		42.0	32.6				48.5		23.5
Progression Factor		1.09	3.83		0.92	0.88				1.00		1.00
Incremental Delay, d2		0.1	0.1		37.8	1.6				37.8		22.6
Delay (s)		7.7	23.0		76.4	30.2				86.3		46.1
Level of Service		A	C		E	C				F		D
Approach Delay (s)		10.3			68.1			0.0			57.3	
Approach LOS		B			E			A			E	

Intersection Summary

HCM 2000 Control Delay	44.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.07		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	89.0%	ICU Level of Service	E
Analysis Period (min)	15		

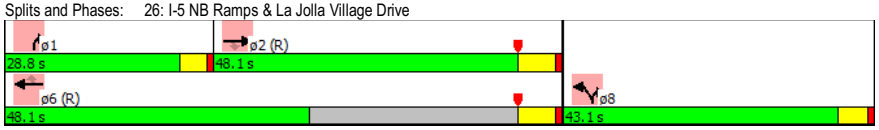
c Critical Lane Group

Lane Group	EBT	EBR	WBT	WBR	NBL	NBR	ø1
Lane Configurations							
Traffic Volume (vph)	1406	962	1324	712	541	914	
Future Volume (vph)	1406	962	1324	712	541	914	
Turn Type	NA	Perm	NA	Perm	Prot	custom	
Protected Phases	2		6		8	1 8	1
Permitted Phases		2		6			
Detector Phase	2	2	6	6	8	1 8	
Switch Phase							
Minimum Initial (s)	16.0	16.0	16.0	16.0	5.0		2.0
Minimum Split (s)	36.2	36.2	22.2	22.2	21.1		9.5
Total Split (s)	48.1	48.1	48.1	48.1	43.1		28.8
Total Split (%)	40.1%	40.1%	40.1%	40.1%	35.9%		24%
Yellow Time (s)	5.2	5.2	5.2	5.2	4.1		3.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	6.2	6.2	6.2	6.2	5.1		
Lead/Lag	Lag	Lag					Lead
Lead-Lag Optimize?	Yes	Yes					Yes
Recall Mode	C-Max	C-Max	C-Max	C-Max	Min		None

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 75 (63%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 70
Control Type: Actuated-Coordinated

Splits and Phases: 26: I-5 NB Ramps & La Jolla Village Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1406	962	0	1324	712	541	0	914	0	0	0
Future Volume (vph)	0	1406	962	0	1324	712	541	0	914	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.2	6.2		6.2	6.2	5.1		4.7			
Lane Util. Factor		0.91	1.00		0.91	1.00	0.97		0.88			
Frt		1.00	0.85		1.00	0.85	1.00		0.85			
Flt Protected		1.00	1.00		1.00	1.00	0.95		1.00			
Satd. Flow (prot)		5085	1583		5085	1583	3433		2787			
Flt Permitted		1.00	1.00		1.00	1.00	0.95		1.00			
Satd. Flow (perm)		5085	1583		5085	1583	3433		2787			
Peak-hour factor, PHF	0.98	0.98	0.98	0.92	0.92	0.92	0.92	0.92	0.92	0.25	0.25	0.25
Adj. Flow (vph)	0	1435	982	0	1439	774	588	0	993	0	0	0
RTOR Reduction (vph)	0	0	522	0	0	315	0	0	17	0	0	0
Lane Group Flow (vph)	0	1435	460	0	1439	459	588	0	976	0	0	0
Turn Type		NA	Perm		NA	Perm	Prot		custom			
Protected Phases		2			6		8		1 8			
Permitted Phases			2			6						
Actuated Green, G (s)		53.8	53.8		71.1	71.1	37.6		55.3			
Effective Green, g (s)		53.8	53.8		71.1	71.1	37.6		50.2			
Actuated g/C Ratio		0.45	0.45		0.59	0.59	0.31		0.42			
Clearance Time (s)		6.2	6.2		6.2	6.2	5.1					
Vehicle Extension (s)		2.0	2.0		2.0	2.0	2.0					
Lane Grp Cap (vph)		2279	709		3012	937	1075		1165			
v/s Ratio Prot		0.28			0.28		0.17		c0.35			
v/s Ratio Perm			c0.29			0.29						
v/c Ratio		0.63	0.65		0.48	0.49	0.55		0.84			
Uniform Delay, d1		25.4	25.7		13.9	14.0	34.1		31.3			
Progression Factor		1.31	4.40		1.00	1.00	1.00		1.00			
Incremental Delay, d2		1.1	3.8		0.5	1.8	0.3		5.4			
Delay (s)		34.5	117.1		14.4	15.9	34.4		36.7			
Level of Service		C	F		B	B	C		D			
Approach Delay (s)		68.1			14.9			35.8			0.0	
Approach LOS		E			B			D			A	

Intersection Summary

HCM 2000 Control Delay	40.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	68.2%	ICU Level of Service	C
Analysis Period (min)	15		

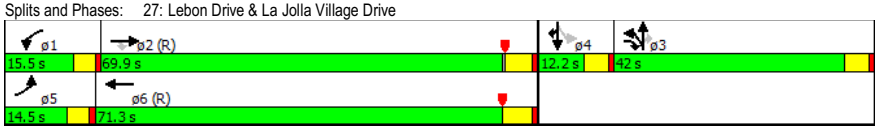
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	3	1547	174	204	1394	643	8	254	16	3	23
Future Volume (vph)	3	1547	174	204	1394	643	8	254	16	3	23
Turn Type	Prot	NA	pm+ov	Prot	NA	Split	NA	Perm	Perm	NA	Prot
Protected Phases	5	2	3	1	6	3	3			4	4
Permitted Phases			2					3	4		
Detector Phase	5	2	3	1	6	3	3	3	4	4	4
Switch Phase											
Minimum Initial (s)	4.0	10.0	7.0	4.0	10.0	7.0	7.0	7.0	4.0	4.0	4.0
Minimum Split (s)	8.4	15.3	11.9	8.4	15.7	11.9	11.9	11.9	8.9	8.9	8.9
Total Split (s)	14.5	69.9	42.0	15.5	71.3	42.0	42.0	42.0	12.2	12.2	12.2
Total Split (%)	10.4%	49.9%	30.0%	11.1%	50.9%	30.0%	30.0%	30.0%	8.7%	8.7%	8.7%
Yellow Time (s)	3.4	4.3	3.9	3.4	4.7	3.9	3.9	3.9	3.9	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	4.4	5.3	4.9	4.4	5.7	4.9	4.9	4.9		4.9	4.9
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lag	Lag	Lead	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	C-Max	None	None	None	None	None	None

Intersection Summary

Cycle Length: 140
Actuated Cycle Length: 140
Offset: 83 (59%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 27: Lebon Drive & La Jolla Village Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	1547	174	204	1394	11	643	8	254	16	3	23
Future Volume (vph)	3	1547	174	204	1394	11	643	8	254	16	3	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.3	4.9	4.4	5.7		4.9	4.9	4.9		4.9	4.9
Lane Util. Factor	1.00	0.91	1.00	0.97	0.91		0.97	0.95	0.95		1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00		1.00	0.86	0.85		1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00		0.96	1.00
Satd. Flow (prot)	1770	5085	1583	3433	5079		3433	1521	1504		1788	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00		0.64	1.00
Satd. Flow (perm)	1770	5085	1583	3433	5079		3433	1521	1504		1198	1583
Peak-hour factor, PHF	0.80	0.80	0.80	0.94	0.94	0.94	0.84	0.84	0.84	0.80	0.80	0.80
Adj. Flow (vph)	4	1934	218	217	1483	12	765	10	302	20	4	29
RTOR Reduction (vph)	0	0	56	0	0	0	0	108	112	0	0	28
Lane Group Flow (vph)	4	1934	162	217	1495	0	765	50	42	0	24	1
Turn Type	Prot	NA	pm+ov	Prot	NA		Split	NA	Perm	Perm	NA	Prot
Protected Phases	5	2	3	1	6		3	3			4	4
Permitted Phases			2						3	4		
Actuated Green, G (s)	1.2	65.9	104.0	10.8	75.1		38.1	38.1	38.1		5.7	5.7
Effective Green, g (s)	1.2	65.9	104.0	10.8	75.1		38.1	38.1	38.1		5.7	5.7
Actuated g/C Ratio	0.01	0.47	0.74	0.08	0.54		0.27	0.27	0.27		0.04	0.04
Clearance Time (s)	4.4	5.3	4.9	4.4	5.7		4.9	4.9	4.9		4.9	4.9
Vehicle Extension (s)	2.0	6.1	6.5	2.0	5.6		6.5	6.5	6.5		2.0	2.0
Lane Grp Cap (vph)	15	2393	1175	264	2724		934	413	409		48	64
v/s Ratio Prot	0.00	c0.38	0.04	c0.06	0.29		c0.22	0.03				0.00
v/s Ratio Perm			0.06						0.03		c0.02	
v/c Ratio	0.27	0.81	0.14	0.82	0.55		0.82	0.12	0.10		0.50	0.02
Uniform Delay, d1	69.0	31.7	5.2	63.7	21.3		47.7	38.4	38.1		65.8	64.5
Progression Factor	1.00	1.00	1.00	1.09	0.93		1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	3.5	3.1	0.2	6.2	0.3		6.9	0.4	0.4		3.0	0.0
Delay (s)	72.4	34.7	5.3	75.6	20.0		54.6	38.8	38.5		68.7	64.5
Level of Service	E	C	A	E	C		D	D	D		E	E
Approach Delay (s)		31.8			27.1			50.0			66.4	
Approach LOS		C			C			D			E	

Intersection Summary

HCM 2000 Control Delay	34.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	19.9
Intersection Capacity Utilization	72.9%	ICU Level of Service	C
Analysis Period (min)	15		

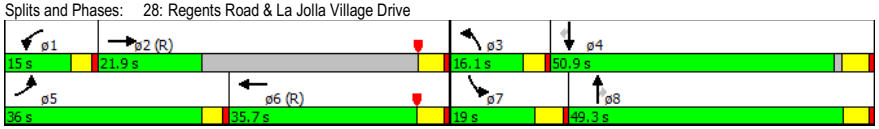
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	728	1407	134	799	317	697	235	147	212	226
Future Volume (vph)	728	1407	134	799	317	697	235	147	212	226
Turn Type	Prot	NA	Prot	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2	1	6	3	8		7	4	
Permitted Phases							8			4
Detector Phase	5	2	1	6	3	8	8	7	4	4
Switch Phase										
Minimum Initial (s)	4.0	10.0	4.0	10.0	4.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	8.4	15.3	8.4	15.4	8.4	15.3	15.3	15.4	15.4	15.4
Total Split (s)	36.0	21.9	15.0	35.7	16.1	49.3	49.3	19.0	50.9	50.9
Total Split (%)	25.7%	15.6%	10.7%	25.5%	11.5%	35.2%	35.2%	13.6%	36.4%	36.4%
Yellow Time (s)	3.4	4.3	3.4	4.4	3.4	4.3	4.3	4.4	4.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.3	4.4	5.4	4.4	5.3	5.3	5.4	5.4	5.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Min	None	C-Min	None	Min	Min	Min	Min	Min

Intersection Summary

Cycle Length: 140
Actuated Cycle Length: 140
Offset: 55 (39%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 120
Control Type: Actuated-Coordinated

Splits and Phases: 28: Regents Road & La Jolla Village Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	728	1407	33	134	799	143	317	697	235	147	212	226
Future Volume (vph)	728	1407	33	134	799	143	317	697	235	147	212	226
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.3		4.4	5.4		4.4	5.3	5.3	5.4	5.4	5.4
Lane Util. Factor	0.97	0.91		0.97	0.91		0.97	0.95	1.00	1.00	0.95	1.00
Frt	1.00	1.00		1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5068		3433	4970		3433	3539	1583	1770	3539	1583
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5068		3433	4970		3433	3539	1583	1770	3539	1583
Peak-hour factor, PHF	0.86	0.86	0.86	0.84	0.84	0.84	0.80	0.80	0.80	0.80	0.80	0.80
Adj. Flow (vph)	847	1636	38	160	951	170	396	871	294	184	265	282
RTOR Reduction (vph)	0	2	0	0	18	0	0	0	130	0	0	195
Lane Group Flow (vph)	847	1672	0	160	1103	0	396	871	164	184	265	88
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases									8			4
Actuated Green, G (s)	34.7	54.7		10.4	30.3		11.7	40.9	40.9	13.6	43.7	43.7
Effective Green, g (s)	34.7	54.7		10.4	30.3		11.7	40.9	40.9	13.6	43.7	43.7
Actuated g/C Ratio	0.25	0.39		0.07	0.22		0.08	0.29	0.29	0.10	0.31	0.31
Clearance Time (s)	4.4	5.3		4.4	5.4		4.4	5.3	5.3	5.4	5.4	5.4
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	850	1980		255	1075		286	1033	462	171	1104	494
v/s Ratio Prot	c0.25	0.33		0.05	c0.22		c0.12	c0.25		0.10	c0.07	
v/s Ratio Perm									0.10			0.06
v/c Ratio	1.00	0.84		0.63	1.03		1.38	0.84	0.36	1.08	0.24	0.18
Uniform Delay, d1	52.6	38.8		62.9	54.9		64.2	46.5	39.1	63.2	35.8	35.1
Progression Factor	1.27	1.45		1.46	0.44		1.00	1.00	1.00	0.97	0.92	1.27
Incremental Delay, d2	25.8	3.6		0.4	16.0		193.4	6.4	0.5	89.8	0.1	0.2
Delay (s)	92.9	59.7		92.5	40.4		257.5	52.9	39.6	151.3	33.0	44.6
Level of Service	F	E		F	D		F	D	D	F	C	D
Approach Delay (s)		70.9			46.9			102.3			67.2	
Approach LOS		E			D			F			E	

Intersection Summary

HCM 2000 Control Delay	73.4	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.97		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	20.5
Intersection Capacity Utilization	84.1%	ICU Level of Service	E
Analysis Period (min)	15		

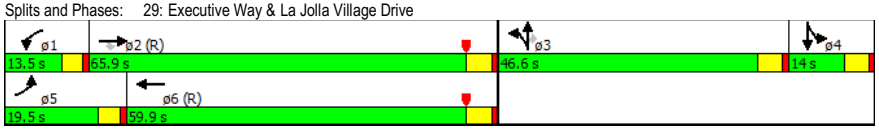
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	77	1931	107	147	2336	35	51	158	61	22
Future Volume (vph)	77	1931	107	147	2336	35	51	158	61	22
Turn Type	Prot	NA	Perm	Prot	NA	Split	NA	Perm	Split	NA
Protected Phases	5	2		1	6	3	3		4	4
Permitted Phases			2					3		
Detector Phase	5	2	2	1	6	3	3	3	4	4
Switch Phase										
Minimum Initial (s)	4.0	10.0	10.0	4.0	10.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.4	15.3	15.3	8.4	15.3	45.9	45.9	45.9	8.9	8.9
Total Split (s)	19.5	65.9	65.9	13.5	59.9	46.6	46.6	46.6	14.0	14.0
Total Split (%)	13.9%	47.1%	47.1%	9.6%	42.8%	33.3%	33.3%	33.3%	10.0%	10.0%
Yellow Time (s)	3.4	4.3	4.3	3.4	4.3	3.9	3.9	3.9	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.3	5.3	4.4	5.3	4.9	4.9	4.9	4.9	4.9
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	None	None	None	None	None

Intersection Summary

Cycle Length: 140
Actuated Cycle Length: 140
Offset: 20 (14%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 29: Executive Way & La Jolla Village Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	77	1931	107	147	2336	462	35	51	158	61	22	25
Future Volume (vph)	77	1931	107	147	2336	462	35	51	158	61	22	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.3	5.3	4.4	5.3		4.9	4.9	4.9	4.9	4.9	
Lane Util. Factor	1.00	0.91	1.00	0.97	0.91		0.95	0.95	1.00	1.00	0.95	
Frt	1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85	1.00	0.92	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	5085	1583	3433	4959		1681	1764	1583	1770	3260	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	5085	1583	3433	4959		1681	1764	1583	1770	3260	
Peak-hour factor, PHF	0.91	0.91	0.91	0.87	0.87	0.87	0.85	0.85	0.85	0.80	0.80	0.80
Adj. Flow (vph)	85	2122	118	169	2685	531	41	60	186	76	28	31
RTOR Reduction (vph)	0	0	46	0	17	0	0	0	131	0	29	0
Lane Group Flow (vph)	85	2122	72	169	3199	0	37	64	55	76	30	0
Turn Type	Prot	NA	Perm	Prot	NA		Split	NA	Perm	Split	NA	
Protected Phases	5	2		1	6		3	3		4	4	
Permitted Phases			2						3			
Actuated Green, G (s)	10.9	73.7	73.7	9.1	71.9		27.2	27.2	27.2	10.5	10.5	
Effective Green, g (s)	10.9	73.7	73.7	9.1	71.9		27.2	27.2	27.2	10.5	10.5	
Actuated g/C Ratio	0.08	0.53	0.53	0.06	0.51		0.19	0.19	0.19	0.08	0.08	
Clearance Time (s)	4.4	5.3	5.3	4.4	5.3		4.9	4.9	4.9	4.9	4.9	
Vehicle Extension (s)	2.0	5.8	5.8	2.0	5.5		2.0	2.0	2.0	6.1	6.1	
Lane Grp Cap (vph)	137	2676	833	223	2546		326	342	307	132	244	
v/s Ratio Prot	0.05	0.42		c0.05	c0.65		0.02	c0.04		c0.04	0.01	
v/s Ratio Perm			0.05						0.03			
v/c Ratio	0.62	0.79	0.09	0.76	1.26		0.11	0.19	0.18	0.58	0.12	
Uniform Delay, d1	62.5	26.9	16.4	64.4	34.0		46.5	47.2	47.1	62.6	60.5	
Progression Factor	1.23	0.49	0.49	1.31	0.40		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	3.8	1.5	0.1	1.2	115.7		0.1	0.1	0.1	11.8	0.7	
Delay (s)	80.8	14.7	8.3	85.7	129.3		46.5	47.3	47.2	74.4	61.1	
Level of Service	F	B	A	F	F		D	D	D	E	E	
Approach Delay (s)		16.7			127.1			47.1			68.6	
Approach LOS		B			F			D			E	

Intersection Summary

HCM 2000 Control Delay	80.2	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	19.5
Intersection Capacity Utilization	81.9%	ICU Level of Service	D
Analysis Period (min)	15		

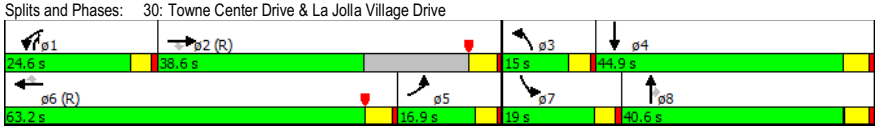
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	371	1697	75	250	2833	996	130	305	457	190	26
Future Volume (vph)	371	1697	75	250	2833	996	130	305	457	190	26
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA
Protected Phases	5	2		1	6		3	8	1	7	4
Permitted Phases			2			6			8		
Detector Phase	5	2	2	1	6	6	3	8	1	7	4
Switch Phase											
Minimum Initial (s)	4.0	10.0	10.0	4.0	10.0	10.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.4	15.5	15.5	8.4	15.3	15.3	8.4	9.0	8.4	8.4	9.3
Total Split (s)	16.9	38.6	38.6	24.6	63.2	63.2	15.0	40.6	24.6	19.0	44.9
Total Split (%)	12.1%	27.6%	27.6%	17.6%	45.1%	45.1%	10.7%	29.0%	17.6%	13.6%	32.1%
Yellow Time (s)	3.4	4.5	4.5	3.4	4.3	4.3	3.4	4.0	3.4	3.4	4.3
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.5	5.5	4.4	5.3	5.3	4.4	5.0	4.4	4.4	5.3
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lead	Lead	Lag	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	None	None	None	None

Intersection Summary

Cycle Length: 140
Actuated Cycle Length: 140
Offset: 13 (9%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 30: Towne Center Drive & La Jolla Village Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	371	1697	75	250	2833	996	130	305	457	190	26	31
Future Volume (vph)	371	1697	75	250	2833	996	130	305	457	190	26	31
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.5	5.5	4.4	5.3	5.3	4.4	5.0	4.4	4.4	5.3	
Lane Util. Factor	0.97	0.91	1.00	0.97	0.86	0.86	0.97	1.00	0.88	0.97	0.95	
Frt	1.00	1.00	0.85	1.00	0.99	0.85	1.00	1.00	0.85	1.00	0.92	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	3433	5085	1583	3433	4770	1362	3433	1863	2787	3433	3248	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	3433	5085	1583	3433	4770	1362	3433	1863	2787	3433	3248	
Peak-hour factor, PHF	0.93	0.93	0.93	0.90	0.90	0.90	0.80	0.80	0.80	0.92	0.92	0.92
Adj. Flow (vph)	399	1825	81	278	3148	1107	162	381	571	207	28	34
RTOR Reduction (vph)	0	0	48	0	4	165	0	0	61	0	27	0
Lane Group Flow (vph)	399	1825	33	278	3310	776	163	381	510	207	35	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	
Protected Phases	5	2		1	6		3	8	1	7	4	
Permitted Phases			2			6			8			
Actuated Green, G (s)	12.5	57.5	57.5	16.8	62.0	62.0	16.5	33.4	50.2	13.0	29.6	
Effective Green, g (s)	12.5	57.5	57.5	16.8	62.0	62.0	16.5	33.4	50.2	13.0	29.6	
Actuated g/C Ratio	0.09	0.41	0.41	0.12	0.44	0.44	0.12	0.24	0.36	0.09	0.21	
Clearance Time (s)	4.4	5.5	5.5	4.4	5.3	5.3	4.4	5.0	4.4	4.4	5.3	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	306	2088	650	411	2112	603	404	444	999	318	686	
v/s Ratio Prot	c0.12	0.36		0.08	c0.69		0.05	c0.20	0.06	c0.06	0.01	
v/s Ratio Perm			0.02			0.57			0.12			
v/c Ratio	1.30	0.87	0.05	0.68	1.57	1.29	0.40	0.86	0.51	0.65	0.05	
Uniform Delay, d1	63.8	37.9	24.8	59.0	39.0	39.0	57.2	51.0	35.3	61.3	44.0	
Progression Factor	0.53	0.29	0.07	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	151.4	3.6	0.1	4.4	257.6	141.4	0.7	15.1	0.4	4.7	0.0	
Delay (s)	185.5	14.6	1.9	63.4	296.6	180.4	57.9	66.1	35.7	66.0	44.0	
Level of Service	F	B	A	E	F	F	E	E	D	E	D	
Approach Delay (s)		43.7			258.2			49.3			61.0	
Approach LOS		D			F			D			E	

Intersection Summary

HCM 2000 Control Delay	163.3	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.25		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	19.6
Intersection Capacity Utilization	110.1%	ICU Level of Service	H
Analysis Period (min)	15		

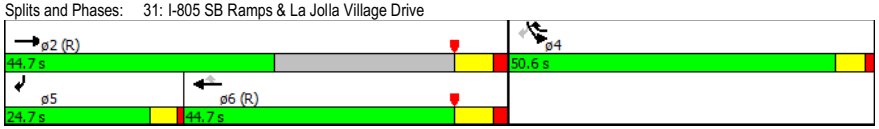
c Critical Lane Group

Lane Group	EBT	WBT	WBR	SBL	SBR
Lane Configurations					
Traffic Volume (vph)	1782	2031	501	341	2045
Future Volume (vph)	1782	2031	501	341	2045
Turn Type	NA	NA	pm+ov	Prot	custom
Protected Phases	2	6	4	4	5
Permitted Phases			6		4
Detector Phase	2	6	4	4	5
Switch Phase					
Minimum Initial (s)	15.0	15.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	10.6	10.6	9.7
Total Split (s)	44.7	44.7	50.6	50.6	24.7
Total Split (%)	37.3%	37.3%	42.2%	42.2%	20.6%
Yellow Time (s)	5.5	5.5	4.1	4.1	3.7
All-Red Time (s)	2.0	2.0	1.5	1.5	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.5	7.5	5.6	5.6	4.7
Lead/Lag		Lag			Lead
Lead-Lag Optimize?		Yes			Yes
Recall Mode	C-Max	C-Max	None	None	None

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 10 (8%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 140
Control Type: Actuated-Coordinated

Splits and Phases: 31: I-805 SB Ramps & La Jolla Village Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1782	523	0	2031	501	0	0	0	341	0	2045
Future Volume (vph)	0	1782	523	0	2031	501	0	0	0	341	0	2045
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		7.5			7.5	5.6				5.6		4.7
Lane Util. Factor		0.91			0.91	1.00				0.97		0.88
Frt		0.97			1.00	0.85				1.00		0.85
Flt Protected		1.00			1.00	1.00				0.95		1.00
Satd. Flow (prot)		4912			5085	1583				3433		2787
Flt Permitted		1.00			1.00	1.00				0.95		1.00
Satd. Flow (perm)		4912			5085	1583				3433		2787
Peak-hour factor, PHF	0.92	0.92	0.92	0.96	0.96	0.96	0.25	0.25	0.25	0.80	0.80	0.80
Adj. Flow (vph)	0	1937	568	0	2116	522	0	0	0	426	0	2556
RTOR Reduction (vph)	0	25	0	0	0	273	0	0	0	0	0	19
Lane Group Flow (vph)	0	2480	0	0	2116	249	0	0	0	426	0	2537
Turn Type		NA			NA	pm+ov				Prot		custom
Protected Phases		2			6	4				4		5
Permitted Phases						6						4
Actuated Green, G (s)		86.9			37.2	57.2				20.0		65.0
Effective Green, g (s)		86.9			37.2	57.2				20.0		65.0
Actuated g/C Ratio		0.72			0.31	0.48				0.17		0.54
Clearance Time (s)		7.5			7.5	5.6				5.6		4.7
Vehicle Extension (s)		2.0			2.0	2.0				2.0		2.0
Lane Grp Cap (vph)		3557			1576	754				572		1509
v/s Ratio Prot		0.50			c0.42	0.05				0.12		c0.63
v/s Ratio Perm						0.10						0.28
v/c Ratio		0.70			1.34	0.33				0.74		1.68
Uniform Delay, d1		9.2			41.4	19.5				47.6		27.5
Progression Factor		1.00			0.88	4.36				1.00		1.00
Incremental Delay, d2		1.2			156.9	0.1				4.6		309.5
Delay (s)		10.4			193.3	85.0				52.2		337.0
Level of Service		B			F	F				D		F
Approach Delay (s)		10.4			171.9			0.0			296.3	
Approach LOS		B			F			A			F	

Intersection Summary

HCM 2000 Control Delay	167.8	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.56		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	17.8
Intersection Capacity Utilization	120.9%	ICU Level of Service	H
Analysis Period (min)	15		

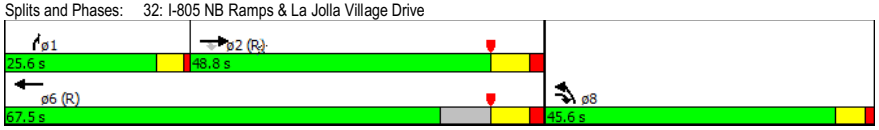
c Critical Lane Group

Lane Group	EBT	EBR	WBT	NBL	NBR
Lane Configurations					
Traffic Volume (vph)	1418	787	1458	1029	418
Future Volume (vph)	1418	787	1458	1029	418
Turn Type	NA	pm+ov	NA	Prot	Prot
Protected Phases	2	8	6	8	1
Permitted Phases		2			
Detector Phase	2	8	6	8	1
Switch Phase					
Minimum Initial (s)	16.0	5.0	15.0	5.0	5.0
Minimum Split (s)	23.5	10.6	22.5	10.6	10.6
Total Split (s)	48.8	45.6	67.5	45.6	25.6
Total Split (%)	40.7%	38.0%	56.3%	38.0%	21.3%
Yellow Time (s)	5.5	4.1	5.5	4.1	3.7
All-Red Time (s)	2.0	1.5	2.0	1.5	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.5	5.6	7.5	5.6	4.7
Lead/Lag	Lag				Lead
Lead-Lag Optimize?	Yes				Yes
Recall Mode	C-Max	None	C-Max	None	None

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 18 (15%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 80
Control Type: Actuated-Coordinated

Splits and Phases: 32: I-805 NB Ramps & La Jolla Village Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1418	787	0	1458	489	1029	0	418	0	0	0
Future Volume (vph)	0	1418	787	0	1458	489	1029	0	418	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		7.5	5.6		7.5		5.6		4.7			
Lane Util. Factor		0.91	1.00		0.86		0.97		0.88			
Frt		1.00	0.85		0.96		1.00		0.85			
Flt Protected		1.00	1.00		1.00		0.95		1.00			
Satd. Flow (prot)		5085	1583		6167		3433		2787			
Flt Permitted		1.00	1.00		1.00		0.95		1.00			
Satd. Flow (perm)		5085	1583		6167		3433		2787			
Peak-hour factor, PHF	0.90	0.90	0.90	0.96	0.96	0.96	0.88	0.88	0.88	0.25	0.25	0.25
Adj. Flow (vph)	0	1576	874	0	1519	509	1169	0	475	0	0	0
RTOR Reduction (vph)	0	0	219	0	50	0	0	0	283	0	0	0
Lane Group Flow (vph)	0	1576	656	0	1978	0	1169	0	192	0	0	0
Turn Type		NA	pm+ov		NA		Prot		Prot			
Protected Phases		2	8		6		8		1			
Permitted Phases			2									
Actuated Green, G (s)		50.0	90.0		66.9		40.0		12.2			
Effective Green, g (s)		50.0	90.0		66.9		40.0		12.2			
Actuated g/C Ratio		0.42	0.75		0.56		0.33		0.10			
Clearance Time (s)		7.5	5.6		7.5		5.6		4.7			
Vehicle Extension (s)		2.0	2.0		2.0		2.0		2.0			
Lane Grp Cap (vph)		2118	1187		3438		1144		283			
v/s Ratio Prot		c0.31	0.18		c0.32		c0.34		0.07			
v/s Ratio Perm			0.23									
v/c Ratio		0.74	0.55		0.58		1.02		0.68			
Uniform Delay, d1		29.6	6.4		17.3		40.0		52.0			
Progression Factor		0.95	10.57		1.00		1.00		1.00			
Incremental Delay, d2		1.9	0.3		0.7		32.3		5.0			
Delay (s)		30.2	67.9		18.0		72.3		57.0			
Level of Service		C	E		B		E		E			
Approach Delay (s)		43.6			18.0			67.9			0.0	
Approach LOS		D			B			E			A	

Intersection Summary

HCM 2000 Control Delay	41.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	17.8
Intersection Capacity Utilization	68.3%	ICU Level of Service	C
Analysis Period (min)	15		

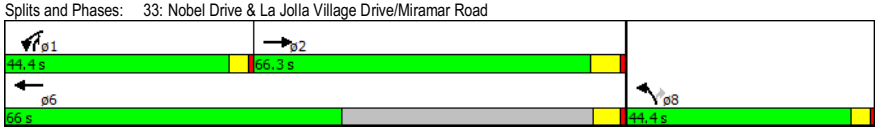
c Critical Lane Group

Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Configurations					
Traffic Volume (vph)	1838	476	1977	76	942
Future Volume (vph)	1838	476	1977	76	942
Turn Type	NA	Prot	NA	Prot	pm+ov
Protected Phases	2	1	6	8	1
Permitted Phases					8
Detector Phase	2	1	6	8	1
Switch Phase					
Minimum Initial (s)	10.0	4.0	10.0	7.0	4.0
Minimum Split (s)	16.3	8.4	16.0	11.4	8.4
Total Split (s)	66.3	44.4	66.0	44.4	44.4
Total Split (%)	42.7%	28.6%	42.6%	28.6%	28.6%
Yellow Time (s)	5.3	3.4	5.0	3.4	3.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.3	4.4	6.0	4.4	4.4
Lead/Lag	Lag	Lead			Lead
Lead-Lag Optimize?	Yes	Yes			Yes
Recall Mode	Min	None	Min	None	None

Intersection Summary

Cycle Length: 155.1
Actuated Cycle Length: 119.6
Natural Cycle: 65
Control Type: Actuated-Uncoordinated

Splits and Phases: 33: Nobel Drive & La Jolla Village Drive/Miramar Road



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1838	144	476	1977	76	942
Future Volume (vph)	1838	144	476	1977	76	942
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.3		4.4	6.0	4.4	4.4
Lane Util. Factor	0.86		0.97	0.86	1.00	0.88
Frt	0.99		1.00	1.00	1.00	0.85
Flt Protected	1.00		0.95	1.00	0.95	1.00
Satd. Flow (prot)	6338		3433	6408	1770	2787
Flt Permitted	1.00		0.95	1.00	0.95	1.00
Satd. Flow (perm)	6338		3433	6408	1770	2787
Peak-hour factor, PHF	0.86	0.86	0.91	0.91	0.94	0.94
Adj. Flow (vph)	2137	167	523	2173	81	1002
RTOR Reduction (vph)	6	0	0	0	0	0
Lane Group Flow (vph)	2298	0	523	2173	81	1002
Turn Type	NA		Prot	NA	Prot	pm+ov
Protected Phases	2		1	6	8	1
Permitted Phases						8
Actuated Green, G (s)	60.5		36.8	102.0	8.1	44.9
Effective Green, g (s)	60.5		36.8	102.0	8.1	44.9
Actuated g/C Ratio	0.50		0.31	0.85	0.07	0.37
Clearance Time (s)	6.3		4.4	6.0	4.4	4.4
Vehicle Extension (s)	5.0		2.0	5.4	2.0	2.0
Lane Grp Cap (vph)	3182		1048	5424	118	1140
v/s Ratio Prot	c0.36		0.15	0.34	0.05	c0.27
v/s Ratio Perm						0.09
v/c Ratio	0.72		0.50	0.40	0.69	0.88
Uniform Delay, d1	23.4		34.3	2.1	55.0	35.3
Progression Factor	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	1.0		0.1	0.1	12.4	7.7
Delay (s)	24.5		34.4	2.3	67.4	43.0
Level of Service	C		C	A	E	D
Approach Delay (s)	24.5			8.5	44.8	
Approach LOS	C			A	D	

Intersection Summary

HCM 2000 Control Delay	21.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	120.5	Sum of lost time (s)	15.1
Intersection Capacity Utilization	70.9%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBU	WBT	WBR	SBL
Lane Configurations						
Traffic Volume (vph)	609	2268	3	2236	783	148
Future Volume (vph)	609	2268	3	2236	783	148
Turn Type	Prot	NA	Prot	NA	Perm	Prot
Protected Phases	5	2	1	6		7
Permitted Phases					6	
Detector Phase	5	2	1	6	6	7
Switch Phase						
Minimum Initial (s)	4.0	10.0	4.0	10.0	10.0	10.0
Minimum Split (s)	8.4	16.3	8.4	15.4	15.4	14.4
Total Split (s)	34.4	66.3	24.4	65.4	65.4	44.4
Total Split (%)	23.9%	46.0%	16.9%	45.4%	45.4%	30.8%
Yellow Time (s)	3.4	5.3	3.4	4.4	4.4	3.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	6.3	4.4	5.4	5.4	4.4
Lead/Lag	Lead	Lag	Lead	Lag	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	Min	None	Min	Min	None

Intersection Summary

Cycle Length: 144.2
Actuated Cycle Length: 118.5
Natural Cycle: 90
Control Type: Actuated-Uncoordinated

Splits and Phases: 34: Miramar Road & Eastgate Mall

Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Traffic Volume (vph)	609	2268	3	2236	783	148	216
Future Volume (vph)	609	2268	3	2236	783	148	216
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	6.3	4.4	5.4	5.4	4.4	
Lane Util. Factor	0.97	0.91	1.00	0.86	1.00	0.97	
Frt	1.00	1.00	1.00	1.00	0.85	0.91	
Flt Protected	0.95	1.00	0.95	1.00	1.00	0.98	
Satd. Flow (prot)	3433	5085	1770	6408	1583	3226	
Flt Permitted	0.95	1.00	0.95	1.00	1.00	0.98	
Satd. Flow (perm)	3433	5085	1770	6408	1583	3226	
Peak-hour factor, PHF	0.87	0.87	0.92	0.92	0.92	0.80	0.80
Adj. Flow (vph)	700	2607	3	2430	851	185	270
RTOR Reduction (vph)	0	0	0	0	320	221	0
Lane Group Flow (vph)	700	2607	3	2430	531	234	0
Turn Type	Prot	NA	Prot	NA	Perm	Prot	
Protected Phases	5	2	1	6		7	
Permitted Phases					6		
Actuated Green, G (s)	29.1	90.9	1.0	63.7	63.7	15.1	
Effective Green, g (s)	29.1	90.9	1.0	63.7	63.7	15.1	
Actuated g/C Ratio	0.24	0.74	0.01	0.52	0.52	0.12	
Clearance Time (s)	4.4	6.3	4.4	5.4	5.4	4.4	
Vehicle Extension (s)	2.0	5.0	2.0	6.1	6.1	4.5	
Lane Grp Cap (vph)	818	3785	14	3343	825	398	
v/s Ratio Prot	c0.20	0.51	0.00	c0.38		c0.07	
v/s Ratio Perm					0.34		
v/c Ratio	0.86	0.69	0.21	0.73	0.64	0.59	
Uniform Delay, d1	44.5	8.2	60.2	22.5	21.0	50.6	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	8.4	0.7	2.8	1.2	2.9	3.0	
Delay (s)	52.9	8.9	62.9	23.7	23.9	53.6	
Level of Service	D	A	E	C	C	D	
Approach Delay (s)		18.2		23.8		53.6	
Approach LOS		B		C		D	

Intersection Summary

HCM 2000 Control Delay	23.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	122.1	Sum of lost time (s)	15.1
Intersection Capacity Utilization	74.0%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBT	WBR	SBL
Lane Configurations					
Traffic Volume (vph)	106	2653	3064	104	58
Future Volume (vph)	106	2653	3064	104	58
Turn Type	Prot	NA	NA	Perm	Prot
Protected Phases	5	2	6		4
Permitted Phases				6	
Detector Phase	5	2	6	6	4
Switch Phase					
Minimum Initial (s)	4.0	10.0	10.0	10.0	4.0
Minimum Split (s)	8.4	15.8	15.4	15.4	8.9
Total Split (s)	22.6	89.9	89.9	89.9	37.5
Total Split (%)	15.1%	59.9%	59.9%	59.9%	25.0%
Yellow Time (s)	3.4	4.8	4.4	4.4	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.8	5.4	5.4	4.9
Lead/Lag	Lag		Lead	Lead	
Lead-Lag Optimize?	Yes		Yes	Yes	
Recall Mode	None	C-Max	C-Max	C-Max	None

Intersection Summary

Cycle Length: 150
Actuated Cycle Length: 150
Offset: 87 (58%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 35: Miramar Road & Miramar Mall

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	106	2653	3064	104	58	52
Future Volume (vph)	106	2653	3064	104	58	52
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.8	5.4	5.4	4.9	
Lane Util. Factor	1.00	0.91	0.91	1.00	1.00	
Frt	1.00	1.00	1.00	0.85	0.94	
Flt Protected	0.95	1.00	1.00	1.00	0.97	
Satd. Flow (prot)	1770	5085	5085	1583	1699	
Flt Permitted	0.95	1.00	1.00	1.00	0.97	
Satd. Flow (perm)	1770	5085	5085	1583	1699	
Peak-hour factor, PHF	0.86	0.86	0.92	0.92	0.81	0.81
Adj. Flow (vph)	123	3085	3330	113	72	64
RTOR Reduction (vph)	0	0	0	24	24	0
Lane Group Flow (vph)	123	3085	3330	89	112	0
Turn Type	Prot	NA	NA	Perm	Prot	
Protected Phases	5	2	6		4	
Permitted Phases				6		
Actuated Green, G (s)	18.2	122.7	100.5	100.5	16.6	
Effective Green, g (s)	18.2	122.7	100.5	100.5	16.6	
Actuated g/C Ratio	0.12	0.82	0.67	0.67	0.11	
Clearance Time (s)	4.4	5.8	5.4	5.4	4.9	
Vehicle Extension (s)	2.0	4.6	5.2	5.2	2.0	
Lane Grp Cap (vph)	214	4159	3406	1060	188	
v/s Ratio Prot	0.07	c0.61	c0.65		c0.07	
v/s Ratio Perm				0.06		
v/c Ratio	0.57	0.74	0.98	0.08	0.60	
Uniform Delay, d1	62.2	6.3	23.7	8.7	63.5	
Progression Factor	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	2.3	1.2	11.0	0.2	3.4	
Delay (s)	64.6	7.5	34.7	8.8	66.9	
Level of Service	E	A	C	A	E	
Approach Delay (s)		9.7	33.9		66.9	
Approach LOS		A	C		E	

Intersection Summary

HCM 2000 Control Delay	23.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	14.7
Intersection Capacity Utilization	83.7%	ICU Level of Service	E
Analysis Period (min)	15		

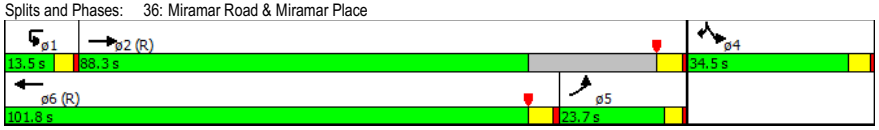
c Critical Lane Group

Lane Group	EBL	EBT	WBU	WBT	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	126	2571	24	2953	87	49
Future Volume (vph)	126	2571	24	2953	87	49
Turn Type	Prot	NA	Prot	NA	Prot	Prot
Protected Phases	5	2	1	6	4	4
Permitted Phases						
Detector Phase	5	2	1	6	4	4
Switch Phase						
Minimum Initial (s)	4.0	10.0	4.0	10.0	4.0	4.0
Minimum Split (s)	8.4	15.7	8.4	15.7	8.9	8.9
Total Split (s)	23.7	88.3	13.5	101.8	34.5	34.5
Total Split (%)	14.8%	55.2%	8.4%	63.6%	21.6%	21.6%
Yellow Time (s)	3.4	4.7	3.4	4.7	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.7	4.4	5.7	4.9	4.9
Lead/Lag	Lag	Lag	Lead	Lead		
Lead-Lag Optimize?	Yes	Yes	Yes	Yes		
Recall Mode	None	C-Max	None	C-Max	None	None

Intersection Summary

Cycle Length: 160
Actuated Cycle Length: 160
Offset: 150 (94%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 36: Miramar Road & Miramar Place



Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Traffic Volume (vph)	126	2571	24	2953	156	87	49
Future Volume (vph)	126	2571	24	2953	156	87	49
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.7	4.4	5.7		4.9	4.9
Lane Util. Factor	1.00	0.91	1.00	0.91		0.97	0.91
Frt	1.00	1.00	1.00	0.99		0.99	0.85
Flt Protected	0.95	1.00	0.95	1.00		0.96	1.00
Satd. Flow (prot)	1770	5085	1770	5047		3415	1441
Flt Permitted	0.95	1.00	0.95	1.00		0.96	1.00
Satd. Flow (perm)	1770	5085	1770	5047		3415	1441
Peak-hour factor, PHF	0.85	0.85	0.92	0.95	0.95	0.80	0.80
Adj. Flow (vph)	148	3025	26	3108	164	109	61
RTOR Reduction (vph)	0	0	0	3	0	5	49
Lane Group Flow (vph)	148	3025	26	3269	0	113	3
Turn Type	Prot	NA	Prot	NA		Prot	Prot
Protected Phases	5	2	1	6		4	4
Permitted Phases							
Actuated Green, G (s)	21.1	129.5	4.8	113.2		10.7	10.7
Effective Green, g (s)	21.1	129.5	4.8	113.2		10.7	10.7
Actuated g/C Ratio	0.13	0.81	0.03	0.71		0.07	0.07
Clearance Time (s)	4.4	5.7	4.4	5.7		4.9	4.9
Vehicle Extension (s)	3.0	4.8	2.0	5.4		3.0	3.0
Lane Grp Cap (vph)	233	4115	53	3570		228	96
v/s Ratio Prot	0.08	c0.59	0.01	c0.65		c0.03	0.00
v/s Ratio Perm							
v/c Ratio	0.64	0.74	0.49	0.92		0.50	0.04
Uniform Delay, d1	65.8	7.2	76.4	19.4		72.1	69.8
Progression Factor	1.00	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	5.6	1.2	2.6	4.9		1.7	0.2
Delay (s)	71.4	8.4	79.0	24.3		73.8	70.0
Level of Service	E	A	E	C		E	E
Approach Delay (s)		11.3		24.7		72.6	
Approach LOS		B		C		E	

Intersection Summary

HCM 2000 Control Delay	19.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.86		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	15.0
Intersection Capacity Utilization	83.3%	ICU Level of Service	E
Analysis Period (min)	15		

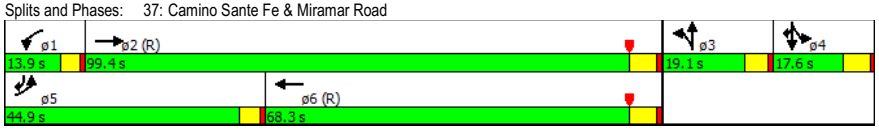
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	794	944	37	1881	25	13	61	12	685
Future Volume (vph)	794	944	37	1881	25	13	61	12	685
Turn Type	Prot	NA	Prot	NA	Split	NA	Split	NA	pt+ov
Protected Phases	5	2	1	6	3	3	4	4	4 5
Permitted Phases									
Detector Phase	5	2	1	6	3	3	4	4	4 5
Switch Phase									
Minimum Initial (s)	12.0	10.0	4.0	10.0	4.0	4.0	4.0	4.0	
Minimum Split (s)	16.4	15.8	8.4	15.7	8.9	8.9	9.5	9.5	
Total Split (s)	44.9	99.4	13.9	68.3	19.1	19.1	17.6	17.6	
Total Split (%)	29.9%	66.3%	9.3%	45.5%	12.7%	12.7%	11.7%	11.7%	
Yellow Time (s)	3.4	4.8	3.4	4.7	3.9	3.9	4.5	4.5	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.4	5.8	4.4	5.7	4.9	4.9	5.5	5.5	
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lead	Lag	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	C-Max	None	C-Max	None	None	None	None	

Intersection Summary

Cycle Length: 150
Actuated Cycle Length: 150
Offset: 98 (65%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 100
Control Type: Actuated-Coordinated

Splits and Phases: 37: Camino Sante Fe & Miramar Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	794	944	60	37	1881	124	25	13	9	61	12	685
Future Volume (vph)	794	944	60	37	1881	124	25	13	9	61	12	685
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.8		4.4	5.7		4.9	4.9		5.5	5.5	5.5
Lane Util. Factor	0.97	0.91		0.97	0.91		1.00	1.00		0.95	0.95	0.88
Frt	1.00	0.99		1.00	0.99		1.00	0.94		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	0.97	1.00
Satd. Flow (prot)	3433	5039		3433	5038		1770	1749		1681	1712	2787
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	0.97	1.00
Satd. Flow (perm)	3433	5039		3433	5038		1770	1749		1681	1712	2787
Peak-hour factor, PHF	0.99	0.99	0.99	0.97	0.97	0.97	0.80	0.80	0.80	0.80	0.80	0.80
Adj. Flow (vph)	802	954	61	38	1939	128	31	16	11	76	15	856
RTOR Reduction (vph)	0	4	0	0	5	0	0	11	0	0	0	136
Lane Group Flow (vph)	802	1011	0	38	2062	0	31	16	0	45	46	720
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	pt+ov
Protected Phases	5	2		1	6		3	3		4	4	4 5
Permitted Phases												
Actuated Green, G (s)	38.4	98.1		5.2	65.0		6.2	6.2		19.9	19.9	63.8
Effective Green, g (s)	38.4	98.1		5.2	65.0		6.2	6.2		19.9	19.9	63.8
Actuated g/C Ratio	0.26	0.65		0.03	0.43		0.04	0.04		0.13	0.13	0.43
Clearance Time (s)	4.4	5.8		4.4	5.7		4.9	4.9		5.5	5.5	
Vehicle Extension (s)	2.0	4.8		2.0	5.4		2.0	2.0		2.8	2.8	
Lane Grp Cap (vph)	878	3295		119	2183		73	72		223	227	1185
v/s Ratio Prot	c0.23	0.20		0.01	c0.41		c0.02	0.01		0.03	0.03	c0.26
v/s Ratio Perm												
v/c Ratio	0.91	0.31		0.32	0.94		0.42	0.23		0.20	0.20	0.61
Uniform Delay, d1	54.2	11.2		70.7	40.8		70.2	69.6		58.0	58.0	33.4
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	13.5	0.2		0.6	10.0		1.4	0.6		0.4	0.4	0.8
Delay (s)	67.7	11.5		71.2	50.8		71.6	70.2		58.4	58.4	34.2
Level of Service	E	B		E	D		E	E		E	E	C
Approach Delay (s)		36.3			51.2			70.9			36.6	
Approach LOS		D			D			E			D	

Intersection Summary

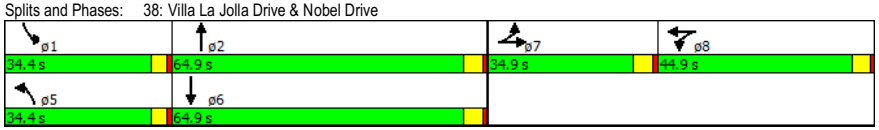
HCM 2000 Control Delay	43.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	20.6
Intersection Capacity Utilization	83.4%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	4	37	1	9	738	116	285
Future Volume (vph)	4	37	1	9	738	116	285
Turn Type	NA	Split	NA	Prot	NA	Prot	NA
Protected Phases	7	8	8	5	2	1	6
Permitted Phases							
Detector Phase	7	8	8	5	2	1	6
Switch Phase							
Minimum Initial (s)	6.0	6.0	6.0	4.0	7.0	6.0	10.0
Minimum Split (s)	10.9	10.9	10.9	8.4	11.9	10.4	14.9
Total Split (s)	34.9	44.9	44.9	34.4	64.9	34.4	64.9
Total Split (%)	19.5%	25.1%	25.1%	19.2%	36.2%	19.2%	36.2%
Yellow Time (s)	3.9	3.9	3.9	3.4	3.9	3.4	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	4.9	4.4	4.9	4.4	4.9
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	Min	None	Min

Intersection Summary
Cycle Length: 179.1
Actuated Cycle Length: 69.6
Natural Cycle: 55
Control Type: Actuated-Uncoordinated

Splits and Phases: 38: Villa La Jolla Drive & Nobel Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	29	4	6	37	1	294	9	738	78	116	285	11
Future Volume (vph)	29	4	6	37	1	294	9	738	78	116	285	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9		4.9	4.9		4.4	4.9		4.4	4.9	
Lane Util. Factor		1.00		0.97	1.00		1.00	0.95		0.97	0.95	
Frt		0.98		1.00	0.85		1.00	0.99		1.00	0.99	
Flt Protected		0.96		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1760		3433	1584		1770	3488		3433	3520	
Flt Permitted		0.96		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1760		3433	1584		1770	3488		3433	3520	
Peak-hour factor, PHF	0.81	0.81	0.81	0.92	0.92	0.92	0.91	0.91	0.91	0.89	0.89	0.89
Adj. Flow (vph)	36	5	7	40	1	320	10	811	86	130	320	12
RTOR Reduction (vph)	0	4	0	0	286	0	0	4	0	0	1	0
Lane Group Flow (vph)	0	44	0	40	35	0	10	893	0	130	331	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	7	7		8	8		5	2		1	6	
Permitted Phases												
Actuated Green, G (s)		5.6		7.9	7.9		0.9	32.8		8.4	40.3	
Effective Green, g (s)		5.6		7.9	7.9		0.9	32.8		8.4	40.3	
Actuated g/C Ratio		0.08		0.11	0.11		0.01	0.44		0.11	0.55	
Clearance Time (s)		4.9		4.9	4.9		4.4	4.9		4.4	4.9	
Vehicle Extension (s)		2.0		2.0	2.0		2.0	4.3		2.0	3.7	
Lane Grp Cap (vph)		133		367	169		21	1550		390	1922	
v/s Ratio Prot		c0.03		0.01	c0.02		0.01	c0.26		c0.04	0.09	
v/s Ratio Perm												
v/c Ratio		0.33		0.11	0.21		0.48	0.58		0.33	0.17	
Uniform Delay, d1		32.3		29.8	30.1		36.2	15.3		30.1	8.4	
Progression Factor		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.5		0.0	0.2		6.1	0.7		0.2	0.1	
Delay (s)		32.9		29.8	30.3		42.3	16.0		30.3	8.4	
Level of Service		C		C	C		D	B		C	A	
Approach Delay (s)		32.9			30.3			16.3			14.6	
Approach LOS		C			C			B			B	

Intersection Summary			
HCM 2000 Control Delay	19.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.46		
Actuated Cycle Length (s)	73.8	Sum of lost time (s)	19.1
Intersection Capacity Utilization	66.2%	ICU Level of Service	C
Analysis Period (min)	15		

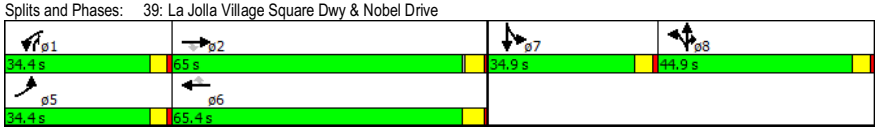
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	4	231	5	549	302	299	5	5	283	160	5
Future Volume (vph)	4	231	5	549	302	299	5	5	283	160	5
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Split	NA	pt+ov	Split	NA
Protected Phases	5	2		1	6		8	8	8 1	7	7
Permitted Phases			2			6					
Detector Phase	5	2	2	1	6	6	8	8	8 1	7	7
Switch Phase											
Minimum Initial (s)	4.0	7.0	7.0	4.0	7.0	7.0	8.0	8.0		8.0	8.0
Minimum Split (s)	9.4	12.0	12.0	8.4	12.4	12.4	12.9	12.9		12.9	12.9
Total Split (s)	34.4	65.0	65.0	34.4	65.4	65.4	44.9	44.9		34.9	34.9
Total Split (%)	19.2%	36.2%	36.2%	19.2%	36.4%	36.4%	25.0%	25.0%		19.4%	19.4%
Yellow Time (s)	3.4	4.0	4.0	3.4	4.4	4.4	3.9	3.9		3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	4.4	5.0	5.0	4.4	5.4	5.4	4.9	4.9		4.9	4.9
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lag	Lag		Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None		None	None

Intersection Summary

Cycle Length: 179.6
Actuated Cycle Length: 100.6
Natural Cycle: 55
Control Type: Actuated-Uncoordinated

Splits and Phases: 39: La Jolla Village Square Dwy & Nobel Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	4	231	5	549	302	299	5	5	283	160	5	0
Future Volume (vph)	4	231	5	549	302	299	5	5	283	160	5	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.0	5.0	4.4	5.4	5.4	4.9	4.9	4.9	4.9	4.9	
Lane Util. Factor	1.00	0.95	1.00	0.97	0.95	1.00	0.95	0.95	1.00	0.95	0.95	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.99	1.00	0.95	0.96	
Satd. Flow (prot)	1770	3539	1583	3433	3539	1583	1681	1757	1583	1681	1690	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.99	1.00	0.95	0.96	
Satd. Flow (perm)	1770	3539	1583	3433	3539	1583	1681	1757	1583	1681	1690	
Peak-hour factor, PHF	0.87	0.87	0.87	0.91	0.91	0.91	0.80	0.80	0.80	0.80	0.80	0.80
Adj. Flow (vph)	5	266	6	603	332	329	6	6	354	200	6	0
RTOR Reduction (vph)	0	0	5	0	0	169	0	0	191	0	0	0
Lane Group Flow (vph)	5	266	1	603	332	160	5	7	163	102	104	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Split	NA	pt+ov	Split	NA	
Protected Phases	5	2		1	6		8	8	8 1	7	7	
Permitted Phases			2			6						
Actuated Green, G (s)	0.9	21.5	21.5	30.0	50.2	50.2	10.2	10.2	45.1	22.6	22.6	
Effective Green, g (s)	0.9	21.5	21.5	30.0	50.2	50.2	10.2	10.2	45.1	22.6	22.6	
Actuated g/C Ratio	0.01	0.21	0.21	0.29	0.49	0.49	0.10	0.10	0.44	0.22	0.22	
Clearance Time (s)	4.4	5.0	5.0	4.4	5.4	5.4	4.9	4.9		4.9	4.9	
Vehicle Extension (s)	2.0	4.1	4.1	2.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)	15	735	328	995	1716	767	165	173	689	367	369	
v/s Ratio Prot	0.00	c0.08		c0.18	0.09		0.00	0.00	c0.10	0.06	c0.06	
v/s Ratio Perm			0.00			0.10						
v/c Ratio	0.33	0.36	0.00	0.61	0.19	0.21	0.03	0.04	0.24	0.28	0.28	
Uniform Delay, d1	51.0	35.1	32.5	31.7	15.1	15.3	42.2	42.2	18.4	33.7	33.7	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	4.7	0.4	0.0	0.7	0.1	0.2	0.1	0.1	0.2	0.6	0.6	
Delay (s)	55.7	35.6	32.5	32.4	15.2	15.4	42.3	42.4	18.6	34.2	34.3	
Level of Service	E	D	C	C	B	B	D	D	B	C	C	
Approach Delay (s)		35.9			23.5			19.4			34.2	
Approach LOS		D			C			B			C	

Intersection Summary

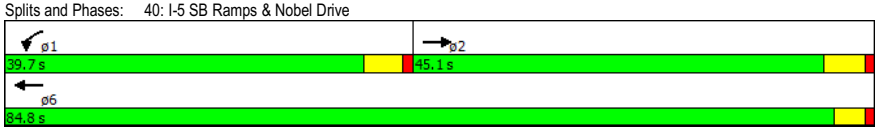
HCM 2000 Control Delay	25.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.42		
Actuated Cycle Length (s)	103.5	Sum of lost time (s)	19.6
Intersection Capacity Utilization	45.2%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBT	WBL	WBT
Lane Configurations			
Traffic Volume (vph)	361	271	1296
Future Volume (vph)	361	271	1296
Turn Type	NA	Prot	NA
Protected Phases	2	1	6
Permitted Phases			
Detector Phase	2	1	6
Switch Phase			
Minimum Initial (s)	13.0	5.0	1.0
Minimum Split (s)	18.1	9.7	5.5
Total Split (s)	45.1	39.7	84.8
Total Split (%)	53.2%	46.8%	100.0%
Yellow Time (s)	4.1	3.7	3.0
All-Red Time (s)	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0
Total Lost Time (s)	5.1	4.7	4.0
Lead/Lag	Lag	Lead	
Lead-Lag Optimize?	Yes	Yes	
Recall Mode	Min	None	Min

Intersection Summary
Cycle Length: 84.8
Actuated Cycle Length: 34.2
Natural Cycle: 40
Control Type: Actuated-Uncoordinated

Splits and Phases: 40: I-5 SB Ramps & Nobel Drive



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	361	296	271	1296	0	0
Future Volume (vph)	361	296	271	1296	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1		4.7	4.0		
Lane Util. Factor	0.95		0.97	0.95		
Frt	0.93		1.00	1.00		
Flt Protected	1.00		0.95	1.00		
Satd. Flow (prot)	3300		3433	3539		
Flt Permitted	1.00		0.95	1.00		
Satd. Flow (perm)	3300		3433	3539		
Peak-hour factor, PHF	0.87	0.87	0.90	0.90	0.25	0.25
Adj. Flow (vph)	415	340	301	1440	0	0
RTOR Reduction (vph)	178	0	0	0	0	0
Lane Group Flow (vph)	577	0	301	1440	0	0
Turn Type	NA		Prot	NA		
Protected Phases	2		1	6		
Permitted Phases						
Actuated Green, G (s)	15.7		8.6	34.1		
Effective Green, g (s)	15.7		8.6	34.1		
Actuated g/C Ratio	0.46		0.25	1.00		
Clearance Time (s)	5.1		4.7	4.0		
Vehicle Extension (s)	3.0		3.0	3.0		
Lane Grp Cap (vph)	1519		865	3539		
v/s Ratio Prot	0.17		0.09	c0.41		
v/s Ratio Perm						
v/c Ratio	0.38		0.35	0.41		
Uniform Delay, d1	6.0		10.5	0.0		
Progression Factor	1.00		1.00	1.00		
Incremental Delay, d2	0.2		0.2	0.1		
Delay (s)	6.2		10.7	0.1		
Level of Service	A		B	A		
Approach Delay (s)	6.2			1.9	0.0	
Approach LOS	A			A	A	

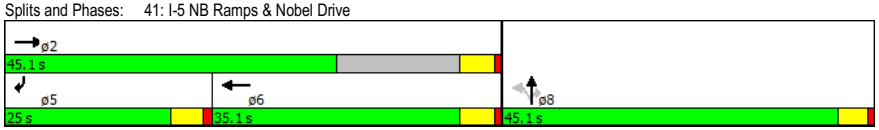
Intersection Summary			
HCM 2000 Control Delay	3.2	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	34.1	Sum of lost time (s)	9.8
Intersection Capacity Utilization	39.2%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBT	WBT	NBL	NBT	NBR	SBR
Lane Configurations						
Traffic Volume (vph)	396	1055	297	161	427	102
Future Volume (vph)	396	1055	297	161	427	102
Turn Type	NA	NA	Perm	NA	Perm	Prot
Protected Phases	2	6		8		5
Permitted Phases			8		8	
Detector Phase	2	6	8	8	8	5
Switch Phase						
Minimum Initial (s)	11.0	13.0	5.0	5.0	5.0	5.0
Minimum Split (s)	16.1	18.1	22.5	22.5	22.5	10.0
Total Split (s)	45.1	35.1	45.1	45.1	45.1	25.0
Total Split (%)	42.9%	33.4%	42.9%	42.9%	42.9%	23.8%
Yellow Time (s)	4.1	4.1	3.5	3.5	3.5	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.1	5.1	4.5	4.5	4.5	5.0
Lead/Lag		Lag				Lead
Lead-Lag Optimize?		Yes				Yes
Recall Mode	Min	Min	None	None	None	None

Intersection Summary
Cycle Length: 105.2
Actuated Cycle Length: 61.8
Natural Cycle: 60
Control Type: Actuated-Uncoordinated

Splits and Phases: 41: I-5 NB Ramps & Nobel Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	396	0	0	1055	34	297	161	427	0	0	102
Future Volume (vph)	0	396	0	0	1055	34	297	161	427	0	0	102
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.1			5.1		4.5	4.5	4.5			5.0
Lane Util. Factor		0.95			0.91		0.95	0.95	1.00			1.00
Frt		1.00			1.00		1.00	1.00	0.85			0.86
Flt Protected		1.00			1.00		0.95	0.98	1.00			1.00
Satd. Flow (prot)		3539			5061		1681	1743	1583			1611
Flt Permitted		1.00			1.00		0.95	0.98	1.00			1.00
Satd. Flow (perm)		3539			5061		1681	1743	1583			1611
Peak-hour factor, PHF	0.90	0.90	0.90	0.80	0.80	0.80	0.95	0.95	0.95	0.80	0.80	0.80
Adj. Flow (vph)	0	440	0	0	1319	42	313	169	449	0	0	128
RTOR Reduction (vph)	0	0	0	0	3	0	0	0	260	0	0	120
Lane Group Flow (vph)	0	440	0	0	1359	0	238	244	189	0	0	8
Turn Type		NA			NA		Perm	NA	Perm			Prot
Protected Phases		2			6			8				5
Permitted Phases							8		8			
Actuated Green, G (s)		34.6			25.9		18.2	18.2	18.2			3.7
Effective Green, g (s)		34.6			25.9		18.2	18.2	18.2			3.7
Actuated g/C Ratio		0.55			0.42		0.29	0.29	0.29			0.06
Clearance Time (s)		5.1			5.1		4.5	4.5	4.5			5.0
Vehicle Extension (s)		2.0			2.0		3.0	3.0	3.0			2.0
Lane Grp Cap (vph)		1962			2100		490	508	461			95
v/s Ratio Prot		c0.12			c0.27							0.00
v/s Ratio Perm							c0.14	0.14	0.12			
v/c Ratio		0.22			0.65		0.49	0.48	0.41			0.08
Uniform Delay, d1		7.1			14.6		18.2	18.2	17.8			27.7
Progression Factor		1.00			1.00		1.00	1.00	1.00			1.00
Incremental Delay, d2		0.0			0.5		0.8	0.7	0.6			0.1
Delay (s)		7.1			15.1		19.0	18.9	18.4			27.9
Level of Service		A			B		B	B	B			C
Approach Delay (s)		7.1			15.1			18.7			27.9	
Approach LOS		A			B			B			C	

Intersection Summary			
HCM 2000 Control Delay	15.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	62.4	Sum of lost time (s)	14.6
Intersection Capacity Utilization	52.1%	ICU Level of Service	A
Analysis Period (min)	15		

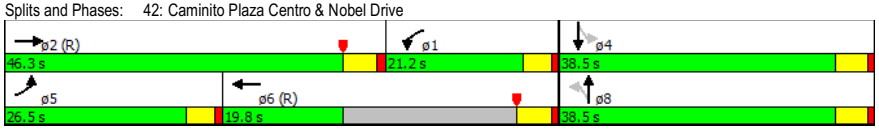
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	50	789	64	869	47	2	4	5
Future Volume (vph)	50	789	64	869	47	2	4	5
Turn Type	Prot	NA	Prot	NA	Perm	NA	Perm	NA
Protected Phases	5	2	1	6		8		4
Permitted Phases					8		4	
Detector Phase	5	2	1	6	8	8	4	4
Switch Phase								
Minimum Initial (s)	4.0	10.0	4.0	10.0	6.0	6.0	6.0	6.0
Minimum Split (s)	8.4	15.2	8.4	15.2	10.9	10.9	10.9	10.9
Total Split (s)	26.5	46.3	21.2	19.8	38.5	38.5	38.5	38.5
Total Split (%)	25.0%	43.7%	20.0%	18.7%	36.3%	36.3%	36.3%	36.3%
Yellow Time (s)	3.4	4.2	3.4	4.2	3.9	3.9	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	4.4	5.2	4.4	5.2		4.9		4.9
Lead/Lag	Lead	Lead	Lag	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes				
Recall Mode	None	C-Max	None	C-Max	None	None	None	None

Intersection Summary

Cycle Length: 106
Actuated Cycle Length: 106
Offset: 26 (25%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 40
Control Type: Actuated-Coordinated

Splits and Phases: 42: Caminito Plaza Centro & Nobel Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	50	789	111	64	869	18	47	2	23	4	5	44
Future Volume (vph)	50	789	111	64	869	18	47	2	23	4	5	44
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.2		4.4	5.2			4.9			4.9	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Frt	1.00	0.98		1.00	1.00			0.96			0.89	
Flt Protected	0.95	1.00		0.95	1.00			0.97			1.00	
Satd. Flow (prot)	1770	4991		1770	5070			1727			1647	
Flt Permitted	0.95	1.00		0.95	1.00			0.80			0.98	
Satd. Flow (perm)	1770	4991		1770	5070			1420			1621	
Peak-hour factor, PHF	0.92	0.92	0.92	0.93	0.93	0.93	0.80	0.80	0.80	0.80	0.80	0.80
Adj. Flow (vph)	54	858	121	69	934	19	59	2	29	5	6	55
RTOR Reduction (vph)	0	12	0	0	1	0	0	19	0	0	46	0
Lane Group Flow (vph)	54	967	0	69	952	0	0	72	0	0	20	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8			4		
Actuated Green, G (s)	6.7	61.3		13.4	68.0			16.8			16.8	
Effective Green, g (s)	6.7	61.3		13.4	68.0			16.8			16.8	
Actuated g/C Ratio	0.06	0.58		0.13	0.64			0.16			0.16	
Clearance Time (s)	4.4	5.2		4.4	5.2			4.9			4.9	
Vehicle Extension (s)	2.0	5.0		2.0	4.5			2.5			2.0	
Lane Grp Cap (vph)	111	2886		223	3252			225			256	
v/s Ratio Prot	c0.03	c0.19		0.04	c0.19							
v/s Ratio Perm								c0.05			0.01	
v/c Ratio	0.49	0.34		0.31	0.29			0.32			0.08	
Uniform Delay, d1	48.0	11.7		42.1	8.4			39.5			38.0	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	1.2	0.3		0.3	0.2			0.6			0.0	
Delay (s)	49.2	12.0		42.4	8.6			40.1			38.0	
Level of Service	D	B		D	A			D			D	
Approach Delay (s)		13.9			10.9			40.1			38.0	
Approach LOS		B			B			D			D	

Intersection Summary

HCM 2000 Control Delay	14.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.34		
Actuated Cycle Length (s)	106.0	Sum of lost time (s)	14.5
Intersection Capacity Utilization	44.1%	ICU Level of Service	A
Analysis Period (min)	15		

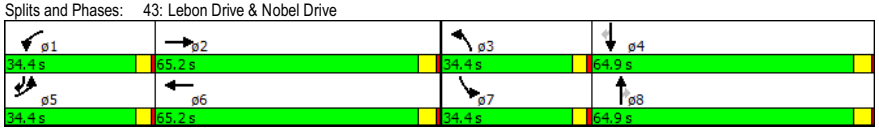
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	76	638	69	607	233	367	95	46	90	91
Future Volume (vph)	76	638	69	607	233	367	95	46	90	91
Turn Type	Prot	NA	Prot	NA	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	5	2	1	6	3	8		7	4	5
Permitted Phases							8			4
Detector Phase	5	2	1	6	3	8	8	7	4	5
Switch Phase										
Minimum Initial (s)	4.0	10.0	4.0	10.0	4.0	8.0	8.0	10.0	10.0	4.0
Minimum Split (s)	8.4	15.2	8.4	15.2	8.4	12.9	12.9	14.4	14.9	8.4
Total Split (s)	34.4	65.2	34.4	65.2	34.4	64.9	64.9	34.4	64.9	34.4
Total Split (%)	17.3%	32.8%	17.3%	32.8%	17.3%	32.6%	32.6%	17.3%	32.6%	17.3%
Yellow Time (s)	3.4	4.2	3.4	4.2	3.4	3.9	3.9	3.4	3.9	3.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.2	4.4	5.2	4.4	4.9	4.9	4.4	4.9	4.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 198.9
Actuated Cycle Length: 102.1
Natural Cycle: 60
Control Type: Actuated-Uncoordinated

Splits and Phases: 43: Lebon Drive & Nobel Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	76	638	90	69	607	120	233	367	95	46	90	91
Future Volume (vph)	76	638	90	69	607	120	233	367	95	46	90	91
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.2		4.4	5.2		4.4	4.9	4.9	4.4	4.9	4.4
Lane Util. Factor	0.97	0.91		1.00	0.91		0.97	0.95	1.00	0.97	0.95	1.00
Frt	1.00	0.98		1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	4991		1770	4959		3433	3539	1583	3433	3539	1583
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	4991		1770	4959		3433	3539	1583	3433	3539	1583
Peak-hour factor, PHF	0.88	0.88	0.88	0.91	0.91	0.91	0.85	0.85	0.85	0.85	0.85	0.85
Adj. Flow (vph)	86	725	102	76	667	132	274	432	112	54	106	107
RTOR Reduction (vph)	0	9	0	0	14	0	0	0	48	0	0	46
Lane Group Flow (vph)	86	818	0	76	785	0	274	432	64	54	106	61
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	5	2		1	6		3	8		7	4	5
Permitted Phases									8			4
Actuated Green, G (s)	7.7	35.4		7.8	35.5		13.8	34.2	34.2	7.3	27.7	35.4
Effective Green, g (s)	7.7	35.4		7.8	35.5		13.8	34.2	34.2	7.3	27.7	35.4
Actuated g/C Ratio	0.07	0.34		0.08	0.34		0.13	0.33	0.33	0.07	0.27	0.34
Clearance Time (s)	4.4	5.2		4.4	5.2		4.4	4.9	4.9	4.4	4.9	4.4
Vehicle Extension (s)	2.0	4.5		2.0	4.5		2.0	6.4	6.4	2.0	5.5	2.0
Lane Grp Cap (vph)	255	1705		133	1699		457	1168	522	241	946	540
v/s Ratio Prot	0.03	c0.16		c0.04	0.16		c0.08	c0.12		0.02	0.03	0.01
v/s Ratio Perm									0.04			0.03
v/c Ratio	0.34	0.48		0.57	0.46		0.60	0.37	0.12	0.22	0.11	0.11
Uniform Delay, d1	45.5	26.9		46.3	26.6		42.3	26.5	24.2	45.5	28.7	23.3
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.3	0.4		3.6	0.3		1.4	0.6	0.3	0.2	0.1	0.0
Delay (s)	45.8	27.2		49.9	26.9		43.7	27.1	24.5	45.6	28.8	23.4
Level of Service	D	C		D	C		D	C	C	D	C	C
Approach Delay (s)		29.0			28.9			32.3			30.0	
Approach LOS		C			C			C			C	

Intersection Summary

HCM 2000 Control Delay	30.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	103.6	Sum of lost time (s)	18.9
Intersection Capacity Utilization	49.9%	ICU Level of Service	A
Analysis Period (min)	15		

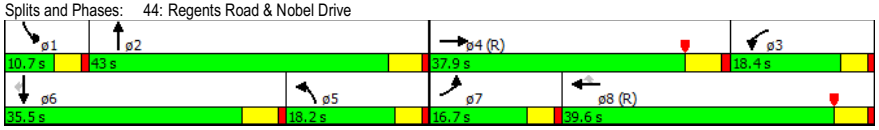
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	211	579	379	445	169	173	713	70	406	47
Future Volume (vph)	211	579	379	445	169	173	713	70	406	47
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Prot	NA	Perm
Protected Phases	7	4	3	8		5	2	1	6	
Permitted Phases					8					6
Detector Phase	7	4	3	8	8	5	2	1	6	6
Switch Phase										
Minimum Initial (s)	4.0	10.0	4.0	10.0	10.0	4.0	10.0	4.0	10.0	10.0
Minimum Split (s)	8.4	37.7	8.4	37.3	37.3	8.4	41.2	8.4	35.5	35.5
Total Split (s)	16.7	37.9	18.4	39.6	39.6	18.2	43.0	10.7	35.5	35.5
Total Split (%)	15.2%	34.5%	16.7%	36.0%	36.0%	16.5%	39.1%	9.7%	32.3%	32.3%
Yellow Time (s)	3.4	4.7	3.4	4.3	4.3	3.4	4.2	3.4	4.5	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.7	4.4	5.3	5.3	4.4	5.2	4.4	5.5	5.5
Lead/Lag	Lead	Lead	Lag	Lag	Lag	Lag	Lag	Lead	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	C-Max	None	Min	None	Min	Min

Intersection Summary

Cycle Length: 110
Actuated Cycle Length: 110
Offset: 0 (0%), Referenced to phase 4:EBT and 8:WBT, Start of Yellow
Natural Cycle: 110
Control Type: Actuated-Coordinated

Splits and Phases: 44: Regents Road & Nobel Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	211	579	108	379	445	169	173	713	407	70	406	47
Future Volume (vph)	211	579	108	379	445	169	173	713	407	70	406	47
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.7		4.4	5.3	5.3	4.4	5.2		4.4	5.5	5.5
Lane Util. Factor	0.97	0.91		0.97	0.95	1.00	1.00	0.91		1.00	0.95	1.00
Frt	1.00	0.98		1.00	1.00	0.85	1.00	0.95		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3433	4966		3433	3539	1583	1770	4808		1770	3539	1583
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	3433	4966		3433	3539	1583	1770	4808		1770	3539	1583
Peak-hour factor, PHF	0.97	0.97	0.97	0.88	0.88	0.88	0.80	0.80	0.80	0.80	0.80	0.80
Adj. Flow (vph)	218	597	111	431	506	192	216	891	509	88	508	59
RTOR Reduction (vph)	0	25	0	0	0	118	0	94	0	0	0	44
Lane Group Flow (vph)	218	683	0	431	506	74	216	1306	0	88	508	15
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA		Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8						6
Actuated Green, G (s)	10.7	32.2		14.0	35.9	35.9	15.9	37.8		6.3	27.9	27.9
Effective Green, g (s)	10.7	32.2		14.0	35.9	35.9	15.9	37.8		6.3	27.9	27.9
Actuated g/C Ratio	0.10	0.29		0.13	0.33	0.33	0.14	0.34		0.06	0.25	0.25
Clearance Time (s)	4.4	5.7		4.4	5.3	5.3	4.4	5.2		4.4	5.5	5.5
Vehicle Extension (s)	2.0	4.4		2.0	6.1	6.1	2.0	5.7		2.0	6.2	6.2
Lane Grp Cap (vph)	333	1453		436	1155	516	255	1652		101	897	401
v/s Ratio Prot	c0.06	c0.14		c0.13	0.14		0.12	c0.27		c0.05	0.14	
v/s Ratio Perm						0.05						0.01
v/c Ratio	0.65	0.47		0.99	0.44	0.14	0.85	0.79		0.87	0.57	0.04
Uniform Delay, d1	47.9	31.9		47.9	29.1	26.2	45.9	32.5		51.4	35.8	30.9
Progression Factor	1.00	1.00		0.65	0.46	0.08	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	3.5	1.1		35.8	1.0	0.5	21.3	3.2		49.7	1.8	0.1
Delay (s)	51.4	33.0		67.2	14.5	2.6	67.1	35.7		101.2	37.6	31.0
Level of Service	D	C		E	B	A	E	D		F	D	C
Approach Delay (s)		37.3			32.6			39.9			45.5	
Approach LOS		D			C			D			D	

Intersection Summary

HCM 2000 Control Delay	38.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	67.6%	ICU Level of Service	C
Analysis Period (min)	15		

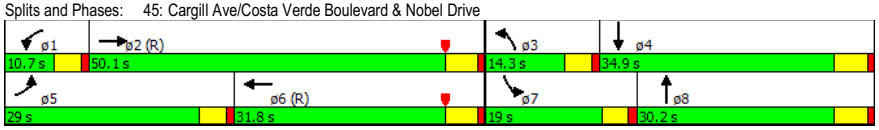
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	274	637	31	692	58	58	149	35
Future Volume (vph)	274	637	31	692	58	58	149	35
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	5	2	1	6	3	8	7	4
Permitted Phases								
Detector Phase	5	2	1	6	3	8	7	4
Switch Phase								
Minimum Initial (s)	4.0	25.0	4.0	25.0	4.0	25.0	4.0	25.0
Minimum Split (s)	8.4	30.2	8.4	30.2	8.4	30.2	8.4	30.2
Total Split (s)	29.0	50.1	10.7	31.8	14.3	30.2	19.0	34.9
Total Split (%)	26.4%	45.5%	9.7%	28.9%	13.0%	27.5%	17.3%	31.7%
Yellow Time (s)	3.4	4.2	3.4	4.2	3.4	4.2	3.4	4.2
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.2	4.4	5.2	4.4	5.2	4.4	5.2
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	Max	None	Max

Intersection Summary

Cycle Length: 110
Actuated Cycle Length: 110
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 45: Cargill Ave/Costa Verde Boulevard & Nobel Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	274	637	25	31	692	145	58	58	32	149	35	185
Future Volume (vph)	274	637	25	31	692	145	58	58	32	149	35	185
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.2		4.4	5.2		4.4	5.2		4.4	5.2	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	1.00		1.00	1.00	
Frt	1.00	0.99		1.00	0.97		1.00	0.95		1.00	0.87	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	5057		1770	4953		1770	1764		1770	1628	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	5057		1770	4953		1770	1764		1770	1628	
Peak-hour factor, PHF	0.88	0.88	0.88	0.91	0.91	0.91	0.80	0.80	0.80	0.87	0.87	0.87
Adj. Flow (vph)	311	724	28	34	760	159	72	72	40	171	40	213
RTOR Reduction (vph)	0	3	0	0	29	0	0	17	0	0	149	0
Lane Group Flow (vph)	311	749	0	34	890	0	73	96	0	171	104	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases												
Actuated Green, G (s)	22.2	46.5		3.8	28.1		7.2	27.2		13.3	33.3	
Effective Green, g (s)	22.2	46.5		3.8	28.1		7.2	27.2		13.3	33.3	
Actuated g/C Ratio	0.20	0.42		0.03	0.26		0.07	0.25		0.12	0.30	
Clearance Time (s)	4.4	5.2		4.4	5.2		4.4	5.2		4.4	5.2	
Vehicle Extension (s)	2.0	4.5		2.0	4.5		2.0	4.5		2.0	4.5	
Lane Grp Cap (vph)	357	2137		61	1265		115	436		214	492	
v/s Ratio Prot	c0.18	0.15		0.02	c0.18		0.04	0.05		c0.10	c0.06	
v/s Ratio Perm												
v/c Ratio	0.87	0.35		0.56	0.70		0.63	0.22		0.80	0.21	
Uniform Delay, d1	42.5	21.5		52.3	37.2		50.1	33.0		47.0	28.6	
Progression Factor	1.04	0.43		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	15.6	0.3		6.1	3.3		8.1	1.2		17.4	1.0	
Delay (s)	60.0	9.6		58.4	40.5		58.3	34.1		64.4	29.6	
Level of Service	E	A		E	D		E	C		E	C	
Approach Delay (s)		24.3			41.1			43.6			43.6	
Approach LOS		C			D			D			D	

Intersection Summary

HCM 2000 Control Delay	34.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	19.2
Intersection Capacity Utilization	81.1%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	78	1123	11	692	34	0	63	0
Future Volume (vph)	78	1123	11	692	34	0	63	0
Turn Type	Prot	NA	Prot	NA	Perm	NA	Perm	NA
Protected Phases	5	2	1	6		8		4
Permitted Phases					8		4	
Detector Phase	5	2	1	6	8	8	4	4
Switch Phase								
Minimum Initial (s)	4.0	7.0	4.0	7.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.4	19.0	8.4	28.9	32.9	32.9	32.9	32.9
Total Split (s)	34.4	65.0	34.4	64.9	44.9	44.9	44.9	44.9
Total Split (%)	23.8%	45.0%	23.8%	45.0%	31.1%	31.1%	31.1%	31.1%
Yellow Time (s)	3.4	4.0	3.4	3.9	3.9	3.9	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.4	5.0	4.4	4.9		4.9	4.9	4.9
Lead/Lag	Lead	Lag	Lead	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes				
Recall Mode	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 144.3
Actuated Cycle Length: 67.1
Natural Cycle: 80
Control Type: Actuated-Uncoordinated

Splits and Phases: 46: Lombard Place & Nobel Drive

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	78	1123	11	11	692	41	34	0	19	63	0	38
Future Volume (vph)	78	1123	11	11	692	41	34	0	19	63	0	38
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.0		4.4	4.9			4.9		4.9	4.9	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00		1.00	1.00	
Frt	1.00	1.00		1.00	0.99			0.95		1.00	0.85	
Flt Protected	0.95	1.00		0.95	1.00			0.97		0.95	1.00	
Satd. Flow (prot)	1770	3534		1770	3510			1718		1770	1583	
Flt Permitted	0.95	1.00		0.95	1.00			0.78		0.83	1.00	
Satd. Flow (perm)	1770	3534		1770	3510			1377		1550	1583	
Peak-hour factor, PHF	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Adj. Flow (vph)	98	1404	14	14	865	51	42	0	24	79	0	48
RTOR Reduction (vph)	0	0	0	0	2	0	0	42	0	0	42	0
Lane Group Flow (vph)	98	1418	0	14	914	0	0	25	0	79	6	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8			4		
Actuated Green, G (s)	7.5	46.9		0.8	40.3			9.3		9.3	9.3	
Effective Green, g (s)	7.5	46.9		0.8	40.3			9.3		9.3	9.3	
Actuated g/C Ratio	0.11	0.66		0.01	0.57			0.13		0.13	0.13	
Clearance Time (s)	4.4	5.0		4.4	4.9			4.9		4.9	4.9	
Vehicle Extension (s)	2.0	3.7		2.0	4.4			2.0		2.0	2.0	
Lane Grp Cap (vph)	186	2324		19	1983			179		202	206	
v/s Ratio Prot	c0.06	c0.40		0.01	0.26						0.00	
v/s Ratio Perm								0.02		c0.05		
v/c Ratio	0.53	0.61		0.74	0.46			0.14		0.39	0.03	
Uniform Delay, d1	30.2	7.0		35.1	9.1			27.5		28.4	27.1	
Progression Factor	1.00	1.00		1.00	1.00			1.00		1.00	1.00	
Incremental Delay, d2	1.2	0.5		79.4	0.3			0.1		0.5	0.0	
Delay (s)	31.5	7.5		114.5	9.4			27.6		28.9	27.1	
Level of Service	C	A		F	A			C		C	C	
Approach Delay (s)		9.0			11.0			27.6			28.2	
Approach LOS		A			B			C			C	

Intersection Summary

HCM 2000 Control Delay	11.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	71.3	Sum of lost time (s)	14.3
Intersection Capacity Utilization	56.4%	ICU Level of Service	B
Analysis Period (min)	15		

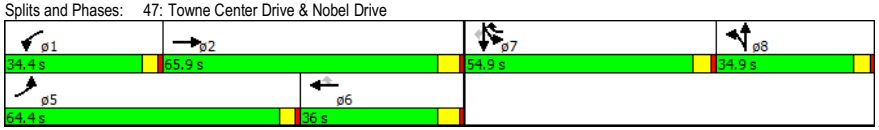
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	420	776	13	326	65	156	19	34	223
Future Volume (vph)	420	776	13	326	65	156	19	34	223
Turn Type	Prot	NA	Prot	NA	pm+ov	NA	Split	NA	Perm
Protected Phases	5	2	1	6	7	8	7	7	
Permitted Phases					6				7
Detector Phase	5	2	1	6	7	8	7	7	7
Switch Phase									
Minimum Initial (s)	4.0	7.0	4.0	7.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.4	12.9	8.4	13.0	8.9	8.9	8.9	8.9	8.9
Total Split (s)	64.4	65.9	34.4	36.0	54.9	34.9	54.9	54.9	54.9
Total Split (%)	33.9%	34.6%	18.1%	18.9%	28.9%	18.3%	28.9%	28.9%	28.9%
Yellow Time (s)	3.4	4.9	3.4	5.0	3.9	3.9	3.9	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.9	4.4	6.0	4.9	4.9	4.9	4.9	4.9
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 190.2
Actuated Cycle Length: 89.9
Natural Cycle: 55
Control Type: Actuated-Uncoordinated

Splits and Phases: 47: Towne Center Drive & Nobel Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	420	776	28	13	326	65	51	156	133	19	34	223
Future Volume (vph)	420	776	28	13	326	65	51	156	133	19	34	223
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.9		4.4	6.0	4.9		4.9		4.9	4.9	4.9
Lane Util. Factor	0.97	0.95		1.00	0.91	1.00		0.95		1.00	1.00	1.00
Frt	1.00	0.99		1.00	1.00	0.85		0.94		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.99		0.95	1.00	1.00
Satd. Flow (prot)	3433	3521		1770	5085	1583		3307		1770	1863	1583
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.99		0.95	1.00	1.00
Satd. Flow (perm)	3433	3521		1770	5085	1583		3307		1770	1863	1583
Peak-hour factor, PHF	0.85	0.85	0.85	0.91	0.91	0.91	0.80	0.80	0.80	0.82	0.82	0.82
Adj. Flow (vph)	494	913	33	14	358	71	64	195	166	23	41	272
RTOR Reduction (vph)	0	1	0	0	0	45	0	52	0	0	0	236
Lane Group Flow (vph)	494	945	0	14	358	26	0	373	0	23	41	36
Turn Type	Prot	NA		Prot	NA	pm+ov	Split	NA		Split	NA	Perm
Protected Phases	5	2		1	6	7	8	8		7	7	
Permitted Phases						6						7
Actuated Green, G (s)	20.7	40.2		2.0	21.4	33.4		17.1		12.0	12.0	12.0
Effective Green, g (s)	20.7	40.2		2.0	21.4	33.4		17.1		12.0	12.0	12.0
Actuated g/C Ratio	0.23	0.44		0.02	0.23	0.37		0.19		0.13	0.13	0.13
Clearance Time (s)	4.4	5.9		4.4	6.0	4.9		4.9		4.9	4.9	4.9
Vehicle Extension (s)	2.0	4.9		2.0	3.3	4.0		2.0		4.0	4.0	4.0
Lane Grp Cap (vph)	777	1548		38	1190	578		618		232	244	207
v/s Ratio Prot	c0.14	c0.27		0.01	0.07	0.01		c0.11		0.01	0.02	
v/s Ratio Perm						0.01						c0.02
v/c Ratio	0.64	0.61		0.37	0.30	0.04		0.60		0.10	0.17	0.17
Uniform Delay, d1	31.9	19.6		44.1	28.8	18.7		34.0		34.9	35.3	35.3
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00
Incremental Delay, d2	1.3	1.0		2.2	0.2	0.0		1.1		0.3	0.4	0.5
Delay (s)	33.2	20.6		46.3	29.0	18.8		35.2		35.2	35.7	35.8
Level of Service	C	C		D	C	B		D		D	D	D
Approach Delay (s)		24.9			27.9			35.2			35.8	
Approach LOS		C			C			D			D	

Intersection Summary

HCM 2000 Control Delay	28.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	91.4	Sum of lost time (s)	20.2
Intersection Capacity Utilization	54.1%	ICU Level of Service	A
Analysis Period (min)	15		

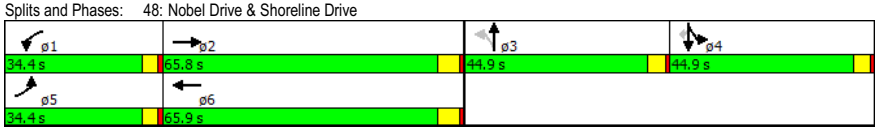
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	13	928	9	308	41	6	164	1	29
Future Volume (vph)	13	928	9	308	41	6	164	1	29
Turn Type	Prot	NA	Prot	NA	Perm	NA	Split	NA	Perm
Protected Phases	5	2	1	6		3	4	4	
Permitted Phases					3				4
Detector Phase	5	2	1	6	3	3	4	4	4
Switch Phase									
Minimum Initial (s)	4.0	10.0	4.0	10.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.4	15.8	8.4	30.9	8.9	8.9	33.9	33.9	33.9
Total Split (s)	34.4	65.8	34.4	65.9	44.9	44.9	44.9	44.9	44.9
Total Split (%)	18.1%	34.6%	18.1%	34.7%	23.6%	23.6%	23.6%	23.6%	23.6%
Yellow Time (s)	3.4	4.8	3.4	4.9	3.9	3.9	3.9	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.8	4.4	5.9		4.9	4.9	4.9	4.9
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 190.1
Actuated Cycle Length: 113.1
Natural Cycle: 85
Control Type: Actuated-Uncoordinated

Splits and Phases: 48: Nobel Drive & Shoreline Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	13	928	10	9	308	48	41	6	76	164	1	29
Future Volume (vph)	13	928	10	9	308	48	41	6	76	164	1	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.8		4.4	5.9			4.9		4.9	4.9	4.9
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00		1.00	1.00	0.88
Frt	1.00	1.00		1.00	0.98			0.92		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.98		0.95	1.00	1.00
Satd. Flow (prot)	1770	5077		1770	4982			1680		1770	1863	2787
Flt Permitted	0.95	1.00		0.95	1.00			0.21		0.95	1.00	1.00
Satd. Flow (perm)	1770	5077		1770	4982			353		1770	1863	2787
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.88	0.88	0.88	0.86	0.86	0.86
Adj. Flow (vph)	14	1020	11	10	338	53	47	7	86	191	1	34
RTOR Reduction (vph)	0	1	0	0	11	0	0	25	0	0	0	29
Lane Group Flow (vph)	14	1030	0	10	380	0	0	115	0	191	1	5
Turn Type	Prot	NA		Prot	NA		Perm	NA		Split	NA	Perm
Protected Phases	5	2		1	6			3		4	4	
Permitted Phases							3					4
Actuated Green, G (s)	2.4	36.1		1.1	34.7			41.0		18.3	18.3	18.3
Effective Green, g (s)	2.4	36.1		1.1	34.7			41.0		18.3	18.3	18.3
Actuated g/C Ratio	0.02	0.31		0.01	0.30			0.35		0.16	0.16	0.16
Clearance Time (s)	4.4	5.8		4.4	5.9			4.9		4.9	4.9	4.9
Vehicle Extension (s)	2.0	4.6		2.0	4.4			2.0		2.0	2.0	2.0
Lane Grp Cap (vph)	36	1573		16	1483			124		278	292	437
v/s Ratio Prot	c0.01	c0.20		0.01	0.08					c0.11	0.00	
v/s Ratio Perm								c0.33				0.00
v/c Ratio	0.39	0.65		0.62	0.26			0.93		0.69	0.00	0.01
Uniform Delay, d1	56.3	34.8		57.5	31.1			36.4		46.4	41.4	41.5
Progression Factor	1.00	1.00		1.00	1.00			1.00		1.00	1.00	1.00
Incremental Delay, d2	2.5	1.2		44.0	0.2			58.9		5.5	0.0	0.0
Delay (s)	58.8	36.0		101.5	31.2			95.3		51.9	41.4	41.5
Level of Service	E	D		F	C			F		D	D	D
Approach Delay (s)		36.3			33.0			95.3			50.3	
Approach LOS		D			C			F			D	

Intersection Summary

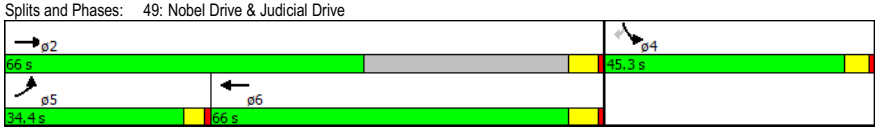
HCM 2000 Control Delay	41.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	116.5	Sum of lost time (s)	20.1
Intersection Capacity Utilization	42.8%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBT	SBL	SBR
Lane Configurations					
Traffic Volume (vph)	81	1135	361	301	13
Future Volume (vph)	81	1135	361	301	13
Turn Type	Prot	NA	NA	Prot	Perm
Protected Phases	5	2	6	4	
Permitted Phases					4
Detector Phase	5	2	6	4	4
Switch Phase					
Minimum Initial (s)	4.0	10.0	10.0	7.0	7.0
Minimum Split (s)	11.4	16.0	16.0	12.3	12.3
Total Split (s)	34.4	66.0	66.0	45.3	45.3
Total Split (%)	23.6%	45.3%	45.3%	31.1%	31.1%
Yellow Time (s)	3.4	5.0	5.0	4.3	4.3
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	6.0	6.0	5.3	5.3
Lead/Lag	Lead		Lag		
Lead-Lag Optimize?	Yes		Yes		
Recall Mode	None	Min	Min	None	None

Intersection Summary
Cycle Length: 145.7
Actuated Cycle Length: 99.8
Natural Cycle: 55
Control Type: Actuated-Uncoordinated

Splits and Phases: 49: Nobel Drive & Judicial Drive



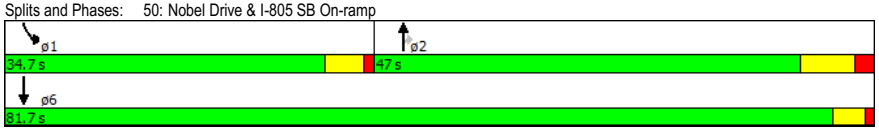
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	81	1135	361	1290	301	13
Future Volume (vph)	81	1135	361	1290	301	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	6.0	6.0		5.3	5.3
Lane Util. Factor	0.97	0.91	0.91		0.97	1.00
Frt	1.00	1.00	0.88		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	3433	5085	4489		3433	1583
Flt Permitted	0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)	3433	5085	4489		3433	1583
Peak-hour factor, PHF	0.91	0.91	0.90	0.90	0.87	0.87
Adj. Flow (vph)	89	1247	401	1433	346	15
RTOR Reduction (vph)	0	0	314	0	0	12
Lane Group Flow (vph)	89	1247	1520	0	346	3
Turn Type	Prot	NA	NA		Prot	Perm
Protected Phases	5	2	6		4	
Permitted Phases						4
Actuated Green, G (s)	7.1	69.6	58.1		18.8	18.8
Effective Green, g (s)	7.1	69.6	58.1		18.8	18.8
Actuated g/C Ratio	0.07	0.70	0.58		0.19	0.19
Clearance Time (s)	4.4	6.0	6.0		5.3	5.3
Vehicle Extension (s)	2.0	5.4	5.4		4.4	4.4
Lane Grp Cap (vph)	244	3549	2615		647	298
v/s Ratio Prot	0.03	c0.25	c0.34		c0.10	
v/s Ratio Perm						0.00
v/c Ratio	0.36	0.35	1.15dr		0.53	0.01
Uniform Delay, d1	44.1	6.0	13.1		36.5	32.9
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	0.3	0.1	0.6		1.3	0.0
Delay (s)	44.5	6.2	13.7		37.8	32.9
Level of Service	D	A	B		D	C
Approach Delay (s)		8.7	13.7		37.6	
Approach LOS		A	B		D	

Intersection Summary			
HCM 2000 Control Delay	14.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	99.7	Sum of lost time (s)	15.7
Intersection Capacity Utilization	54.1%	ICU Level of Service	A
Analysis Period (min)	15		
dr Defacto Right Lane. Recode with 1 though lane as a right lane.			
c Critical Lane Group			

Lane Group	NBT	NBR	SBL	SBT
Lane Configurations				
Traffic Volume (vph)	532	666	26	1789
Future Volume (vph)	532	666	26	1789
Turn Type	NA	Perm	Prot	NA
Protected Phases	2		1	6
Permitted Phases		2		
Detector Phase	2	2	1	6
Switch Phase				
Minimum Initial (s)	12.0	12.0	5.0	1.0
Minimum Split (s)	19.0	19.0	9.7	5.0
Total Split (s)	47.0	47.0	34.7	81.7
Total Split (%)	57.5%	57.5%	42.5%	100.0%
Yellow Time (s)	5.0	5.0	3.7	3.0
All-Red Time (s)	2.0	2.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	4.7	4.0
Lead/Lag	Lag	Lag	Lead	
Lead-Lag Optimize?	Yes	Yes	Yes	
Recall Mode	Min	Min	None	Min

Intersection Summary
Cycle Length: 81.7
Actuated Cycle Length: 44.9
Natural Cycle: 40
Control Type: Actuated-Uncoordinated

Splits and Phases: 50: Nobel Drive & I-805 SB On-ramp



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	532	666	26	1789
Future Volume (vph)	0	0	532	666	26	1789
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)			7.0	7.0	4.7	4.0
Lane Util. Factor			0.95	0.88	0.97	0.91
Frt			1.00	0.85	1.00	1.00
Flt Protected			1.00	1.00	0.95	1.00
Satd. Flow (prot)			3539	2787	3433	5085
Flt Permitted			1.00	1.00	0.95	1.00
Satd. Flow (perm)			3539	2787	3433	5085
Peak-hour factor, PHF	0.25	0.25	0.90	0.90	0.93	0.93
Adj. Flow (vph)	0	0	591	740	28	1924
RTOR Reduction (vph)	0	0	0	194	0	0
Lane Group Flow (vph)	0	0	591	546	28	1924
Turn Type			NA	Perm	Prot	NA
Protected Phases			2		1	6
Permitted Phases				2		
Actuated Green, G (s)			36.0	36.0	1.1	48.8
Effective Green, g (s)			36.0	36.0	1.1	48.8
Actuated g/C Ratio			0.74	0.74	0.02	1.00
Clearance Time (s)			7.0	7.0	4.7	4.0
Vehicle Extension (s)			3.0	3.0	3.0	3.0
Lane Grp Cap (vph)			2610	2055	77	5085
v/s Ratio Prot			0.17		0.01	c0.38
v/s Ratio Perm				0.20		
v/c Ratio			0.23	0.27	0.36	0.38
Uniform Delay, d1			2.0	2.1	23.5	0.0
Progression Factor			1.00	1.00	1.00	1.00
Incremental Delay, d2			0.0	0.1	2.9	0.0
Delay (s)			2.1	2.2	26.4	0.0
Level of Service			A	A	C	A
Approach Delay (s)	0.0		2.1			0.4
Approach LOS	A		A			A

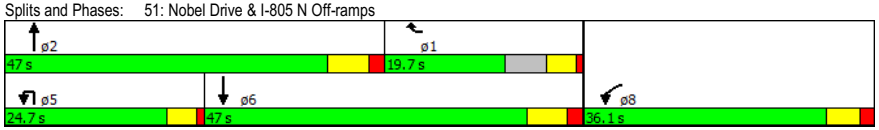
Intersection Summary			
HCM 2000 Control Delay	1.1	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	48.8	Sum of lost time (s)	11.7
Intersection Capacity Utilization	51.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	WBL	WBR	NBT	SBT	ø5
Lane Configurations					
Traffic Volume (vph)	932	621	506	586	
Future Volume (vph)	932	621	506	586	
Turn Type	Prot	Prot	NA	NA	
Protected Phases	8	1	2	6	5
Permitted Phases					
Detector Phase	8	1	2	6	
Switch Phase					
Minimum Initial (s)	5.0	5.0	16.0	11.0	5.0
Minimum Split (s)	11.1	9.7	23.0	18.0	9.7
Total Split (s)	36.1	19.7	47.0	47.0	24.7
Total Split (%)	33.5%	18.3%	43.6%	43.6%	23%
Yellow Time (s)	4.1	3.7	5.0	5.0	3.7
All-Red Time (s)	2.0	1.0	2.0	2.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.1	4.7	7.0	7.0	
Lead/Lag		Lag	Lead	Lag	Lead
Lead-Lag Optimize?		Yes	Yes	Yes	Yes
Recall Mode	None	None	Min	Min	None

Intersection Summary
Cycle Length: 107.8
Actuated Cycle Length: 72.9
Natural Cycle: 60
Control Type: Actuated-Uncoordinated

Splits and Phases: 51: Nobel Drive & I-805 N Off-ramps



Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	932	621	0	506	0	0	586
Future Volume (vph)	932	621	0	506	0	0	586
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.1	4.7		7.0			7.0
Lane Util. Factor	0.97	0.88		0.95			0.91
Frt	1.00	0.85		1.00			1.00
Flt Protected	0.95	1.00		1.00			1.00
Satd. Flow (prot)	3433	2787		3539			5085
Flt Permitted	0.95	1.00		1.00			1.00
Satd. Flow (perm)	3433	2787		3539			5085
Peak-hour factor, PHF	0.97	0.97	0.92	0.84	0.84	0.84	0.84
Adj. Flow (vph)	961	640	0	602	0	0	698
RTOR Reduction (vph)	0	513	0	0	0	0	0
Lane Group Flow (vph)	961	127	0	602	0	0	698
Turn Type	Prot	Prot	Prot	NA			NA
Protected Phases	8	1	5	2			6
Permitted Phases							
Actuated Green, G (s)	28.1	8.7		18.2			31.6
Effective Green, g (s)	28.1	8.7		18.2			31.6
Actuated g/C Ratio	0.39	0.12		0.25			0.43
Clearance Time (s)	6.1	4.7		7.0			7.0
Vehicle Extension (s)	2.0	3.0		2.0			2.0
Lane Grp Cap (vph)	1325	333		884			2207
v/s Ratio Prot	c0.28	c0.05		c0.17			0.14
v/s Ratio Perm							
v/c Ratio	0.73	0.38		0.68			0.32
Uniform Delay, d1	19.1	29.6		24.7			13.5
Progression Factor	1.00	1.00		1.00			1.00
Incremental Delay, d2	1.7	0.7		1.7			0.0
Delay (s)	20.8	30.3		26.4			13.5
Level of Service	C	C		C			B
Approach Delay (s)	24.6			26.4			13.5
Approach LOS	C			C			B

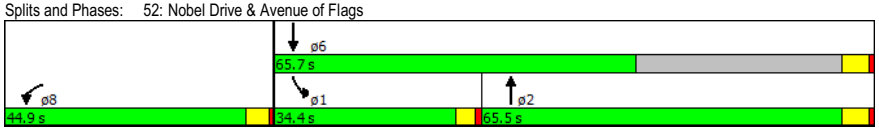
Intersection Summary			
HCM 2000 Control Delay	22.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	72.8	Sum of lost time (s)	17.8
Intersection Capacity Utilization	51.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	WBL	NBT	SBL	SBT
Lane Configurations				
Traffic Volume (vph)	2	1188	5	635
Future Volume (vph)	2	1188	5	635
Turn Type	Prot	NA	Prot	NA
Protected Phases	8	2	1	6
Permitted Phases				
Detector Phase	8	2	1	6
Switch Phase				
Minimum Initial (s)	4.0	7.0	4.0	7.0
Minimum Split (s)	8.9	12.5	8.4	12.7
Total Split (s)	44.9	65.5	34.4	65.7
Total Split (%)	31.0%	45.2%	23.8%	45.4%
Yellow Time (s)	3.9	4.5	3.4	4.7
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	5.5	4.4	5.7
Lead/Lag		Lag	Lead	
Lead-Lag Optimize?		Yes	Yes	
Recall Mode	None	Min	None	Min

Intersection Summary
Cycle Length: 144.8
Actuated Cycle Length: 63.7
Natural Cycle: 50
Control Type: Actuated-Uncoordinated

Splits and Phases: 52: Nobel Drive & Avenue of Flags



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	2	2	1188	9	5	635
Future Volume (vph)	2	2	1188	9	5	635
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9		5.5		4.4	5.7
Lane Util. Factor	1.00		0.95		1.00	0.95
Frt	0.93		1.00		1.00	1.00
Flt Protected	0.98		1.00		0.95	1.00
Satd. Flow (prot)	1695		3535		1770	3539
Flt Permitted	0.98		1.00		0.95	1.00
Satd. Flow (perm)	1695		3535		1770	3539
Peak-hour factor, PHF	0.25	0.25	0.88	0.88	0.97	0.97
Adj. Flow (vph)	8	8	1350	10	5	655
RTOR Reduction (vph)	8	0	0	0	0	0
Lane Group Flow (vph)	8	0	1360	0	5	655
Turn Type	Prot		NA		Prot	NA
Protected Phases	8		2		1	6
Permitted Phases						
Actuated Green, G (s)	0.8		55.0		0.7	59.9
Effective Green, g (s)	0.8		55.0		0.7	59.9
Actuated g/C Ratio	0.01		0.77		0.01	0.84
Clearance Time (s)	4.9		5.5		4.4	5.7
Vehicle Extension (s)	2.0		5.2		2.0	4.9
Lane Grp Cap (vph)	19		2726		17	2973
v/s Ratio Prot	c0.00		c0.38		0.00	c0.19
v/s Ratio Perm						
v/c Ratio	0.43		0.50		0.29	0.22
Uniform Delay, d1	35.0		3.0		35.1	1.1
Progression Factor	1.00		1.00		1.00	1.00
Incremental Delay, d2	5.5		0.3		3.5	0.1
Delay (s)	40.5		3.4		38.5	1.2
Level of Service	D		A		D	A
Approach Delay (s)	40.5		3.4			1.5
Approach LOS	D		A			A

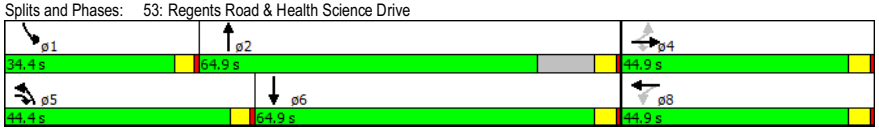
Intersection Summary			
HCM 2000 Control Delay	3.0	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	71.3	Sum of lost time (s)	14.8
Intersection Capacity Utilization	45.1%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	30	0	90	3	0	945	357	25	128
Future Volume (vph)	30	0	90	3	0	945	357	25	128
Turn Type	Perm	NA	pm+ov	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4	5		8	5	2	1	6
Permitted Phases	4		4	8					
Detector Phase	4	4	5	8	8	5	2	1	6
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	10.0	4.0	10.0
Minimum Split (s)	8.9	8.9	8.4	22.9	22.9	8.4	14.9	8.4	14.9
Total Split (s)	44.9	44.9	44.4	44.9	44.9	44.4	64.9	34.4	64.9
Total Split (%)	29.1%	29.1%	28.8%	29.1%	29.1%	28.8%	42.1%	22.3%	42.1%
Yellow Time (s)	3.9	3.9	3.4	3.9	3.9	3.4	3.9	3.4	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.9	4.4		4.9	4.4	4.9	4.4	4.9
Lead/Lag			Lead			Lead	Lag	Lead	Lag
Lead-Lag Optimize?			Yes			Yes	Yes	Yes	Yes
Recall Mode	None	None	Min	None	None	Min	None	None	None

Intersection Summary
Cycle Length: 154.2
Actuated Cycle Length: 69
Natural Cycle: 110
Control Type: Actuated-Uncoordinated

Splits and Phases: 53: Regents Road & Health Science Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	0	90	3	0	3	945	357	47	25	128	162
Future Volume (vph)	30	0	90	3	0	3	945	357	47	25	128	162
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9	4.4		4.9		4.4	4.9		4.4	4.9	
Lane Util. Factor		1.00	1.00		1.00		1.00	0.95		1.00	0.95	
Frt		1.00	0.85		0.93		1.00	0.98		1.00	0.92	
Flt Protected		0.95	1.00		0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1770	1583		1695		1770	3478		1770	3242	
Flt Permitted		1.00	1.00		0.83		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1863	1583		1434		1770	3478		1770	3242	
Peak-hour factor, PHF	0.93	0.93	0.93	0.80	0.80	0.80	0.85	0.85	0.85	0.80	0.80	0.80
Adj. Flow (vph)	32	0	97	4	0	4	1112	420	55	31	160	202
RTOR Reduction (vph)	0	0	39	0	8	0	0	3	0	0	161	0
Lane Group Flow (vph)	0	32	58	0	0	0	1112	472	0	31	202	0
Turn Type	Perm	NA	pm+ov	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4	5		8		5	2		1	6	
Permitted Phases	4		4	8								
Actuated Green, G (s)		3.8	45.2		3.8		41.4	54.6		2.4	15.6	
Effective Green, g (s)		3.8	45.2		3.8		41.4	54.6		2.4	15.6	
Actuated g/C Ratio		0.05	0.60		0.05		0.55	0.73		0.03	0.21	
Clearance Time (s)		4.9	4.4		4.9		4.4	4.9		4.4	4.9	
Vehicle Extension (s)		2.0	2.0		2.0		2.0	3.8		2.0	3.8	
Lane Grp Cap (vph)		94	954		72		977	2531		56	674	
v/s Ratio Prot			0.03				c0.63	0.14		0.02	c0.06	
v/s Ratio Perm		c0.02	0.00		0.00							
v/c Ratio		0.34	0.06		0.01		1.14	0.19		0.55	0.30	
Uniform Delay, d1		34.4	6.1		33.8		16.8	3.2		35.8	25.1	
Progression Factor		1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.8	0.0		0.0		74.8	0.0		6.6	0.3	
Delay (s)		35.2	6.2		33.8		91.6	3.3		42.3	25.4	
Level of Service		D	A		C		F	A		D	C	
Approach Delay (s)		13.4			33.8			65.2			26.7	
Approach LOS		B			C			E			C	

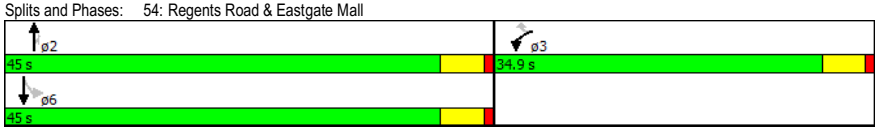
Intersection Summary					
HCM 2000 Control Delay		54.7	HCM 2000 Level of Service		D
HCM 2000 Volume to Capacity ratio		0.87			
Actuated Cycle Length (s)		75.0	Sum of lost time (s)		14.2
Intersection Capacity Utilization		76.3%	ICU Level of Service		D
Analysis Period (min)		15			

c Critical Lane Group

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	267	399	884	371	81	189
Future Volume (vph)	267	399	884	371	81	189
Turn Type	Prot	Perm	NA	Perm	Perm	NA
Protected Phases	3		2			6
Permitted Phases		3		2	6	
Detector Phase	3	3	2	2	6	6
Switch Phase						
Minimum Initial (s)	4.0	4.0	7.0	7.0	7.0	7.0
Minimum Split (s)	8.9	8.9	12.0	12.0	12.0	12.0
Total Split (s)	34.9	34.9	45.0	45.0	45.0	45.0
Total Split (%)	43.7%	43.7%	56.3%	56.3%	56.3%	56.3%
Yellow Time (s)	3.9	3.9	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	5.0	5.0	5.0	5.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None	None	Min	Min	Min	Min

Intersection Summary
Cycle Length: 79.9
Actuated Cycle Length: 66
Natural Cycle: 50
Control Type: Actuated-Uncoordinated

Splits and Phases: 54: Regents Road & Eastgate Mall



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	267	399	884	371	81	189
Future Volume (vph)	267	399	884	371	81	189
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9	5.0	5.0	5.0	5.0
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.18	1.00
Satd. Flow (perm)	1770	1583	3539	1583	331	3539
Peak-hour factor, PHF	0.80	0.80	0.81	0.81	0.87	0.87
Adj. Flow (vph)	334	499	1091	458	93	217
RTOR Reduction (vph)	0	38	0	231	0	0
Lane Group Flow (vph)	334	461	1091	227	93	217
Turn Type	Prot	Perm	NA	Perm	Perm	NA
Protected Phases	3		2			6
Permitted Phases		3		2	6	
Actuated Green, G (s)	23.0	23.0	32.4	32.4	32.4	32.4
Effective Green, g (s)	23.0	23.0	32.4	32.4	32.4	32.4
Actuated g/C Ratio	0.35	0.35	0.50	0.50	0.50	0.50
Clearance Time (s)	4.9	4.9	5.0	5.0	5.0	5.0
Vehicle Extension (s)	2.0	2.0	3.4	3.4	3.5	3.5
Lane Grp Cap (vph)	623	557	1755	785	164	1755
v/s Ratio Prot	0.19		c0.31			0.06
v/s Ratio Perm		c0.29		0.14	0.28	
v/c Ratio	0.54	0.83	0.62	0.29	0.57	0.12
Uniform Delay, d1	16.9	19.3	12.0	9.7	11.5	8.8
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.4	9.3	0.7	0.2	4.8	0.0
Delay (s)	17.3	28.7	12.7	9.9	16.4	8.9
Level of Service	B	C	B	A	B	A
Approach Delay (s)	24.1		11.9			11.1
Approach LOS	C		B			B

Intersection Summary			
HCM 2000 Control Delay	15.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	65.3	Sum of lost time (s)	9.9
Intersection Capacity Utilization	57.5%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	2	3	7	2	75	2	1138	79	322
Future Volume (vph)	2	3	7	2	75	2	1138	79	322
Turn Type	Perm	NA	Perm	NA	Perm	Prot	NA	Prot	NA
Protected Phases		4		8		5	2	1	6
Permitted Phases	4		8		8				
Detector Phase	4	4	8	8	8	5	2	1	6
Switch Phase									
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	4.0	10.0	4.0	10.0
Minimum Split (s)	11.9	11.9	11.9	11.9	11.9	8.4	14.9	8.4	14.9
Total Split (s)	34.9	34.9	44.9	44.9	44.9	34.4	64.9	34.4	64.9
Total Split (%)	24.2%	24.2%	31.1%	31.1%	31.1%	23.9%	45.0%	23.9%	45.0%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.9	3.4	3.9	3.4	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.9		4.9	4.9	4.4	4.9	4.4	4.9
Lead/Lag						Lead	Lag	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	None	Min

Intersection Summary

Cycle Length: 144.2
Actuated Cycle Length: 87.1
Natural Cycle: 60
Control Type: Actuated-Uncoordinated

Splits and Phases: 55: Regents Road & Executive Drive

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	3	3	7	2	75	2	1138	47	79	322	6
Future Volume (vph)	2	3	3	7	2	75	2	1138	47	79	322	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9			4.9	4.9	4.4	4.9		4.4	4.9	
Lane Util. Factor		1.00			1.00	1.00	1.00	0.95		1.00	0.95	
Frt		0.95			1.00	0.85	1.00	0.99		1.00	1.00	
Flt Protected		0.99			0.96	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1747			1790	1583	1770	3518		1770	3529	
Flt Permitted		0.94			0.81	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1659			1507	1583	1770	3518		1770	3529	
Peak-hour factor, PHF	0.80	0.80	0.80	0.82	0.82	0.82	0.82	0.82	0.82	0.80	0.80	0.80
Adj. Flow (vph)	2	4	4	9	2	91	2	1388	57	99	402	8
RTOR Reduction (vph)	0	4	0	0	0	81	0	1	0	0	1	0
Lane Group Flow (vph)	0	7	0	0	11	10	2	1444	0	99	410	0
Turn Type	Perm	NA		Perm	NA	Perm	Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8		8						
Actuated Green, G (s)		9.8			9.8	9.8	0.8	56.6		10.0	65.8	
Effective Green, g (s)		9.8			9.8	9.8	0.8	56.6		10.0	65.8	
Actuated g/C Ratio		0.11			0.11	0.11	0.01	0.62		0.11	0.73	
Clearance Time (s)		4.9			4.9	4.9	4.4	4.9		4.4	4.9	
Vehicle Extension (s)		2.0			3.1	3.1	2.0	3.1		2.0	3.1	
Lane Grp Cap (vph)		179			163	171	15	2197		195	2563	
v/s Ratio Prot							0.00	c0.41		c0.06	0.12	
v/s Ratio Perm		0.00			c0.01	0.01						
v/c Ratio		0.04			0.07	0.06	0.13	0.66		0.51	0.16	
Uniform Delay, d1		36.2			36.3	36.3	44.6	10.8		38.0	3.8	
Progression Factor		1.00			1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.0			0.2	0.1	1.5	0.7		0.8	0.0	
Delay (s)		36.2			36.5	36.4	46.0	11.5		38.7	3.9	
Level of Service		D			D	D	D	B		D	A	
Approach Delay (s)		36.2			36.4			11.6			10.6	
Approach LOS		D			D			B			B	

Intersection Summary

HCM 2000 Control Delay	12.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	90.6	Sum of lost time (s)	14.2
Intersection Capacity Utilization	56.9%	ICU Level of Service	B
Analysis Period (min)	15		

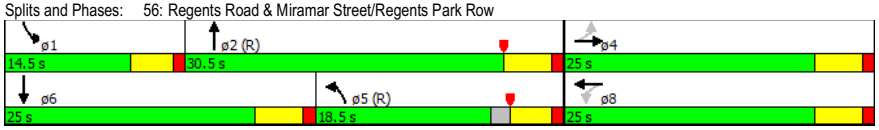
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	106	13	60	26	243	904	60	261
Future Volume (vph)	106	13	60	26	243	904	60	261
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	7.0	4.0	7.0
Minimum Split (s)	8.9	8.9	8.9	8.9	8.4	11.9	8.4	11.9
Total Split (s)	25.0	25.0	25.0	25.0	18.5	30.5	14.5	25.0
Total Split (%)	35.7%	35.7%	35.7%	35.7%	26.4%	43.6%	20.7%	35.7%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.4	3.9	3.4	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	4.9	4.9	4.4	4.9	4.4	4.9
Lead/Lag					Lag	Lag	Lead	Lead
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	C-Max	C-Max	None	Max

Intersection Summary

Cycle Length: 70
Actuated Cycle Length: 70
Offset: 10 (14%), Referenced to phase 2:NBT and 5:NBL, Start of Yellow
Natural Cycle: 60
Control Type: Actuated-Coordinated

Splits and Phases: 56: Regents Road & Miramar Street/Regents Park Row



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	106	13	215	60	26	82	243	904	210	60	261	59
Future Volume (vph)	106	13	215	60	26	82	243	904	210	60	261	59
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9		4.9	4.9		4.4	4.9		4.4	4.9	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frt	1.00	0.86		1.00	0.89		1.00	0.97		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1599		1770	1651		1770	3439		1770	3441	
Flt Permitted	0.67	1.00		0.44	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1248	1599		812	1651		1770	3439		1770	3441	
Peak-hour factor, PHF	0.97	0.97	0.97	0.80	0.80	0.80	0.81	0.81	0.81	0.87	0.87	0.87
Adj. Flow (vph)	109	13	222	75	32	102	300	1116	259	69	300	68
RTOR Reduction (vph)	0	181	0	0	84	0	0	21	0	0	24	0
Lane Group Flow (vph)	109	54	0	75	52	0	300	1354	0	69	344	0
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8								
Actuated Green, G (s)	12.8	12.8		12.8	12.8		15.6	37.9		5.1	27.4	
Effective Green, g (s)	12.8	12.8		12.8	12.8		15.6	37.9		5.1	27.4	
Actuated g/C Ratio	0.18	0.18		0.18	0.18		0.22	0.54		0.07	0.39	
Clearance Time (s)	4.9	4.9		4.9	4.9		4.4	4.9		4.4	4.9	
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	3.8		2.0	3.8	
Lane Grp Cap (vph)	228	292		148	301		394	1861		128	1346	
v/s Ratio Prot		0.03			0.03		0.17	c0.39		c0.04	0.10	
v/s Ratio Perm	0.09			c0.09								
v/c Ratio	0.48	0.18		0.51	0.17		0.76	0.73		0.54	0.26	
Uniform Delay, d1	25.6	24.2		25.8	24.1		25.5	12.1		31.3	14.4	
Progression Factor	1.00	1.00		1.00	1.00		1.33	1.65		1.00	1.00	
Incremental Delay, d2	0.6	0.1		1.0	0.1		5.7	1.1		2.2	0.5	
Delay (s)	26.2	24.3		26.8	24.2		39.6	21.1		33.5	14.9	
Level of Service	C	C		C	C		D	C		C	B	
Approach Delay (s)		24.9			25.1			24.4			17.8	
Approach LOS		C			C			C			B	

Intersection Summary

HCM 2000 Control Delay	23.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	70.0	Sum of lost time (s)	14.2
Intersection Capacity Utilization	68.3%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	50	7	62	5	132	24	1151	15	302
Future Volume (vph)	50	7	62	5	132	24	1151	15	302
Turn Type	Perm	NA	Perm	NA	pm+ov	Prot	NA	Prot	NA
Protected Phases		4		8	1	5	2	1	6
Permitted Phases	4		8		8				
Detector Phase	4	4	8	8	1	5	2	1	6
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	10.0	4.0	10.0
Minimum Split (s)	8.9	8.9	8.9	8.9	8.4	8.4	15.2	8.4	15.3
Total Split (s)	44.9	44.9	44.9	44.9	34.4	34.4	65.2	34.4	65.3
Total Split (%)	31.1%	31.1%	31.1%	31.1%	23.8%	23.8%	45.1%	23.8%	45.2%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.4	3.4	4.2	3.4	4.3
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.9		4.9	4.4	4.4	5.2	4.4	5.3
Lead/Lag					Lead	Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 144.6
Actuated Cycle Length: 76.1
Natural Cycle: 45
Control Type: Actuated-Uncoordinated

Splits and Phases: 57: Regents Road & Plaza De Palmas

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	50	7	39	62	5	132	24	1151	26	15	302	9
Future Volume (vph)	50	7	39	62	5	132	24	1151	26	15	302	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9			4.9	4.4	4.4	5.2		4.4	5.3	
Lane Util. Factor		1.00			1.00	1.00	1.00	0.91		1.00	0.95	
Frt		0.95			1.00	0.85	1.00	1.00		1.00	1.00	
Flt Protected		0.97			0.96	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1716			1780	1583	1770	5068		1770	3524	
Flt Permitted		0.79			0.68	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1396			1262	1583	1770	5068		1770	3524	
Peak-hour factor, PHF	0.80	0.80	0.80	0.81	0.81	0.81	0.80	0.80	0.80	0.80	0.80	0.80
Adj. Flow (vph)	62	9	49	77	6	163	30	1439	32	19	378	11
RTOR Reduction (vph)	0	19	0	0	0	13	0	1	0	0	1	0
Lane Group Flow (vph)	0	102	0	0	83	150	30	1471	0	19	388	0
Turn Type	Perm	NA		Perm	NA	pm+ov	Prot	NA		Prot	NA	
Protected Phases		4			8	1	5	2		1	6	
Permitted Phases	4			8		8						
Actuated Green, G (s)		13.2			13.2	19.0	3.7	43.8		5.8	45.8	
Effective Green, g (s)		13.2			13.2	19.0	3.7	43.8		5.8	45.8	
Actuated g/C Ratio		0.17			0.17	0.25	0.05	0.57		0.08	0.59	
Clearance Time (s)		4.9			4.9	4.4	4.4	5.2		4.4	5.3	
Vehicle Extension (s)		2.0			2.0	2.0	2.0	4.5		2.0	4.2	
Lane Grp Cap (vph)		238			215	389	84	2871		132	2087	
v/s Ratio Prot						c0.03	0.02	c0.29		0.01	0.11	
v/s Ratio Perm		c0.07			0.07	0.07						
v/c Ratio		0.43			0.39	0.39	0.36	0.51		0.14	0.19	
Uniform Delay, d1		28.7			28.5	24.3	35.6	10.2		33.4	7.2	
Progression Factor		1.00			1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.5			0.4	0.2	0.9	0.3		0.2	0.1	
Delay (s)		29.1			28.9	24.5	36.6	10.5		33.6	7.3	
Level of Service		C			C	C	D	B		C	A	
Approach Delay (s)		29.1			26.0			11.0			8.5	
Approach LOS		C			C			B			A	

Intersection Summary

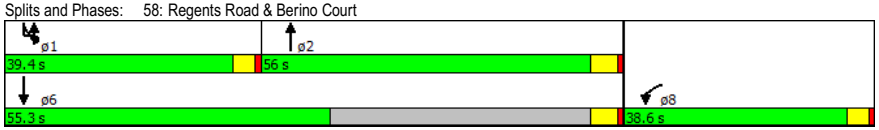
HCM 2000 Control Delay	13.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	77.3	Sum of lost time (s)	14.6
Intersection Capacity Utilization	48.6%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	WBL	NBT	SBL	SBT
Lane Configurations				
Traffic Volume (vph)	106	980	245	608
Future Volume (vph)	106	980	245	608
Turn Type	Prot	NA	Prot	NA
Protected Phases	8	2	1	6
Permitted Phases				
Detector Phase	8	2	1	6
Switch Phase				
Minimum Initial (s)	4.0	7.0	4.0	7.0
Minimum Split (s)	8.4	12.2	8.4	23.3
Total Split (s)	38.6	56.0	39.4	55.3
Total Split (%)	28.8%	41.8%	29.4%	41.3%
Yellow Time (s)	3.4	4.2	3.4	4.3
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.2	4.4	5.3
Lead/Lag		Lag	Lead	
Lead-Lag Optimize?		Yes	Yes	
Recall Mode	None	None	None	None

Intersection Summary
Cycle Length: 134
Actuated Cycle Length: 126.9
Natural Cycle: 90
Control Type: Actuated-Uncoordinated

Splits and Phases: 58: Regents Road & Berino Court



Movement	WBL	WBR	NBT	NBR	SBU	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	106	128	980	185	89	245	608
Future Volume (vph)	106	128	980	185	89	245	608
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4		5.2			4.4	5.3
Lane Util. Factor	1.00		0.95			1.00	0.95
Frt	0.93		0.98			1.00	1.00
Flt Protected	0.98		1.00			0.95	1.00
Satd. Flow (prot)	1687		3455			1770	3539
Flt Permitted	0.98		1.00			0.95	1.00
Satd. Flow (perm)	1687		3455			1770	3539
Peak-hour factor, PHF	0.80	0.80	0.80	0.80	0.92	0.80	0.80
Adj. Flow (vph)	132	160	1225	231	97	306	760
RTOR Reduction (vph)	0	0	11	0	0	0	0
Lane Group Flow (vph)	293	0	1445	0	0	403	760
Turn Type	Prot		NA		Prot	Prot	NA
Protected Phases	8		2		1	1	6
Permitted Phases							
Actuated Green, G (s)	30.3		50.9			31.7	86.9
Effective Green, g (s)	30.3		50.9			31.7	86.9
Actuated g/C Ratio	0.24		0.40			0.25	0.68
Clearance Time (s)	4.4		5.2			4.4	5.3
Vehicle Extension (s)	2.0		3.9			2.0	3.7
Lane Grp Cap (vph)	402		1385			442	2423
v/s Ratio Prot	c0.17		c0.42			c0.23	0.21
v/s Ratio Perm							
v/c Ratio	0.73		1.04			0.91	0.31
Uniform Delay, d1	44.5		38.0			46.2	8.0
Progression Factor	1.00		1.00			1.00	1.00
Incremental Delay, d2	5.5		36.2			22.5	0.1
Delay (s)	50.0		74.2			68.7	8.1
Level of Service	D		E			E	A
Approach Delay (s)	50.0		74.2				29.1
Approach LOS	D		E				C

Intersection Summary			
HCM 2000 Control Delay	53.8	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.92		
Actuated Cycle Length (s)	126.9	Sum of lost time (s)	14.0
Intersection Capacity Utilization	76.9%	ICU Level of Service	D
Analysis Period (min)	15		

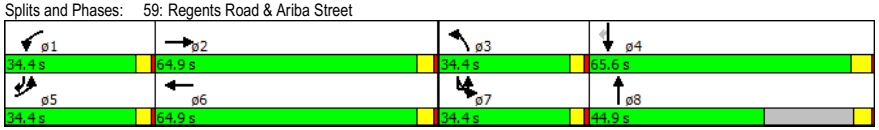
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	112	14	121	56	418	889	30	536	123
Future Volume (vph)	112	14	121	56	418	889	30	536	123
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA	pm+ov
Protected Phases	5	2	1	6	3	8	7	4	5
Permitted Phases									4
Detector Phase	5	2	1	6	3	8	7	4	5
Switch Phase									
Minimum Initial (s)	4.0	7.0	4.0	7.0	4.0	7.0	4.0	7.0	4.0
Minimum Split (s)	8.4	11.9	8.4	11.9	8.4	11.9	8.4	12.6	8.4
Total Split (s)	34.4	64.9	34.4	64.9	34.4	44.9	34.4	65.6	34.4
Total Split (%)	17.3%	32.6%	17.3%	32.6%	17.3%	22.5%	17.3%	32.9%	17.3%
Yellow Time (s)	3.4	3.9	3.4	3.9	3.4	3.9	3.4	4.6	3.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	4.9	4.4	4.9	4.4	4.9	4.4	5.6	4.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 199.3
Actuated Cycle Length: 126.7
Natural Cycle: 90
Control Type: Actuated-Uncoordinated

Splits and Phases: 59: Regents Road & Ariba Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	112	14	390	121	56	54	418	889	192	99	30	536
Future Volume (vph)	112	14	390	121	56	54	418	889	192	99	30	536
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	4.9		4.4	4.9			4.4	5.6
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95			1.00	0.95
Frt	1.00	0.86		1.00	0.93		1.00	0.97			1.00	1.00
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			0.95	1.00
Satd. Flow (prot)	1770	3027		1770	3278		1770	3445			1770	3539
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00			0.95	1.00
Satd. Flow (perm)	1770	3027		1770	3278		1770	3445			1770	3539
Peak-hour factor, PHF	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.92	0.80	0.80
Adj. Flow (vph)	140	18	488	151	70	68	522	1111	240	108	38	670
RTOR Reduction (vph)	0	296	0	0	53	0	0	8	0	0	0	0
Lane Group Flow (vph)	140	210	0	151	85	0	523	1343	0	0	146	670
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	Prot	NA
Protected Phases	5	2		1	6		3	8		7	7	4
Permitted Phases												
Actuated Green, G (s)	15.3	26.5		16.2	27.4		30.7	49.3			15.8	33.7
Effective Green, g (s)	15.3	26.5		16.2	27.4		30.7	49.3			15.8	33.7
Actuated g/C Ratio	0.12	0.21		0.13	0.22		0.24	0.39			0.12	0.27
Clearance Time (s)	4.4	4.9		4.4	4.9		4.4	4.9			4.4	5.6
Vehicle Extension (s)	2.0	6.3		2.0	5.9		2.0	4.8			2.0	4.4
Lane Grp Cap (vph)	214	634		226	710		429	1343			221	943
v/s Ratio Prot	0.08	c0.07		c0.09	0.03		c0.30	c0.39			0.08	0.19
v/s Ratio Perm												
v/c Ratio	0.65	0.33		0.67	0.12		1.22	1.00			0.66	0.71
Uniform Delay, d1	53.0	42.4		52.5	39.8		47.9	38.6			52.7	41.9
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2	5.4	0.9		5.7	0.2		118.1	24.6			5.6	2.9
Delay (s)	58.4	43.4		58.2	40.0		165.9	63.1			58.4	44.8
Level of Service	E	D		E	D		F	E			E	D
Approach Delay (s)		46.6			49.5			91.8				43.6
Approach LOS		D			D			F				D

Intersection Summary

HCM 2000 Control Delay	68.5	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	126.4	Sum of lost time (s)	19.3
Intersection Capacity Utilization	73.8%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

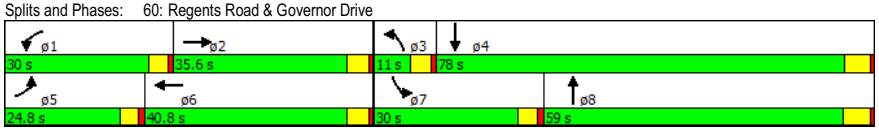
Movement	SBR
Lane Configurations	
Traffic Volume (vph)	123
Future Volume (vph)	123
Ideal Flow (vphpl)	1900
Total Lost time (s)	4.4
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1583
Flt Permitted	1.00
Satd. Flow (perm)	1583
Peak-hour factor, PHF	0.80
Adj. Flow (vph)	154
RTOR Reduction (vph)	94
Lane Group Flow (vph)	60
Turn Type	pm+ov
Protected Phases	5
Permitted Phases	4
Actuated Green, G (s)	49.0
Effective Green, g (s)	49.0
Actuated g/C Ratio	0.39
Clearance Time (s)	4.4
Vehicle Extension (s)	2.0
Lane Grp Cap (vph)	613
v/s Ratio Prot	0.01
v/s Ratio Perm	0.03
v/c Ratio	0.10
Uniform Delay, d1	24.6
Progression Factor	1.00
Incremental Delay, d2	0.0
Delay (s)	24.7
Level of Service	C
Approach Delay (s)	
Approach LOS	

Intersection Summary

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	164	70	334	67	23	1246	342	554
Future Volume (vph)	164	70	334	67	23	1246	342	554
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	5	2	1	6	3	8	7	4
Permitted Phases								
Detector Phase	5	2	1	6	3	8	7	4
Switch Phase								
Minimum Initial (s)	4.0	4.0	4.0	7.0	5.0	7.0	5.0	4.0
Minimum Split (s)	8.4	32.9	8.4	33.9	9.5	34.8	9.5	35.5
Total Split (s)	24.8	35.6	30.0	40.8	11.0	59.0	30.0	78.0
Total Split (%)	16.0%	23.0%	19.4%	26.4%	7.1%	38.2%	19.4%	50.5%
Yellow Time (s)	3.4	3.9	3.4	3.9	3.5	4.8	3.5	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	4.9	4.4	4.9	4.5	5.8	4.5	5.5
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Min	None	Min	None	None	None	None

Intersection Summary
Cycle Length: 154.6
Actuated Cycle Length: 140.5
Natural Cycle: 150
Control Type: Actuated-Uncoordinated

Splits and Phases: 60: Regents Road & Governor Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	164	70	43	334	67	89	23	1246	155	342	554	151
Future Volume (vph)	164	70	43	334	67	89	23	1246	155	342	554	151
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	4.9		4.5	5.8		4.5	5.5	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	0.94		1.00	0.91		1.00	0.98		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3337		1770	3237		1770	3481		1770	3425	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	3337		1770	3237		1770	3481		1770	3425	
Peak-hour factor, PHF	0.80	0.80	0.80	0.80	0.80	0.80	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	205	88	54	418	84	111	26	1384	172	380	616	168
RTOR Reduction (vph)	0	48	0	0	93	0	0	5	0	0	14	0
Lane Group Flow (vph)	205	94	0	418	102	0	26	1551	0	380	770	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases												
Actuated Green, G (s)	19.0	16.1		25.7	22.8		3.8	55.4		25.6	77.5	
Effective Green, g (s)	19.0	16.1		25.7	22.8		3.8	55.4		25.6	77.5	
Actuated g/C Ratio	0.13	0.11		0.18	0.16		0.03	0.39		0.18	0.54	
Clearance Time (s)	4.4	4.9		4.4	4.9		4.5	5.8		4.5	5.5	
Vehicle Extension (s)	2.0	4.5		2.0	5.0		3.0	4.6		3.0	2.0	
Lane Grp Cap (vph)	236	377		319	518		47	1354		318	1864	
v/s Ratio Prot	0.12	c0.03		c0.24	0.03		0.01	c0.45		c0.21	0.22	
v/s Ratio Perm												
v/c Ratio	0.87	0.25		1.31	0.20		0.55	1.15		1.19	0.41	
Uniform Delay, d1	60.5	57.6		58.4	51.9		68.5	43.5		58.4	19.1	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	26.2	0.6		160.4	0.4		13.3	74.5		114.4	0.1	
Delay (s)	86.6	58.2		218.7	52.2		81.8	118.0		172.8	19.1	
Level of Service	F	E		F	D		F	F		F	B	
Approach Delay (s)		75.0			165.8			117.4			69.3	
Approach LOS		E			F			F			E	

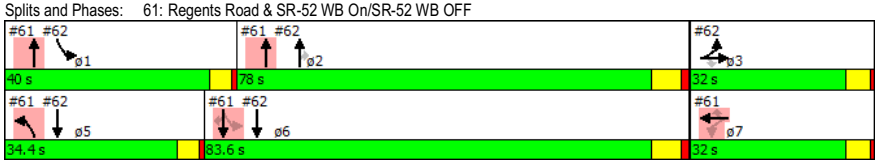
Intersection Summary			
HCM 2000 Control Delay	106.3	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.07		
Actuated Cycle Length (s)	142.4	Sum of lost time (s)	19.6
Intersection Capacity Utilization	96.5%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	WBT	WBR	NBL	NBT	SBL	SBT	SBR	ø1	ø2	ø3
Lane Configurations										
Traffic Volume (vph)	1	146	472	1137	1	673	367			
Future Volume (vph)	1	146	472	1137	1	673	367			
Turn Type	NA	Perm	Prot	NA	Perm	NA	Perm			
Protected Phases	7		5	1 2		6		1	2	3
Permitted Phases		7			6		6			
Detector Phase	7	7	5	1 2	6	6	6			
Switch Phase										
Minimum Initial (s)	5.0	5.0	5.0		13.0	13.0	13.0	5.0	13.0	5.0
Minimum Split (s)	10.1	10.1	9.7		23.7	23.7	23.7	22.7	23.7	10.1
Total Split (s)	32.0	32.0	34.4		83.6	83.6	83.6	40.0	78.0	32.0
Total Split (%)	21.3%	21.3%	22.9%		55.7%	55.7%	55.7%	27%	52%	21%
Yellow Time (s)	4.1	4.1	3.7		5.2	5.2	5.2	3.7	5.2	4.1
All-Red Time (s)	1.0	1.0	1.0		1.5	1.5	1.5	1.0	1.5	1.0
Lost Time Adjust (s)	0.0	0.0	0.0			0.0	0.0			
Total Lost Time (s)	5.1	5.1	4.7			6.7	6.7			
Lead/Lag			Lead		Lag	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?			Yes		Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None	None		Max	Max	Max	None	Max	None

Intersection Summary
Cycle Length: 150
Actuated Cycle Length: 150
Natural Cycle: 110
Control Type: Actuated-Uncoordinated

Splits and Phases: 61: Regents Road & SR-52 WB On/SR-52 WB OFF



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	317	1	146	472	1137	0	1	673	367
Future Volume (vph)	0	0	0	317	1	146	472	1137	0	1	673	367
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					5.1	5.1	4.7	4.7			6.7	6.7
Lane Util. Factor					1.00	1.00	0.97	0.95			0.95	1.00
Frt					1.00	0.85	1.00	1.00			1.00	0.85
Flt Protected					0.95	1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)					1774	1583	3433	3539			3539	1583
Flt Permitted					0.95	1.00	0.95	1.00			0.95	1.00
Satd. Flow (perm)					1774	1583	3433	3539			3377	1583
Peak-hour factor, PHF	0.25	0.25	0.25	0.80	0.80	0.80	0.96	0.96	0.96	0.89	0.89	0.89
Adj. Flow (vph)	0	0	0	396	1	182	492	1184	0	1	756	412
RTOR Reduction (vph)	0	0	0	0	0	106	0	0	0	0	0	194
Lane Group Flow (vph)	0	0	0	0	397	77	492	1184	0	0	757	218
Turn Type				Perm	NA	Perm	Prot	NA		Perm	NA	Perm
Protected Phases					7		5	1 2			6	
Permitted Phases				7		7				6		6
Actuated Green, G (s)					26.9	26.9	27.2	111.3			79.4	79.4
Effective Green, g (s)					26.9	26.9	27.2	111.3			79.4	79.4
Actuated g/C Ratio					0.18	0.18	0.18	0.74			0.53	0.53
Clearance Time (s)					5.1	5.1	4.7				6.7	6.7
Vehicle Extension (s)					2.0	2.0	2.0				3.0	3.0
Lane Grp Cap (vph)					318	283	622	2625			1787	837
v/s Ratio Prot							c0.14	c0.33				
v/s Ratio Perm					0.22	0.05					0.22	0.14
v/c Ratio					1.25	0.27	0.79	0.45			0.42	0.26
Uniform Delay, d1					61.5	53.1	58.7	7.5			21.4	19.3
Progression Factor					1.00	1.00	1.16	0.91			1.00	1.00
Incremental Delay, d2					135.3	0.2	2.8	0.1			0.7	0.8
Delay (s)					196.8	53.3	71.1	6.9			22.2	20.0
Level of Service					F	D	E	A			C	C
Approach Delay (s)		0.0			151.6			25.7			21.4	
Approach LOS		A			F			C			C	

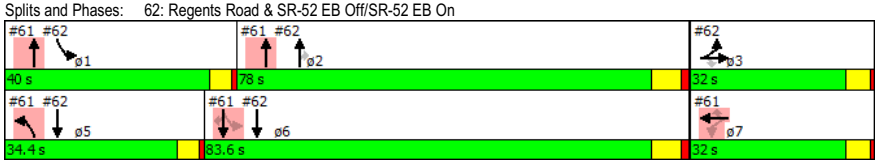
Intersection Summary			
HCM 2000 Control Delay	45.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	16.5
Intersection Capacity Utilization	85.5%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	EBR	NBT	NBR	SBL	SBT	ø5	ø6	ø7
Lane Configurations										
Traffic Volume (vph)	245	0	113	1480	416	352	568			
Future Volume (vph)	245	0	113	1480	416	352	568			
Turn Type	Split	NA	Perm	NA	Perm	Prot	NA			
Protected Phases	3	3		2		1	5 6	5	6	7
Permitted Phases			3		2					
Detector Phase	3	3	3	2	2	1	5 6			
Switch Phase										
Minimum Initial (s)	5.0	5.0	5.0	13.0	13.0	5.0		5.0	13.0	5.0
Minimum Split (s)	10.1	10.1	10.1	23.7	23.7	22.7		9.7	23.7	10.1
Total Split (s)	32.0	32.0	32.0	78.0	78.0	40.0		34.4	83.6	32.0
Total Split (%)	21.3%	21.3%	21.3%	52.0%	52.0%	26.7%		23%	56%	21%
Yellow Time (s)	4.1	4.1	4.1	5.2	5.2	3.7		3.7	5.2	4.1
All-Red Time (s)	1.0	1.0	1.0	1.5	1.5	1.0		1.0	1.5	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0				
Total Lost Time (s)	5.1	5.1	5.1	6.7	6.7	4.7				
Lead/Lag				Lag	Lag	Lead		Lead	Lag	
Lead-Lag Optimize?				Yes	Yes	Yes		Yes	Yes	
Recall Mode	None	None	None	Max	Max	None		None	Max	None

Intersection Summary
Cycle Length: 150
Actuated Cycle Length: 150
Natural Cycle: 110
Control Type: Actuated-Uncoordinated

Splits and Phases: 62: Regents Road & SR-52 EB Off/SR-52 EB On



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	245	0	113	0	0	0	0	1480	416	352	568	0
Future Volume (vph)	245	0	113	0	0	0	0	1480	416	352	568	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1	5.1					6.7	6.7	4.7	4.7	
Lane Util. Factor	0.95	0.95	1.00					0.95	1.00	1.00	0.95	
Frt	1.00	1.00	0.85					1.00	0.85	1.00	1.00	
Flt Protected	0.95	0.95	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1681	1681	1583					3539	1583	1770	3539	
Flt Permitted	0.95	0.95	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1681	1681	1583					3539	1583	1770	3539	
Peak-hour factor, PHF	0.80	0.80	0.80	0.25	0.25	0.25	0.91	0.91	0.91	0.80	0.80	0.80
Adj. Flow (vph)	306	0	141	0	0	0	0	1626	457	440	710	0
RTOR Reduction (vph)	0	0	78	0	0	0	0	0	44	0	0	0
Lane Group Flow (vph)	153	153	63	0	0	0	0	1626	413	440	710	0
Turn Type	Split	NA	Perm					NA	Perm	Prot	NA	
Protected Phases	3	3						2		1	5 6	
Permitted Phases			3						2			
Actuated Green, G (s)	26.9	26.9	26.9					71.3	71.3	35.3	111.3	
Effective Green, g (s)	26.9	26.9	26.9					71.3	71.3	35.3	111.3	
Actuated g/C Ratio	0.18	0.18	0.18					0.48	0.48	0.24	0.74	
Clearance Time (s)	5.1	5.1	5.1					6.7	6.7	4.7		
Vehicle Extension (s)	2.0	2.0	2.0					3.0	3.0	3.0		
Lane Grp Cap (vph)	301	301	283					1682	752	416	2625	
v/s Ratio Prot	c0.09	0.09						c0.46		c0.25	0.20	
v/s Ratio Perm			0.04						0.26			
v/c Ratio	0.51	0.51	0.22					0.97	0.55	1.06	0.27	
Uniform Delay, d1	55.6	55.6	52.6					38.2	27.9	57.4	6.2	
Progression Factor	1.00	1.00	1.00					1.00	1.00	1.29	1.11	
Incremental Delay, d2	0.5	0.5	0.1					15.3	2.9	52.9	0.0	
Delay (s)	56.1	56.1	52.8					53.5	30.8	126.8	6.9	
Level of Service	E	E	D					D	C	F	A	
Approach Delay (s)		55.0			0.0			48.6			52.8	
Approach LOS		E			A			D			D	

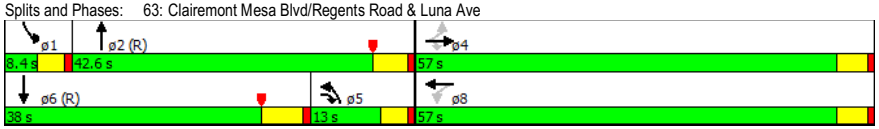
Intersection Summary			
HCM 2000 Control Delay	50.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	16.5
Intersection Capacity Utilization	80.9%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	591	5	81	8	9	104	1225	11	398
Future Volume (vph)	591	5	81	8	9	104	1225	11	398
Turn Type	Perm	NA	pm+ov	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4	5		8	5	2	1	6
Permitted Phases	4		4	8					
Detector Phase	4	4	5	8	8	5	2	1	6
Switch Phase									
Minimum Initial (s)	10.0	10.0	4.0	1.0	1.0	4.0	10.0	4.0	4.0
Minimum Split (s)	14.9	14.9	8.4	5.9	5.9	8.4	15.3	8.4	10.2
Total Split (s)	57.0	57.0	13.0	57.0	57.0	13.0	42.6	8.4	38.0
Total Split (%)	52.8%	52.8%	12.0%	52.8%	52.8%	12.0%	39.4%	7.8%	35.2%
Yellow Time (s)	3.9	3.9	3.4	3.9	3.9	3.4	4.3	3.4	5.2
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.9	4.4		4.9	4.4	5.3	4.4	6.2
Lead/Lag			Lag			Lag	Lag	Lead	Lead
Lead-Lag Optimize?			Yes			Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	None	C-Max

Intersection Summary
Cycle Length: 108
Actuated Cycle Length: 108
Offset: 78 (72%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 130
Control Type: Actuated-Coordinated

Splits and Phases: 63: Clairemont Mesa Blvd/Regents Road & Luna Ave



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	591	5	81	8	9	86	104	1225	5	11	398	270
Future Volume (vph)	591	5	81	8	9	86	104	1225	5	11	398	270
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9	4.4		4.9		4.4	5.3		4.4	6.2	
Lane Util. Factor		1.00	1.00		1.00		1.00	0.95		1.00	0.95	
Frt		1.00	0.85		0.89		1.00	1.00		1.00	0.94	
Flt Protected		0.95	1.00		1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1775	1583		1646		1770	3537		1770	3325	
Flt Permitted		0.65	1.00		0.95		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1211	1583		1568		1770	3537		1770	3325	
Peak-hour factor, PHF	0.87	0.87	0.87	0.80	0.80	0.80	0.94	0.94	0.94	0.80	0.80	0.80
Adj. Flow (vph)	679	6	93	10	11	108	111	1303	5	14	498	338
RTOR Reduction (vph)	0	0	38	0	56	0	0	0	0	0	115	0
Lane Group Flow (vph)	0	685	55	0	73	0	111	1308	0	14	721	0
Turn Type	Perm	NA	pm+ov	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4	5		8		5	2		1	6	
Permitted Phases	4		4	8								
Actuated Green, G (s)		52.1	63.3		52.1		11.2	39.7		1.6	29.2	
Effective Green, g (s)		52.1	63.3		52.1		11.2	39.7		1.6	29.2	
Actuated g/C Ratio		0.48	0.59		0.48		0.10	0.37		0.01	0.27	
Clearance Time (s)		4.9	4.4		4.9		4.4	5.3		4.4	6.2	
Vehicle Extension (s)		4.0	2.0		2.0		2.0	4.4		2.0	3.2	
Lane Grp Cap (vph)		584	992		756		183	1300		26	898	
v/s Ratio Prot			0.01				0.06	c0.37		0.01	c0.22	
v/s Ratio Perm		c0.57	0.03		0.05							
v/c Ratio		1.17	0.05		0.10		0.61	1.01		0.54	0.80	
Uniform Delay, d1		27.9	9.6		15.2		46.3	34.1		52.8	36.7	
Progression Factor		1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		95.0	0.0		0.0		3.9	26.5		10.3	7.5	
Delay (s)		122.9	9.6		15.2		50.2	60.6		63.1	44.3	
Level of Service		F	A		B		D	E		E	D	
Approach Delay (s)		109.4			15.2			59.8			44.6	
Approach LOS		F			B			E			D	

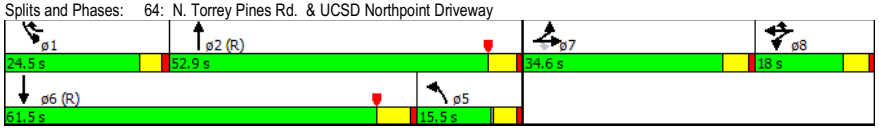
Intersection Summary				
HCM 2000 Control Delay	66.1	HCM 2000 Level of Service	E	
HCM 2000 Volume to Capacity ratio	1.12			
Actuated Cycle Length (s)	108.0	Sum of lost time (s)	15.5	
Intersection Capacity Utilization	89.2%	ICU Level of Service	E	
Analysis Period (min)	15			

c Critical Lane Group

Lane Group	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	23	16	39	17	45	76	672	129	503
Future Volume (vph)	23	16	39	17	45	76	672	129	503
Turn Type	NA	Perm	Split	NA	pt+ov	Prot	NA	Prot	NA
Protected Phases	7		8	8	8 1	5	2	1	6
Permitted Phases		7							
Detector Phase	7	7	8	8	8 1	5	2	1	6
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	4.0		4.0	10.0	4.0	10.0
Minimum Split (s)	8.9	8.9	8.9	8.9		8.4	15.3	8.4	15.9
Total Split (s)	34.6	34.6	18.0	18.0		15.5	52.9	24.5	61.5
Total Split (%)	26.6%	26.6%	13.8%	13.8%		11.9%	40.7%	18.8%	47.3%
Yellow Time (s)	3.9	3.9	3.9	3.9		3.4	4.3	3.4	4.9
All-Red Time (s)	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	4.9	4.9		4.4	5.3	4.4	5.9
Lead/Lag	Lead	Lead	Lag	Lag		Lag	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None		None	C-Max	None	C-Max

Intersection Summary
Cycle Length: 130
Actuated Cycle Length: 130
Offset: 72 (55%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 55
Control Type: Actuated-Coordinated

Splits and Phases: 64: N. Torrey Pines Rd. & UCSD Northpoint Driveway



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	23	16	39	17	45	76	672	110	129	503	59
Future Volume (vph)	10	23	16	39	17	45	76	672	110	129	503	59
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9	4.9	4.9	4.9	4.9	4.4	5.3		4.4	5.9	
Lane Util. Factor		1.00	1.00	1.00	1.00	1.00	1.00	0.95		0.97	0.95	
Frt		1.00	0.85	1.00	1.00	0.85	1.00	0.98		1.00	0.98	
Flt Protected		0.99	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1835	1583	1770	1863	1583	1770	3464		3433	3483	
Flt Permitted		0.99	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1835	1583	1770	1863	1583	1770	3464		3433	3483	
Peak-hour factor, PHF	0.89	0.89	0.89	0.80	0.80	0.80	0.89	0.89	0.89	0.91	0.91	0.91
Adj. Flow (vph)	11	26	18	49	21	56	85	755	124	142	553	65
RTOR Reduction (vph)	0	0	16	0	0	47	0	6	0	0	5	0
Lane Group Flow (vph)	0	37	2	49	21	9	85	873	0	142	613	0
Turn Type	Split	NA	Perm	Split	NA	pt+ov	Prot	NA		Prot	NA	
Protected Phases	7	7		8	8	8 1	5	2		1	6	
Permitted Phases			7									
Actuated Green, G (s)		14.4	14.4	7.1	7.1	21.8	11.6	79.2		9.8	76.8	
Effective Green, g (s)		14.4	14.4	7.1	7.1	21.8	11.6	79.2		9.8	76.8	
Actuated g/C Ratio		0.11	0.11	0.05	0.05	0.17	0.09	0.61		0.08	0.59	
Clearance Time (s)		4.9	4.9	4.9	4.9		4.4	5.3		4.4	5.9	
Vehicle Extension (s)		2.0	2.0	2.0	2.0		2.0	4.8		2.0	4.7	
Lane Grp Cap (vph)		203	175	96	101	265	157	2110		258	2057	
v/s Ratio Prot		c0.02		c0.03	0.01	0.01	c0.05	c0.25		c0.04	0.18	
v/s Ratio Perm			0.00									
v/c Ratio		0.18	0.01	0.51	0.21	0.04	0.54	0.41		0.55	0.30	
Uniform Delay, d1		52.5	51.5	59.8	58.8	45.3	56.7	13.3		58.0	13.2	
Progression Factor		1.00	1.00	1.00	1.00	1.00	1.00	1.00		0.75	1.48	
Incremental Delay, d2		0.2	0.0	1.9	0.4	0.0	2.0	0.6		1.3	0.3	
Delay (s)		52.6	51.5	61.7	59.1	45.3	58.7	13.9		44.8	19.8	
Level of Service		D	D	E	E	D	E	B		D	B	
Approach Delay (s)		52.2			54.0			17.8			24.5	
Approach LOS		D			D			B			C	

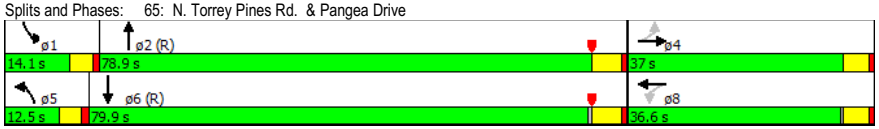
Intersection Summary			
HCM 2000 Control Delay	23.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	20.1
Intersection Capacity Utilization	46.8%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	9	0	13	0	10	1084	39	388
Future Volume (vph)	9	0	13	0	10	1084	39	388
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	7.0	7.0	7.0	7.0	4.0	10.0	4.0	10.0
Minimum Split (s)	11.9	11.9	11.9	11.9	8.4	15.3	8.4	15.3
Total Split (s)	37.0	37.0	36.6	36.6	12.5	78.9	14.1	79.9
Total Split (%)	28.5%	28.5%	28.2%	28.2%	9.6%	60.7%	10.8%	61.5%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.4	4.3	3.4	4.3
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.9	4.9	4.9	4.4	5.3	4.4	5.3
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	None	C-Max

Intersection Summary
Cycle Length: 130
Actuated Cycle Length: 130
Offset: 59 (45%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 55
Control Type: Actuated-Coordinated

Splits and Phases: 65: N. Torrey Pines Rd. & Pangea Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	9	0	10	13	0	14	10	1084	53	39	388	10
Future Volume (vph)	9	0	10	13	0	14	10	1084	53	39	388	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9		4.9	4.9		4.4	5.3		4.4	5.3	
Lane Util. Factor		1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frt		0.93		1.00	0.85		1.00	0.99		1.00	1.00	
Flt Protected		0.98		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1688		1770	1583		1770	3514		1770	3526	
Flt Permitted		0.88		0.74	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1526		1381	1583		1770	3514		1770	3526	
Peak-hour factor, PHF	0.80	0.80	0.80	0.81	0.81	0.81	0.90	0.90	0.90	0.93	0.93	0.93
Adj. Flow (vph)	11	0	12	16	0	17	11	1204	59	42	417	11
RTOR Reduction (vph)	0	22	0	0	15	0	0	2	0	0	1	0
Lane Group Flow (vph)	0	2	0	16	2	0	11	1261	0	42	427	0
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8								
Actuated Green, G (s)		13.4		13.4	13.4		2.5	95.4		6.6	99.5	
Effective Green, g (s)		13.4		13.4	13.4		2.5	95.4		6.6	99.5	
Actuated g/C Ratio		0.10		0.10	0.10		0.02	0.73		0.05	0.77	
Clearance Time (s)		4.9		4.9	4.9		4.4	5.3		4.4	5.3	
Vehicle Extension (s)		2.0		2.0	2.0		2.0	5.7		2.0	5.5	
Lane Grp Cap (vph)		157		142	163		34	2578		89	2698	
v/s Ratio Prot					0.00		0.01	c0.36		c0.02	c0.12	
v/s Ratio Perm		0.00		c0.01								
v/c Ratio		0.02		0.11	0.01		0.32	0.49		0.47	0.16	
Uniform Delay, d1		52.4		52.9	52.3		62.9	7.2		60.0	4.1	
Progression Factor		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.0		0.1	0.0		2.0	0.7		1.4	0.1	
Delay (s)		52.4		53.0	52.4		64.9	7.9		61.4	4.2	
Level of Service		D		D	D		E	A		E	A	
Approach Delay (s)		52.4			52.7			8.3			9.3	
Approach LOS		D			D			A			A	

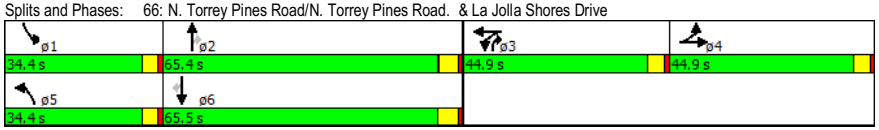
Intersection Summary			
HCM 2000 Control Delay	10.0	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.44		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	14.6
Intersection Capacity Utilization	48.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	202	13	25	21	176	1540	62	29	278	131
Future Volume (vph)	202	13	25	21	176	1540	62	29	278	131
Turn Type	Split	NA	Split	NA	Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	4	4	3	3	5	2	3	1	6	
Permitted Phases							2			6
Detector Phase	4	4	3	3	5	2	3	1	6	6
Switch Phase										
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	10.0	4.0	4.0	10.0	10.0
Minimum Split (s)	8.9	8.9	8.9	8.9	8.4	15.4	8.9	8.4	15.5	15.5
Total Split (s)	44.9	44.9	44.9	44.9	34.4	65.4	44.9	34.4	65.5	65.5
Total Split (%)	23.7%	23.7%	23.7%	23.7%	18.1%	34.5%	23.7%	18.1%	34.5%	34.5%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.4	4.4	3.9	3.4	4.5	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	4.9	4.9	4.4	5.4	4.9	4.4	5.5	5.5
Lead/Lag	Lag	Lag	Lead	Lead	Lead	Lag	Lead	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 189.7
Actuated Cycle Length: 139.2
Natural Cycle: 90
Control Type: Actuated-Uncoordinated

Splits and Phases: 66: N. Torrey Pines Road/N. Torrey Pines Road. & La Jolla Shores Drive



66: N. Torrey Pines Road/N. Torrey Pines Road. & La Jolla Shores Drive

Timing Plan: Morning Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	202	13	121	25	21	62	176	1540	62	29	278	131
Future Volume (vph)	202	13	121	25	21	62	176	1540	62	29	278	131
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9		4.9	4.9		4.4	5.4	4.9	4.4	5.5	5.5
Lane Util. Factor	0.95	0.95		0.97	1.00		1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	0.89		1.00	0.89		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	0.99		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1681	1557		3433	1653		1770	3539	1583	1770	3539	1583
Flt Permitted	0.95	0.99		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1681	1557		3433	1653		1770	3539	1583	1770	3539	1583
Peak-hour factor, PHF	0.90	0.90	0.90	0.80	0.80	0.80	0.93	0.93	0.93	0.80	0.80	0.80
Adj. Flow (vph)	224	14	134	31	26	78	189	1656	67	36	348	164
RTOR Reduction (vph)	0	59	0	0	59	0	0	0	13	0	0	0
Lane Group Flow (vph)	193	120	0	31	45	0	189	1656	54	36	348	164
Turn Type	Split	NA		Split	NA		Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	4	4		3	3		5	2	3	1	6	
Permitted Phases									2			6
Actuated Green, G (s)	25.5	25.5		25.7	25.7		19.1	62.8	88.5	6.1	49.7	49.7
Effective Green, g (s)	25.5	25.5		25.7	25.7		19.1	62.8	88.5	6.1	49.7	49.7
Actuated g/C Ratio	0.18	0.18		0.18	0.18		0.14	0.45	0.63	0.04	0.36	0.36
Clearance Time (s)	4.9	4.9		4.9	4.9		4.4	5.4	4.9	4.4	5.5	5.5
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	4.0	2.0	2.0	3.9	3.9
Lane Grp Cap (vph)	306	284		631	304		241	1590	1002	77	1259	563
v/s Ratio Prot	c0.11	0.08		0.01	c0.03		c0.11	c0.47	0.01	0.02	0.10	
v/s Ratio Perm									0.02			0.10
v/c Ratio	0.63	0.42		0.05	0.15		0.78	1.04	0.05	0.47	0.28	0.29
Uniform Delay, d1	52.8	50.6		46.9	47.8		58.3	38.4	9.7	65.2	32.2	32.3
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	3.1	0.4		0.0	0.1		14.2	34.2	0.0	1.6	0.2	0.4
Delay (s)	55.8	51.0		46.9	47.9		72.5	72.6	9.7	66.8	32.3	32.7
Level of Service	E	D		D	D		E	E	A	E	C	C
Approach Delay (s)		53.5			47.7			70.4			34.7	
Approach LOS		D			D			E			C	

Intersection Summary			
HCM 2000 Control Delay	60.7	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	139.7	Sum of lost time (s)	19.7
Intersection Capacity Utilization	74.5%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

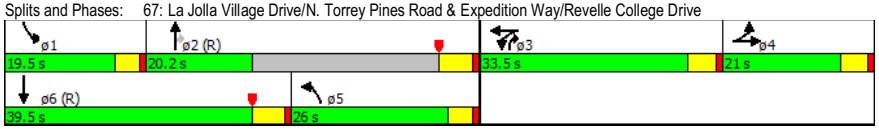
67: La Jolla Village Drive/N. Torrey Pines Road & Expedition Way/Revelle College Drive

Timing Plan: Morning Peak

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	8	31	16	23	240	1767	137	45	358
Future Volume (vph)	8	31	16	23	240	1767	137	45	358
Turn Type	Split	NA	Split	NA	Prot	NA	pm+ov	Prot	NA
Protected Phases	4	4	3	3	5	2	3	1	6
Permitted Phases							2		
Detector Phase	4	4	3	3	5	2	3	1	6
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	10.0	4.0	4.0	10.0
Minimum Split (s)	8.9	8.9	8.9	8.9	8.4	15.6	8.9	8.4	15.4
Total Split (s)	21.0	21.0	33.5	33.5	26.0	20.2	33.5	19.5	39.5
Total Split (%)	17.5%	17.5%	27.9%	27.9%	21.7%	16.8%	27.9%	16.3%	32.9%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.4	4.6	3.9	3.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	4.9	4.9	4.4	5.6	4.9	4.4	5.4
Lead/Lag	Lag	Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	None	None	C-Max

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 27 (23%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 80
Control Type: Actuated-Coordinated

Splits and Phases: 67: La Jolla Village Drive/N. Torrey Pines Road & Expedition Way/Revelle College Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	31	47	16	23	8	240	1767	137	45	358	16
Future Volume (vph)	8	31	47	16	23	8	240	1767	137	45	358	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9		4.9	4.9		4.4	5.6	4.9	4.4	5.4	
Lane Util. Factor	0.95	0.95		0.97	1.00		1.00	0.95	1.00	1.00	0.95	
Frt	1.00	0.91		1.00	0.96		1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1681	1610		3433	1791		1770	3539	1583	1770	3517	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1681	1610		3433	1791		1770	3539	1583	1770	3517	
Peak-hour factor, PHF	0.91	0.91	0.91	0.80	0.80	0.80	0.94	0.94	0.94	0.80	0.80	0.80
Adj. Flow (vph)	9	34	52	20	29	10	255	1880	146	56	448	20
RTOR Reduction (vph)	0	48	0	0	9	0	0	0	37	0	2	0
Lane Group Flow (vph)	8	39	0	20	30	0	255	1880	109	56	466	0
Turn Type	Split	NA		Split	NA		Prot	NA	pm+ov	Prot	NA	
Protected Phases	4	4		3	3		5	2	3	1	6	
Permitted Phases									2			
Actuated Green, G (s)	7.6	7.6		10.3	10.3		22.6	75.0	85.3	7.3	59.9	
Effective Green, g (s)	7.6	7.6		10.3	10.3		22.6	75.0	85.3	7.3	59.9	
Actuated g/C Ratio	0.06	0.06		0.09	0.09		0.19	0.62	0.71	0.06	0.50	
Clearance Time (s)	4.9	4.9		4.9	4.9		4.4	5.6	4.9	4.4	5.4	
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	4.0	2.0	2.0	4.2	
Lane Grp Cap (vph)	106	101		294	153		333	2211	1125	107	1755	
v/s Ratio Prot	0.00	c0.02		0.01	c0.02		0.14	c0.53	0.01	c0.03	0.13	
v/s Ratio Perm									0.06			
v/c Ratio	0.08	0.39		0.07	0.20		0.77	0.85	0.10	0.52	0.27	
Uniform Delay, d1	52.9	54.0		50.4	51.0		46.2	18.0	5.4	54.7	17.3	
Progression Factor	1.00	1.00		1.00	1.00		0.95	0.80	2.61	1.00	1.00	
Incremental Delay, d2	0.1	0.9		0.0	0.2		8.0	3.8	0.0	2.1	0.4	
Delay (s)	53.0	54.9		50.5	51.2		51.9	18.2	14.1	56.8	17.7	
Level of Service	D	D		D	D		D	B	B	E	B	
Approach Delay (s)		54.7			51.0			21.7			21.9	
Approach LOS		D			D			C			C	

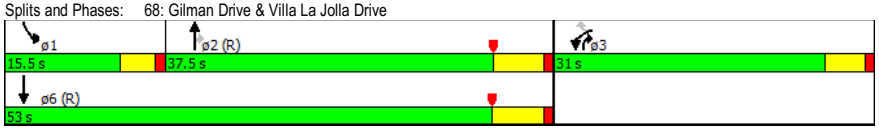
Intersection Summary			
HCM 2000 Control Delay	23.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	19.8
Intersection Capacity Utilization	71.4%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	25	279	852	43	367	366
Future Volume (vph)	25	279	852	43	367	366
Turn Type	Prot	Perm	NA	pm+ov	Prot	NA
Protected Phases	3		2	3	1	6
Permitted Phases		3		2		
Detector Phase	3	3	2	3	1	6
Switch Phase						
Minimum Initial (s)	4.0	4.0	7.0	4.0	4.0	7.0
Minimum Split (s)	8.9	8.9	12.9	8.9	8.4	13.0
Total Split (s)	31.0	31.0	37.5	31.0	15.5	53.0
Total Split (%)	36.9%	36.9%	44.6%	36.9%	18.5%	63.1%
Yellow Time (s)	3.9	3.9	4.9	3.9	3.4	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	5.9	4.9	4.4	6.0
Lead/Lag			Lag		Lead	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None	None	C-Max	None	None	C-Max

Intersection Summary
Cycle Length: 84
Actuated Cycle Length: 84
Offset: 9 (11%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 70
Control Type: Actuated-Coordinated

Splits and Phases: 68: Gilman Drive & Villa La Jolla Drive



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	25	279	852	43	367	366
Future Volume (vph)	25	279	852	43	367	366
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9	5.9	4.9	4.4	6.0
Lane Util. Factor	0.97	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	3433	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	3433	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.80	0.80	0.80	0.80	0.80	0.80
Adj. Flow (vph)	31	349	1065	54	459	458
RTOR Reduction (vph)	0	264	0	5	0	0
Lane Group Flow (vph)	31	85	1065	49	459	458
Turn Type	Prot	Perm	NA	pm+ov	Prot	NA
Protected Phases	3		2	3	1	6
Permitted Phases		3		2		
Actuated Green, G (s)	10.2	10.2	31.6	41.8	27.0	62.9
Effective Green, g (s)	10.2	10.2	31.6	41.8	27.0	62.9
Actuated g/C Ratio	0.12	0.12	0.38	0.50	0.32	0.75
Clearance Time (s)	4.9	4.9	5.9	4.9	4.4	6.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	416	192	1331	787	568	2650
v/s Ratio Prot	0.01		c0.30	0.01	c0.26	0.13
v/s Ratio Perm		c0.05		0.02		
v/c Ratio	0.07	0.44	0.80	0.06	0.81	0.17
Uniform Delay, d1	32.7	34.3	23.4	10.9	26.1	3.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.1	1.6	5.1	0.0	8.3	0.1
Delay (s)	32.8	35.9	28.5	11.0	34.4	3.2
Level of Service	C	D	C	B	C	A
Approach Delay (s)	35.6		27.7			18.8
Approach LOS	D		C			B

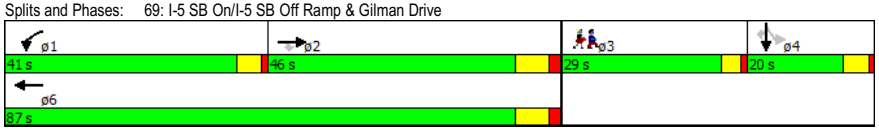
Intersection Summary			
HCM 2000 Control Delay	25.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	84.0	Sum of lost time (s)	15.2
Intersection Capacity Utilization	59.9%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBT	EBR	WBL	WBT	SBT	SBR	ø3
Lane Configurations							
Traffic Volume (vph)	84	590	233	953	0	75	
Future Volume (vph)	84	590	233	953	0	75	
Turn Type	NA	Perm	Prot	NA	NA	Perm	
Protected Phases	2		1	6	4		3
Permitted Phases		2				4	
Detector Phase	2	2	1	6	4	4	
Switch Phase							
Minimum Initial (s)	13.0	13.0	5.0	12.0	5.0	5.0	1.0
Minimum Split (s)	20.2	20.2	9.7	19.2	17.1	17.1	29.0
Total Split (s)	46.0	46.0	41.0	87.0	20.0	20.0	29.0
Total Split (%)	33.8%	33.8%	30.1%	64.0%	14.7%	14.7%	21%
Yellow Time (s)	5.2	5.2	3.7	5.2	4.1	4.1	3.0
All-Red Time (s)	2.0	2.0	1.0	2.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	7.2	7.2	4.7	7.2	5.1	5.1	
Lead/Lag	Lag	Lag	Lead		Lag	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes
Recall Mode	Min	Min	None	Min	None	None	None

Intersection Summary
Cycle Length: 136
Actuated Cycle Length: 44.5
Natural Cycle: 80
Control Type: Actuated-Uncoordinated

Splits and Phases: 69: I-5 SB On/I-5 SB Off Ramp & Gilman Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	84	590	233	953	0	0	0	0	12	0	75
Future Volume (vph)	0	84	590	233	953	0	0	0	0	12	0	75
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		7.2	7.2	4.7	7.2						5.1	5.1
Lane Util. Factor		1.00	0.88	1.00	0.95						1.00	1.00
Frt		1.00	0.85	1.00	1.00						1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00						0.95	1.00
Satd. Flow (prot)		1863	2787	1770	3539						1770	1583
Flt Permitted		1.00	1.00	0.95	1.00						0.95	1.00
Satd. Flow (perm)		1863	2787	1770	3539						1770	1583
Peak-hour factor, PHF	0.84	0.84	0.84	0.94	0.94	0.94	0.25	0.25	0.25	0.80	0.80	0.80
Adj. Flow (vph)	0	100	702	248	1014	0	0	0	0	15	0	94
RTOR Reduction (vph)	0	0	495	0	0	0	0	0	0	0	0	85
Lane Group Flow (vph)	0	100	207	248	1014	0	0	0	0	0	15	9
Turn Type		NA	Perm	Prot	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases			2							4		4
Actuated Green, G (s)		13.5	13.5	11.0	29.2						4.2	4.2
Effective Green, g (s)		13.5	13.5	11.0	29.2						4.2	4.2
Actuated g/C Ratio		0.30	0.30	0.24	0.64						0.09	0.09
Clearance Time (s)		7.2	7.2	4.7	7.2						5.1	5.1
Vehicle Extension (s)		2.0	2.0	2.0	2.0						2.0	2.0
Lane Grp Cap (vph)		550	823	426	2261						162	145
v/s Ratio Prot		0.05		c0.14	c0.29							
v/s Ratio Perm			0.07								0.01	0.01
v/c Ratio		0.18	0.25	0.58	0.45						0.09	0.06
Uniform Delay, d1		12.0	12.3	15.3	4.2						19.0	18.9
Progression Factor		1.00	1.00	1.00	1.00						1.00	1.00
Incremental Delay, d2		0.1	0.1	1.3	0.1						0.1	0.1
Delay (s)		12.0	12.3	16.6	4.2						19.1	19.0
Level of Service		B	B	B	A						B	B
Approach Delay (s)		12.3			6.7			0.0			19.0	
Approach LOS		B			A			A			B	

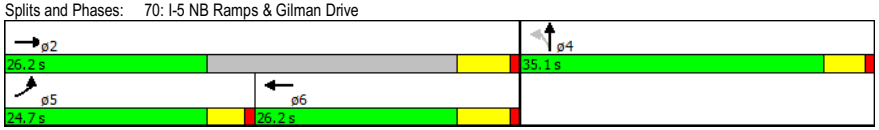
Intersection Summary			
HCM 2000 Control Delay	9.4	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	45.7	Sum of lost time (s)	21.0
Intersection Capacity Utilization	74.5%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBT	NBL	NBT
Lane Configurations					
Traffic Volume (vph)	70	27	328	894	0
Future Volume (vph)	70	27	328	894	0
Turn Type	Prot	NA	NA	Perm	NA
Protected Phases	5	2	6		4
Permitted Phases				4	
Detector Phase	5	2	6	4	4
Switch Phase					
Minimum Initial (s)	5.0	12.0	12.0	5.0	5.0
Minimum Split (s)	9.7	18.2	18.2	10.1	10.1
Total Split (s)	24.7	26.2	26.2	35.1	35.1
Total Split (%)	28.7%	30.5%	30.5%	40.8%	40.8%
Yellow Time (s)	3.7	5.2	5.2	4.1	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.7	6.2	6.2	5.1	5.1
Lead/Lag	Lead		Lag		
Lead-Lag Optimize?	Yes		Yes		
Recall Mode	None	Min	Min	None	None

Intersection Summary
Cycle Length: 86
Actuated Cycle Length: 61.4
Natural Cycle: 60
Control Type: Actuated-Uncoordinated

Splits and Phases: 70: I-5 NB Ramps & Gilman Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	70	27	0	0	328	53	894	0	95	0	0	0
Future Volume (vph)	70	27	0	0	328	53	894	0	95	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.7	6.2			6.2		5.1	5.1				
Lane Util. Factor	1.00	1.00			0.95		0.95	0.95				
Frt	1.00	1.00			0.98		1.00	0.97				
Flt Protected	0.95	1.00			1.00		0.95	0.96				
Satd. Flow (prot)	1770	1863			3465		1681	1651				
Flt Permitted	0.95	1.00			1.00		0.95	0.96				
Satd. Flow (perm)	1770	1863			3465		1681	1651				
Peak-hour factor, PHF	0.80	0.80	0.80	0.84	0.84	0.84	0.95	0.95	0.95	0.25	0.25	0.25
Adj. Flow (vph)	88	34	0	0	390	63	941	0	100	0	0	0
RTOR Reduction (vph)	0	0	0	0	15	0	0	59	0	0	0	0
Lane Group Flow (vph)	88	34	0	0	438	0	527	455	0	0	0	0
Turn Type	Prot	NA			NA		Perm	NA				
Protected Phases	5	2			6			4				
Permitted Phases							4					
Actuated Green, G (s)	6.3	25.1			14.1		25.6	25.6				
Effective Green, g (s)	6.3	25.1			14.1		25.6	25.6				
Actuated g/C Ratio	0.10	0.40			0.23		0.41	0.41				
Clearance Time (s)	4.7	6.2			6.2		5.1	5.1				
Vehicle Extension (s)	2.0	2.0			2.0		2.0	2.0				
Lane Grp Cap (vph)	179	754			788		694	681				
v/s Ratio Prot	c0.05	0.02			c0.13							
v/s Ratio Perm							c0.31	0.28				
v/c Ratio	0.49	0.05			0.56		0.76	0.67				
Uniform Delay, d1	26.3	11.2			21.2		15.6	14.8				
Progression Factor	1.00	1.00			1.00		1.00	1.00				
Incremental Delay, d2	0.8	0.0			0.5		4.3	1.9				
Delay (s)	27.1	11.2			21.7		19.8	16.7				
Level of Service	C	B			C		B	B				
Approach Delay (s)		22.7			21.7			18.3			0.0	
Approach LOS		C			C			B			A	

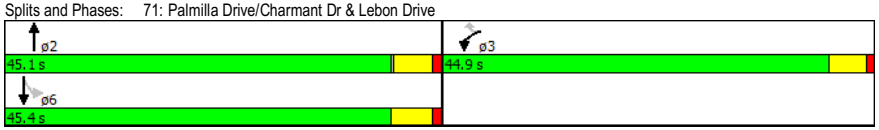
Intersection Summary			
HCM 2000 Control Delay	19.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	62.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	74.5%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Configurations					
Traffic Volume (vph)	138	15	53	115	163
Future Volume (vph)	138	15	53	115	163
Turn Type	Prot	Perm	NA	Perm	NA
Protected Phases	3		2		6
Permitted Phases		3		6	
Detector Phase	3	3	2	6	6
Switch Phase					
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	11.9	11.9	12.1	12.4	12.4
Total Split (s)	44.9	44.9	45.1	45.4	45.4
Total Split (%)	49.7%	49.7%	49.9%	50.3%	50.3%
Yellow Time (s)	3.9	3.9	4.1	4.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	5.1	5.4	5.4
Lead/Lag					
Lead-Lag Optimize?					
Recall Mode	Min	Min	None	None	None

Intersection Summary
Cycle Length: 90.3
Actuated Cycle Length: 41.1
Natural Cycle: 40
Control Type: Actuated-Uncoordinated

Splits and Phases: 71: Palmilla Drive/Charmant Dr & Lebon Drive



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	138	15	53	630	115	163
Future Volume (vph)	138	15	53	630	115	163
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9	5.1		5.4	5.4
Lane Util. Factor	0.97	0.91	0.95		1.00	0.95
Frt	1.00	0.85	0.86		1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	3437	1441	3050		1770	3539
Flt Permitted	0.95	1.00	1.00		0.31	1.00
Satd. Flow (perm)	3437	1441	3050		586	3539
Peak-hour factor, PHF	0.88	0.88	0.82	0.82	0.93	0.93
Adj. Flow (vph)	157	17	65	768	124	175
RTOR Reduction (vph)	1	11	389	0	0	0
Lane Group Flow (vph)	158	4	444	0	124	175
Turn Type	Prot	Perm	NA		Perm	NA
Protected Phases	3		2			6
Permitted Phases		3			6	
Actuated Green, G (s)	10.0	10.0	19.5		19.2	19.2
Effective Green, g (s)	10.0	10.0	19.5		19.2	19.2
Actuated g/C Ratio	0.25	0.25	0.49		0.49	0.49
Clearance Time (s)	4.9	4.9	5.1		5.4	5.4
Vehicle Extension (s)	2.0	2.0	3.8		3.4	3.4
Lane Grp Cap (vph)	870	364	1505		284	1720
v/s Ratio Prot	c0.05		0.15			0.05
v/s Ratio Perm		0.00			c0.21	
v/c Ratio	0.18	0.01	0.30		0.44	0.10
Uniform Delay, d1	11.5	11.0	5.9		6.6	5.5
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	0.0	0.0	0.1		1.2	0.0
Delay (s)	11.6	11.0	6.1		7.9	5.5
Level of Service	B	B	A		A	A
Approach Delay (s)	11.5		6.1			6.5
Approach LOS	B		A			A

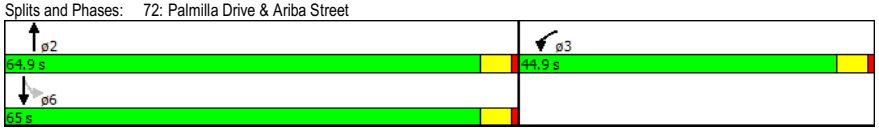
Intersection Summary			
HCM 2000 Control Delay	6.9	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.35		
Actuated Cycle Length (s)	39.5	Sum of lost time (s)	10.3
Intersection Capacity Utilization	46.9%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	WBL	NBT	SBL	SBT
Lane Configurations				
Traffic Volume (vph)	154	74	298	51
Future Volume (vph)	154	74	298	51
Turn Type	Prot	NA	Perm	NA
Protected Phases	3	2		6
Permitted Phases			6	
Detector Phase	3	2	6	6
Switch Phase				
Minimum Initial (s)	6.0	7.0	7.0	7.0
Minimum Split (s)	10.9	11.9	12.0	12.0
Total Split (s)	44.9	64.9	65.0	65.0
Total Split (%)	40.9%	59.1%	59.1%	59.1%
Yellow Time (s)	3.9	3.9	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	5.0	5.0
Lead/Lag				
Lead-Lag Optimize?				
Recall Mode	None	Min	Min	Min

Intersection Summary
Cycle Length: 109.9
Actuated Cycle Length: 49.4
Natural Cycle: 55
Control Type: Actuated-Uncoordinated

Splits and Phases: 72: Palmilla Drive & Ariba Street



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	154	372	74	201	298	51
Future Volume (vph)	154	372	74	201	298	51
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9		4.9		5.0	5.0
Lane Util. Factor	0.97		0.95		1.00	0.95
Frt	0.89		0.89		1.00	1.00
Flt Protected	0.99		1.00		0.95	1.00
Satd. Flow (prot)	3184		3151		1770	3539
Flt Permitted	0.99		1.00		0.55	1.00
Satd. Flow (perm)	3184		3151		1032	3539
Peak-hour factor, PHF	0.83	0.83	0.84	0.84	0.80	0.80
Adj. Flow (vph)	186	448	88	239	372	64
RTOR Reduction (vph)	332	0	111	0	0	0
Lane Group Flow (vph)	302	0	216	0	373	64
Turn Type	Prot		NA		Perm	NA
Protected Phases	3		2			6
Permitted Phases					6	
Actuated Green, G (s)	12.3		25.6		25.5	25.5
Effective Green, g (s)	12.3		25.6		25.5	25.5
Actuated g/C Ratio	0.26		0.54		0.53	0.53
Clearance Time (s)	4.9		4.9		5.0	5.0
Vehicle Extension (s)	2.0		4.0		3.8	3.8
Lane Grp Cap (vph)	821		1691		551	1891
v/s Ratio Prot	c0.09		0.07			0.02
v/s Ratio Perm					c0.36	
v/c Ratio	0.37		0.13		0.68	0.03
Uniform Delay, d1	14.5		5.5		8.1	5.3
Progression Factor	1.00		1.00		1.00	1.00
Incremental Delay, d2	0.1		0.0		3.5	0.0
Delay (s)	14.6		5.5		11.6	5.3
Level of Service	B		A		B	A
Approach Delay (s)	14.6		5.5			10.7
Approach LOS	B		A			B

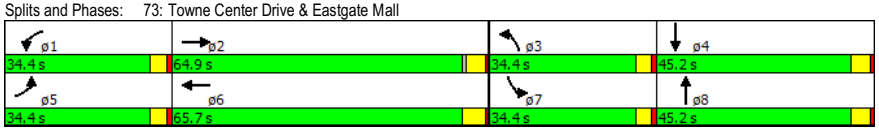
Intersection Summary			
HCM 2000 Control Delay	11.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	47.7	Sum of lost time (s)	9.9
Intersection Capacity Utilization	53.6%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	101	255	99	548	253	591	12	47
Future Volume (vph)	101	255	99	548	253	591	12	47
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	5	2	1	6	3	8	7	4
Permitted Phases								
Detector Phase	5	2	1	6	3	8	7	4
Switch Phase								
Minimum Initial (s)	4.0	7.0	4.0	7.0	4.0	7.0	4.0	7.0
Minimum Split (s)	8.4	11.9	8.4	12.7	8.4	12.2	8.4	12.7
Total Split (s)	34.4	64.9	34.4	65.7	34.4	45.2	34.4	45.2
Total Split (%)	19.1%	36.1%	19.1%	36.6%	19.1%	25.2%	19.1%	25.2%
Yellow Time (s)	3.4	3.9	3.4	4.7	3.4	4.2	3.4	4.2
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	4.9	4.4	5.7	4.4	5.2	4.4	5.2
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 179.7
Actuated Cycle Length: 96.1
Natural Cycle: 65
Control Type: Actuated-Uncoordinated

Splits and Phases: 73: Towne Center Drive & Eastgate Mall



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	101	255	148	99	548	116	253	591	327	12	47	8
Future Volume (vph)	101	255	148	99	548	116	253	591	327	12	47	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	5.7		4.4	5.2		4.4	5.2	
Lane Util. Factor	0.97	0.95		1.00	0.95		0.97	0.95		0.97	0.95	
Frt	1.00	0.94		1.00	0.97		1.00	0.95		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	3433	3344		1770	3446		3433	3350		3433	3462	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	3433	3344		1770	3446		3433	3350		3433	3462	
Peak-hour factor, PHF	0.94	0.94	0.94	0.96	0.96	0.96	0.86	0.86	0.86	0.80	0.80	0.80
Adj. Flow (vph)	107	271	157	103	571	121	294	687	380	15	59	10
RTOR Reduction (vph)	0	51	0	0	11	0	0	32	0	0	8	0
Lane Group Flow (vph)	107	377	0	103	681	0	294	1035	0	15	61	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases												
Actuated Green, G (s)	7.9	26.6		10.6	28.5		20.7	40.7		1.9	21.9	
Effective Green, g (s)	7.9	26.6		10.6	28.5		20.7	40.7		1.9	21.9	
Actuated g/C Ratio	0.08	0.27		0.11	0.29		0.21	0.41		0.02	0.22	
Clearance Time (s)	4.4	4.9		4.4	5.7		4.4	5.2		4.4	5.2	
Vehicle Extension (s)	2.0	5.1		2.0	4.8		2.0	5.1		2.0	4.8	
Lane Grp Cap (vph)	274	901		190	995		719	1381		66	768	
v/s Ratio Prot	0.03	0.11		c0.06	c0.20		c0.09	c0.31		0.00	0.02	
v/s Ratio Perm												
v/c Ratio	0.39	0.42		0.54	0.68		0.41	0.75		0.23	0.08	
Uniform Delay, d1	43.1	29.7		41.7	31.1		33.7	24.7		47.7	30.4	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.3	0.7		1.7	2.4		0.1	2.8		0.6	0.1	
Delay (s)	43.5	30.4		43.4	33.6		33.9	27.4		48.3	30.5	
Level of Service	D	C		D	C		C	C		D	C	
Approach Delay (s)		33.0			34.8			28.8			33.7	
Approach LOS		C			C			C			C	

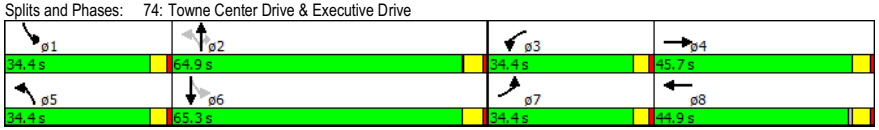
Intersection Summary			
HCM 2000 Control Delay	31.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	98.7	Sum of lost time (s)	19.7
Intersection Capacity Utilization	61.7%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	94	299	39	146	254	789	579	41	152
Future Volume (vph)	94	299	39	146	254	789	579	41	152
Turn Type	Prot	NA	Prot	NA	pm+pt	NA	Perm	pm+pt	NA
Protected Phases	7	4	3	8	5	2		1	6
Permitted Phases					2		2	6	
Detector Phase	7	4	3	8	5	2	2	1	6
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	7.0	4.0	7.0	7.0	4.0	7.0
Minimum Split (s)	8.4	8.9	8.4	11.9	8.4	11.9	11.9	8.4	12.3
Total Split (s)	34.4	45.7	34.4	44.9	34.4	64.9	64.9	34.4	65.3
Total Split (%)	19.1%	25.4%	19.1%	25.0%	19.1%	36.1%	36.1%	19.1%	36.3%
Yellow Time (s)	3.4	3.9	3.4	3.9	3.4	3.9	3.9	3.4	4.3
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	4.9	4.4	4.9	4.4	4.9	4.9	4.4	5.3
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Min	Min	None	Min

Intersection Summary
Cycle Length: 179.8
Actuated Cycle Length: 95.2
Natural Cycle: 60
Control Type: Actuated-Uncoordinated

Splits and Phases: 74: Towne Center Drive & Executive Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	94	299	24	39	146	26	254	789	579	41	152	62
Future Volume (vph)	94	299	24	39	146	26	254	789	579	41	152	62
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	4.9		4.4	4.9	4.9	4.4	5.3	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95	1.00	1.00	0.95	
Frt	1.00	0.99		1.00	0.98		1.00	1.00	0.85	1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3499		1770	3458		1770	3539	1583	1770	3385	
Flt Permitted	0.95	1.00		0.95	1.00		0.51	1.00	1.00	0.32	1.00	
Satd. Flow (perm)	1770	3499		1770	3458		944	3539	1583	605	3385	
Peak-hour factor, PHF	0.84	0.84	0.84	0.80	0.80	0.80	0.95	0.95	0.95	0.80	0.80	0.80
Adj. Flow (vph)	112	356	29	49	182	32	267	831	609	51	190	78
RTOR Reduction (vph)	0	3	0	0	9	0	0	0	195	0	25	0
Lane Group Flow (vph)	112	382	0	49	207	0	267	831	414	51	243	0
Turn Type	Prot	NA		Prot	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases							2		2	6		
Actuated Green, G (s)	11.7	25.2		6.2	19.7		51.1	42.0	42.0	34.9	30.2	
Effective Green, g (s)	11.7	25.2		6.2	19.7		51.1	42.0	42.0	34.9	30.2	
Actuated g/C Ratio	0.12	0.26		0.06	0.20		0.53	0.43	0.43	0.36	0.31	
Clearance Time (s)	4.4	4.9		4.4	4.9		4.4	4.9	4.9	4.4	5.3	
Vehicle Extension (s)	2.0	5.3		2.0	5.4		2.0	3.8	3.8	2.0	3.8	
Lane Grp Cap (vph)	214	911		113	704		636	1537	687	274	1057	
v/s Ratio Prot	c0.06	c0.11		0.03	0.06		c0.07	0.23		0.01	0.07	
v/s Ratio Perm							0.15		c0.26	0.06		
v/c Ratio	0.52	0.42		0.43	0.29		0.42	0.54	0.60	0.19	0.23	
Uniform Delay, d1	39.9	29.7		43.6	32.6		12.8	20.2	21.0	20.3	24.6	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	1.1	0.7		1.0	0.6		0.2	0.5	1.7	0.1	0.1	
Delay (s)	40.9	30.4		44.5	33.2		13.0	20.7	22.6	20.5	24.8	
Level of Service	D	C		D	C		B	C	C	C	C	
Approach Delay (s)		32.8			35.3			20.2			24.1	
Approach LOS		C			D			C			C	

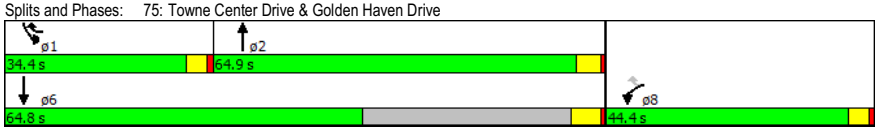
Intersection Summary			
HCM 2000 Control Delay	24.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	96.7	Sum of lost time (s)	19.0
Intersection Capacity Utilization	60.0%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Configurations					
Traffic Volume (vph)	153	451	331	195	98
Future Volume (vph)	153	451	331	195	98
Turn Type	Prot	pm+ov	NA	Prot	NA
Protected Phases	8	1	2	1	6
Permitted Phases		8			
Detector Phase	8	1	2	1	6
Switch Phase					
Minimum Initial (s)	4.0	4.0	10.0	4.0	10.0
Minimum Split (s)	33.4	8.4	14.9	8.4	15.8
Total Split (s)	44.4	34.4	64.9	34.4	64.8
Total Split (%)	30.9%	23.9%	45.2%	23.9%	45.1%
Yellow Time (s)	3.4	3.4	3.9	3.4	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	4.4	4.9	4.4	5.8
Lead/Lag		Lead	Lag	Lead	
Lead-Lag Optimize?		Yes	Yes	Yes	
Recall Mode	None	None	None	None	None

Intersection Summary
Cycle Length: 143.7
Actuated Cycle Length: 66.3
Natural Cycle: 65
Control Type: Actuated-Uncoordinated

Splits and Phases: 75: Towne Center Drive & Golden Haven Drive



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	153	451	331	284	195	98
Future Volume (vph)	153	451	331	284	195	98
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	0%		0%			-7%
Total Lost time (s)	4.4	4.4	4.9		4.4	5.8
Lane Util. Factor	1.00	1.00	0.95		1.00	0.95
Frt	1.00	0.85	0.93		1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1770	1583	3294		1832	3663
Flt Permitted	0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)	1770	1583	3294		1832	3663
Peak-hour factor, PHF	0.91	0.91	0.86	0.86	0.85	0.85
Adj. Flow (vph)	168	496	385	330	229	115
RTOR Reduction (vph)	0	191	116	0	0	0
Lane Group Flow (vph)	168	305	599	0	229	115
Turn Type	Prot	pm+ov	NA		Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8				
Actuated Green, G (s)	13.3	27.5	23.9		14.2	41.6
Effective Green, g (s)	13.3	27.5	23.9		14.2	41.6
Actuated g/C Ratio	0.20	0.42	0.37		0.22	0.64
Clearance Time (s)	4.4	4.4	4.9		4.4	5.8
Vehicle Extension (s)	2.0	2.0	5.0		2.0	5.0
Lane Grp Cap (vph)	361	775	1209		399	2340
v/s Ratio Prot	c0.09	0.09	c0.18		c0.13	0.03
v/s Ratio Perm		0.11				
v/c Ratio	0.47	0.39	0.50		0.57	0.05
Uniform Delay, d1	22.8	13.0	15.9		22.7	4.4
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	0.3	0.1	0.7		1.2	0.0
Delay (s)	23.1	13.1	16.6		24.0	4.4
Level of Service	C	B	B		C	A
Approach Delay (s)	15.7		16.6			17.4
Approach LOS	B		B			B

Intersection Summary				
HCM 2000 Control Delay	16.4	HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio	0.51			
Actuated Cycle Length (s)	65.1	Sum of lost time (s)	13.7	
Intersection Capacity Utilization	53.9%	ICU Level of Service	A	
Analysis Period (min)	15			
c Critical Lane Group				

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	58	127	61	121	289	188	137	14	57
Future Volume (vph)	58	127	61	121	289	188	137	14	57
Turn Type	Perm	NA	Perm	NA	pm+pt	NA	Perm	pm+pt	NA
Protected Phases		4		8	5	2		1	6
Permitted Phases	4		8		2		2	6	
Detector Phase	4	4	8	8	5	2	2	1	6
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	7.0	7.0	4.0	7.0
Minimum Split (s)	8.9	8.9	8.4	8.4	8.4	11.9	11.9	8.4	11.9
Total Split (s)	44.9	44.9	44.4	44.4	34.4	64.9	64.9	34.4	64.9
Total Split (%)	31.1%	31.1%	30.8%	30.8%	23.9%	45.0%	45.0%	23.9%	45.0%
Yellow Time (s)	3.9	3.9	3.4	3.4	3.4	3.9	3.9	3.4	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	4.4	4.4	4.4	4.9	4.9	4.4	4.9
Lead/Lag					Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Min	Min	None	Min

Intersection Summary
Cycle Length: 144.2
Actuated Cycle Length: 51.6
Natural Cycle: 40
Control Type: Actuated-Uncoordinated

Splits and Phases: 76: Executive Way & Executive Drive

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	58	127	72	61	121	31	289	188	137	14	57	24
Future Volume (vph)	58	127	72	61	121	31	289	188	137	14	57	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9		4.4	4.4		4.4	4.9	4.9	4.4	4.9	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.95		1.00	0.97		1.00	1.00	0.85	1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3346		1770	3432		1770	1863	1583	1770	1780	
Flt Permitted	0.65	1.00		0.61	1.00		0.53	1.00	1.00	0.62	1.00	
Satd. Flow (perm)	1203	3346		1129	3432		993	1863	1583	1152	1780	
Peak-hour factor, PHF	0.85	0.85	0.85	0.90	0.90	0.90	0.84	0.84	0.84	0.80	0.80	0.80
Adj. Flow (vph)	68	149	85	68	134	34	344	224	163	18	71	30
RTOR Reduction (vph)	0	63	0	0	18	0	0	0	75	0	13	0
Lane Group Flow (vph)	68	171	0	68	150	0	344	224	88	18	88	0
Turn Type	Perm	NA		Perm	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2		2	6		
Actuated Green, G (s)	10.1	10.1		10.6	10.6		34.4	29.4	29.4	15.4	14.8	
Effective Green, g (s)	10.1	10.1		10.6	10.6		34.4	29.4	29.4	15.4	14.8	
Actuated g/C Ratio	0.19	0.19		0.20	0.20		0.63	0.54	0.54	0.28	0.27	
Clearance Time (s)	4.9	4.9		4.4	4.4		4.4	4.9	4.9	4.4	4.9	
Vehicle Extension (s)	2.0	2.0		2.3	2.3		2.0	2.9	2.9	2.0	2.6	
Lane Grp Cap (vph)	223	622		220	669		846	1008	857	333	485	
v/s Ratio Prot		0.05			0.04		c0.11	0.12		0.00	0.05	
v/s Ratio Perm	0.06			c0.06			c0.14		0.06	0.01		
v/c Ratio	0.30	0.28		0.31	0.22		0.41	0.22	0.10	0.05	0.18	
Uniform Delay, d1	19.1	19.0		18.7	18.4		4.8	6.5	6.0	14.1	15.1	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.3	0.1		0.5	0.1		0.1	0.1	0.1	0.0	0.1	
Delay (s)	19.4	19.0		19.2	18.5		4.9	6.6	6.1	14.1	15.3	
Level of Service	B	B		B	B		A	A	A	B	B	
Approach Delay (s)		19.1			18.7			5.7			15.1	
Approach LOS		B			B			A			B	

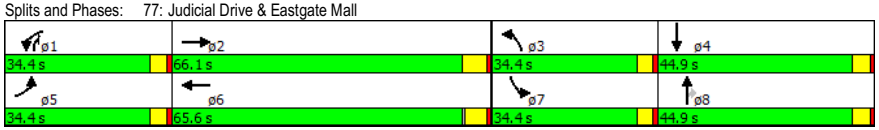
Intersection Summary			
HCM 2000 Control Delay	11.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.42		
Actuated Cycle Length (s)	54.3	Sum of lost time (s)	14.2
Intersection Capacity Utilization	43.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	139	338	446	584	258	236	282	4	17
Future Volume (vph)	139	338	446	584	258	236	282	4	17
Turn Type	Prot	NA	Prot	NA	Prot	NA	pm+ov	Prot	NA
Protected Phases	5	2	1	6	3	8	1	7	4
Permitted Phases							8		
Detector Phase	5	2	1	6	3	8	1	7	4
Switch Phase									
Minimum Initial (s)	4.0	7.0	4.0	7.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.4	13.1	8.4	12.6	8.4	8.9	8.4	8.4	8.9
Total Split (s)	34.4	66.1	34.4	65.6	34.4	44.9	34.4	34.4	44.9
Total Split (%)	19.1%	36.8%	19.1%	36.5%	19.1%	25.0%	19.1%	19.1%	25.0%
Yellow Time (s)	3.4	5.1	3.4	4.6	3.4	3.9	3.4	3.4	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	6.1	4.4	5.6	4.4	4.9	4.4	4.4	4.9
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 179.8
Actuated Cycle Length: 100.4
Natural Cycle: 80
Control Type: Actuated-Uncoordinated

Splits and Phases: 77: Judicial Drive & Eastgate Mall



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	139	338	59	446	584	78	258	236	282	4	17	11
Future Volume (vph)	139	338	59	446	584	78	258	236	282	4	17	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	6.1		4.4	5.6		4.4	4.9	4.4	4.4	4.9	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.98		1.00	0.98		1.00	1.00	0.85	1.00	0.94	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3461		1770	3477		1770	1863	1583	1770	1751	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	3461		1770	3477		1770	1863	1583	1770	1751	
Peak-hour factor, PHF	0.93	0.93	0.93	0.84	0.84	0.84	0.94	0.94	0.94	0.80	0.80	0.80
Adj. Flow (vph)	149	363	63	531	695	93	274	251	300	5	21	14
RTOR Reduction (vph)	0	10	0	0	6	0	0	0	118	0	13	0
Lane Group Flow (vph)	149	416	0	531	782	0	274	251	182	5	22	0
Turn Type	Prot	NA		Prot	NA		Prot	NA	pm+ov	Prot	NA	
Protected Phases	5	2		1	6		3	8	1	7	4	
Permitted Phases									8			
Actuated Green, G (s)	14.2	19.9		31.8	38.0		24.0	30.9	62.7	0.8	7.7	
Effective Green, g (s)	14.2	19.9		31.8	38.0		24.0	30.9	62.7	0.8	7.7	
Actuated g/C Ratio	0.14	0.19		0.31	0.37		0.23	0.30	0.61	0.01	0.07	
Clearance Time (s)	4.4	6.1		4.4	5.6		4.4	4.9	4.4	4.4	4.9	
Vehicle Extension (s)	2.0	2.7		2.0	3.0		2.0	2.0	2.0	2.0	2.0	
Lane Grp Cap (vph)	243	667		545	1280		411	557	961	13	130	
v/s Ratio Prot	0.08	0.12		c0.30	c0.23		c0.15	c0.13	0.06	0.00	0.01	
v/s Ratio Perm									0.06			
v/c Ratio	0.61	0.62		0.97	0.61		0.67	0.45	0.19	0.38	0.17	
Uniform Delay, d1	41.9	38.2		35.3	26.6		36.0	29.3	9.0	51.0	44.8	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	3.2	1.7		31.7	0.9		3.2	0.2	0.0	6.8	0.2	
Delay (s)	45.1	39.9		67.0	27.4		39.1	29.5	9.0	57.7	45.0	
Level of Service	D	D		E	C		D	C	A	E	D	
Approach Delay (s)		41.3			43.4			25.2			46.6	
Approach LOS		D			D			C			D	

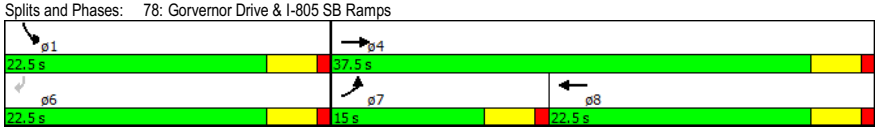
Intersection Summary			
HCM 2000 Control Delay	37.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	103.2	Sum of lost time (s)	19.8
Intersection Capacity Utilization	69.7%	ICU Level of Service	C
Analysis Period (min)	15		

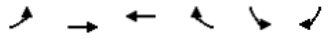
c Critical Lane Group

Lane Group	EBL	EBT	WBT	SBL	SBR
Lane Configurations					
Traffic Volume (vph)	419	346	442	77	304
Future Volume (vph)	419	346	442	77	304
Turn Type	Prot	NA	NA	Prot	Perm
Protected Phases	7	4	8	1	
Permitted Phases					6
Detector Phase	7	4	8	1	6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5
Total Split (s)	15.0	37.5	22.5	22.5	22.5
Total Split (%)	25.0%	62.5%	37.5%	37.5%	37.5%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead		Lag		
Lead-Lag Optimize?	Yes		Yes		
Recall Mode	None	None	None	None	Min

Intersection Summary
Cycle Length: 60
Actuated Cycle Length: 43.6
Natural Cycle: 60
Control Type: Actuated-Uncoordinated

Splits and Phases: 78: Gorvernor Drive & I-805 SB Ramps

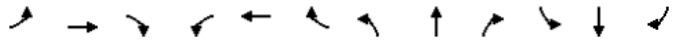




Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	419	346	442	20	77	304
Future Volume (vph)	419	346	442	20	77	304
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5		4.5	4.5
Lane Util. Factor	0.97	1.00	0.95		1.00	1.00
Frt	1.00	1.00	0.99		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	3433	1863	3517		1770	1583
Flt Permitted	0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)	3433	1863	3517		1770	1583
Peak-hour factor, PHF	0.88	0.88	0.89	0.89	1.00	1.00
Adj. Flow (vph)	476	393	497	22	77	304
RTOR Reduction (vph)	0	0	6	0	0	251
Lane Group Flow (vph)	476	393	513	0	77	53
Turn Type	Prot	NA	NA		Prot	Perm
Protected Phases	7	4	8		1	
Permitted Phases						6
Actuated Green, G (s)	10.1	26.8	12.2		7.6	7.6
Effective Green, g (s)	10.1	26.8	12.2		7.6	7.6
Actuated g/C Ratio	0.23	0.62	0.28		0.18	0.18
Clearance Time (s)	4.5	4.5	4.5		4.5	4.5
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	798	1150	988		309	277
v/s Ratio Prot	c0.14	0.21	c0.15		c0.04	
v/s Ratio Perm						0.03
v/c Ratio	0.60	0.34	0.52		0.25	0.19
Uniform Delay, d1	14.8	4.0	13.1		15.4	15.3
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	1.2	0.2	0.5		0.4	0.3
Delay (s)	16.0	4.2	13.6		15.9	15.6
Level of Service	B	A	B		B	B
Approach Delay (s)		10.7	13.6		15.7	
Approach LOS		B	B		B	

Intersection Summary				
HCM 2000 Control Delay	12.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	43.4	Sum of lost time (s)	13.5
Intersection Capacity Utilization	40.3%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	374	24	0	0	33	14	478	12	22	0	0	0
Future Volume (Veh/h)	374	24	0	0	33	14	478	12	22	0	0	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.96	0.96	0.96	0.55	0.55	0.55	0.95	0.95	0.95	1.00	1.00	1.00
Hourly flow rate (vph)	390	25	0	0	60	25	503	13	23	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1086	1042	0	1043	1030	24	0			36		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1086	1042	0	1043	1030	24	0			36		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	0	84	100	100	63	98	69			100		
cM capacity (veh/h)	104	158	1085	140	161	1052	1623			1575		

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	415	85	539
Volume Left	390	0	503
Volume Right	0	25	23
cSH	106	214	1623
Volume to Capacity	3.90	0.40	0.31
Queue Length 95th (ft)	Err	44	33
Control Delay (s)	Err	32.4	7.8
Lane LOS	F	D	A
Approach Delay (s)	Err	32.4	7.8
Approach LOS	F	D	

Intersection Summary			
Average Delay	4000.5		
Intersection Capacity Utilization	63.8%	ICU Level of Service	B
Analysis Period (min)	15		

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	ø4
Lane Configurations							
Traffic Volume (vph)	183	371	325	1377	305	246	
Future Volume (vph)	183	371	325	1377	305	246	
Turn Type	NA	Perm	Prot	NA	Prot	pt+ov	
Protected Phases	2		1	6	8	8 1	4
Permitted Phases		2					
Detector Phase	2	2	1	6	8	8 1	
Switch Phase							
Minimum Initial (s)	10.0	10.0	7.0	10.0	10.0		4.0
Minimum Split (s)	43.2	43.2	11.4	24.9	23.3		41.0
Total Split (s)	48.6	48.6	34.1	82.7	45.3		43.8
Total Split (%)	38.0%	38.0%	26.6%	64.6%	35.4%		34%
Yellow Time (s)	5.2	5.2	3.4	5.0	4.3		3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	6.2	6.2	4.4	6.0	5.3		
Lead/Lag	Lag	Lag	Lead				
Lead-Lag Optimize?							
Recall Mode	C-Max	C-Max	None	C-Max	None		None

Intersection Summary

Cycle Length: 128
Actuated Cycle Length: 128
Offset: 70 (55%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 100
Control Type: Actuated-Coordinated

Splits and Phases: 1: N. Torrey Pines Rd. & Genesee Ave

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	183	371	325	1377	305	246
Future Volume (vph)	183	371	325	1377	305	246
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.2	6.2	4.4	6.0	5.3	5.3
Lane Util. Factor	0.91	1.00	0.97	0.91	0.97	0.88
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	5085	1583	3433	5085	3433	2787
Flt Permitted	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (perm)	5085	1583	3433	5085	3433	2787
Peak-hour factor, PHF	0.67	0.67	0.92	0.92	0.87	0.87
Adj. Flow (vph)	273	554	353	1497	351	283
RTOR Reduction (vph)	0	231	0	0	0	188
Lane Group Flow (vph)	273	323	353	1497	351	95
Turn Type	NA	Perm	Prot	NA	Prot	pt+ov
Protected Phases	2		1	6	8	8 1
Permitted Phases		2				
Actuated Green, G (s)	74.6	74.6	17.6	96.8	19.9	42.8
Effective Green, g (s)	74.6	74.6	17.6	96.8	19.9	42.8
Actuated g/C Ratio	0.58	0.58	0.14	0.76	0.16	0.33
Clearance Time (s)	6.2	6.2	4.4	6.0	5.3	
Vehicle Extension (s)	4.0	4.0	2.0	3.7	3.8	
Lane Grp Cap (vph)	2963	922	472	3845	533	931
v/s Ratio Prot	0.05		c0.10	c0.29	c0.10	0.03
v/s Ratio Perm		0.20				
v/c Ratio	0.09	0.35	0.75	0.39	0.66	0.10
Uniform Delay, d1	11.8	14.0	53.1	5.4	50.9	29.4
Progression Factor	1.00	1.00	1.49	0.56	1.00	1.00
Incremental Delay, d2	0.1	1.0	4.9	0.3	3.2	0.1
Delay (s)	11.8	15.0	83.9	3.3	54.0	29.4
Level of Service	B	B	F	A	D	C
Approach Delay (s)	14.0			18.7	43.0	
Approach LOS	B			B	D	

Intersection Summary

HCM 2000 Control Delay	22.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	128.0	Sum of lost time (s)	15.9
Intersection Capacity Utilization	44.7%	ICU Level of Service	A
Analysis Period (min)	15		

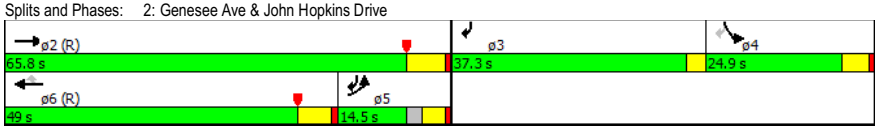
c Critical Lane Group

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	ø3
Lane Configurations							
Traffic Volume (vph)	137	366	1607	491	503	53	
Future Volume (vph)	137	366	1607	491	503	53	
Turn Type	Prot	NA	NA	Perm	Prot	pt+ov	
Protected Phases	5	2	6		4	3 5	3
Permitted Phases				6		4	
Detector Phase	5	2	6	6	4	3 5	
Switch Phase							
Minimum Initial (s)	4.0	10.0	10.0	10.0	7.0		4.0
Minimum Split (s)	9.5	16.7	15.9	15.9	11.9		7.0
Total Split (s)	14.5	65.8	49.0	49.0	24.9		37.3
Total Split (%)	11.3%	51.4%	38.3%	38.3%	19.5%		29%
Yellow Time (s)	3.4	5.7	4.9	4.9	3.9		3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		0.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	4.4	6.7	5.9	5.9	4.9		
Lead/Lag	Lag		Lead	Lead	Lag		Lead
Lead-Lag Optimize?	Yes		Yes	Yes	Yes		Yes
Recall Mode	None	C-Max	C-Max	C-Max	None		None

Intersection Summary

Cycle Length: 128
Actuated Cycle Length: 128
Offset: 58 (45%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 60
Control Type: Actuated-Coordinated

Splits and Phases: 2: Genesee Ave & John Hopkins Drive



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	137	366	1607	491	503	53
Future Volume (vph)	137	366	1607	491	503	53
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	6.7	5.9	5.9	4.9	3.0
Lane Util. Factor	1.00	0.91	0.81	1.00	0.97	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	5085	7544	1583	3433	1583
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	5085	7544	1583	3433	1583
Peak-hour factor, PHF	0.80	0.80	0.90	0.90	0.79	0.79
Adj. Flow (vph)	171	458	1786	546	637	67
RTOR Reduction (vph)	0	0	0	267	0	1
Lane Group Flow (vph)	171	458	1786	279	637	66
Turn Type	Prot	NA	NA	Perm	Prot	pt+ov
Protected Phases	5	2	6		4	3 5
Permitted Phases				6		4
Actuated Green, G (s)	12.4	71.7	55.7	55.7	38.5	58.5
Effective Green, g (s)	12.4	71.7	55.7	55.7	38.5	54.1
Actuated g/C Ratio	0.10	0.56	0.44	0.44	0.30	0.42
Clearance Time (s)	4.4	6.7	5.9	5.9	4.9	
Vehicle Extension (s)	2.0	4.0	3.9	3.9	5.0	
Lane Grp Cap (vph)	171	2848	3282	688	1032	706
v/s Ratio Prot	c0.10	0.09	c0.24		c0.19	c0.01
v/s Ratio Perm				0.18		0.03
v/c Ratio	1.00	0.16	0.54	0.41	0.62	0.09
Uniform Delay, d1	57.8	13.6	26.8	24.8	38.4	22.2
Progression Factor	0.94	0.74	1.41	3.71	1.00	1.00
Incremental Delay, d2	68.7	0.1	0.5	1.4	1.6	0.0
Delay (s)	123.0	10.2	38.1	93.5	40.0	22.2
Level of Service	F	B	D	F	D	C
Approach Delay (s)		40.9	51.1		38.3	
Approach LOS		D	D		D	

Intersection Summary

HCM 2000 Control Delay	46.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	128.0	Sum of lost time (s)	18.2
Intersection Capacity Utilization	53.2%	ICU Level of Service	A
Analysis Period (min)	15		

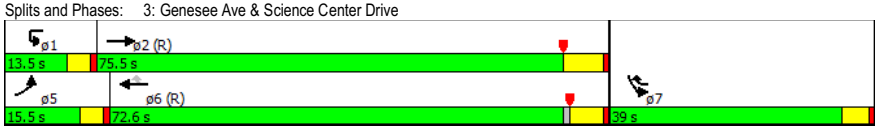
c Critical Lane Group

Lane Group	EBL	EBT	WBU	WBT	WBR	SBL
Lane Configurations						
Traffic Volume (vph)	64	756	8	2189	303	37
Future Volume (vph)	64	756	8	2189	303	37
Turn Type	Prot	NA	Prot	NA	pm+ov	Prot
Protected Phases	5	2	1	6	7	7
Permitted Phases					6	
Detector Phase	5	2	1	6	7	7
Switch Phase						
Minimum Initial (s)	4.0	10.0	4.0	10.0	4.0	4.0
Minimum Split (s)	9.5	22.5	9.5	16.0	8.9	8.9
Total Split (s)	15.5	75.5	13.5	72.6	39.0	39.0
Total Split (%)	12.1%	59.0%	10.5%	56.7%	30.5%	30.5%
Yellow Time (s)	3.4	5.9	3.4	5.0	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	6.9	4.4	6.0	4.9	4.9
Lead/Lag	Lead	Lag	Lead	Lag		
Lead-Lag Optimize?	Yes	Yes	Yes	Yes		
Recall Mode	None	C-Max	None	C-Max	None	None

Intersection Summary

Cycle Length: 128
Actuated Cycle Length: 128
Offset: 108 (84%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 60
Control Type: Actuated-Coordinated

Splits and Phases: 3: Genesee Ave & Science Center Drive



Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Traffic Volume (vph)	64	756	8	2189	303	37	16
Future Volume (vph)	64	756	8	2189	303	37	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	6.9	4.4	6.0	4.9	4.9	
Lane Util. Factor	1.00	0.91	1.00	0.91	1.00	0.97	
Frt	1.00	1.00	1.00	1.00	0.85	0.95	
Flt Protected	0.95	1.00	0.95	1.00	1.00	0.97	
Satd. Flow (prot)	1770	5085	1770	5085	1583	3332	
Flt Permitted	0.95	1.00	0.95	1.00	1.00	0.97	
Satd. Flow (perm)	1770	5085	1770	5085	1583	3332	
Peak-hour factor, PHF	0.82	0.82	0.92	0.92	0.92	0.86	0.86
Adj. Flow (vph)	78	922	9	2379	329	43	19
RTOR Reduction (vph)	0	0	0	0	64	18	0
Lane Group Flow (vph)	78	922	9	2379	265	44	0
Turn Type	Prot	NA	Prot	NA	pm+ov	Prot	
Protected Phases	5	2	1	6	7	7	
Permitted Phases					6		
Actuated Green, G (s)	9.6	103.1	1.5	95.9	103.1	7.2	
Effective Green, g (s)	9.6	103.1	1.5	95.9	103.1	7.2	
Actuated g/C Ratio	0.07	0.81	0.01	0.75	0.81	0.06	
Clearance Time (s)	4.4	6.9	4.4	6.0	4.9	4.9	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	132	4095	20	3809	1275	187	
v/s Ratio Prot	c0.04	0.18	0.01	c0.47	0.01	c0.01	
v/s Ratio Perm					0.16		
v/c Ratio	0.59	0.23	0.45	0.62	0.21	0.24	
Uniform Delay, d1	57.3	3.0	62.8	7.6	2.9	57.8	
Progression Factor	0.76	2.08	0.90	0.83	1.18	1.00	
Incremental Delay, d2	6.4	0.1	13.7	0.7	0.1	0.7	
Delay (s)	50.1	6.3	70.3	6.9	3.5	58.4	
Level of Service	D	A	E	A	A	E	
Approach Delay (s)		9.7		6.7		58.4	
Approach LOS		A		A		E	

Intersection Summary

HCM 2000 Control Delay	8.4	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	128.0	Sum of lost time (s)	16.2
Intersection Capacity Utilization	61.9%	ICU Level of Service	B
Analysis Period (min)	15		

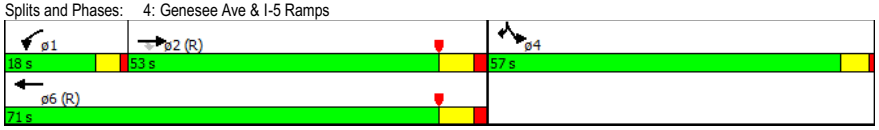
c Critical Lane Group

Lane Group	EBT	EBR	WBL	WBT	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	664	273	157	1613	729	509
Future Volume (vph)	664	273	157	1613	729	509
Turn Type	NA	Perm	Prot	NA	Prot	Prot
Protected Phases	2		1	6	4	4
Permitted Phases		2				
Detector Phase	2	2	1	6	4	4
Switch Phase						
Minimum Initial (s)	10.0	10.0	5.0	10.0	13.0	13.0
Minimum Split (s)	25.2	25.2	9.7	25.2	18.1	18.1
Total Split (s)	53.0	53.0	18.0	71.0	57.0	57.0
Total Split (%)	41.4%	41.4%	14.1%	55.5%	44.5%	44.5%
Yellow Time (s)	5.2	5.2	3.7	5.2	4.1	4.1
All-Red Time (s)	2.0	2.0	1.0	2.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.2	7.2	4.7	7.2	5.1	5.1
Lead/Lag	Lag	Lag	Lead			
Lead-Lag Optimize?	Yes	Yes	Yes			
Recall Mode	C-Max	C-Max	None	C-Max	Min	Min

Intersection Summary

Cycle Length: 128
Actuated Cycle Length: 128
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 60
Control Type: Actuated-Coordinated

Splits and Phases: 4: Genesee Ave & I-5 Ramps



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	664	273	157	1613	0	0	0	0	729	0	509
Future Volume (vph)	0	664	273	157	1613	0	0	0	0	729	0	509
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		7.2	7.2	4.7	7.2					5.1		5.1
Lane Util. Factor		0.81	0.88	0.97	0.91					0.97		0.88
Frt		1.00	0.85	1.00	1.00					1.00		0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (prot)		7544	2787	3433	5085					3433		2787
Flt Permitted		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (perm)		7544	2787	3433	5085					3433		2787
Peak-hour factor, PHF	0.67	0.67	0.67	0.92	0.92	0.92	0.25	0.25	0.25	0.86	0.86	0.86
Adj. Flow (vph)	0	991	407	171	1753	0	0	0	0	848	0	592
RTOR Reduction (vph)	0	0	210	0	0	0	0	0	0	0	0	53
Lane Group Flow (vph)	0	991	197	171	1753	0	0	0	0	848	0	539
Turn Type		NA	Perm	Prot	NA					Prot		Prot
Protected Phases		2		1	6					4		4
Permitted Phases			2									
Actuated Green, G (s)		61.9	61.9	10.7	77.3					38.4		38.4
Effective Green, g (s)		61.9	61.9	10.7	77.3					38.4		38.4
Actuated g/C Ratio		0.48	0.48	0.08	0.60					0.30		0.30
Clearance Time (s)		7.2	7.2	4.7	7.2					5.1		5.1
Vehicle Extension (s)		2.0	2.0	2.0	2.0					2.0		2.0
Lane Grp Cap (vph)		3648	1347	286	3070					1029		836
v/s Ratio Prot		0.13		0.05	c0.34					c0.25		0.19
v/s Ratio Perm			0.07									
v/c Ratio		0.27	0.15	0.60	0.57					0.82		0.64
Uniform Delay, d1		19.6	18.4	56.6	15.3					41.7		38.9
Progression Factor		1.29	5.29	1.20	0.12					1.00		1.00
Incremental Delay, d2		0.2	0.2	1.5	0.5					5.2		1.3
Delay (s)		25.6	97.4	69.4	2.3					46.9		40.2
Level of Service		C	F	E	A					D		D
Approach Delay (s)		46.5			8.3			0.0			44.1	
Approach LOS		D			A			A			D	

Intersection Summary

HCM 2000 Control Delay	30.3	HCM 2000 Level of Service	C	
HCM 2000 Volume to Capacity ratio	0.68			
Actuated Cycle Length (s)	128.0	Sum of lost time (s)	17.0	
Intersection Capacity Utilization	82.6%	ICU Level of Service	E	
Analysis Period (min)	15			

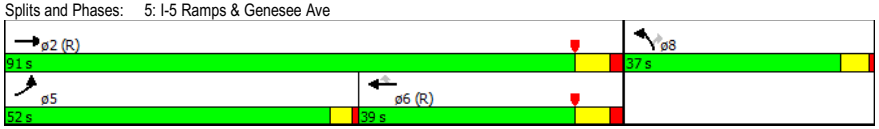
c Critical Lane Group

Lane Group	EBL	EBT	WBT	WBR	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	963	323	1395	837	542	305
Future Volume (vph)	963	323	1395	837	542	305
Turn Type	Prot	NA	NA	Perm	Prot	Perm
Protected Phases	5	2	6		8	
Permitted Phases				6		8
Detector Phase	5	2	6	6	8	8
Switch Phase						
Minimum Initial (s)	11.0	10.0	10.0	10.0	5.0	5.0
Minimum Split (s)	25.2	17.2	17.2	17.2	22.1	22.1
Total Split (s)	52.0	91.0	39.0	39.0	37.0	37.0
Total Split (%)	40.6%	71.1%	30.5%	30.5%	28.9%	28.9%
Yellow Time (s)	3.2	5.2	5.2	5.2	4.1	4.1
All-Red Time (s)	1.0	2.0	2.0	2.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.2	7.2	7.2	7.2	5.1	5.1
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Recall Mode	Min	C-Max	C-Max	C-Max	None	None

Intersection Summary

Cycle Length: 128
Actuated Cycle Length: 128
Offset: 81 (63%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 80
Control Type: Actuated-Coordinated

Splits and Phases: 5: I-5 Ramps & Genesee Ave



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	963	323	0	0	1395	837	542	0	305	0	0	0
Future Volume (vph)	963	323	0	0	1395	837	542	0	305	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	7.2			7.2	7.2	5.1		5.1			
Lane Util. Factor	0.97	0.91			0.81	0.88	0.97		0.88			
Frt	1.00	1.00			1.00	0.85	1.00		0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95		1.00			
Satd. Flow (prot)	3433	5085			7544	2787	3433		2787			
Flt Permitted	0.95	1.00			1.00	1.00	0.95		1.00			
Satd. Flow (perm)	3433	5085			7544	2787	3433		2787			
Peak-hour factor, PHF	0.90	0.90	0.90	0.88	0.88	0.88	0.79	0.79	0.79	0.25	0.25	0.25
Adj. Flow (vph)	1070	359	0	0	1585	951	686	0	386	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	553	0	0	299	0	0	0
Lane Group Flow (vph)	1070	359	0	0	1585	398	686	0	87	0	0	0
Turn Type	Prot	NA			NA	Perm	Prot		Perm			
Protected Phases	5	2			6		8					
Permitted Phases						6			8			
Actuated Green, G (s)	43.8	86.7			38.7	38.7	29.0		29.0			
Effective Green, g (s)	43.8	86.7			38.7	38.7	29.0		29.0			
Actuated g/C Ratio	0.34	0.68			0.30	0.30	0.23		0.23			
Clearance Time (s)	4.2	7.2			7.2	7.2	5.1		5.1			
Vehicle Extension (s)	2.0	2.0			2.0	2.0	2.0		2.0			
Lane Grp Cap (vph)	1174	3444			2280	842	777		631			
v/s Ratio Prot	c0.31	0.07			c0.21		c0.20					
v/s Ratio Perm						0.14			0.03			
v/c Ratio	0.91	0.10			0.70	0.47	0.88		0.14			
Uniform Delay, d1	40.2	7.2			39.4	36.4	47.9		39.5			
Progression Factor	0.96	1.45			0.70	0.40	1.00		1.00			
Incremental Delay, d2	9.8	0.1			1.7	1.8	11.3		0.0			
Delay (s)	48.2	10.4			29.5	16.5	59.1		39.6			
Level of Service	D	B			C	B	E		D			
Approach Delay (s)		38.7			24.6			52.1			0.0	
Approach LOS		D			C			D			A	

Intersection Summary

HCM 2000 Control Delay	34.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	128.0	Sum of lost time (s)	16.5
Intersection Capacity Utilization	82.6%	ICU Level of Service	E
Analysis Period (min)	15		

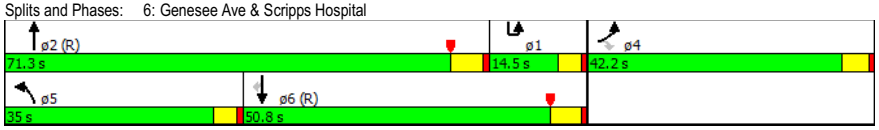
c Critical Lane Group

Lane Group	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	780	773	472	762	31	748	592
Future Volume (vph)	780	773	472	762	31	748	592
Turn Type	Prot	Perm	Prot	NA	Prot	NA	Perm
Protected Phases	4		5	2	1	6	
Permitted Phases		4					6
Detector Phase	4	4	5	2	1	6	6
Switch Phase							
Minimum Initial (s)	7.0	7.0	4.0	10.0	4.0	10.0	10.0
Minimum Split (s)	11.9	11.9	9.5	22.5	9.5	30.5	30.5
Total Split (s)	42.2	42.2	35.0	71.3	14.5	50.8	50.8
Total Split (%)	33.0%	33.0%	27.3%	55.7%	11.3%	39.7%	39.7%
Yellow Time (s)	3.9	3.9	3.4	4.7	3.4	4.7	4.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	4.4	5.7	4.4	5.7	5.7
Lead/Lag			Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?			Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	C-Max	None	C-Max	C-Max

Intersection Summary

Cycle Length: 128
Actuated Cycle Length: 128
Offset: 106 (83%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 6: Genesee Ave & Scripps Hospital



Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	780	773	472	762	31	748	592
Future Volume (vph)	780	773	472	762	31	748	592
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9	4.4	5.7	4.4	5.7	5.7
Lane Util. Factor	0.97	1.00	1.00	0.91	1.00	0.91	1.00
Frt	1.00	0.85	1.00	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	1583	1770	5085	1770	5085	1583
Flt Permitted	0.95	1.00	0.95	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	1583	1770	5085	1770	5085	1583
Peak-hour factor, PHF	0.93	0.93	0.96	0.96	0.92	0.93	0.93
Adj. Flow (vph)	839	831	492	794	34	804	637
RTOR Reduction (vph)	0	359	0	0	0	0	409
Lane Group Flow (vph)	839	472	492	794	34	804	228
Turn Type	Prot	Perm	Prot	NA	Prot	NA	Perm
Protected Phases	4		5	2	1	6	
Permitted Phases		4					6
Actuated Green, G (s)	37.3	37.3	30.6	69.6	6.1	45.1	45.1
Effective Green, g (s)	37.3	37.3	30.6	69.6	6.1	45.1	45.1
Actuated g/C Ratio	0.29	0.29	0.24	0.54	0.05	0.35	0.35
Clearance Time (s)	4.9	4.9	4.4	5.7	4.4	5.7	5.7
Vehicle Extension (s)	2.0	2.0	2.0	5.2	2.0	4.0	4.0
Lane Grp Cap (vph)	1000	461	423	2764	84	1791	557
v/s Ratio Prot	0.24		c0.28	0.16	0.02	c0.16	
v/s Ratio Perm		c0.30					0.14
v/c Ratio	0.84	1.02	1.16	0.29	0.40	0.45	0.41
Uniform Delay, d1	42.5	45.4	48.7	15.8	59.2	31.9	31.4
Progression Factor	1.00	1.00	1.01	1.55	1.03	0.99	1.84
Incremental Delay, d2	6.0	48.4	95.3	0.2	1.2	0.8	2.2
Delay (s)	48.5	93.7	144.4	24.7	61.9	32.4	59.8
Level of Service	D	F	F	C	E	C	E
Approach Delay (s)	71.0			70.5		44.9	
Approach LOS	E			E		D	

Intersection Summary

HCM 2000 Control Delay	62.2	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	128.0	Sum of lost time (s)	15.0
Intersection Capacity Utilization	75.4%	ICU Level of Service	D
Analysis Period (min)	15		

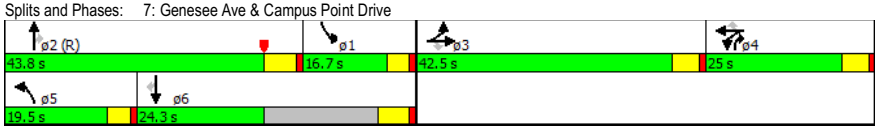
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	257	10	260	159	18	132	315	1015	216	112	1020	296
Future Volume (vph)	257	10	260	159	18	132	315	1015	216	112	1020	296
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	3	3		4	4		5	2	4	1	6	
Permitted Phases			3			4			2			6
Detector Phase	3	3	3	4	4	4	5	2	4	1	6	6
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	4.0	10.0	7.0	4.0	10.0	10.0
Minimum Split (s)	11.9	11.9	11.9	22.5	22.5	22.5	8.4	37.7	22.5	8.4	33.7	33.7
Total Split (s)	42.5	42.5	42.5	25.0	25.0	25.0	19.5	43.8	25.0	16.7	24.3	24.3
Total Split (%)	33.2%	33.2%	33.2%	19.5%	19.5%	19.5%	15.2%	34.2%	19.5%	13.0%	19.0%	19.0%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.9	3.9	3.4	4.7	3.9	3.4	4.7	4.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	4.9	4.9	4.9	4.9	4.4	5.7	4.9	4.4	5.7	5.7
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lag	Lead	Lead	Lag	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	None	None	None	None

Intersection Summary

Cycle Length: 128
Actuated Cycle Length: 128
Offset: 26 (20%), Referenced to phase 2:NBT, Start of Yellow
Natural Cycle: 85
Control Type: Actuated-Coordinated

Splits and Phases: 7: Genesee Ave & Campus Point Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	257	10	260	159	18	132	315	1015	216	112	1020	296
Future Volume (vph)	257	10	260	159	18	132	315	1015	216	112	1020	296
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9	4.9	4.9	4.9	4.9	4.4	5.7	4.9	4.4	5.7	5.7
Lane Util. Factor	0.97	1.00	0.88	0.95	0.95	0.88	0.97	0.91	1.00	0.97	0.91	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	0.96	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	1863	2787	1681	1701	2787	3433	5085	1583	3433	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	0.96	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	1863	2787	1681	1701	2787	3433	5085	1583	3433	5085	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.89	0.89	0.89	0.84	0.84	0.84	0.94	0.94	0.94
Adj. Flow (vph)	279	11	283	179	20	148	375	1208	257	119	1085	315
RTOR Reduction (vph)	0	0	249	0	0	133	0	0	91	0	0	146
Lane Group Flow (vph)	279	11	34	98	101	15	375	1208	166	119	1085	169
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	3	3		4	4		5	2	4	1	6	
Permitted Phases			3			4			2			6
Actuated Green, G (s)	15.4	15.4	15.4	12.7	12.7	12.7	19.3	69.9	82.6	10.1	60.7	60.7
Effective Green, g (s)	15.4	15.4	15.4	12.7	12.7	12.7	19.3	69.9	82.6	10.1	60.7	60.7
Actuated g/C Ratio	0.12	0.12	0.12	0.10	0.10	0.10	0.15	0.55	0.65	0.08	0.47	0.47
Clearance Time (s)	4.9	4.9	4.9	4.9	4.9	4.9	4.4	5.7	4.9	4.4	5.7	5.7
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	3.7	2.0	2.0	4.0	4.0
Lane Grp Cap (vph)	413	224	335	166	168	276	517	2776	1082	270	2411	750
v/s Ratio Prot	c0.08	0.01		0.06	c0.06		c0.11	0.24	0.02	0.03	c0.21	
v/s Ratio Perm			0.01			0.01			0.09			0.11
v/c Ratio	0.68	0.05	0.10	0.59	0.60	0.05	0.73	0.44	0.15	0.44	0.45	0.23
Uniform Delay, d1	53.9	49.8	50.1	55.2	55.2	52.2	51.8	17.3	8.9	56.3	22.5	19.8
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.30	0.95	2.89	0.93	0.79	1.20
Incremental Delay, d2	3.4	0.0	0.0	3.7	4.1	0.0	3.2	0.4	0.0	0.3	0.1	0.1
Delay (s)	57.3	49.9	50.2	58.9	59.3	52.2	70.7	16.8	25.8	52.4	17.9	24.0
Level of Service	E	D	D	E	E	D	E	B	C	D	B	C
Approach Delay (s)		53.7			56.2			29.1			21.8	
Approach LOS		D			E			C			C	

Intersection Summary

HCM 2000 Control Delay	32.0	HCM 2000 Level of Service	C	
HCM 2000 Volume to Capacity ratio	0.55			
Actuated Cycle Length (s)	128.0	Sum of lost time (s)	19.9	
Intersection Capacity Utilization	55.2%	ICU Level of Service	B	
Analysis Period (min)	15			

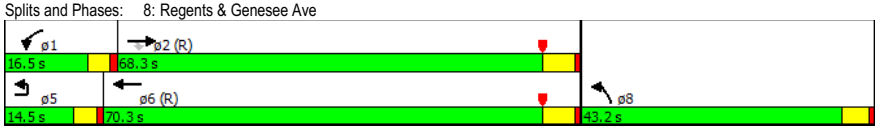
c Critical Lane Group

Lane Group	EBU	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations							
Traffic Volume (vph)	41	1170	175	33	1720	252	17
Future Volume (vph)	41	1170	175	33	1720	252	17
Turn Type	Prot	NA	Perm	Prot	NA	Prot	custom
Protected Phases	5	2		1	6	8	
Permitted Phases			2				
Detector Phase	5	2	2	1	6	8	
Switch Phase							
Minimum Initial (s)	4.0	10.0	10.0	4.0	10.0	7.0	
Minimum Split (s)	9.5	22.7	22.7	9.5	22.5	37.9	
Total Split (s)	14.5	68.3	68.3	16.5	70.3	43.2	
Total Split (%)	11.3%	53.4%	53.4%	12.9%	54.9%	33.8%	
Yellow Time (s)	3.4	4.7	4.7	3.4	4.7	3.9	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.4	5.7	5.7	4.4	5.7	4.9	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		
Recall Mode	None	C-Max	C-Max	None	C-Max	None	

Intersection Summary

Cycle Length: 128
Actuated Cycle Length: 128
Offset: 56 (44%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 100
Control Type: Actuated-Coordinated

Splits and Phases: 8: Regents & Genesee Ave



Movement	EBU	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations							
Traffic Volume (vph)	41	1170	175	33	1720	252	17
Future Volume (vph)	41	1170	175	33	1720	252	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	12	16	12
Total Lost time (s)	4.4	5.7	5.7	4.4	5.7	4.9	4.0
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	1770	5085	1583	1770	5085	2006	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (perm)	1770	5085	1583	1770	5085	2006	1583
Peak-hour factor, PHF	0.92	0.70	0.70	0.72	0.72	0.96	0.96
Adj. Flow (vph)	45	1671	250	46	2389	262	18
RTOR Reduction (vph)	0	0	83	0	0	0	18
Lane Group Flow (vph)	45	1671	167	46	2389	263	0
Turn Type	Prot	NA	Perm	Prot	NA	Prot	custom
Protected Phases	5	2		1	6	8	
Permitted Phases			2				
Actuated Green, G (s)	6.8	84.9	84.9	6.8	84.9	21.3	0.0
Effective Green, g (s)	6.8	84.9	84.9	6.8	84.9	21.3	0.0
Actuated g/C Ratio	0.05	0.66	0.66	0.05	0.66	0.17	0.00
Clearance Time (s)	4.4	5.7	5.7	4.4	5.7	4.9	
Vehicle Extension (s)	2.0	5.0	5.0	2.0	3.9	2.0	
Lane Grp Cap (vph)	94	3372	1049	94	3372	333	0
v/s Ratio Prot	0.03	0.33		c0.03	c0.47	c0.13	
v/s Ratio Perm			0.11				
v/c Ratio	0.48	0.50	0.16	0.49	0.71	0.79	0.00
Uniform Delay, d1	58.9	10.8	8.1	58.9	13.7	51.2	64.0
Progression Factor	1.03	0.52	0.35	1.07	0.87	1.00	1.00
Incremental Delay, d2	1.3	0.5	0.3	1.4	1.3	10.9	0.0
Delay (s)	61.7	6.1	3.1	64.5	13.2	62.1	64.0
Level of Service	E	A	A	E	B	E	E
Approach Delay (s)		7.0			14.2	62.2	
Approach LOS		A			B	E	

Intersection Summary

HCM 2000 Control Delay	14.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	128.0	Sum of lost time (s)	15.0
Intersection Capacity Utilization	56.9%	ICU Level of Service	B
Analysis Period (min)	15		

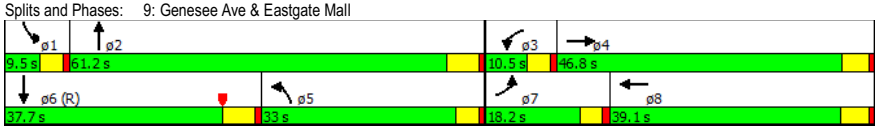
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	165	118	19	127	402	869	37	907
Future Volume (vph)	165	118	19	127	402	869	37	907
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	7	4	3	8	5	2	1	6
Permitted Phases								
Detector Phase	7	4	3	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	4.0	7.0	4.0	7.0	4.0	10.0	4.0	10.0
Minimum Split (s)	8.4	38.9	9.5	39.1	9.5	31.7	9.5	32.7
Total Split (s)	18.2	46.8	10.5	39.1	33.0	61.2	9.5	37.7
Total Split (%)	14.2%	36.6%	8.2%	30.5%	25.8%	47.8%	7.4%	29.5%
Yellow Time (s)	3.4	3.9	3.4	4.1	3.4	4.7	3.4	4.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	4.9	4.4	5.1	4.4	5.7	4.4	5.7
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max

Intersection Summary

Cycle Length: 128
Actuated Cycle Length: 128
Offset: 93 (73%), Referenced to phase 6:SBT, Start of Yellow
Natural Cycle: 145
Control Type: Actuated-Coordinated

Splits and Phases: 9: Genesee Ave & Eastgate Mall



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	165	118	391	19	127	25	402	869	21	37	907	179
Future Volume (vph)	165	118	391	19	127	25	402	869	21	37	907	179
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	5.1		4.4	5.7		4.4	5.7	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.91		0.97	0.91	
Frt	1.00	0.88		1.00	0.98		1.00	1.00		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3131		1770	3451		1770	5067		3433	4960	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	3131		1770	3451		1770	5067		3433	4960	
Peak-hour factor, PHF	0.83	0.83	0.83	0.79	0.79	0.79	0.96	0.96	0.96	0.82	0.82	0.82
Adj. Flow (vph)	199	142	471	24	161	32	419	905	22	45	1106	218
RTOR Reduction (vph)	0	386	0	0	16	0	0	1	0	0	18	0
Lane Group Flow (vph)	199	227	0	24	177	0	419	926	0	45	1306	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Actuated Green, G (s)	13.8	23.0		3.7	12.7		29.4	76.7		5.2	52.5	
Effective Green, g (s)	13.8	23.0		3.7	12.7		29.4	76.7		5.2	52.5	
Actuated g/C Ratio	0.11	0.18		0.03	0.10		0.23	0.60		0.04	0.41	
Clearance Time (s)	4.4	4.9		4.4	5.1		4.4	5.7		4.4	5.7	
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	4.2		2.0	4.3	
Lane Grp Cap (vph)	190	562		51	342		406	3036		139	2034	
v/s Ratio Prot	c0.11	0.07		0.01	c0.05		c0.24	0.18		0.01	c0.26	
v/s Ratio Perm												
v/c Ratio	1.05	0.40		0.47	0.52		1.03	0.30		0.32	0.64	
Uniform Delay, d1	57.1	46.4		61.2	54.7		49.3	12.6		59.7	30.2	
Progression Factor	1.00	1.00		1.00	1.00		0.61	0.21		0.95	0.72	
Incremental Delay, d2	78.3	0.2		2.5	0.6		49.7	0.1		0.4	1.4	
Delay (s)	135.4	46.6		63.7	55.3		79.6	2.8		57.1	23.1	
Level of Service	F	D		E	E		E	A		E	C	
Approach Delay (s)		68.4			56.2			26.7			24.2	
Approach LOS		E			E			C			C	

Intersection Summary

HCM 2000 Control Delay	36.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	128.0	Sum of lost time (s)	19.6
Intersection Capacity Utilization	79.2%	ICU Level of Service	D
Analysis Period (min)	15		

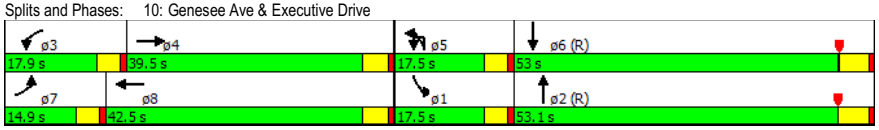
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	19	64	251	80	59	1168	68	1119
Future Volume (vph)	19	64	251	80	59	1168	68	1119
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	7	4	3	8	5	2	1	6
Permitted Phases								
Detector Phase	7	4	3	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	10.0	4.0	10.0
Minimum Split (s)	8.4	8.9	8.4	8.9	8.4	15.5	8.4	15.4
Total Split (s)	14.9	39.5	17.9	42.5	17.5	53.1	17.5	53.0
Total Split (%)	11.6%	30.9%	14.0%	33.2%	13.7%	41.5%	13.7%	41.4%
Yellow Time (s)	3.4	3.9	3.4	3.9	3.4	4.5	3.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	4.9	4.4	4.9	4.4	5.5	4.4	5.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	None	C-Max

Intersection Summary

Cycle Length: 128
Actuated Cycle Length: 128
Offset: 114 (89%), Referenced to phase 6:SBT and 2:NBT, Start of Yellow
Natural Cycle: 60
Control Type: Actuated-Coordinated

Splits and Phases: 10: Genesee Ave & Executive Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	19	64	77	251	80	91	18	59	1168	253	68	1119
Future Volume (vph)	19	64	77	251	80	91	18	59	1168	253	68	1119
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	4.9			4.4	5.5		4.4	5.4
Lane Util. Factor	1.00	0.95		0.97	0.95			1.00	0.91		1.00	0.91
Frt	1.00	0.92		1.00	0.92			1.00	0.97		1.00	1.00
Flt Protected	0.95	1.00		0.95	1.00			0.95	1.00		0.95	1.00
Satd. Flow (prot)	1770	3248		3433	3256			1770	4950		1770	5069
Flt Permitted	0.95	1.00		0.95	1.00			0.95	1.00		0.95	1.00
Satd. Flow (perm)	1770	3248		3433	3256			1770	4950		1770	5069
Peak-hour factor, PHF	0.85	0.85	0.85	0.86	0.86	0.86	0.92	0.80	0.80	0.80	0.94	0.94
Adj. Flow (vph)	22	75	91	292	93	106	20	74	1460	316	72	1190
RTOR Reduction (vph)	0	84	0	0	91	0	0	0	16	0	0	1
Lane Group Flow (vph)	22	82	0	292	108	0	0	94	1760	0	72	1215
Turn Type	Prot	NA		Prot	NA		Prot	Prot	NA		Prot	NA
Protected Phases	7	4		3	8		5	5	2		1	6
Permitted Phases												
Actuated Green, G (s)	4.2	9.3		13.1	18.2			11.1	77.9		8.5	75.4
Effective Green, g (s)	4.2	9.3		13.1	18.2			11.1	77.9		8.5	75.4
Actuated g/C Ratio	0.03	0.07		0.10	0.14			0.09	0.61		0.07	0.59
Clearance Time (s)	4.4	4.9		4.4	4.9			4.4	5.5		4.4	5.4
Vehicle Extension (s)	2.0	2.0		2.0	2.0			2.0	3.6		2.0	3.8
Lane Grp Cap (vph)	58	235		351	462			153	3012		117	2985
v/s Ratio Prot	0.01	c0.03		c0.09	0.03			c0.05	c0.36		0.04	0.24
v/s Ratio Perm												
v/c Ratio	0.38	0.35		0.83	0.23			0.61	0.58		0.62	0.41
Uniform Delay, d1	60.6	56.5		56.4	48.7			56.4	15.2		58.2	14.2
Progression Factor	1.00	1.00		1.00	1.00			1.10	0.55		1.28	0.27
Incremental Delay, d2	1.5	0.3		14.7	0.1			4.4	0.7		5.5	0.3
Delay (s)	62.1	56.8		71.1	48.8			66.3	9.1		80.1	4.2
Level of Service	E	E		E	D			E	A		F	A
Approach Delay (s)		57.4			62.1				12.0			8.5
Approach LOS		E			E				B			A

Intersection Summary

HCM 2000 Control Delay	19.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	128.0	Sum of lost time (s)	19.2
Intersection Capacity Utilization	59.4%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	24
Future Volume (vph)	24
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.94
Adj. Flow (vph)	26
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

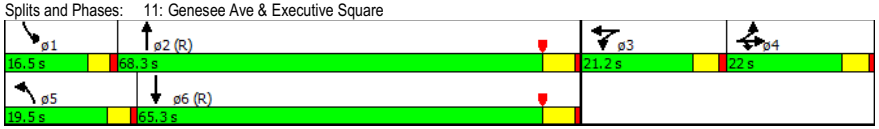
Intersection Summary

Lane Group	EBL	EBT	EBR	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	18	2	108	2	18	86	1472	15	1485
Future Volume (vph)	18	2	108	2	18	86	1472	15	1485
Turn Type	Split	NA	Prot	NA	NA	Prot	NA	Prot	NA
Protected Phases	4	4	4	3		5	2	1	6
Permitted Phases									
Detector Phase	4	4	4	3		5	2	1	6
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	4.0		4.0	10.0	4.0	10.0
Minimum Split (s)	8.9	8.9	8.9	8.9		8.4	15.7	8.4	15.7
Total Split (s)	22.0	22.0	22.0	21.2		19.5	68.3	16.5	65.3
Total Split (%)	17.2%	17.2%	17.2%	16.6%		15.2%	53.4%	12.9%	51.0%
Yellow Time (s)	3.9	3.9	3.9	3.9		3.4	4.7	3.4	4.7
All-Red Time (s)	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	4.9	4.9		4.4	5.7	4.4	5.7
Lead/Lag	Lag	Lag	Lag	Lead		Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None		None	C-Max	None	C-Max

Intersection Summary

Cycle Length: 128
Actuated Cycle Length: 128
Offset: 4 (3%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 65
Control Type: Actuated-Coordinated

Splits and Phases: 11: Genesee Ave & Executive Square



Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	1	18	2	108	242	2	18	86	1472	123	15	1485
Future Volume (vph)	1	18	2	108	242	2	18	86	1472	123	15	1485
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9	4.9	4.9		4.9	4.0	4.4	5.7		4.4	5.7
Lane Util. Factor		0.95	0.91	0.95		0.95	0.95	1.00	0.91		1.00	0.91
Frt		1.00	0.86	0.85		1.00	0.85	1.00	0.99		1.00	1.00
Flt Protected		0.95	1.00	1.00		0.95	1.00	0.95	1.00		0.95	1.00
Satd. Flow (prot)		1681	1456	1504		1685	1504	1770	5026		1770	5077
Flt Permitted		0.59	1.00	1.00		0.95	1.00	0.95	1.00		0.95	1.00
Satd. Flow (perm)		1050	1456	1504		1685	1504	1770	5026		1770	5077
Peak-hour factor, PHF	0.92	0.94	0.94	0.94	0.96	0.96	0.96	0.92	0.92	0.92	0.96	0.96
Adj. Flow (vph)	1	19	2	115	252	2	19	93	1600	134	16	1547
RTOR Reduction (vph)	0	0	48	52	0	0	17	0	7	0	0	1
Lane Group Flow (vph)	0	18	11	8	0	256	0	93	1727	0	16	1563
Turn Type		Split	NA	Prot	Split	NA	NA	Prot	NA		Prot	NA
Protected Phases		4	4	4	3	3		5	2		1	6
Permitted Phases												
Actuated Green, G (s)		17.1	17.1	17.1		16.3	0.0	11.0	71.9		2.8	63.7
Effective Green, g (s)		17.1	17.1	17.1		16.3	0.0	11.0	71.9		2.8	63.7
Actuated g/C Ratio		0.13	0.13	0.13		0.13	0.00	0.09	0.56		0.02	0.50
Clearance Time (s)		4.9	4.9	4.9		4.9		4.4	5.7		4.4	5.7
Vehicle Extension (s)		2.0	2.0	2.0		2.0		2.0	3.9		2.0	2.2
Lane Grp Cap (vph)		140	194	200		214	0	152	2823		38	2526
v/s Ratio Prot			0.01	0.01		c0.15		c0.05	c0.34		0.01	0.31
v/s Ratio Perm		c0.02										
v/c Ratio		0.13	0.06	0.04		1.20	0.00	0.61	0.61		0.42	0.62
Uniform Delay, d1		48.9	48.4	48.3		55.9	64.0	56.4	18.7		61.8	23.3
Progression Factor		1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.24	0.84
Incremental Delay, d2		0.2	0.0	0.0		124.6	0.0	5.0	1.0		2.5	1.0
Delay (s)		49.0	48.5	48.3		180.5	64.0	61.5	19.7		79.0	20.7
Level of Service		D	D	D		F	E	E	B		E	C
Approach Delay (s)			48.5			173.2			21.9			21.3
Approach LOS			D			F			C			C

Intersection Summary			
HCM 2000 Control Delay	33.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	128.0	Sum of lost time (s)	19.9
Intersection Capacity Utilization	67.6%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	16
Future Volume (vph)	16
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.96
Adj. Flow (vph)	17
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

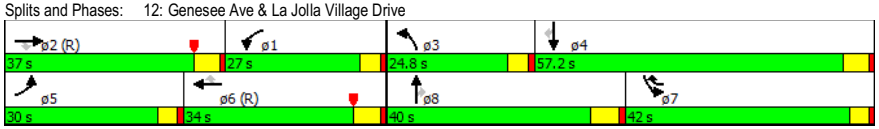
Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	364	393	291	370	676	380	302	943	221	664	831	359
Future Volume (vph)	364	393	291	370	676	380	302	943	221	664	831	359
Turn Type	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6	7	3	8		7	4	
Permitted Phases			2			6			8			4
Detector Phase	5	2	2	1	6	7	3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	4.0	10.0	10.0	4.0	10.0	4.0	4.0	10.0	10.0	4.0	10.0	10.0
Minimum Split (s)	8.4	15.3	15.3	8.4	15.5	8.4	8.4	15.7	15.7	8.4	15.4	15.4
Total Split (s)	30.0	37.0	37.0	27.0	34.0	42.0	24.8	40.0	40.0	42.0	57.2	57.2
Total Split (%)	20.5%	25.3%	25.3%	18.5%	23.3%	28.8%	17.0%	27.4%	27.4%	28.8%	39.2%	39.2%
Yellow Time (s)	3.4	4.3	4.3	3.4	4.5	3.4	3.4	4.7	4.7	3.4	4.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.3	5.3	4.4	5.5	4.4	4.4	5.7	5.7	4.4	5.4	5.4
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lag	Lead	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 146
Actuated Cycle Length: 146
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow, Master Intersection
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 12: Genesee Ave & La Jolla Village Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	364	393	291	370	676	380	302	943	221	664	831	359
Future Volume (vph)	364	393	291	370	676	380	302	943	221	664	831	359
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.3	5.3	4.4	5.5	4.4	4.4	5.7	5.7	4.4	5.4	5.4
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.91	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5085	1583	3433	5085	1583	3433	5085	1583	3433	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5085	1583	3433	5085	1583	3433	5085	1583	3433	5085	1583
Peak-hour factor, PHF	0.80	0.80	0.80	0.87	0.87	0.87	0.94	0.94	0.94	0.93	0.93	0.93
Adj. Flow (vph)	455	491	364	425	777	437	321	1003	235	714	894	386
RTOR Reduction (vph)	0	0	210	0	0	45	0	0	181	0	0	177
Lane Group Flow (vph)	455	491	154	425	777	392	321	1003	54	714	894	209
Turn Type	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6	7	3	8		7	4	
Permitted Phases			2			6			8			4
Actuated Green, G (s)	22.8	35.9	35.9	22.6	35.5	69.5	17.5	33.7	33.7	34.0	50.5	50.5
Effective Green, g (s)	22.8	35.9	35.9	22.6	35.5	69.5	17.5	33.7	33.7	34.0	50.5	50.5
Actuated g/C Ratio	0.16	0.25	0.25	0.15	0.24	0.48	0.12	0.23	0.23	0.23	0.35	0.35
Clearance Time (s)	4.4	5.3	5.3	4.4	5.5	4.4	4.4	5.7	5.7	4.4	5.4	5.4
Vehicle Extension (s)	2.0	6.0	6.0	2.0	5.8	2.0	2.0	3.5	3.5	2.0	4.1	4.1
Lane Grp Cap (vph)	536	1250	389	531	1236	753	411	1173	365	799	1758	547
v/s Ratio Prot	c0.13	0.10		c0.12	c0.15	0.12	0.09	c0.20		c0.21	0.18	
v/s Ratio Perm			0.10			0.13			0.03			0.13
v/c Ratio	0.85	0.39	0.40	0.80	0.63	0.52	0.78	0.86	0.15	0.89	0.51	0.38
Uniform Delay, d1	59.9	46.0	46.0	59.5	49.4	26.6	62.4	53.8	44.7	54.2	37.9	36.0
Progression Factor	0.71	0.75	1.74	0.72	0.68	0.53	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	8.2	0.6	2.1	6.9	2.1	0.3	8.6	6.4	0.2	12.1	0.3	0.6
Delay (s)	50.7	35.2	82.2	49.7	35.8	14.5	71.0	60.2	44.9	66.4	38.2	36.6
Level of Service	D	D	F	D	D	B	E	E	D	E	D	D
Approach Delay (s)		53.6			33.7			60.2			48.0	
Approach LOS		D			C			E			D	

Intersection Summary

HCM 2000 Control Delay	48.4	HCM 2000 Level of Service	D	
HCM 2000 Volume to Capacity ratio	0.82			
Actuated Cycle Length (s)	146.0	Sum of lost time (s)	20.0	
Intersection Capacity Utilization	77.3%	ICU Level of Service	D	
Analysis Period (min)	15			

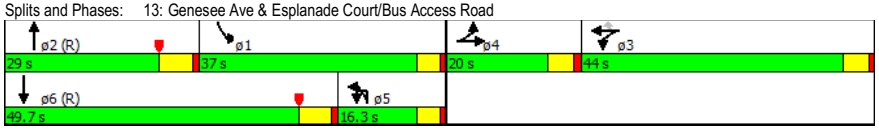
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	247	113	373	141	697	54	398	811	288
Future Volume (vph)	247	113	373	141	697	54	398	811	288
Turn Type	Split	NA	Split	NA	Perm	Prot	NA	Prot	NA
Protected Phases	4	4	3	3		5	2	1	6
Permitted Phases					3				
Detector Phase	4	4	3	3	3	5	2	1	6
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	10.0	4.0	10.0
Minimum Split (s)	8.9	8.9	8.9	8.9	8.9	8.4	16.0	8.4	15.7
Total Split (s)	20.0	20.0	44.0	44.0	44.0	16.3	29.0	37.0	49.7
Total Split (%)	15.4%	15.4%	33.8%	33.8%	33.8%	12.5%	22.3%	28.5%	38.2%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.9	3.4	5.0	3.4	4.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	4.9	4.9	4.9	4.4	6.0	4.4	5.7
Lead/Lag	Lead	Lead	Lag	Lag	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	None	C-Max

Intersection Summary

Cycle Length: 130
Actuated Cycle Length: 130
Offset: 77 (59%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 110
Control Type: Actuated-Coordinated

Splits and Phases: 13: Genesee Ave & Esplanade Court/Bus Access Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	247	113	77	373	141	697	8	54	398	429	811	288
Future Volume (vph)	247	113	77	373	141	697	8	54	398	429	811	288
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9		4.9	4.9	4.9		4.4	6.0		4.4	5.7
Lane Util. Factor	0.97	1.00		0.97	0.95	0.95		1.00	0.91		0.97	0.91
Frt	1.00	0.94		1.00	0.90	0.85		1.00	0.92		1.00	0.95
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.95	1.00		0.95	1.00
Satd. Flow (prot)	3433	1749		3433	1592	1504		1770	4690		3433	4808
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.95	1.00		0.95	1.00
Satd. Flow (perm)	3433	1749		3433	1592	1504		1770	4690		3433	4808
Peak-hour factor, PHF	0.78	0.78	0.78	0.68	0.68	0.68	0.92	0.84	0.84	0.84	0.82	0.82
Adj. Flow (vph)	317	145	99	549	207	1025	9	64	474	511	989	351
RTOR Reduction (vph)	0	19	0	0	56	327	0	0	152	0	0	77
Lane Group Flow (vph)	317	225	0	549	571	278	0	73	833	0	989	474
Turn Type	Split	NA		Split	NA	Perm	Prot	Prot	NA		Prot	NA
Protected Phases	4	4		3	3		5	5	2		1	6
Permitted Phases						3						
Actuated Green, G (s)	15.1	15.1		39.1	39.1	39.1		9.5	22.1		33.5	46.4
Effective Green, g (s)	15.1	15.1		39.1	39.1	39.1		9.5	22.1		33.5	46.4
Actuated g/C Ratio	0.12	0.12		0.30	0.30	0.30		0.07	0.17		0.26	0.36
Clearance Time (s)	4.9	4.9		4.9	4.9	4.9		4.4	6.0		4.4	5.7
Vehicle Extension (s)	2.0	2.0		2.0	2.0	2.0		2.0	3.7		2.0	4.1
Lane Grp Cap (vph)	398	203		1032	478	452		129	797		884	1716
v/s Ratio Prot	0.09	c0.13		0.16	c0.36			0.04	c0.18		c0.29	0.10
v/s Ratio Perm						0.18						
v/c Ratio	0.80	1.11		0.53	1.19	0.61		0.57	1.19dr		1.12	0.28
Uniform Delay, d1	56.0	57.5		37.8	45.5	39.0		58.3	54.0		48.2	29.8
Progression Factor	1.00	1.00		1.00	1.00	1.00		0.71	0.79		1.00	1.00
Incremental Delay, d2	9.9	95.9		0.3	106.6	1.7		2.8	41.6		68.4	0.4
Delay (s)	65.9	153.4		38.1	152.1	40.7		44.0	84.1		116.7	30.2
Level of Service	E	F		D	F	D		D	F		F	C
Approach Delay (s)		103.9			79.1				81.3			85.7
Approach LOS		F			E				F			F

Intersection Summary

HCM 2000 Control Delay	84.5	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.13		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	20.2
Intersection Capacity Utilization	86.0%	ICU Level of Service	E
Analysis Period (min)	15		

dr Defacto Right Lane. Recode with 1 though lane as a right lane.
c Critical Lane Group

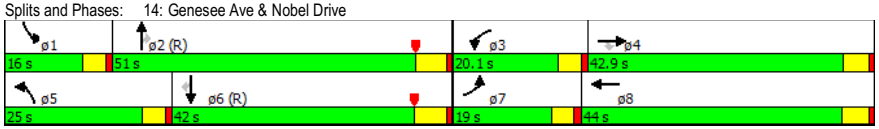
Movement	SBR
Lane Configurations	
Traffic Volume (vph)	164
Future Volume (vph)	164
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.82
Adj. Flow (vph)	200
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	264	573	225	173	665	324	559	175	163	825	143
Future Volume (vph)	264	573	225	173	665	324	559	175	163	825	143
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8	5	2		1	6	
Permitted Phases			4					2			6
Detector Phase	7	4	4	3	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	4.0	10.0	10.0	4.0	10.0	4.0	10.0	10.0	4.0	10.0	10.0
Minimum Split (s)	8.4	37.9	37.9	8.4	40.1	8.4	35.7	35.7	8.4	38.9	38.9
Total Split (s)	19.0	42.9	42.9	20.1	44.0	25.0	51.0	51.0	16.0	42.0	42.0
Total Split (%)	14.6%	33.0%	33.0%	15.5%	33.8%	19.2%	39.2%	39.2%	12.3%	32.3%	32.3%
Yellow Time (s)	3.4	3.9	3.9	3.4	4.1	3.4	4.7	4.7	3.4	4.9	4.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	4.9	4.9	4.4	5.1	4.4	5.7	5.7	4.4	5.9	5.9
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max

Intersection Summary
Cycle Length: 130
Actuated Cycle Length: 130
Offset: 83 (64%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 110
Control Type: Actuated-Coordinated

Splits and Phases: 14: Genesee Ave & Nobel Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	264	573	225	173	665	78	324	559	175	163	825	143
Future Volume (vph)	264	573	225	173	665	78	324	559	175	163	825	143
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9	4.9	4.4	5.1		4.4	5.7	5.7	4.4	5.9	5.9
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95		0.97	0.95	1.00	0.97	0.91	1.00
Frt	1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	3539	1583	3433	3483		3433	3539	1583	3433	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3539	1583	3433	3483		3433	3539	1583	3433	5085	1583
Peak-hour factor, PHF	0.90	0.90	0.90	0.87	0.87	0.87	0.87	0.87	0.87	0.92	0.92	0.92
Adj. Flow (vph)	293	637	250	199	764	90	372	643	201	177	897	155
RTOR Reduction (vph)	0	0	178	0	7	0	0	0	96	0	0	104
Lane Group Flow (vph)	293	637	73	199	847	0	372	643	105	177	897	51
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4						2			6
Actuated Green, G (s)	13.8	37.7	37.7	11.9	35.6		17.8	50.7	50.7	10.3	43.0	43.0
Effective Green, g (s)	13.8	37.7	37.7	11.9	35.6		17.8	50.7	50.7	10.3	43.0	43.0
Actuated g/C Ratio	0.11	0.29	0.29	0.09	0.27		0.14	0.39	0.39	0.08	0.33	0.33
Clearance Time (s)	4.4	4.9	4.9	4.4	5.1		4.4	5.7	5.7	4.4	5.9	5.9
Vehicle Extension (s)	2.0	4.0	4.0	2.0	2.1		2.0	8.0	8.0	2.0	4.0	4.0
Lane Grp Cap (vph)	364	1026	459	314	953		470	1380	617	271	1681	523
v/s Ratio Prot	c0.09	0.18		0.06	c0.24		c0.11	0.18		0.05	c0.18	
v/s Ratio Perm			0.05						0.07			0.03
v/c Ratio	0.80	0.62	0.16	0.63	0.89		0.79	0.47	0.17	0.65	0.53	0.10
Uniform Delay, d1	56.8	40.0	34.3	56.9	45.3		54.3	29.6	25.9	58.1	35.4	30.1
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.19	0.45	0.14	1.23	0.60	0.56
Incremental Delay, d2	11.5	1.3	0.2	3.1	9.9		7.7	1.1	0.6	4.0	1.1	0.3
Delay (s)	68.3	41.3	34.6	60.0	55.2		72.2	14.4	4.3	75.7	22.4	17.3
Level of Service	E	D	C	E	E		E	B	A	E	C	B
Approach Delay (s)		46.6			56.1			30.4			29.4	
Approach LOS		D			E			C			C	

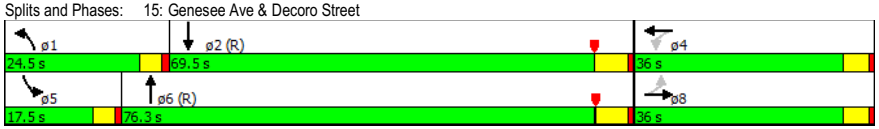
Intersection Summary				
HCM 2000 Control Delay	40.0	HCM 2000 Level of Service	D	
HCM 2000 Volume to Capacity ratio	0.72			
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	19.8	
Intersection Capacity Utilization	70.1%	ICU Level of Service	C	
Analysis Period (min)	15			

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	27	4	4	4	5	887	159	944
Future Volume (vph)	27	4	4	4	5	887	159	944
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		8		4	1	6	5	2
Permitted Phases	8		4					
Detector Phase	8	8	4	4	1	6	5	2
Switch Phase								
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	10.0	4.0	10.0
Minimum Split (s)	8.9	8.9	8.9	8.9	8.4	15.7	8.4	15.9
Total Split (s)	36.0	36.0	36.0	36.0	24.5	76.3	17.5	69.5
Total Split (%)	27.7%	27.7%	27.7%	27.7%	18.8%	58.7%	13.5%	53.5%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.4	4.7	3.4	4.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.9		4.9	4.4	5.7	4.4	5.9
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	None	C-Max

Intersection Summary
Cycle Length: 130
Actuated Cycle Length: 130
Offset: 97 (75%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow
Natural Cycle: 50
Control Type: Actuated-Coordinated

Splits and Phases: 15: Genesee Ave & Decoro Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	27	4	4	4	4	181	5	887	7	159	944	35
Future Volume (vph)	27	4	4	4	4	181	5	887	7	159	944	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9			4.9		4.4	5.7		4.4	5.9	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frt		0.99			0.87		1.00	1.00		1.00	0.99	
Flt Protected		0.96			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1766			1621		1770	3535		1770	3520	
Flt Permitted		0.38			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		706			1610		1770	3535		1770	3520	
Peak-hour factor, PHF	0.73	0.73	0.73	0.88	0.88	0.88	0.91	0.91	0.91	0.96	0.96	0.96
Adj. Flow (vph)	37	5	5	5	5	206	5	975	8	166	983	36
RTOR Reduction (vph)	0	4	0	0	191	0	0	0	0	0	1	0
Lane Group Flow (vph)	0	43	0	0	25	0	5	983	0	166	1018	0
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		8			4		1	6		5	2	
Permitted Phases	8			4								
Actuated Green, G (s)		9.3			9.3		1.2	87.3		18.4	104.3	
Effective Green, g (s)		9.3			9.3		1.2	87.3		18.4	104.3	
Actuated g/C Ratio		0.07			0.07		0.01	0.67		0.14	0.80	
Clearance Time (s)		4.9			4.9		4.4	5.7		4.4	5.9	
Vehicle Extension (s)		2.0			2.0		2.0	4.3		2.0	3.7	
Lane Grp Cap (vph)		50			115		16	2373		250	2824	
v/s Ratio Prot							0.00	c0.28		c0.09	0.29	
v/s Ratio Perm		c0.06			0.02							
v/c Ratio		0.87			0.22		0.31	0.41		0.66	0.36	
Uniform Delay, d1		59.7			56.9		64.0	9.7		52.9	3.6	
Progression Factor		1.00			1.00		0.88	2.02		0.89	1.14	
Incremental Delay, d2		76.6			0.3		3.9	0.5		4.5	0.3	
Delay (s)		136.3			57.3		60.2	20.1		51.5	4.4	
Level of Service		F			E		E	C		D	A	
Approach Delay (s)		136.3			57.3			20.3			11.0	
Approach LOS		F			E			C			B	

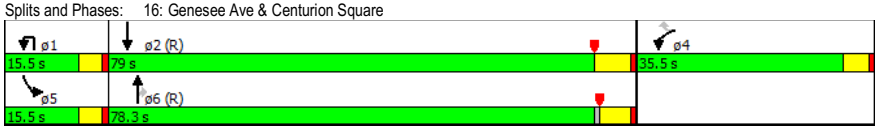
Intersection Summary			
HCM 2000 Control Delay	21.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	15.2
Intersection Capacity Utilization	64.1%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	90	27	2	748	66	66	847
Future Volume (vph)	90	27	2	748	66	66	847
Turn Type	Prot	Perm	Prot	NA	Perm	Prot	NA
Protected Phases	4		1	6		5	2
Permitted Phases		4			6		
Detector Phase	4	4	1	6	6	5	2
Switch Phase							
Minimum Initial (s)	7.0	7.0	4.0	10.0	10.0	4.0	10.0
Minimum Split (s)	11.9	11.9	8.4	15.7	15.7	8.4	16.4
Total Split (s)	35.5	35.5	15.5	78.3	78.3	15.5	79.0
Total Split (%)	27.3%	27.3%	11.9%	60.2%	60.2%	11.9%	60.8%
Yellow Time (s)	3.9	3.9	3.4	4.7	4.7	3.4	5.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	4.4	5.7	5.7	4.4	6.4
Lead/Lag			Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?			Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	C-Max	C-Max	None	C-Max

Intersection Summary
Cycle Length: 130
Actuated Cycle Length: 130
Offset: 37 (28%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow
Natural Cycle: 45
Control Type: Actuated-Coordinated

Splits and Phases: 16: Genesee Ave & Centurion Square



Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	90	27	2	748	66	66	847
Future Volume (vph)	90	27	2	748	66	66	847
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9	4.4	5.7	5.7	4.4	6.4
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	0.97	0.95
Frt	1.00	0.85	1.00	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	1770	3539	1583	3433	3539
Flt Permitted	0.95	1.00	0.95	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	1770	3539	1583	3433	3539
Peak-hour factor, PHF	0.66	0.66	0.92	0.90	0.90	0.94	0.94
Adj. Flow (vph)	136	41	2	831	73	70	901
RTOR Reduction (vph)	0	36	0	0	20	0	0
Lane Group Flow (vph)	136	5	2	831	53	70	901
Turn Type	Prot	Perm	Prot	NA	Perm	Prot	NA
Protected Phases	4		1	6		5	2
Permitted Phases		4			6		
Actuated Green, G (s)	14.4	14.4	1.1	94.5	94.5	6.1	98.8
Effective Green, g (s)	14.4	14.4	1.1	94.5	94.5	6.1	98.8
Actuated g/C Ratio	0.11	0.11	0.01	0.73	0.73	0.05	0.76
Clearance Time (s)	4.9	4.9	4.4	5.7	5.7	4.4	6.4
Vehicle Extension (s)	2.0	2.0	2.0	4.2	4.2	2.0	3.4
Lane Grp Cap (vph)	196	175	14	2572	1150	161	2689
v/s Ratio Prot	c0.08		0.00	0.23		c0.02	c0.25
v/s Ratio Perm		0.00			0.03		
v/c Ratio	0.69	0.03	0.14	0.32	0.05	0.43	0.34
Uniform Delay, d1	55.7	51.5	64.0	6.3	5.0	60.3	5.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.40	0.17
Incremental Delay, d2	8.3	0.0	1.7	0.3	0.1	0.7	0.3
Delay (s)	64.0	51.6	65.7	6.7	5.1	85.0	1.2
Level of Service	E	D	E	A	A	F	A
Approach Delay (s)	61.1			6.7			7.2
Approach LOS	E			A			A

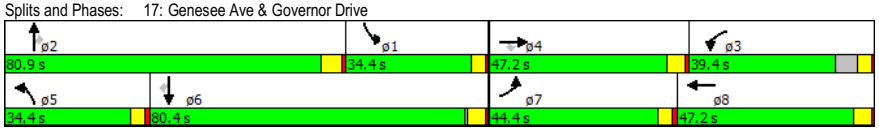
Intersection Summary			
HCM 2000 Control Delay	11.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.39		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	15.7
Intersection Capacity Utilization	43.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	69	173	65	377	142	82	501	308	269	491	52
Future Volume (vph)	69	173	65	377	142	82	501	308	269	491	52
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8	5	2		1	6	
Permitted Phases			4					2			6
Detector Phase	7	4	4	3	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	4.0	8.0	8.0	4.0	8.0	4.0	8.0	8.0	4.0	8.0	8.0
Minimum Split (s)	8.4	13.2	13.2	8.4	13.2	8.4	13.9	13.9	8.4	13.4	13.4
Total Split (s)	44.4	47.2	47.2	39.4	47.2	34.4	80.9	80.9	34.4	80.4	80.4
Total Split (%)	21.5%	22.8%	22.8%	19.0%	22.8%	16.6%	39.1%	39.1%	16.6%	38.9%	38.9%
Yellow Time (s)	3.4	4.2	4.2	3.4	4.2	3.4	4.9	4.9	3.4	4.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.2	5.2	4.4	5.2	4.4	5.9	5.9	4.4	5.4	5.4
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lead	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	Min

Intersection Summary
Cycle Length: 206.9
Actuated Cycle Length: 88.9
Natural Cycle: 60
Control Type: Actuated-Uncoordinated

Splits and Phases: 17: Genesee Ave & Governor Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	69	173	65	377	142	160	82	501	308	269	491	52
Future Volume (vph)	69	173	65	377	142	160	82	501	308	269	491	52
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	16	12	12	12	12	12	12	12
Total Lost time (s)	4.4	5.2	5.2	4.4	5.2		4.4	5.9	5.9	4.4	5.4	5.4
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95		1.00	0.95	1.00	0.97	0.95	1.00
Frt	1.00	1.00	0.85	1.00	0.92		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	3539	1583	3433	3692		1770	3539	1583	3433	3539	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3539	1583	3433	3692		1770	3539	1583	3433	3539	1583
Peak-hour factor, PHF	0.94	0.94	0.94	0.83	0.83	0.83	0.93	0.93	0.93	0.83	0.83	0.83
Adj. Flow (vph)	73	184	69	454	171	193	88	539	331	324	592	63
RTOR Reduction (vph)	0	0	61	0	89	0	0	0	140	0	0	41
Lane Group Flow (vph)	73	184	8	454	275	0	88	539	191	324	592	22
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4						2			6
Actuated Green, G (s)	5.7	10.9	10.9	19.8	25.0		10.2	23.9	23.9	14.9	29.1	29.1
Effective Green, g (s)	5.7	10.9	10.9	19.8	25.0		10.2	23.9	23.9	14.9	29.1	29.1
Actuated g/C Ratio	0.06	0.12	0.12	0.22	0.28		0.11	0.27	0.27	0.17	0.33	0.33
Clearance Time (s)	4.4	5.2	5.2	4.4	5.2		4.4	5.9	5.9	4.4	5.4	5.4
Vehicle Extension (s)	2.0	2.3	2.3	2.0	3.8		2.0	2.9	2.9	2.0	3.5	3.5
Lane Grp Cap (vph)	218	431	193	760	1032		201	946	423	572	1151	515
v/s Ratio Prot	0.02	c0.05		c0.13	0.07		0.05	c0.15		c0.09	0.17	
v/s Ratio Perm			0.01						0.12			0.01
v/c Ratio	0.33	0.43	0.04	0.60	0.27		0.44	0.57	0.45	0.57	0.51	0.04
Uniform Delay, d1	40.0	36.4	34.6	31.2	25.1		36.9	28.3	27.3	34.3	24.4	20.6
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.3	0.4	0.1	0.8	0.2		0.6	0.8	0.7	0.8	0.5	0.0
Delay (s)	40.4	36.8	34.7	32.1	25.2		37.5	29.1	28.0	35.0	24.9	20.7
Level of Service	D	D	C	C	C		D	C	C	D	C	C
Approach Delay (s)		37.1			29.0			29.5			28.0	
Approach LOS		D			C			C			C	

Intersection Summary				
HCM 2000 Control Delay	29.7	HCM 2000 Level of Service	C	
HCM 2000 Volume to Capacity ratio	0.55			
Actuated Cycle Length (s)	89.4	Sum of lost time (s)	19.9	
Intersection Capacity Utilization	55.5%	ICU Level of Service	B	
Analysis Period (min)	15			
c Critical Lane Group				

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	231	155	716	632	248
Future Volume (Veh/h)	0	231	155	716	632	248
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.87	0.87	0.83	0.83	0.87	0.87
Hourly flow rate (vph)	0	266	187	863	726	285
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1532	363	726			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1532	363	726			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	58	79			
cM capacity (veh/h)	84	634	873			

Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	266	187	432	432	363	363	285
Volume Left	0	187	0	0	0	0	0
Volume Right	266	0	0	0	0	0	285
cSH	634	873	1700	1700	1700	1700	1700
Volume to Capacity	0.42	0.21	0.25	0.25	0.21	0.21	0.17
Queue Length 95th (ft)	52	20	0	0	0	0	0
Control Delay (s)	14.7	10.2	0.0	0.0	0.0	0.0	0.0
Lane LOS	B	B					
Approach Delay (s)	14.7	1.8			0.0		
Approach LOS	B						

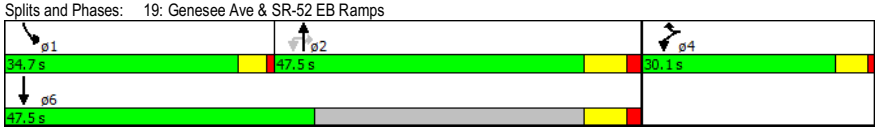
Intersection Summary				
Average Delay	2.5			
Intersection Capacity Utilization	38.4%	ICU Level of Service		A
Analysis Period (min)	15			

Lane Group	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	171	147	2	752	279	525	321
Future Volume (vph)	171	147	2	752	279	525	321
Turn Type	Prot	Prot	Perm	NA	Perm	Prot	NA
Protected Phases	4	4		2		1	6
Permitted Phases			2		2		
Detector Phase	4	4	2	2	2	1	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	13.0	13.0	13.0	5.0	10.0
Minimum Split (s)	37.1	37.1	38.5	38.5	38.5	9.7	25.5
Total Split (s)	30.1	30.1	47.5	47.5	47.5	34.7	47.5
Total Split (%)	26.8%	26.8%	42.3%	42.3%	42.3%	30.9%	42.3%
Yellow Time (s)	4.1	4.1	5.5	5.5	5.5	3.7	5.5
All-Red Time (s)	1.0	1.0	2.0	2.0	2.0	1.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	5.1	5.1		7.5	7.5	4.7	7.5
Lead/Lag			Lag	Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	Yes	
Recall Mode	None	None	Min	Min	Min	None	Min

Intersection Summary

Cycle Length: 112.3
Actuated Cycle Length: 96.9
Natural Cycle: 120
Control Type: Actuated-Uncoordinated

Splits and Phases: 19: Genesee Ave & SR-52 EB Ramps



Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	171	147	2	752	279	525	321
Future Volume (vph)	171	147	2	752	279	525	321
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1		7.5	7.5	4.7	7.5
Lane Util. Factor	1.00	1.00		0.95	1.00	1.00	0.95
Frt	1.00	0.85		1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00		1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583		3539	1583	1770	3539
Flt Permitted	0.95	1.00		0.95	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583		3377	1583	1770	3539
Peak-hour factor, PHF	0.92	0.92	0.92	0.82	0.82	0.90	0.90
Adj. Flow (vph)	186	160	2	917	340	583	357
RTOR Reduction (vph)	0	134	0	0	137	0	0
Lane Group Flow (vph)	186	26	0	919	203	583	357
Turn Type	Prot	Prot	Perm	NA	Perm	Prot	NA
Protected Phases	4	4		2		1	6
Permitted Phases			2		2		
Actuated Green, G (s)	15.6	15.6		33.4	33.4	30.4	68.5
Effective Green, g (s)	15.6	15.6		33.4	33.4	30.4	68.5
Actuated g/C Ratio	0.16	0.16		0.35	0.35	0.31	0.71
Clearance Time (s)	5.1	5.1		7.5	7.5	4.7	7.5
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	285	255		1166	546	556	2506
v/s Ratio Prot	c0.11	0.02				c0.33	0.10
v/s Ratio Perm				c0.27	0.13		
v/c Ratio	0.65	0.10		0.79	0.37	1.05	0.14
Uniform Delay, d1	38.0	34.6		28.5	23.8	33.2	4.6
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	5.3	0.2		3.6	0.4	51.5	0.0
Delay (s)	43.3	34.7		32.1	24.2	84.7	4.6
Level of Service	D	C		C	C	F	A
Approach Delay (s)	39.3			29.9			54.3
Approach LOS	D			C			D

Intersection Summary

HCM 2000 Control Delay	40.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.86		
Actuated Cycle Length (s)	96.7	Sum of lost time (s)	17.3
Intersection Capacity Utilization	76.2%	ICU Level of Service	D
Analysis Period (min)	15		

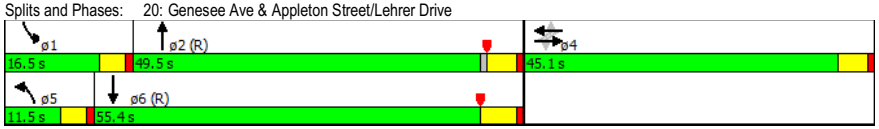
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	261	22	10	14	12	659	72	626
Future Volume (vph)	261	22	10	14	12	659	72	626
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		4	5	2	1	6
Permitted Phases	4		4					
Detector Phase	4	4	4	4	5	2	1	6
Switch Phase								
Minimum Initial (s)	6.0	6.0	6.0	6.0	4.0	10.0	4.0	10.0
Minimum Split (s)	10.9	10.9	10.9	10.9	8.4	14.9	8.4	15.8
Total Split (s)	45.1	45.1	45.1	45.1	11.5	49.5	16.5	55.4
Total Split (%)	40.3%	40.3%	40.3%	40.3%	10.3%	44.2%	14.7%	49.5%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.4	3.9	3.4	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.9		4.9	4.4	4.9	4.4	5.8
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	None	C-Max

Intersection Summary

Cycle Length: 112
Actuated Cycle Length: 112
Offset: 88 (79%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 55
Control Type: Actuated-Coordinated

Splits and Phases: 20: Genesee Ave & Appleton Street/Lehrer Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	261	22	16	10	14	133	12	659	11	72	626	123
Future Volume (vph)	261	22	16	10	14	133	12	659	11	72	626	123
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	16	12	12	16	12	12	12	12	12	12	12
Total Lost time (s)		4.9			4.9		4.4	4.9		4.4	5.8	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frt		0.99			0.89		1.00	1.00		1.00	0.98	
Flt Protected		0.96			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		2008			1864		1770	3531		1770	3452	
Flt Permitted		0.54			0.97		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1142			1806		1770	3531		1770	3452	
Peak-hour factor, PHF	0.75	0.75	0.75	0.73	0.73	0.73	0.90	0.90	0.90	0.91	0.91	0.91
Adj. Flow (vph)	348	29	21	14	19	182	13	732	12	79	688	135
RTOR Reduction (vph)	0	2	0	0	118	0	0	1	0	0	13	0
Lane Group Flow (vph)	0	396	0	0	97	0	13	743	0	79	810	0
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4			4								
Actuated Green, G (s)		39.6			39.6		2.8	49.6		8.6	54.5	
Effective Green, g (s)		39.6			39.6		2.8	49.6		8.6	54.5	
Actuated g/C Ratio		0.35			0.35		0.02	0.44		0.08	0.49	
Clearance Time (s)		4.9			4.9		4.4	4.9		4.4	5.8	
Vehicle Extension (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		403			638		44	1563		135	1679	
v/s Ratio Prot							0.01	0.21		c0.04	c0.23	
v/s Ratio Perm		c0.35			0.05							
v/c Ratio		0.98			0.15		0.30	0.48		0.59	0.48	
Uniform Delay, d1		35.9			24.7		53.6	22.0		50.0	19.3	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		40.0			0.1		3.7	1.0		6.3	1.0	
Delay (s)		75.9			24.8		57.4	23.1		56.3	20.3	
Level of Service		E			C		E	C		E	C	
Approach Delay (s)		75.9			24.8			23.6			23.4	
Approach LOS		E			C			C			C	

Intersection Summary

HCM 2000 Control Delay	32.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	112.0	Sum of lost time (s)	15.1
Intersection Capacity Utilization	67.3%	ICU Level of Service	C
Analysis Period (min)	15		

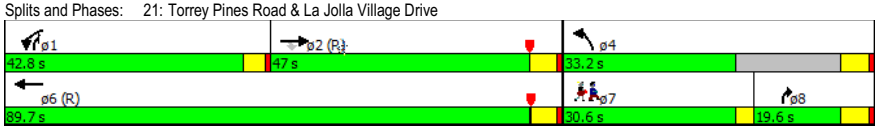
c Critical Lane Group

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	ø7	ø8
Lane Configurations								
Traffic Volume (vph)	791	164	757	720	141	720		
Future Volume (vph)	791	164	757	720	141	720		
Turn Type	NA	Perm	Prot	NA	Prot	pt+ov		
Protected Phases	2		1	6	4	8 1	7	8
Permitted Phases		2						
Detector Phase	2	2	1	6	4	8 1		
Switch Phase								
Minimum Initial (s)	10.0	10.0	4.0	10.0	4.0		4.0	4.0
Minimum Split (s)	15.4	15.4	8.4	15.3	9.6		8.0	9.6
Total Split (s)	47.0	47.0	42.8	89.7	33.2		30.6	19.6
Total Split (%)	33.6%	33.6%	30.6%	64.1%	23.7%		22%	14%
Yellow Time (s)	4.4	4.4	3.4	4.3	4.6		3.0	4.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		0.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0			
Total Lost Time (s)	5.4	5.4	4.4	5.3	5.6			
Lead/Lag	Lag	Lag	Lead				Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes				Yes	Yes
Recall Mode	C-Max	C-Max	None	C-Max	None		None	None

Intersection Summary

Cycle Length: 140
Actuated Cycle Length: 140
Offset: 15 (11%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 65
Control Type: Actuated-Coordinated

Splits and Phases: 21: Torrey Pines Road & La Jolla Village Drive



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	791	164	757	720	141	720
Future Volume (vph)	791	164	757	720	141	720
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.4	5.4	4.4	5.3	5.6	5.6
Lane Util. Factor	0.91	1.00	0.97	0.91	0.97	0.88
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	5085	1583	3433	5085	3433	2787
Flt Permitted	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (perm)	5085	1583	3433	5085	3433	2787
Peak-hour factor, PHF	0.76	0.76	0.91	0.91	0.82	0.82
Adj. Flow (vph)	1041	216	832	791	172	878
RTOR Reduction (vph)	0	128	0	0	0	0
Lane Group Flow (vph)	1041	88	832	791	172	878
Turn Type	NA	Perm	Prot	NA	Prot	pt+ov
Protected Phases	2		1	6	4	8 1
Permitted Phases		2				
Actuated Green, G (s)	55.2	55.2	37.5	97.2	31.9	75.0
Effective Green, g (s)	55.2	55.2	37.5	97.2	31.9	75.0
Actuated g/C Ratio	0.39	0.39	0.27	0.69	0.23	0.54
Clearance Time (s)	5.4	5.4	4.4	5.3	5.6	
Vehicle Extension (s)	5.5	5.5	2.0	8.0	2.0	
Lane Grp Cap (vph)	2004	624	919	3530	782	1493
v/s Ratio Prot	c0.20		c0.24	0.16	0.05	c0.32
v/s Ratio Perm		0.06				
v/c Ratio	0.52	0.14	0.91	0.22	0.22	0.59
Uniform Delay, d1	32.3	27.2	49.5	7.7	43.9	22.0
Progression Factor	1.00	1.00	0.93	0.87	1.00	1.00
Incremental Delay, d2	1.0	0.5	11.5	0.1	0.1	0.4
Delay (s)	33.3	27.7	57.8	6.9	44.0	22.4
Level of Service	C	C	E	A	D	C
Approach Delay (s)	32.3			33.0	25.9	
Approach LOS	C			C	C	

Intersection Summary

HCM 2000 Control Delay	30.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	18.4
Intersection Capacity Utilization	53.7%	ICU Level of Service	A
Analysis Period (min)	15		

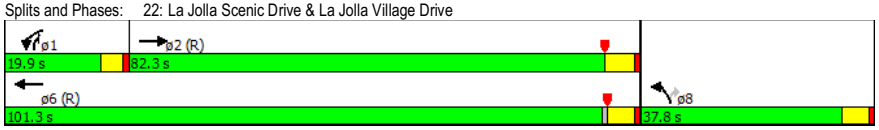
c Critical Lane Group

Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Configurations					
Traffic Volume (vph)	1408	197	1374	103	207
Future Volume (vph)	1408	197	1374	103	207
Turn Type	NA	Prot	NA	Prot	pm+ov
Protected Phases	2	1	6	8	1
Permitted Phases					8
Detector Phase	2	1	6	8	1
Switch Phase					
Minimum Initial (s)	10.0	4.0	10.0	4.0	4.0
Minimum Split (s)	15.7	8.4	15.3	9.5	8.4
Total Split (s)	82.3	19.9	101.3	37.8	19.9
Total Split (%)	58.8%	14.2%	72.4%	27.0%	14.2%
Yellow Time (s)	4.7	3.4	4.3	4.5	3.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.7	4.4	5.3	5.5	4.4
Lead/Lag	Lag	Lead			Lead
Lead-Lag Optimize?	Yes	Yes			Yes
Recall Mode	C-Max	None	C-Max	None	None

Intersection Summary

Cycle Length: 140
Actuated Cycle Length: 140
Offset: 12 (9%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 75
Control Type: Actuated-Coordinated

Splits and Phases: 22: La Jolla Scenic Drive & La Jolla Village Drive



Movement	EBU	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations							
Traffic Volume (vph)	1	1408	87	197	1374	103	207
Future Volume (vph)	1	1408	87	197	1374	103	207
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.7		4.4	5.3	5.5	4.4
Lane Util. Factor		0.91		0.97	0.91	1.00	0.88
Frt		0.99		1.00	1.00	1.00	0.85
Flt Protected		1.00		0.95	1.00	0.95	1.00
Satd. Flow (prot)		5041		3433	5085	1770	2787
Flt Permitted		0.94		0.95	1.00	0.95	1.00
Satd. Flow (perm)		4736		3433	5085	1770	2787
Peak-hour factor, PHF	0.92	0.95	0.95	0.92	0.92	0.88	0.88
Adj. Flow (vph)	1	1482	92	214	1493	117	235
RTOR Reduction (vph)	0	3	0	0	0	0	40
Lane Group Flow (vph)	0	1572	0	214	1493	117	195
Turn Type		NA		Prot	NA	Prot	pm+ov
Protected Phases		2		1	6	8	1
Permitted Phases							8
Actuated Green, G (s)		97.6		13.1	115.5	13.7	26.8
Effective Green, g (s)		97.6		13.1	115.5	13.7	26.8
Actuated g/C Ratio		0.70		0.09	0.82	0.10	0.19
Clearance Time (s)		5.7		4.4	5.3	5.5	4.4
Vehicle Extension (s)		4.0		2.0	5.9	2.0	2.0
Lane Grp Cap (vph)		3301		321	4195	173	533
v/s Ratio Prot				c0.06	0.29	c0.07	0.03
v/s Ratio Perm		c0.33					0.04
v/c Ratio		8.36dr		0.67	0.36	0.68	0.37
Uniform Delay, d1		9.6		61.3	3.0	61.0	49.2
Progression Factor		1.06		1.00	1.00	1.00	1.00
Incremental Delay, d2		0.4		4.0	0.2	8.0	0.2
Delay (s)		10.6		65.4	3.3	69.0	49.4
Level of Service		B		E	A	E	D
Approach Delay (s)		10.6			11.1	55.9	
Approach LOS		B			B	E	

Intersection Summary

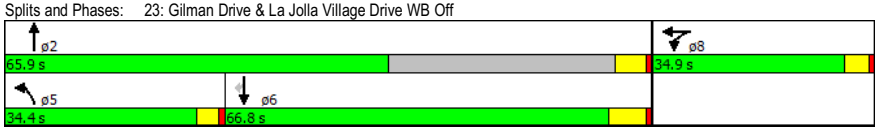
HCM 2000 Control Delay	15.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	15.6
Intersection Capacity Utilization	75.2%	ICU Level of Service	D
Analysis Period (min)	15		

dr Defacto Right Lane. Recode with 1 though lane as a right lane.
c Critical Lane Group

Lane Group	WBT	NBL	NBT	SBT	SBR
Lane Configurations					
Traffic Volume (vph)	0	167	264	254	116
Future Volume (vph)	0	167	264	254	116
Turn Type	NA	Prot	NA	NA	Perm
Protected Phases	8	5	2	6	
Permitted Phases					6
Detector Phase	8	5	2	6	6
Switch Phase					
Minimum Initial (s)	4.0	4.0	10.0	10.0	10.0
Minimum Split (s)	34.9	8.5	17.9	18.8	18.8
Total Split (s)	34.9	34.4	65.9	66.8	66.8
Total Split (%)	25.6%	25.3%	48.4%	49.1%	49.1%
Yellow Time (s)	3.9	3.4	4.9	5.8	5.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.4	5.9	6.8	6.8
Lead/Lag		Lead		Lag	Lag
Lead-Lag Optimize?		Yes		Yes	Yes
Recall Mode	None	None	Min	Min	Min

Intersection Summary
Cycle Length: 136.1
Actuated Cycle Length: 41.1
Natural Cycle: 65
Control Type: Actuated-Uncoordinated

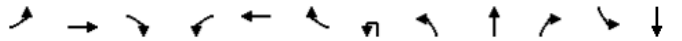
Splits and Phases: 23: Gilman Drive & La Jolla Village Drive WB Off



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	5	0	92	167	264	0	0	254	116
Future Volume (vph)	0	0	0	5	0	92	167	264	0	0	254	116
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.9		4.4	5.9			6.8	6.8
Lane Util. Factor					1.00		1.00	0.95			0.95	1.00
Frt					0.87		1.00	1.00			1.00	0.85
Flt Protected					1.00		0.95	1.00			1.00	1.00
Satd. Flow (prot)					1620		1770	3539			3539	1583
Flt Permitted					1.00		0.95	1.00			1.00	1.00
Satd. Flow (perm)					1620		1770	3539			3539	1583
Peak-hour factor, PHF	0.25	0.25	0.25	0.84	0.84	0.84	0.96	0.96	0.96	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	6	0	110	174	275	0	0	282	129
RTOR Reduction (vph)	0	0	0	0	97	0	0	0	0	0	0	94
Lane Group Flow (vph)	0	0	0	0	19	0	174	275	0	0	282	35
Turn Type				Split	NA		Prot	NA			NA	Perm
Protected Phases				8	8		5	2			6	
Permitted Phases												6
Actuated Green, G (s)					4.9		9.8	26.4			11.3	11.3
Effective Green, g (s)					4.9		9.8	26.4			11.3	11.3
Actuated g/C Ratio					0.12		0.23	0.63			0.27	0.27
Clearance Time (s)					4.9		4.4	5.9			6.8	6.8
Vehicle Extension (s)					3.0		3.0	3.0			3.0	3.0
Lane Grp Cap (vph)					188		412	2219			949	424
v/s Ratio Prot					c0.01		c0.10	0.08			c0.08	
v/s Ratio Perm												0.02
v/c Ratio					0.10		0.42	0.12			0.30	0.08
Uniform Delay, d1					16.6		13.7	3.2			12.2	11.5
Progression Factor					1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2					0.2		0.7	0.0			0.2	0.1
Delay (s)					16.9		14.4	3.2			12.4	11.6
Level of Service					B		B	A			B	B
Approach Delay (s)		0.0			16.9			7.6			12.2	
Approach LOS		A			B			A			B	

Intersection Summary				
HCM 2000 Control Delay	10.6	HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio	0.31			
Actuated Cycle Length (s)	42.1	Sum of lost time (s)	16.1	
Intersection Capacity Utilization	Err%	ICU Level of Service	H	
Analysis Period (min)	15			

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (veh/h)	18	5	329	0	0	226	2	0	414	66	75	210
Future Volume (Veh/h)	18	5	329	0	0	226	2	0	414	66	75	210
Sign Control		Stop			Stop				Free			Free
Grade		0%			0%				0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	20	5	358	0	0	246	0	0	450	72	82	228
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)			13									
Median type									None			None
Median storage veh)												
Upstream signal (ft)												483
pX, platoon unblocked							0.00					
vC, conflicting volume	863	914	114	910	842	225	0	228			522	
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	863	914	114	910	842	225	0	228			522	
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	0.0	4.1			4.1	
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	0.0	2.2			2.2	
p0 queue free %	87	98	61	100	100	68	0	100			92	
cM capacity (veh/h)	160	250	917	130	276	778	0	1337			1041	

Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	378	225	225	72	82	114	114
Volume Left	20	0	0	0	82	0	0
Volume Right	358	0	0	72	0	0	0
cSH	968	1700	1700	1700	1041	1700	1700
Volume to Capacity	0.39	0.13	0.13	0.04	0.08	0.07	0.07
Queue Length 95th (ft)	47	0	0	0	6	0	0
Control Delay (s)	12.4	0.0	0.0	0.0	8.8	0.0	0.0
Lane LOS	B				A		
Approach Delay (s)	Err	0.0			2.3		
Approach LOS	F						

Intersection Summary					
Average Delay	Err				
Intersection Capacity Utilization	Err%	ICU Level of Service		H	
Analysis Period (min)	15				

Movement	SBR
Lane Configurations	
Traffic Volume (veh/h)	0
Future Volume (Veh/h)	0
Sign Control	
Grade	
Peak Hour Factor	0.92
Hourly flow rate (vph)	0
Pedestrians	
Lane Width (ft)	
Walking Speed (ft/s)	
Percent Blockage	
Right turn flare (veh)	
Median type	
Median storage veh)	
Upstream signal (ft)	
pX, platoon unblocked	
vC, conflicting volume	
vC1, stage 1 conf vol	
vC2, stage 2 conf vol	
vCu, unblocked vol	
tC, single (s)	
tC, 2 stage (s)	
tF (s)	
p0 queue free %	
cM capacity (veh/h)	

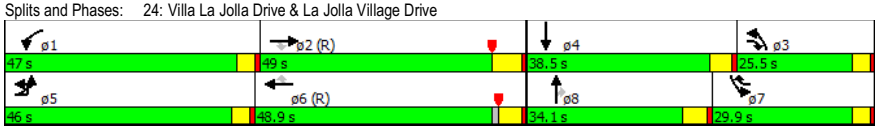
Direction, Lane #

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	68	1019	166	920	948	821	183	1115	654	692	297
Future Volume (vph)	68	1019	166	920	948	821	183	1115	654	692	297
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA
Protected Phases	5	2	3	1	6	7	3	8		7	4
Permitted Phases			2			6			8		
Detector Phase	5	2	3	1	6	7	3	8	8	7	4
Switch Phase											
Minimum Initial (s)	4.0	10.0	4.0	4.0	10.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.4	16.4	22.4	8.4	15.3	8.4	22.4	9.5	9.5	8.4	8.9
Total Split (s)	46.0	49.0	25.5	47.0	48.9	29.9	25.5	34.1	34.1	29.9	38.5
Total Split (%)	28.8%	30.6%	15.9%	29.4%	30.6%	18.7%	15.9%	21.3%	21.3%	18.7%	24.1%
Yellow Time (s)	3.4	5.4	3.4	3.4	4.3	3.4	3.4	4.5	4.5	3.4	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	6.4	4.4	4.4	5.3	4.4	4.4	5.5	5.5	4.4	4.9
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	C-Max	None	None	None	None	None	None

Intersection Summary

Cycle Length: 160
Actuated Cycle Length: 160
Offset: 4 (3%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 24: Villa La Jolla Drive & La Jolla Village Drive



Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	65	68	1019	166	920	948	821	183	1115	654	692	297
Future Volume (vph)	65	68	1019	166	920	948	821	183	1115	654	692	297
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.4	6.4	4.4	4.4	5.3	4.4	4.4	5.5	5.5	4.4	4.9
Lane Util. Factor		1.00	0.91	1.00	0.97	0.91	1.00	0.97	0.95	0.95	0.97	1.00
Frt		1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99	0.85	1.00	0.97
Flt Protected		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)		1770	5085	1583	3433	5085	1583	3433	1755	1504	3433	1812
Flt Permitted		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Satd. Flow (perm)		1770	5085	1583	3433	5085	1583	3433	1755	1504	3433	1812
Peak-hour factor, PHF	0.92	0.93	0.93	0.93	0.95	0.95	0.95	0.89	0.89	0.89	0.88	0.88
Adj. Flow (vph)	71	73	1096	178	968	998	864	206	1253	735	786	338
RTOR Reduction (vph)	0	0	0	34	0	0	186	0	2	131	0	5
Lane Group Flow (vph)	0	144	1096	144	968	998	678	206	1325	530	786	408
Turn Type	Prot	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA
Protected Phases	5	5	2	3	1	6	7	3	8		7	4
Permitted Phases				2			6			8		
Actuated Green, G (s)		17.5	42.6	63.7	42.6	68.8	94.3	21.1	28.6	28.6	25.5	33.6
Effective Green, g (s)		17.5	42.6	63.7	42.6	68.8	94.3	21.1	28.6	28.6	25.5	33.6
Actuated g/C Ratio		0.11	0.27	0.40	0.27	0.43	0.59	0.13	0.18	0.18	0.16	0.21
Clearance Time (s)		4.4	6.4	4.4	4.4	5.3	4.4	4.4	5.5	5.5	4.4	4.9
Vehicle Extension (s)		2.0	4.4	2.0	2.0	4.7	2.0	2.0	3.3	3.3	2.0	2.0
Lane Grp Cap (vph)		193	1353	630	914	2186	932	452	313	268	547	380
v/s Ratio Prot		0.08	c0.22	0.03	c0.28	0.20	0.12	0.06	c0.76		c0.23	0.23
v/s Ratio Perm				0.06			0.31			0.35		
v/c Ratio		0.75	0.81	0.23	1.06	0.46	0.73	0.46	4.23	1.98	1.44	1.07
Uniform Delay, d1		69.1	54.9	31.9	58.7	32.3	23.6	64.1	65.7	65.7	67.2	63.2
Progression Factor		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2		12.8	5.3	0.1	46.7	0.7	2.4	0.3	1463.0	453.8	206.9	67.4
Delay (s)		81.9	60.3	31.9	105.4	33.0	26.1	64.4	1528.7	519.5	274.2	130.6
Level of Service		F	E	C	F	C	C	E	F	F	F	F
Approach Delay (s)			58.9			55.7			1087.1			224.7
Approach LOS			E			E			F			F

Intersection Summary

HCM 2000 Control Delay	379.0	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.70		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	20.7
Intersection Capacity Utilization	154.8%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	66
Future Volume (vph)	66
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.88
Adj. Flow (vph)	75
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

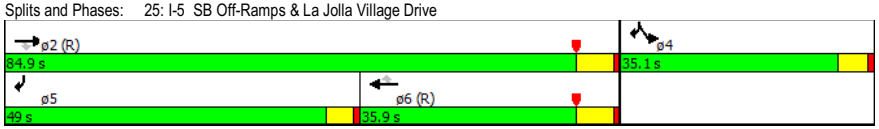
Intersection Summary

Lane Group	EBT	EBR	WBT	WBR	SBL	SBR	ø5
Lane Configurations							
Traffic Volume (vph)	1391	1134	1386	460	749	1181	
Future Volume (vph)	1391	1134	1386	460	749	1181	
Turn Type	NA	Perm	NA	Perm	Prot	custom	
Protected Phases	2		6		4	4 5	5
Permitted Phases		2		6			
Detector Phase	2	2	6	6	4	4 5	
Switch Phase							
Minimum Initial (s)	10.0	10.0	15.0	15.0	5.0		2.0
Minimum Split (s)	16.2	16.2	21.2	21.2	10.1		6.7
Total Split (s)	84.9	84.9	35.9	35.9	35.1		49.0
Total Split (%)	70.8%	70.8%	29.9%	29.9%	29.3%		41%
Yellow Time (s)	5.2	5.2	5.2	5.2	4.1		3.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	6.2	6.2	6.2	6.2	5.1		
Lead/Lag			Lag	Lag			Lead
Lead-Lag Optimize?			Yes	Yes			Yes
Recall Mode	C-Max	C-Max	C-Max	C-Max	Min		None

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 70 (58%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 75
Control Type: Actuated-Coordinated

Splits and Phases: 25: I-5 SB Off-Ramps & La Jolla Village Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1391	1134	0	1386	460	0	0	0	749	0	1181
Future Volume (vph)	0	1391	1134	0	1386	460	0	0	0	749	0	1181
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.2	6.2		6.2	6.2				5.1		5.1
Lane Util. Factor		0.86	1.00		0.91	1.00				0.97		0.88
Frt		1.00	0.85		1.00	0.85				1.00		0.85
Flt Protected		1.00	1.00		1.00	1.00				0.95		1.00
Satd. Flow (prot)		6408	1583		5085	1583				3433		2787
Flt Permitted		1.00	1.00		1.00	1.00				0.95		1.00
Satd. Flow (perm)		6408	1583		5085	1583				3433		2787
Peak-hour factor, PHF	0.92	0.92	0.92	0.80	0.80	0.80	0.25	0.25	0.25	0.88	0.88	0.88
Adj. Flow (vph)	0	1512	1233	0	1732	575	0	0	0	851	0	1342
RTOR Reduction (vph)	0	0	375	0	0	283	0	0	0	0	0	11
Lane Group Flow (vph)	0	1512	858	0	1733	292	0	0	0	851	0	1331
Turn Type		NA	Perm		NA	Perm				Prot		custom
Protected Phases		2			6					4		4 5
Permitted Phases			2			6						
Actuated Green, G (s)		78.7	78.7		34.5	34.5				30.0		74.6
Effective Green, g (s)		78.7	78.7		34.5	34.5				30.0		74.6
Actuated g/C Ratio		0.66	0.66		0.29	0.29				0.25		0.62
Clearance Time (s)		6.2	6.2		6.2	6.2				5.1		
Vehicle Extension (s)		2.0	2.0		2.0	2.0				2.0		
Lane Grp Cap (vph)		4202	1038		1461	455				858		1732
v/s Ratio Prot		0.24			c0.34					c0.25		0.48
v/s Ratio Perm			c0.54			0.18						
v/c Ratio		0.36	0.83		1.19	0.64				0.99		0.77
Uniform Delay, d1		9.3	15.5		42.8	37.4				44.9		16.4
Progression Factor		1.00	1.00		1.02	1.12				1.00		1.00
Incremental Delay, d2		0.2	7.5		90.5	6.3				28.5		1.9
Delay (s)		9.5	23.0		134.0	48.2				73.4		18.3
Level of Service		A	C		F	D				E		B
Approach Delay (s)		15.6			112.7			0.0			39.7	
Approach LOS		B			F			A			D	

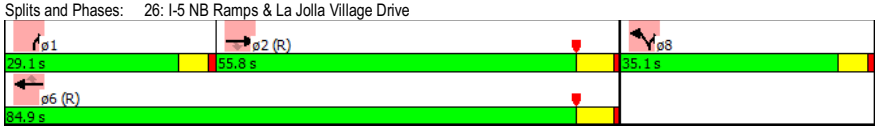
Intersection Summary			
HCM 2000 Control Delay	53.8	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.01		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	77.5%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBT	EBR	WBT	WBR	NBL	NBR	ø1
Lane Configurations							
Traffic Volume (vph)	1303	960	1306	521	431	338	
Future Volume (vph)	1303	960	1306	521	431	338	
Turn Type	NA	Perm	NA	Perm	Prot	custom	
Protected Phases	2		6		8	1 8	1
Permitted Phases		2		6			
Detector Phase	2	2	6	6	8	1 8	
Switch Phase							
Minimum Initial (s)	16.0	16.0	16.0	16.0	5.0		2.0
Minimum Split (s)	36.2	36.2	22.2	22.2	10.1		7.1
Total Split (s)	55.8	55.8	84.9	84.9	35.1		29.1
Total Split (%)	46.5%	46.5%	70.8%	70.8%	29.3%		24%
Yellow Time (s)	5.2	5.2	5.2	5.2	4.1		4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	6.2	6.2	6.2	6.2	5.1		
Lead/Lag	Lag	Lag					Lead
Lead-Lag Optimize?	Yes	Yes					Yes
Recall Mode	C-Max	C-Max	C-Max	C-Max	Min		None

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 75 (63%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 65
Control Type: Actuated-Coordinated

Splits and Phases: 26: I-5 NB Ramps & La Jolla Village Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1303	960	0	1306	521	431	0	338	0	0	0
Future Volume (vph)	0	1303	960	0	1306	521	431	0	338	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.2	6.2		6.2	6.2	5.1		5.1			
Lane Util. Factor		0.91	1.00		0.91	1.00	0.97		0.88			
Frt		1.00	0.85		1.00	0.85	1.00		0.85			
Flt Protected		1.00	1.00		1.00	1.00	0.95		1.00			
Satd. Flow (prot)		5085	1583		5085	1583	3433		2787			
Flt Permitted		1.00	1.00		1.00	1.00	0.95		1.00			
Satd. Flow (perm)		5085	1583		5085	1583	3433		2787			
Peak-hour factor, PHF	0.84	0.84	0.84	0.83	0.83	0.83	0.83	0.83	0.83	0.25	0.25	0.25
Adj. Flow (vph)	0	1551	1143	0	1573	628	519	0	407	0	0	0
RTOR Reduction (vph)	0	0	405	0	0	178	0	0	21	0	0	0
Lane Group Flow (vph)	0	1551	738	0	1573	450	519	0	386	0	0	0
Turn Type		NA	Perm		NA	Perm	Prot		custom			
Protected Phases		2			6		8		1 8			
Permitted Phases			2			6						
Actuated Green, G (s)		75.5	75.5		85.9	85.9	22.8		33.2			
Effective Green, g (s)		75.5	75.5		85.9	85.9	22.8		33.2			
Actuated g/C Ratio		0.63	0.63		0.72	0.72	0.19		0.28			
Clearance Time (s)		6.2	6.2		6.2	6.2	5.1					
Vehicle Extension (s)		2.0	2.0		2.0	2.0	2.0					
Lane Grp Cap (vph)		3199	995		3640	1133	652		771			
v/s Ratio Prot		0.30			0.31		c0.15		c0.14			
v/s Ratio Perm			c0.47			0.28						
v/c Ratio		0.48	0.74		0.43	0.40	0.80		0.50			
Uniform Delay, d1		11.9	15.5		7.0	6.8	46.4		36.4			
Progression Factor		1.06	4.51		1.00	1.00	1.00		1.00			
Incremental Delay, d2		0.5	4.4		0.4	1.0	6.3		0.2			
Delay (s)		13.1	74.2		7.4	7.8	52.6		36.6			
Level of Service		B	E		A	A	D		D			
Approach Delay (s)		39.0			7.5			45.6			0.0	
Approach LOS		D			A			D			A	

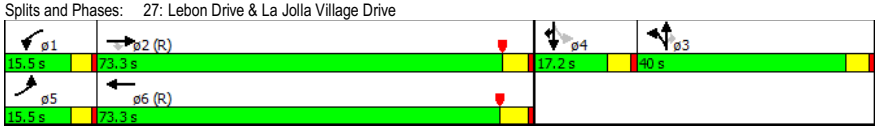
Intersection Summary			
HCM 2000 Control Delay	28.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.4
Intersection Capacity Utilization	64.6%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	4	1420	74	99	1599	185	10	122	7	2	13
Future Volume (vph)	4	1420	74	99	1599	185	10	122	7	2	13
Turn Type	Prot	NA	Perm	Prot	NA	Split	NA	Perm	Perm	NA	Prot
Protected Phases	5	2		1	6	3	3			4	4
Permitted Phases			2					3	4		
Detector Phase	5	2	2	1	6	3	3	3	4	4	4
Switch Phase											
Minimum Initial (s)	4.0	10.0	10.0	4.0	10.0	7.0	7.0	7.0	4.0	4.0	4.0
Minimum Split (s)	8.4	15.3	15.3	8.4	15.7	39.9	39.9	39.9	8.9	8.9	8.9
Total Split (s)	15.5	73.3	73.3	15.5	73.3	40.0	40.0	40.0	17.2	17.2	17.2
Total Split (%)	10.6%	50.2%	50.2%	10.6%	50.2%	27.4%	27.4%	27.4%	11.8%	11.8%	11.8%
Yellow Time (s)	3.4	4.3	4.3	3.4	4.7	3.9	3.9	3.9	3.9	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	4.4	5.3	5.3	4.4	5.7	4.9	4.9	4.9		4.9	4.9
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lag	Lag	Lead	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	None	None	None	None	None	None

Intersection Summary
Cycle Length: 146
Actuated Cycle Length: 146
Offset: 126 (86%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 100
Control Type: Actuated-Coordinated

Splits and Phases: 27: Lebon Drive & La Jolla Village Drive



Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	11	4	1420	74	99	1599	11	185	10	122	7	2
Future Volume (vph)	11	4	1420	74	99	1599	11	185	10	122	7	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.4	5.3	5.3	4.4	5.7		4.9	4.9	4.9		4.9
Lane Util. Factor		1.00	0.91	1.00	0.97	0.91		0.97	0.95	0.95		1.00
Frt		1.00	1.00	0.85	1.00	1.00		1.00	0.87	0.85		1.00
Flt Protected		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00		0.96
Satd. Flow (prot)		1770	5085	1583	3433	5080		3433	1543	1504		1791
Flt Permitted		0.13	1.00	1.00	0.95	1.00		0.95	1.00	1.00		0.57
Satd. Flow (perm)		244	5085	1583	3433	5080		3433	1543	1504		1064
Peak-hour factor, PHF	0.92	0.98	0.98	0.98	0.78	0.78	0.78	0.65	0.65	0.65	0.58	0.58
Adj. Flow (vph)	12	4	1449	76	127	2050	14	285	15	188	12	3
RTOR Reduction (vph)	0	0	0	31	0	1	0	0	74	84	0	0
Lane Group Flow (vph)	0	16	1449	45	127	2063	0	285	29	16	0	15
Turn Type		Prot	NA	Perm	Prot	NA		Split	NA	Perm	Perm	NA
Protected Phases		5	2		1	6		3	3			4
Permitted Phases				2						3	4	
Actuated Green, G (s)		30.5	86.7	86.7	9.8	65.6		23.7	23.7	23.7		6.3
Effective Green, g (s)		30.5	86.7	86.7	9.8	65.6		23.7	23.7	23.7		6.3
Actuated g/C Ratio		0.21	0.59	0.59	0.07	0.45		0.16	0.16	0.16		0.04
Clearance Time (s)		4.4	5.3	5.3	4.4	5.7		4.9	4.9	4.9		4.9
Vehicle Extension (s)		2.0	6.1	6.1	2.0	5.6		6.5	6.5	6.5		2.0
Lane Grp Cap (vph)		50	3019	940	230	2282		557	250	244		45
v/s Ratio Prot			c0.28		c0.04	c0.41		c0.08	0.02			
v/s Ratio Perm		0.07		0.03						0.01		c0.01
v/c Ratio		0.32	0.48	0.05	0.55	0.90		0.51	0.12	0.07		0.33
Uniform Delay, d1		49.0	16.8	12.4	66.0	37.3		55.9	52.2	51.8		67.8
Progression Factor		1.00	1.00	1.00	1.12	0.67		1.00	1.00	1.00		1.00
Incremental Delay, d2		1.3	0.5	0.1	1.2	4.8		2.4	0.7	0.4		1.6
Delay (s)		50.3	17.4	12.5	75.1	30.0		58.2	52.9	52.2		69.4
Level of Service		D	B	B	E	C		E	D	D		E
Approach Delay (s)			17.5			32.6			55.9			67.9
Approach LOS			B			C			E			E

Intersection Summary			
HCM 2000 Control Delay	30.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	146.0	Sum of lost time (s)	19.9
Intersection Capacity Utilization	60.2%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	13
Future Volume (vph)	13
Ideal Flow (vphpl)	1900
Total Lost time (s)	4.9
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1583
Flt Permitted	1.00
Satd. Flow (perm)	1583
Peak-hour factor, PHF	0.58
Adj. Flow (vph)	22
RTOR Reduction (vph)	21
Lane Group Flow (vph)	1
Turn Type	Prot
Protected Phases	4
Permitted Phases	
Actuated Green, G (s)	6.3
Effective Green, g (s)	6.3
Actuated g/C Ratio	0.04
Clearance Time (s)	4.9
Vehicle Extension (s)	2.0
Lane Grp Cap (vph)	68
v/s Ratio Prot	0.00
v/s Ratio Perm	
v/c Ratio	0.01
Uniform Delay, d1	66.9
Progression Factor	1.00
Incremental Delay, d2	0.0
Delay (s)	66.9
Level of Service	E
Approach Delay (s)	
Approach LOS	

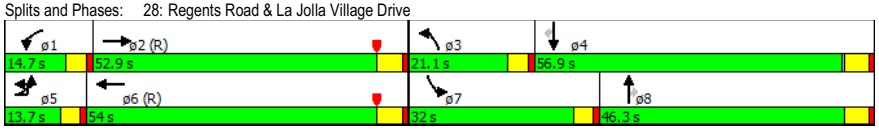
Intersection Summary

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	287	1149	328	943	290	337	207	218	355	320
Future Volume (vph)	287	1149	328	943	290	337	207	218	355	320
Turn Type	Prot	NA	Prot	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2	1	6	3	8		7	4	
Permitted Phases							8			4
Detector Phase	5	2	1	6	3	8	8	7	4	4
Switch Phase										
Minimum Initial (s)	4.0	10.0	4.0	10.0	4.0	10.0	10.0	4.0	10.0	10.0
Minimum Split (s)	8.4	41.3	8.4	35.4	8.4	41.3	41.3	8.4	35.3	35.3
Total Split (s)	13.7	52.9	14.7	54.0	21.1	46.3	46.3	32.0	56.9	56.9
Total Split (%)	9.4%	36.2%	10.1%	37.0%	14.5%	31.7%	31.7%	21.9%	39.0%	39.0%
Yellow Time (s)	3.4	4.3	3.4	4.4	3.4	4.3	4.3	3.4	4.3	4.3
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.3	4.4	5.4	4.4	5.3	5.3	4.4	5.3	5.3
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	None	None	None	None	None

Intersection Summary

Cycle Length: 146
Actuated Cycle Length: 146
Offset: 85 (58%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 120
Control Type: Actuated-Coordinated

Splits and Phases: 28: Regents Road & La Jolla Village Drive



Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	48	287	1149	59	328	943	139	290	337	207	218	355
Future Volume (vph)	48	287	1149	59	328	943	139	290	337	207	218	355
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.4	5.3		4.4	5.4		4.4	5.3	5.3	4.4	5.3
Lane Util. Factor		0.97	0.91		0.97	0.91		0.97	0.95	1.00	1.00	0.95
Frt		1.00	0.99		1.00	0.98		1.00	1.00	0.85	1.00	1.00
Flt Protected		0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)		3433	5048		3433	4987		3433	3539	1583	1770	3539
Flt Permitted		0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (perm)		3433	5048		3433	4987		3433	3539	1583	1770	3539
Peak-hour factor, PHF	0.92	0.98	0.98	0.98	0.82	0.82	0.82	0.88	0.88	0.88	0.77	0.77
Adj. Flow (vph)	52	293	1172	60	400	1150	170	330	383	235	283	461
RTOR Reduction (vph)	0	0	4	0	0	13	0	0	0	139	0	0
Lane Group Flow (vph)	0	345	1228	0	400	1307	0	330	383	96	283	461
Turn Type	Prot	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA
Protected Phases	5	5	2		1	6		3	8		7	4
Permitted Phases										8		
Actuated Green, G (s)		22.0	47.7		23.0	48.6		16.4	29.9	29.9	26.0	39.5
Effective Green, g (s)		22.0	47.7		23.0	48.6		16.4	29.9	29.9	26.0	39.5
Actuated g/C Ratio		0.15	0.33		0.16	0.33		0.11	0.20	0.20	0.18	0.27
Clearance Time (s)		4.4	5.3		4.4	5.4		4.4	5.3	5.3	4.4	5.3
Vehicle Extension (s)		3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)		517	1649		540	1660		385	724	324	315	957
v/s Ratio Prot		0.10	0.24		c0.12	c0.26		0.10	0.11		c0.16	0.13
v/s Ratio Perm										0.06		
v/c Ratio		0.67	0.74		0.74	0.79		0.86	0.53	0.30	0.90	0.48
Uniform Delay, d1		58.5	43.7		58.7	44.0		63.6	51.8	49.1	58.7	44.7
Progression Factor		1.11	1.25		0.97	0.65		1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2		3.0	2.8		4.7	3.3		16.9	0.7	0.5	26.4	0.4
Delay (s)		67.7	57.5		61.7	31.7		80.5	52.5	49.7	85.1	45.0
Level of Service		E	E		E	C		F	D	D	F	D
Approach Delay (s)			59.7			38.7			61.5			61.1
Approach LOS			E			D			E			E

Intersection Summary

HCM 2000 Control Delay	53.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	146.0	Sum of lost time (s)	19.5
Intersection Capacity Utilization	75.2%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	320
Future Volume (vph)	320
Ideal Flow (vphpl)	1900
Total Lost time (s)	5.3
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1583
Flt Permitted	1.00
Satd. Flow (perm)	1583
Peak-hour factor, PHF	0.77
Adj. Flow (vph)	416
RTOR Reduction (vph)	61
Lane Group Flow (vph)	355
Turn Type	Perm
Protected Phases	
Permitted Phases	4
Actuated Green, G (s)	39.5
Effective Green, g (s)	39.5
Actuated g/C Ratio	0.27
Clearance Time (s)	5.3
Vehicle Extension (s)	3.0
Lane Grp Cap (vph)	428
v/s Ratio Prot	
v/s Ratio Perm	c0.22
v/c Ratio	0.83
Uniform Delay, d1	50.1
Progression Factor	1.00
Incremental Delay, d2	12.5
Delay (s)	62.5
Level of Service	E
Approach Delay (s)	
Approach LOS	

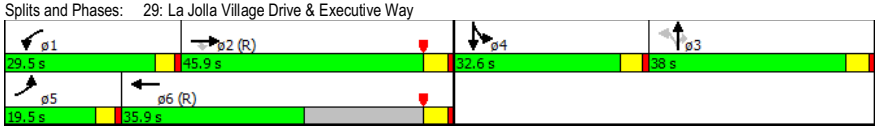
Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	71	654	574	729	672	348	156	550	152	159
Future Volume (vph)	71	654	574	729	672	348	156	550	152	159
Turn Type	Prot	NA	Perm	Prot	NA	Perm	NA	Perm	Split	NA
Protected Phases	5	2		1	6		3		4	4
Permitted Phases			2			3		3		
Detector Phase	5	2	2	1	6	3	3	3	4	4
Switch Phase										
Minimum Initial (s)	4.0	10.0	10.0	4.0	10.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.4	15.3	15.3	8.4	15.3	45.9	45.9	45.9	8.9	8.9
Total Split (s)	19.5	45.9	45.9	29.5	35.9	38.0	38.0	38.0	32.6	32.6
Total Split (%)	13.4%	31.4%	31.4%	20.2%	24.6%	26.0%	26.0%	26.0%	22.3%	22.3%
Yellow Time (s)	3.4	4.3	4.3	3.4	4.3	3.9	3.9	3.9	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.3	5.3	4.4	5.3	4.9	4.9	4.9	4.9	4.9
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lag	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	None	None	None	None	None

Intersection Summary

Cycle Length: 146
Actuated Cycle Length: 146
Offset: 28 (19%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 29: La Jolla Village Drive & Executive Way



Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	4	71	654	574	15	729	672	114	348	156	550	152
Future Volume (vph)	4	71	654	574	15	729	672	114	348	156	550	152
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.4	5.3	5.3		4.4	5.3		4.9	4.9	4.9	4.9
Lane Util. Factor		1.00	0.91	1.00		0.97	0.91		0.95	0.95	1.00	1.00
Frt		1.00	1.00	0.85		1.00	0.98		1.00	1.00	0.85	1.00
Flt Protected		0.95	1.00	1.00		0.95	1.00		0.95	0.98	1.00	0.95
Satd. Flow (prot)		1770	5085	1583		3433	4974		1681	1733	1583	1770
Flt Permitted		0.26	1.00	1.00		0.16	1.00		0.57	0.72	1.00	0.95
Satd. Flow (perm)		493	5085	1583		576	4974		1007	1277	1583	1770
Peak-hour factor, PHF	0.92	0.95	0.95	0.95	0.92	0.84	0.84	0.84	0.88	0.88	0.88	0.80
Adj. Flow (vph)	4	75	688	604	16	868	800	136	395	177	625	190
RTOR Reduction (vph)	0	0	0	436	0	0	16	0	0	0	272	0
Lane Group Flow (vph)	0	79	688	168	0	884	920	0	265	307	353	190
Turn Type		Prot	NA	Perm		Prot	NA		Perm	NA	Perm	Split
Protected Phases		5	2			1	6			3		4
Permitted Phases				2					3		3	
Actuated Green, G (s)		15.1	40.6	40.6		25.1	50.6		37.0	37.0	37.0	23.8
Effective Green, g (s)		15.1	40.6	40.6		25.1	50.6		37.0	37.0	37.0	23.8
Actuated g/C Ratio		0.10	0.28	0.28		0.17	0.35		0.25	0.25	0.25	0.16
Clearance Time (s)		4.4	5.3	5.3		4.4	5.3		4.9	4.9	4.9	4.9
Vehicle Extension (s)		2.0	5.8	5.8		2.0	5.5		2.0	2.0	2.0	6.1
Lane Grp Cap (vph)		50	1414	440		99	1723		255	323	401	288
v/s Ratio Prot			0.14				c0.18					c0.11
v/s Ratio Perm		0.16		0.11		c1.54			c0.26	0.24	0.22	
v/c Ratio		1.58	0.49	0.38		8.93	0.53		1.04	0.95	0.88	0.66
Uniform Delay, d1		65.5	44.0	42.6		60.5	38.2		54.5	53.6	52.4	57.3
Progression Factor		1.00	0.60	5.23		1.00	0.72		1.00	1.00	1.00	1.00
Incremental Delay, d2		324.1	1.0	2.0		3586.3	1.1		67.0	36.7	19.2	8.6
Delay (s)		389.6	27.4	224.7		3646.8	28.7		121.5	90.3	71.6	65.9
Level of Service		F	C	F		F	C		F	F	E	E
Approach Delay (s)			135.2				1786.1			87.4		
Approach LOS			F				F			F		

Intersection Summary			
HCM 2000 Control Delay	732.1	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	2.38		
Actuated Cycle Length (s)	146.0	Sum of lost time (s)	19.5
Intersection Capacity Utilization	92.6%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	159	80
Future Volume (vph)	159	80
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	4.9	
Lane Util. Factor	0.95	
Frt	0.95	
Flt Protected	1.00	
Satd. Flow (prot)	3362	
Flt Permitted	1.00	
Satd. Flow (perm)	3362	
Peak-hour factor, PHF	0.80	0.80
Adj. Flow (vph)	199	100
RTOR Reduction (vph)	44	0
Lane Group Flow (vph)	255	0
Turn Type	NA	
Protected Phases	4	
Permitted Phases		
Actuated Green, G (s)	23.8	
Effective Green, g (s)	23.8	
Actuated g/C Ratio	0.16	
Clearance Time (s)	4.9	
Vehicle Extension (s)	6.1	
Lane Grp Cap (vph)	548	
v/s Ratio Prot	0.08	
v/s Ratio Perm		
v/c Ratio	0.46	
Uniform Delay, d1	55.3	
Progression Factor	1.00	
Incremental Delay, d2	1.8	
Delay (s)	57.1	
Level of Service	E	
Approach Delay (s)	60.5	
Approach LOS	E	

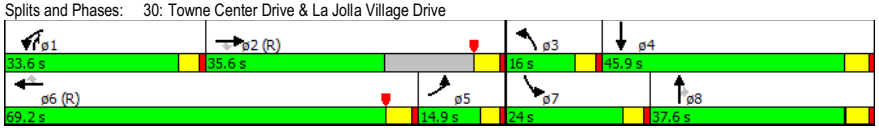
Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	39	1301	80	253	1339	120	100	39	388	540	138
Future Volume (vph)	39	1301	80	253	1339	120	100	39	388	540	138
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA
Protected Phases	5	2		1	6		3	8	1	7	4
Permitted Phases			2			6			8		
Detector Phase	5	2	2	1	6	6	3	8	1	7	4
Switch Phase											
Minimum Initial (s)	4.0	10.0	10.0	4.0	10.0	10.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.4	15.5	15.5	8.4	15.3	15.3	8.4	9.0	8.4	8.4	9.3
Total Split (s)	14.9	35.6	35.6	33.6	69.2	69.2	16.0	37.6	33.6	24.0	45.9
Total Split (%)	10.2%	24.4%	24.4%	23.0%	47.4%	47.4%	11.0%	25.8%	23.0%	16.4%	31.4%
Yellow Time (s)	3.4	4.5	4.5	3.4	4.3	4.3	3.4	4.0	3.4	3.4	4.3
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.5	5.5	4.4	5.3	5.3	4.4	5.0	4.4	4.4	5.3
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lead	Lead	Lag	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	None	None	None	None

Intersection Summary

Cycle Length: 146
Actuated Cycle Length: 146
Offset: 17 (12%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 65
Control Type: Actuated-Coordinated

Splits and Phases: 30: Towne Center Drive & La Jolla Village Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	39	1301	80	253	1339	120	100	39	388	540	138	46
Future Volume (vph)	39	1301	80	253	1339	120	100	39	388	540	138	46
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.5	5.5	4.4	5.3	5.3	4.4	5.0	4.4	4.4	5.3	
Lane Util. Factor	0.97	0.91	1.00	0.97	0.86	0.86	0.97	1.00	0.88	0.97	0.95	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.96	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	3433	5085	1583	3433	4800	1362	3433	1863	2787	3433	3406	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	3433	5085	1583	3433	4800	1362	3433	1863	2787	3433	3406	
Peak-hour factor, PHF	0.96	0.96	0.96	0.85	0.85	0.85	0.90	0.90	0.90	0.92	0.92	0.92
Adj. Flow (vph)	41	1355	83	298	1575	141	111	43	431	587	150	50
RTOR Reduction (vph)	0	0	37	0	0	47	0	0	102	0	27	0
Lane Group Flow (vph)	41	1355	46	298	1589	80	111	43	329	587	173	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	
Protected Phases	5	2		1	6		3	8	1	7	4	
Permitted Phases			2			6			8			
Actuated Green, G (s)	8.4	80.4	80.4	18.6	90.8	90.8	9.8	7.7	26.3	20.0	17.6	
Effective Green, g (s)	8.4	80.4	80.4	18.6	90.8	90.8	9.8	7.7	26.3	20.0	17.6	
Actuated g/C Ratio	0.06	0.55	0.55	0.13	0.62	0.62	0.07	0.05	0.18	0.14	0.12	
Clearance Time (s)	4.4	5.5	5.5	4.4	5.3	5.3	4.4	5.0	4.4	4.4	5.3	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	197	2800	871	437	2985	847	230	98	502	470	410	
v/s Ratio Prot	0.01	c0.27		c0.09	c0.33		0.03	0.02	c0.08	c0.17	0.05	
v/s Ratio Perm			0.03			0.06			0.03			
v/c Ratio	0.21	0.48	0.05	0.68	0.53	0.09	0.48	0.44	0.66	1.25	0.42	
Uniform Delay, d1	65.6	20.1	15.2	60.9	15.6	11.1	65.7	67.1	55.6	63.0	59.5	
Progression Factor	0.80	0.71	0.38	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.4	0.4	0.1	4.4	0.7	0.2	1.6	3.1	3.1	128.7	0.7	
Delay (s)	52.8	14.7	5.8	65.2	16.3	11.3	67.3	70.2	58.7	191.7	60.2	
Level of Service	D	B	A	E	B	B	E	E	E	F	E	
Approach Delay (s)		15.3			23.2			61.2			158.3	
Approach LOS		B			C			E			F	

Intersection Summary

HCM 2000 Control Delay	47.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	146.0	Sum of lost time (s)	19.6
Intersection Capacity Utilization	67.2%	ICU Level of Service	C
Analysis Period (min)	15		

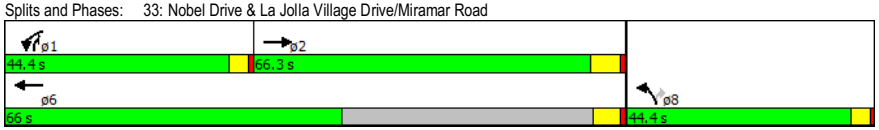
c Critical Lane Group

Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Configurations					
Traffic Volume (vph)	1194	357	1568	68	918
Future Volume (vph)	1194	357	1568	68	918
Turn Type	NA	Prot	NA	Prot	pm+ov
Protected Phases	2	1	6	8	1
Permitted Phases					8
Detector Phase	2	1	6	8	1
Switch Phase					
Minimum Initial (s)	10.0	4.0	10.0	7.0	4.0
Minimum Split (s)	16.3	8.4	16.0	11.4	8.4
Total Split (s)	66.3	44.4	66.0	44.4	44.4
Total Split (%)	42.7%	28.6%	42.6%	28.6%	28.6%
Yellow Time (s)	5.3	3.4	5.0	3.4	3.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.3	4.4	6.0	4.4	4.4
Lead/Lag	Lag	Lead			Lead
Lead-Lag Optimize?	Yes	Yes			Yes
Recall Mode	Min	None	Min	None	None

Intersection Summary

Cycle Length: 155.1
Actuated Cycle Length: 87.6
Natural Cycle: 50
Control Type: Actuated-Uncoordinated

Splits and Phases: 33: Nobel Drive & La Jolla Village Drive/Miramar Road



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1194	60	357	1568	68	918
Future Volume (vph)	1194	60	357	1568	68	918
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.3		4.4	6.0	4.4	4.4
Lane Util. Factor	0.86		0.97	0.86	1.00	0.88
Frt	0.99		1.00	1.00	1.00	0.85
Flt Protected	1.00		0.95	1.00	0.95	1.00
Satd. Flow (prot)	6362		3433	6408	1770	2787
Flt Permitted	1.00		0.95	1.00	0.95	1.00
Satd. Flow (perm)	6362		3433	6408	1770	2787
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.96	0.96
Adj. Flow (vph)	1270	64	380	1668	71	956
RTOR Reduction (vph)	4	0	0	0	0	12
Lane Group Flow (vph)	1330	0	380	1668	71	944
Turn Type	NA		Prot	NA	Prot	pm+ov
Protected Phases	2		1	6	8	1
Permitted Phases						8
Actuated Green, G (s)	35.5		31.0	71.2	6.7	37.7
Effective Green, g (s)	35.5		31.0	71.2	6.7	37.7
Actuated g/C Ratio	0.40		0.35	0.81	0.08	0.43
Clearance Time (s)	6.3		4.4	6.0	4.4	4.4
Vehicle Extension (s)	5.0		2.0	5.4	2.0	2.0
Lane Grp Cap (vph)	2557		1205	5167	134	1328
v/s Ratio Prot	c0.21		0.11	0.26	0.04	c0.25
v/s Ratio Perm						0.09
v/c Ratio	0.52		0.32	0.32	0.53	0.71
Uniform Delay, d1	20.0		20.9	2.2	39.3	20.8
Progression Factor	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	0.4		0.1	0.1	1.7	1.5
Delay (s)	20.3		21.0	2.3	41.0	22.3
Level of Service	C		C	A	D	C
Approach Delay (s)	20.3			5.8	23.6	
Approach LOS	C			A	C	

Intersection Summary

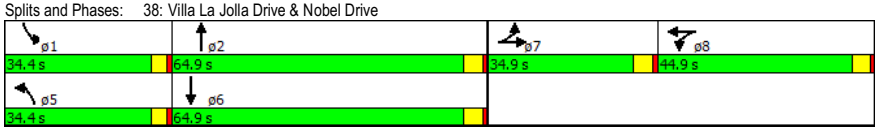
HCM 2000 Control Delay	14.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	88.3	Sum of lost time (s)	15.1
Intersection Capacity Utilization	59.3%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	4	56	2	7	649	335	631
Future Volume (vph)	4	56	2	7	649	335	631
Turn Type	NA	Split	NA	Prot	NA	Prot	NA
Protected Phases	7	8	8	5	2	1	6
Permitted Phases							
Detector Phase	7	8	8	5	2	1	6
Switch Phase							
Minimum Initial (s)	6.0	6.0	6.0	4.0	7.0	6.0	10.0
Minimum Split (s)	10.9	10.9	10.9	8.4	11.9	10.4	14.9
Total Split (s)	34.9	44.9	44.9	34.4	64.9	34.4	64.9
Total Split (%)	19.5%	25.1%	25.1%	19.2%	36.2%	19.2%	36.2%
Yellow Time (s)	3.9	3.9	3.9	3.4	3.9	3.4	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	4.9	4.4	4.9	4.4	4.9
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	Min	None	Min

Intersection Summary
Cycle Length: 179.1
Actuated Cycle Length: 74.7
Natural Cycle: 60
Control Type: Actuated-Uncoordinated

Splits and Phases: 38: Villa La Jolla Drive & Nobel Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	13	4	6	56	2	330	7	649	107	335	631	12
Future Volume (vph)	13	4	6	56	2	330	7	649	107	335	631	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9		4.9	4.9		4.4	4.9		4.4	4.9	
Lane Util. Factor		1.00		0.97	1.00		1.00	0.95		0.97	0.95	
Frt		0.96		1.00	0.85		1.00	0.98		1.00	1.00	
Flt Protected		0.97		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1747		3433	1585		1770	3464		3433	3529	
Flt Permitted		0.97		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1747		3433	1585		1770	3464		3433	3529	
Peak-hour factor, PHF	0.68	0.68	0.68	0.92	0.92	0.92	0.93	0.93	0.93	0.91	0.91	0.91
Adj. Flow (vph)	19	6	9	61	2	359	8	698	115	368	693	13
RTOR Reduction (vph)	0	9	0	0	321	0	0	6	0	0	0	0
Lane Group Flow (vph)	0	25	0	61	40	0	8	807	0	368	706	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	7	7		8	8		5	2		1	6	
Permitted Phases												
Actuated Green, G (s)		3.7		8.5	8.5		0.9	33.7		15.1	47.9	
Effective Green, g (s)		3.7		8.5	8.5		0.9	33.7		15.1	47.9	
Actuated g/C Ratio		0.05		0.11	0.11		0.01	0.42		0.19	0.60	
Clearance Time (s)		4.9		4.9	4.9		4.4	4.9		4.4	4.9	
Vehicle Extension (s)		2.0		2.0	2.0		2.0	4.3		2.0	3.7	
Lane Grp Cap (vph)		80		364	168		19	1457		647	2110	
v/s Ratio Prot		c0.01		0.02	c0.03		0.00	c0.23		c0.11	0.20	
v/s Ratio Perm												
v/c Ratio		0.32		0.17	0.24		0.42	0.55		0.57	0.33	
Uniform Delay, d1		37.0		32.6	32.8		39.3	17.5		29.5	8.1	
Progression Factor		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.8		0.1	0.3		5.4	0.6		0.7	0.1	
Delay (s)		37.8		32.7	33.1		44.7	18.1		30.2	8.2	
Level of Service		D		C	C		D	B		C	A	
Approach Delay (s)		37.8			33.0			18.4			15.8	
Approach LOS		D			C			B			B	

Intersection Summary				
HCM 2000 Control Delay	20.1	HCM 2000 Level of Service	C	
HCM 2000 Volume to Capacity ratio	0.50			
Actuated Cycle Length (s)	80.1	Sum of lost time (s)	19.1	
Intersection Capacity Utilization	63.3%	ICU Level of Service	B	
Analysis Period (min)	15			

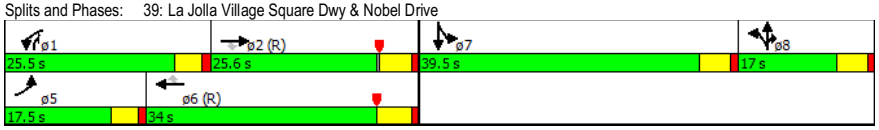
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	29	146	282	1248	119	256	214	166	983	288	176
Future Volume (vph)	29	146	282	1248	119	256	214	166	983	288	176
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Split	NA	pt+ov	Split	NA
Protected Phases	5	2		1	6		8	8	8 1	7	7
Permitted Phases			2			6					
Detector Phase	5	2	2	1	6	6	8	8	8 1	7	7
Switch Phase											
Minimum Initial (s)	4.0	7.0	7.0	4.0	7.0	7.0	8.0	8.0		8.0	8.0
Minimum Split (s)	9.4	12.0	12.0	8.4	12.4	12.4	12.9	12.9		38.9	38.9
Total Split (s)	17.5	25.6	25.6	25.5	34.0	34.0	17.0	17.0		39.5	39.5
Total Split (%)	16.2%	23.7%	23.7%	23.6%	31.5%	31.5%	15.7%	15.7%		36.6%	36.6%
Yellow Time (s)	3.4	4.0	4.0	3.4	4.4	4.4	3.9	3.9		3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	4.4	5.0	5.0	4.4	5.4	5.4	4.9	4.9		4.9	4.9
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lag	Lag		Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	None		None	None

Intersection Summary

Cycle Length: 108
Actuated Cycle Length: 108
Offset: 41 (38%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 39: La Jolla Village Square Dwy & Nobel Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	29	146	282	1248	119	256	214	166	983	288	176	22
Future Volume (vph)	29	146	282	1248	119	256	214	166	983	288	176	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.0	5.0	4.4	5.4	5.4	4.9	4.9	4.9	4.9	4.9	
Lane Util. Factor	1.00	0.95	1.00	0.97	0.95	1.00	0.95	0.95	1.00	0.95	0.95	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.99	1.00	0.95	0.99	
Satd. Flow (prot)	1770	3539	1583	3433	3539	1583	1681	1757	1583	1681	1729	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.99	1.00	0.95	0.99	
Satd. Flow (perm)	1770	3539	1583	3433	3539	1583	1681	1757	1583	1681	1729	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.86	0.86	0.86	0.92	0.92	0.92
Adj. Flow (vph)	31	155	300	1328	127	272	249	193	1143	313	191	24
RTOR Reduction (vph)	0	0	242	0	0	178	0	0	186	0	4	0
Lane Group Flow (vph)	31	155	58	1328	127	94	217	225	957	260	264	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Split	NA	pt+ov	Split	NA	
Protected Phases	5	2		1	6		8	8	8 1	7	7	
Permitted Phases			2			6						
Actuated Green, G (s)	4.5	21.0	21.0	21.1	37.2	37.2	22.6	22.6	48.6	24.1	24.1	
Effective Green, g (s)	4.5	21.0	21.0	21.1	37.2	37.2	22.6	22.6	48.6	24.1	24.1	
Actuated g/C Ratio	0.04	0.19	0.19	0.20	0.34	0.34	0.21	0.21	0.45	0.22	0.22	
Clearance Time (s)	4.4	5.0	5.0	4.4	5.4	5.4	4.9	4.9		4.9	4.9	
Vehicle Extension (s)	2.0	4.1	4.1	2.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)	73	688	307	670	1218	545	351	367	712	375	385	
v/s Ratio Prot	0.02	c0.04		c0.39	0.04		0.13	0.13	c0.60	c0.15	0.15	
v/s Ratio Perm			0.04			0.06						
v/c Ratio	0.42	0.23	0.19	1.98	0.10	0.17	0.62	0.61	1.34	0.69	0.69	
Uniform Delay, d1	50.5	36.6	36.4	43.5	24.1	24.7	38.8	38.7	29.7	38.6	38.5	
Progression Factor	1.00	1.00	1.00	1.14	1.12	2.44	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	1.4	0.8	1.4	446.8	0.2	0.6	3.7	3.5	164.2	5.9	5.4	
Delay (s)	51.9	37.4	37.8	496.3	27.2	60.7	42.5	42.2	193.9	44.4	43.9	
Level of Service	D	D	D	F	C	E	D	D	F	D	D	
Approach Delay (s)		38.5			393.2			151.6			44.2	
Approach LOS		D			F			F			D	

Intersection Summary

HCM 2000 Control Delay	222.2	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.10		
Actuated Cycle Length (s)	108.0	Sum of lost time (s)	19.6
Intersection Capacity Utilization	92.3%	ICU Level of Service	F
Analysis Period (min)	15		

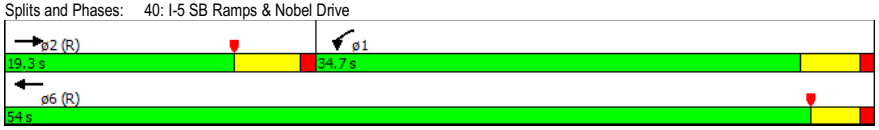
c Critical Lane Group

Lane Group	EBT	WBL	WBT
Lane Configurations			
Traffic Volume (vph)	812	155	1655
Future Volume (vph)	812	155	1655
Turn Type	NA	Prot	NA
Protected Phases	2	1	6
Permitted Phases			
Detector Phase	2	1	6
Switch Phase			
Minimum Initial (s)	13.0	5.0	1.0
Minimum Split (s)	18.1	9.7	22.0
Total Split (s)	19.3	34.7	54.0
Total Split (%)	35.7%	64.3%	100.0%
Yellow Time (s)	4.1	3.7	3.0
All-Red Time (s)	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0
Total Lost Time (s)	5.1	4.7	4.0
Lead/Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	
Recall Mode	C-Max	None	C-Max

Intersection Summary

Cycle Length: 54
Actuated Cycle Length: 54
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 40
Control Type: Actuated-Coordinated

Splits and Phases: 40: I-5 SB Ramps & Nobel Drive



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	812	557	155	1655	0	0
Future Volume (vph)	812	557	155	1655	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1		4.7	4.0		
Lane Util. Factor	0.95		0.97	0.95		
Frt	0.94		1.00	1.00		
Flt Protected	1.00		0.95	1.00		
Satd. Flow (prot)	3323		3433	3539		
Flt Permitted	1.00		0.95	1.00		
Satd. Flow (perm)	3323		3433	3539		
Peak-hour factor, PHF	0.89	0.89	0.98	0.98	0.25	0.25
Adj. Flow (vph)	912	626	158	1689	0	0
RTOR Reduction (vph)	193	0	0	0	0	0
Lane Group Flow (vph)	1345	0	158	1689	0	0
Turn Type	NA		Prot	NA		
Protected Phases	2		1	6		
Permitted Phases						
Actuated Green, G (s)	20.2		24.0	54.0		
Effective Green, g (s)	20.2		24.0	54.0		
Actuated g/C Ratio	0.37		0.44	1.00		
Clearance Time (s)	5.1		4.7	4.0		
Vehicle Extension (s)	3.0		3.0	3.0		
Lane Grp Cap (vph)	1243		1525	3539		
v/s Ratio Prot	c0.40		0.05	c0.48		
v/s Ratio Perm						
v/c Ratio	1.08		0.10	0.48		
Uniform Delay, d1	16.9		8.7	0.0		
Progression Factor	1.35		1.05	1.00		
Incremental Delay, d2	38.4		0.0	0.4		
Delay (s)	61.2		9.2	0.4		
Level of Service	E		A	A		
Approach Delay (s)	61.2			1.2	0.0	
Approach LOS	E			A	A	

Intersection Summary

HCM 2000 Control Delay	28.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	54.0	Sum of lost time (s)	9.8
Intersection Capacity Utilization	52.9%	ICU Level of Service	A
Analysis Period (min)	15		

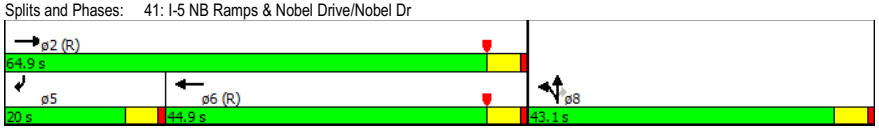
c Critical Lane Group

Lane Group	EBT	WBT	NBL	NBT	NBR	SBR
Lane Configurations						
Traffic Volume (vph)	836	1154	374	47	157	180
Future Volume (vph)	836	1154	374	47	157	180
Turn Type	NA	NA	Split	NA	Perm	Prot
Protected Phases	2	6	8	8		5
Permitted Phases					8	
Detector Phase	2	6	8	8	8	5
Switch Phase						
Minimum Initial (s)	11.0	13.0	5.0	5.0	5.0	5.0
Minimum Split (s)	16.1	18.1	10.1	10.1	10.1	10.0
Total Split (s)	64.9	44.9	43.1	43.1	43.1	20.0
Total Split (%)	60.1%	41.6%	39.9%	39.9%	39.9%	18.5%
Yellow Time (s)	4.1	4.1	4.1	4.1	4.1	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.1	5.1	5.1	5.1	5.1	5.0
Lead/Lag		Lag				Lead
Lead-Lag Optimize?		Yes				Yes
Recall Mode	C-Max	C-Max	Min	Min	Min	None

Intersection Summary

Cycle Length: 108
Actuated Cycle Length: 108
Offset: 67 (62%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 70
Control Type: Actuated-Coordinated

Splits and Phases: 41: I-5 NB Ramps & Nobel Drive/Nobel Dr



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	836	0	0	1154	40	374	47	157	0	0	180
Future Volume (vph)	11	836	0	0	1154	40	374	47	157	0	0	180
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.1			5.1		5.1	5.1	5.1			5.0
Lane Util. Factor		0.95			0.91		0.95	0.95	1.00			1.00
Frt		1.00			0.99		1.00	1.00	0.85			0.86
Flt Protected		1.00			1.00		0.95	0.96	1.00			1.00
Satd. Flow (prot)		3537			5059		1681	1703	1583			1611
Flt Permitted		0.93			1.00		0.95	0.96	1.00			1.00
Satd. Flow (perm)		3293			5059		1681	1703	1583			1611
Peak-hour factor, PHF	0.91	0.91	0.91	0.94	0.94	0.94	0.96	0.96	0.96	0.79	0.79	0.79
Adj. Flow (vph)	12	919	0	0	1228	43	390	49	164	0	0	228
RTOR Reduction (vph)	0	0	0	0	2	0	0	0	100	0	0	117
Lane Group Flow (vph)	0	931	0	0	1269	0	218	221	64	0	0	111
Turn Type		NA			NA		Split	NA	Perm			Prot
Protected Phases		2			6		8	8				5
Permitted Phases									8			
Actuated Green, G (s)		78.5			61.7		19.3	19.3	19.3			11.8
Effective Green, g (s)		78.5			61.7		19.3	19.3	19.3			11.8
Actuated g/C Ratio		0.73			0.57		0.18	0.18	0.18			0.11
Clearance Time (s)		5.1			5.1		5.1	5.1	5.1			5.0
Vehicle Extension (s)		2.0			2.0		2.0	2.0	2.0			2.0
Lane Grp Cap (vph)		2393			2890		300	304	282			176
v/s Ratio Prot					c0.25		0.13	c0.13				c0.07
v/s Ratio Perm		0.28							0.04			
v/c Ratio		0.39			0.44		0.73	0.73	0.23			0.63
Uniform Delay, d1		5.6			13.2		41.9	41.9	38.0			46.0
Progression Factor		1.28			1.03		1.00	1.00	1.00			1.00
Incremental Delay, d2		0.1			0.5		7.2	7.2	0.1			5.4
Delay (s)		7.3			14.1		49.1	49.0	38.1			51.4
Level of Service		A			B		D	D	D			D
Approach Delay (s)		7.3			14.1			46.1			51.4	
Approach LOS		A			B			D			D	

Intersection Summary

HCM 2000 Control Delay	21.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	108.0	Sum of lost time (s)	15.2
Intersection Capacity Utilization	58.6%	ICU Level of Service	B
Analysis Period (min)	15		

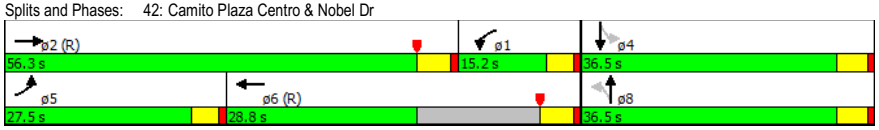
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	95	928	48	1003	56	2	16	2
Future Volume (vph)	95	928	48	1003	56	2	16	2
Turn Type	Prot	NA	Prot	NA	Perm	NA	Perm	NA
Protected Phases	5	2	1	6		8		4
Permitted Phases					8		4	
Detector Phase	5	2	1	6	8	8	4	4
Switch Phase								
Minimum Initial (s)	4.0	10.0	4.0	10.0	6.0	6.0	6.0	6.0
Minimum Split (s)	9.5	25.2	9.5	25.2	36.5	36.5	36.5	36.5
Total Split (s)	27.5	56.3	15.2	28.8	36.5	36.5	36.5	36.5
Total Split (%)	25.5%	52.1%	14.1%	26.7%	33.8%	33.8%	33.8%	33.8%
Yellow Time (s)	3.4	4.2	3.4	4.2	3.9	3.9	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	4.4	5.2	4.4	5.2		4.9		4.9
Lead/Lag	Lead	Lead	Lag	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes				
Recall Mode	None	C-Max	None	C-Max	None	None	None	None

Intersection Summary

Cycle Length: 108
Actuated Cycle Length: 108
Offset: 22 (20%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 75
Control Type: Actuated-Coordinated

Splits and Phases: 42: Camito Plaza Centro & Nobel Dr



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	95	928	52	48	1003	25	56	2	39	16	2	47
Future Volume (vph)	95	928	52	48	1003	25	56	2	39	16	2	47
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.2		4.4	5.2			4.9			4.9	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Frt	1.00	0.99		1.00	1.00			0.95			0.90	
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.99	
Satd. Flow (prot)	1770	5045		1770	5067			1711			1659	
Flt Permitted	0.95	1.00		0.95	1.00			0.78			0.92	
Satd. Flow (perm)	1770	5045		1770	5067			1371			1540	
Peak-hour factor, PHF	0.94	0.94	0.94	0.93	0.93	0.93	0.83	0.83	0.83	0.83	0.83	0.83
Adj. Flow (vph)	101	987	55	52	1078	27	67	2	47	19	2	57
RTOR Reduction (vph)	0	4	0	0	1	0	0	28	0	0	49	0
Lane Group Flow (vph)	101	1038	0	52	1104	0	0	88	0	0	29	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8			4		
Actuated Green, G (s)	11.5	70.5		8.6	67.6			14.4			14.4	
Effective Green, g (s)	11.5	70.5		8.6	67.6			14.4			14.4	
Actuated g/C Ratio	0.11	0.65		0.08	0.63			0.13			0.13	
Clearance Time (s)	4.4	5.2		4.4	5.2			4.9			4.9	
Vehicle Extension (s)	3.0	5.0		3.0	4.5			2.5			2.0	
Lane Grp Cap (vph)	188	3293		140	3171			182			205	
v/s Ratio Prot	c0.06	0.21		0.03	c0.22							
v/s Ratio Perm								c0.06			0.02	
v/c Ratio	0.54	0.32		0.37	0.35			0.48			0.14	
Uniform Delay, d1	45.7	8.2		47.1	9.7			43.4			41.3	
Progression Factor	0.89	1.35		1.00	1.00			1.00			1.00	
Incremental Delay, d2	2.0	0.2		1.7	0.3			1.5			0.1	
Delay (s)	42.8	11.2		48.8	10.0			44.8			41.4	
Level of Service	D	B		D	A			D			D	
Approach Delay (s)		14.0			11.7			44.8			41.4	
Approach LOS		B			B			D			D	

Intersection Summary

HCM 2000 Control Delay	15.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.39		
Actuated Cycle Length (s)	108.0	Sum of lost time (s)	14.5
Intersection Capacity Utilization	49.0%	ICU Level of Service	A
Analysis Period (min)	15		

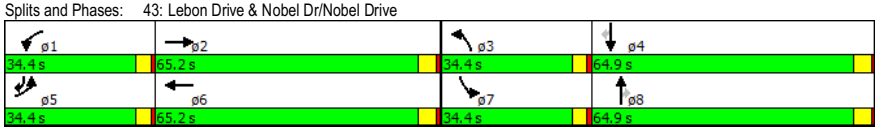
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	106	751	24	744	195	179	61	57	103	127
Future Volume (vph)	106	751	24	744	195	179	61	57	103	127
Turn Type	Prot	NA	Prot	NA	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	5	2	1	6	3	8		7	4	5
Permitted Phases							8			4
Detector Phase	5	2	1	6	3	8	8	7	4	5
Switch Phase										
Minimum Initial (s)	4.0	10.0	4.0	10.0	4.0	8.0	8.0	10.0	10.0	4.0
Minimum Split (s)	8.4	15.2	8.4	15.2	8.4	12.9	12.9	14.4	14.9	8.4
Total Split (s)	34.4	65.2	34.4	65.2	34.4	64.9	64.9	34.4	64.9	34.4
Total Split (%)	17.3%	32.8%	17.3%	32.8%	17.3%	32.6%	32.6%	17.3%	32.6%	17.3%
Yellow Time (s)	3.4	4.2	3.4	4.2	3.4	3.9	3.9	3.4	3.9	3.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.2	4.4	5.2	4.4	4.9	4.9	4.4	4.9	4.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 198.9
Actuated Cycle Length: 76.8
Natural Cycle: 55
Control Type: Actuated-Uncoordinated

Splits and Phases: 43: Lebon Drive & Nobel Dr/Nobel Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	106	751	120	24	744	55	195	179	61	57	103	127
Future Volume (vph)	106	751	120	24	744	55	195	179	61	57	103	127
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.2		4.4	5.2		4.4	4.9	4.9	4.4	4.9	4.4
Lane Util. Factor	0.97	0.91		1.00	0.91		0.97	0.95	1.00	0.97	0.95	1.00
Frt	1.00	0.98		1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	4980		1770	5033		3433	3539	1583	3433	3539	1583
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	4980		1770	5033		3433	3539	1583	3433	3539	1583
Peak-hour factor, PHF	0.91	0.91	0.91	0.89	0.89	0.89	0.94	0.94	0.94	0.79	0.79	0.79
Adj. Flow (vph)	116	825	132	27	836	62	207	190	65	72	130	161
RTOR Reduction (vph)	0	10	0	0	4	0	0	0	51	0	0	56
Lane Group Flow (vph)	116	947	0	27	894	0	207	190	14	72	130	105
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	5	2		1	6		3	8		7	4	5
Permitted Phases									8			4
Actuated Green, G (s)	7.8	32.3		3.8	28.3		10.3	16.9	16.9	7.7	14.3	22.1
Effective Green, g (s)	7.8	32.3		3.8	28.3		10.3	16.9	16.9	7.7	14.3	22.1
Actuated g/C Ratio	0.10	0.41		0.05	0.36		0.13	0.21	0.21	0.10	0.18	0.28
Clearance Time (s)	4.4	5.2		4.4	5.2		4.4	4.9	4.9	4.4	4.9	4.4
Vehicle Extension (s)	2.0	4.5		2.0	4.5		2.0	6.4	6.4	2.0	5.5	2.0
Lane Grp Cap (vph)	336	2020		84	1789		444	751	336	332	635	439
v/s Ratio Prot	c0.03	c0.19		0.02	0.18		c0.06	c0.05		0.02	0.04	0.02
v/s Ratio Perm									0.01			0.04
v/c Ratio	0.35	0.47		0.32	0.50		0.47	0.25	0.04	0.22	0.20	0.24
Uniform Delay, d1	33.5	17.4		36.7	20.1		32.1	26.1	24.9	33.2	27.8	22.3
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2	0.3		0.8	0.4		0.3	0.6	0.2	0.1	0.4	0.1
Delay (s)	33.7	17.7		37.5	20.5		32.4	26.7	25.1	33.3	28.2	22.4
Level of Service	C	B		D	C		C	C	C	C	C	C
Approach Delay (s)		19.4			21.0			29.0			26.6	
Approach LOS		B			C			C			C	

Intersection Summary

HCM 2000 Control Delay	22.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.43		
Actuated Cycle Length (s)	79.6	Sum of lost time (s)	18.9
Intersection Capacity Utilization	51.3%	ICU Level of Service	A
Analysis Period (min)	15		

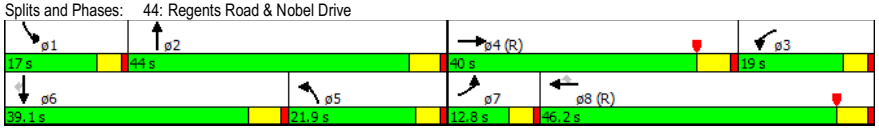
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	106	647	294	675	139	102	641	110	461	175
Future Volume (vph)	106	647	294	675	139	102	641	110	461	175
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Prot	NA	Perm
Protected Phases	7	4	3	8		5	2	1	6	
Permitted Phases					8					6
Detector Phase	7	4	3	8	8	5	2	1	6	6
Switch Phase										
Minimum Initial (s)	4.0	10.0	4.0	10.0	10.0	4.0	10.0	4.0	10.0	10.0
Minimum Split (s)	8.4	37.7	8.4	37.3	37.3	8.4	41.2	8.4	35.5	35.5
Total Split (s)	12.8	40.0	19.0	46.2	46.2	21.9	44.0	17.0	39.1	39.1
Total Split (%)	10.7%	33.3%	15.8%	38.5%	38.5%	18.3%	36.7%	14.2%	32.6%	32.6%
Yellow Time (s)	3.4	4.7	3.4	4.3	4.3	3.4	4.2	3.4	4.5	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.7	4.4	5.3	5.3	4.4	5.2	4.4	5.5	5.5
Lead/Lag	Lead	Lead	Lag	Lag	Lag	Lag	Lag	Lead	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	C-Max	None	Min	None	Min	Min

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 4:EBT and 8:WBT, Start of Yellow
Natural Cycle: 100
Control Type: Actuated-Coordinated

Splits and Phases: 44: Regents Road & Nobel Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	106	647	103	294	675	139	102	641	450	110	461	175
Future Volume (vph)	106	647	103	294	675	139	102	641	450	110	461	175
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.7		4.4	5.3	5.3	4.4	5.2		4.4	5.5	5.5
Lane Util. Factor	0.97	0.91		0.97	0.95	1.00	1.00	0.91		1.00	0.95	1.00
Frt	1.00	0.98		1.00	1.00	0.85	1.00	0.94		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3433	4981		3433	3539	1583	1770	4771		1770	3539	1583
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	3433	4981		3433	3539	1583	1770	4771		1770	3539	1583
Peak-hour factor, PHF	0.91	0.91	0.91	0.94	0.94	0.94	0.74	0.74	0.74	0.95	0.95	0.95
Adj. Flow (vph)	116	711	113	313	718	148	138	866	608	116	485	184
RTOR Reduction (vph)	0	18	0	0	0	97	0	103	0	0	0	123
Lane Group Flow (vph)	116	806	0	313	718	51	138	1371	0	116	485	61
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA		Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8						6
Actuated Green, G (s)	7.7	34.3		14.6	41.6	41.6	23.0	40.4		11.0	28.1	28.1
Effective Green, g (s)	7.7	34.3		14.6	41.6	41.6	23.0	40.4		11.0	28.1	28.1
Actuated g/C Ratio	0.06	0.29		0.12	0.35	0.35	0.19	0.34		0.09	0.23	0.23
Clearance Time (s)	4.4	5.7		4.4	5.3	5.3	4.4	5.2		4.4	5.5	5.5
Vehicle Extension (s)	2.0	4.4		2.0	6.1	6.1	2.0	5.7		2.0	6.2	6.2
Lane Grp Cap (vph)	220	1423		417	1226	548	339	1606		162	828	370
v/s Ratio Prot	0.03	c0.16		c0.09	c0.20		0.08	c0.29		c0.07	0.14	
v/s Ratio Perm						0.03						0.04
v/c Ratio	0.53	0.57		0.75	0.59	0.09	0.41	0.96dr		0.72	0.59	0.17
Uniform Delay, d1	54.4	36.5		50.9	32.1	26.5	42.5	37.0		53.0	40.8	36.6
Progression Factor	1.00	1.00		0.56	0.53	0.44	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	1.1	1.6		4.8	1.5	0.2	0.3	5.2		11.8	2.1	0.6
Delay (s)	55.4	38.2		33.4	18.5	12.0	42.8	42.3		64.8	42.9	37.2
Level of Service	E	D		C	B	B	D	D		E	D	D
Approach Delay (s)		40.3			21.6			42.3			44.8	
Approach LOS		D			C			D			D	

Intersection Summary

HCM 2000 Control Delay	36.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	68.2%	ICU Level of Service	C
Analysis Period (min)	15		

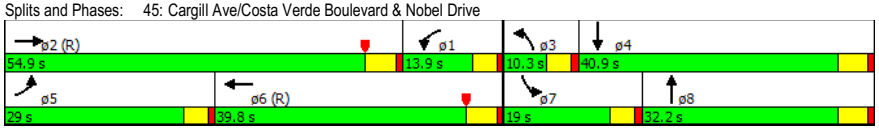
dr Defacto Right Lane. Recode with 1 though lane as a right lane.
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	366	784	54	854	36	60	183	35
Future Volume (vph)	366	784	54	854	36	60	183	35
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	5	2	1	6	3	8	7	4
Permitted Phases								
Detector Phase	5	2	1	6	3	8	7	4
Switch Phase								
Minimum Initial (s)	4.0	25.0	4.0	25.0	4.0	25.0	4.0	25.0
Minimum Split (s)	8.4	32.2	8.4	39.2	8.4	32.2	8.4	39.2
Total Split (s)	29.0	54.9	13.9	39.8	10.3	32.2	19.0	40.9
Total Split (%)	24.2%	45.8%	11.6%	33.2%	8.6%	26.8%	15.8%	34.1%
Yellow Time (s)	3.4	4.2	3.4	4.2	3.4	4.2	3.4	4.2
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.2	4.4	5.2	4.4	5.2	4.4	5.2
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	Max	None	Max

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 120
Control Type: Actuated-Coordinated

Splits and Phases: 45: Cargill Ave/Costa Verde Boulevard & Nobel Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	366	784	52	54	854	163	36	60	44	183	35	217
Future Volume (vph)	366	784	52	54	854	163	36	60	44	183	35	217
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.2		4.4	5.2		4.4	5.2		4.4	5.2	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	1.00		1.00	1.00	
Frt	1.00	0.99		1.00	0.98		1.00	0.94		1.00	0.87	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	5038		1770	4963		1770	1745		1770	1622	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	5038		1770	4963		1770	1745		1770	1622	
Peak-hour factor, PHF	0.91	0.91	0.91	0.92	0.92	0.92	0.73	0.73	0.73	0.81	0.81	0.81
Adj. Flow (vph)	402	862	57	59	928	177	49	82	60	226	43	268
RTOR Reduction (vph)	0	6	0	0	24	0	0	21	0	0	182	0
Lane Group Flow (vph)	402	913	0	59	1081	0	49	121	0	226	129	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases												
Actuated Green, G (s)	24.6	50.7		7.6	33.7		4.7	27.9		14.6	37.8	
Effective Green, g (s)	24.6	50.7		7.6	33.7		4.7	27.9		14.6	37.8	
Actuated g/C Ratio	0.21	0.42		0.06	0.28		0.04	0.23		0.12	0.31	
Clearance Time (s)	4.4	5.2		4.4	5.2		4.4	5.2		4.4	5.2	
Vehicle Extension (s)	2.0	4.5		2.0	4.5		2.0	4.5		2.0	4.5	
Lane Grp Cap (vph)	362	2128		112	1393		69	405		215	510	
v/s Ratio Prot	c0.23	0.18		0.03	c0.22		0.03	c0.07		c0.13	0.08	
v/s Ratio Perm												
v/c Ratio	1.11	0.43		0.53	0.78		0.71	0.30		1.05	0.25	
Uniform Delay, d1	47.7	24.4		54.5	39.7		57.0	38.0		52.7	30.6	
Progression Factor	1.11	0.47		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	73.5	0.4		2.1	4.3		24.7	1.9		75.5	1.2	
Delay (s)	126.5	11.9		56.5	44.0		81.7	39.8		128.2	31.8	
Level of Service	F	B		E	D		F	D		F	C	
Approach Delay (s)		46.8			44.6			50.6			72.4	
Approach LOS		D			D			D			E	

Intersection Summary

HCM 2000 Control Delay	50.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	19.2
Intersection Capacity Utilization	83.4%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	304	877	12	758	6	0	147	4
Future Volume (vph)	304	877	12	758	6	0	147	4
Turn Type	Prot	NA	Prot	NA	Perm	NA	Perm	NA
Protected Phases	5	2	1	6		8		4
Permitted Phases					8		4	
Detector Phase	5	2	1	6	8	8	4	4
Switch Phase								
Minimum Initial (s)	4.0	7.0	4.0	7.0	4.0	4.0	4.0	4.0
Minimum Split (s)	9.5	19.0	9.5	28.9	32.9	32.9	32.9	32.9
Total Split (s)	34.4	65.0	34.4	64.9	44.9	44.9	44.9	44.9
Total Split (%)	23.8%	45.0%	23.8%	45.0%	31.1%	31.1%	31.1%	31.1%
Yellow Time (s)	3.4	4.0	3.4	3.9	3.9	3.9	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.4	5.0	4.4	4.9		4.9	4.9	4.9
Lead/Lag	Lead	Lag	Lead	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes				
Recall Mode	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 144.3
Actuated Cycle Length: 101
Natural Cycle: 90
Control Type: Actuated-Uncoordinated

Splits and Phases: 46: Lombard Place & Nobel Drive

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	304	877	9	12	758	164	6	0	10	147	4	241
Future Volume (vph)	304	877	9	12	758	164	6	0	10	147	4	241
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.0		4.4	4.9			4.9		4.9	4.9	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00		1.00	1.00	
Frt	1.00	1.00		1.00	0.97			0.92		1.00	0.85	
Flt Protected	0.95	1.00		0.95	1.00			0.98		0.95	1.00	
Satd. Flow (prot)	1770	3534		1770	3445			1675		1770	1588	
Flt Permitted	0.95	1.00		0.95	1.00			0.72		0.74	1.00	
Satd. Flow (perm)	1770	3534		1770	3445			1230		1385	1588	
Peak-hour factor, PHF	0.95	0.95	0.95	0.93	0.93	0.93	0.75	0.75	0.75	0.76	0.76	0.76
Adj. Flow (vph)	320	923	9	13	815	176	8	0	13	193	5	317
RTOR Reduction (vph)	0	0	0	0	13	0	0	17	0	0	255	0
Lane Group Flow (vph)	320	932	0	13	978	0	0	4	0	193	67	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8			4		
Actuated Green, G (s)	25.0	66.5		2.4	44.0			20.1		20.1	20.1	
Effective Green, g (s)	25.0	66.5		2.4	44.0			20.1		20.1	20.1	
Actuated g/C Ratio	0.24	0.64		0.02	0.43			0.19		0.19	0.19	
Clearance Time (s)	4.4	5.0		4.4	4.9			4.9		4.9	4.9	
Vehicle Extension (s)	3.0	3.7		3.0	4.4			2.0		2.0	2.0	
Lane Grp Cap (vph)	428	2275		41	1467			239		269	308	
v/s Ratio Prot	c0.18	0.26		0.01	c0.28						0.04	
v/s Ratio Perm								0.00		c0.14		
v/c Ratio	0.75	0.41		0.32	0.67			0.02		0.72	0.22	
Uniform Delay, d1	36.2	8.9		49.6	23.8			33.6		38.9	35.0	
Progression Factor	1.00	1.00		1.00	1.00			1.00		1.00	1.00	
Incremental Delay, d2	7.0	0.2		4.4	1.4			0.0		7.4	0.1	
Delay (s)	43.2	9.1		54.1	25.1			33.6		46.3	35.1	
Level of Service	D	A		D	C			C		D	D	
Approach Delay (s)		17.8			25.5			33.6			39.3	
Approach LOS		B			C			C			D	

Intersection Summary

HCM 2000 Control Delay	24.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	103.3	Sum of lost time (s)	14.3
Intersection Capacity Utilization	70.0%	ICU Level of Service	C
Analysis Period (min)	15		

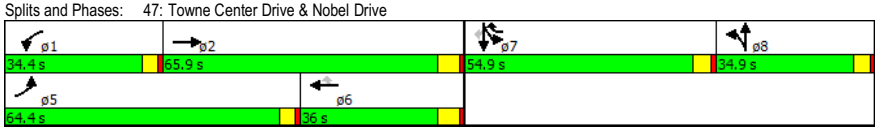
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	392	531	23	550	97	50	43	64	398
Future Volume (vph)	392	531	23	550	97	50	43	64	398
Turn Type	Prot	NA	Prot	NA	pm+ov	NA	Split	NA	Perm
Protected Phases	5	2	1	6	7	8	7	7	
Permitted Phases					6				7
Detector Phase	5	2	1	6	7	8	7	7	7
Switch Phase									
Minimum Initial (s)	4.0	7.0	4.0	7.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.4	12.9	8.4	13.0	8.9	8.9	8.9	8.9	8.9
Total Split (s)	64.4	65.9	34.4	36.0	54.9	34.9	54.9	54.9	54.9
Total Split (%)	33.9%	34.6%	18.1%	18.9%	28.9%	18.3%	28.9%	28.9%	28.9%
Yellow Time (s)	3.4	4.9	3.4	5.0	3.9	3.9	3.9	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.9	4.4	6.0	4.9	4.9	4.9	4.9	4.9
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 190.2
Actuated Cycle Length: 73.9
Natural Cycle: 60
Control Type: Actuated-Uncoordinated

Splits and Phases: 47: Towne Center Drive & Nobel Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	392	531	43	23	550	97	30	50	42	43	64	398
Future Volume (vph)	392	531	43	23	550	97	30	50	42	43	64	398
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.9		4.4	6.0	4.9		4.9		4.9	4.9	4.9
Lane Util. Factor	0.97	0.95		1.00	0.91	1.00		0.95		1.00	1.00	1.00
Frt	1.00	0.99		1.00	1.00	0.85		0.95		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.99		0.95	1.00	1.00
Satd. Flow (prot)	3433	3499		1770	5085	1583		3315		1770	1863	1583
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.99		0.95	1.00	1.00
Satd. Flow (perm)	3433	3499		1770	5085	1583		3315		1770	1863	1583
Peak-hour factor, PHF	0.96	0.96	0.96	0.85	0.85	0.85	0.78	0.78	0.78	0.91	0.91	0.91
Adj. Flow (vph)	408	553	45	27	647	114	38	64	54	47	70	437
RTOR Reduction (vph)	0	3	0	0	0	49	0	39	0	0	0	365
Lane Group Flow (vph)	408	595	0	27	647	65	0	117	0	47	70	72
Turn Type	Prot	NA		Prot	NA	pm+ov	Split	NA		Split	NA	Perm
Protected Phases	5	2		1	6	7	8	8		7	7	
Permitted Phases						6						7
Actuated Green, G (s)	15.1	33.3		2.4	20.5	33.0		7.8		12.5	12.5	12.5
Effective Green, g (s)	15.1	33.3		2.4	20.5	33.0		7.8		12.5	12.5	12.5
Actuated g/C Ratio	0.20	0.44		0.03	0.27	0.43		0.10		0.16	0.16	0.16
Clearance Time (s)	4.4	5.9		4.4	6.0	4.9		4.9		4.9	4.9	4.9
Vehicle Extension (s)	2.0	4.9		2.0	3.3	4.0		2.0		4.0	4.0	4.0
Lane Grp Cap (vph)	681	1531		55	1369	686		339		290	306	260
v/s Ratio Prot	c0.12	0.17		0.02	c0.13	0.02		c0.04		0.03	0.04	
v/s Ratio Perm						0.03						c0.05
v/c Ratio	0.60	0.39		0.49	0.47	0.10		0.35		0.16	0.23	0.28
Uniform Delay, d1	27.7	14.5		36.2	23.3	12.7		31.8		27.3	27.6	27.8
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00
Incremental Delay, d2	1.0	0.3		2.5	0.3	0.1		0.2		0.4	0.5	0.8
Delay (s)	28.7	14.8		38.7	23.6	12.8		32.0		27.7	28.1	28.6
Level of Service	C	B		D	C	B		C		C	C	C
Approach Delay (s)		20.5			22.5			32.0			28.5	
Approach LOS		C			C			C			C	

Intersection Summary

HCM 2000 Control Delay	23.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.44		
Actuated Cycle Length (s)	76.1	Sum of lost time (s)	20.2
Intersection Capacity Utilization	52.0%	ICU Level of Service	A
Analysis Period (min)	15		

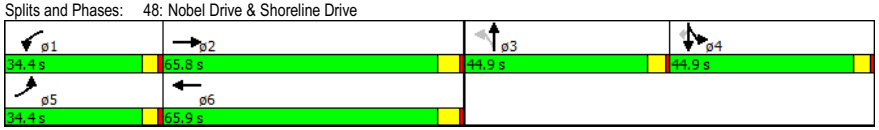
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	36	561	16	618	17	4	94	3	32
Future Volume (vph)	36	561	16	618	17	4	94	3	32
Turn Type	Prot	NA	Prot	NA	Perm	NA	Split	NA	Perm
Protected Phases	5	2	1	6		3	4	4	
Permitted Phases					3				4
Detector Phase	5	2	1	6	3	3	4	4	4
Switch Phase									
Minimum Initial (s)	4.0	10.0	4.0	10.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.4	15.8	8.4	30.9	8.9	8.9	33.9	33.9	33.9
Total Split (s)	34.4	65.8	34.4	65.9	44.9	44.9	44.9	44.9	44.9
Total Split (%)	18.1%	34.6%	18.1%	34.7%	23.6%	23.6%	23.6%	23.6%	23.6%
Yellow Time (s)	3.4	4.8	3.4	4.9	3.9	3.9	3.9	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.8	4.4	5.9		4.9	4.9	4.9	4.9
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 190.1
Actuated Cycle Length: 73.2
Natural Cycle: 85
Control Type: Actuated-Uncoordinated

Splits and Phases: 48: Nobel Drive & Shoreline Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	36	561	18	16	618	83	17	4	22	94	3	32
Future Volume (vph)	36	561	18	16	618	83	17	4	22	94	3	32
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.8		4.4	5.9			4.9		4.9	4.9	4.9
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00		1.00	1.00	0.88
Frt	1.00	1.00		1.00	0.98			0.93		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.98		0.95	1.00	1.00
Satd. Flow (prot)	1770	5062		1770	4995			1700		1770	1863	2787
Flt Permitted	0.95	1.00		0.95	1.00			0.22		0.95	1.00	1.00
Satd. Flow (perm)	1770	5062		1770	4995			376		1770	1863	2787
Peak-hour factor, PHF	0.93	0.93	0.93	0.87	0.87	0.87	0.62	0.62	0.62	0.93	0.93	0.93
Adj. Flow (vph)	39	603	19	18	710	95	27	6	35	101	3	34
RTOR Reduction (vph)	0	2	0	0	8	0	0	20	0	0	0	30
Lane Group Flow (vph)	39	620	0	18	797	0	0	48	0	101	3	4
Turn Type	Prot	NA		Prot	NA		Perm	NA		Split	NA	Perm
Protected Phases	5	2		1	6			3		4	4	
Permitted Phases							3					4
Actuated Green, G (s)	3.7	31.5		1.9	29.6			14.9		8.0	8.0	8.0
Effective Green, g (s)	3.7	31.5		1.9	29.6			14.9		8.0	8.0	8.0
Actuated g/C Ratio	0.05	0.41		0.02	0.39			0.20		0.10	0.10	0.10
Clearance Time (s)	4.4	5.8		4.4	5.9			4.9		4.9	4.9	4.9
Vehicle Extension (s)	2.0	4.6		2.0	4.4			2.0		2.0	2.0	2.0
Lane Grp Cap (vph)	85	2089		44	1937			73		185	195	292
v/s Ratio Prot	c0.02	0.12		0.01	c0.16					c0.06	0.00	
v/s Ratio Perm								c0.13				0.00
v/c Ratio	0.46	0.30		0.41	0.41			0.66		0.55	0.02	0.01
Uniform Delay, d1	35.3	15.0		36.6	17.0			28.3		32.4	30.6	30.6
Progression Factor	1.00	1.00		1.00	1.00			1.00		1.00	1.00	1.00
Incremental Delay, d2	1.4	0.1		2.2	0.2			15.0		1.8	0.0	0.0
Delay (s)	36.8	15.1		38.9	17.2			43.3		34.2	30.6	30.6
Level of Service	D	B		D	B			D		C	C	C
Approach Delay (s)		16.4			17.7			43.3			33.2	
Approach LOS		B			B			D			C	

Intersection Summary

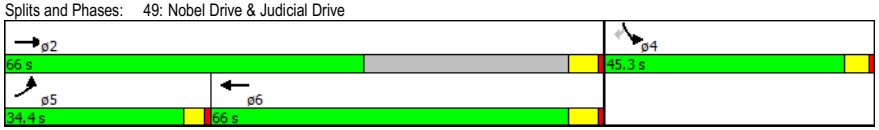
HCM 2000 Control Delay	19.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	76.3	Sum of lost time (s)	20.1
Intersection Capacity Utilization	41.1%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBT	SBL	SBR
Lane Configurations					
Traffic Volume (vph)	48	734	627	369	32
Future Volume (vph)	48	734	627	369	32
Turn Type	Prot	NA	NA	Prot	Perm
Protected Phases	5	2	6	4	
Permitted Phases					4
Detector Phase	5	2	6	4	4
Switch Phase					
Minimum Initial (s)	4.0	10.0	10.0	7.0	7.0
Minimum Split (s)	8.4	16.0	36.0	39.3	39.3
Total Split (s)	34.4	66.0	66.0	45.3	45.3
Total Split (%)	23.6%	45.3%	45.3%	31.1%	31.1%
Yellow Time (s)	3.4	5.0	5.0	4.3	4.3
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	6.0	6.0	5.3	5.3
Lead/Lag	Lead		Lag		
Lead-Lag Optimize?	Yes		Yes		
Recall Mode	None	Min	Min	None	None

Intersection Summary
Cycle Length: 145.7
Actuated Cycle Length: 74.1
Natural Cycle: 85
Control Type: Actuated-Uncoordinated

Splits and Phases: 49: Nobel Drive & Judicial Drive



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	48	734	627	394	369	32
Future Volume (vph)	48	734	627	394	369	32
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	6.0	6.0		5.3	5.3
Lane Util. Factor	0.97	0.91	0.91		0.97	1.00
Frt	1.00	1.00	0.94		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	3433	5085	4791		3433	1583
Flt Permitted	0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)	3433	5085	4791		3433	1583
Peak-hour factor, PHF	0.90	0.90	0.85	0.85	0.87	0.87
Adj. Flow (vph)	53	816	738	464	424	37
RTOR Reduction (vph)	0	0	68	0	0	28
Lane Group Flow (vph)	53	816	1134	0	424	9
Turn Type	Prot	NA	NA		Prot	Perm
Protected Phases	5	2	6		4	
Permitted Phases						4
Actuated Green, G (s)	4.6	45.3	36.3		17.7	17.7
Effective Green, g (s)	4.6	45.3	36.3		17.7	17.7
Actuated g/C Ratio	0.06	0.61	0.49		0.24	0.24
Clearance Time (s)	4.4	6.0	6.0		5.3	5.3
Vehicle Extension (s)	2.0	5.4	5.4		4.4	4.4
Lane Grp Cap (vph)	212	3100	2340		817	377
v/s Ratio Prot	0.02	c0.16	c0.24		c0.12	
v/s Ratio Perm						0.01
v/c Ratio	0.25	0.26	0.48		0.52	0.02
Uniform Delay, d1	33.2	6.7	12.7		24.6	21.7
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	0.2	0.1	0.4		0.9	0.0
Delay (s)	33.4	6.9	13.1		25.5	21.7
Level of Service	C	A	B		C	C
Approach Delay (s)		8.5	13.1		25.2	
Approach LOS		A	B		C	

Intersection Summary			
HCM 2000 Control Delay	13.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	74.3	Sum of lost time (s)	15.7
Intersection Capacity Utilization	40.9%	ICU Level of Service	A
Analysis Period (min)	15		

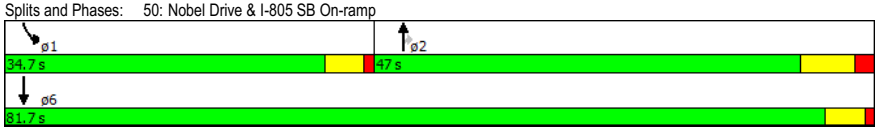
c Critical Lane Group

Lane Group	NBT	NBR	SBL	SBT
Lane Configurations				
Traffic Volume (vph)	363	621	46	1146
Future Volume (vph)	363	621	46	1146
Turn Type	NA	Perm	Prot	NA
Protected Phases	2		1	6
Permitted Phases		2		
Detector Phase	2	2	1	6
Switch Phase				
Minimum Initial (s)	12.0	12.0	5.0	5.0
Minimum Split (s)	39.0	39.0	9.7	9.7
Total Split (s)	47.0	47.0	34.7	81.7
Total Split (%)	57.5%	57.5%	42.5%	100.0%
Yellow Time (s)	5.0	5.0	3.7	3.7
All-Red Time (s)	2.0	2.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	4.7	4.7
Lead/Lag	Lag	Lag	Lead	
Lead-Lag Optimize?	Yes	Yes	Yes	
Recall Mode	Min	Min	None	None

Intersection Summary

Cycle Length: 81.7
Actuated Cycle Length: 84.9
Natural Cycle: 150
Control Type: Actuated-Uncoordinated

Splits and Phases: 50: Nobel Drive & I-805 SB On-ramp



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	363	621	46	1146
Future Volume (vph)	0	0	363	621	46	1146
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)			7.0	7.0	4.7	4.7
Lane Util. Factor			0.95	0.88	0.97	0.91
Frt			1.00	0.85	1.00	1.00
Flt Protected			1.00	1.00	0.95	1.00
Satd. Flow (prot)			3539	2787	3433	5085
Flt Permitted			1.00	1.00	0.95	1.00
Satd. Flow (perm)			3539	2787	3433	5085
Peak-hour factor, PHF	0.94	0.94	0.25	0.25	0.25	0.25
Adj. Flow (vph)	0	0	1452	2484	184	4584
RTOR Reduction (vph)	0	0	0	257	0	0
Lane Group Flow (vph)	0	0	1452	2227	184	4584
Turn Type			NA	Perm	Prot	NA
Protected Phases			2		1	6
Permitted Phases				2		
Actuated Green, G (s)			63.3	63.3	9.9	84.9
Effective Green, g (s)			63.3	63.3	9.9	84.9
Actuated g/C Ratio			0.75	0.75	0.12	1.00
Clearance Time (s)			7.0	7.0	4.7	4.7
Vehicle Extension (s)			3.0	3.0	3.0	3.0
Lane Grp Cap (vph)			2638	2077	400	5085
v/s Ratio Prot			0.41		0.05	c0.90
v/s Ratio Perm				c0.80		
v/c Ratio			0.55	1.07	0.46	0.90
Uniform Delay, d1			4.7	10.8	35.0	0.0
Progression Factor			1.00	1.00	1.00	1.00
Incremental Delay, d2			0.3	42.4	0.8	2.6
Delay (s)			4.9	53.2	35.8	2.6
Level of Service			A	D	D	A
Approach Delay (s)	0.0		35.4			3.9
Approach LOS	A		D			A

Intersection Summary

HCM 2000 Control Delay	18.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	1.11		
Actuated Cycle Length (s)	84.9	Sum of lost time (s)	11.7
Intersection Capacity Utilization	44.6%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	WBL	WBR	NBT	SBT	ø5
Lane Configurations					
Traffic Volume (vph)	580	615	319	481	
Future Volume (vph)	580	615	319	481	
Turn Type	Prot	Prot	NA	NA	
Protected Phases	8	1	2	6	5
Permitted Phases					
Detector Phase	8	1	2	6	
Switch Phase					
Minimum Initial (s)	5.0	5.0	16.0	11.0	5.0
Minimum Split (s)	11.1	11.1	23.0	18.0	9.7
Total Split (s)	36.1	19.7	47.0	47.0	24.7
Total Split (%)	33.5%	18.3%	43.6%	43.6%	23%
Yellow Time (s)	4.1	3.7	5.0	5.0	3.7
All-Red Time (s)	2.0	1.0	2.0	2.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.1	4.7	7.0	7.0	
Lead/Lag		Lead	Lag	Lag	Lead
Lead-Lag Optimize?		Yes	Yes	Yes	Yes
Recall Mode	None	None	Min	Min	None

Intersection Summary
Cycle Length: 107.8
Actuated Cycle Length: 71.1
Natural Cycle: 65
Control Type: Actuated-Uncoordinated

Splits and Phases: 51: Nobel Drive & I-805 N Off-ramps

Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	580	615	0	319	0	0	481
Future Volume (vph)	580	615	0	319	0	0	481
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.1	4.7		7.0			7.0
Lane Util. Factor	0.97	0.88		0.95			0.91
Frt	1.00	0.85		1.00			1.00
Flt Protected	0.95	1.00		1.00			1.00
Satd. Flow (prot)	3433	2787		3539			5085
Flt Permitted	0.95	1.00		1.00			1.00
Satd. Flow (perm)	3433	2787		3539			5085
Peak-hour factor, PHF	0.86	0.86	0.92	0.93	0.93	0.25	0.25
Adj. Flow (vph)	674	715	0	343	0	0	1924
RTOR Reduction (vph)	0	647	0	0	0	0	0
Lane Group Flow (vph)	674	68	0	343	0	0	1924
Turn Type	Prot	Prot	Prot	NA			NA
Protected Phases	8	1	5	2			6
Permitted Phases							
Actuated Green, G (s)	18.1	6.8		28.4			39.9
Effective Green, g (s)	18.1	6.8		28.4			39.9
Actuated g/C Ratio	0.25	0.10		0.40			0.56
Clearance Time (s)	6.1	4.7		7.0			7.0
Vehicle Extension (s)	2.0	2.0		2.0			2.0
Lane Grp Cap (vph)	873	266		1413			2853
v/s Ratio Prot	c0.20	0.02		0.10			c0.38
v/s Ratio Perm							
v/c Ratio	0.77	0.26		0.24			0.67
Uniform Delay, d1	24.6	29.8		14.2			11.0
Progression Factor	1.00	1.00		1.00			1.00
Incremental Delay, d2	3.9	0.2		0.0			0.5
Delay (s)	28.5	30.0		14.2			11.5
Level of Service	C	C		B			B
Approach Delay (s)	29.3			14.2			11.5
Approach LOS	C			B			B

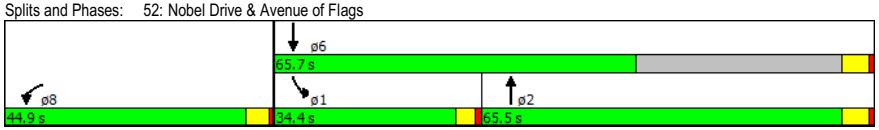
Intersection Summary			
HCM 2000 Control Delay	18.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	71.1	Sum of lost time (s)	17.8
Intersection Capacity Utilization	44.6%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	WBL	NBT	SBL	SBT
Lane Configurations				
Traffic Volume (vph)	41	965	44	389
Future Volume (vph)	41	965	44	389
Turn Type	Prot	NA	Prot	NA
Protected Phases	8	2	1	6
Permitted Phases				
Detector Phase	8	2	1	6
Switch Phase				
Minimum Initial (s)	4.0	7.0	4.0	7.0
Minimum Split (s)	28.9	26.5	9.5	12.7
Total Split (s)	44.9	65.5	34.4	65.7
Total Split (%)	31.0%	45.2%	23.8%	45.4%
Yellow Time (s)	3.9	4.5	3.4	4.7
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	5.5	4.4	5.7
Lead/Lag		Lag	Lead	
Lead-Lag Optimize?		Yes	Yes	
Recall Mode	None	Min	None	Min

Intersection Summary
Cycle Length: 144.8
Actuated Cycle Length: 66.6
Natural Cycle: 70
Control Type: Actuated-Uncoordinated

Splits and Phases: 52: Nobel Drive & Avenue of Flags



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	41	31	965	66	44	389
Future Volume (vph)	41	31	965	66	44	389
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9		5.5		4.4	5.7
Lane Util. Factor	1.00		0.95		1.00	0.95
Frt	0.94		0.99		1.00	1.00
Flt Protected	0.97		1.00		0.95	1.00
Satd. Flow (prot)	1706		3505		1770	3539
Flt Permitted	0.97		1.00		0.95	1.00
Satd. Flow (perm)	1706		3505		1770	3539
Peak-hour factor, PHF	0.75	0.75	0.91	0.91	0.89	0.89
Adj. Flow (vph)	55	41	1060	73	49	437
RTOR Reduction (vph)	24	0	2	0	0	0
Lane Group Flow (vph)	72	0	1131	0	49	437
Turn Type	Prot		NA		Prot	NA
Protected Phases	8		2		1	6
Permitted Phases						
Actuated Green, G (s)	6.6		43.4		4.8	52.4
Effective Green, g (s)	6.6		43.4		4.8	52.4
Actuated g/C Ratio	0.09		0.62		0.07	0.75
Clearance Time (s)	4.9		5.5		4.4	5.7
Vehicle Extension (s)	2.0		5.2		3.0	4.9
Lane Grp Cap (vph)	161		2185		122	2664
v/s Ratio Prot	c0.04		c0.32		c0.03	0.12
v/s Ratio Perm						
v/c Ratio	0.45		0.52		0.40	0.16
Uniform Delay, d1	29.8		7.3		31.0	2.4
Progression Factor	1.00		1.00		1.00	1.00
Incremental Delay, d2	0.7		0.4		2.2	0.1
Delay (s)	30.5		7.7		33.2	2.5
Level of Service	C		A		C	A
Approach Delay (s)	30.5		7.7			5.6
Approach LOS	C		A			A

Intersection Summary			
HCM 2000 Control Delay	8.4	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	69.6	Sum of lost time (s)	14.8
Intersection Capacity Utilization	48.6%	ICU Level of Service	A
Analysis Period (min)	15		

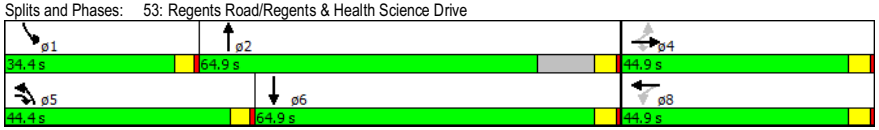
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBT	ø1
Lane Configurations									
Traffic Volume (vph)	79	0	431	2	2	373	171	142	
Future Volume (vph)	79	0	431	2	2	373	171	142	
Turn Type	Perm	NA	pm+ov	Perm	NA	Prot	NA	NA	
Protected Phases		4	5		8	5	2	6	1
Permitted Phases	4		4	8					
Detector Phase	4	4	5	8	8	5	2	6	
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	10.0	10.0	4.0
Minimum Split (s)	8.9	8.9	8.4	22.9	22.9	8.4	14.9	14.9	8.4
Total Split (s)	44.9	44.9	44.4	44.9	44.9	44.4	64.9	64.9	34.4
Total Split (%)	29.1%	29.1%	28.8%	29.1%	29.1%	28.8%	42.1%	42.1%	22%
Yellow Time (s)	3.9	3.9	3.4	3.9	3.9	3.4	3.9	3.9	3.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	
Total Lost Time (s)		4.9	4.4		4.9	4.4	4.9	4.9	
Lead/Lag			Lead			Lead	Lag	Lag	Lead
Lead-Lag Optimize?			Yes			Yes	Yes	Yes	Yes
Recall Mode	None	None	Min	None	None	Min	None	None	None

Intersection Summary

Cycle Length: 154.2
Actuated Cycle Length: 53.1
Natural Cycle: 60
Control Type: Actuated-Uncoordinated

Splits and Phases: 53: Regents Road/Regents & Health Science Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	79	0	431	2	2	0	373	171	2	0	142	97
Future Volume (vph)	79	0	431	2	2	0	373	171	2	0	142	97
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9	4.4		4.9		4.4	4.9			4.9	
Lane Util. Factor		1.00	1.00		1.00		1.00	0.95			0.95	
Frt		1.00	0.85		1.00		1.00	1.00			0.94	
Flt Protected		0.95	1.00		0.98		0.95	1.00			1.00	
Satd. Flow (prot)		1770	1583		1817		1770	3534			3323	
Flt Permitted		0.75	1.00		0.84		0.95	1.00			1.00	
Satd. Flow (perm)		1402	1583		1564		1770	3534			3323	
Peak-hour factor, PHF	0.78	0.78	0.78	0.50	0.50	0.50	0.92	0.92	0.92	0.81	0.81	0.81
Adj. Flow (vph)	101	0	553	4	4	0	405	186	2	0	175	120
RTOR Reduction (vph)	0	0	266	0	0	0	0	0	0	0	94	0
Lane Group Flow (vph)	0	101	287	0	8	0	405	188	0	0	201	0
Turn Type	Perm	NA	pm+ov	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4	5		8		5	2		1	6	
Permitted Phases	4		4	8								
Actuated Green, G (s)		7.8	27.9		7.8		20.1	36.1			11.6	
Effective Green, g (s)		7.8	27.9		7.8		20.1	36.1			11.6	
Actuated g/C Ratio		0.15	0.52		0.15		0.37	0.67			0.22	
Clearance Time (s)		4.9	4.4		4.9		4.4	4.9			4.9	
Vehicle Extension (s)		2.0	2.0		2.0		2.0	3.8			3.8	
Lane Grp Cap (vph)		203	822		227		662	2375			717	
v/s Ratio Prot			0.13				c0.23	0.05			c0.06	
v/s Ratio Perm		c0.07	0.05		0.01							
v/c Ratio		0.50	0.35		0.04		0.61	0.08			0.28	
Uniform Delay, d1		21.1	7.6		19.7		13.6	3.0			17.6	
Progression Factor		1.00	1.00		1.00		1.00	1.00			1.00	
Incremental Delay, d2		0.7	0.1		0.0		1.2	0.0			0.3	
Delay (s)		21.8	7.7		19.7		14.8	3.1			17.8	
Level of Service		C	A		B		B	A			B	
Approach Delay (s)		9.9			19.7			11.1			17.8	
Approach LOS		A			B			B			B	

Intersection Summary

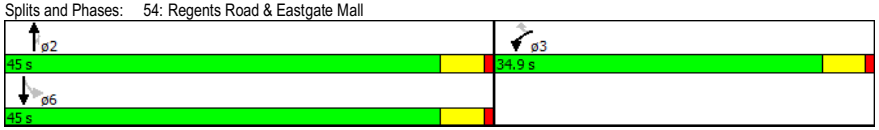
HCM 2000 Control Delay	11.9	HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio	0.49			
Actuated Cycle Length (s)	53.7	Sum of lost time (s)	14.2	
Intersection Capacity Utilization	50.2%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	153	105	446	144	104	475
Future Volume (vph)	153	105	446	144	104	475
Turn Type	Prot	Perm	NA	Perm	Perm	NA
Protected Phases	3		2			6
Permitted Phases		3		2	6	
Detector Phase	3	3	2	2	6	6
Switch Phase						
Minimum Initial (s)	4.0	4.0	7.0	7.0	7.0	7.0
Minimum Split (s)	8.9	8.9	12.0	12.0	12.0	12.0
Total Split (s)	34.9	34.9	45.0	45.0	45.0	45.0
Total Split (%)	43.7%	43.7%	56.3%	56.3%	56.3%	56.3%
Yellow Time (s)	3.9	3.9	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	5.0	5.0	5.0	5.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None	None	Min	Min	Min	Min

Intersection Summary
Cycle Length: 79.9
Actuated Cycle Length: 34
Natural Cycle: 40
Control Type: Actuated-Uncoordinated

Splits and Phases: 54: Regents Road & Eastgate Mall



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	153	105	446	144	104	475
Future Volume (vph)	153	105	446	144	104	475
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9	5.0	5.0	5.0	5.0
Lane Util. Factor	1.00	1.00	0.91	0.91	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3375	1441	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.46	1.00
Satd. Flow (perm)	1770	1583	3375	1441	864	3539
Peak-hour factor, PHF	0.95	0.95	0.94	0.94	0.85	0.85
Adj. Flow (vph)	161	111	474	153	122	559
RTOR Reduction (vph)	0	85	3	73	0	0
Lane Group Flow (vph)	161	26	486	65	122	559
Turn Type	Prot	Perm	NA	Perm	Perm	NA
Protected Phases	3		2			6
Permitted Phases		3		2	6	
Actuated Green, G (s)	7.9	7.9	15.9	15.9	15.9	15.9
Effective Green, g (s)	7.9	7.9	15.9	15.9	15.9	15.9
Actuated g/C Ratio	0.23	0.23	0.47	0.47	0.47	0.47
Clearance Time (s)	4.9	4.9	5.0	5.0	5.0	5.0
Vehicle Extension (s)	2.0	2.0	3.4	3.4	3.5	3.5
Lane Grp Cap (vph)	414	371	1592	679	407	1669
v/s Ratio Prot	c0.09		0.14			c0.16
v/s Ratio Perm		0.02		0.05	0.14	
v/c Ratio	0.39	0.07	0.31	0.10	0.30	0.33
Uniform Delay, d1	10.9	10.0	5.5	4.9	5.5	5.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2	0.0	0.1	0.1	0.5	0.1
Delay (s)	11.1	10.1	5.6	5.0	6.0	5.7
Level of Service	B	B	A	A	A	A
Approach Delay (s)	10.7		5.5			5.8
Approach LOS	B		A			A

Intersection Summary			
HCM 2000 Control Delay	6.5	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.35		
Actuated Cycle Length (s)	33.7	Sum of lost time (s)	9.9
Intersection Capacity Utilization	40.6%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	9	8	59	8	78	8	486	74	490
Future Volume (vph)	9	8	59	8	78	8	486	74	490
Turn Type	Perm	NA	Perm	NA	Perm	Prot	NA	Prot	NA
Protected Phases		4		8		5	2	1	6
Permitted Phases	4		8		8				
Detector Phase	4	4	8	8	8	5	2	1	6
Switch Phase									
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	4.0	10.0	4.0	10.0
Minimum Split (s)	11.9	11.9	11.9	11.9	11.9	8.4	14.9	8.4	14.9
Total Split (s)	34.9	34.9	44.9	44.9	44.9	34.4	64.9	34.4	64.9
Total Split (%)	24.2%	24.2%	31.1%	31.1%	31.1%	23.9%	45.0%	23.9%	45.0%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.9	3.4	3.9	3.4	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.9		4.9	4.9	4.4	4.9	4.4	4.9
Lead/Lag						Lead	Lag	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	None	Min

Intersection Summary
Cycle Length: 144.2
Actuated Cycle Length: 43.1
Natural Cycle: 40
Control Type: Actuated-Uncoordinated

Splits and Phases: 55: Regents Road & Executive Drive

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	9	8	8	59	8	78	8	486	52	74	490	19
Future Volume (vph)	9	8	8	59	8	78	8	486	52	74	490	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9			4.9	4.9	4.4	4.9		4.4	4.9	
Lane Util. Factor		1.00			1.00	1.00	1.00	0.95		1.00	0.95	
Frt		0.96			1.00	0.85	1.00	0.99		1.00	0.99	
Flt Protected		0.98			0.96	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1751			1784	1583	1770	3488		1770	3520	
Flt Permitted		0.86			0.73	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1536			1367	1583	1770	3488		1770	3520	
Peak-hour factor, PHF	0.96	0.96	0.96	0.90	0.90	0.90	0.95	0.95	0.95	0.93	0.93	0.93
Adj. Flow (vph)	9	8	8	66	9	87	8	512	55	80	527	20
RTOR Reduction (vph)	0	7	0	0	0	75	0	6	0	0	1	0
Lane Group Flow (vph)	0	18	0	0	75	12	8	561	0	80	546	0
Turn Type	Perm	NA		Perm	NA	Perm	Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8		8						
Actuated Green, G (s)		6.8			6.8	6.8	0.9	21.3		5.6	26.0	
Effective Green, g (s)		6.8			6.8	6.8	0.9	21.3		5.6	26.0	
Actuated g/C Ratio		0.14			0.14	0.14	0.02	0.44		0.12	0.54	
Clearance Time (s)		4.9			4.9	4.9	4.4	4.9		4.4	4.9	
Vehicle Extension (s)		2.0			3.1	3.1	2.0	3.1		2.0	3.1	
Lane Grp Cap (vph)		218			194	224	33	1551		206	1910	
v/s Ratio Prot							0.00	c0.16		c0.05	0.16	
v/s Ratio Perm		0.01			c0.05	0.01						
v/c Ratio		0.08			0.39	0.06	0.24	0.36		0.39	0.29	
Uniform Delay, d1		17.8			18.7	17.8	23.2	8.8		19.6	5.9	
Progression Factor		1.00			1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.1			1.3	0.1	1.4	0.2		0.4	0.1	
Delay (s)		17.9			20.0	17.9	24.6	9.0		20.0	6.0	
Level of Service		B			B	B	C	A		C	A	
Approach Delay (s)		17.9			18.9			9.2			7.8	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM 2000 Control Delay	9.8	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.37		
Actuated Cycle Length (s)	47.9	Sum of lost time (s)	14.2
Intersection Capacity Utilization	39.1%	ICU Level of Service	A
Analysis Period (min)	15		

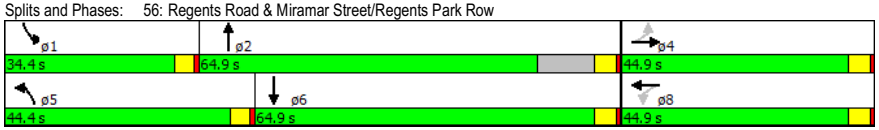
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	43	9	129	11	81	463	80	482
Future Volume (vph)	43	9	129	11	81	463	80	482
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	7.0	4.0	7.0
Minimum Split (s)	8.9	8.9	8.9	8.9	8.4	11.9	8.4	11.9
Total Split (s)	44.9	44.9	44.9	44.9	44.4	64.9	34.4	64.9
Total Split (%)	29.1%	29.1%	29.1%	29.1%	28.8%	42.1%	22.3%	42.1%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.4	3.9	3.4	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	4.9	4.9	4.4	4.9	4.4	4.9
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 154.2
Actuated Cycle Length: 55.4
Natural Cycle: 40
Control Type: Actuated-Uncoordinated

Splits and Phases: 56: Regents Road & Miramar Street/Regents Park Row



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	43	9	101	129	11	102	81	463	114	80	482	60
Future Volume (vph)	43	9	101	129	11	102	81	463	114	80	482	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9		4.9	4.9		4.4	4.9		4.4	4.9	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frt	1.00	0.86		1.00	0.87		1.00	0.97		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1606		1770	1612		1770	3434		1770	3480	
Flt Permitted	0.68	1.00		0.66	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1268	1606		1236	1612		1770	3434		1770	3480	
Peak-hour factor, PHF	0.75	0.75	0.75	0.95	0.95	0.95	0.86	0.86	0.86	0.91	0.91	0.91
Adj. Flow (vph)	57	12	135	136	12	107	94	538	133	88	530	66
RTOR Reduction (vph)	0	102	0	0	81	0	0	16	0	0	6	0
Lane Group Flow (vph)	57	45	0	136	38	0	94	655	0	88	590	0
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8								
Actuated Green, G (s)	13.6	13.6		13.6	13.6		6.8	21.1		6.6	20.9	
Effective Green, g (s)	13.6	13.6		13.6	13.6		6.8	21.1		6.6	20.9	
Actuated g/C Ratio	0.25	0.25		0.25	0.25		0.12	0.38		0.12	0.38	
Clearance Time (s)	4.9	4.9		4.9	4.9		4.4	4.9		4.4	4.9	
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	3.8		2.0	3.8	
Lane Grp Cap (vph)	310	393		302	395		216	1305		210	1310	
v/s Ratio Prot		0.03			0.02		c0.05	c0.19		0.05	0.17	
v/s Ratio Perm	0.04			c0.11								
v/c Ratio	0.18	0.11		0.45	0.10		0.44	0.50		0.42	0.45	
Uniform Delay, d1	16.6	16.3		17.8	16.2		22.6	13.2		22.7	13.0	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.1	0.0		0.4	0.0		0.5	0.4		0.5	0.3	
Delay (s)	16.7	16.3		18.2	16.2		23.1	13.6		23.2	13.3	
Level of Service	B	B		B	B		C	B		C	B	
Approach Delay (s)		16.4			17.3			14.7			14.6	
Approach LOS		B			B			B			B	

Intersection Summary

HCM 2000 Control Delay	15.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	55.5	Sum of lost time (s)	14.2
Intersection Capacity Utilization	46.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	24	6	61	18	122	21	612	48	655
Future Volume (vph)	24	6	61	18	122	21	612	48	655
Turn Type	Perm	NA	Perm	NA	pm+ov	Prot	NA	Prot	NA
Protected Phases		4		8	1	5	2	1	6
Permitted Phases	4		8		8				
Detector Phase	4	4	8	8	1	5	2	1	6
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	10.0	4.0	10.0
Minimum Split (s)	8.9	8.9	8.9	8.9	8.4	8.4	15.2	8.4	15.3
Total Split (s)	44.9	44.9	44.9	44.9	34.4	34.4	65.2	34.4	65.3
Total Split (%)	31.1%	31.1%	31.1%	31.1%	23.8%	23.8%	45.1%	23.8%	45.2%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.4	3.4	4.2	3.4	4.3
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.9		4.9	4.4	4.4	5.2	4.4	5.3
Lead/Lag					Lead	Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 144.6
Actuated Cycle Length: 44.6
Natural Cycle: 40
Control Type: Actuated-Uncoordinated

Splits and Phases: 57: Regents Road & Plaza De Palmas

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	24	6	9	61	18	122	21	612	54	48	655	22
Future Volume (vph)	24	6	9	61	18	122	21	612	54	48	655	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9			4.9	4.4	4.4	5.2		4.4	5.3	
Lane Util. Factor		1.00			1.00	1.00	1.00	0.91		1.00	0.95	
Frt		0.97			1.00	0.85	1.00	0.99		1.00	1.00	
Flt Protected		0.97			0.96	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1750			1793	1583	1770	5023		1770	3522	
Flt Permitted		0.77			0.74	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1381			1380	1583	1770	5023		1770	3522	
Peak-hour factor, PHF	0.77	0.77	0.77	0.94	0.94	0.94	0.90	0.90	0.90	0.89	0.89	0.89
Adj. Flow (vph)	31	8	12	65	19	130	23	680	60	54	736	25
RTOR Reduction (vph)	0	10	0	0	0	92	0	7	0	0	1	0
Lane Group Flow (vph)	0	41	0	0	84	38	23	733	0	54	760	0
Turn Type	Perm	NA		Perm	NA	pm+ov	Prot	NA		Prot	NA	
Protected Phases		4			8	1	5	2		1	6	
Permitted Phases	4			8		8						
Actuated Green, G (s)		6.5			6.5	13.1	1.0	21.6		6.6	27.1	
Effective Green, g (s)		6.5			6.5	13.1	1.0	21.6		6.6	27.1	
Actuated g/C Ratio		0.13			0.13	0.27	0.02	0.44		0.13	0.55	
Clearance Time (s)		4.9			4.9	4.4	4.4	5.2		4.4	5.3	
Vehicle Extension (s)		2.0			2.0	2.0	2.0	4.5		2.0	4.2	
Lane Grp Cap (vph)		182			182	421	35	2205		237	1939	
v/s Ratio Prot						0.01	0.01	0.15		c0.03	c0.22	
v/s Ratio Perm		0.03			c0.06	0.01						
v/c Ratio		0.23			0.46	0.09	0.66	0.33		0.23	0.39	
Uniform Delay, d1		19.1			19.7	13.6	23.9	9.1		19.0	6.3	
Progression Factor		1.00			1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.2			0.7	0.0	29.0	0.2		0.2	0.2	
Delay (s)		19.3			20.4	13.6	53.0	9.2		19.2	6.5	
Level of Service		B			C	B	D	A		B	A	
Approach Delay (s)		19.3			16.3			10.5			7.4	
Approach LOS		B			B			B			A	

Intersection Summary

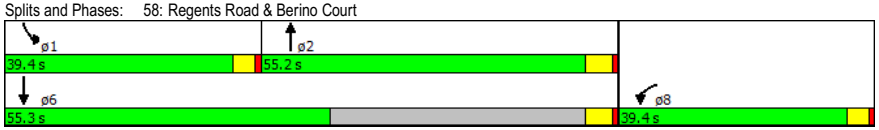
HCM 2000 Control Delay	10.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	49.2	Sum of lost time (s)	14.6
Intersection Capacity Utilization	43.2%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	WBL	NBT	SBL	SBT
Lane Configurations				
Traffic Volume (vph)	16	920	116	712
Future Volume (vph)	16	920	116	712
Turn Type	Prot	NA	Prot	NA
Protected Phases	8	2	1	6
Permitted Phases				
Detector Phase	8	2	1	6
Switch Phase				
Minimum Initial (s)	4.0	7.0	4.0	7.0
Minimum Split (s)	8.4	12.2	8.4	12.3
Total Split (s)	39.4	55.2	39.4	55.3
Total Split (%)	29.4%	41.2%	29.4%	41.3%
Yellow Time (s)	3.4	4.2	3.4	4.3
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.2	4.4	5.3
Lead/Lag		Lag	Lead	
Lead-Lag Optimize?		Yes	Yes	
Recall Mode	None	None	None	None

Intersection Summary
Cycle Length: 134
Actuated Cycle Length: 47.1
Natural Cycle: 45
Control Type: Actuated-Uncoordinated

Splits and Phases: 58: Regents Road & Berino Court



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	16	3	920	8	116	712
Future Volume (vph)	16	3	920	8	116	712
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4		5.2		4.4	5.3
Lane Util. Factor	1.00		0.95		1.00	0.95
Frt	0.98		1.00		1.00	1.00
Flt Protected	0.96		1.00		0.95	1.00
Satd. Flow (prot)	1748		3535		1770	3539
Flt Permitted	0.96		1.00		0.95	1.00
Satd. Flow (perm)	1748		3535		1770	3539
Peak-hour factor, PHF	0.81	0.81	0.88	0.88	0.91	0.91
Adj. Flow (vph)	20	4	1045	9	127	782
RTOR Reduction (vph)	4	0	0	0	0	0
Lane Group Flow (vph)	20	0	1054	0	127	782
Turn Type	Prot		NA		Prot	NA
Protected Phases	8		2		1	6
Permitted Phases						
Actuated Green, G (s)	1.8		26.8		7.6	38.7
Effective Green, g (s)	1.8		26.8		7.6	38.7
Actuated g/C Ratio	0.04		0.53		0.15	0.77
Clearance Time (s)	4.4		5.2		4.4	5.3
Vehicle Extension (s)	2.0		3.9		2.0	3.7
Lane Grp Cap (vph)	62		1887		267	2728
v/s Ratio Prot	c0.01		c0.30		c0.07	0.22
v/s Ratio Perm						
v/c Ratio	0.32		0.56		0.48	0.29
Uniform Delay, d1	23.6		7.8		19.5	1.7
Progression Factor	1.00		1.00		1.00	1.00
Incremental Delay, d2	1.1		0.4		0.5	0.1
Delay (s)	24.7		8.2		20.0	1.8
Level of Service	C		A		B	A
Approach Delay (s)	24.7		8.2			4.3
Approach LOS	C		A			A

Intersection Summary			
HCM 2000 Control Delay	6.6	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	50.2	Sum of lost time (s)	14.0
Intersection Capacity Utilization	47.1%	ICU Level of Service	A
Analysis Period (min)	15		

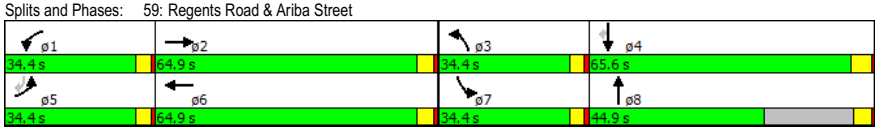
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	37	20	52	47	255	808	45	562	66
Future Volume (vph)	37	20	52	47	255	808	45	562	66
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA	custom
Protected Phases	5	2	1	6	3	8	7	4	
Permitted Phases									5 4
Detector Phase	5	2	1	6	3	8	7	4	5 4
Switch Phase									
Minimum Initial (s)	4.0	7.0	4.0	7.0	4.0	7.0	4.0	7.0	
Minimum Split (s)	8.4	11.9	8.4	11.9	8.4	11.9	8.4	12.6	
Total Split (s)	34.4	64.9	34.4	64.9	34.4	44.9	34.4	65.6	
Total Split (%)	17.3%	32.6%	17.3%	32.6%	17.3%	22.5%	17.3%	32.9%	
Yellow Time (s)	3.4	3.9	3.4	3.9	3.4	3.9	3.4	4.6	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.4	4.9	4.4	4.9	4.4	4.9	4.4	5.6	
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	None	None	None	None	None	

Intersection Summary

Cycle Length: 199.3
Actuated Cycle Length: 98.1
Natural Cycle: 60
Control Type: Actuated-Uncoordinated

Splits and Phases: 59: Regents Road & Ariba Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	37	20	322	52	47	18	255	808	159	45	562	66
Future Volume (vph)	37	20	322	52	47	18	255	808	159	45	562	66
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	4.9		4.4	4.9		4.4	5.6	4.4
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	1.00
Frt	1.00	0.86		1.00	0.96		1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	3040		1770	3393		1770	3452		1770	3539	1583
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1770	3040		1770	3393		1770	3452		1770	3539	1583
Peak-hour factor, PHF	0.85	0.85	0.85	0.71	0.71	0.71	0.88	0.88	0.88	0.87	0.87	0.87
Adj. Flow (vph)	44	24	379	73	66	25	290	918	181	52	646	76
RTOR Reduction (vph)	0	324	0	0	21	0	0	6	0	0	0	49
Lane Group Flow (vph)	44	79	0	73	70	0	290	1093	0	52	646	27
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	custom
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases												5 4
Actuated Green, G (s)	7.3	14.4		7.7	14.8		30.4	52.6		6.6	28.1	41.0
Effective Green, g (s)	7.3	14.4		7.7	14.8		30.4	52.6		6.6	28.1	35.4
Actuated g/C Ratio	0.07	0.14		0.08	0.15		0.30	0.53		0.07	0.28	0.35
Clearance Time (s)	4.4	4.9		4.4	4.9		4.4	4.9		4.4	5.6	
Vehicle Extension (s)	2.0	6.3		2.0	5.9		2.0	4.8		2.0	4.4	
Lane Grp Cap (vph)	129	438		136	502		538	1817		116	995	560
v/s Ratio Prot	0.02	c0.03		c0.04	0.02		c0.16	c0.32		0.03	0.18	
v/s Ratio Perm												0.02
v/c Ratio	0.34	0.18		0.54	0.14		0.54	0.60		0.45	0.65	0.05
Uniform Delay, d1	44.0	37.6		44.4	37.0		28.9	16.4		44.9	31.6	21.2
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	0.6	0.6		2.0	0.3		0.5	0.8		1.0	1.8	0.0
Delay (s)	44.6	38.2		46.4	37.4		29.4	17.2		45.9	33.3	21.2
Level of Service	D	D		D	D		C	B		D	C	C
Approach Delay (s)		38.8			41.4			19.7			33.0	
Approach LOS		D			D			B			C	

Intersection Summary

HCM 2000 Control Delay	27.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	99.9	Sum of lost time (s)	19.3
Intersection Capacity Utilization	60.6%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	106	40	263	74	24	993	165	687
Future Volume (vph)	106	40	263	74	24	993	165	687
Turn Type	Prot	NA	Prot	NA	Perm	NA	Perm	NA
Protected Phases	5	2	1	6		8		4
Permitted Phases					8		4	
Detector Phase	5	2	1	6	8	8	4	4
Switch Phase								
Minimum Initial (s)	4.0	4.0	4.0	7.0	7.0	7.0	4.0	4.0
Minimum Split (s)	8.4	8.9	8.4	11.9	12.8	12.8	9.5	9.5
Total Split (s)	34.4	64.9	34.4	64.9	45.8	45.8	45.5	45.5
Total Split (%)	23.7%	44.7%	23.7%	44.7%	31.6%	31.6%	31.4%	31.4%
Yellow Time (s)	3.4	3.9	3.4	3.9	4.8	4.8	4.5	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	4.9	4.4	4.9	5.8	5.8	5.5	5.5
Lead/Lag	Lead	Lag	Lead	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes				
Recall Mode	None	Min	None	Min	None	None	None	None

Intersection Summary
Cycle Length: 145.1
Actuated Cycle Length: 82.9
Natural Cycle: 100
Control Type: Actuated-Uncoordinated

Splits and Phases: 60: Regents Road & Governor Drive

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	106	40	39	263	74	123	24	993	84	165	687	84
Future Volume (vph)	106	40	39	263	74	123	24	993	84	165	687	84
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	4.9		5.8	5.8		5.5	5.5	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	0.93		1.00	0.91		1.00	0.99		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3277		1770	3208		1770	3498		1770	3481	
Flt Permitted	0.95	1.00		0.95	1.00		0.23	1.00		0.11	1.00	
Satd. Flow (perm)	1770	3277		1770	3208		426	3498		206	3481	
Peak-hour factor, PHF	0.90	0.90	0.90	0.86	0.86	0.86	0.84	0.84	0.84	0.83	0.83	0.83
Adj. Flow (vph)	118	44	43	306	86	143	29	1182	100	199	828	101
RTOR Reduction (vph)	0	39	0	0	113	0	0	3	0	0	5	0
Lane Group Flow (vph)	118	48	0	306	116	0	29	1279	0	199	924	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8			4		
Actuated Green, G (s)	10.2	8.3		19.3	17.4		40.2	40.2		40.5	40.5	
Effective Green, g (s)	10.2	8.3		19.3	17.4		40.2	40.2		40.5	40.5	
Actuated g/C Ratio	0.12	0.10		0.23	0.21		0.48	0.48		0.49	0.49	
Clearance Time (s)	4.4	4.9		4.4	4.9		5.8	5.8		5.5	5.5	
Vehicle Extension (s)	2.0	4.5		2.0	5.0		4.6	4.6		2.0	2.0	
Lane Grp Cap (vph)	217	328		412	673		206	1696		100	1700	
v/s Ratio Prot	0.07	0.01		c0.17	c0.04			0.37			0.27	
v/s Ratio Perm							0.07			c0.97		
v/c Ratio	0.54	0.15		0.74	0.17		0.14	0.75		1.99	0.54	
Uniform Delay, d1	34.2	34.1		29.5	26.8		11.8	17.3		21.2	14.8	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.5	0.4		6.2	0.3		0.6	2.2		479.1	0.2	
Delay (s)	35.7	34.4		35.7	27.1		12.4	19.6		500.3	15.0	
Level of Service	D	C		D	C		B	B		F	B	
Approach Delay (s)		35.1			32.0			19.4			100.6	
Approach LOS		D			C			B			F	

Intersection Summary				
HCM 2000 Control Delay	51.3	HCM 2000 Level of Service	D	
HCM 2000 Volume to Capacity ratio	1.42			
Actuated Cycle Length (s)	82.9	Sum of lost time (s)	15.1	
Intersection Capacity Utilization	74.3%	ICU Level of Service	D	
Analysis Period (min)	15			

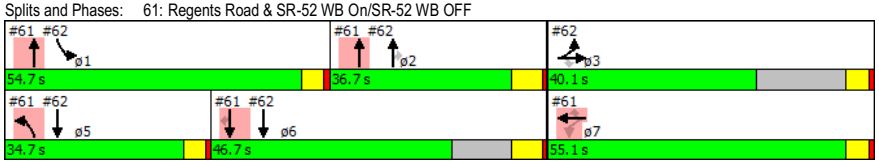
c Critical Lane Group

Lane Group	WBT	WBR	NBL	NBT	SBT	SBR	ø1	ø2	ø3
Lane Configurations									
Traffic Volume (vph)	1	122	296	643	566	151			
Future Volume (vph)	1	122	296	643	566	151			
Turn Type	NA	Perm	Prot	NA	NA	Perm			
Protected Phases	7		5	1 2	6		1	2	3
Permitted Phases		7				6			
Detector Phase	7	7	5	1 2	6	6			
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0		13.0	13.0	5.0	13.0	5.0
Minimum Split (s)	10.1	10.1	9.7		19.2	19.2	9.7	19.2	10.1
Total Split (s)	55.1	55.1	34.7		46.7	46.7	54.7	36.7	40.1
Total Split (%)	37.6%	37.6%	23.7%		31.9%	31.9%	37%	25%	27%
Yellow Time (s)	4.1	4.1	3.7		5.2	5.2	3.7	5.2	4.1
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0			
Total Lost Time (s)	5.1	5.1	4.7		6.2	6.2			
Lead/Lag			Lead		Lag	Lag	Lead	Lag	
Lead-Lag Optimize?			Yes		Yes	Yes	Yes	Yes	
Recall Mode	None	None	None		Max	Max	None	Max	None

Intersection Summary

Cycle Length: 146.5
Actuated Cycle Length: 103.8
Natural Cycle: 50
Control Type: Actuated-Uncoordinated

Splits and Phases: 61: Regents Road & SR-52 WB On/SR-52 WB OFF



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	326	1	122	296	643	0	0	566	151
Future Volume (vph)	0	0	0	326	1	122	296	643	0	0	566	151
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					5.1	5.1	4.7	4.7			6.2	6.2
Lane Util. Factor					1.00	1.00	0.97	0.95			0.95	1.00
Frt					1.00	0.85	1.00	1.00			1.00	0.85
Flt Protected					0.95	1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)					1774	1583	3433	3539			3539	1583
Flt Permitted					0.95	1.00	0.95	1.00			1.00	1.00
Satd. Flow (perm)					1774	1583	3433	3539			3539	1583
Peak-hour factor, PHF	0.25	0.25	0.25	0.93	0.93	0.93	0.85	0.85	0.85	0.87	0.87	0.87
Adj. Flow (vph)	0	0	0	351	1	131	348	756	0	0	651	174
RTOR Reduction (vph)	0	0	0	0	0	98	0	0	0	0	0	105
Lane Group Flow (vph)	0	0	0	0	352	33	348	756	0	0	651	69
Turn Type				Perm	NA	Perm	Prot	NA			NA	Perm
Protected Phases					7		5	1 2			6	
Permitted Phases				7		7						6
Actuated Green, G (s)					25.8	25.8	20.6	66.5			41.2	41.2
Effective Green, g (s)					25.8	25.8	20.6	66.5			41.2	41.2
Actuated g/C Ratio					0.25	0.25	0.20	0.64			0.40	0.40
Clearance Time (s)					5.1	5.1	4.7				6.2	6.2
Vehicle Extension (s)					2.0	2.0	2.0				2.0	2.0
Lane Grp Cap (vph)					441	394	682	2271			1407	629
v/s Ratio Prot							c0.10	c0.21			c0.18	
v/s Ratio Perm					0.20	0.02						0.04
v/c Ratio					0.80	0.08	0.51	0.33			0.46	0.11
Uniform Delay, d1					36.5	29.8	37.0	8.4			23.0	19.7
Progression Factor					1.00	1.00	1.44	0.75			1.00	1.00
Incremental Delay, d2					9.1	0.0	0.2	0.0			1.1	0.4
Delay (s)					45.6	29.9	53.6	6.4			24.1	20.0
Level of Service					D	C	D	A			C	C
Approach Delay (s)		0.0			41.3			21.3			23.3	
Approach LOS		A			D			C			C	

Intersection Summary

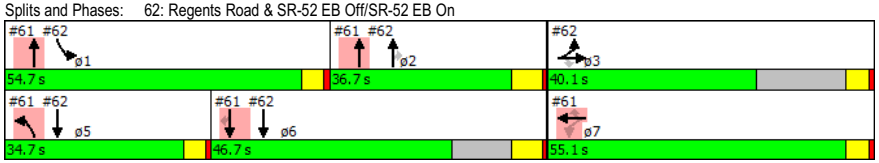
HCM 2000 Control Delay	26.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	103.6	Sum of lost time (s)	16.0
Intersection Capacity Utilization	55.5%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	EBR	NBT	NBR	SBL	SBT	ø5	ø6	ø7
Lane Configurations										
Traffic Volume (vph)	210	2	258	748	343	131	746			
Future Volume (vph)	210	2	258	748	343	131	746			
Turn Type	Split	NA	Perm	NA	Perm	Prot	NA			
Protected Phases	3	3		2		1	5 6	5	6	7
Permitted Phases			3		2					
Detector Phase	3	3	3	2	2	1	5 6			
Switch Phase										
Minimum Initial (s)	5.0	5.0	5.0	13.0	13.0	5.0		5.0	13.0	5.0
Minimum Split (s)	10.1	10.1	10.1	19.2	19.2	9.7		9.7	19.2	10.1
Total Split (s)	40.1	40.1	40.1	36.7	36.7	54.7		34.7	46.7	55.1
Total Split (%)	27.4%	27.4%	27.4%	25.1%	25.1%	37.3%		24%	32%	38%
Yellow Time (s)	4.1	4.1	4.1	5.2	5.2	3.7		3.7	5.2	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0				
Total Lost Time (s)	5.1	5.1	5.1	6.2	6.2	4.7				
Lead/Lag				Lag	Lag	Lead		Lead	Lag	
Lead-Lag Optimize?				Yes	Yes	Yes		Yes	Yes	
Recall Mode	None	None	None	Max	Max	None		None	Max	None

Intersection Summary
Cycle Length: 146.5
Actuated Cycle Length: 103.8
Natural Cycle: 50
Control Type: Actuated-Uncoordinated

Splits and Phases: 62: Regents Road & SR-52 EB Off/SR-52 EB On



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	210	2	258	0	0	0	0	748	343	131	746	0
Future Volume (vph)	210	2	258	0	0	0	0	748	343	131	746	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1	5.1					6.2	6.2	4.7	4.7	
Lane Util. Factor	0.95	0.95	1.00					0.95	1.00	1.00	0.95	
Frt	1.00	1.00	0.85					1.00	0.85	1.00	1.00	
Flt Protected	0.95	0.95	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1681	1687	1583					3539	1583	1770	3539	
Flt Permitted	0.95	0.95	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1681	1687	1583					3539	1583	1770	3539	
Peak-hour factor, PHF	0.96	0.96	0.96	0.25	0.25	0.25	0.86	0.86	0.86	0.89	0.89	0.89
Adj. Flow (vph)	219	2	269	0	0	0	0	870	399	147	838	0
RTOR Reduction (vph)	0	0	128	0	0	0	0	0	49	0	0	0
Lane Group Flow (vph)	109	112	141	0	0	0	0	870	350	147	838	0
Turn Type	Split	NA	Perm					NA	Perm	Prot	NA	
Protected Phases	3	3						2		1	5 6	
Permitted Phases			3						2			
Actuated Green, G (s)	25.8	25.8	25.8					44.1	44.1	17.7	66.5	
Effective Green, g (s)	25.8	25.8	25.8					44.1	44.1	17.7	66.5	
Actuated g/C Ratio	0.25	0.25	0.25					0.43	0.43	0.17	0.64	
Clearance Time (s)	5.1	5.1	5.1					6.2	6.2	4.7		
Vehicle Extension (s)	2.0	2.0	2.0					2.0	2.0	2.0		
Lane Grp Cap (vph)	418	420	394					1506	673	302	2271	
v/s Ratio Prot	0.06	0.07						c0.25		c0.08	c0.24	
v/s Ratio Perm			c0.09						0.22			
v/c Ratio	0.26	0.27	0.36					0.58	0.52	0.49	0.37	
Uniform Delay, d1	31.2	31.3	32.1					22.7	21.9	38.8	8.7	
Progression Factor	1.00	1.00	1.00					1.00	1.00	1.16	0.87	
Incremental Delay, d2	0.1	0.1	0.2					1.6	2.9	0.4	0.0	
Delay (s)	31.4	31.4	32.3					24.3	24.8	45.4	7.6	
Level of Service	C	C	C					C	C	D	A	
Approach Delay (s)		31.9			0.0			24.4			13.2	
Approach LOS		C			A			C			B	

Intersection Summary				
HCM 2000 Control Delay	21.7	HCM 2000 Level of Service	C	
HCM 2000 Volume to Capacity ratio	0.50			
Actuated Cycle Length (s)	103.6	Sum of lost time (s)	16.0	
Intersection Capacity Utilization	55.5%	ICU Level of Service	B	
Analysis Period (min)	15			

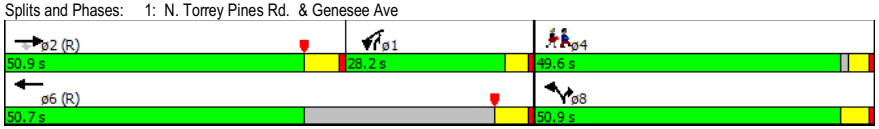
c Critical Lane Group

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	ø4
Lane Configurations							
Traffic Volume (vph)	1083	1007	431	367	695	297	
Future Volume (vph)	1083	1007	431	367	695	297	
Turn Type	NA	Perm	Prot	NA	Prot	pt+ov	
Protected Phases	2		1	6	8	8 1	4
Permitted Phases		2					
Detector Phase	2	2	1	6	8	8 1	
Switch Phase							
Minimum Initial (s)	10.0	10.0	7.0	10.0	10.0		4.0
Minimum Split (s)	43.2	43.2	11.4	24.9	23.3		41.0
Total Split (s)	50.9	50.9	28.2	50.7	50.9		49.6
Total Split (%)	39.2%	39.2%	21.7%	39.0%	39.2%		38%
Yellow Time (s)	5.2	5.2	3.4	5.0	4.3		3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	6.2	6.2	4.4	6.0	5.3		
Lead/Lag	Lead	Lead	Lag				
Lead-Lag Optimize?							
Recall Mode	C-Max	C-Max	None	C-Max	None		None

Intersection Summary

Cycle Length: 130
Actuated Cycle Length: 130
Offset: 7 (5%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 110
Control Type: Actuated-Coordinated

Splits and Phases: 1: N. Torrey Pines Rd. & Genesee Ave



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1083	1007	431	367	695	297
Future Volume (vph)	1083	1007	431	367	695	297
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.2	6.2	4.4	6.0	5.3	5.3
Lane Util. Factor	0.91	1.00	0.97	0.91	0.97	0.88
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	5085	1583	3433	5085	3433	2787
Flt Permitted	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (perm)	5085	1583	3433	5085	3433	2787
Peak-hour factor, PHF	0.95	0.95	0.80	0.80	0.90	0.90
Adj. Flow (vph)	1140	1060	539	459	772	330
RTOR Reduction (vph)	0	439	0	0	0	11
Lane Group Flow (vph)	1140	621	539	459	772	319
Turn Type	NA	Perm	Prot	NA	Prot	pt+ov
Protected Phases	2		1	6	8	8 1
Permitted Phases		2				
Actuated Green, G (s)	52.8	52.8	23.8	81.2	37.5	65.7
Effective Green, g (s)	52.8	52.8	23.8	81.2	37.5	61.3
Actuated g/C Ratio	0.41	0.41	0.18	0.62	0.29	0.47
Clearance Time (s)	6.2	6.2	4.4	6.0	5.3	
Vehicle Extension (s)	4.0	4.0	2.0	3.7	3.8	
Lane Grp Cap (vph)	2065	642	628	3176	990	1314
v/s Ratio Prot	0.22		c0.16	0.09	c0.22	0.11
v/s Ratio Perm		c0.39				
v/c Ratio	0.55	0.97	0.86	0.14	0.78	0.24
Uniform Delay, d1	29.5	37.7	51.5	10.1	42.5	20.5
Progression Factor	1.00	1.00	0.52	0.33	0.71	0.66
Incremental Delay, d2	1.1	28.2	10.4	0.1	3.9	0.1
Delay (s)	30.6	65.9	37.0	3.5	34.1	13.7
Level of Service	C	E	D	A	C	B
Approach Delay (s)	47.6			21.6	28.0	
Approach LOS	D			C	C	

Intersection Summary

HCM 2000 Control Delay	36.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	15.9
Intersection Capacity Utilization	83.5%	ICU Level of Service	E
Analysis Period (min)	15		

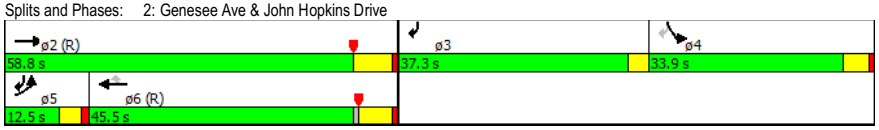
c Critical Lane Group

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	ø3
Lane Configurations							
Traffic Volume (vph)	41	1291	710	209	1013	120	
Future Volume (vph)	41	1291	710	209	1013	120	
Turn Type	Prot	NA	NA	Perm	Prot	pt+ov	
Protected Phases	5	2	6		4	3 5	3
Permitted Phases				6		4	
Detector Phase	5	2	6	6	4	3 5	
Switch Phase							
Minimum Initial (s)	4.0	10.0	10.0	10.0	7.0		4.0
Minimum Split (s)	9.5	16.7	15.9	15.9	11.9		7.0
Total Split (s)	12.5	58.8	45.5	45.5	33.9		37.3
Total Split (%)	9.6%	45.2%	35.0%	35.0%	26.1%		29%
Yellow Time (s)	3.4	5.7	4.9	4.9	3.9		3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		0.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	4.4	6.7	5.9	5.9	4.9		
Lead/Lag	Lead		Lag	Lag	Lag		Lead
Lead-Lag Optimize?	Yes		Yes	Yes	Yes		Yes
Recall Mode	None	C-Max	C-Max	C-Max	None		None

Intersection Summary

Cycle Length: 130
Actuated Cycle Length: 130
Offset: 22 (17%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 70
Control Type: Actuated-Coordinated

Splits and Phases: 2: Genesee Ave & John Hopkins Drive



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	41	1291	710	209	1013	120
Future Volume (vph)	41	1291	710	209	1013	120
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	6.7	5.9	5.9	4.9	3.0
Lane Util. Factor	1.00	0.91	0.81	1.00	0.97	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	5085	7544	1583	3433	1583
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	5085	7544	1583	3433	1583
Peak-hour factor, PHF	0.92	0.92	0.80	0.80	0.80	0.80
Adj. Flow (vph)	45	1403	888	261	1266	150
RTOR Reduction (vph)	0	0	0	177	0	10
Lane Group Flow (vph)	45	1403	888	84	1266	140
Turn Type	Prot	NA	NA	Perm	Prot	pt+ov
Protected Phases	5	2	6		4	3 5
Permitted Phases				6		4
Actuated Green, G (s)	6.9	52.1	41.6	41.6	46.1	70.2
Effective Green, g (s)	6.9	52.1	41.6	41.6	46.1	70.2
Actuated g/C Ratio	0.05	0.40	0.32	0.32	0.35	0.54
Clearance Time (s)	4.4	6.7	5.9	5.9	4.9	
Vehicle Extension (s)	2.0	4.0	3.9	3.9	5.0	
Lane Grp Cap (vph)	93	2037	2414	506	1217	891
v/s Ratio Prot	0.03	c0.28	0.12		c0.37	c0.03
v/s Ratio Perm				0.05		0.06
v/c Ratio	0.48	0.69	0.37	0.17	1.04	0.16
Uniform Delay, d1	59.8	32.2	34.1	31.7	41.9	15.0
Progression Factor	1.04	0.59	0.93	1.38	1.00	1.00
Incremental Delay, d2	1.3	1.7	0.4	0.7	36.9	0.0
Delay (s)	63.6	20.7	32.0	44.4	78.8	15.1
Level of Service	E	C	C	D	E	B
Approach Delay (s)		22.0	34.8		72.1	
Approach LOS		C	C		E	

Intersection Summary

HCM 2000 Control Delay	43.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	18.2
Intersection Capacity Utilization	63.5%	ICU Level of Service	B
Analysis Period (min)	15		

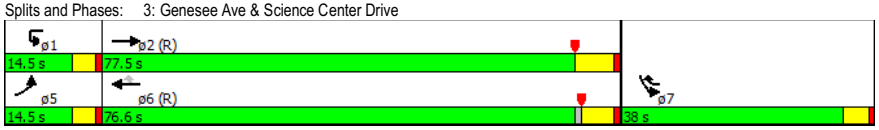
c Critical Lane Group

Lane Group	EBL	EBT	WBU	WBT	WBR	SBL
Lane Configurations						
Traffic Volume (vph)	93	2168	12	842	364	343
Future Volume (vph)	93	2168	12	842	364	343
Turn Type	Prot	NA	Prot	NA	pm+ov	Prot
Protected Phases	5	2	1	6	7	7
Permitted Phases					6	
Detector Phase	5	2	1	6	7	7
Switch Phase						
Minimum Initial (s)	4.0	10.0	4.0	10.0	4.0	4.0
Minimum Split (s)	9.5	22.5	9.5	16.0	8.9	8.9
Total Split (s)	14.5	77.5	14.5	76.6	38.0	38.0
Total Split (%)	11.2%	59.6%	11.2%	58.9%	29.2%	29.2%
Yellow Time (s)	3.4	5.9	3.4	5.0	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	6.9	4.4	6.0	4.9	4.9
Lead/Lag	Lead	Lag	Lead	Lag		
Lead-Lag Optimize?	Yes	Yes	Yes	Yes		
Recall Mode	None	C-Max	None	C-Max	None	None

Intersection Summary

Cycle Length: 130
Actuated Cycle Length: 130
Offset: 55 (42%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 60
Control Type: Actuated-Coordinated

Splits and Phases: 3: Genesee Ave & Science Center Drive



Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Traffic Volume (vph)	93	2168	12	842	364	343	81
Future Volume (vph)	93	2168	12	842	364	343	81
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	6.9	4.4	6.0	4.9	4.9	
Lane Util. Factor	1.00	0.91	1.00	0.91	1.00	0.97	
Frt	1.00	1.00	1.00	1.00	0.85	0.97	
Flt Protected	0.95	1.00	0.95	1.00	1.00	0.96	
Satd. Flow (prot)	1770	5085	1770	5085	1583	3374	
Flt Permitted	0.95	1.00	0.95	1.00	1.00	0.96	
Satd. Flow (perm)	1770	5085	1770	5085	1583	3374	
Peak-hour factor, PHF	0.97	0.97	0.92	0.83	0.83	0.90	0.90
Adj. Flow (vph)	96	2235	13	1014	439	381	90
RTOR Reduction (vph)	0	0	0	0	45	18	0
Lane Group Flow (vph)	96	2235	13	1014	394	453	0
Turn Type	Prot	NA	Prot	NA	pm+ov	Prot	
Protected Phases	5	2	1	6	7	7	
Permitted Phases					6		
Actuated Green, G (s)	12.0	87.1	3.0	79.0	102.7	23.7	
Effective Green, g (s)	12.0	87.1	3.0	79.0	102.7	23.7	
Actuated g/C Ratio	0.09	0.67	0.02	0.61	0.79	0.18	
Clearance Time (s)	4.4	6.9	4.4	6.0	4.9	4.9	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	163	3406	40	3090	1250	615	
v/s Ratio Prot	c0.05	c0.44	0.01	0.20	0.06	c0.13	
v/s Ratio Perm					0.19		
v/c Ratio	0.59	0.66	0.33	0.33	0.31	0.74	
Uniform Delay, d1	56.6	12.6	62.5	12.5	3.8	50.2	
Progression Factor	1.10	0.68	1.00	1.00	1.00	1.00	
Incremental Delay, d2	2.7	0.5	4.7	0.3	0.1	4.6	
Delay (s)	64.8	9.0	67.2	12.8	4.0	54.8	
Level of Service	E	A	E	B	A	D	
Approach Delay (s)		11.3		10.6		54.8	
Approach LOS		B		B		D	

Intersection Summary

HCM 2000 Control Delay	15.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	16.2
Intersection Capacity Utilization	71.1%	ICU Level of Service	C
Analysis Period (min)	15		

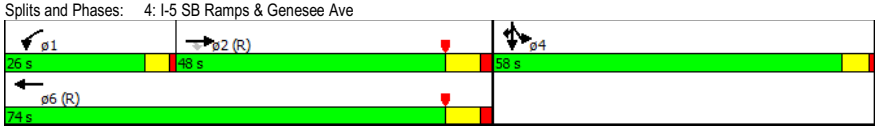
c Critical Lane Group

Lane Group	EBT	EBR	WBL	WBT	SBL	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	1847	758	339	788	830	4	346
Future Volume (vph)	1847	758	339	788	830	4	346
Turn Type	NA	Perm	Prot	NA	Split	NA	Prot
Protected Phases	2		1	6	4	4	4
Permitted Phases		2					
Detector Phase	2	2	1	6	4	4	4
Switch Phase							
Minimum Initial (s)	10.0	10.0	5.0	10.0	13.0	13.0	13.0
Minimum Split (s)	25.2	25.2	9.7	28.2	18.1	18.1	18.1
Total Split (s)	48.0	48.0	26.0	74.0	58.0	58.0	58.0
Total Split (%)	36.4%	36.4%	19.7%	56.1%	43.9%	43.9%	43.9%
Yellow Time (s)	5.2	5.2	3.7	5.2	4.1	4.1	4.1
All-Red Time (s)	2.0	2.0	1.0	2.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.2	7.2	4.7	7.2	5.1	5.1	5.1
Lead/Lag	Lag	Lag	Lead				
Lead-Lag Optimize?	Yes	Yes	Yes				
Recall Mode	C-Max	C-Max	Max	C-Max	Min	Min	Min

Intersection Summary

Cycle Length: 132
Actuated Cycle Length: 132
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 70
Control Type: Actuated-Coordinated

Splits and Phases: 4: I-5 SB Ramps & Genesee Ave



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1847	758	339	788	0	0	0	0	830	4	346
Future Volume (vph)	0	1847	758	339	788	0	0	0	0	830	4	346
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		7.2	7.2	4.7	7.2					5.1	5.1	5.1
Lane Util. Factor		0.81	0.88	0.97	0.91					0.95	0.95	0.88
Frt		1.00	0.85	1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	0.95	1.00
Satd. Flow (prot)		7544	2787	3433	5085					1681	1686	2787
Flt Permitted		1.00	1.00	0.95	1.00					0.95	0.95	1.00
Satd. Flow (perm)		7544	2787	3433	5085					1681	1686	2787
Peak-hour factor, PHF	0.95	0.95	0.95	0.89	0.89	0.89	0.25	0.25	0.25	0.90	0.90	0.90
Adj. Flow (vph)	0	1944	798	381	885	0	0	0	0	922	4	384
RTOR Reduction (vph)	0	0	551	0	0	0	0	0	0	0	0	126
Lane Group Flow (vph)	0	1944	247	381	885	0	0	0	0	461	465	258
Turn Type		NA	Perm	Prot	NA					Split	NA	Prot
Protected Phases		2		1	6					4	4	4
Permitted Phases			2									
Actuated Green, G (s)		40.8	40.8	30.0	75.5					44.2	44.2	44.2
Effective Green, g (s)		40.8	40.8	30.0	75.5					44.2	44.2	44.2
Actuated g/C Ratio		0.31	0.31	0.23	0.57					0.33	0.33	0.33
Clearance Time (s)		7.2	7.2	4.7	7.2					5.1	5.1	5.1
Vehicle Extension (s)		2.0	2.0	2.0	2.0					2.0	2.0	2.0
Lane Grp Cap (vph)		2331	861	780	2908					562	564	933
v/s Ratio Prot		c0.26		c0.11	0.17					0.27	c0.28	0.09
v/s Ratio Perm			0.09									
v/c Ratio		0.83	0.29	0.49	0.30					0.82	0.82	0.28
Uniform Delay, d1		42.4	34.6	44.3	14.6					40.3	40.3	32.2
Progression Factor		1.00	1.00	0.38	0.31					1.00	1.00	1.00
Incremental Delay, d2		3.7	0.8	1.9	0.2					8.9	9.1	0.1
Delay (s)		46.1	35.4	18.9	4.8					49.2	49.4	32.2
Level of Service		D	D	B	A					D	D	C
Approach Delay (s)		43.0			9.0			0.0			44.3	
Approach LOS		D			A			A			D	

Intersection Summary

HCM 2000 Control Delay	35.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	132.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	87.5%	ICU Level of Service	E
Analysis Period (min)	15		

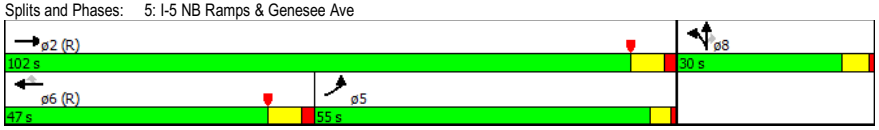
c Critical Lane Group

Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Configurations							
Traffic Volume (vph)	1017	1602	753	959	399	5	97
Future Volume (vph)	1017	1602	753	959	399	5	97
Turn Type	Prot	NA	NA	Perm	Split	NA	Perm
Protected Phases	5	2	6		8	8	
Permitted Phases				6			8
Detector Phase	5	2	6	6	8	8	8
Switch Phase							
Minimum Initial (s)	11.0	10.0	10.0	10.0	5.0	5.0	5.0
Minimum Split (s)	15.2	28.2	25.2	25.2	10.1	10.1	10.1
Total Split (s)	55.0	102.0	47.0	47.0	30.0	30.0	30.0
Total Split (%)	41.7%	77.3%	35.6%	35.6%	22.7%	22.7%	22.7%
Yellow Time (s)	3.2	5.2	5.2	5.2	4.1	4.1	4.1
All-Red Time (s)	1.0	2.0	2.0	2.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.2	7.2	7.2	7.2	5.1	5.1	5.1
Lead/Lag	Lag		Lead	Lead			
Lead-Lag Optimize?	Yes		Yes	Yes			
Recall Mode	Max	C-Max	C-Max	C-Max	Min	Min	Min

Intersection Summary

Cycle Length: 132
Actuated Cycle Length: 132
Offset: 102 (77%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 75
Control Type: Actuated-Coordinated

Splits and Phases: 5: I-5 NB Ramps & Genesee Ave



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1017	1602	0	0	753	959	399	5	97	0	0	0
Future Volume (vph)	1017	1602	0	0	753	959	399	5	97	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	7.2			7.2	7.2	5.1	5.1	5.1			
Lane Util. Factor	0.97	0.91			0.86	0.88	0.95	0.95	0.88			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.95	1.00			
Satd. Flow (prot)	3433	5085			6408	2787	1681	1687	2787			
Flt Permitted	0.95	1.00			1.00	1.00	0.95	0.95	1.00			
Satd. Flow (perm)	3433	5085			6408	2787	1681	1687	2787			
Peak-hour factor, PHF	0.95	0.95	0.95	0.90	0.90	0.90	0.91	0.91	0.91	0.25	0.25	0.25
Adj. Flow (vph)	1071	1686	0	0	837	1066	438	5	107	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	444	0	0	79	0	0	0
Lane Group Flow (vph)	1071	1686	0	0	837	622	223	220	28	0	0	0
Turn Type	Prot	NA			NA	Perm	Split	NA	Perm			
Protected Phases	5	2			6		8	8				
Permitted Phases						6			8			
Actuated Green, G (s)	50.8	98.8			43.8	43.8	20.9	20.9	20.9			
Effective Green, g (s)	50.8	98.8			43.8	43.8	20.9	20.9	20.9			
Actuated g/C Ratio	0.38	0.75			0.33	0.33	0.16	0.16	0.16			
Clearance Time (s)	4.2	7.2			7.2	7.2	5.1	5.1	5.1			
Vehicle Extension (s)	2.0	2.0			2.0	2.0	2.0	2.0	2.0			
Lane Grp Cap (vph)	1321	3806			2126	924	266	267	441			
v/s Ratio Prot	c0.31	0.33			0.13		c0.13	0.13				
v/s Ratio Perm						c0.22			0.01			
v/c Ratio	0.81	0.44			0.39	0.67	0.84	0.82	0.06			
Uniform Delay, d1	36.3	6.2			33.9	37.9	53.9	53.8	47.2			
Progression Factor	0.70	0.87			0.88	1.07	1.00	1.00	1.00			
Incremental Delay, d2	3.3	0.2			0.5	3.3	19.3	17.5	0.0			
Delay (s)	28.6	5.6			30.4	43.9	73.2	71.2	47.2			
Level of Service	C	A			C	D	E	E	D			
Approach Delay (s)		14.6			38.0			67.4			0.0	
Approach LOS		B			D			E			A	

Intersection Summary

HCM 2000 Control Delay	28.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	132.0	Sum of lost time (s)	16.5
Intersection Capacity Utilization	87.5%	ICU Level of Service	E
Analysis Period (min)	15		

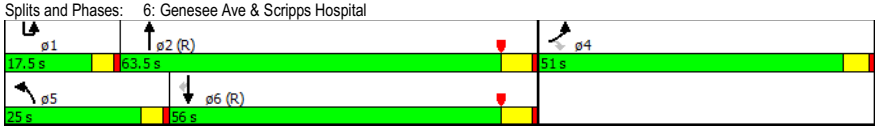
c Critical Lane Group

Lane Group	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	738	858	310	1092	8	1548	173
Future Volume (vph)	738	858	310	1092	8	1548	173
Turn Type	Prot	Perm	Prot	NA	Prot	NA	Perm
Protected Phases	4		5	2	1	6	
Permitted Phases		4					6
Detector Phase	4	4	5	2	1	6	6
Switch Phase							
Minimum Initial (s)	7.0	7.0	4.0	10.0	4.0	10.0	10.0
Minimum Split (s)	11.9	11.9	9.5	22.5	9.5	30.5	30.5
Total Split (s)	51.0	51.0	25.0	63.5	17.5	56.0	56.0
Total Split (%)	38.6%	38.6%	18.9%	48.1%	13.3%	42.4%	42.4%
Yellow Time (s)	3.9	3.9	3.4	4.7	3.4	4.7	4.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	4.4	5.7	4.4	5.7	5.7
Lead/Lag			Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?			Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	C-Max	None	C-Max	C-Max

Intersection Summary

Cycle Length: 132
Actuated Cycle Length: 132
Offset: 34 (26%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 120
Control Type: Actuated-Coordinated

Splits and Phases: 6: Genesee Ave & Scripps Hospital



Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	738	858	310	1092	8	1548	173
Future Volume (vph)	738	858	310	1092	8	1548	173
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9	4.4	5.7	4.4	5.7	5.7
Lane Util. Factor	0.97	1.00	1.00	0.91	1.00	0.91	1.00
Frt	1.00	0.85	1.00	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	1583	1770	5085	1770	5085	1583
Flt Permitted	0.95	1.00	0.95	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	1583	1770	5085	1770	5085	1583
Peak-hour factor, PHF	0.90	0.90	0.90	0.86	0.92	0.89	0.90
Adj. Flow (vph)	820	953	344	1270	9	1739	192
RTOR Reduction (vph)	0	174	0	0	0	0	61
Lane Group Flow (vph)	820	779	344	1270	9	1739	131
Turn Type	Prot	Perm	Prot	NA	Prot	NA	Perm
Protected Phases	4		5	2	1	6	
Permitted Phases		4					6
Actuated Green, G (s)	46.1	46.1	20.6	69.6	1.3	50.3	50.3
Effective Green, g (s)	46.1	46.1	20.6	69.6	1.3	50.3	50.3
Actuated g/C Ratio	0.35	0.35	0.16	0.53	0.01	0.38	0.38
Clearance Time (s)	4.9	4.9	4.4	5.7	4.4	5.7	5.7
Vehicle Extension (s)	2.0	2.0	2.0	5.2	2.0	4.0	4.0
Lane Grp Cap (vph)	1198	552	276	2681	17	1937	603
v/s Ratio Prot	0.24		c0.19	0.25	0.01	c0.34	
v/s Ratio Perm		c0.49					0.08
v/c Ratio	0.68	1.41	1.25	0.47	0.53	0.90	0.22
Uniform Delay, d1	36.7	43.0	55.7	19.7	65.0	38.4	27.6
Progression Factor	1.00	1.00	1.20	0.29	1.07	0.52	0.33
Incremental Delay, d2	1.3	195.8	135.5	0.5	12.2	6.7	0.8
Delay (s)	38.0	238.8	202.6	6.2	81.7	26.7	9.9
Level of Service	D	F	F	A	F	C	A
Approach Delay (s)	145.9			48.0		25.3	
Approach LOS	F			D		C	

Intersection Summary

HCM 2000 Control Delay	72.3	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.16		
Actuated Cycle Length (s)	132.0	Sum of lost time (s)	15.0
Intersection Capacity Utilization	91.9%	ICU Level of Service	F
Analysis Period (min)	15		

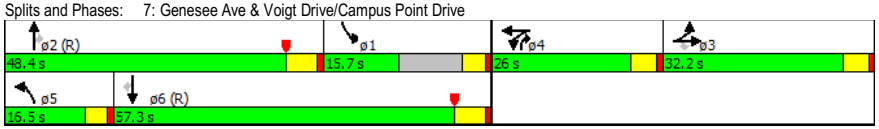
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	295	11	425	536	21	221	850	61	55	2195	110
Future Volume (vph)	295	11	425	536	21	221	850	61	55	2195	110
Turn Type	Split	NA	Perm	Split	NA	Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	3	3		4	4	5	2	4	1	6	
Permitted Phases			3					2			6
Detector Phase	3	3	3	4	4	5	2	4	1	6	6
Switch Phase											
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	4.0	10.0	7.0	4.0	10.0	10.0
Minimum Split (s)	11.9	11.9	11.9	22.5	22.5	8.4	37.7	22.5	8.4	33.7	33.7
Total Split (s)	32.2	32.2	32.2	26.0	26.0	16.5	48.4	26.0	15.7	57.3	57.3
Total Split (%)	24.4%	24.4%	24.4%	19.7%	19.7%	12.5%	36.7%	19.7%	11.9%	43.4%	43.4%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.9	3.4	4.7	3.9	3.4	4.7	4.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	4.9	4.9	4.9	4.4	5.7	4.9	4.4	5.7	5.7
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lead	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	None	None	C-Max	C-Max

Intersection Summary

Cycle Length: 132
Actuated Cycle Length: 132
Offset: 25 (19%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 125
Control Type: Actuated-Coordinated

Splits and Phases: 7: Genesee Ave & Voigt Drive/Campus Point Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	295	11	425	536	21	290	221	850	61	55	2195	110
Future Volume (vph)	295	11	425	536	21	290	221	850	61	55	2195	110
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9	4.9	4.9	4.9		4.4	5.7	4.9	4.4	5.7	5.7
Lane Util. Factor	0.97	1.00	0.88	0.97	0.95		0.97	0.91	1.00	0.97	0.91	1.00
Frt	1.00	1.00	0.85	1.00	0.86		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	1863	2787	3433	3044		3433	5085	1583	3433	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	1863	2787	3433	3044		3433	5085	1583	3433	5085	1583
Peak-hour factor, PHF	0.90	0.90	0.90	0.87	0.87	0.87	0.92	0.92	0.92	0.94	0.94	0.94
Adj. Flow (vph)	328	12	472	616	24	333	240	924	66	59	2335	117
RTOR Reduction (vph)	0	0	250	0	256	0	0	0	29	0	0	52
Lane Group Flow (vph)	328	12	222	616	101	0	240	924	37	59	2335	65
Turn Type	Split	NA	Perm	Split	NA		Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	3	3		4	4		5	2	4	1	6	
Permitted Phases			3						2			6
Actuated Green, G (s)	20.4	20.4	20.4	21.1	21.1		12.0	53.8	74.9	16.8	58.6	58.6
Effective Green, g (s)	20.4	20.4	20.4	21.1	21.1		12.0	53.8	74.9	16.8	58.6	58.6
Actuated g/C Ratio	0.15	0.15	0.15	0.16	0.16		0.09	0.41	0.57	0.13	0.44	0.44
Clearance Time (s)	4.9	4.9	4.9	4.9	4.9		4.4	5.7	4.9	4.4	5.7	5.7
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0		2.0	3.7	2.0	2.0	4.0	4.0
Lane Grp Cap (vph)	530	287	430	548	486		312	2072	898	436	2257	702
v/s Ratio Prot	c0.10	0.01		c0.18	0.03		c0.07	0.18	0.01	0.02	c0.46	
v/s Ratio Perm			0.08						0.02			0.04
v/c Ratio	0.62	0.04	0.52	1.12	0.21		0.77	0.45	0.04	0.14	1.03	0.09
Uniform Delay, d1	52.2	47.5	51.3	55.5	48.2		58.6	28.3	12.6	51.2	36.7	21.3
Progression Factor	1.00	1.00	1.00	1.00	1.00		0.67	0.75	1.11	0.67	0.53	0.22
Incremental Delay, d2	1.5	0.0	0.4	77.3	0.1		9.5	0.7	0.0	0.0	17.5	0.0
Delay (s)	53.7	47.5	51.7	132.8	48.3		48.9	22.0	14.1	34.2	37.1	4.7
Level of Service	D	D	D	F	D		D	C	B	C	D	A
Approach Delay (s)		52.4			101.8			26.9			35.5	
Approach LOS		D			F			C			D	

Intersection Summary

HCM 2000 Control Delay	47.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.95		
Actuated Cycle Length (s)	132.0	Sum of lost time (s)	19.9
Intersection Capacity Utilization	86.4%	ICU Level of Service	E
Analysis Period (min)	15		

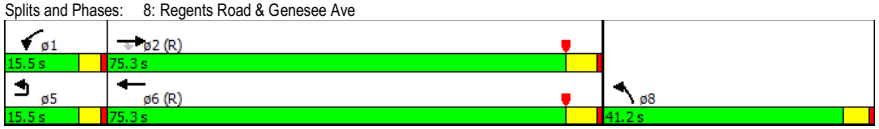
c Critical Lane Group

Lane Group	EBU	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations							
Traffic Volume (vph)	48	2138	970	26	891	190	48
Future Volume (vph)	48	2138	970	26	891	190	48
Turn Type	Prot	NA	Perm	Prot	NA	Prot	custom
Protected Phases	5	2		1	6	8	
Permitted Phases			2				
Detector Phase	5	2	2	1	6	8	
Switch Phase							
Minimum Initial (s)	4.0	10.0	10.0	4.0	10.0	7.0	
Minimum Split (s)	9.5	22.7	22.7	9.5	22.5	37.9	
Total Split (s)	15.5	75.3	75.3	15.5	75.3	41.2	
Total Split (%)	11.7%	57.0%	57.0%	11.7%	57.0%	31.2%	
Yellow Time (s)	3.4	4.7	4.7	3.4	4.7	3.9	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.4	5.7	5.7	4.4	5.7	4.9	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		
Recall Mode	None	C-Max	C-Max	None	C-Max	None	

Intersection Summary

Cycle Length: 132
Actuated Cycle Length: 132
Offset: 29 (22%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 8: Regents Road & Genesee Ave



Movement	EBU	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations							
Traffic Volume (vph)	48	2138	970	26	891	190	48
Future Volume (vph)	48	2138	970	26	891	190	48
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	12	16	12
Total Lost time (s)	4.4	5.7	5.7	4.4	5.7	4.9	4.0
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	1770	5085	1583	1770	5085	2006	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (perm)	1770	5085	1583	1770	5085	2006	1583
Peak-hour factor, PHF	0.92	0.96	0.96	0.94	0.94	0.88	0.88
Adj. Flow (vph)	52	2227	1010	28	948	216	55
RTOR Reduction (vph)	0	0	194	0	0	0	55
Lane Group Flow (vph)	52	2227	816	28	948	216	0
Turn Type	Prot	NA	Perm	Prot	NA	Prot	custom
Protected Phases	5	2		1	6	8	
Permitted Phases			2				
Actuated Green, G (s)	7.3	83.6	83.6	4.6	80.9	28.8	0.0
Effective Green, g (s)	7.3	83.6	83.6	4.6	80.9	28.8	0.0
Actuated g/C Ratio	0.06	0.63	0.63	0.03	0.61	0.22	0.00
Clearance Time (s)	4.4	5.7	5.7	4.4	5.7	4.9	
Vehicle Extension (s)	2.0	5.0	5.0	2.0	3.9	2.0	
Lane Grp Cap (vph)	97	3220	1002	61	3116	437	0
v/s Ratio Prot	c0.03	0.44		0.02	0.19	c0.11	
v/s Ratio Perm			c0.52				
v/c Ratio	0.54	0.69	0.81	0.46	0.30	0.49	0.00
Uniform Delay, d1	60.7	15.8	18.3	62.5	12.2	45.2	66.0
Progression Factor	0.78	1.51	2.23	0.81	1.11	1.00	1.00
Incremental Delay, d2	0.7	0.3	1.9	1.8	0.2	0.3	0.0
Delay (s)	48.3	24.2	42.9	52.2	13.8	45.5	66.0
Level of Service	D	C	D	D	B	D	E
Approach Delay (s)		30.3			14.9	49.7	
Approach LOS		C			B	D	

Intersection Summary

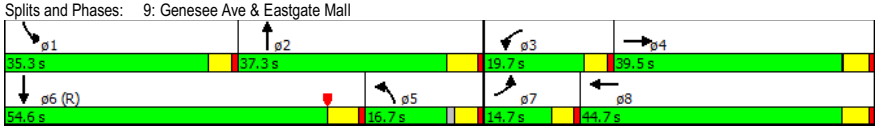
HCM 2000 Control Delay	28.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	132.0	Sum of lost time (s)	15.0
Intersection Capacity Utilization	71.8%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	83	245	223	329	62	608	487	1290
Future Volume (vph)	83	245	223	329	62	608	487	1290
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	7	4	3	8	5	2	1	6
Permitted Phases								
Detector Phase	7	4	3	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	4.0	7.0	4.0	7.0	4.0	10.0	4.0	10.0
Minimum Split (s)	8.4	38.9	9.5	39.1	9.5	31.7	9.5	32.7
Total Split (s)	14.7	39.5	19.7	44.7	16.7	37.3	35.3	54.6
Total Split (%)	11.1%	29.9%	14.9%	33.9%	12.7%	28.3%	26.7%	41.4%
Yellow Time (s)	3.4	3.9	3.4	4.1	3.4	4.7	3.4	4.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	4.9	4.4	5.1	4.4	5.7	4.4	5.7
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max

Intersection Summary

Cycle Length: 132
Actuated Cycle Length: 132
Offset: 58 (44%), Referenced to phase 6:SBT, Start of Yellow
Natural Cycle: 115
Control Type: Actuated-Coordinated

Splits and Phases: 9: Genesee Ave & Eastgate Mall



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	83	245	126	223	329	176	62	608	122	487	1290	116
Future Volume (vph)	83	245	126	223	329	176	62	608	122	487	1290	116
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	5.1		4.4	5.7		4.4	5.7	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.91		0.97	0.91	
Frt	1.00	0.95		1.00	0.95		1.00	0.97		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3359		1770	3354		1770	4958		3433	5022	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	3359		1770	3354		1770	4958		3433	5022	
Peak-hour factor, PHF	0.92	0.92	0.92	0.82	0.82	0.82	0.96	0.96	0.96	0.95	0.95	0.95
Adj. Flow (vph)	90	266	137	272	401	215	65	633	127	513	1358	122
RTOR Reduction (vph)	0	56	0	0	58	0	0	20	0	0	7	0
Lane Group Flow (vph)	90	347	0	272	558	0	65	740	0	513	1473	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Actuated Green, G (s)	10.2	22.5		20.9	33.0		8.2	45.1		24.1	61.0	
Effective Green, g (s)	10.2	22.5		20.9	33.0		8.2	45.1		24.1	61.0	
Actuated g/C Ratio	0.08	0.17		0.16	0.25		0.06	0.34		0.18	0.46	
Clearance Time (s)	4.4	4.9		4.4	5.1		4.4	5.7		4.4	5.7	
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	4.2		2.0	4.3	
Lane Grp Cap (vph)	136	572		280	838		109	1693		626	2320	
v/s Ratio Prot	0.05	0.10		c0.15	c0.17		c0.04	0.15		c0.15	c0.29	
v/s Ratio Perm												
v/c Ratio	0.66	0.61		0.97	0.67		0.60	0.44		0.82	0.63	
Uniform Delay, d1	59.2	50.6		55.3	44.5		60.3	33.6		51.9	27.0	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		0.76	0.42	
Incremental Delay, d2	9.0	1.2		45.5	1.6		5.7	0.3		5.8	1.0	
Delay (s)	68.2	51.9		100.8	46.1		66.0	33.9		45.0	12.4	
Level of Service	E	D		F	D		E	C		D	B	
Approach Delay (s)		54.9			62.9			36.4			20.8	
Approach LOS		D			E			D			C	

Intersection Summary

HCM 2000 Control Delay	36.8	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	132.0	Sum of lost time (s)	19.6
Intersection Capacity Utilization	70.3%	ICU Level of Service	C
Analysis Period (min)	15		

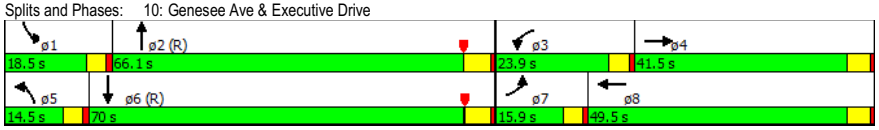
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	16	100	280	207	102	509	112	1906
Future Volume (vph)	16	100	280	207	102	509	112	1906
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	7	4	3	8	5	2	1	6
Permitted Phases								
Detector Phase	7	4	3	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	10.0	4.0	10.0
Minimum Split (s)	8.4	8.9	8.4	8.9	8.4	15.5	9.5	15.4
Total Split (s)	15.9	41.5	23.9	49.5	14.5	66.1	18.5	70.0
Total Split (%)	10.6%	27.7%	15.9%	33.0%	9.7%	44.1%	12.3%	46.7%
Yellow Time (s)	3.4	3.9	3.4	3.9	3.4	4.5	3.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	4.9	4.4	4.9	4.4	5.5	4.4	5.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	None	C-Max

Intersection Summary

Cycle Length: 150
Actuated Cycle Length: 150
Offset: 100 (67%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 75
Control Type: Actuated-Coordinated

Splits and Phases: 10: Genesee Ave & Executive Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	16	100	91	280	207	100	102	509	155	112	1906	31
Future Volume (vph)	16	100	91	280	207	100	102	509	155	112	1906	31
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	4.9		4.4	5.5		4.4	5.4	
Lane Util. Factor	1.00	0.95		0.97	0.95		1.00	0.91		1.00	0.91	
Frt	1.00	0.93		1.00	0.95		1.00	0.97		1.00	1.00	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3286		3433	3366		1770	4907		1770	5073	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	3286		3433	3366		1770	4907		1770	5073	
Peak-hour factor, PHF	0.80	0.80	0.80	0.92	0.92	0.92	0.91	0.91	0.91	0.90	0.90	0.90
Adj. Flow (vph)	20	125	114	304	225	109	112	559	170	124	2118	34
RTOR Reduction (vph)	0	99	0	0	44	0	0	29	0	0	1	0
Lane Group Flow (vph)	20	140	0	304	290	0	112	700	0	124	2151	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Actuated Green, G (s)	4.3	20.2		17.0	32.9		13.5	79.3		14.3	80.2	
Effective Green, g (s)	4.3	20.2		17.0	32.9		13.5	79.3		14.3	80.2	
Actuated g/C Ratio	0.03	0.13		0.11	0.22		0.09	0.53		0.10	0.53	
Clearance Time (s)	4.4	4.9		4.4	4.9		4.4	5.5		4.4	5.4	
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	3.6		2.0	3.8	
Lane Grp Cap (vph)	50	442		389	738		159	2594		168	2712	
v/s Ratio Prot	0.01	0.04		c0.09	c0.09		0.06	0.14		c0.07	c0.42	
v/s Ratio Perm												
v/c Ratio	0.40	0.32		0.78	0.39		0.70	0.27		0.74	0.79	
Uniform Delay, d1	71.6	58.7		64.7	50.0		66.3	19.4		66.0	28.2	
Progression Factor	1.00	1.00		1.00	1.00		1.44	0.43		1.00	1.00	
Incremental Delay, d2	1.9	0.2		9.1	0.1		10.8	0.3		13.5	2.5	
Delay (s)	73.5	58.8		73.8	50.2		106.5	8.5		79.6	30.7	
Level of Service	E	E		E	D		F	A		E	C	
Approach Delay (s)		60.0			61.4			21.6			33.3	
Approach LOS		E			E			C			C	

Intersection Summary

HCM 2000 Control Delay	37.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	19.2
Intersection Capacity Utilization	72.8%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	34	2	180	9	18	33	694	11	2327
Future Volume (vph)	34	2	180	9	18	33	694	11	2327
Turn Type	Split	NA	Prot	NA	NA	Prot	NA	Prot	NA
Protected Phases	4	4	4	3		5	2	1	6
Permitted Phases									
Detector Phase	4	4	4	3		5	2	1	6
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	4.0		4.0	10.0	4.0	10.0
Minimum Split (s)	8.9	8.9	8.9	8.9		8.4	15.7	8.4	15.7
Total Split (s)	15.0	15.0	15.0	13.2		13.5	33.3	13.5	33.3
Total Split (%)	20.0%	20.0%	20.0%	17.6%		18.0%	44.4%	18.0%	44.4%
Yellow Time (s)	3.9	3.9	3.9	3.9		3.4	4.7	3.4	4.7
All-Red Time (s)	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	4.9	4.9		4.4	5.7	4.4	5.7
Lead/Lag	Lag	Lag	Lag	Lead		Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None		None	C-Max	None	C-Max

Intersection Summary

Cycle Length: 75
Actuated Cycle Length: 75
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 11: Genesee Ave & Executive Square

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	34	2	180	135	9	18	33	694	9	11	2327	20
Future Volume (vph)	34	2	180	135	9	18	33	694	9	11	2327	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9	4.9		4.9	4.0	4.4	5.7		4.4	5.7	
Lane Util. Factor	0.95	0.91	0.95		0.95	0.95	1.00	0.91		1.00	0.91	
Frt	1.00	0.86	0.85		1.00	0.85	1.00	1.00		1.00	1.00	
Flt Protected	0.95	1.00	1.00		0.96	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1454	1504		1688	1504	1770	5075		1770	5079	
Flt Permitted	0.95	1.00	1.00		0.96	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1681	1454	1504		1688	1504	1770	5075		1770	5079	
Peak-hour factor, PHF	0.80	0.80	0.80	0.80	0.80	0.80	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	42	2	225	169	11	22	36	763	10	12	2557	22
RTOR Reduction (vph)	0	100	105	0	1	21	0	1	0	0	1	0
Lane Group Flow (vph)	39	17	10	0	181	0	36	772	0	12	2578	0
Turn Type	Split	NA	Prot	Split	NA	NA	Prot	NA		Prot	NA	
Protected Phases	4	4	4	3	3		5	2		1	6	
Permitted Phases												
Actuated Green, G (s)	6.6	6.6	6.6		8.3	0.0	4.2	39.0		1.2	36.0	
Effective Green, g (s)	6.6	6.6	6.6		8.3	0.0	4.2	39.0		1.2	36.0	
Actuated g/C Ratio	0.09	0.09	0.09		0.11	0.00	0.06	0.52		0.02	0.48	
Clearance Time (s)	4.9	4.9	4.9		4.9		4.4	5.7		4.4	5.7	
Vehicle Extension (s)	2.0	2.0	2.0		2.0		2.0	3.9		2.0	2.2	
Lane Grp Cap (vph)	147	127	132		186	0	99	2639		28	2437	
v/s Ratio Prot	c0.02	0.01	0.01		c0.11		c0.02	c0.15		0.01	c0.51	
v/s Ratio Perm												
v/c Ratio	0.27	0.13	0.08		0.97	0.00	0.36	0.29		0.43	1.06	
Uniform Delay, d1	31.9	31.6	31.4		33.2	37.5	34.1	10.2		36.6	19.5	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.04	0.90		1.17	1.33	
Incremental Delay, d2	0.4	0.2	0.1		57.7	0.0	0.7	0.2		2.6	33.1	
Delay (s)	32.3	31.7	31.5		90.9	37.5	36.2	9.4		45.4	59.1	
Level of Service	C	C	C		F	D	D	A		D	E	
Approach Delay (s)		31.7			85.4			10.5			59.1	
Approach LOS		C			F			B			E	

Intersection Summary

HCM 2000 Control Delay	48.4	HCM 2000 Level of Service	D	
HCM 2000 Volume to Capacity ratio	0.89			
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	19.9	
Intersection Capacity Utilization	74.1%	ICU Level of Service	D	
Analysis Period (min)	15			

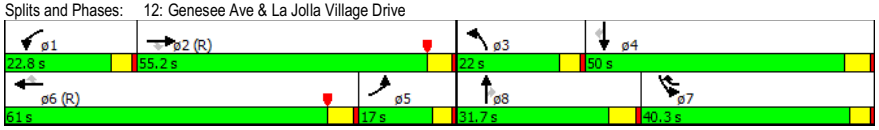
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	230	1301	357	339	1546	122	383	367	67	556	1456	502
Future Volume (vph)	230	1301	357	339	1546	122	383	367	67	556	1456	502
Turn Type	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6	7	3	8		7	4	
Permitted Phases			2			6			8			4
Detector Phase	5	2	2	1	6	7	3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	4.0	10.0	10.0	4.0	10.0	4.0	4.0	10.0	10.0	4.0	10.0	10.0
Minimum Split (s)	8.4	15.3	15.3	8.4	15.5	8.4	8.4	15.7	15.7	8.4	15.4	15.4
Total Split (s)	17.0	55.2	55.2	22.8	61.0	40.3	22.0	31.7	31.7	40.3	50.0	50.0
Total Split (%)	11.3%	36.8%	36.8%	15.2%	40.7%	26.9%	14.7%	21.1%	21.1%	26.9%	33.3%	33.3%
Yellow Time (s)	3.4	4.3	4.3	3.4	4.5	3.4	3.4	4.7	4.7	3.4	4.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.3	5.3	4.4	5.5	4.4	4.4	5.7	5.7	4.4	5.4	5.4
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lag	Lead	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 150
Actuated Cycle Length: 150
Offset: 6 (4%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 140
Control Type: Actuated-Coordinated

Splits and Phases: 12: Genesee Ave & La Jolla Village Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	230	1301	357	339	1546	122	383	367	67	556	1456	502
Future Volume (vph)	230	1301	357	339	1546	122	383	367	67	556	1456	502
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.3	5.3	4.4	5.5	4.4	4.4	5.7	5.7	4.4	5.4	5.4
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.91	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5085	1583	3433	5085	1583	3433	5085	1583	3433	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5085	1583	3433	5085	1583	3433	5085	1583	3433	5085	1583
Peak-hour factor, PHF	0.80	0.80	0.80	0.80	0.80	0.80	0.91	0.91	0.91	0.93	0.93	0.93
Adj. Flow (vph)	288	1626	446	424	1932	152	421	403	74	598	1566	540
RTOR Reduction (vph)	0	0	173	0	0	30	0	0	65	0	0	113
Lane Group Flow (vph)	288	1626	273	424	1933	123	421	403	9	598	1566	427
Turn Type	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6	7	3	8		7	4	
Permitted Phases			2			6			8			4
Actuated Green, G (s)	12.6	49.9	49.9	18.4	55.5	99.4	17.6	18.0	18.0	43.9	44.6	44.6
Effective Green, g (s)	12.6	49.9	49.9	18.4	55.5	99.4	17.6	18.0	18.0	43.9	44.6	44.6
Actuated g/C Ratio	0.08	0.33	0.33	0.12	0.37	0.66	0.12	0.12	0.12	0.29	0.30	0.30
Clearance Time (s)	4.4	5.3	5.3	4.4	5.5	4.4	4.4	5.7	5.7	4.4	5.4	5.4
Vehicle Extension (s)	2.0	6.0	6.0	2.0	5.8	2.0	2.0	3.5	3.5	2.0	4.1	4.1
Lane Grp Cap (vph)	288	1691	526	421	1881	1095	402	610	189	1004	1511	470
v/s Ratio Prot	0.08	c0.32		0.12	c0.38	0.03	c0.12	0.08		0.17	c0.31	
v/s Ratio Perm			0.17			0.04			0.01			0.27
v/c Ratio	1.00	0.96	0.52	1.01	1.03	0.11	1.05	0.66	0.05	0.60	1.04	0.91
Uniform Delay, d1	68.7	49.1	40.4	65.8	47.2	9.2	66.2	63.1	58.4	45.4	52.7	50.7
Progression Factor	0.59	0.45	0.13	0.70	0.79	0.14	0.91	0.90	1.00	0.80	0.82	0.85
Incremental Delay, d2	15.9	2.1	0.3	14.9	15.1	0.0	41.5	1.1	0.0	0.2	23.7	8.5
Delay (s)	56.2	24.3	5.6	61.3	52.4	1.3	101.8	57.9	58.5	36.5	66.8	51.6
Level of Service	E	C	A	E	D	A	F	E	E	D	E	D
Approach Delay (s)		24.7			50.8			78.5			57.0	
Approach LOS		C			D			E			E	

Intersection Summary

HCM 2000 Control Delay	48.5	HCM 2000 Level of Service	D	
HCM 2000 Volume to Capacity ratio	1.04			
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	20.0	
Intersection Capacity Utilization	91.9%	ICU Level of Service	F	
Analysis Period (min)	15			

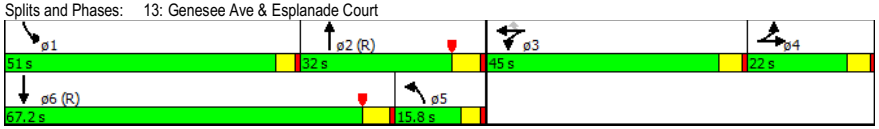
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	183	136	534	165	803	68	356	1052	942
Future Volume (vph)	183	136	534	165	803	68	356	1052	942
Turn Type	Split	NA	Split	NA	Perm	Prot	NA	Prot	NA
Protected Phases	4	4	3	3		5	2	1	6
Permitted Phases					3				
Detector Phase	4	4	3	3	3	5	2	1	6
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	10.0	4.0	10.0
Minimum Split (s)	8.9	8.9	8.9	8.9	8.9	8.4	16.0	8.4	15.7
Total Split (s)	22.0	22.0	45.0	45.0	45.0	15.8	32.0	51.0	67.2
Total Split (%)	14.7%	14.7%	30.0%	30.0%	30.0%	10.5%	21.3%	34.0%	44.8%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.9	3.4	5.0	3.4	4.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	4.9	4.9	4.9	4.4	6.0	4.4	5.7
Lead/Lag	Lag	Lag	Lead	Lead	Lead	Lag	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	None	C-Max

Intersection Summary

Cycle Length: 150
Actuated Cycle Length: 150
Offset: 125 (83%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 120
Control Type: Actuated-Coordinated

Splits and Phases: 13: Genesee Ave & Esplanade Court



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	183	136	83	534	165	803	68	356	439	1052	942	206
Future Volume (vph)	183	136	83	534	165	803	68	356	439	1052	942	206
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9		4.9	4.9	4.9	4.4	6.0		4.4	5.7	
Lane Util. Factor	0.97	1.00		0.97	0.95	0.95	1.00	0.91		0.97	0.91	
Frt	1.00	0.94		1.00	0.90	0.85	1.00	0.92		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	3433	1757		3433	1593	1504	1770	4664		3433	4948	
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	3433	1757		3433	1593	1504	1770	4664		3433	4948	
Peak-hour factor, PHF	0.80	0.80	0.80	0.83	0.83	0.83	0.80	0.80	0.80	0.80	0.80	0.80
Adj. Flow (vph)	229	170	104	643	199	967	85	445	549	1315	1178	258
RTOR Reduction (vph)	0	15	0	0	48	418	0	148	0	0	23	0
Lane Group Flow (vph)	229	259	0	643	547	153	85	846	0	1315	1413	0
Turn Type	Split	NA		Split	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	4	4		3	3		5	2		1	6	
Permitted Phases						3						
Actuated Green, G (s)	17.1	17.1		40.1	40.1	40.1	11.4	26.0		46.6	61.5	
Effective Green, g (s)	17.1	17.1		40.1	40.1	40.1	11.4	26.0		46.6	61.5	
Actuated g/C Ratio	0.11	0.11		0.27	0.27	0.27	0.08	0.17		0.31	0.41	
Clearance Time (s)	4.9	4.9		4.9	4.9	4.9	4.4	6.0		4.4	5.7	
Vehicle Extension (s)	2.0	2.0		2.0	2.0	2.0	2.0	3.7		2.0	4.1	
Lane Grp Cap (vph)	391	200		917	425	402	134	808		1066	2028	
v/s Ratio Prot	0.07	c0.15		0.19	c0.34		0.05	c0.18		c0.38	0.29	
v/s Ratio Perm						0.10						
v/c Ratio	0.59	1.29		0.70	1.29	0.38	0.63	1.30dr		1.23	0.70	
Uniform Delay, d1	63.1	66.5		49.5	54.9	44.8	67.3	62.0		51.7	36.5	
Progression Factor	1.00	1.00		1.00	1.00	1.00	0.94	0.92		0.65	0.51	
Incremental Delay, d2	1.4	164.5		2.0	146.3	0.2	5.7	41.6		109.4	1.0	
Delay (s)	64.5	230.9		51.5	201.3	45.0	69.1	98.4		142.9	19.5	
Level of Service	E	F		D	F	D	E	F		F	B	
Approach Delay (s)		155.2			98.7			96.1			78.5	
Approach LOS		F			F			F			E	

Intersection Summary

HCM 2000 Control Delay	93.8	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.22		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	20.2
Intersection Capacity Utilization	93.9%	ICU Level of Service	F
Analysis Period (min)	15		

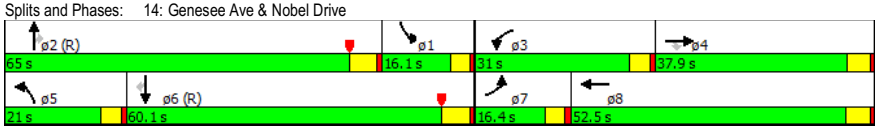
dr Defacto Right Lane. Recode with 1 though lane as a right lane.
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	259	508	329	406	845	294	518	172	136	1457	155
Future Volume (vph)	259	508	329	406	845	294	518	172	136	1457	155
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8	5	2		1	6	
Permitted Phases			4					2			6
Detector Phase	7	4	4	3	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	4.0	10.0	10.0	4.0	10.0	4.0	10.0	10.0	4.0	10.0	10.0
Minimum Split (s)	8.4	37.9	37.9	8.4	40.1	8.4	35.7	35.7	8.4	38.9	38.9
Total Split (s)	16.4	37.9	37.9	31.0	52.5	21.0	65.0	65.0	16.1	60.1	60.1
Total Split (%)	10.9%	25.3%	25.3%	20.7%	35.0%	14.0%	43.3%	43.3%	10.7%	40.1%	40.1%
Yellow Time (s)	3.4	3.9	3.9	3.4	4.1	3.4	4.7	4.7	3.4	4.9	4.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	4.9	4.9	4.4	5.1	4.4	5.7	5.7	4.4	5.9	5.9
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max

Intersection Summary

Cycle Length: 150
Actuated Cycle Length: 150
Offset: 20 (13%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 130
Control Type: Actuated-Coordinated

Splits and Phases: 14: Genesee Ave & Nobel Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	259	508	329	406	845	77	294	518	172	136	1457	155
Future Volume (vph)	259	508	329	406	845	77	294	518	172	136	1457	155
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9	4.9	4.4	5.1		4.4	5.7	5.7	4.4	5.9	5.9
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95		0.97	0.95	1.00	0.97	0.91	1.00
Frt	1.00	1.00	0.85	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	3539	1583	3433	3495		3433	3539	1583	3433	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3539	1583	3433	3495		3433	3539	1583	3433	5085	1583
Peak-hour factor, PHF	0.91	0.91	0.91	0.84	0.84	0.84	0.87	0.87	0.87	0.84	0.84	0.84
Adj. Flow (vph)	285	558	362	483	1006	92	338	595	198	162	1735	185
RTOR Reduction (vph)	0	0	164	0	5	0	0	0	94	0	0	75
Lane Group Flow (vph)	285	558	198	483	1093	0	338	595	104	162	1735	110
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4						2			6
Actuated Green, G (s)	12.0	35.3	35.3	24.3	47.4		16.3	59.3	59.3	11.7	54.5	54.5
Effective Green, g (s)	12.0	35.3	35.3	24.3	47.4		16.3	59.3	59.3	11.7	54.5	54.5
Actuated g/C Ratio	0.08	0.24	0.24	0.16	0.32		0.11	0.40	0.40	0.08	0.36	0.36
Clearance Time (s)	4.4	4.9	4.9	4.4	5.1		4.4	5.7	5.7	4.4	5.9	5.9
Vehicle Extension (s)	2.0	4.0	4.0	2.0	2.1		2.0	8.0	8.0	2.0	4.0	4.0
Lane Grp Cap (vph)	274	832	372	556	1104		373	1399	625	267	1847	575
v/s Ratio Prot	c0.08	0.16		0.14	c0.31		c0.10	0.17		0.05	c0.34	
v/s Ratio Perm			0.12						0.07			0.07
v/c Ratio	1.04	0.67	0.53	0.87	0.99		0.91	0.43	0.17	0.61	0.94	0.19
Uniform Delay, d1	69.0	52.1	50.1	61.3	51.1		66.1	33.0	29.3	66.9	46.2	32.7
Progression Factor	0.92	1.12	1.34	1.00	1.00		1.09	0.45	0.02	0.93	0.89	1.08
Incremental Delay, d2	61.1	2.0	1.6	13.1	24.6		20.4	0.7	0.5	1.9	8.4	0.5
Delay (s)	124.4	60.3	68.7	74.4	75.7		92.5	15.6	1.1	64.3	49.6	35.9
Level of Service	F	E	E	E	E		F	B	A	E	D	D
Approach Delay (s)		78.0			75.3			36.1			49.5	
Approach LOS		E			E			D			D	

Intersection Summary

HCM 2000 Control Delay	59.5	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.96		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	19.8
Intersection Capacity Utilization	86.2%	ICU Level of Service	E
Analysis Period (min)	15		

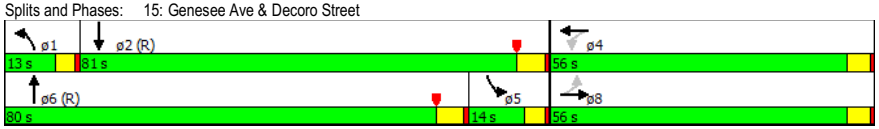
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	85	32	190	68	87	859	39	2162
Future Volume (vph)	85	32	190	68	87	859	39	2162
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		8		4	1	6	5	2
Permitted Phases	8		4					
Detector Phase	8	8	4	4	1	6	5	2
Switch Phase								
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	10.0	4.0	10.0
Minimum Split (s)	8.9	8.9	8.9	8.9	8.4	15.7	8.4	15.9
Total Split (s)	56.0	56.0	56.0	56.0	13.0	80.0	14.0	81.0
Total Split (%)	37.3%	37.3%	37.3%	37.3%	8.7%	53.3%	9.3%	54.0%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.4	4.7	3.4	4.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.9		4.9	4.4	5.7	4.4	5.9
Lead/Lag					Lead	Lead	Lag	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	None	C-Max

Intersection Summary

Cycle Length: 150
Actuated Cycle Length: 150
Offset: 21 (14%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 15: Genesee Ave & Decoro Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	85	32	141	190	68	74	87	859	15	39	2162	136
Future Volume (vph)	85	32	141	190	68	74	87	859	15	39	2162	136
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9			4.9		4.4	5.7		4.4	5.9	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frt		0.93			0.97		1.00	1.00		1.00	0.99	
Flt Protected		0.98			0.97		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1698			1756		1770	3530		1770	3508	
Flt Permitted		0.77			0.60		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1326			1083		1770	3530		1770	3508	
Peak-hour factor, PHF	0.85	0.85	0.85	0.80	0.80	0.80	0.85	0.85	0.85	0.90	0.90	0.90
Adj. Flow (vph)	100	38	166	238	85	92	102	1011	18	43	2402	151
RTOR Reduction (vph)	0	29	0	0	7	0	0	1	0	0	3	0
Lane Group Flow (vph)	0	275	0	0	409	0	102	1028	0	43	2550	0
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		8			4		1	6		5	2	
Permitted Phases	8			4								
Actuated Green, G (s)		51.1			51.1		8.6	76.2		7.7	75.1	
Effective Green, g (s)		51.1			51.1		8.6	76.2		7.7	75.1	
Actuated g/C Ratio		0.34			0.34		0.06	0.51		0.05	0.50	
Clearance Time (s)		4.9			4.9		4.4	5.7		4.4	5.9	
Vehicle Extension (s)		2.0			2.0		2.0	4.3		2.0	3.7	
Lane Grp Cap (vph)		451			368		101	1793		90	1756	
v/s Ratio Prot							c0.06	0.29		0.02	c0.73	
v/s Ratio Perm		0.21			c0.38							
v/c Ratio		0.61			1.11		1.01	0.57		0.48	1.45	
Uniform Delay, d1		41.2			49.5		70.7	25.6		69.2	37.5	
Progression Factor		1.00			1.00		1.10	0.78		0.90	0.88	
Incremental Delay, d2		1.6			80.9		90.0	1.3		0.7	205.0	
Delay (s)		42.8			130.4		167.8	21.4		63.2	238.1	
Level of Service		D			F		F	C		E	F	
Approach Delay (s)		42.8			130.4			34.6			235.2	
Approach LOS		D			F			C			F	

Intersection Summary

HCM 2000 Control Delay	161.2	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.29		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	15.2
Intersection Capacity Utilization	113.1%	ICU Level of Service	H
Analysis Period (min)	15		

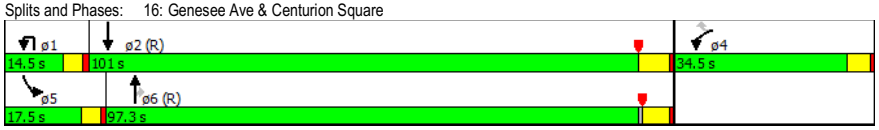
c Critical Lane Group

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	ø1
Lane Configurations							
Traffic Volume (vph)	89	23	936	46	46	2345	
Future Volume (vph)	89	23	936	46	46	2345	
Turn Type	Prot	Perm	NA	Perm	Prot	NA	
Protected Phases	4		6		5	2	1
Permitted Phases		4		6			
Detector Phase	4	4	6	6	5	2	
Switch Phase							
Minimum Initial (s)	7.0	7.0	10.0	10.0	4.0	10.0	4.0
Minimum Split (s)	11.9	11.9	15.7	15.7	8.4	16.4	8.4
Total Split (s)	34.5	34.5	97.3	97.3	17.5	101.0	14.5
Total Split (%)	23.0%	23.0%	64.9%	64.9%	11.7%	67.3%	10%
Yellow Time (s)	3.9	3.9	4.7	4.7	3.4	5.4	3.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.9	4.9	5.7	5.7	4.4	6.4	
Lead/Lag			Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?			Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	C-Max	C-Max	None	C-Max	None

Intersection Summary

Cycle Length: 150
Actuated Cycle Length: 150
Offset: 33 (22%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 16: Genesee Ave & Centurion Square



Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	89	23	0	936	46	46	2345
Future Volume (vph)	89	23	0	936	46	46	2345
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9		5.7	5.7	4.4	6.4
Lane Util. Factor	1.00	1.00		0.95	1.00	0.97	0.95
Frt	1.00	0.85		1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00		1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583		3539	1583	3433	3539
Flt Permitted	0.95	1.00		1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583		3539	1583	3433	3539
Peak-hour factor, PHF	0.80	0.80	0.92	0.89	0.89	0.94	0.94
Adj. Flow (vph)	111	29	0	1052	52	49	2495
RTOR Reduction (vph)	0	26	0	0	12	0	0
Lane Group Flow (vph)	111	3	0	1052	40	49	2495
Turn Type	Prot	Perm	Prot	NA	Perm	Prot	NA
Protected Phases	4		1	6		5	2
Permitted Phases		4			6		
Actuated Green, G (s)	13.8	13.8		115.6	115.6	5.6	124.9
Effective Green, g (s)	13.8	13.8		115.6	115.6	5.6	124.9
Actuated g/C Ratio	0.09	0.09		0.77	0.77	0.04	0.83
Clearance Time (s)	4.9	4.9		5.7	5.7	4.4	6.4
Vehicle Extension (s)	2.0	2.0		4.2	4.2	2.0	3.4
Lane Grp Cap (vph)	162	145		2727	1219	128	2946
v/s Ratio Prot	c0.06			0.30		0.01	c0.70
v/s Ratio Perm		0.00			0.03		
v/c Ratio	0.69	0.02		0.39	0.03	0.38	0.85
Uniform Delay, d1	66.0	61.9		5.6	4.0	70.5	7.1
Progression Factor	1.00	1.00		1.00	1.00	0.74	2.40
Incremental Delay, d2	9.2	0.0		0.4	0.1	0.1	0.3
Delay (s)	75.2	62.0		6.0	4.1	52.6	17.4
Level of Service	E	E		A	A	D	B
Approach Delay (s)	72.4			5.9			18.1
Approach LOS	E			A			B

Intersection Summary

HCM 2000 Control Delay	16.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.86		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	15.7
Intersection Capacity Utilization	80.1%	ICU Level of Service	D
Analysis Period (min)	15		

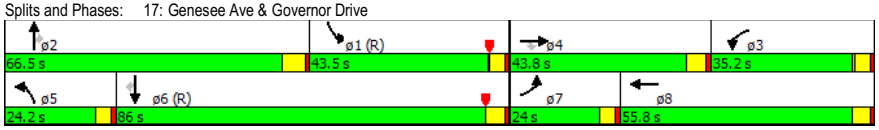
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	94	187	84	524	232	144	611	429	452	1622	227
Future Volume (vph)	94	187	84	524	232	144	611	429	452	1622	227
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8	5	2		1	6	
Permitted Phases			4					2			6
Detector Phase	7	4	4	3	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	4.0	8.0	8.0	4.0	8.0	4.0	8.0	8.0	4.0	8.0	8.0
Minimum Split (s)	8.4	13.2	13.2	8.4	13.2	8.4	13.9	13.9	8.4	13.4	13.4
Total Split (s)	24.0	43.8	43.8	35.2	55.8	24.2	66.5	66.5	43.5	86.0	86.0
Total Split (%)	12.6%	23.1%	23.1%	18.5%	29.4%	12.7%	35.0%	35.0%	22.9%	45.3%	45.3%
Yellow Time (s)	3.4	4.2	4.2	3.4	4.2	3.4	4.9	4.9	3.4	4.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.2	5.2	4.4	5.2	4.4	5.9	5.9	4.4	5.4	5.4
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lead	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	C-Max	C-Max	C-Max

Intersection Summary

Cycle Length: 190
Actuated Cycle Length: 190
Offset: 65.7 (35%), Referenced to phase 1:SBL and 6:SBT, Start of Yellow
Natural Cycle: 130
Control Type: Actuated-Coordinated

Splits and Phases: 17: Genesee Ave & Governor Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	94	187	84	524	232	129	144	611	429	452	1622	227
Future Volume (vph)	94	187	84	524	232	129	144	611	429	452	1622	227
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	16	12	12	12	12	12	12	12
Total Lost time (s)	4.4	5.2	5.2	4.4	5.2		4.4	5.9	5.9	4.4	5.4	5.4
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95		1.00	0.95	1.00	0.97	0.95	1.00
Frt	1.00	1.00	0.85	1.00	0.95		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	3539	1583	3433	3797		1770	3539	1583	3433	3539	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3539	1583	3433	3797		1770	3539	1583	3433	3539	1583
Peak-hour factor, PHF	0.95	0.95	0.95	0.87	0.87	0.87	0.92	0.92	0.92	0.89	0.89	0.89
Adj. Flow (vph)	99	197	88	602	267	148	157	664	466	508	1822	255
RTOR Reduction (vph)	0	0	75	0	39	0	0	0	169	0	0	52
Lane Group Flow (vph)	99	197	13	602	376	0	157	664	297	508	1822	203
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4						2			6
Actuated Green, G (s)	9.9	28.1	28.1	36.2	54.4		18.9	46.1	46.1	59.7	87.4	87.4
Effective Green, g (s)	9.9	28.1	28.1	36.2	54.4		18.9	46.1	46.1	59.7	87.4	87.4
Actuated g/C Ratio	0.05	0.15	0.15	0.19	0.29		0.10	0.24	0.24	0.31	0.46	0.46
Clearance Time (s)	4.4	5.2	5.2	4.4	5.2		4.4	5.9	5.9	4.4	5.4	5.4
Vehicle Extension (s)	2.0	2.3	2.3	2.0	3.8		2.0	2.9	2.9	2.0	3.5	3.5
Lane Grp Cap (vph)	178	523	234	654	1087		176	858	384	1078	1627	728
v/s Ratio Prot	c0.03	c0.06		c0.18	0.10		c0.09	0.19		0.15	c0.51	
v/s Ratio Perm			0.01						0.19			0.13
v/c Ratio	0.56	0.38	0.06	0.92	0.35		0.89	0.77	0.77	0.47	1.12	0.28
Uniform Delay, d1	87.9	73.0	69.6	75.5	53.7		84.5	67.1	67.1	52.4	51.3	31.8
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	2.1	0.3	0.1	18.1	0.2		38.0	4.4	9.3	1.5	62.8	1.0
Delay (s)	90.0	73.3	69.6	93.6	54.0		122.6	71.4	76.4	53.9	114.1	32.7
Level of Service	F	E	E	F	D		F	E	E	D	F	C
Approach Delay (s)		76.8			77.4			79.5			94.3	
Approach LOS		E			E			E			F	

Intersection Summary

HCM 2000 Control Delay	86.1	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	190.0	Sum of lost time (s)	19.9
Intersection Capacity Utilization	90.6%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	462	314	558	1802	447
Future Volume (Veh/h)	0	462	314	558	1802	447
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.81	0.81	0.91	0.91	0.91	0.91
Hourly flow rate (vph)	0	570	345	613	1980	491
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2976	990	1980			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2976	990	1980			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	0	0	0			
cM capacity (veh/h)	0	245	288			

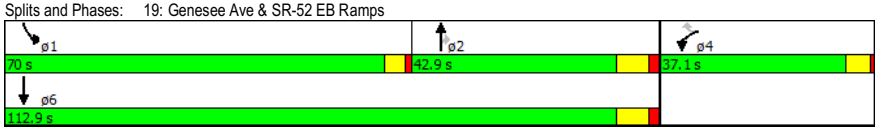
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	570	345	306	306	990	990	491
Volume Left	0	345	0	0	0	0	0
Volume Right	570	0	0	0	0	0	491
cSH	245	288	1700	1700	1700	1700	1700
Volume to Capacity	2.32	1.20	0.18	0.18	0.58	0.58	0.29
Queue Length 95th (ft)	1133	387	0	0	0	0	0
Control Delay (s)	640.3	155.2	0.0	0.0	0.0	0.0	0.0
Lane LOS	F	F					
Approach Delay (s)	640.3	55.9			0.0		
Approach LOS	F						

Intersection Summary			
Average Delay	104.7		
Intersection Capacity Utilization	85.1%	ICU Level of Service	E
Analysis Period (min)	15		

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	326	201	702	289	699	1525
Future Volume (vph)	326	201	702	289	699	1525
Turn Type	Prot	Perm	NA	Perm	Prot	NA
Protected Phases	4		2		1	6
Permitted Phases		4		2		
Detector Phase	4	4	2	2	1	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	13.0	13.0	5.0	10.0
Minimum Split (s)	37.1	37.1	38.5	38.5	10.7	17.5
Total Split (s)	37.1	37.1	42.9	42.9	70.0	112.9
Total Split (%)	24.7%	24.7%	28.6%	28.6%	46.7%	75.3%
Yellow Time (s)	4.1	4.1	5.5	5.5	3.7	5.5
All-Red Time (s)	1.0	1.0	2.0	2.0	1.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.1	5.1	7.5	7.5	4.7	7.5
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	None	None	Min	Min	None	Min

Intersection Summary
Cycle Length: 150
Actuated Cycle Length: 149.4
Natural Cycle: 140
Control Type: Actuated-Uncoordinated

Splits and Phases: 19: Genesee Ave & SR-52 EB Ramps



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	326	201	702	289	699	1525
Future Volume (vph)	326	201	702	289	699	1525
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1	7.5	7.5	4.7	7.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.86	0.86	0.91	0.91	0.92	0.92
Adj. Flow (vph)	379	234	771	318	760	1658
RTOR Reduction (vph)	0	163	0	113	0	0
Lane Group Flow (vph)	379	71	771	205	760	1658
Turn Type	Prot	Perm	NA	Perm	Prot	NA
Protected Phases	4		2		1	6
Permitted Phases		4		2		
Actuated Green, G (s)	32.0	32.0	35.0	35.0	65.1	104.8
Effective Green, g (s)	32.0	32.0	35.0	35.0	65.1	104.8
Actuated g/C Ratio	0.21	0.21	0.23	0.23	0.44	0.70
Clearance Time (s)	5.1	5.1	7.5	7.5	4.7	7.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	379	339	829	370	771	2482
v/s Ratio Prot	c0.21		c0.22		c0.43	0.47
v/s Ratio Perm		0.05		0.13		
v/c Ratio	1.00	0.21	0.93	0.55	0.99	0.67
Uniform Delay, d1	58.7	48.3	56.0	50.3	41.7	12.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	46.2	0.3	16.7	1.8	28.6	0.7
Delay (s)	104.9	48.6	72.7	52.1	70.3	13.2
Level of Service	F	D	E	D	E	B
Approach Delay (s)	83.4		66.7			31.2
Approach LOS	F		E			C

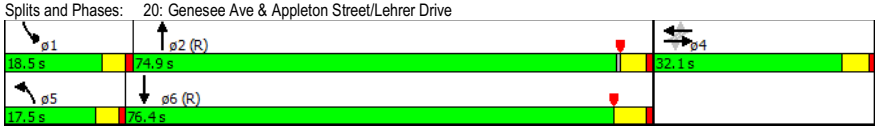
Intersection Summary			
HCM 2000 Control Delay	48.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.97		
Actuated Cycle Length (s)	149.4	Sum of lost time (s)	17.3
Intersection Capacity Utilization	90.6%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	247	54	17	25	27	673	195	1270
Future Volume (vph)	247	54	17	25	27	673	195	1270
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		4	5	2	1	6
Permitted Phases	4		4					
Detector Phase	4	4	4	4	5	2	1	6
Switch Phase								
Minimum Initial (s)	6.0	6.0	6.0	6.0	4.0	10.0	4.0	10.0
Minimum Split (s)	10.9	10.9	10.9	10.9	8.4	14.9	8.4	15.8
Total Split (s)	32.1	32.1	32.1	32.1	17.5	74.9	18.5	76.4
Total Split (%)	25.5%	25.5%	25.5%	25.5%	13.9%	59.4%	14.7%	60.6%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.4	3.9	3.4	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.9		4.9	4.4	4.9	4.4	5.8
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	None	C-Max

Intersection Summary
Cycle Length: 126
Actuated Cycle Length: 126
Offset: 107 (85%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 20: Genesee Ave & Appleton Street/Lehrer Drive



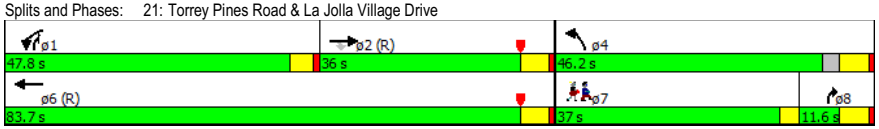
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	247	54	24	17	25	92	27	673	13	195	1270	307
Future Volume (vph)	247	54	24	17	25	92	27	673	13	195	1270	307
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	16	12	12	16	12	12	12	12	12	12	12
Total Lost time (s)		4.9			4.9		4.4	4.9		4.4	5.8	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frt		0.99			0.91		1.00	1.00		1.00	0.97	
Flt Protected		0.96			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		2014			1903		1770	3529		1770	3436	
Flt Permitted		0.56			0.96		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1165			1840		1770	3529		1770	3436	
Peak-hour factor, PHF	0.86	0.86	0.86	0.84	0.84	0.84	0.82	0.82	0.82	0.93	0.93	0.93
Adj. Flow (vph)	287	63	28	20	30	110	33	821	16	210	1366	330
RTOR Reduction (vph)	0	2	0	0	63	0	0	1	0	0	14	0
Lane Group Flow (vph)	0	376	0	0	97	0	33	836	0	210	1682	0
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4			4								
Actuated Green, G (s)		27.2			27.2		5.4	70.5		14.1	78.3	
Effective Green, g (s)		27.2			27.2		5.4	70.5		14.1	78.3	
Actuated g/C Ratio		0.22			0.22		0.04	0.56		0.11	0.62	
Clearance Time (s)		4.9			4.9		4.4	4.9		4.4	5.8	
Vehicle Extension (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		251			397		75	1974		198	2135	
v/s Ratio Prot							0.02	0.24		c0.12	c0.49	
v/s Ratio Perm		c0.32			0.05							
v/c Ratio		1.50			0.25		0.44	0.42		1.06	0.79	
Uniform Delay, d1		49.4			40.9		58.8	16.0		56.0	17.7	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		243.3			0.3		4.1	0.7		80.9	3.0	
Delay (s)		292.7			41.2		62.9	16.7		136.9	20.7	
Level of Service		F			D		E	B		F	C	
Approach Delay (s)		292.7			41.2			18.4			33.5	
Approach LOS		F			D			B			C	

Intersection Summary			
HCM 2000 Control Delay	59.5	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.01		
Actuated Cycle Length (s)	126.0	Sum of lost time (s)	15.1
Intersection Capacity Utilization	85.5%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	ø7	ø8
Lane Configurations								
Traffic Volume (vph)	1729	343	1401	772	128	1037		
Future Volume (vph)	1729	343	1401	772	128	1037		
Turn Type	NA	Perm	Prot	NA	Prot	pt+ov		
Protected Phases	2		1	6	4	8 1	7	8
Permitted Phases		2						
Detector Phase	2	2	1	6	4	8 1		
Switch Phase								
Minimum Initial (s)	10.0	10.0	4.0	10.0	4.0		4.0	4.0
Minimum Split (s)	15.4	15.4	8.4	15.3	9.6		37.0	9.6
Total Split (s)	36.0	36.0	47.8	83.7	46.2		37.0	11.6
Total Split (%)	27.2%	27.2%	36.1%	63.2%	34.9%		28%	9%
Yellow Time (s)	4.4	4.4	3.4	4.3	4.6		3.0	4.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		0.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0			
Total Lost Time (s)	5.4	5.4	4.4	5.3	5.6			
Lead/Lag	Lag	Lag	Lead				Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes				Yes	Yes
Recall Mode	C-Max	C-Max	None	C-Max	None		None	None

Intersection Summary
Cycle Length: 132.4
Actuated Cycle Length: 132.4
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 21: Torrey Pines Road & La Jolla Village Drive



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1729	343	1401	772	128	1037
Future Volume (vph)	1729	343	1401	772	128	1037
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.4	5.4	4.4	5.3	5.6	5.6
Lane Util. Factor	0.91	1.00	0.97	0.91	0.97	0.88
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	5085	1583	3433	5085	3433	2787
Flt Permitted	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (perm)	5085	1583	3433	5085	3433	2787
Peak-hour factor, PHF	0.90	0.90	0.89	0.89	0.91	0.91
Adj. Flow (vph)	1921	381	1574	867	141	1140
RTOR Reduction (vph)	0	151	0	0	0	0
Lane Group Flow (vph)	1921	230	1574	867	141	1140
Turn Type	NA	Perm	Prot	NA	Prot	pt+ov
Protected Phases	2		1	6	4	8 1
Permitted Phases		2				
Actuated Green, G (s)	30.0	30.0	43.4	77.9	43.6	62.4
Effective Green, g (s)	30.0	30.0	43.4	77.9	43.6	62.4
Actuated g/C Ratio	0.23	0.23	0.33	0.59	0.33	0.47
Clearance Time (s)	5.4	5.4	4.4	5.3	5.6	
Vehicle Extension (s)	5.5	5.5	2.0	8.0	2.0	
Lane Grp Cap (vph)	1152	358	1125	2991	1130	1313
v/s Ratio Prot	c0.38		c0.46	0.17	c0.04	c0.41
v/s Ratio Perm		0.15				
v/c Ratio	1.67	0.64	1.40	0.29	0.12	0.87
Uniform Delay, d1	51.2	46.4	44.5	13.5	31.1	31.3
Progression Factor	0.67	0.46	1.00	1.00	1.00	1.00
Incremental Delay, d2	301.6	2.7	185.0	0.2	0.0	6.1
Delay (s)	335.7	24.0	229.5	13.8	31.1	37.4
Level of Service	F	C	F	B	C	D
Approach Delay (s)	284.2			152.9	36.7	
Approach LOS	F			F	D	

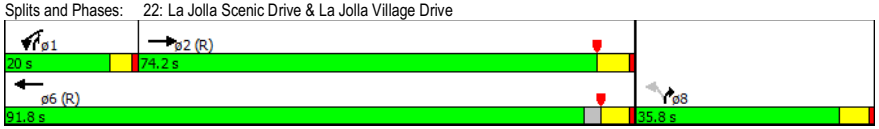
Intersection Summary			
HCM 2000 Control Delay	178.4	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.13		
Actuated Cycle Length (s)	132.4	Sum of lost time (s)	18.4
Intersection Capacity Utilization	89.9%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Configurations					
Traffic Volume (vph)	2619	527	2012	145	347
Future Volume (vph)	2619	527	2012	145	347
Turn Type	NA	Prot	NA	Perm	pt+ov
Protected Phases	2	1	6		8 1
Permitted Phases				8	
Detector Phase	2	1	6	8	8 1
Switch Phase					
Minimum Initial (s)	10.0	4.0	10.0	4.0	
Minimum Split (s)	15.7	8.4	15.3	9.5	
Total Split (s)	74.2	20.0	91.8	35.8	
Total Split (%)	57.1%	15.4%	70.6%	27.5%	
Yellow Time (s)	4.7	3.4	4.3	4.5	
All-Red Time (s)	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.7	4.4	5.3	5.5	
Lead/Lag	Lag	Lead			
Lead-Lag Optimize?	Yes	Yes			
Recall Mode	C-Max	None	C-Max	None	

Intersection Summary
Cycle Length: 130
Actuated Cycle Length: 130
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 130
Control Type: Actuated-Coordinated

Splits and Phases: 22: La Jolla Scenic Drive & La Jolla Village Drive



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	2619	132	527	2012	145	347
Future Volume (vph)	2619	132	527	2012	145	347
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.7		4.4	5.3	5.5	5.5
Lane Util. Factor	0.91		0.97	0.91	1.00	0.88
Frt	0.99		1.00	1.00	1.00	0.85
Flt Protected	1.00		0.95	1.00	0.95	1.00
Satd. Flow (prot)	5049		3433	5085	1770	2787
Flt Permitted	1.00		0.95	1.00	0.95	1.00
Satd. Flow (perm)	5049		3433	5085	1770	2787
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.83	0.83
Adj. Flow (vph)	2847	143	573	2187	175	418
RTOR Reduction (vph)	4	0	0	0	0	1
Lane Group Flow (vph)	2986	0	573	2187	175	417
Turn Type	NA		Prot	NA	Perm	pt+ov
Protected Phases	2		1	6		8 1
Permitted Phases					8	
Actuated Green, G (s)	68.5		26.1	99.4	19.8	51.4
Effective Green, g (s)	68.5		26.1	99.4	19.8	51.4
Actuated g/C Ratio	0.53		0.20	0.76	0.15	0.40
Clearance Time (s)	5.7		4.4	5.3	5.5	
Vehicle Extension (s)	4.0		2.0	5.9	2.0	
Lane Grp Cap (vph)	2660		689	3888	269	1101
v/s Ratio Prot	c0.59		c0.17	0.43		0.15
v/s Ratio Perm					c0.10	
v/c Ratio	1.12		0.83	0.56	0.65	0.38
Uniform Delay, d1	30.8		49.8	6.3	51.8	28.0
Progression Factor	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	60.7		8.1	0.6	4.2	0.1
Delay (s)	91.5		57.9	6.9	56.1	28.0
Level of Service	F		E	A	E	C
Approach Delay (s)	91.5			17.5	36.3	
Approach LOS	F			B	D	

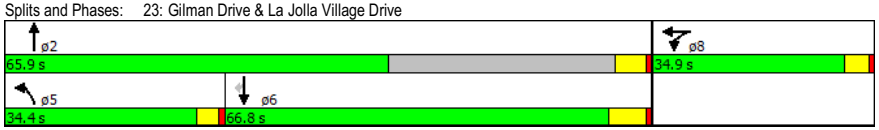
Intersection Summary			
HCM 2000 Control Delay	54.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.97		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	15.6
Intersection Capacity Utilization	89.6%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	WBT	NBL	NBT	SBT	SBR
Lane Configurations					
Traffic Volume (vph)	0	182	258	1082	182
Future Volume (vph)	0	182	258	1082	182
Turn Type	NA	Prot	NA	NA	Perm
Protected Phases	8	5	2	6	
Permitted Phases					6
Detector Phase	8	5	2	6	6
Switch Phase					
Minimum Initial (s)	4.0	4.0	10.0	10.0	10.0
Minimum Split (s)	8.9	8.4	15.9	16.8	16.8
Total Split (s)	34.9	34.4	65.9	66.8	66.8
Total Split (%)	25.6%	25.3%	48.4%	49.1%	49.1%
Yellow Time (s)	3.9	3.4	4.9	5.8	5.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.4	5.9	6.8	6.8
Lead/Lag		Lead		Lag	Lag
Lead-Lag Optimize?		Yes		Yes	Yes
Recall Mode	None	None	Min	Min	Min

Intersection Summary
Cycle Length: 136.1
Actuated Cycle Length: 76.6
Natural Cycle: 60
Control Type: Actuated-Uncoordinated

Splits and Phases: 23: Gilman Drive & La Jolla Village Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	17	0	109	182	258	0	0	1082	182
Future Volume (vph)	0	0	0	17	0	109	182	258	0	0	1082	182
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.9		4.4	5.9			6.8	6.8
Lane Util. Factor					1.00		1.00	0.95			0.95	1.00
Frt					0.88		1.00	1.00			1.00	0.85
Flt Protected					0.99		0.95	1.00			1.00	1.00
Satd. Flow (prot)					1634		1770	3539			3539	1583
Flt Permitted					0.99		0.95	1.00			1.00	1.00
Satd. Flow (perm)					1634		1770	3539			3539	1583
Peak-hour factor, PHF	0.25	0.25	0.25	0.83	0.83	0.83	0.83	0.83	0.83	0.97	0.97	0.97
Adj. Flow (vph)	0	0	0	20	0	131	219	311	0	0	1115	188
RTOR Reduction (vph)	0	0	0	0	118	0	0	0	0	0	0	50
Lane Group Flow (vph)	0	0	0	0	33	0	219	311	0	0	1115	138
Turn Type				Split	NA		Prot	NA			NA	Perm
Protected Phases				8	8		5	2			6	
Permitted Phases												6
Actuated Green, G (s)					7.8		16.5	57.4			35.6	35.6
Effective Green, g (s)					7.8		16.5	57.4			35.6	35.6
Actuated g/C Ratio					0.10		0.22	0.76			0.47	0.47
Clearance Time (s)					4.9		4.4	5.9			6.8	6.8
Vehicle Extension (s)					3.0		3.0	3.0			3.0	3.0
Lane Grp Cap (vph)					167		384	2672			1657	741
v/s Ratio Prot					c0.02		c0.12	0.09			c0.32	
v/s Ratio Perm												0.09
v/c Ratio					0.20		0.57	0.12			0.67	0.19
Uniform Delay, d1					31.2		26.6	2.5			15.7	11.8
Progression Factor					1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2					0.6		2.0	0.0			1.1	0.1
Delay (s)					31.8		28.6	2.5			16.8	11.9
Level of Service					C		C	A			B	B
Approach Delay (s)		0.0			31.8			13.3			16.1	
Approach LOS		A			C			B			B	

Intersection Summary				
HCM 2000 Control Delay	16.5	HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio	0.58			
Actuated Cycle Length (s)	76.0	Sum of lost time (s)	16.1	
Intersection Capacity Utilization	Err%	ICU Level of Service	H	
Analysis Period (min)	15			

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	8	5	1020	0	0	0	0	413	123	166	969	0
Future Volume (Veh/h)	8	5	1020	0	0	0	0	413	123	166	969	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.97	0.97	0.97	0.25	0.25	0.25	0.83	0.83	0.83	0.96	0.96	0.96
Hourly flow rate (vph)	8	5	1052	0	0	0	0	498	148	173	1009	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)			13									
Median type								None			None	
Median storage veh)												
Upstream signal (ft)											483	
pX, platoon unblocked	0.77	0.77	0.77	0.77	0.77		0.77					
vC, conflicting volume	1604	2001	504	1877	1853	249	1009			646		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1182	1699	0	1538	1507	249	408			646		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	92	91	0	0	100	100	100			82		
cM capacity (veh/h)	96	57	833	0	75	751	881			935		

Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	1060	249	249	148	173	504	504
Volume Left	8	0	0	0	173	0	0
Volume Right	1052	0	0	148	0	0	0
cSH	839	1700	1700	1700	935	1700	1700
Volume to Capacity	1.26	0.15	0.15	0.09	0.18	0.30	0.30
Queue Length 95th (ft)	951	0	0	0	17	0	0
Control Delay (s)	145.0	0.0	0.0	0.0	9.7	0.0	0.0
Lane LOS	F				A		
Approach Delay (s)	Err	0.0			1.4		
Approach LOS	F						

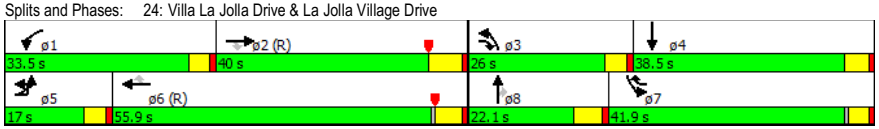
Intersection Summary				
Average Delay	Err			
Intersection Capacity Utilization	Err%	ICU Level of Service	H	
Analysis Period (min)	15			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	57	1887	67	605	1115	390	451	237	662	1208	721
Future Volume (vph)	57	1887	67	605	1115	390	451	237	662	1208	721
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA
Protected Phases	5	2	3	1	6	7	3	8		7	4
Permitted Phases			2			6			8		
Detector Phase	5	2	3	1	6	7	3	8	8	7	4
Switch Phase											
Minimum Initial (s)	4.0	10.0	4.0	4.0	10.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.4	16.4	22.4	8.4	15.3	8.4	22.4	9.5	9.5	8.4	8.9
Total Split (s)	17.0	40.0	26.0	33.5	55.9	41.9	26.0	22.1	22.1	41.9	38.5
Total Split (%)	12.3%	29.0%	18.8%	24.3%	40.5%	30.4%	18.8%	16.0%	16.0%	30.4%	27.9%
Yellow Time (s)	3.4	5.4	3.4	3.4	4.3	3.4	3.4	4.5	4.5	3.4	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	6.4	4.4	4.4	5.3	4.4	4.4	5.5	5.5	4.4	4.9
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	C-Max	None	None	None	None	None	None

Intersection Summary

Cycle Length: 138
Actuated Cycle Length: 138
Offset: 44 (32%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 24: Villa La Jolla Drive & La Jolla Village Drive



Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	54	57	1887	67	605	1115	390	451	237	662	1208	721
Future Volume (vph)	54	57	1887	67	605	1115	390	451	237	662	1208	721
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.4	6.4	4.4	4.4	5.3	4.4	4.4	5.5	5.5	4.4	4.9
Lane Util. Factor		1.00	0.91	1.00	0.97	0.91	1.00	0.97	0.95	0.95	0.97	1.00
Frt		1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.93	0.85	1.00	0.98
Flt Protected		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)		1770	5085	1583	3433	5085	1583	3433	1639	1504	3433	1825
Flt Permitted		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Satd. Flow (perm)		1770	5085	1583	3433	5085	1583	3433	1639	1504	3433	1825
Peak-hour factor, PHF	0.92	0.80	0.80	0.80	0.85	0.85	0.85	0.82	0.82	0.82	0.82	0.82
Adj. Flow (vph)	59	71	2359	84	712	1312	459	550	289	807	1473	879
RTOR Reduction (vph)	0	0	0	50	0	0	68	0	26	258	0	4
Lane Group Flow (vph)	0	130	2359	34	712	1312	391	550	545	267	1473	1013
Turn Type	Prot	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA
Protected Phases	5	5	2	3	1	6	7	3	8		7	4
Permitted Phases				2			6			8		
Actuated Green, G (s)		12.0	33.6	55.2	29.1	51.8	89.8	21.6	16.6	16.6	38.0	33.6
Effective Green, g (s)		12.0	33.6	55.2	29.1	51.8	89.8	21.6	16.6	16.6	38.0	33.6
Actuated g/C Ratio		0.09	0.24	0.40	0.21	0.38	0.65	0.16	0.12	0.12	0.28	0.24
Clearance Time (s)		4.4	6.4	4.4	4.4	5.3	4.4	4.4	5.5	5.5	4.4	4.9
Vehicle Extension (s)		2.0	4.4	2.0	2.0	4.7	2.0	2.0	3.3	3.3	2.0	2.0
Lane Grp Cap (vph)		153	1238	633	723	1908	1030	537	197	180	945	444
v/s Ratio Prot		0.07	c0.46	0.01	c0.21	0.26	0.10	0.16	c0.33		c0.43	c0.56
v/s Ratio Perm				0.01			0.14			0.18		
v/c Ratio		0.85	1.91	0.05	0.98	0.69	0.38	1.02	2.77	1.48	1.56	2.28
Uniform Delay, d1		62.1	52.2	25.4	54.2	36.3	11.2	58.2	60.7	60.7	50.0	52.2
Progression Factor		1.00	1.00	1.00	1.17	0.69	0.27	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2		32.1	410.5	0.0	27.2	1.8	0.1	45.1	810.1	245.3	256.6	584.0
Delay (s)		94.2	462.7	25.4	90.8	26.9	3.1	103.3	870.8	306.0	306.6	636.2
Level of Service		F	F	C	F	C	A	F	F	F	F	F
Approach Delay (s)			429.8			40.8			434.2			441.3
Approach LOS			F			D			F			F

Intersection Summary

HCM 2000 Control Delay	328.6	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.85		
Actuated Cycle Length (s)	138.0	Sum of lost time (s)	20.7
Intersection Capacity Utilization	131.4%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	113
Future Volume (vph)	113
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.82
Adj. Flow (vph)	138
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

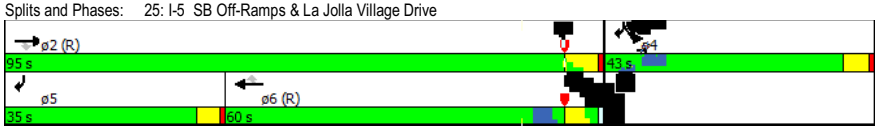
Intersection Summary

Lane Group	EBT	EBR	WBT	WBR	SBL	SBR	ø5
Lane Configurations							
Traffic Volume (vph)	2188	1361	1523	1141	812	590	
Future Volume (vph)	2188	1361	1523	1141	812	590	
Turn Type	NA	Perm	NA	Perm	Prot	custom	
Protected Phases	2		6		4	4 5	5
Permitted Phases		2		6			
Detector Phase	2	2	6	6	4	4 5	
Switch Phase							
Minimum Initial (s)	10.0	10.0	15.0	15.0	5.0		2.0
Minimum Split (s)	16.2	16.2	21.2	21.2	10.1		6.7
Total Split (s)	95.0	95.0	60.0	60.0	43.0		35.0
Total Split (%)	68.8%	68.8%	43.5%	43.5%	31.2%		25%
Yellow Time (s)	5.2	5.2	5.2	5.2	4.1		3.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	6.2	6.2	6.2	6.2	5.1		
Lead/Lag			Lag	Lag			Lead
Lead-Lag Optimize?			Yes	Yes			Yes
Recall Mode	C-Max	C-Max	C-Max	C-Max	Min		None

Intersection Summary

Cycle Length: 138
Actuated Cycle Length: 138
Offset: 59 (43%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 80
Control Type: Actuated-Coordinated

Splits and Phases: 25: I-5 SB Off-Ramps & La Jolla Village Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	2188	1361	0	1523	1141	0	0	0	812	0	590
Future Volume (vph)	0	2188	1361	0	1523	1141	0	0	0	812	0	590
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.2	6.2		6.2	6.2				5.1		5.1
Lane Util. Factor		0.86	1.00		0.91	1.00				0.97		0.88
Frt		1.00	0.85		1.00	0.85				1.00		0.85
Flt Protected		1.00	1.00		1.00	1.00				0.95		1.00
Satd. Flow (prot)		6408	1583		5085	1583				3433		2787
Flt Permitted		1.00	1.00		1.00	1.00				0.95		1.00
Satd. Flow (perm)		6408	1583		5085	1583				3433		2787
Peak-hour factor, PHF	0.93	0.93	0.93	0.94	0.94	0.94	0.25	0.25	0.25	0.84	0.84	0.84
Adj. Flow (vph)	0	2353	1463	0	1620	1214	0	0	0	967	0	702
RTOR Reduction (vph)	0	0	389	0	0	431	0	0	0	0	0	16
Lane Group Flow (vph)	0	2353	1074	0	1620	783	0	0	0	967	0	686
Turn Type		NA	Perm		NA	Perm				Prot		custom
Protected Phases		2			6					4		4 5
Permitted Phases			2			6						
Actuated Green, G (s)		88.8	88.8		76.3	76.3				37.9		50.8
Effective Green, g (s)		88.8	88.8		76.3	76.3				37.9		50.8
Actuated g/C Ratio		0.64	0.64		0.55	0.55				0.27		0.37
Clearance Time (s)		6.2	6.2		6.2	6.2				5.1		
Vehicle Extension (s)		2.0	2.0		2.0	2.0				2.0		
Lane Grp Cap (vph)		4123	1018		2811	875				942		1025
v/s Ratio Prot		0.37			0.32					c0.28		0.25
v/s Ratio Perm			c0.68			0.49						
v/c Ratio		0.57	1.06		0.58	0.90				1.03		0.67
Uniform Delay, d1		13.9	24.6		20.2	27.3				50.1		36.6
Progression Factor		0.68	5.41		0.87	1.36				1.00		1.00
Incremental Delay, d2		0.1	27.5		0.7	11.4				36.3		1.3
Delay (s)		9.5	160.5		18.3	48.7				86.3		37.9
Level of Service		A	F		B	D				F		D
Approach Delay (s)		67.4			31.3			0.0			65.9	
Approach LOS		E			C			A			E	

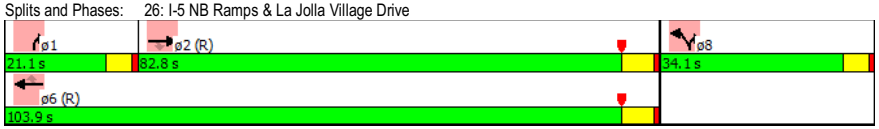
Intersection Summary			
HCM 2000 Control Delay	54.8	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.09		
Actuated Cycle Length (s)	138.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	89.4%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBT	EBR	WBT	WBR	NBL	NBR	ø1
Lane Configurations							
Traffic Volume (vph)	1704	1426	2260	795	323	318	
Future Volume (vph)	1704	1426	2260	795	323	318	
Turn Type	NA	Perm	NA	Perm	Prot	custom	
Protected Phases	2		6		8	1 8	1
Permitted Phases		2		6			
Detector Phase	2	2	6	6	8	1 8	
Switch Phase							
Minimum Initial (s)	16.0	16.0	16.0	16.0	5.0		2.0
Minimum Split (s)	36.2	36.2	22.2	22.2	10.1		7.1
Total Split (s)	82.8	82.8	103.9	103.9	34.1		21.1
Total Split (%)	60.0%	60.0%	75.3%	75.3%	24.7%		15%
Yellow Time (s)	5.2	5.2	5.2	5.2	4.1		4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	6.2	6.2	6.2	6.2	5.1		
Lead/Lag	Lag	Lag					Lead
Lead-Lag Optimize?	Yes	Yes					Yes
Recall Mode	C-Max	C-Max	C-Max	C-Max	Min		None

Intersection Summary
Cycle Length: 138
Actuated Cycle Length: 138
Offset: 65 (47%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 110
Control Type: Actuated-Coordinated

Splits and Phases: 26: I-5 NB Ramps & La Jolla Village Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1704	1426	0	2260	795	323	0	318	0	0	0
Future Volume (vph)	0	1704	1426	0	2260	795	323	0	318	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.2	6.2		6.2	6.2	5.1		5.1			
Lane Util. Factor		0.91	1.00		0.91	1.00	0.97		0.88			
Frt		1.00	0.85		1.00	0.85	1.00		0.85			
Flt Protected		1.00	1.00		1.00	1.00	0.95		1.00			
Satd. Flow (prot)		5085	1583		5085	1583	3433		2787			
Flt Permitted		1.00	1.00		1.00	1.00	0.95		1.00			
Satd. Flow (perm)		5085	1583		5085	1583	3433		2787			
Peak-hour factor, PHF	0.98	0.98	0.98	0.92	0.92	0.92	0.92	0.92	0.92	0.25	0.25	0.25
Adj. Flow (vph)	0	1739	1455	0	2457	864	351	0	346	0	0	0
RTOR Reduction (vph)	0	0	321	0	0	155	0	0	20	0	0	0
Lane Group Flow (vph)	0	1739	1134	0	2457	709	351	0	326	0	0	0
Turn Type		NA	Perm		NA	Perm	Prot		custom			
Protected Phases		2			6		8		1 8			
Permitted Phases			2			6						
Actuated Green, G (s)		97.4	97.4		107.6	107.6	19.1		29.3			
Effective Green, g (s)		97.4	97.4		107.6	107.6	19.1		29.3			
Actuated g/C Ratio		0.71	0.71		0.78	0.78	0.14		0.21			
Clearance Time (s)		6.2	6.2		6.2	6.2	5.1					
Vehicle Extension (s)		2.0	2.0		2.0	2.0	2.0					
Lane Grp Cap (vph)		3588	1117		3964	1234	475		591			
v/s Ratio Prot		0.34			c0.48		c0.10		0.12			
v/s Ratio Perm			c0.72			0.45						
v/c Ratio		0.48	1.02		0.62	0.57	0.74		0.55			
Uniform Delay, d1		9.1	20.3		6.5	6.1	57.1		48.5			
Progression Factor		1.02	3.60		1.00	1.00	1.00		1.00			
Incremental Delay, d2		0.3	26.4		0.7	2.0	5.1		0.6			
Delay (s)		9.6	99.5		7.2	8.0	62.2		49.1			
Level of Service		A	F		A	A	E		D			
Approach Delay (s)		50.6			7.4			55.7			0.0	
Approach LOS		D			A			E			A	

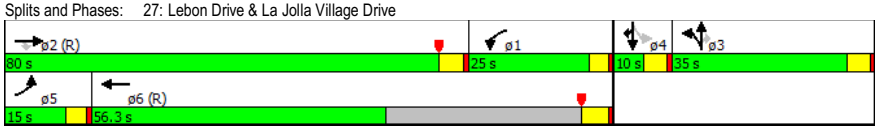
Intersection Summary			
HCM 2000 Control Delay	31.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.97		
Actuated Cycle Length (s)	138.0	Sum of lost time (s)	16.4
Intersection Capacity Utilization	93.5%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	9	2443	317	413	2101	592	8	173	10	2	7
Future Volume (vph)	9	2443	317	413	2101	592	8	173	10	2	7
Turn Type	Prot	NA	Perm	Prot	NA	Split	NA	Perm	Perm	NA	Prot
Protected Phases	5	2		1	6	3	3			4	4
Permitted Phases			2					3	4		
Detector Phase	5	2	2	1	6	3	3	3	4	4	4
Switch Phase											
Minimum Initial (s)	4.0	10.0	10.0	4.0	10.0	7.0	7.0	7.0	4.0	4.0	4.0
Minimum Split (s)	8.4	15.3	15.3	8.4	15.7	11.9	11.9	11.9	8.9	8.9	8.9
Total Split (s)	15.0	80.0	80.0	25.0	56.3	35.0	35.0	35.0	10.0	10.0	10.0
Total Split (%)	10.0%	53.3%	53.3%	16.7%	37.5%	23.3%	23.3%	23.3%	6.7%	6.7%	6.7%
Yellow Time (s)	3.4	4.3	4.3	3.4	4.7	3.9	3.9	3.9	3.9	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	4.4	5.3	5.3	4.4	5.7	4.9	4.9	4.9		4.9	4.9
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lag	Lag	Lag	Lead	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	None	None	None	None	None	None

Intersection Summary
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 3 (2%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 27: Lebon Drive & La Jolla Village Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	9	2443	317	413	2101	10	592	8	173	10	2	7
Future Volume (vph)	9	2443	317	413	2101	10	592	8	173	10	2	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.3	5.3	4.4	5.7		4.9	4.9	4.9		4.9	4.9
Lane Util. Factor	1.00	0.91	1.00	0.97	0.91		0.97	0.95	0.95		1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00		1.00	0.86	0.85		1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00		0.96	1.00
Satd. Flow (prot)	1770	5085	1583	3433	5082		3433	1528	1504		1790	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00		0.88	1.00
Satd. Flow (perm)	1770	5085	1583	3433	5082		3433	1528	1504		1647	1583
Peak-hour factor, PHF	0.94	0.94	0.94	0.85	0.85	0.85	0.83	0.83	0.83	0.80	0.80	0.80
Adj. Flow (vph)	10	2599	337	486	2472	12	713	10	208	12	2	9
RTOR Reduction (vph)	0	0	143	0	0	0	0	79	85	0	0	9
Lane Group Flow (vph)	10	2599	194	486	2484	0	713	31	23	0	16	0
Turn Type	Prot	NA	Perm	Prot	NA		Split	NA	Perm	Perm	NA	Prot
Protected Phases	5	2		1	6		3	3			4	4
Permitted Phases			2						3	4		
Actuated Green, G (s)	2.6	71.1	71.1	23.2	91.3		32.1	32.1	32.1		4.1	4.1
Effective Green, g (s)	2.6	71.1	71.1	23.2	91.3		32.1	32.1	32.1		4.1	4.1
Actuated g/C Ratio	0.02	0.47	0.47	0.15	0.61		0.21	0.21	0.21		0.03	0.03
Clearance Time (s)	4.4	5.3	5.3	4.4	5.7		4.9	4.9	4.9		4.9	4.9
Vehicle Extension (s)	2.0	6.1	6.1	2.0	5.6		6.5	6.5	6.5		2.0	2.0
Lane Grp Cap (vph)	30	2410	750	530	3093		734	326	321		45	43
v/s Ratio Prot	0.01	c0.51		c0.14	0.49		c0.21	0.02				0.00
v/s Ratio Perm			0.12						0.02		c0.01	
v/c Ratio	0.33	1.08	0.26	0.92	0.80		0.97	0.10	0.07		0.36	0.01
Uniform Delay, d1	72.8	39.5	23.7	62.5	22.5		58.5	47.3	47.1		71.7	71.0
Progression Factor	1.00	1.00	1.00	0.81	0.70		1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	2.4	43.6	0.8	2.6	0.2		26.7	0.4	0.3		1.8	0.0
Delay (s)	75.2	83.1	24.5	53.1	16.0		85.2	47.7	47.4		73.4	71.0
Level of Service	E	F	C	D	B		F	D	D		E	E
Approach Delay (s)		76.3			22.1			76.4			72.5	
Approach LOS		E			C			E			E	

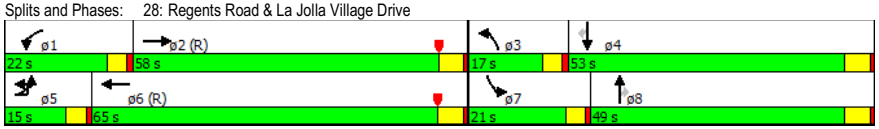
Intersection Summary			
HCM 2000 Control Delay	52.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.00		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	19.9
Intersection Capacity Utilization	94.7%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	386	1991	651	2053	412	381	139	307	1027	777
Future Volume (vph)	386	1991	651	2053	412	381	139	307	1027	777
Turn Type	Prot	NA	Prot	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2	1	6	3	8		7	4	
Permitted Phases							8			4
Detector Phase	5	2	1	6	3	8	8	7	4	4
Switch Phase										
Minimum Initial (s)	4.0	10.0	4.0	10.0	4.0	10.0	10.0	4.0	10.0	10.0
Minimum Split (s)	8.4	41.3	8.4	35.4	8.4	41.3	41.3	8.4	35.3	35.3
Total Split (s)	15.0	58.0	22.0	65.0	17.0	49.0	49.0	21.0	53.0	53.0
Total Split (%)	10.0%	38.7%	14.7%	43.3%	11.3%	32.7%	32.7%	14.0%	35.3%	35.3%
Yellow Time (s)	3.4	4.3	3.4	4.4	3.4	4.3	4.3	3.4	4.3	4.3
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.3	4.4	5.4	4.4	5.3	5.3	4.4	5.3	5.3
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	None	None	None	None	None

Intersection Summary
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 5 (3%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 28: Regents Road & La Jolla Village Drive



Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	35	386	1991	128	651	2053	103	412	381	139	307	1027
Future Volume (vph)	35	386	1991	128	651	2053	103	412	381	139	307	1027
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.4	5.3		4.4	5.4		4.4	5.3	5.3	4.4	5.3
Lane Util. Factor		0.97	0.91		0.97	0.91		0.97	0.95	1.00	1.00	0.95
Frt		1.00	0.99		1.00	0.99		1.00	1.00	0.85	1.00	1.00
Flt Protected		0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)		3433	5039		3433	5049		3433	3539	1583	1770	3539
Flt Permitted		0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (perm)		3433	5039		3433	5049		3433	3539	1583	1770	3539
Peak-hour factor, PHF	0.92	0.96	0.96	0.96	0.90	0.90	0.90	0.82	0.82	0.82	0.89	0.89
Adj. Flow (vph)	38	402	2074	133	723	2281	114	502	465	170	345	1154
RTOR Reduction (vph)	0	0	5	0	0	4	0	0	0	120	0	0
Lane Group Flow (vph)	0	440	2202	0	723	2391	0	502	465	50	345	1154
Turn Type	Prot	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA
Protected Phases	5	5	2		1	6		3	8		7	4
Permitted Phases										8		
Actuated Green, G (s)		10.6	52.7		17.6	59.6		12.6	43.7	43.7	16.6	47.7
Effective Green, g (s)		10.6	52.7		17.6	59.6		12.6	43.7	43.7	16.6	47.7
Actuated g/C Ratio		0.07	0.35		0.12	0.40		0.08	0.29	0.29	0.11	0.32
Clearance Time (s)		4.4	5.3		4.4	5.4		4.4	5.3	5.3	4.4	5.3
Vehicle Extension (s)		3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)		242	1770		402	2006		288	1031	461	195	1125
v/s Ratio Prot		0.13	0.44		c0.21	c0.47		0.15	0.13		c0.19	0.33
v/s Ratio Perm										0.03		
v/c Ratio		1.82	1.24		1.80	1.19		1.74	0.45	0.11	1.77	1.03
Uniform Delay, d1		69.7	48.6		66.2	45.2		68.7	43.4	38.9	66.7	51.1
Progression Factor		1.32	0.71		1.12	0.87		1.13	0.70	0.67	1.00	1.00
Incremental Delay, d2		373.0	111.4		362.8	88.3		348.4	0.3	0.1	366.2	33.6
Delay (s)		465.3	146.1		436.8	127.6		425.8	30.8	26.2	432.9	84.7
Level of Service		F	F		F	F		F	C	C	F	F
Approach Delay (s)			199.2			199.3			204.5			222.9
Approach LOS			F			F			F			F

Intersection Summary			
HCM 2000 Control Delay	205.9	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.52		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	19.5
Intersection Capacity Utilization	130.1%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	777
Future Volume (vph)	777
Ideal Flow (vphpl)	1900
Total Lost time (s)	5.3
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1583
Flt Permitted	1.00
Satd. Flow (perm)	1583
Peak-hour factor, PHF	0.89
Adj. Flow (vph)	873
RTOR Reduction (vph)	77
Lane Group Flow (vph)	796
Turn Type	Perm
Protected Phases	
Permitted Phases	4
Actuated Green, G (s)	47.7
Effective Green, g (s)	47.7
Actuated g/C Ratio	0.32
Clearance Time (s)	5.3
Vehicle Extension (s)	3.0
Lane Grp Cap (vph)	503
v/s Ratio Prot	
v/s Ratio Perm	c0.50
v/c Ratio	1.58
Uniform Delay, d1	51.1
Progression Factor	1.00
Incremental Delay, d2	271.5
Delay (s)	322.6
Level of Service	F
Approach Delay (s)	
Approach LOS	

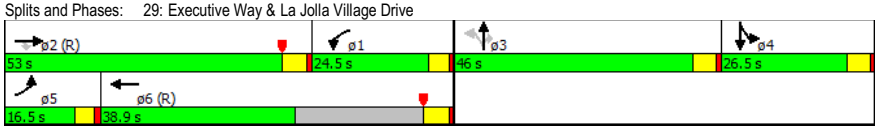
Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	85	1551	392	540	1512	323	63	497	417	203
Future Volume (vph)	85	1551	392	540	1512	323	63	497	417	203
Turn Type	Prot	NA	Perm	Prot	NA	Perm	NA	Perm	Split	NA
Protected Phases	5	2		1	6		3		4	4
Permitted Phases			2			3		3		
Detector Phase	5	2	2	1	6	3	3	3	4	4
Switch Phase										
Minimum Initial (s)	4.0	10.0	10.0	4.0	10.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.4	15.3	15.3	8.4	15.3	45.9	45.9	45.9	8.9	8.9
Total Split (s)	16.5	53.0	53.0	24.5	38.9	46.0	46.0	46.0	26.5	26.5
Total Split (%)	11.0%	35.3%	35.3%	16.3%	25.9%	30.7%	30.7%	30.7%	17.7%	17.7%
Yellow Time (s)	3.4	4.3	4.3	3.4	4.3	3.9	3.9	3.9	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.3	5.3	4.4	5.3	4.9	4.9	4.9	4.9	4.9
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lead	Lead	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	None	None	None	None	None

Intersection Summary

Cycle Length: 150
Actuated Cycle Length: 150
Offset: 81 (54%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 140
Control Type: Actuated-Coordinated

Splits and Phases: 29: Executive Way & La Jolla Village Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	85	1551	392	540	1512	112	323	63	497	417	203	282
Future Volume (vph)	85	1551	392	540	1512	112	323	63	497	417	203	282
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.3	5.3	4.4	5.3		4.9	4.9	4.9	4.9	4.9	
Lane Util. Factor	1.00	0.91	1.00	0.97	0.91		0.95	0.95	1.00	1.00	0.95	
Frt	1.00	1.00	0.85	1.00	0.99		1.00	1.00	0.85	1.00	0.91	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	0.97	1.00	0.95	1.00	
Satd. Flow (prot)	1770	5085	1583	3433	5033		1681	1711	1583	1770	3231	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.10	0.08	1.00	0.95	1.00	
Satd. Flow (perm)	1770	5085	1583	3433	5033		172	145	1583	1770	3231	
Peak-hour factor, PHF	0.83	0.83	0.83	0.80	0.80	0.80	0.89	0.89	0.89	0.84	0.84	0.84
Adj. Flow (vph)	102	1869	472	675	1890	140	363	71	558	496	242	336
RTOR Reduction (vph)	0	0	235	0	6	0	0	0	183	0	168	0
Lane Group Flow (vph)	102	1869	237	675	2024	0	207	227	375	496	410	0
Turn Type	Prot	NA	Perm	Prot	NA		Perm	NA	Perm	Split	NA	
Protected Phases	5	2		1	6			3		4	4	
Permitted Phases			2				3		3			
Actuated Green, G (s)	11.2	47.7	47.7	20.1	56.6		41.1	41.1	41.1	21.6	21.6	
Effective Green, g (s)	11.2	47.7	47.7	20.1	56.6		41.1	41.1	41.1	21.6	21.6	
Actuated g/C Ratio	0.07	0.32	0.32	0.13	0.38		0.27	0.27	0.27	0.14	0.14	
Clearance Time (s)	4.4	5.3	5.3	4.4	5.3		4.9	4.9	4.9	4.9	4.9	
Vehicle Extension (s)	2.0	5.8	5.8	2.0	5.5		2.0	2.0	2.0	6.1	6.1	
Lane Grp Cap (vph)	132	1617	503	460	1899		47	39	433	254	465	
v/s Ratio Prot	0.06	c0.37		c0.20	0.40					c0.28	0.13	
v/s Ratio Perm			0.15				1.20	c1.56	0.24			
v/c Ratio	0.77	1.16	0.47	1.47	1.07		4.40	5.82	0.87	1.95	0.88	
Uniform Delay, d1	68.2	51.1	41.0	65.0	46.7		54.4	54.4	51.8	64.2	63.0	
Progression Factor	0.65	0.93	1.35	0.62	0.44		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	13.9	74.7	1.9	211.4	31.0		1580.0	2223.6	15.9	442.8	19.5	
Delay (s)	58.0	122.3	57.1	251.7	51.4		1634.4	2278.0	67.7	507.0	82.5	
Level of Service	E	F	E	F	D		F	F	E	F	F	
Approach Delay (s)		107.0			101.4			900.4			278.5	
Approach LOS		F			F			F			F	

Intersection Summary

HCM 2000 Control Delay	239.5	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	2.77		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	19.5
Intersection Capacity Utilization	96.4%	ICU Level of Service	F
Analysis Period (min)	15		

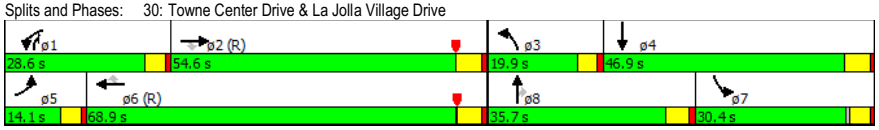
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	43	2311	147	444	1851	181	187	74	668	782	412
Future Volume (vph)	43	2311	147	444	1851	181	187	74	668	782	412
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA
Protected Phases	5	2		1	6		3	8	1	7	4
Permitted Phases			2			6			8		
Detector Phase	5	2	2	1	6	6	3	8	1	7	4
Switch Phase											
Minimum Initial (s)	4.0	10.0	10.0	4.0	10.0	10.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.4	33.5	33.5	8.4	15.3	15.3	8.4	9.0	8.4	8.4	9.3
Total Split (s)	14.1	54.6	54.6	28.6	68.9	68.9	19.9	35.7	28.6	30.4	46.9
Total Split (%)	9.4%	36.4%	36.4%	19.1%	45.9%	45.9%	13.3%	23.8%	19.1%	20.3%	31.3%
Yellow Time (s)	3.4	4.5	4.5	3.4	4.3	4.3	3.4	4.0	3.4	3.4	4.3
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.5	5.5	4.4	5.3	5.3	4.4	5.0	4.4	4.4	5.3
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lead	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	Max	None	None	None

Intersection Summary

Cycle Length: 150
Actuated Cycle Length: 150
Offset: 93 (62%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 30: Towne Center Drive & La Jolla Village Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	43	2311	147	444	1851	181	187	74	668	782	412	107
Future Volume (vph)	43	2311	147	444	1851	181	187	74	668	782	412	107
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.5	5.5	4.4	5.3	5.3	4.4	5.0	4.4	4.4	5.3	
Lane Util. Factor	0.97	0.91	1.00	0.97	0.86	0.86	0.97	1.00	0.88	0.97	0.95	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.97	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	3433	5085	1583	3433	4799	1362	3433	1863	2787	3433	3430	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	3433	5085	1583	3433	4799	1362	3433	1863	2787	3433	3430	
Peak-hour factor, PHF	0.84	0.84	0.84	0.80	0.80	0.80	0.80	0.80	0.80	0.87	0.87	0.87
Adj. Flow (vph)	51	2751	175	555	2314	226	234	92	835	899	474	123
RTOR Reduction (vph)	0	0	100	0	1	65	0	0	36	0	15	0
Lane Group Flow (vph)	51	2751	75	555	2336	138	234	93	799	899	582	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	
Protected Phases	5	2		1	6		3	8	1	7	4	
Permitted Phases			2			6			8			
Actuated Green, G (s)	6.5	49.1	49.1	24.2	67.0	67.0	14.3	30.7	54.9	26.7	42.8	
Effective Green, g (s)	6.5	49.1	49.1	24.2	67.0	67.0	14.3	30.7	54.9	26.7	42.8	
Actuated g/C Ratio	0.04	0.33	0.33	0.16	0.45	0.45	0.10	0.20	0.37	0.18	0.29	
Clearance Time (s)	4.4	5.5	5.5	4.4	5.3	5.3	4.4	5.0	4.4	4.4	5.3	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	148	1664	518	553	2143	608	327	381	1020	611	978	
v/s Ratio Prot	0.01	c0.54		c0.16	c0.49		0.07	0.05	c0.13	c0.26	0.17	
v/s Ratio Perm			0.05			0.10			0.16			
v/c Ratio	0.34	1.65	0.14	1.00	1.09	0.23	0.72	0.24	0.78	1.47	0.60	
Uniform Delay, d1	69.7	50.5	35.6	62.9	41.5	25.6	65.9	49.9	42.3	61.6	46.1	
Progression Factor	1.30	0.40	0.12	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.1	294.2	0.1	39.2	49.0	0.9	7.3	1.5	4.0	220.9	1.0	
Delay (s)	90.5	314.2	4.4	102.1	90.5	26.4	73.1	51.5	46.3	282.6	47.1	
Level of Service	F	F	A	F	F	C	E	D	D	F	D	
Approach Delay (s)		292.2			88.4			52.1			188.6	
Approach LOS		F			F			D			F	

Intersection Summary

HCM 2000 Control Delay	170.2	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.30		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	19.6
Intersection Capacity Utilization	102.2%	ICU Level of Service	G
Analysis Period (min)	15		

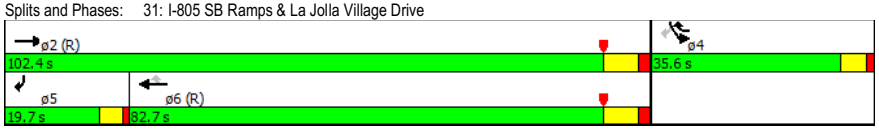
c Critical Lane Group

Lane Group	EBT	WBT	WBR	SBL	SBR
Lane Configurations					
Traffic Volume (vph)	2378	1806	658	63	642
Future Volume (vph)	2378	1806	658	63	642
Turn Type	NA	NA	pm+ov	Prot	custom
Protected Phases	2	6	4	4	5
Permitted Phases			6		4
Detector Phase	2	6	4	4	5
Switch Phase					
Minimum Initial (s)	15.0	15.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	10.6	10.6	9.7
Total Split (s)	102.4	82.7	35.6	35.6	19.7
Total Split (%)	74.2%	59.9%	25.8%	25.8%	14.3%
Yellow Time (s)	5.5	5.5	4.1	4.1	3.7
All-Red Time (s)	2.0	2.0	1.5	1.5	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.5	7.5	5.6	5.6	4.7
Lead/Lag		Lag			Lead
Lead-Lag Optimize?		Yes			Yes
Recall Mode	C-Max	C-Max	None	None	None

Intersection Summary

Cycle Length: 138
Actuated Cycle Length: 138
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 110
Control Type: Actuated-Coordinated

Splits and Phases: 31: I-805 SB Ramps & La Jolla Village Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	2378	1229	0	1806	658	0	0	0	63	0	642
Future Volume (vph)	0	2378	1229	0	1806	658	0	0	0	63	0	642
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		7.5			7.5	5.6				5.6		4.7
Lane Util. Factor		0.91			0.91	1.00				0.97		0.88
Frt		0.95			1.00	0.85				1.00		0.85
Flt Protected		1.00			1.00	1.00				0.95		1.00
Satd. Flow (prot)		4825			5085	1583				3433		2787
Flt Permitted		1.00			1.00	1.00				0.95		1.00
Satd. Flow (perm)		4825			5085	1583				3433		2787
Peak-hour factor, PHF	0.92	0.92	0.92	0.83	0.83	0.83	0.25	0.25	0.25	0.85	0.85	0.85
Adj. Flow (vph)	0	2585	1336	0	2176	793	0	0	0	74	0	755
RTOR Reduction (vph)	0	32	0	0	0	283	0	0	0	0	0	26
Lane Group Flow (vph)	0	3889	0	0	2176	510	0	0	0	74	0	729
Turn Type		NA			NA	pm+ov				Prot		custom
Protected Phases		2			6	4				4		5
Permitted Phases						6						4
Actuated Green, G (s)		117.3			81.1	88.7				7.6		39.1
Effective Green, g (s)		117.3			81.1	88.7				7.6		39.1
Actuated g/C Ratio		0.85			0.59	0.64				0.06		0.28
Clearance Time (s)		7.5			7.5	5.6				5.6		4.7
Vehicle Extension (s)		2.0			2.0	2.0				2.0		2.0
Lane Grp Cap (vph)		4101			2988	1017				189		789
v/s Ratio Prot		c0.81			0.43	0.03				0.02		c0.21
v/s Ratio Perm						0.29						0.05
v/c Ratio		0.95			0.73	0.50				0.39		0.92
Uniform Delay, d1		8.0			20.5	13.0				63.0		48.0
Progression Factor		1.00			0.64	1.01				1.00		1.00
Incremental Delay, d2		6.3			1.2	0.1				0.5		16.2
Delay (s)		14.3			14.4	13.2				63.5		64.2
Level of Service		B			B	B				E		E
Approach Delay (s)		14.3			14.1			0.0			64.1	
Approach LOS		B			B			A			E	

Intersection Summary

HCM 2000 Control Delay	19.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.98		
Actuated Cycle Length (s)	138.0	Sum of lost time (s)	17.8
Intersection Capacity Utilization	86.4%	ICU Level of Service	E
Analysis Period (min)	15		

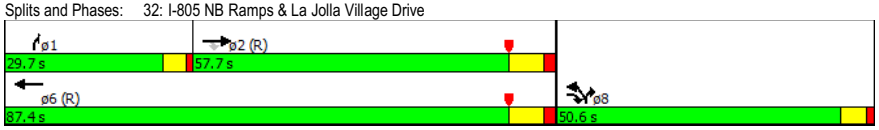
c Critical Lane Group

Lane Group	EBT	EBR	WBT	NBL	NBR	ø1
Lane Configurations						
Traffic Volume (vph)	1102	1349	1799	541	147	
Future Volume (vph)	1102	1349	1799	541	147	
Turn Type	NA	pm+ov	NA	Prot	custom	
Protected Phases	2	8	6	8	1 8	1
Permitted Phases		2				
Detector Phase	2	8	6	8	1 8	
Switch Phase						
Minimum Initial (s)	16.0	5.0	15.0	5.0		5.0
Minimum Split (s)	23.5	10.6	24.5	10.6		10.2
Total Split (s)	57.7	50.6	87.4	50.6		29.7
Total Split (%)	41.8%	36.7%	63.3%	36.7%		22%
Yellow Time (s)	5.5	4.1	5.5	4.1		3.7
All-Red Time (s)	2.0	1.5	2.0	1.5		1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		
Total Lost Time (s)	7.5	5.6	7.5	5.6		
Lead/Lag	Lag					Lead
Lead-Lag Optimize?	Yes					Yes
Recall Mode	C-Max	None	C-Max	None		None

Intersection Summary

Cycle Length: 138
Actuated Cycle Length: 138
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 50
Control Type: Actuated-Coordinated

Splits and Phases: 32: I-805 NB Ramps & La Jolla Village Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1102	1349	0	1799	454	541	0	147	0	0	0
Future Volume (vph)	0	1102	1349	0	1799	454	541	0	147	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		7.5	5.6		7.5		5.6		4.7			
Lane Util. Factor		0.91	1.00		0.86		0.97		0.88			
Frt		1.00	0.85		0.97		1.00		0.85			
Flt Protected		1.00	1.00		1.00		0.95		1.00			
Satd. Flow (prot)		5085	1583		6214		3433		2787			
Flt Permitted		1.00	1.00		1.00		0.95		1.00			
Satd. Flow (perm)		5085	1583		6214		3433		2787			
Peak-hour factor, PHF	0.91	0.91	0.91	0.85	0.85	0.85	0.85	0.85	0.85	0.25	0.25	0.25
Adj. Flow (vph)	0	1211	1482	0	2116	534	636	0	173	0	0	0
RTOR Reduction (vph)	0	0	180	0	33	0	0	0	23	0	0	0
Lane Group Flow (vph)	0	1211	1302	0	2617	0	636	0	150	0	0	0
Turn Type		NA	pm+ov		NA		Prot		custom			
Protected Phases		2	8		6		8		1 8			
Permitted Phases			2									
Actuated Green, G (s)		70.2	115.2		79.9		45.0		55.6			
Effective Green, g (s)		70.2	115.2		79.9		45.0		50.0			
Actuated g/C Ratio		0.51	0.83		0.58		0.33		0.36			
Clearance Time (s)		7.5	5.6		7.5		5.6					
Vehicle Extension (s)		2.0	2.0		2.0		2.0					
Lane Grp Cap (vph)		2586	1321		3597		1119		1009			
v/s Ratio Prot		0.24	c0.32		c0.42		0.19		0.05			
v/s Ratio Perm			0.50									
v/c Ratio		0.47	0.99		0.73		0.57		0.15			
Uniform Delay, d1		21.9	10.6		21.1		38.5		29.7			
Progression Factor		0.79	6.34		1.00		1.00		1.00			
Incremental Delay, d2		0.2	12.2		1.3		0.4		0.0			
Delay (s)		17.5	79.5		22.5		38.9		29.7			
Level of Service		B	E		C		D		C			
Approach Delay (s)		51.6			22.5			36.9			0.0	
Approach LOS		D			C			D			A	

Intersection Summary

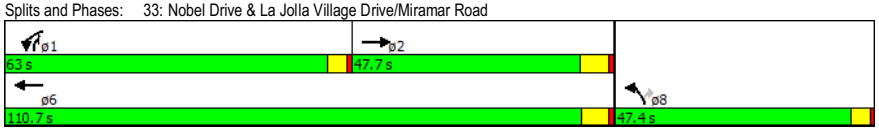
HCM 2000 Control Delay	37.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.99		
Actuated Cycle Length (s)	138.0	Sum of lost time (s)	17.8
Intersection Capacity Utilization	88.2%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Configurations					
Traffic Volume (vph)	1399	1142	1622	154	633
Future Volume (vph)	1399	1142	1622	154	633
Turn Type	NA	Prot	NA	Prot	pm+ov
Protected Phases	2	1	6	8	1
Permitted Phases					8
Detector Phase	2	1	6	8	1
Switch Phase					
Minimum Initial (s)	10.0	4.0	10.0	7.0	4.0
Minimum Split (s)	31.3	8.4	16.0	47.4	8.4
Total Split (s)	47.7	63.0	110.7	47.4	63.0
Total Split (%)	30.2%	39.8%	70.0%	30.0%	39.8%
Yellow Time (s)	5.3	3.4	5.0	3.4	3.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.3	4.4	6.0	4.4	4.4
Lead/Lag	Lag	Lead			Lead
Lead-Lag Optimize?	Yes	Yes			Yes
Recall Mode	Min	None	Min	None	None

Intersection Summary
Cycle Length: 158.1
Actuated Cycle Length: 133.1
Natural Cycle: 150
Control Type: Actuated-Uncoordinated

Splits and Phases: 33: Nobel Drive & La Jolla Village Drive/Miramar Road



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1399	40	1142	1622	154	633
Future Volume (vph)	1399	40	1142	1622	154	633
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.3		4.4	6.0	4.4	4.4
Lane Util. Factor	0.86		0.97	0.86	1.00	0.88
Frt	1.00		1.00	1.00	1.00	0.85
Flt Protected	1.00		0.95	1.00	0.95	1.00
Satd. Flow (prot)	6381		3433	6408	1770	2787
Flt Permitted	1.00		0.95	1.00	0.95	1.00
Satd. Flow (perm)	6381		3433	6408	1770	2787
Peak-hour factor, PHF	0.80	0.80	0.80	0.80	0.85	0.85
Adj. Flow (vph)	1749	50	1428	2028	181	745
RTOR Reduction (vph)	2	0	0	0	0	0
Lane Group Flow (vph)	1797	0	1428	2028	181	745
Turn Type	NA		Prot	NA	Prot	pm+ov
Protected Phases	2		1	6	8	1
Permitted Phases						8
Actuated Green, G (s)	41.5		58.7	104.9	17.9	76.6
Effective Green, g (s)	41.5		58.7	104.9	17.9	76.6
Actuated g/C Ratio	0.31		0.44	0.79	0.13	0.58
Clearance Time (s)	6.3		4.4	6.0	4.4	4.4
Vehicle Extension (s)	5.0		2.0	5.4	2.0	2.0
Lane Grp Cap (vph)	1988		1512	5046	237	1694
v/s Ratio Prot	c0.28		c0.42	0.32	c0.10	0.19
v/s Ratio Perm						0.07
v/c Ratio	0.90		0.94	0.40	0.76	0.44
Uniform Delay, d1	43.9		35.7	4.4	55.6	16.1
Progression Factor	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	6.6		12.1	0.1	12.3	0.1
Delay (s)	50.6		47.8	4.5	67.9	16.2
Level of Service	D		D	A	E	B
Approach Delay (s)	50.6			22.4	26.3	
Approach LOS	D			C	C	

Intersection Summary			
HCM 2000 Control Delay	31.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	133.2	Sum of lost time (s)	15.1
Intersection Capacity Utilization	74.6%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBU	WBT	WBR	SBL
Lane Configurations						
Traffic Volume (vph)	395	1476	9	2439	365	700
Future Volume (vph)	395	1476	9	2439	365	700
Turn Type	Prot	NA	Prot	NA	Perm	Prot
Protected Phases	5	2	1	6		7
Permitted Phases					6	
Detector Phase	5	2	1	6	6	7
Switch Phase						
Minimum Initial (s)	4.0	10.0	4.0	10.0	10.0	10.0
Minimum Split (s)	8.4	16.3	8.4	29.4	29.4	38.4
Total Split (s)	34.4	66.3	24.4	65.4	65.4	44.4
Total Split (%)	23.9%	46.0%	16.9%	45.4%	45.4%	30.8%
Yellow Time (s)	3.4	5.3	3.4	4.4	4.4	3.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	6.3	4.4	5.4	5.4	4.4
Lead/Lag	Lead	Lag	Lead	Lag	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	Min	None	Min	Min	None

Intersection Summary

Cycle Length: 144.2
Actuated Cycle Length: 139
Natural Cycle: 150
Control Type: Actuated-Uncoordinated

Splits and Phases: 34: Miramar Road & Eastgate Mall

Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Traffic Volume (vph)	395	1476	9	2439	365	700	569
Future Volume (vph)	395	1476	9	2439	365	700	569
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	6.3	4.4	5.4	5.4	4.4	
Lane Util. Factor	0.97	0.91	1.00	0.86	1.00	0.97	
Frt	1.00	1.00	1.00	1.00	0.85	0.93	
Flt Protected	0.95	1.00	0.95	1.00	1.00	0.97	
Satd. Flow (prot)	3433	5085	1770	6408	1583	3280	
Flt Permitted	0.95	1.00	0.95	1.00	1.00	0.97	
Satd. Flow (perm)	3433	5085	1770	6408	1583	3280	
Peak-hour factor, PHF	0.80	0.80	0.92	0.86	0.86	0.80	0.80
Adj. Flow (vph)	494	1845	10	2836	424	875	711
RTOR Reduction (vph)	0	0	0	0	235	101	0
Lane Group Flow (vph)	494	1845	10	2836	189	1485	0
Turn Type	Prot	NA	Prot	NA	Perm	Prot	
Protected Phases	5	2	1	6		7	
Permitted Phases					6		
Actuated Green, G (s)	24.7	85.9	1.5	63.6	63.6	40.0	
Effective Green, g (s)	24.7	85.9	1.5	63.6	63.6	40.0	
Actuated g/C Ratio	0.17	0.60	0.01	0.45	0.45	0.28	
Clearance Time (s)	4.4	6.3	4.4	5.4	5.4	4.4	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	595	3065	18	2859	706	920	
v/s Ratio Prot	c0.14	0.36	0.01	c0.44		c0.45	
v/s Ratio Perm					0.12		
v/c Ratio	0.83	0.60	0.56	0.99	0.27	1.61	
Uniform Delay, d1	56.9	17.6	70.2	39.2	24.8	51.2	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	9.6	0.3	32.3	14.9	0.2	281.6	
Delay (s)	66.4	18.0	102.5	54.1	25.0	332.8	
Level of Service	E	B	F	D	C	F	
Approach Delay (s)		28.2		50.5		332.8	
Approach LOS		C		D		F	

Intersection Summary

HCM 2000 Control Delay	105.5	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.16		
Actuated Cycle Length (s)	142.5	Sum of lost time (s)	15.1
Intersection Capacity Utilization	96.4%	ICU Level of Service	F
Analysis Period (min)	15		

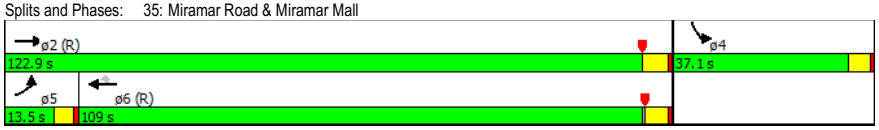
c Critical Lane Group

Lane Group	EBL	EBT	WBT	WBR	SBL
Lane Configurations					
Traffic Volume (vph)	29	2310	2948	110	129
Future Volume (vph)	29	2310	2948	110	129
Turn Type	Prot	NA	NA	Perm	Prot
Protected Phases	5	2	6		4
Permitted Phases				6	
Detector Phase	5	2	6	6	4
Switch Phase					
Minimum Initial (s)	4.0	10.0	10.0	10.0	4.0
Minimum Split (s)	8.4	15.8	15.4	15.4	8.9
Total Split (s)	13.5	122.9	109.0	109.0	37.1
Total Split (%)	8.4%	76.8%	68.1%	68.1%	23.2%
Yellow Time (s)	3.4	4.8	4.4	4.4	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.8	5.4	5.4	4.9
Lead/Lag	Lead		Lag	Lag	
Lead-Lag Optimize?	Yes		Yes	Yes	
Recall Mode	None	C-Max	C-Max	C-Max	None

Intersection Summary

Cycle Length: 160
Actuated Cycle Length: 160
Offset: 91 (57%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 35: Miramar Road & Miramar Mall



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	29	2310	2948	110	129	86
Future Volume (vph)	29	2310	2948	110	129	86
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.8	5.4	5.4	4.9	
Lane Util. Factor	1.00	0.91	0.91	1.00	1.00	
Frt	1.00	1.00	1.00	0.85	0.95	
Flt Protected	0.95	1.00	1.00	1.00	0.97	
Satd. Flow (prot)	1770	5085	5085	1583	1711	
Flt Permitted	0.95	1.00	1.00	1.00	0.97	
Satd. Flow (perm)	1770	5085	5085	1583	1711	
Peak-hour factor, PHF	0.89	0.89	0.87	0.87	0.93	0.93
Adj. Flow (vph)	33	2596	3389	126	139	92
RTOR Reduction (vph)	0	0	0	26	16	0
Lane Group Flow (vph)	33	2596	3389	100	215	0
Turn Type	Prot	NA	NA	Perm	Prot	
Protected Phases	5	2	6		4	
Permitted Phases				6		
Actuated Green, G (s)	6.2	125.1	114.9	114.9	24.2	
Effective Green, g (s)	6.2	125.1	114.9	114.9	24.2	
Actuated g/C Ratio	0.04	0.78	0.72	0.72	0.15	
Clearance Time (s)	4.4	5.8	5.4	5.4	4.9	
Vehicle Extension (s)	2.0	4.6	5.2	5.2	2.0	
Lane Grp Cap (vph)	68	3975	3651	1136	258	
v/s Ratio Prot	0.02	c0.51	c0.67		c0.13	
v/s Ratio Perm				0.06		
v/c Ratio	0.49	0.65	0.93	0.09	0.83	
Uniform Delay, d1	75.3	7.8	19.1	6.8	65.9	
Progression Factor	1.00	1.00	1.02	0.61	1.00	
Incremental Delay, d2	2.0	0.8	3.7	0.1	19.2	
Delay (s)	77.3	8.6	23.1	4.2	85.2	
Level of Service	E	A	C	A	F	
Approach Delay (s)		9.5	22.4		85.2	
Approach LOS		A	C		F	

Intersection Summary

HCM 2000 Control Delay	19.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.91		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	14.7
Intersection Capacity Utilization	78.0%	ICU Level of Service	D
Analysis Period (min)	15		

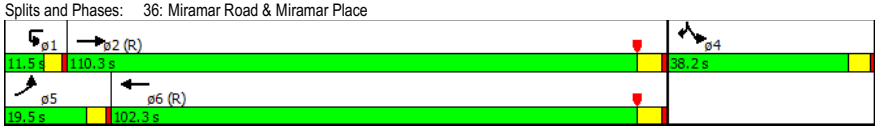
c Critical Lane Group

Lane Group	EBL	EBT	WBU	WBT	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	26	2358	9	3049	157	50
Future Volume (vph)	26	2358	9	3049	157	50
Turn Type	Prot	NA	Prot	NA	Prot	Prot
Protected Phases	5	2	1	6	4	4
Permitted Phases						
Detector Phase	5	2	1	6	4	4
Switch Phase						
Minimum Initial (s)	4.0	10.0	4.0	10.0	4.0	4.0
Minimum Split (s)	8.4	15.7	8.4	28.7	37.9	37.9
Total Split (s)	19.5	110.3	11.5	102.3	38.2	38.2
Total Split (%)	12.2%	68.9%	7.2%	63.9%	23.9%	23.9%
Yellow Time (s)	3.4	4.7	3.4	4.7	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.7	4.4	5.7	4.9	4.9
Lead/Lag	Lead	Lag	Lead	Lag		
Lead-Lag Optimize?	Yes	Yes	Yes	Yes		
Recall Mode	None	C-Max	None	C-Max	None	None

Intersection Summary

Cycle Length: 160
Actuated Cycle Length: 160
Offset: 54 (34%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 140
Control Type: Actuated-Coordinated

Splits and Phases: 36: Miramar Road & Miramar Place



Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Traffic Volume (vph)	26	2358	9	3049	72	157	50
Future Volume (vph)	26	2358	9	3049	72	157	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.7	4.4	5.7		4.9	4.9
Lane Util. Factor	1.00	0.91	1.00	0.91		0.97	0.91
Frt	1.00	1.00	1.00	1.00		1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00		0.95	1.00
Satd. Flow (prot)	1770	5085	1770	5068		3431	1441
Flt Permitted	0.95	1.00	0.95	1.00		0.95	1.00
Satd. Flow (perm)	1770	5085	1770	5068		3431	1441
Peak-hour factor, PHF	0.89	0.89	0.92	0.96	0.96	0.82	0.82
Adj. Flow (vph)	29	2649	10	3176	75	191	61
RTOR Reduction (vph)	0	0	0	1	0	2	49
Lane Group Flow (vph)	29	2649	10	3250	0	195	6
Turn Type	Prot	NA	Prot	NA		Prot	Prot
Protected Phases	5	2	1	6		4	4
Permitted Phases							
Actuated Green, G (s)	5.6	125.0	2.6	122.0		17.4	17.4
Effective Green, g (s)	5.6	125.0	2.6	122.0		17.4	17.4
Actuated g/C Ratio	0.03	0.78	0.02	0.76		0.11	0.11
Clearance Time (s)	4.4	5.7	4.4	5.7		4.9	4.9
Vehicle Extension (s)	3.0	4.8	2.0	5.4		3.0	3.0
Lane Grp Cap (vph)	61	3972	28	3864		373	156
v/s Ratio Prot	c0.02	c0.52	0.01	c0.64		c0.06	0.00
v/s Ratio Perm							
v/c Ratio	0.48	0.67	0.36	0.84		0.52	0.04
Uniform Delay, d1	75.8	8.0	77.9	12.6		67.4	63.8
Progression Factor	0.91	0.74	0.94	0.68		1.00	1.00
Incremental Delay, d2	4.3	0.7	0.3	0.2		1.3	0.1
Delay (s)	73.0	6.6	73.2	8.8		68.7	63.9
Level of Service	E	A	E	A		E	E
Approach Delay (s)		7.3		9.0		67.7	
Approach LOS		A		A		E	

Intersection Summary

HCM 2000 Control Delay	10.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	15.0
Intersection Capacity Utilization	74.3%	ICU Level of Service	D
Analysis Period (min)	15		

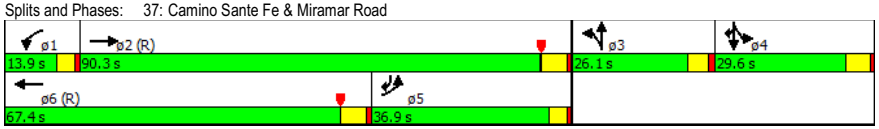
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	937	1680	49	1349	134	52	209	15	1671
Future Volume (vph)	937	1680	49	1349	134	52	209	15	1671
Turn Type	Prot	NA	Prot	NA	Split	NA	Split	NA	pt+ov
Protected Phases	5	2	1	6	3	3	4	4	4 5
Permitted Phases									
Detector Phase	5	2	1	6	3	3	4	4	4 5
Switch Phase									
Minimum Initial (s)	12.0	10.0	4.0	10.0	4.0	4.0	4.0	4.0	
Minimum Split (s)	16.4	15.8	8.4	15.7	8.9	8.9	9.5	9.5	
Total Split (s)	36.9	90.3	13.9	67.4	26.1	26.1	29.6	29.6	
Total Split (%)	23.1%	56.4%	8.7%	42.1%	16.3%	16.3%	18.5%	18.5%	
Yellow Time (s)	3.4	4.8	3.4	4.7	3.9	3.9	4.5	4.5	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.4	5.8	4.4	5.7	4.9	4.9	5.5	5.5	
Lead/Lag	Lag	Lag	Lead	Lead	Lead	Lead	Lag	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	C-Max	None	C-Max	None	None	None	None	

Intersection Summary

Cycle Length: 160
Actuated Cycle Length: 160
Offset: 41 (26%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 37: Camino Sante Fe & Miramar Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	937	1680	132	49	1349	85	134	52	23	209	15	1671
Future Volume (vph)	937	1680	132	49	1349	85	134	52	23	209	15	1671
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.8		4.4	5.7		4.9	4.9		5.5	5.5	5.5
Lane Util. Factor	0.97	0.91		0.97	0.91		1.00	1.00		0.95	0.95	0.88
Frt	1.00	0.99		1.00	0.99		1.00	0.95		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	0.96	1.00
Satd. Flow (prot)	3433	5030		3433	5040		1770	1777		1681	1696	2787
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	0.96	1.00
Satd. Flow (perm)	3433	5030		3433	5040		1770	1777		1681	1696	2787
Peak-hour factor, PHF	0.94	0.94	0.94	0.91	0.91	0.91	0.80	0.80	0.80	0.95	0.95	0.95
Adj. Flow (vph)	997	1787	140	54	1482	93	168	65	29	220	16	1759
RTOR Reduction (vph)	0	5	0	0	4	0	0	11	0	0	0	65
Lane Group Flow (vph)	997	1922	0	54	1571	0	168	83	0	117	119	1694
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	pt+ov
Protected Phases	5	2		1	6		3	3		4	4	4 5
Permitted Phases												
Actuated Green, G (s)	33.4	88.1		6.0	60.8		18.4	18.4		26.9	26.9	60.3
Effective Green, g (s)	33.4	88.1		6.0	60.8		18.4	18.4		26.9	26.9	60.3
Actuated g/C Ratio	0.21	0.55		0.04	0.38		0.11	0.11		0.17	0.17	0.38
Clearance Time (s)	4.4	5.8		4.4	5.7		4.9	4.9		5.5	5.5	
Vehicle Extension (s)	2.0	4.8		2.0	5.4		2.0	2.0		2.8	2.8	
Lane Grp Cap (vph)	716	2769		128	1915		203	204		282	285	1050
v/s Ratio Prot	0.29	0.38		0.02	c0.31		c0.09	0.05		0.07	0.07	c0.61
v/s Ratio Perm												
v/c Ratio	1.39	0.69		0.42	0.82		0.83	0.41		0.41	0.42	1.61
Uniform Delay, d1	63.3	26.1		75.3	44.7		69.2	65.7		59.5	59.5	49.9
Progression Factor	0.88	0.67		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	183.4	1.2		0.8	4.1		22.3	0.5		0.9	0.9	280.3
Delay (s)	239.3	18.6		76.1	48.8		91.6	66.2		60.4	60.4	330.1
Level of Service	F	B		E	D		F	E		E	E	F
Approach Delay (s)		93.9			49.7			82.5			298.2	
Approach LOS		F			D			F			F	

Intersection Summary

HCM 2000 Control Delay	142.7	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.16		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	20.6
Intersection Capacity Utilization	107.3%	ICU Level of Service	G
Analysis Period (min)	15		

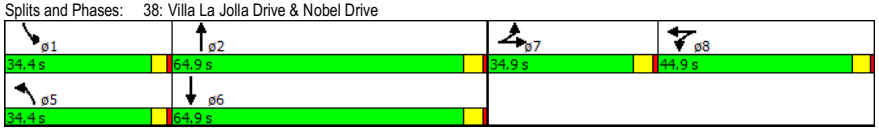
c Critical Lane Group

Lane Group	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	4	135	10	4	720	456	889
Future Volume (vph)	4	135	10	4	720	456	889
Turn Type	NA	Split	NA	Prot	NA	Prot	NA
Protected Phases	7	8	8	5	2	1	6
Permitted Phases							
Detector Phase	7	8	8	5	2	1	6
Switch Phase							
Minimum Initial (s)	6.0	6.0	6.0	4.0	7.0	6.0	10.0
Minimum Split (s)	10.9	10.9	10.9	8.4	11.9	10.4	14.9
Total Split (s)	34.9	44.9	44.9	34.4	64.9	34.4	64.9
Total Split (%)	19.5%	25.1%	25.1%	19.2%	36.2%	19.2%	36.2%
Yellow Time (s)	3.9	3.9	3.9	3.4	3.9	3.4	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	4.9	4.4	4.9	4.4	4.9
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	Min	None	Min

Intersection Summary

Cycle Length: 179.1
Actuated Cycle Length: 130.6
Natural Cycle: 70
Control Type: Actuated-Uncoordinated

Splits and Phases: 38: Villa La Jolla Drive & Nobel Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	24	4	3	135	10	309	4	720	192	456	889	18
Future Volume (vph)	24	4	3	135	10	309	4	720	192	456	889	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9		4.9	4.9		4.4	4.9		4.4	4.9	
Lane Util. Factor		1.00		0.97	1.00		1.00	0.95		0.97	0.95	
Frt		0.99		1.00	0.85		1.00	0.97		1.00	1.00	
Flt Protected		0.96		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1769		3433	1592		1770	3428		3433	3529	
Flt Permitted		0.96		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1769		3433	1592		1770	3428		3433	3529	
Peak-hour factor, PHF	0.80	0.80	0.80	0.94	0.94	0.94	0.86	0.86	0.86	0.95	0.95	0.95
Adj. Flow (vph)	30	5	4	144	11	329	5	837	223	480	936	19
RTOR Reduction (vph)	0	3	0	0	285	0	0	11	0	0	0	0
Lane Group Flow (vph)	0	36	0	144	55	0	5	1049	0	480	955	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	7	7		8	8		5	2		1	6	
Permitted Phases												
Actuated Green, G (s)		14.6		18.1	18.1		1.0	57.3		25.2	81.5	
Effective Green, g (s)		14.6		18.1	18.1		1.0	57.3		25.2	81.5	
Actuated g/C Ratio		0.11		0.13	0.13		0.01	0.43		0.19	0.61	
Clearance Time (s)		4.9		4.9	4.9		4.4	4.9		4.4	4.9	
Vehicle Extension (s)		2.0		2.0	2.0		2.0	4.3		2.0	3.7	
Lane Grp Cap (vph)		192		462	214		13	1462		644	2141	
v/s Ratio Prot		c0.02		c0.04	0.03		0.00	c0.31		c0.14	0.27	
v/s Ratio Perm												
v/c Ratio		0.19		0.31	0.26		0.38	0.72		0.75	0.45	
Uniform Delay, d1		54.5		52.5	52.1		66.3	31.8		51.5	14.2	
Progression Factor		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.2		0.1	0.2		6.8	1.9		4.1	0.2	
Delay (s)		54.6		52.6	52.3		73.1	33.7		55.6	14.4	
Level of Service		D		D	D		E	C		E	B	
Approach Delay (s)		54.6			52.4			33.9			28.2	
Approach LOS		D			D			C			C	

Intersection Summary

HCM 2000 Control Delay	34.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	134.3	Sum of lost time (s)	19.1
Intersection Capacity Utilization	72.4%	ICU Level of Service	C
Analysis Period (min)	15		

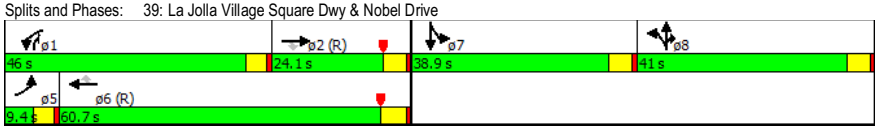
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	6	389	114	1241	288	376	82	83	1078	324	102
Future Volume (vph)	6	389	114	1241	288	376	82	83	1078	324	102
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Split	NA	pt+ov	Split	NA
Protected Phases	5	2		1	6		8	8	8 1	7	7
Permitted Phases			2			6					
Detector Phase	5	2	2	1	6	6	8	8	8 1	7	7
Switch Phase											
Minimum Initial (s)	4.0	7.0	7.0	4.0	7.0	7.0	8.0	8.0		8.0	8.0
Minimum Split (s)	9.4	12.0	12.0	8.4	12.4	12.4	12.9	12.9		38.9	38.9
Total Split (s)	9.4	24.1	24.1	46.0	60.7	60.7	41.0	41.0		38.9	38.9
Total Split (%)	6.3%	16.1%	16.1%	30.7%	40.5%	40.5%	27.3%	27.3%		25.9%	25.9%
Yellow Time (s)	3.4	4.0	4.0	3.4	4.4	4.4	3.9	3.9		3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	4.4	5.0	5.0	4.4	5.4	5.4	4.9	4.9		4.9	4.9
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lag	Lag		Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	None		None	None

Intersection Summary

Cycle Length: 150
Actuated Cycle Length: 150
Offset: 75 (50%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 39: La Jolla Village Square Dwy & Nobel Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	6	389	114	1241	288	376	82	83	1078	324	102	1
Future Volume (vph)	6	389	114	1241	288	376	82	83	1078	324	102	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.0	5.0	4.4	5.4	5.4	4.9	4.9	4.9	4.9	4.9	
Lane Util. Factor	1.00	0.95	1.00	0.97	0.95	1.00	0.95	0.95	1.00	0.95	0.95	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.97	
Satd. Flow (prot)	1770	3539	1583	3433	3539	1583	1681	1762	1583	1681	1723	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.97	
Satd. Flow (perm)	1770	3539	1583	3433	3539	1583	1681	1762	1583	1681	1723	
Peak-hour factor, PHF	0.80	0.80	0.80	0.90	0.90	0.90	0.88	0.88	0.88	0.86	0.86	0.86
Adj. Flow (vph)	8	486	142	1379	320	418	93	94	1225	377	119	1
RTOR Reduction (vph)	0	0	107	0	0	253	0	0	36	0	0	0
Lane Group Flow (vph)	8	486	36	1379	320	165	84	103	1189	245	252	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Split	NA	pt+ov	Split	NA	
Protected Phases	5	2		1	6		8	8	8 1	7	7	
Permitted Phases			2			6						
Actuated Green, G (s)	1.0	19.1	19.1	41.6	59.3	59.3	36.1	36.1	82.6	34.0	34.0	
Effective Green, g (s)	1.0	19.1	19.1	41.6	59.3	59.3	36.1	36.1	82.6	34.0	34.0	
Actuated g/C Ratio	0.01	0.13	0.13	0.28	0.40	0.40	0.24	0.24	0.55	0.23	0.23	
Clearance Time (s)	4.4	5.0	5.0	4.4	5.4	5.4	4.9	4.9		4.9	4.9	
Vehicle Extension (s)	2.0	4.1	4.1	2.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)	11	450	201	952	1399	625	404	424	871	381	390	
v/s Ratio Prot	0.00	c0.14		c0.40	0.09		0.05	0.06	c0.75	0.15	c0.15	
v/s Ratio Perm			0.02			0.10						
v/c Ratio	0.73	1.08	0.18	1.45	0.23	0.26	0.21	0.24	1.37	0.64	0.65	
Uniform Delay, d1	74.4	65.5	58.4	54.2	30.1	30.6	45.5	45.9	33.7	52.5	52.5	
Progression Factor	1.00	1.00	1.00	1.13	1.07	2.38	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	110.3	65.6	1.9	206.9	0.3	0.9	0.4	0.4	171.7	4.1	4.1	
Delay (s)	184.7	131.1	60.4	268.2	32.5	73.6	45.9	46.3	205.4	56.6	56.6	
Level of Service	F	F	E	F	C	E	D	D	F	E	E	
Approach Delay (s)		115.9			194.2			184.3			56.6	
Approach LOS		F			F			F			E	

Intersection Summary

HCM 2000 Control Delay	165.8	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.22		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	19.6
Intersection Capacity Utilization	101.5%	ICU Level of Service	G
Analysis Period (min)	15		

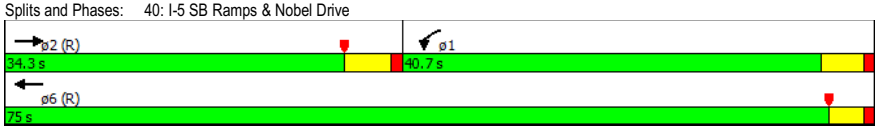
c Critical Lane Group

Lane Group	EBT	WBL	WBT
Lane Configurations			
Traffic Volume (vph)	1073	840	1928
Future Volume (vph)	1073	840	1928
Turn Type	NA	Prot	NA
Protected Phases	2	1	6
Permitted Phases			
Detector Phase	2	1	6
Switch Phase			
Minimum Initial (s)	13.0	5.0	1.0
Minimum Split (s)	18.1	9.7	5.5
Total Split (s)	34.3	40.7	75.0
Total Split (%)	45.7%	54.3%	100.0%
Yellow Time (s)	4.1	3.7	3.0
All-Red Time (s)	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0
Total Lost Time (s)	5.1	4.7	4.0
Lead/Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	
Recall Mode	C-Max	None	C-Max

Intersection Summary

Cycle Length: 75
Actuated Cycle Length: 75
Offset: 61 (81%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 40: I-5 SB Ramps & Nobel Drive



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1073	858	840	1928	0	0
Future Volume (vph)	1073	858	840	1928	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1		4.7	4.0		
Lane Util. Factor	0.95		0.97	0.95		
Frt	0.93		1.00	1.00		
Flt Protected	1.00		0.95	1.00		
Satd. Flow (prot)	3303		3433	3539		
Flt Permitted	1.00		0.95	1.00		
Satd. Flow (perm)	3303		3433	3539		
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.25	0.25
Adj. Flow (vph)	1129	903	884	2029	0	0
RTOR Reduction (vph)	58	0	0	0	0	0
Lane Group Flow (vph)	1974	0	884	2029	0	0
Turn Type	NA		Prot	NA		
Protected Phases	2		1	6		
Permitted Phases						
Actuated Green, G (s)	29.2		36.0	75.0		
Effective Green, g (s)	29.2		36.0	75.0		
Actuated g/C Ratio	0.39		0.48	1.00		
Clearance Time (s)	5.1		4.7	4.0		
Vehicle Extension (s)	3.0		3.0	3.0		
Lane Grp Cap (vph)	1285		1647	3539		
v/s Ratio Prot	c0.60		0.26	c0.57		
v/s Ratio Perm						
v/c Ratio	1.54		0.54	0.57		
Uniform Delay, d1	22.9		13.7	0.0		
Progression Factor	1.26		0.86	1.00		
Incremental Delay, d2	241.6		0.1	0.2		
Delay (s)	270.4		11.9	0.2		
Level of Service	F		B	A		
Approach Delay (s)	270.4			3.8	0.0	
Approach LOS	F			A	A	

Intersection Summary

HCM 2000 Control Delay	113.3	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.05		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	9.8
Intersection Capacity Utilization	89.3%	ICU Level of Service	E
Analysis Period (min)	15		

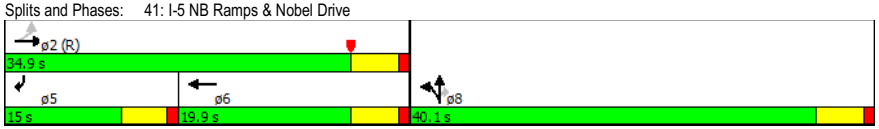
c Critical Lane Group

Lane Group	EBL	EBT	WBT	NBL	NBT	NBR	SBR
Lane Configurations							
Traffic Volume (vph)	11	1146	2032	359	46	294	310
Future Volume (vph)	11	1146	2032	359	46	294	310
Turn Type	Perm	NA	NA	Split	NA	Perm	Prot
Protected Phases		2	6	8	8		5
Permitted Phases	2					8	
Detector Phase	2	2	6	8	8	8	5
Switch Phase							
Minimum Initial (s)	11.0	11.0	13.0	5.0	5.0	5.0	5.0
Minimum Split (s)	16.1	16.1	18.1	10.1	10.1	10.1	10.0
Total Split (s)	34.9	34.9	19.9	40.1	40.1	40.1	15.0
Total Split (%)	46.5%	46.5%	26.5%	53.5%	53.5%	53.5%	20.0%
Yellow Time (s)	4.1	4.1	4.1	4.1	4.1	4.1	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.1	5.1	5.1	5.1	5.1	5.0
Lead/Lag			Lag				Lead
Lead-Lag Optimize?			Yes				Yes
Recall Mode	C-Max	C-Max	None	Min	Min	Min	None

Intersection Summary

Cycle Length: 75
Actuated Cycle Length: 75
Offset: 70 (93%), Referenced to phase 2:EBTL, Start of Yellow
Natural Cycle: 80
Control Type: Actuated-Coordinated

Splits and Phases: 41: I-5 NB Ramps & Nobel Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	1146	0	0	2032	13	359	46	294	0	0	310
Future Volume (vph)	11	1146	0	0	2032	13	359	46	294	0	0	310
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.1			5.1		5.1	5.1	5.1			5.0
Lane Util. Factor		0.95			0.91		0.95	0.95	1.00			1.00
Frt		1.00			1.00		1.00	1.00	0.85			0.86
Flt Protected		1.00			1.00		0.95	0.96	1.00			1.00
Satd. Flow (prot)		3538			5080		1681	1704	1583			1611
Flt Permitted		0.76			1.00		0.95	0.96	1.00			1.00
Satd. Flow (perm)		2687			5080		1681	1704	1583			1611
Peak-hour factor, PHF	0.93	0.93	0.93	0.95	0.95	0.95	0.87	0.87	0.87	0.84	0.84	0.84
Adj. Flow (vph)	12	1232	0	0	2139	14	413	53	338	0	0	369
RTOR Reduction (vph)	0	0	0	0	1	0	0	0	76	0	0	208
Lane Group Flow (vph)	0	1244	0	0	2152	0	231	235	262	0	0	161
Turn Type	Perm	NA			NA		Split	NA	Perm			Prot
Protected Phases		2			6		8	8				5
Permitted Phases	2								8			
Actuated Green, G (s)		45.1			28.9		19.7	19.7	19.7			11.2
Effective Green, g (s)		45.1			28.9		19.7	19.7	19.7			11.2
Actuated g/C Ratio		0.60			0.39		0.26	0.26	0.26			0.15
Clearance Time (s)		5.1			5.1		5.1	5.1	5.1			5.0
Vehicle Extension (s)		2.0			2.0		2.0	2.0	2.0			2.0
Lane Grp Cap (vph)		1615			1957		441	447	415			240
v/s Ratio Prot					c0.42		0.14	0.14				0.10
v/s Ratio Perm		c0.46							c0.17			
v/c Ratio		0.77			1.10		0.52	0.53	0.63			0.67
Uniform Delay, d1		11.1			23.1		23.6	23.7	24.4			30.2
Progression Factor		0.26			1.34		1.00	1.00	1.00			1.00
Incremental Delay, d2		0.3			52.4		0.5	0.5	2.3			5.7
Delay (s)		3.3			83.2		24.2	24.2	26.7			35.9
Level of Service		A			F		C	C	C			D
Approach Delay (s)		3.3			83.2			25.2			35.9	
Approach LOS		A			F			C			D	

Intersection Summary

HCM 2000 Control Delay	47.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.92		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	15.2
Intersection Capacity Utilization	82.6%	ICU Level of Service	E
Analysis Period (min)	15		

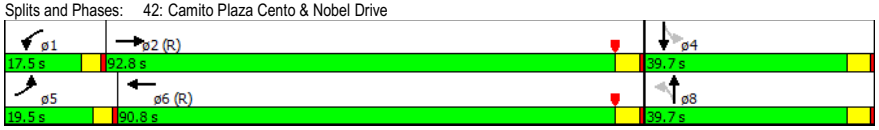
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	78	1432	30	1705	112	9	8	2
Future Volume (vph)	78	1432	30	1705	112	9	8	2
Turn Type	Prot	NA	Prot	NA	Perm	NA	Perm	NA
Protected Phases	5	2	1	6		8		4
Permitted Phases					8		4	
Detector Phase	5	2	1	6	8	8	4	4
Switch Phase								
Minimum Initial (s)	4.0	10.0	4.0	10.0	6.0	6.0	6.0	6.0
Minimum Split (s)	9.5	25.2	9.5	25.2	37.9	37.9	37.9	37.9
Total Split (s)	19.5	92.8	17.5	90.8	39.7	39.7	39.7	39.7
Total Split (%)	13.0%	61.9%	11.7%	60.5%	26.5%	26.5%	26.5%	26.5%
Yellow Time (s)	3.4	4.2	3.4	4.2	3.9	3.9	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	4.4	5.2	4.4	5.2		4.9		4.9
Lead/Lag	Lead	Lag	Lead	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes				
Recall Mode	None	C-Max	None	C-Max	None	None	None	None

Intersection Summary

Cycle Length: 150
Actuated Cycle Length: 150
Offset: 101 (67%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 42: Camito Plaza Cento & Nobel Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	78	1432	53	30	1705	39	112	9	76	8	2	49
Future Volume (vph)	78	1432	53	30	1705	39	112	9	76	8	2	49
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.2		4.4	5.2			4.9			4.9	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Frt	1.00	0.99		1.00	1.00			0.95			0.89	
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.99	
Satd. Flow (prot)	1770	5058		1770	5068			1717			1644	
Flt Permitted	0.95	1.00		0.95	1.00			0.76			0.95	
Satd. Flow (perm)	1770	5058		1770	5068			1340			1574	
Peak-hour factor, PHF	0.96	0.96	0.96	0.95	0.95	0.95	0.82	0.82	0.82	0.80	0.80	0.80
Adj. Flow (vph)	81	1492	55	32	1795	41	137	11	93	10	2	61
RTOR Reduction (vph)	0	2	0	0	1	0	0	16	0	0	49	0
Lane Group Flow (vph)	81	1545	0	32	1835	0	0	225	0	0	25	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8			4		
Actuated Green, G (s)	11.8	101.3		5.7	95.2			28.5			28.5	
Effective Green, g (s)	11.8	101.3		5.7	95.2			28.5			28.5	
Actuated g/C Ratio	0.08	0.68		0.04	0.63			0.19			0.19	
Clearance Time (s)	4.4	5.2		4.4	5.2			4.9			4.9	
Vehicle Extension (s)	3.0	5.0		3.0	4.5			2.5			2.0	
Lane Grp Cap (vph)	139	3415		67	3216			254			299	
v/s Ratio Prot	c0.05	0.31		0.02	c0.36							
v/s Ratio Perm								c0.17			0.02	
v/c Ratio	0.58	0.45		0.48	0.57			0.89			0.08	
Uniform Delay, d1	66.7	11.4		70.7	15.7			59.2			50.0	
Progression Factor	0.90	0.84		1.00	1.00			1.00			1.00	
Incremental Delay, d2	4.5	0.3		5.3	0.7			28.3			0.0	
Delay (s)	64.5	9.9		76.0	16.4			87.5			50.0	
Level of Service	E	A		E	B			F			D	
Approach Delay (s)		12.6			17.5			87.5			50.0	
Approach LOS		B			B			F			D	

Intersection Summary

HCM 2000 Control Delay	20.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	14.5
Intersection Capacity Utilization	68.2%	ICU Level of Service	C
Analysis Period (min)	15		

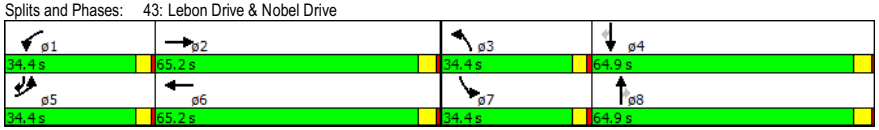
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	131	894	133	1042	191	190	66	111	314	296
Future Volume (vph)	131	894	133	1042	191	190	66	111	314	296
Turn Type	Prot	NA	Prot	NA	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	5	2	1	6	3	8		7	4	5
Permitted Phases							8			4
Detector Phase	5	2	1	6	3	8	8	7	4	5
Switch Phase										
Minimum Initial (s)	4.0	10.0	4.0	10.0	4.0	8.0	8.0	10.0	10.0	4.0
Minimum Split (s)	8.4	15.2	8.4	15.2	8.4	12.9	12.9	14.4	14.9	8.4
Total Split (s)	34.4	65.2	34.4	65.2	34.4	64.9	64.9	34.4	64.9	34.4
Total Split (%)	17.3%	32.8%	17.3%	32.8%	17.3%	32.6%	32.6%	17.3%	32.6%	17.3%
Yellow Time (s)	3.4	4.2	3.4	4.2	3.4	3.9	3.9	3.4	3.9	3.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.2	4.4	5.2	4.4	4.9	4.9	4.4	4.9	4.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 198.9
Actuated Cycle Length: 130.3
Natural Cycle: 60
Control Type: Actuated-Uncoordinated

Splits and Phases: 43: Lebon Drive & Nobel Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	131	894	224	133	1042	75	191	190	66	111	314	296
Future Volume (vph)	131	894	224	133	1042	75	191	190	66	111	314	296
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.2		4.4	5.2		4.4	4.9	4.9	4.4	4.9	4.4
Lane Util. Factor	0.97	0.91		1.00	0.91		0.97	0.95	1.00	0.97	0.95	1.00
Frt	1.00	0.97		1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	4932		1770	5034		3433	3539	1583	3433	3539	1583
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	4932		1770	5034		3433	3539	1583	3433	3539	1583
Peak-hour factor, PHF	0.88	0.88	0.88	0.91	0.91	0.91	0.96	0.96	0.96	0.80	0.80	0.80
Adj. Flow (vph)	149	1016	255	146	1145	82	199	198	69	139	392	370
RTOR Reduction (vph)	0	19	0	0	3	0	0	0	51	0	0	46
Lane Group Flow (vph)	149	1252	0	146	1224	0	199	198	18	139	393	324
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	5	2		1	6		3	8		7	4	5
Permitted Phases									8			4
Actuated Green, G (s)	10.8	50.0		16.1	55.3		12.8	33.1	33.1	11.4	31.7	42.5
Effective Green, g (s)	10.8	50.0		16.1	55.3		12.8	33.1	33.1	11.4	31.7	42.5
Actuated g/C Ratio	0.08	0.39		0.12	0.43		0.10	0.26	0.26	0.09	0.24	0.33
Clearance Time (s)	4.4	5.2		4.4	5.2		4.4	4.9	4.9	4.4	4.9	4.4
Vehicle Extension (s)	2.0	4.5		2.0	4.5		2.0	6.4	6.4	2.0	5.5	2.0
Lane Grp Cap (vph)	286	1904		220	2149		339	904	404	302	866	519
v/s Ratio Prot	0.04	c0.25		c0.08	0.24		c0.06	0.06		0.04	0.11	c0.05
v/s Ratio Perm									0.01			0.15
v/c Ratio	0.52	0.66		0.66	0.57		0.59	0.22	0.04	0.46	0.45	0.62
Uniform Delay, d1	56.9	32.7		54.1	28.1		55.8	38.0	36.3	56.1	41.5	36.8
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.8	1.0		5.7	0.5		1.7	0.4	0.1	0.4	0.9	1.7
Delay (s)	57.7	33.7		59.8	28.6		57.5	38.4	36.4	56.5	42.5	38.5
Level of Service	E	C		E	C		E	D	D	E	D	D
Approach Delay (s)		36.2			31.9			46.3			43.0	
Approach LOS		D			C			D			D	

Intersection Summary

HCM 2000 Control Delay	37.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	129.5	Sum of lost time (s)	18.9
Intersection Capacity Utilization	60.4%	ICU Level of Service	B
Analysis Period (min)	15		

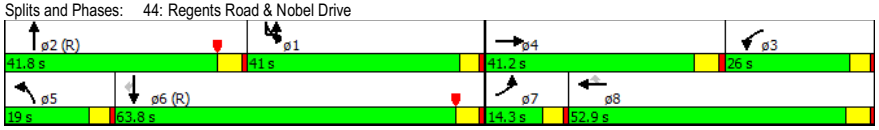
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	214	894	524	1055	138	153	604	410	1052	285
Future Volume (vph)	214	894	524	1055	138	153	604	410	1052	285
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Prot	NA	Perm
Protected Phases	7	4	3	8		5	2	1	6	
Permitted Phases					8					6
Detector Phase	7	4	3	8	8	5	2	1	6	6
Switch Phase										
Minimum Initial (s)	4.0	10.0	4.0	10.0	10.0	4.0	10.0	4.0	10.0	10.0
Minimum Split (s)	8.4	41.2	8.4	41.2	41.2	8.4	41.2	8.4	41.2	41.2
Total Split (s)	14.3	41.2	26.0	52.9	52.9	19.0	41.8	41.0	63.8	63.8
Total Split (%)	9.5%	27.5%	17.3%	35.3%	35.3%	12.7%	27.9%	27.3%	42.5%	42.5%
Yellow Time (s)	3.4	4.2	3.4	4.2	4.2	3.4	4.2	3.4	4.2	4.2
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.2	4.4	5.2	5.2	4.4	5.2	4.4	5.2	5.2
Lead/Lag	Lead	Lead	Lag	Lag	Lag	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Min	None	Min	Min	None	C-Max	None	C-Max	C-Max

Intersection Summary

Cycle Length: 150
Actuated Cycle Length: 150
Offset: 49 (33%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 44: Regents Road & Nobel Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	214	894	132	524	1055	138	153	604	269	23	410	1052
Future Volume (vph)	214	894	132	524	1055	138	153	604	269	23	410	1052
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.2		4.4	5.2	5.2	4.4	5.2			4.4	5.2
Lane Util. Factor	0.97	0.91		0.97	0.95	1.00	1.00	0.91			1.00	0.95
Frt	1.00	0.98		1.00	1.00	0.85	1.00	0.95			1.00	1.00
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00			0.95	1.00
Satd. Flow (prot)	3433	4987		3433	3539	1583	1770	4850			1770	3539
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00			0.95	1.00
Satd. Flow (perm)	3433	4987		3433	3539	1583	1770	4850			1770	3539
Peak-hour factor, PHF	0.94	0.94	0.94	0.91	0.91	0.91	0.95	0.95	0.95	0.92	0.82	0.82
Adj. Flow (vph)	228	951	140	576	1159	152	161	636	283	25	500	1283
RTOR Reduction (vph)	0	13	0	0	0	80	0	54	0	0	0	0
Lane Group Flow (vph)	228	1078	0	576	1159	72	161	865	0	0	525	1283
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA		Prot	Prot	NA
Protected Phases	7	4		3	8		5	2		1	1	6
Permitted Phases						8						
Actuated Green, G (s)	9.9	35.7		21.9	47.7	47.7	14.6	36.6			36.6	58.6
Effective Green, g (s)	9.9	35.7		21.9	47.7	47.7	14.6	36.6			36.6	58.6
Actuated g/C Ratio	0.07	0.24		0.15	0.32	0.32	0.10	0.24			0.24	0.39
Clearance Time (s)	4.4	5.2		4.4	5.2	5.2	4.4	5.2			4.4	5.2
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0			3.0	3.0
Lane Grp Cap (vph)	226	1186		501	1125	503	172	1183			431	1382
v/s Ratio Prot	0.07	c0.22		c0.17	c0.33		c0.09	0.18			c0.30	c0.36
v/s Ratio Perm						0.05						
v/c Ratio	1.01	0.91		1.15	1.03	0.14	0.94	0.73			1.22	0.93
Uniform Delay, d1	70.0	55.6		64.0	51.1	36.5	67.2	52.2			56.7	43.7
Progression Factor	1.00	1.00		0.69	0.62	0.13	1.00	1.00			0.73	0.86
Incremental Delay, d2	62.2	10.2		84.7	31.9	0.1	49.8	4.0			105.4	4.9
Delay (s)	132.2	65.8		129.1	63.5	4.9	117.0	56.2			146.6	42.6
Level of Service	F	E		F	E	A	F	E			F	D
Approach Delay (s)		77.2			78.8			65.3				65.2
Approach LOS		E			E			E				E

Intersection Summary

HCM 2000 Control Delay	71.6	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.05		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	19.2
Intersection Capacity Utilization	92.9%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	285
Future Volume (vph)	285
Ideal Flow (vphpl)	1900
Total Lost time (s)	5.2
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1583
Flt Permitted	1.00
Satd. Flow (perm)	1583
Peak-hour factor, PHF	0.82
Adj. Flow (vph)	348
RTOR Reduction (vph)	72
Lane Group Flow (vph)	276
Turn Type	Perm
Protected Phases	
Permitted Phases	6
Actuated Green, G (s)	58.6
Effective Green, g (s)	58.6
Actuated g/C Ratio	0.39
Clearance Time (s)	5.2
Vehicle Extension (s)	3.0
Lane Grp Cap (vph)	618
v/s Ratio Prot	
v/s Ratio Perm	0.17
v/c Ratio	0.45
Uniform Delay, d1	33.7
Progression Factor	0.73
Incremental Delay, d2	0.8
Delay (s)	25.3
Level of Service	C
Approach Delay (s)	
Approach LOS	

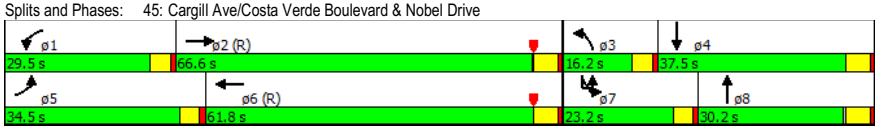
Intersection Summary

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	393	908	90	1070	63	56	201	70
Future Volume (vph)	393	908	90	1070	63	56	201	70
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	5	2	1	6	3	8	7	4
Permitted Phases								
Detector Phase	5	2	1	6	3	8	7	4
Switch Phase								
Minimum Initial (s)	4.0	25.0	4.0	25.0	4.0	25.0	4.0	25.0
Minimum Split (s)	8.4	30.2	8.4	30.2	8.4	30.2	8.4	30.2
Total Split (s)	34.5	66.6	29.5	61.8	16.2	30.2	23.2	37.5
Total Split (%)	23.0%	44.4%	19.7%	41.2%	10.8%	20.1%	15.5%	25.0%
Yellow Time (s)	3.4	4.2	3.4	4.2	3.4	4.2	3.4	4.2
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.2	4.4	5.2	4.4	5.2	4.4	5.2
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	Max	None	Max

Intersection Summary

Cycle Length: 150
Actuated Cycle Length: 150
Offset: 145 (97%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 130
Control Type: Actuated-Coordinated

Splits and Phases: 45: Cargill Ave/Costa Verde Boulevard & Nobel Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	393	908	72	90	1070	156	63	56	49	4	201	70
Future Volume (vph)	393	908	72	90	1070	156	63	56	49	4	201	70
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.2		4.4	5.2		4.4	5.2			4.4	5.2
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	1.00			1.00	1.00
Frt	1.00	0.99		1.00	0.98		1.00	0.93			1.00	0.88
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			0.95	1.00
Satd. Flow (prot)	1770	5029		1770	4988		1770	1732			1770	1645
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00			0.95	1.00
Satd. Flow (perm)	1770	5029		1770	4988		1770	1732			1770	1645
Peak-hour factor, PHF	0.95	0.95	0.95	0.88	0.88	0.88	0.83	0.83	0.83	0.92	0.87	0.87
Adj. Flow (vph)	414	956	76	102	1216	177	76	67	59	4	231	80
RTOR Reduction (vph)	0	5	0	0	12	0	0	21	0	0	0	84
Lane Group Flow (vph)	414	1027	0	102	1381	0	76	105	0	0	235	280
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	Prot	NA
Protected Phases	5	2		1	6		3	8		7	7	4
Permitted Phases												
Actuated Green, G (s)	30.1	73.7		13.0	56.6		9.9	25.3			18.8	34.2
Effective Green, g (s)	30.1	73.7		13.0	56.6		9.9	25.3			18.8	34.2
Actuated g/C Ratio	0.20	0.49		0.09	0.38		0.07	0.17			0.13	0.23
Clearance Time (s)	4.4	5.2		4.4	5.2		4.4	5.2			4.4	5.2
Vehicle Extension (s)	2.0	4.5		2.0	4.5		2.0	4.5			2.0	4.5
Lane Grp Cap (vph)	355	2470		153	1882		116	292			221	375
v/s Ratio Prot	c0.23	0.20		0.06	c0.28		0.04	0.06			c0.13	c0.17
v/s Ratio Perm												
v/c Ratio	1.17	0.42		0.67	0.73		0.66	0.36			1.06	0.75
Uniform Delay, d1	59.9	24.4		66.4	40.2		68.4	55.2			65.6	53.9
Progression Factor	1.27	0.30		1.46	0.27		1.00	1.00			1.00	1.00
Incremental Delay, d2	84.0	0.2		3.8	1.2		9.7	3.4			78.3	12.7
Delay (s)	160.4	7.5		100.4	12.1		78.1	58.6			143.9	66.6
Level of Service	F	A		F	B		E	E			F	E
Approach Delay (s)		51.3			18.2			65.9				96.9
Approach LOS		D			B			E				F

Intersection Summary				
HCM 2000 Control Delay	46.2	HCM 2000 Level of Service	D	
HCM 2000 Volume to Capacity ratio	0.90			
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	19.2	
Intersection Capacity Utilization	94.1%	ICU Level of Service	F	
Analysis Period (min)	15			

c Critical Lane Group

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	247
Future Volume (vph)	247
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.87
Adj. Flow (vph)	284
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

Intersection Summary

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	299	735	26	1698	22	6	101	0
Future Volume (vph)	299	735	26	1698	22	6	101	0
Turn Type	Prot	NA	Prot	NA	Perm	NA	Perm	NA
Protected Phases	5	2	1	6		8		4
Permitted Phases					8		4	
Detector Phase	5	2	1	6	8	8	4	4
Switch Phase								
Minimum Initial (s)	4.0	7.0	4.0	7.0	4.0	4.0	4.0	4.0
Minimum Split (s)	9.5	19.0	9.5	28.9	32.9	32.9	32.9	32.9
Total Split (s)	31.2	100.3	11.0	80.1	33.0	33.0	33.0	33.0
Total Split (%)	21.6%	69.5%	7.6%	55.5%	22.9%	22.9%	22.9%	22.9%
Yellow Time (s)	3.4	4.0	3.4	3.9	3.9	3.9	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.4	5.0	4.4	4.9		4.9	4.9	4.9
Lead/Lag	Lead	Lag	Lead	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes				
Recall Mode	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 144.3
Actuated Cycle Length: 135.1
Natural Cycle: 150
Control Type: Actuated-Uncoordinated

Splits and Phases: 46: Lombard Place & Nobel Drive

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	299	735	26	26	1698	121	22	6	8	101	0	278
Future Volume (vph)	299	735	26	26	1698	121	22	6	8	101	0	278
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.0		4.4	4.9			4.9		4.9	4.9	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00		1.00	1.00	
Frt	1.00	0.99		1.00	0.99			0.97		1.00	0.85	
Flt Protected	0.95	1.00		0.95	1.00			0.97		0.95	1.00	
Satd. Flow (prot)	1770	3521		1770	3504			1755		1770	1583	
Flt Permitted	0.95	1.00		0.95	1.00			0.17		0.76	1.00	
Satd. Flow (perm)	1770	3521		1770	3504			314		1423	1583	
Peak-hour factor, PHF	0.89	0.89	0.89	0.90	0.90	0.90	0.80	0.80	0.80	0.80	0.80	0.80
Adj. Flow (vph)	336	826	29	29	1887	134	28	8	10	126	0	348
RTOR Reduction (vph)	0	1	0	0	3	0	0	8	0	0	221	0
Lane Group Flow (vph)	336	854	0	29	2018	0	0	38	0	126	127	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8			4		
Actuated Green, G (s)	26.9	100.3		3.8	77.3			18.5		18.5	18.5	
Effective Green, g (s)	26.9	100.3		3.8	77.3			18.5		18.5	18.5	
Actuated g/C Ratio	0.20	0.73		0.03	0.56			0.14		0.14	0.14	
Clearance Time (s)	4.4	5.0		4.4	4.9			4.9		4.9	4.9	
Vehicle Extension (s)	2.0	3.7		2.0	4.4			2.0		2.0	2.0	
Lane Grp Cap (vph)	347	2579		49	1978			42		192	213	
v/s Ratio Prot	c0.19	0.24		0.02	c0.58						0.08	
v/s Ratio Perm								c0.12		0.09		
v/c Ratio	0.97	0.33		0.59	1.02			0.91		0.66	0.59	
Uniform Delay, d1	54.6	6.5		65.8	29.8			58.4		56.2	55.7	
Progression Factor	1.00	1.00		1.00	1.00			1.00		1.00	1.00	
Incremental Delay, d2	39.2	0.1		12.1	25.4			101.4		6.0	2.9	
Delay (s)	93.8	6.6		77.9	55.2			159.8		62.2	58.6	
Level of Service	F	A		E	E			F		E	E	
Approach Delay (s)		31.2			55.5			159.8			59.6	
Approach LOS		C			E			F			E	

Intersection Summary					
HCM 2000 Control Delay	49.6	HCM 2000 Level of Service	D		
HCM 2000 Volume to Capacity ratio	0.99				
Actuated Cycle Length (s)	136.9	Sum of lost time (s)	14.3		
Intersection Capacity Utilization	100.1%	ICU Level of Service	G		
Analysis Period (min)	15				

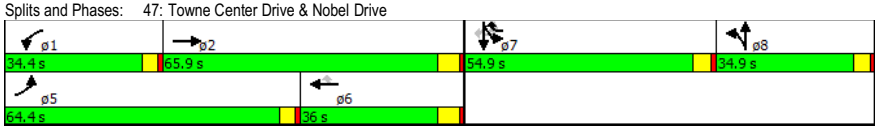
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	SBU	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	370	496	234	1119	39	31	4	50	261	685
Future Volume (vph)	370	496	234	1119	39	31	4	50	261	685
Turn Type	Prot	NA	Prot	NA	pm+ov	NA	Perm	Split	NA	Perm
Protected Phases	5	2	1	6	7!	8		7	7	
Permitted Phases					6		7!			7
Detector Phase	5	2	1	6	7	8	7	7	7	7
Switch Phase										
Minimum Initial (s)	4.0	7.0	4.0	7.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.4	12.9	8.4	13.0	8.9	8.9	8.9	8.9	8.9	8.9
Total Split (s)	64.4	65.9	34.4	36.0	54.9	34.9	54.9	54.9	54.9	54.9
Total Split (%)	33.9%	34.6%	18.1%	18.9%	28.9%	18.3%	28.9%	28.9%	28.9%	28.9%
Yellow Time (s)	3.4	4.9	3.4	5.0	3.9	3.9	3.9	3.9	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.4	5.9	4.4	6.0	4.9	4.9		4.9	4.9	4.9
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lead	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 190.2
Actuated Cycle Length: 143.2
Natural Cycle: 90
Control Type: Actuated-Uncoordinated
! Phase conflict between lane groups.

Splits and Phases: 47: Towne Center Drive & Nobel Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	370	496	71	234	1119	39	49	31	24	4	50	261
Future Volume (vph)	370	496	71	234	1119	39	49	31	24	4	50	261
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.9		4.4	6.0	4.9		4.9			4.9	4.9
Lane Util. Factor	0.97	0.95		1.00	0.91	1.00		0.95			1.00	1.00
Frt	1.00	0.98		1.00	1.00	0.85		0.97			1.00	1.00
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.98			0.95	1.00
Satd. Flow (prot)	3433	3473		1770	5085	1583		3338			1770	1863
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.98			0.08	1.00
Satd. Flow (perm)	3433	3473		1770	5085	1583		3338			148	1863
Peak-hour factor, PHF	0.90	0.90	0.90	0.87	0.87	0.87	0.80	0.80	0.80	0.92	0.86	0.86
Adj. Flow (vph)	411	551	79	269	1286	45	61	39	30	4	58	303
RTOR Reduction (vph)	0	7	0	0	0	16	0	17	0	0	0	0
Lane Group Flow (vph)	411	623	0	269	1286	29	0	113	0	0	62	303
Turn Type	Prot	NA		Prot	NA	pm+ov	Split	NA		Perm	Split	NA
Protected Phases	5	2		1	6	7!	8	8			7	7
Permitted Phases						6				7!		
Actuated Green, G (s)	22.1	35.1		28.2	41.1	91.4		9.4			50.3	50.3
Effective Green, g (s)	22.1	35.1		28.2	41.1	91.4		9.4			50.3	50.3
Actuated g/C Ratio	0.15	0.25		0.20	0.29	0.64		0.07			0.35	0.35
Clearance Time (s)	4.4	5.9		4.4	6.0	4.9		4.9			4.9	4.9
Vehicle Extension (s)	2.0	4.9		2.0	3.3	4.0		2.0			4.0	4.0
Lane Grp Cap (vph)	530	851		348	1460	1011		219			52	654
v/s Ratio Prot	0.12	0.18		c0.15	c0.25	0.01		c0.03				0.16
v/s Ratio Perm						0.01					c0.42	
v/c Ratio	0.78	0.73		0.77	0.88	0.03		0.52			1.19	0.46
Uniform Delay, d1	58.1	49.7		54.4	48.7	9.5		64.7			46.4	35.9
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00			1.00	1.00
Incremental Delay, d2	6.4	3.9		9.4	6.6	0.0		0.9			186.3	0.7
Delay (s)	64.5	53.6		63.8	55.3	9.5		65.5			232.7	36.7
Level of Service	E	D		E	E	A		E			F	D
Approach Delay (s)		57.9			55.4			65.5				50.0
Approach LOS		E			E			E				D

Intersection Summary

HCM 2000 Control Delay	54.8	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.97		
Actuated Cycle Length (s)	143.1	Sum of lost time (s)	20.2
Intersection Capacity Utilization	80.5%	ICU Level of Service	D
Analysis Period (min)	15		

! Phase conflict between lane groups.
c Critical Lane Group

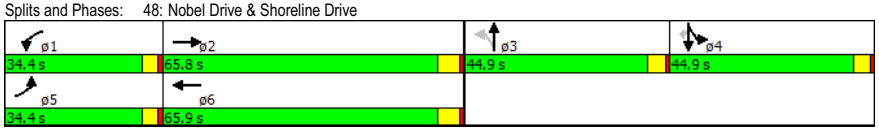
Movement	SBR
Lane Configurations	
Traffic Volume (vph)	685
Future Volume (vph)	685
Ideal Flow (vphpl)	1900
Total Lost time (s)	4.9
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1583
Flt Permitted	1.00
Satd. Flow (perm)	1583
Peak-hour factor, PHF	0.86
Adj. Flow (vph)	797
RTOR Reduction (vph)	452
Lane Group Flow (vph)	345
Turn Type	Perm
Protected Phases	
Permitted Phases	7
Actuated Green, G (s)	50.3
Effective Green, g (s)	50.3
Actuated g/C Ratio	0.35
Clearance Time (s)	4.9
Vehicle Extension (s)	4.0
Lane Grp Cap (vph)	556
v/s Ratio Prot	
v/s Ratio Perm	0.22
v/c Ratio	0.62
Uniform Delay, d1	38.5
Progression Factor	1.00
Incremental Delay, d2	2.4
Delay (s)	40.9
Level of Service	D
Approach Delay (s)	
Approach LOS	

Intersection Summary

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	72	423	47	1229	21	6	75	8	46
Future Volume (vph)	72	423	47	1229	21	6	75	8	46
Turn Type	Prot	NA	Prot	NA	Perm	NA	Split	NA	Perm
Protected Phases	5	2	1	6		3	4	4	
Permitted Phases					3				4
Detector Phase	5	2	1	6	3	3	4	4	4
Switch Phase									
Minimum Initial (s)	4.0	10.0	4.0	10.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.4	15.8	8.4	30.9	8.9	8.9	33.9	33.9	33.9
Total Split (s)	34.4	65.8	34.4	65.9	44.9	44.9	44.9	44.9	44.9
Total Split (%)	18.1%	34.6%	18.1%	34.7%	23.6%	23.6%	23.6%	23.6%	23.6%
Yellow Time (s)	3.4	4.8	3.4	4.9	3.9	3.9	3.9	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.8	4.4	5.9		4.9	4.9	4.9	4.9
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 190.1
Actuated Cycle Length: 145.1
Natural Cycle: 85
Control Type: Actuated-Uncoordinated

Splits and Phases: 48: Nobel Drive & Shoreline Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	72	423	48	47	1229	227	21	6	13	4	75	8
Future Volume (vph)	72	423	48	47	1229	227	21	6	13	4	75	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.8		4.4	5.9			4.9			4.9	4.9
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	1.00
Frt	1.00	0.98		1.00	0.98			0.96			1.00	1.00
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.95	1.00
Satd. Flow (prot)	1770	5007		1770	4966			1734			1770	1863
Flt Permitted	0.95	1.00		0.95	1.00			0.22			0.73	1.00
Satd. Flow (perm)	1770	5007		1770	4966			393			1358	1863
Peak-hour factor, PHF	0.91	0.91	0.91	0.88	0.88	0.88	0.93	0.93	0.93	0.92	0.80	0.80
Adj. Flow (vph)	79	465	53	53	1397	258	23	6	14	4	94	10
RTOR Reduction (vph)	0	6	0	0	12	0	0	11	0	0	0	0
Lane Group Flow (vph)	79	512	0	53	1643	0	0	32	0	0	98	10
Turn Type	Prot	NA		Prot	NA		Perm	NA			Split	NA
Protected Phases	5	2		1	6			3			4	4
Permitted Phases							3					
Actuated Green, G (s)	10.9	65.2		7.6	61.8			13.9			40.4	40.4
Effective Green, g (s)	10.9	65.2		7.6	61.8			13.9			40.4	40.4
Actuated g/C Ratio	0.07	0.44		0.05	0.42			0.09			0.27	0.27
Clearance Time (s)	4.4	5.8		4.4	5.9			4.9			4.9	4.9
Vehicle Extension (s)	2.0	4.6		2.0	4.4			2.0			2.0	2.0
Lane Grp Cap (vph)	131	2219		91	2086			37			372	511
v/s Ratio Prot	c0.04	c0.10		0.03	c0.33							0.01
v/s Ratio Perm								c0.08			c0.07	
v/c Ratio	0.60	0.23		0.58	0.79			0.87			0.26	0.02
Uniform Delay, d1	66.0	25.4		68.2	37.0			65.7			41.7	38.9
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	1.00
Incremental Delay, d2	5.3	0.1		6.0	2.3			93.3			0.1	0.0
Delay (s)	71.3	25.5		74.2	39.2			159.0			41.9	38.9
Level of Service	E	C		E	D			F			D	D
Approach Delay (s)		31.6			40.3			159.0				40.7
Approach LOS		C			D			F				D

Intersection Summary			
HCM 2000 Control Delay	40.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	147.1	Sum of lost time (s)	20.1
Intersection Capacity Utilization	54.4%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

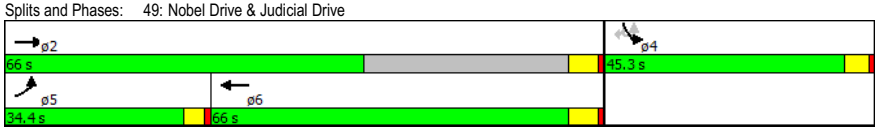
Movement	SBR
Lane Configurations	
Traffic Volume (vph)	46
Future Volume (vph)	46
Ideal Flow (vphpl)	1900
Total Lost time (s)	4.9
Lane Util. Factor	0.88
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	2787
Flt Permitted	1.00
Satd. Flow (perm)	2787
Peak-hour factor, PHF	0.80
Adj. Flow (vph)	58
RTOR Reduction (vph)	42
Lane Group Flow (vph)	16
Turn Type	Perm
Protected Phases	
Permitted Phases	4
Actuated Green, G (s)	40.4
Effective Green, g (s)	40.4
Actuated g/C Ratio	0.27
Clearance Time (s)	4.9
Vehicle Extension (s)	2.0
Lane Grp Cap (vph)	765
v/s Ratio Prot	
v/s Ratio Perm	0.01
v/c Ratio	0.02
Uniform Delay, d1	38.9
Progression Factor	1.00
Incremental Delay, d2	0.0
Delay (s)	38.9
Level of Service	D
Approach Delay (s)	
Approach LOS	

Intersection Summary

Lane Group	EBL	EBT	WBT	SBL	SBR
Lane Configurations					
Traffic Volume (vph)	25	510	1414	804	132
Future Volume (vph)	25	510	1414	804	132
Turn Type	Prot	NA	NA	Prot	Perm
Protected Phases	5	2	6	4	
Permitted Phases					4
Detector Phase	5	2	6	4	4
Switch Phase					
Minimum Initial (s)	4.0	10.0	10.0	7.0	7.0
Minimum Split (s)	11.4	16.0	16.0	12.3	12.3
Total Split (s)	34.4	66.0	66.0	45.3	45.3
Total Split (%)	23.6%	45.3%	45.3%	31.1%	31.1%
Yellow Time (s)	3.4	5.0	5.0	4.3	4.3
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	6.0	6.0	5.3	5.3
Lead/Lag	Lead		Lag		
Lead-Lag Optimize?	Yes		Yes		
Recall Mode	None	Min	Min	None	None

Intersection Summary
Cycle Length: 145.7
Actuated Cycle Length: 117.5
Natural Cycle: 80
Control Type: Actuated-Uncoordinated

Splits and Phases: 49: Nobel Drive & Judicial Drive



Movement	EBL	EBT	WBT	WBR	SBU	SBL	SBR
Lane Configurations							
Traffic Volume (vph)	25	510	1414	327	4	804	132
Future Volume (vph)	25	510	1414	327	4	804	132
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	6.0	6.0			5.3	5.3
Lane Util. Factor	0.97	0.91	0.91			0.97	1.00
Frt	1.00	1.00	0.97			1.00	0.85
Flt Protected	0.95	1.00	1.00			0.95	1.00
Satd. Flow (prot)	3433	5085	4942			3433	1583
Flt Permitted	0.95	1.00	1.00			0.95	1.00
Satd. Flow (perm)	3433	5085	4942			3433	1583
Peak-hour factor, PHF	0.94	0.94	0.92	0.92	0.92	0.84	0.84
Adj. Flow (vph)	27	543	1537	355	4	957	157
RTOR Reduction (vph)	0	0	22	0	0	0	79
Lane Group Flow (vph)	27	543	1870	0	0	961	78
Turn Type	Prot	NA	NA		Perm	Prot	Perm
Protected Phases	5	2	6			4	
Permitted Phases					4		4
Actuated Green, G (s)	3.5	68.0	60.1			40.1	40.1
Effective Green, g (s)	3.5	68.0	60.1			40.1	40.1
Actuated g/C Ratio	0.03	0.57	0.50			0.34	0.34
Clearance Time (s)	4.4	6.0	6.0			5.3	5.3
Vehicle Extension (s)	2.0	5.4	5.4			4.4	4.4
Lane Grp Cap (vph)	100	2895	2487			1152	531
v/s Ratio Prot	0.01	c0.11	c0.38				
v/s Ratio Perm						0.28	0.05
v/c Ratio	0.27	0.19	0.75			0.83	0.15
Uniform Delay, d1	56.7	12.4	23.7			36.6	27.7
Progression Factor	1.00	1.00	1.00			1.00	1.00
Incremental Delay, d2	0.5	0.1	1.6			5.8	0.2
Delay (s)	57.2	12.5	25.3			42.3	27.9
Level of Service	E	B	C			D	C
Approach Delay (s)		14.6	25.3			40.3	
Approach LOS		B	C			D	

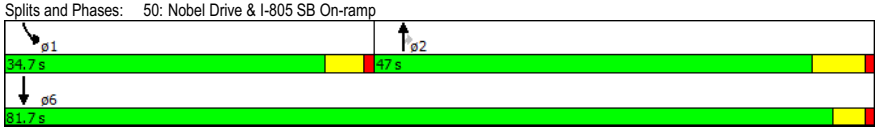
Intersection Summary			
HCM 2000 Control Delay	28.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	119.4	Sum of lost time (s)	15.7
Intersection Capacity Utilization	67.1%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	NBT	NBR	SBL	SBT
Lane Configurations				
Traffic Volume (vph)	625	540	140	1758
Future Volume (vph)	625	540	140	1758
Turn Type	NA	Perm	Prot	NA
Protected Phases	2		1	6
Permitted Phases		2		
Detector Phase	2	2	1	6
Switch Phase				
Minimum Initial (s)	12.0	12.0	5.0	1.0
Minimum Split (s)	19.0	19.0	9.7	5.5
Total Split (s)	47.0	47.0	34.7	81.7
Total Split (%)	57.5%	57.5%	42.5%	100.0%
Yellow Time (s)	5.0	5.0	3.7	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	4.7	4.0
Lead/Lag	Lag	Lag	Lead	
Lead-Lag Optimize?	Yes	Yes	Yes	
Recall Mode	Min	Min	None	Min

Intersection Summary
Cycle Length: 81.7
Actuated Cycle Length: 64.9
Natural Cycle: 40
Control Type: Actuated-Uncoordinated

Splits and Phases: 50: Nobel Drive & I-805 SB On-ramp



Movement	WBL	WBR	NBT	NBR	SBU	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	0	0	625	540	4	140	1758
Future Volume (vph)	0	0	625	540	4	140	1758
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			6.0	6.0		4.7	4.0
Lane Util. Factor			0.95	0.88		0.97	0.91
Frt			1.00	0.85		1.00	1.00
Flt Protected			1.00	1.00		0.95	1.00
Satd. Flow (prot)			3539	2787		3433	5085
Flt Permitted			1.00	1.00		0.13	1.00
Satd. Flow (perm)			3539	2787		480	5085
Peak-hour factor, PHF	0.25	0.25	0.97	0.97	0.92	0.93	0.93
Adj. Flow (vph)	0	0	644	557	4	151	1890
RTOR Reduction (vph)	0	0	0	350	0	0	0
Lane Group Flow (vph)	0	0	644	207	0	155	1890
Turn Type			NA	Perm		Prot	NA
Protected Phases			2			1	6
Permitted Phases				2			
Actuated Green, G (s)			24.1	24.1		30.1	64.9
Effective Green, g (s)			24.1	24.1		30.1	64.9
Actuated g/C Ratio			0.37	0.37		0.46	1.00
Clearance Time (s)			6.0	6.0		4.7	4.0
Vehicle Extension (s)			3.0	3.0		3.0	3.0
Lane Grp Cap (vph)			1314	1034		222	5085
v/s Ratio Prot			c0.18				0.37
v/s Ratio Perm				0.07		c0.32	
v/c Ratio			0.49	0.20		0.70	0.37
Uniform Delay, d1			15.7	13.9		13.8	0.0
Progression Factor			1.00	1.00		1.00	1.00
Incremental Delay, d2			0.3	0.1		9.2	0.0
Delay (s)			16.0	13.9		23.0	0.0
Level of Service			B	B		C	A
Approach Delay (s)	0.0		15.0				1.8
Approach LOS	A		B				A

Intersection Summary			
HCM 2000 Control Delay	6.7	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	64.9	Sum of lost time (s)	10.7
Intersection Capacity Utilization	50.4%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	WBL	WBR	NBT	SBT	ø5
Lane Configurations					
Traffic Volume (vph)	722	359	583	975	
Future Volume (vph)	722	359	583	975	
Turn Type	Prot	Prot	NA	NA	
Protected Phases	8	1	2	6	5
Permitted Phases					
Detector Phase	8	1	2	6	
Switch Phase					
Minimum Initial (s)	5.0	5.0	16.0	11.0	5.0
Minimum Split (s)	11.1	11.1	23.0	18.0	9.7
Total Split (s)	36.1	19.7	47.0	47.0	24.7
Total Split (%)	33.5%	18.3%	43.6%	43.6%	23%
Yellow Time (s)	4.1	3.7	5.0	5.0	3.7
All-Red Time (s)	2.0	1.0	2.0	2.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.1	4.7	7.0	7.0	
Lead/Lag		Lead	Lag	Lag	Lead
Lead-Lag Optimize?		Yes	Yes	Yes	Yes
Recall Mode	None	None	Min	Min	None

Intersection Summary
Cycle Length: 107.8
Actuated Cycle Length: 72.5
Natural Cycle: 75
Control Type: Actuated-Uncoordinated

Splits and Phases: 51: Nobel Drive & I-805 N Off-ramps

Movement	WBL	WBR	NBU	NBT	NBR	SBU	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	722	359	0	583	0	4	0	975
Future Volume (vph)	722	359	0	583	0	4	0	975
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.1	4.7		7.0				7.0
Lane Util. Factor	0.97	0.88		0.95				0.91
Frt	1.00	0.85		1.00				1.00
Flt Protected	0.95	1.00		1.00				1.00
Satd. Flow (prot)	3433	2787		3539				5084
Flt Permitted	0.95	1.00		1.00				0.94
Satd. Flow (perm)	3433	2787		3539				4769
Peak-hour factor, PHF	0.86	0.86	0.92	0.95	0.95	0.92	0.91	0.91
Adj. Flow (vph)	840	417	0	614	0	4	0	1071
RTOR Reduction (vph)	0	376	0	0	0	0	0	0
Lane Group Flow (vph)	840	41	0	614	0	0	0	1075
Turn Type	Prot	Prot	Prot	NA				NA
Protected Phases	8	1	5	2				6
Permitted Phases								
Actuated Green, G (s)	23.5	6.2		24.7				35.6
Effective Green, g (s)	23.5	6.2		24.7				35.6
Actuated g/C Ratio	0.33	0.09		0.34				0.49
Clearance Time (s)	6.1	4.7		7.0				7.0
Vehicle Extension (s)	2.0	2.0		2.0				2.0
Lane Grp Cap (vph)	1117	239		1210				2351
v/s Ratio Prot	c0.24	0.01		c0.17				
v/s Ratio Perm								c0.23
v/c Ratio	0.75	0.17		0.51				0.46
Uniform Delay, d1	21.7	30.6		18.9				12.0
Progression Factor	1.00	1.00		1.00				1.00
Incremental Delay, d2	2.6	0.1		0.1				0.1
Delay (s)	24.3	30.7		19.0				12.0
Level of Service	C	C		B				B
Approach Delay (s)	26.5			19.0				12.0
Approach LOS	C			B				B

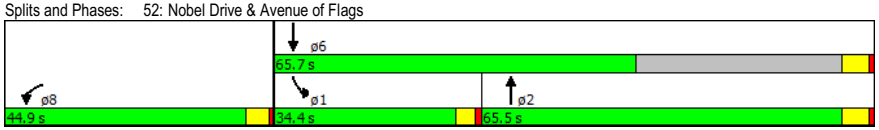
Intersection Summary			
HCM 2000 Control Delay	19.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	72.2	Sum of lost time (s)	17.8
Intersection Capacity Utilization	50.4%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	WBL	NBT	SBL	SBT
Lane Configurations				
Traffic Volume (vph)	10	1136	12	934
Future Volume (vph)	10	1136	12	934
Turn Type	Prot	NA	Prot	NA
Protected Phases	8	2	1	6
Permitted Phases				
Detector Phase	8	2	1	6
Switch Phase				
Minimum Initial (s)	4.0	7.0	4.0	7.0
Minimum Split (s)	28.9	26.5	9.5	12.7
Total Split (s)	44.9	65.5	34.4	65.7
Total Split (%)	31.0%	45.2%	23.8%	45.4%
Yellow Time (s)	3.9	4.5	3.4	4.7
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	5.5	4.4	5.7
Lead/Lag		Lag	Lead	
Lead-Lag Optimize?		Yes	Yes	
Recall Mode	None	Min	None	Min

Intersection Summary
Cycle Length: 144.8
Actuated Cycle Length: 60.4
Natural Cycle: 70
Control Type: Actuated-Uncoordinated

Splits and Phases: 52: Nobel Drive & Avenue of Flags



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	10	8	1136	8	12	934
Future Volume (vph)	10	8	1136	8	12	934
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9		5.5		4.4	5.7
Lane Util. Factor	1.00		0.95		1.00	0.95
Frt	0.94		1.00		1.00	1.00
Flt Protected	0.97		1.00		0.95	1.00
Satd. Flow (prot)	1705		3535		1770	3539
Flt Permitted	0.97		1.00		0.95	1.00
Satd. Flow (perm)	1705		3535		1770	3539
Peak-hour factor, PHF	0.80	0.80	0.91	0.91	0.94	0.94
Adj. Flow (vph)	12	10	1248	9	13	994
RTOR Reduction (vph)	10	0	0	0	0	0
Lane Group Flow (vph)	13	0	1257	0	13	994
Turn Type	Prot		NA		Prot	NA
Protected Phases	8		2		1	6
Permitted Phases						
Actuated Green, G (s)	1.9		49.5		1.0	54.7
Effective Green, g (s)	1.9		49.5		1.0	54.7
Actuated g/C Ratio	0.03		0.74		0.01	0.81
Clearance Time (s)	4.9		5.5		4.4	5.7
Vehicle Extension (s)	2.0		5.2		3.0	4.9
Lane Grp Cap (vph)	48		2603		26	2880
v/s Ratio Prot	c0.01		c0.36		0.01	c0.28
v/s Ratio Perm						
v/c Ratio	0.28		0.48		0.50	0.35
Uniform Delay, d1	32.0		3.6		32.9	1.6
Progression Factor	1.00		1.00		1.00	1.00
Incremental Delay, d2	1.1		0.3		14.3	0.1
Delay (s)	33.1		3.9		47.2	1.8
Level of Service	C		A		D	A
Approach Delay (s)	33.1		3.9			2.3
Approach LOS	C		A			A

Intersection Summary			
HCM 2000 Control Delay	3.5	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	67.2	Sum of lost time (s)	14.8
Intersection Capacity Utilization	43.7%	ICU Level of Service	A
Analysis Period (min)	15		

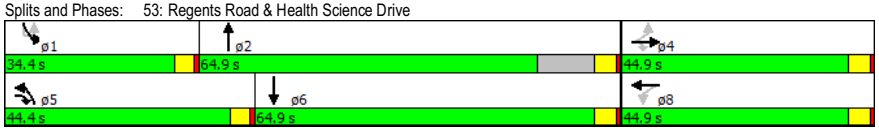
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBU	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	76	5	447	8	0	272	152	4	8	952
Future Volume (vph)	76	5	447	8	0	272	152	4	8	952
Turn Type	Perm	NA	pm+ov	Perm	NA	Prot	NA	custom	Prot	NA
Protected Phases		4	5		8	5	2		1	6
Permitted Phases	4		4	8				1		
Detector Phase	4	4	5	8	8	5	2	1	1	6
Switch Phase										
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	10.0	4.0	4.0	10.0
Minimum Split (s)	8.9	8.9	8.4	22.9	22.9	8.4	14.9	8.4	8.4	14.9
Total Split (s)	44.9	44.9	44.4	44.9	44.9	44.4	64.9	34.4	34.4	64.9
Total Split (%)	29.1%	29.1%	28.8%	29.1%	29.1%	28.8%	42.1%	22.3%	22.3%	42.1%
Yellow Time (s)	3.9	3.9	3.4	3.9	3.9	3.4	3.9	3.4	3.4	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)		4.9	4.4		4.9	4.4	4.9		4.4	4.9
Lead/Lag			Lead			Lead	Lag	Lead	Lead	Lag
Lead-Lag Optimize?			Yes			Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	Min	None	None	Min	None	None	None	None

Intersection Summary

Cycle Length: 154.2
Actuated Cycle Length: 104.6
Natural Cycle: 80
Control Type: Actuated-Uncoordinated

Splits and Phases: 53: Regents Road & Health Science Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	76	5	447	8	0	5	272	152	14	4	8	952
Future Volume (vph)	76	5	447	8	0	5	272	152	14	4	8	952
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9	4.4		4.9		4.4	4.9			4.4	4.9
Lane Util. Factor		1.00	1.00		1.00		1.00	0.95			1.00	0.95
Frt		1.00	0.85		0.95		1.00	0.99			1.00	1.00
Flt Protected		0.96	1.00		0.97		0.95	1.00			0.95	1.00
Satd. Flow (prot)		1779	1583		1715		1770	3493			1770	3522
Flt Permitted		0.73	1.00		0.83		0.95	1.00			0.62	1.00
Satd. Flow (perm)		1355	1583		1460		1770	3493			1164	3522
Peak-hour factor, PHF	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.92	0.82	0.82
Adj. Flow (vph)	95	6	559	10	0	6	340	190	18	4	10	1161
RTOR Reduction (vph)	0	0	11	0	14	0	0	3	0	0	0	1
Lane Group Flow (vph)	0	101	548	0	2	0	340	205	0	0	14	1198
Turn Type	Perm	NA	pm+ov	Perm	NA		Prot	NA		custom	Prot	NA
Protected Phases		4	5		8		5	2			1	6
Permitted Phases	4		4	8						1		
Actuated Green, G (s)		13.1	42.8		13.1		29.7	70.0			6.4	46.7
Effective Green, g (s)		13.1	42.8		13.1		29.7	70.0			6.4	46.7
Actuated g/C Ratio		0.13	0.41		0.13		0.29	0.68			0.06	0.45
Clearance Time (s)		4.9	4.4		4.9		4.4	4.9			4.4	4.9
Vehicle Extension (s)		2.0	2.0		2.0		2.0	3.8			2.0	3.8
Lane Grp Cap (vph)		171	653		184		506	2357			71	1586
v/s Ratio Prot			c0.24				0.19	0.06				c0.34
v/s Ratio Perm		0.07	0.11		0.00						0.01	
v/c Ratio		0.59	0.84		0.01		0.67	0.09			0.20	0.76
Uniform Delay, d1		42.8	27.4		39.6		32.7	5.8			46.2	23.7
Progression Factor		1.00	1.00		1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2		3.6	8.9		0.0		2.8	0.0			0.5	2.2
Delay (s)		46.4	36.2		39.6		35.5	5.8			46.7	25.9
Level of Service		D	D		D		D	A			D	C
Approach Delay (s)		37.8			39.6			24.2				26.2
Approach LOS		D			D			C				C

Intersection Summary

HCM 2000 Control Delay	29.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	103.7	Sum of lost time (s)	14.2
Intersection Capacity Utilization	70.1%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

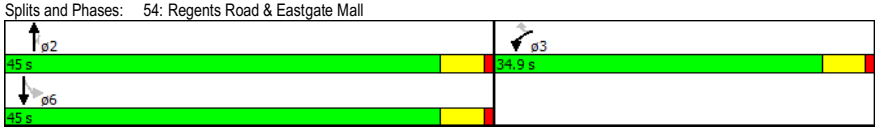
Movement	SBR
Lane Configurations	
Traffic Volume (vph)	31
Future Volume (vph)	31
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.82
Adj. Flow (vph)	38
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

Intersection Summary

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	463	89	358	158	223	1218
Future Volume (vph)	463	89	358	158	223	1218
Turn Type	Prot	Perm	NA	Perm	Perm	NA
Protected Phases	3		2			6
Permitted Phases		3		2	6	
Detector Phase	3	3	2	2	6	6
Switch Phase						
Minimum Initial (s)	4.0	4.0	7.0	7.0	7.0	7.0
Minimum Split (s)	8.9	8.9	12.0	12.0	12.0	12.0
Total Split (s)	34.9	34.9	45.0	45.0	45.0	45.0
Total Split (%)	43.7%	43.7%	56.3%	56.3%	56.3%	56.3%
Yellow Time (s)	3.9	3.9	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	5.0	5.0	5.0	5.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None	None	Min	Min	Min	Min

Intersection Summary
Cycle Length: 79.9
Actuated Cycle Length: 72
Natural Cycle: 55
Control Type: Actuated-Uncoordinated

Splits and Phases: 54: Regents Road & Eastgate Mall



Movement	WBL	WBR	NBT	NBR	SBU	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	463	89	358	158	4	223	1218
Future Volume (vph)	463	89	358	158	4	223	1218
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9	5.0	5.0		5.0	5.0
Lane Util. Factor	1.00	1.00	0.95	1.00		1.00	0.95
Frt	1.00	0.85	1.00	0.85		1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583		1770	3539
Flt Permitted	0.95	1.00	1.00	1.00		0.49	1.00
Satd. Flow (perm)	1770	1583	3539	1583		911	3539
Peak-hour factor, PHF	0.87	0.87	0.80	0.80	0.92	0.88	0.88
Adj. Flow (vph)	532	102	448	198	4	253	1384
RTOR Reduction (vph)	0	66	0	97	0	0	0
Lane Group Flow (vph)	532	36	448	101	0	257	1384
Turn Type	Prot	Perm	NA	Perm		Perm	NA
Protected Phases	3		2				6
Permitted Phases		3		2		6	
Actuated Green, G (s)	25.1	25.1	36.7	36.7		36.7	36.7
Effective Green, g (s)	25.1	25.1	36.7	36.7		36.7	36.7
Actuated g/C Ratio	0.35	0.35	0.51	0.51		0.51	0.51
Clearance Time (s)	4.9	4.9	5.0	5.0		5.0	5.0
Vehicle Extension (s)	2.0	2.0	3.4	3.4		3.5	3.5
Lane Grp Cap (vph)	619	554	1811	810		466	1811
v/s Ratio Prot	c0.30		0.13				c0.39
v/s Ratio Perm		0.02		0.06		0.28	
v/c Ratio	0.86	0.06	0.25	0.13		0.55	0.76
Uniform Delay, d1	21.7	15.5	9.8	9.1		11.9	14.0
Progression Factor	1.00	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	11.1	0.0	0.1	0.1		1.6	2.0
Delay (s)	32.7	15.5	9.9	9.2		13.5	16.1
Level of Service	C	B	A	A		B	B
Approach Delay (s)	29.9		9.7				15.7
Approach LOS	C		A				B

Intersection Summary			
HCM 2000 Control Delay	17.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	71.7	Sum of lost time (s)	9.9
Intersection Capacity Utilization	67.6%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBU	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	24	7	157	9	138	5	406	4	88	1499
Future Volume (vph)	24	7	157	9	138	5	406	4	88	1499
Turn Type	Perm	NA	Perm	NA	Perm	Prot	NA	custom	Prot	NA
Protected Phases		4		8		5	2		1	6
Permitted Phases	4		8		8			1		
Detector Phase	4	4	8	8	8	5	2	1	1	6
Switch Phase										
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	4.0	10.0	4.0	4.0	10.0
Minimum Split (s)	11.9	11.9	11.9	11.9	11.9	8.4	14.9	8.4	8.4	14.9
Total Split (s)	34.9	34.9	44.9	44.9	44.9	34.4	64.9	34.4	34.4	64.9
Total Split (%)	24.2%	24.2%	31.1%	31.1%	31.1%	23.9%	45.0%	23.9%	23.9%	45.0%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.9	3.4	3.9	3.4	3.4	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)		4.9		4.9	4.9	4.4	4.9		4.4	4.9
Lead/Lag						Lead	Lag	Lead	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	None	None	Min

Intersection Summary
Cycle Length: 144.2
Actuated Cycle Length: 91.4
Natural Cycle: 65
Control Type: Actuated-Uncoordinated

Splits and Phases: 55: Regents Road & Executive Drive

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	24	7	8	157	9	138	5	406	35	4	88	1499
Future Volume (vph)	24	7	8	157	9	138	5	406	35	4	88	1499
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9			4.9	4.9	4.4	4.9			4.4	4.9
Lane Util. Factor		1.00			1.00	1.00	1.00	0.95			1.00	0.95
Frt		0.97			1.00	0.85	1.00	0.99			1.00	1.00
Flt Protected		0.97			0.95	1.00	0.95	1.00			0.95	1.00
Satd. Flow (prot)		1758			1779	1583	1770	3497			1770	3525
Flt Permitted		0.74			0.70	1.00	0.95	1.00			0.13	1.00
Satd. Flow (perm)		1345			1307	1583	1770	3497			246	3525
Peak-hour factor, PHF	0.80	0.80	0.80	0.81	0.81	0.81	0.80	0.80	0.80	0.92	0.96	0.96
Adj. Flow (vph)	30	9	10	194	11	170	6	508	44	4	92	1561
RTOR Reduction (vph)	0	7	0	0	0	136	0	5	0	0	0	1
Lane Group Flow (vph)	0	42	0	0	205	34	6	547	0	0	96	1604
Turn Type	Perm	NA		Perm	NA	Perm	Prot	NA		custom	Prot	NA
Protected Phases		4			8		5	2			1	6
Permitted Phases	4			8		8				1		
Actuated Green, G (s)		19.2			19.2	19.2	1.0	31.3			30.3	60.6
Effective Green, g (s)		19.2			19.2	19.2	1.0	31.3			30.3	60.6
Actuated g/C Ratio		0.20			0.20	0.20	0.01	0.33			0.32	0.64
Clearance Time (s)		4.9			4.9	4.9	4.4	4.9			4.4	4.9
Vehicle Extension (s)		2.0			3.1	3.1	2.0	3.1			2.0	3.1
Lane Grp Cap (vph)		271			264	319	18	1152			78	2248
v/s Ratio Prot							0.00	0.16				c0.46
v/s Ratio Perm		0.03			c0.16	0.02					c0.39	
v/c Ratio		0.15			0.78	0.11	0.33	0.47			1.23	0.71
Uniform Delay, d1		31.2			35.9	30.9	46.7	25.3			32.4	11.4
Progression Factor		1.00			1.00	1.00	1.00	1.00			1.00	1.00
Incremental Delay, d2		0.1			13.4	0.2	3.9	0.3			176.3	1.1
Delay (s)		31.3			49.3	31.1	50.6	25.6			208.7	12.5
Level of Service		C			D	C	D	C			F	B
Approach Delay (s)		31.3			41.0			25.9				23.6
Approach LOS		C			D			C				C

Intersection Summary			
HCM 2000 Control Delay	26.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	95.0	Sum of lost time (s)	14.2
Intersection Capacity Utilization	71.0%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	42
Future Volume (vph)	42
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.96
Adj. Flow (vph)	44
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

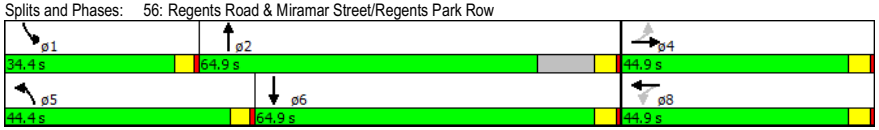
Intersection Summary

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	40	10	113	6	163	436	46	1519
Future Volume (vph)	40	10	113	6	163	436	46	1519
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	7.0	4.0	7.0
Minimum Split (s)	8.9	8.9	8.9	8.9	8.4	11.9	8.4	11.9
Total Split (s)	44.9	44.9	44.9	44.9	44.4	64.9	34.4	64.9
Total Split (%)	29.1%	29.1%	29.1%	29.1%	28.8%	42.1%	22.3%	42.1%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.4	3.9	3.4	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	4.9	4.9	4.4	4.9	4.4	4.9
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 154.2
Actuated Cycle Length: 125.1
Natural Cycle: 100
Control Type: Actuated-Uncoordinated

Splits and Phases: 56: Regents Road & Miramar Street/Regents Park Row



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	40	10	233	113	6	63	163	436	63	46	1519	67
Future Volume (vph)	40	10	233	113	6	63	163	436	63	46	1519	67
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9		4.9	4.9		4.4	4.9		4.4	4.9	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frt	1.00	0.86		1.00	0.86		1.00	0.98		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1594		1770	1609		1770	3472		1770	3517	
Flt Permitted	0.70	1.00		0.36	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1305	1594		669	1609		1770	3472		1770	3517	
Peak-hour factor, PHF	0.87	0.87	0.87	0.80	0.80	0.80	0.84	0.84	0.84	0.89	0.89	0.89
Adj. Flow (vph)	46	11	268	141	8	79	194	519	75	52	1707	75
RTOR Reduction (vph)	0	200	0	0	59	0	0	5	0	0	2	0
Lane Group Flow (vph)	46	79	0	141	28	0	194	589	0	52	1780	0
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8								
Actuated Green, G (s)	31.8	31.8		31.8	31.8		18.2	73.0		7.0	61.8	
Effective Green, g (s)	31.8	31.8		31.8	31.8		18.2	73.0		7.0	61.8	
Actuated g/C Ratio	0.25	0.25		0.25	0.25		0.14	0.58		0.06	0.49	
Clearance Time (s)	4.9	4.9		4.9	4.9		4.4	4.9		4.4	4.9	
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	3.8		2.0	3.8	
Lane Grp Cap (vph)	329	402		168	406		255	2011		98	1725	
v/s Ratio Prot		0.05			0.02		c0.11	0.17		0.03	c0.51	
v/s Ratio Perm	0.04			c0.21								
v/c Ratio	0.14	0.20		0.84	0.07		0.76	0.29		0.53	1.03	
Uniform Delay, d1	36.5	37.0		44.7	35.8		51.8	13.4		57.9	32.1	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.1	0.1		28.0	0.0		11.4	0.1		2.7	30.4	
Delay (s)	36.6	37.1		72.7	35.9		63.2	13.5		60.6	62.5	
Level of Service	D	D		E	D		E	B		E	E	
Approach Delay (s)		37.0			58.6			25.8			62.5	
Approach LOS		D			E			C			E	

Intersection Summary

HCM 2000 Control Delay	50.5	HCM 2000 Level of Service	D	
HCM 2000 Volume to Capacity ratio	0.93			
Actuated Cycle Length (s)	126.0	Sum of lost time (s)	14.2	
Intersection Capacity Utilization	90.3%	ICU Level of Service	E	
Analysis Period (min)	15			

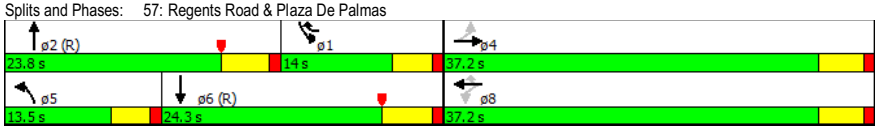
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	21	15	58	15	50	50	475	80	1856
Future Volume (vph)	21	15	58	15	50	50	475	80	1856
Turn Type	Perm	NA	Perm	NA	pm+ov	Prot	NA	Prot	NA
Protected Phases		4		8	1	5	2	1	6
Permitted Phases	4		8		8				
Detector Phase	4	4	8	8	1	5	2	1	6
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	10.0	4.0	10.0
Minimum Split (s)	8.9	8.9	8.9	8.9	8.4	8.4	15.2	8.4	15.3
Total Split (s)	37.2	37.2	37.2	37.2	14.0	13.5	23.8	14.0	24.3
Total Split (%)	49.6%	49.6%	49.6%	49.6%	18.7%	18.0%	31.7%	18.7%	32.4%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.4	3.4	4.2	3.4	4.3
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.9		4.9	4.4	4.4	5.2	4.4	5.3
Lead/Lag					Lag	Lead	Lead	Lag	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	None	C-Max

Intersection Summary

Cycle Length: 75
Actuated Cycle Length: 75
Offset: 64 (85%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 75
Control Type: Actuated-Coordinated

Splits and Phases: 57: Regents Road & Plaza De Palmas



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	21	15	16	58	15	50	50	475	16	80	1856	57
Future Volume (vph)	21	15	16	58	15	50	50	475	16	80	1856	57
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9			4.9	4.4	4.4	5.2		4.4	5.3	
Lane Util. Factor		1.00			1.00	1.00	1.00	0.91		1.00	0.95	
Frt		0.96			1.00	0.85	1.00	1.00		1.00	1.00	
Flt Protected		0.98			0.96	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1749			1792	1583	1770	5060		1770	3523	
Flt Permitted		0.87			0.73	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1553			1367	1583	1770	5060		1770	3523	
Peak-hour factor, PHF	0.82	0.82	0.82	0.80	0.80	0.80	0.80	0.80	0.80	0.93	0.93	0.93
Adj. Flow (vph)	26	18	20	72	19	62	62	594	20	86	1996	61
RTOR Reduction (vph)	0	16	0	0	0	42	0	3	0	0	2	0
Lane Group Flow (vph)	0	48	0	0	92	21	63	611	0	86	2055	0
Turn Type	Perm	NA		Perm	NA	pm+ov	Prot	NA		Prot	NA	
Protected Phases		4			8	1	5	2		1	6	
Permitted Phases	4			8		8						
Actuated Green, G (s)		16.2			16.2	24.8	4.9	35.7		8.6	39.3	
Effective Green, g (s)		16.2			16.2	24.8	4.9	35.7		8.6	39.3	
Actuated g/C Ratio		0.22			0.22	0.33	0.07	0.48		0.11	0.52	
Clearance Time (s)		4.9			4.9	4.4	4.4	5.2		4.4	5.3	
Vehicle Extension (s)		2.0			2.0	2.0	2.0	4.5		2.0	4.2	
Lane Grp Cap (vph)		335			295	616	115	2408		202	1846	
v/s Ratio Prot						0.00	c0.04	0.12		0.05	c0.58	
v/s Ratio Perm		0.03			c0.07	0.01						
v/c Ratio		0.14			0.31	0.03	0.55	0.25		0.43	1.11	
Uniform Delay, d1		23.8			24.7	17.0	34.0	11.7		30.9	17.9	
Progression Factor		1.00			1.00	1.00	0.92	0.50		0.99	1.19	
Incremental Delay, d2		0.1			0.2	0.0	1.9	0.2		0.0	51.8	
Delay (s)		23.9			24.9	17.0	33.0	6.1		30.7	73.1	
Level of Service		C			C	B	C	A		C	E	
Approach Delay (s)		23.9			21.7			8.6			71.4	
Approach LOS		C			C			A			E	

Intersection Summary

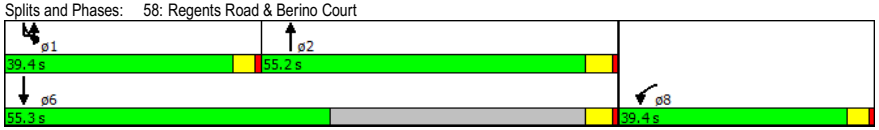
HCM 2000 Control Delay	53.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	14.6
Intersection Capacity Utilization	78.2%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	WBL	NBT	SBL	SBT
Lane Configurations				
Traffic Volume (vph)	42	905	81	1485
Future Volume (vph)	42	905	81	1485
Turn Type	Prot	NA	Prot	NA
Protected Phases	8	2	1	6
Permitted Phases				
Detector Phase	8	2	1	6
Switch Phase				
Minimum Initial (s)	4.0	7.0	4.0	7.0
Minimum Split (s)	8.4	12.2	8.4	12.3
Total Split (s)	39.4	55.2	39.4	55.3
Total Split (%)	29.4%	41.2%	29.4%	41.3%
Yellow Time (s)	3.4	4.2	3.4	4.3
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.2	4.4	5.3
Lead/Lag		Lag	Lead	
Lead-Lag Optimize?		Yes	Yes	
Recall Mode	None	None	None	None

Intersection Summary
Cycle Length: 134
Actuated Cycle Length: 93.3
Natural Cycle: 60
Control Type: Actuated-Uncoordinated

Splits and Phases: 58: Regents Road & Berino Court



Movement	WBL	WBR	NBT	NBR	SBU	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	42	21	905	41	105	81	1485
Future Volume (vph)	42	21	905	41	105	81	1485
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4		5.2			4.4	5.3
Lane Util. Factor	1.00		0.95			1.00	0.95
Frt	0.96		0.99			1.00	1.00
Flt Protected	0.97		1.00			0.95	1.00
Satd. Flow (prot)	1722		3516			1770	3539
Flt Permitted	0.97		1.00			0.95	1.00
Satd. Flow (perm)	1722		3516			1770	3539
Peak-hour factor, PHF	0.80	0.80	0.84	0.84	0.92	0.93	0.93
Adj. Flow (vph)	52	26	1077	49	114	87	1597
RTOR Reduction (vph)	14	0	2	0	0	0	0
Lane Group Flow (vph)	65	0	1124	0	0	201	1597
Turn Type	Prot		NA		Prot	Prot	NA
Protected Phases	8		2		1	1	6
Permitted Phases							
Actuated Green, G (s)	20.4		42.6			16.7	63.6
Effective Green, g (s)	20.4		42.6			16.7	63.6
Actuated g/C Ratio	0.22		0.45			0.18	0.68
Clearance Time (s)	4.4		5.2			4.4	5.3
Vehicle Extension (s)	2.0		3.9			2.0	3.7
Lane Grp Cap (vph)	374		1598			315	2402
v/s Ratio Prot	c0.04		c0.32			0.11	c0.45
v/s Ratio Perm							
v/c Ratio	0.17		0.70			0.64	0.66
Uniform Delay, d1	29.8		20.5			35.7	8.8
Progression Factor	1.00		1.00			1.00	1.00
Incremental Delay, d2	0.1		1.5			3.1	0.8
Delay (s)	29.9		22.0			38.8	9.6
Level of Service	C		C			D	A
Approach Delay (s)	29.9		22.0				12.8
Approach LOS	C		C				B

Intersection Summary			
HCM 2000 Control Delay	16.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	93.7	Sum of lost time (s)	14.0
Intersection Capacity Utilization	52.7%	ICU Level of Service	A
Analysis Period (min)	15		

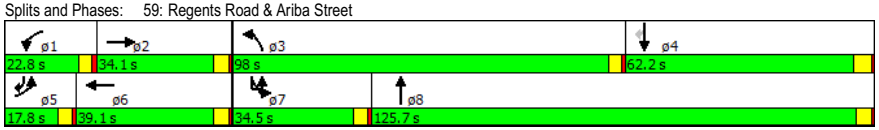
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	35	42	116	51	687	802	59	1004	389
Future Volume (vph)	35	42	116	51	687	802	59	1004	389
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA	pm+ov
Protected Phases	5	2	1	6	3	8	7	4	5
Permitted Phases									4
Detector Phase	5	2	1	6	3	8	7	4	5
Switch Phase									
Minimum Initial (s)	4.0	7.0	4.0	7.0	4.0	7.0	4.0	7.0	4.0
Minimum Split (s)	8.4	32.9	8.4	36.9	8.4	28.9	8.4	37.6	8.4
Total Split (s)	17.8	34.1	22.8	39.1	98.0	125.7	34.5	62.2	17.8
Total Split (%)	8.2%	15.7%	10.5%	18.0%	45.1%	57.9%	15.9%	28.7%	8.2%
Yellow Time (s)	3.4	3.9	3.4	3.9	3.4	3.9	3.4	4.6	3.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	4.9	4.4	4.9	4.4	4.9	4.4	5.6	4.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 217.1
Actuated Cycle Length: 211.6
Natural Cycle: 145
Control Type: Actuated-Uncoordinated

Splits and Phases: 59: Regents Road & Ariba Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	35	42	451	116	51	9	687	802	253	86	59	1004
Future Volume (vph)	35	42	451	116	51	9	687	802	253	86	59	1004
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	4.9		4.4	4.9			4.4	5.6
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95			1.00	0.95
Frt	1.00	0.86		1.00	0.98		1.00	0.96			1.00	1.00
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			0.95	1.00
Satd. Flow (prot)	1770	3054		1770	3458		1770	3412			1770	3539
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00			0.95	1.00
Satd. Flow (perm)	1770	3054		1770	3458		1770	3412			1770	3539
Peak-hour factor, PHF	0.90	0.90	0.90	0.84	0.84	0.84	0.91	0.91	0.91	0.92	0.91	0.91
Adj. Flow (vph)	39	47	501	138	61	11	755	881	278	93	65	1103
RTOR Reduction (vph)	0	444	0	0	7	0	0	12	0	0	0	0
Lane Group Flow (vph)	39	104	0	138	65	0	755	1147	0	0	158	1103
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	Prot	NA
Protected Phases	5	2		1	6		3	8		7	7	4
Permitted Phases												
Actuated Green, G (s)	9.1	24.1		18.0	33.0		93.6	128.1			22.9	56.7
Effective Green, g (s)	9.1	24.1		18.0	33.0		93.6	128.1			22.9	56.7
Actuated g/C Ratio	0.04	0.11		0.09	0.16		0.44	0.61			0.11	0.27
Clearance Time (s)	4.4	4.9		4.4	4.9		4.4	4.9			4.4	5.6
Vehicle Extension (s)	2.0	6.3		2.0	5.9		2.0	4.8			2.0	4.4
Lane Grp Cap (vph)	76	347		150	539		782	2064			191	947
v/s Ratio Prot	0.02	c0.03		c0.08	0.02		c0.43	0.34			0.09	c0.31
v/s Ratio Perm												
v/c Ratio	0.51	0.30		0.92	0.12		0.97	0.56			0.83	1.16
Uniform Delay, d1	99.1	86.1		96.1	76.9		57.5	24.9			92.5	77.5
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2	2.4	1.5		49.7	0.3		23.7	0.5			23.4	85.7
Delay (s)	101.6	87.5		145.8	77.2		81.1	25.4			115.9	163.2
Level of Service	F	F		F	E		F	C			F	F
Approach Delay (s)		88.5			122.3			47.4				132.8
Approach LOS		F			F			D				F

Intersection Summary

HCM 2000 Control Delay	89.2	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	211.7	Sum of lost time (s)	19.3
Intersection Capacity Utilization	104.1%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

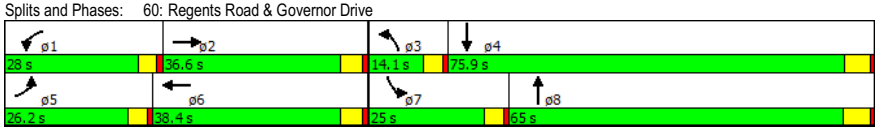
Movement	SBR
Lane Configurations	
Traffic Volume (vph)	389
Future Volume (vph)	389
Ideal Flow (vphpl)	1900
Total Lost time (s)	4.4
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1583
Flt Permitted	1.00
Satd. Flow (perm)	1583
Peak-hour factor, PHF	0.91
Adj. Flow (vph)	427
RTOR Reduction (vph)	170
Lane Group Flow (vph)	257
Turn Type	pm+ov
Protected Phases	5
Permitted Phases	4
Actuated Green, G (s)	65.8
Effective Green, g (s)	65.8
Actuated g/C Ratio	0.31
Clearance Time (s)	4.4
Vehicle Extension (s)	2.0
Lane Grp Cap (vph)	492
v/s Ratio Prot	0.02
v/s Ratio Perm	0.14
v/c Ratio	0.52
Uniform Delay, d1	60.0
Progression Factor	1.00
Incremental Delay, d2	0.5
Delay (s)	60.5
Level of Service	E
Approach Delay (s)	
Approach LOS	

Intersection Summary

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	175	58	345	204	40	1405	273	1245
Future Volume (vph)	175	58	345	204	40	1405	273	1245
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	5	2	1	6	3	8	7	4
Permitted Phases								
Detector Phase	5	2	1	6	3	8	7	4
Switch Phase								
Minimum Initial (s)	4.0	4.0	4.0	7.0	5.0	7.0	5.0	4.0
Minimum Split (s)	8.4	32.9	8.4	33.9	9.5	34.8	9.5	35.5
Total Split (s)	26.2	36.6	28.0	38.4	14.1	65.0	25.0	75.9
Total Split (%)	16.9%	23.7%	18.1%	24.8%	9.1%	42.0%	16.2%	49.1%
Yellow Time (s)	3.4	3.9	3.4	3.9	3.5	4.8	3.5	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	4.9	4.4	4.9	4.5	5.8	4.5	5.5
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Min	None	Min	None	None	None	None

Intersection Summary
Cycle Length: 154.6
Actuated Cycle Length: 140.9
Natural Cycle: 150
Control Type: Actuated-Uncoordinated

Splits and Phases: 60: Regents Road & Governor Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	175	58	23	345	204	162	40	1405	152	273	1245	53
Future Volume (vph)	175	58	23	345	204	162	40	1405	152	273	1245	53
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	4.9		4.5	5.8		4.5	5.5	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	0.96		1.00	0.93		1.00	0.99		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3388		1770	3304		1770	3487		1770	3517	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	3388		1770	3304		1770	3487		1770	3517	
Peak-hour factor, PHF	0.80	0.80	0.80	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	219	72	29	383	227	180	44	1561	169	303	1383	59
RTOR Reduction (vph)	0	25	0	0	101	0	0	5	0	0	2	0
Lane Group Flow (vph)	219	77	0	383	306	0	44	1725	0	303	1440	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases												
Actuated Green, G (s)	20.2	17.7		23.7	21.2		7.0	60.4		20.5	74.2	
Effective Green, g (s)	20.2	17.7		23.7	21.2		7.0	60.4		20.5	74.2	
Actuated g/C Ratio	0.14	0.12		0.17	0.15		0.05	0.43		0.14	0.52	
Clearance Time (s)	4.4	4.9		4.4	4.9		4.5	5.8		4.5	5.5	
Vehicle Extension (s)	2.0	4.5		2.0	5.0		3.0	4.6		3.0	2.0	
Lane Grp Cap (vph)	251	422		295	493		87	1484		255	1839	
v/s Ratio Prot	0.12	0.02		c0.22	c0.09		0.02	c0.49		c0.17	0.41	
v/s Ratio Perm												
v/c Ratio	0.87	0.18		1.30	0.62		0.51	1.16		1.19	0.78	
Uniform Delay, d1	59.6	55.6		59.1	56.6		65.8	40.8		60.7	27.3	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	25.9	0.4		157.0	3.4		4.6	80.9		117.0	2.1	
Delay (s)	85.5	56.0		216.1	60.0		70.3	121.6		177.7	29.4	
Level of Service	F	E		F	E		E	F		F	C	
Approach Delay (s)		76.1			135.6			120.4			55.2	
Approach LOS		E			F			F			E	

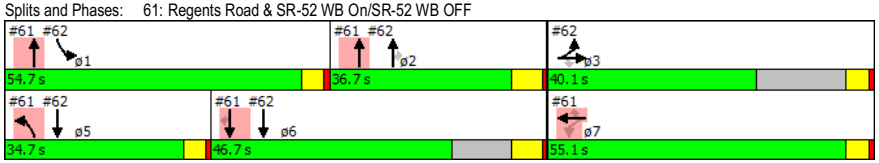
Intersection Summary			
HCM 2000 Control Delay	95.3	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.11		
Actuated Cycle Length (s)	141.9	Sum of lost time (s)	19.6
Intersection Capacity Utilization	97.6%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	WBT	WBR	NBL	NBT	SBT	SBR	ø1	ø2	ø3
Lane Configurations									
Traffic Volume (vph)	1	231	261	795	741	259			
Future Volume (vph)	1	231	261	795	741	259			
Turn Type	NA	Perm	Prot	NA	NA	Perm			
Protected Phases	7		5	1 2	6		1	2	3
Permitted Phases		7				6			
Detector Phase	7	7	5	1 2	6	6			
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0		13.0	13.0	5.0	13.0	5.0
Minimum Split (s)	10.1	10.1	9.7		19.2	19.2	9.7	19.2	10.1
Total Split (s)	55.1	55.1	34.7		46.7	46.7	54.7	36.7	40.1
Total Split (%)	37.6%	37.6%	23.7%		31.9%	31.9%	37%	25%	27%
Yellow Time (s)	4.1	4.1	3.7		5.2	5.2	3.7	5.2	4.1
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0			
Total Lost Time (s)	5.1	5.1	4.7		6.2	6.2			
Lead/Lag			Lead		Lag	Lag	Lead	Lag	
Lead-Lag Optimize?			Yes		Yes	Yes	Yes	Yes	
Recall Mode	None	None	None		Max	Max	None	Max	None

Intersection Summary
Cycle Length: 146.5
Actuated Cycle Length: 136.2
Natural Cycle: 70
Control Type: Actuated-Uncoordinated

Splits and Phases: 61: Regents Road & SR-52 WB On/SR-52 WB OFF



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	548	1	231	261	795	0	0	741	259
Future Volume (vph)	0	0	0	548	1	231	261	795	0	0	741	259
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					5.1	5.1	4.7	4.7			6.2	6.2
Lane Util. Factor					1.00	1.00	0.97	0.95			0.95	1.00
Frt					1.00	0.85	1.00	1.00			1.00	0.85
Flt Protected					0.95	1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)					1774	1583	3433	3539			3539	1583
Flt Permitted					0.95	1.00	0.95	1.00			1.00	1.00
Satd. Flow (perm)					1774	1583	3433	3539			3539	1583
Peak-hour factor, PHF	0.25	0.25	0.25	0.92	0.92	0.92	0.88	0.88	0.88	0.86	0.86	0.86
Adj. Flow (vph)	0	0	0	596	1	251	297	903	0	0	862	301
RTOR Reduction (vph)	0	0	0	0	0	93	0	0	0	0	0	168
Lane Group Flow (vph)	0	0	0	0	597	158	297	903	0	0	862	133
Turn Type				Perm	NA	Perm	Prot	NA			NA	Perm
Protected Phases					7		5	1 2			6	
Permitted Phases				7		7						6
Actuated Green, G (s)					49.7	49.7	30.0	75.2			40.5	40.5
Effective Green, g (s)					49.7	49.7	30.0	75.2			40.5	40.5
Actuated g/C Ratio					0.36	0.36	0.22	0.55			0.30	0.30
Clearance Time (s)					5.1	5.1	4.7				6.2	6.2
Vehicle Extension (s)					2.0	2.0	2.0				2.0	2.0
Lane Grp Cap (vph)					647	577	756	1953			1052	470
v/s Ratio Prot							0.09	c0.26			c0.24	
v/s Ratio Perm					0.34	0.10						0.08
v/c Ratio					0.92	0.27	0.39	0.46			0.82	0.28
Uniform Delay, d1					41.4	30.5	45.3	18.3			44.5	36.7
Progression Factor					1.00	1.00	1.49	1.00			1.00	1.00
Incremental Delay, d2					18.5	0.1	0.1	0.0			7.1	1.5
Delay (s)					60.0	30.6	67.5	18.5			51.6	38.2
Level of Service					E	C	E	B			D	D
Approach Delay (s)		0.0			51.3			30.6			48.1	
Approach LOS		A			D			C			D	

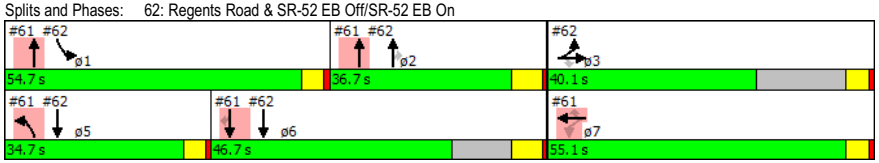
Intersection Summary			
HCM 2000 Control Delay	42.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	136.2	Sum of lost time (s)	16.0
Intersection Capacity Utilization	81.1%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	EBR	NBT	NBR	SBL	SBT	ø5	ø6	ø7
Lane Configurations										
Traffic Volume (vph)	320	3	599	743	196	122	1298			
Future Volume (vph)	320	3	599	743	196	122	1298			
Turn Type	Split	NA	Perm	NA	Perm	Prot	NA			
Protected Phases	3	3		2		1	5 6	5	6	7
Permitted Phases			3		2					
Detector Phase	3	3	3	2	2	1	5 6			
Switch Phase										
Minimum Initial (s)	5.0	5.0	5.0	13.0	13.0	5.0		5.0	13.0	5.0
Minimum Split (s)	10.1	10.1	10.1	19.2	19.2	9.7		9.7	19.2	10.1
Total Split (s)	40.1	40.1	40.1	36.7	36.7	54.7		34.7	46.7	55.1
Total Split (%)	27.4%	27.4%	27.4%	25.1%	25.1%	37.3%		24%	32%	38%
Yellow Time (s)	4.1	4.1	4.1	5.2	5.2	3.7		3.7	5.2	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0				
Total Lost Time (s)	5.1	5.1	5.1	6.2	6.2	4.7				
Lead/Lag				Lag	Lag	Lead		Lead	Lag	
Lead-Lag Optimize?				Yes	Yes	Yes		Yes	Yes	
Recall Mode	None	None	None	Max	Max	None		None	Max	None

Intersection Summary
Cycle Length: 146.5
Actuated Cycle Length: 136.2
Natural Cycle: 70
Control Type: Actuated-Uncoordinated

Splits and Phases: 62: Regents Road & SR-52 EB Off/SR-52 EB On



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	320	3	599	0	0	0	0	743	196	122	1298	0
Future Volume (vph)	320	3	599	0	0	0	0	743	196	122	1298	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1	5.1					6.2	6.2	4.7	4.7	
Lane Util. Factor	0.95	0.95	1.00					0.95	1.00	1.00	0.95	
Frt	1.00	1.00	0.85					1.00	0.85	1.00	1.00	
Flt Protected	0.95	0.95	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1681	1687	1583					3539	1583	1770	3539	
Flt Permitted	0.95	0.95	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1681	1687	1583					3539	1583	1770	3539	
Peak-hour factor, PHF	0.89	0.89	0.89	0.25	0.25	0.25	0.88	0.88	0.88	0.91	0.91	0.91
Adj. Flow (vph)	360	3	673	0	0	0	0	844	223	134	1426	0
RTOR Reduction (vph)	0	0	60	0	0	0	0	0	59	0	0	0
Lane Group Flow (vph)	180	183	613	0	0	0	0	844	164	134	1426	0
Turn Type	Split	NA	Perm					NA	Perm	Prot	NA	
Protected Phases	3	3						2		1	5 6	
Permitted Phases			3						2			
Actuated Green, G (s)	49.7	49.7	49.7					42.4	42.4	28.1	75.2	
Effective Green, g (s)	49.7	49.7	49.7					42.4	42.4	28.1	75.2	
Actuated g/C Ratio	0.36	0.36	0.36					0.31	0.31	0.21	0.55	
Clearance Time (s)	5.1	5.1	5.1					6.2	6.2	4.7		
Vehicle Extension (s)	2.0	2.0	2.0					2.0	2.0	2.0		
Lane Grp Cap (vph)	613	615	577					1101	492	365	1953	
v/s Ratio Prot	0.11	0.11						c0.24		0.08	c0.40	
v/s Ratio Perm			c0.39						0.10			
v/c Ratio	0.29	0.30	1.06					0.77	0.33	0.37	0.73	
Uniform Delay, d1	30.8	30.8	43.2					42.4	36.0	46.4	22.9	
Progression Factor	1.00	1.00	1.00					1.00	1.00	1.26	0.88	
Incremental Delay, d2	0.1	0.1	55.3					5.1	1.8	0.2	0.8	
Delay (s)	30.9	30.9	98.5					47.5	37.8	58.6	20.9	
Level of Service	C	C	F					D	D	E	C	
Approach Delay (s)		74.8			0.0			45.5			24.1	
Approach LOS		E			A			D			C	

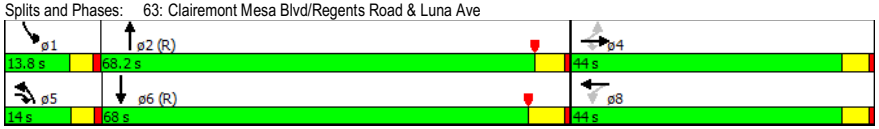
Intersection Summary			
HCM 2000 Control Delay	44.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	136.2	Sum of lost time (s)	16.0
Intersection Capacity Utilization	81.1%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	439	10	134	6	12	132	467	51	1310
Future Volume (vph)	439	10	134	6	12	132	467	51	1310
Turn Type	Perm	NA	pm+ov	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4	5		8	5	2	1	6
Permitted Phases	4		4	8					
Detector Phase	4	4	5	8	8	5	2	1	6
Switch Phase									
Minimum Initial (s)	10.0	10.0	4.0	1.0	1.0	4.0	10.0	4.0	4.0
Minimum Split (s)	36.9	36.9	8.4	33.9	33.9	8.4	22.3	8.4	23.2
Total Split (s)	44.0	44.0	14.0	44.0	44.0	14.0	68.2	13.8	68.0
Total Split (%)	34.9%	34.9%	11.1%	34.9%	34.9%	11.1%	54.1%	11.0%	54.0%
Yellow Time (s)	3.9	3.9	3.4	3.9	3.9	3.4	4.3	3.4	5.2
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.9	4.4		4.9	4.4	5.3	4.4	6.2
Lead/Lag			Lead			Lead	Lag	Lead	Lag
Lead-Lag Optimize?			Yes			Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	None	C-Max

Intersection Summary
Cycle Length: 126
Actuated Cycle Length: 126
Offset: 24 (19%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 140
Control Type: Actuated-Coordinated

Splits and Phases: 63: Clairemont Mesa Blvd/Regents Road & Luna Ave



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	439	10	134	6	12	24	132	467	5	51	1310	539
Future Volume (vph)	439	10	134	6	12	24	132	467	5	51	1310	539
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9	4.4		4.9		4.4	5.3		4.4	6.2	
Lane Util. Factor		1.00	1.00		1.00		1.00	0.95		1.00	0.95	
Frt		1.00	0.85		0.92		1.00	1.00		1.00	0.96	
Flt Protected		0.95	1.00		0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1776	1583		1706		1770	3533		1770	3385	
Flt Permitted		0.73	1.00		0.85		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1360	1583		1462		1770	3533		1770	3385	
Peak-hour factor, PHF	0.94	0.94	0.94	0.81	0.81	0.81	0.87	0.87	0.87	0.94	0.94	0.94
Adj. Flow (vph)	467	11	143	7	15	30	152	537	6	54	1394	573
RTOR Reduction (vph)	0	0	17	0	21	0	0	0	0	0	36	0
Lane Group Flow (vph)	0	478	126	0	31	0	152	543	0	54	1931	0
Turn Type	Perm	NA	pm+ov	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4	5		8		5	2		1	6	
Permitted Phases	4		4	8								
Actuated Green, G (s)		39.1	48.7		39.1		9.6	65.5		6.8	61.8	
Effective Green, g (s)		39.1	48.7		39.1		9.6	65.5		6.8	61.8	
Actuated g/C Ratio		0.31	0.39		0.31		0.08	0.52		0.05	0.49	
Clearance Time (s)		4.9	4.4		4.9		4.4	5.3		4.4	6.2	
Vehicle Extension (s)		4.0	2.0		2.0		2.0	4.4		2.0	3.2	
Lane Grp Cap (vph)		422	611		453		134	1836		95	1660	
v/s Ratio Prot			0.02				c0.09	c0.15		0.03	c0.57	
v/s Ratio Perm		c0.35	0.06		0.02							
v/c Ratio		1.13	0.21		0.07		1.13	0.30		0.57	1.16	
Uniform Delay, d1		43.5	25.8		30.6		58.2	17.2		58.2	32.1	
Progression Factor		1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		85.2	0.1		0.0		118.4	0.4		4.6	80.6	
Delay (s)		128.7	25.8		30.6		176.6	17.6		62.8	112.7	
Level of Service		F	C		C		F	B		E	F	
Approach Delay (s)		105.0			30.6			52.3			111.4	
Approach LOS		F			C			D			F	

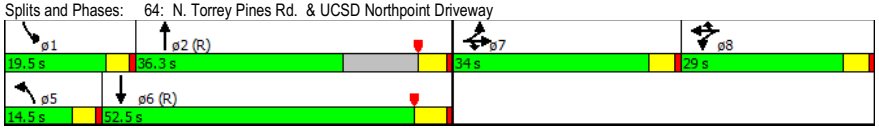
Intersection Summary			
HCM 2000 Control Delay	96.9	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.14		
Actuated Cycle Length (s)	126.0	Sum of lost time (s)	15.5
Intersection Capacity Utilization	105.2%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	29	82	138	13	147	20	533	124	1530
Future Volume (vph)	29	82	138	13	147	20	533	124	1530
Turn Type	NA	Prot	Split	NA	Prot	Prot	NA	Prot	NA
Protected Phases	7	7	8	8	8	5	2	1	6
Permitted Phases									
Detector Phase	7	7	8	8	8	5	2	1	6
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	10.0	4.0	10.0
Minimum Split (s)	8.9	8.9	8.9	8.9	8.9	8.4	15.3	8.4	15.9
Total Split (s)	34.0	34.0	29.0	29.0	29.0	14.5	36.3	19.5	52.5
Total Split (%)	26.2%	26.2%	22.3%	22.3%	22.3%	11.2%	27.9%	15.0%	40.4%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.9	3.4	4.3	3.4	4.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	4.9	4.9	4.9	4.4	5.3	4.4	5.9
Lead/Lag	Lead	Lead	Lag	Lag	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	None	C-Max

Intersection Summary
Cycle Length: 130
Actuated Cycle Length: 130
Offset: 72 (55%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 64: N. Torrey Pines Rd. & UCSD Northpoint Driveway



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	56	29	82	138	13	147	20	533	85	124	1530	9
Future Volume (vph)	56	29	82	138	13	147	20	533	85	124	1530	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9	4.9	4.9	4.9	4.9	4.4	5.3		4.4	5.9	
Lane Util. Factor		1.00	1.00	1.00	1.00	1.00	1.00	0.95		0.97	0.95	
Frt		1.00	0.85	1.00	1.00	0.85	1.00	0.98		1.00	1.00	
Flt Protected		0.97	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1803	1583	1770	1863	1583	1770	3466		3433	3536	
Flt Permitted		0.97	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1803	1583	1770	1863	1583	1770	3466		3433	3536	
Peak-hour factor, PHF	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.92	0.92	0.92
Adj. Flow (vph)	70	36	102	172	16	184	25	666	106	135	1663	10
RTOR Reduction (vph)	0	0	86	0	0	160	0	7	0	0	0	0
Lane Group Flow (vph)	0	106	17	173	16	24	25	765	0	135	1673	0
Turn Type	Split	NA	Prot	Split	NA	Prot	Prot	NA		Prot	NA	
Protected Phases	7	7	7	8	8	8	5	2		1	6	
Permitted Phases												
Actuated Green, G (s)		20.9	20.9	17.1	17.1	17.1	4.5	63.0		9.5	67.4	
Effective Green, g (s)		20.9	20.9	17.1	17.1	17.1	4.5	63.0		9.5	67.4	
Actuated g/C Ratio		0.16	0.16	0.13	0.13	0.13	0.03	0.48		0.07	0.52	
Clearance Time (s)		4.9	4.9	4.9	4.9	4.9	4.4	5.3		4.4	5.9	
Vehicle Extension (s)		2.0	2.0	2.0	2.0	2.0	2.0	4.8		2.0	4.7	
Lane Grp Cap (vph)		289	254	232	245	208	61	1679		250	1833	
v/s Ratio Prot		c0.06	0.01	c0.10	0.01	0.02	0.01	0.22		c0.04	c0.47	
v/s Ratio Perm												
v/c Ratio		0.37	0.07	0.75	0.07	0.12	0.41	0.46		0.54	0.91	
Uniform Delay, d1		48.6	46.3	54.4	49.4	49.8	61.4	22.2		58.1	28.6	
Progression Factor		1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.10	0.73	
Incremental Delay, d2		0.3	0.0	10.8	0.0	0.1	1.6	0.9		0.7	4.8	
Delay (s)		48.9	46.3	65.2	49.5	49.9	63.1	23.0		64.6	25.8	
Level of Service		D	D	E	D	D	E	C		E	C	
Approach Delay (s)		47.6			57.0			24.3			28.7	
Approach LOS		D			E			C			C	

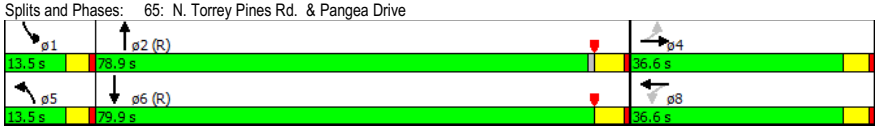
Intersection Summary			
HCM 2000 Control Delay	32.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	20.1
Intersection Capacity Utilization	72.9%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	10	1	79	1	27	511	57	1888
Future Volume (vph)	10	1	79	1	27	511	57	1888
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	7.0	7.0	7.0	7.0	4.0	10.0	4.0	10.0
Minimum Split (s)	11.9	11.9	11.9	11.9	8.4	15.3	8.4	15.3
Total Split (s)	36.6	36.6	36.6	36.6	13.5	78.9	13.5	79.9
Total Split (%)	28.2%	28.2%	28.2%	28.2%	10.4%	60.7%	10.4%	61.5%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.4	4.3	3.4	4.3
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.9	4.9	4.9	4.4	5.3	4.4	5.3
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	None	C-Max

Intersection Summary
Cycle Length: 130
Actuated Cycle Length: 130
Offset: 103 (79%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 75
Control Type: Actuated-Coordinated

Splits and Phases: 65: N. Torrey Pines Rd. & Pangea Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	1	20	79	1	40	27	511	57	57	1888	28
Future Volume (vph)	10	1	20	79	1	40	27	511	57	57	1888	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9		4.9	4.9		4.4	5.3		4.4	5.3	
Lane Util. Factor		1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frt		0.91		1.00	0.85		1.00	0.98		1.00	1.00	
Flt Protected		0.98		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1674		1770	1589		1770	3486		1770	3531	
Flt Permitted		0.92		0.80	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1561		1484	1589		1770	3486		1770	3531	
Peak-hour factor, PHF	0.80	0.80	0.80	0.84	0.84	0.84	0.89	0.89	0.89	0.93	0.93	0.93
Adj. Flow (vph)	12	1	25	94	1	48	30	574	64	61	2030	30
RTOR Reduction (vph)	0	21	0	0	40	0	0	5	0	0	1	0
Lane Group Flow (vph)	0	18	0	94	9	0	30	633	0	61	2059	0
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8								
Actuated Green, G (s)		22.2		22.2	22.2		4.7	86.0		7.2	88.5	
Effective Green, g (s)		22.2		22.2	22.2		4.7	86.0		7.2	88.5	
Actuated g/C Ratio		0.17		0.17	0.17		0.04	0.66		0.06	0.68	
Clearance Time (s)		4.9		4.9	4.9		4.4	5.3		4.4	5.3	
Vehicle Extension (s)		2.0		2.0	2.0		2.0	5.7		2.0	5.5	
Lane Grp Cap (vph)		266		253	271		63	2306		98	2403	
v/s Ratio Prot					0.01		0.02	0.18		c0.03	c0.58	
v/s Ratio Perm		0.01		c0.06								
v/c Ratio		0.07		0.37	0.03		0.48	0.27		0.62	0.86	
Uniform Delay, d1		45.2		47.7	45.0		61.4	9.1		60.1	15.9	
Progression Factor		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.0		0.3	0.0		2.1	0.3		8.5	4.2	
Delay (s)		45.3		48.1	45.0		63.5	9.4		68.6	20.1	
Level of Service		D		D	D		E	A		E	C	
Approach Delay (s)		45.3			47.0			11.8			21.5	
Approach LOS		D			D			B			C	

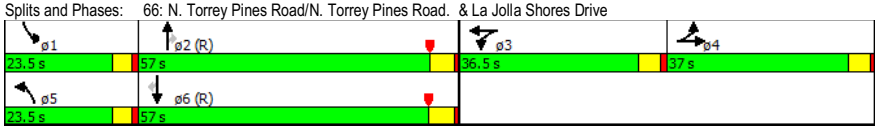
Intersection Summary			
HCM 2000 Control Delay	20.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	14.6
Intersection Capacity Utilization	72.6%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	116	41	108	42	197	614	89	127	1855	226
Future Volume (vph)	116	41	108	42	197	614	89	127	1855	226
Turn Type	Split	NA	Split	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	4	4	3	3	5	2		1	6	
Permitted Phases							2			6
Detector Phase	4	4	3	3	5	2	2	1	6	6
Switch Phase										
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	10.0	10.0	4.0	10.0	10.0
Minimum Split (s)	8.9	8.9	8.9	8.9	8.4	15.4	15.4	8.4	15.5	15.5
Total Split (s)	37.0	37.0	36.5	36.5	23.5	57.0	57.0	23.5	57.0	57.0
Total Split (%)	24.0%	24.0%	23.7%	23.7%	15.3%	37.0%	37.0%	15.3%	37.0%	37.0%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.4	4.4	4.4	3.4	4.5	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	4.9	4.9	4.4	5.4	5.4	4.4	5.5	5.5
Lead/Lag	Lag	Lag	Lead	Lead	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max

Intersection Summary
Cycle Length: 154
Actuated Cycle Length: 154
Offset: 97 (63%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 130
Control Type: Actuated-Coordinated

Splits and Phases: 66: N. Torrey Pines Road/N. Torrey Pines Road. & La Jolla Shores Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	116	41	147	108	42	37	197	614	89	127	1855	226
Future Volume (vph)	116	41	147	108	42	37	197	614	89	127	1855	226
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9		4.9	4.9		4.4	5.4	5.4	4.4	5.5	5.5
Lane Util. Factor	0.95	0.95		0.97	1.00		1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	0.89		1.00	0.93		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1681	1570		3433	1732		1770	3539	1583	1770	3539	1583
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1681	1570		3433	1732		1770	3539	1583	1770	3539	1583
Peak-hour factor, PHF	0.80	0.80	0.80	0.83	0.83	0.83	0.80	0.80	0.80	0.91	0.91	0.91
Adj. Flow (vph)	145	51	184	130	51	45	246	768	111	140	2038	248
RTOR Reduction (vph)	0	70	0	0	21	0	0	0	43	0	0	0
Lane Group Flow (vph)	130	180	0	130	75	0	246	768	68	140	2038	248
Turn Type	Split	NA		Split	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	4	4		3	3		5	2		1	6	
Permitted Phases									2			6
Actuated Green, G (s)	21.8	21.8		26.7	26.7		28.0	70.1	70.1	15.8	57.8	57.8
Effective Green, g (s)	21.8	21.8		26.7	26.7		28.0	70.1	70.1	15.8	57.8	57.8
Actuated g/C Ratio	0.14	0.14		0.17	0.17		0.18	0.46	0.46	0.10	0.38	0.38
Clearance Time (s)	4.9	4.9		4.9	4.9		4.4	5.4	5.4	4.4	5.5	5.5
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	4.0	4.0	2.0	3.9	3.9
Lane Grp Cap (vph)	237	222		595	300		321	1610	720	181	1328	594
v/s Ratio Prot	0.08	c0.11		0.04	c0.04		c0.14	0.22		0.08	c0.58	
v/s Ratio Perm									0.04			0.16
v/c Ratio	0.55	0.81		0.22	0.25		0.77	0.48	0.09	0.77	1.53	0.42
Uniform Delay, d1	61.5	64.1		54.7	55.0		59.9	29.2	23.9	67.4	48.1	35.6
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.4	18.2		0.1	0.2		9.5	1.0	0.3	16.9	244.4	2.2
Delay (s)	62.9	82.2		54.8	55.1		69.3	30.2	24.1	84.3	292.5	37.8
Level of Service	E	F		D	E		E	C	C	F	F	D
Approach Delay (s)		75.6			54.9			38.2			254.5	
Approach LOS		E			D			D			F	

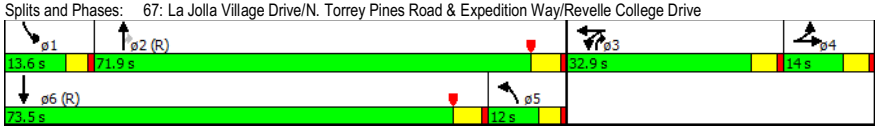
Intersection Summary			
HCM 2000 Control Delay	168.7	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.00		
Actuated Cycle Length (s)	154.0	Sum of lost time (s)	19.7
Intersection Capacity Utilization	91.9%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	43	27	106	19	88	823	61	46	2015
Future Volume (vph)	43	27	106	19	88	823	61	46	2015
Turn Type	Split	NA	Split	NA	Prot	NA	pm+ov	Prot	NA
Protected Phases	4	4	3	3	5	2	3	1	6
Permitted Phases							2		
Detector Phase	4	4	3	3	5	2	3	1	6
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	10.0	4.0	4.0	10.0
Minimum Split (s)	8.9	8.9	32.9	32.9	8.4	37.6	32.9	8.4	29.4
Total Split (s)	14.0	14.0	32.9	32.9	12.0	71.9	32.9	13.6	73.5
Total Split (%)	10.6%	10.6%	24.8%	24.8%	9.1%	54.3%	24.8%	10.3%	55.5%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.4	4.6	3.9	3.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	4.9	4.9	4.4	5.6	4.9	4.4	5.4
Lead/Lag	Lag	Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	None	None	C-Max

Intersection Summary
Cycle Length: 132.4
Actuated Cycle Length: 132.4
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 67: La Jolla Village Drive/N. Torrey Pines Road & Expedition Way/Revelle College Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	43	27	169	106	19	37	88	823	61	46	2015	21
Future Volume (vph)	43	27	169	106	19	37	88	823	61	46	2015	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9		4.9	4.9		4.4	5.6	4.9	4.4	5.4	
Lane Util. Factor	0.95	0.95		0.97	1.00		1.00	0.95	1.00	1.00	0.95	
Frt	1.00	0.87		1.00	0.90		1.00	1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1681	1543		3433	1678		1770	3539	1583	1770	3534	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1681	1543		3433	1678		1770	3539	1583	1770	3534	
Peak-hour factor, PHF	0.81	0.81	0.81	0.94	0.94	0.94	0.80	0.80	0.80	0.97	0.97	0.97
Adj. Flow (vph)	53	33	209	113	20	39	110	1029	76	47	2077	22
RTOR Reduction (vph)	0	146	0	0	34	0	0	0	22	0	0	0
Lane Group Flow (vph)	48	101	0	113	25	0	110	1029	54	47	2099	0
Turn Type	Split	NA		Split	NA		Prot	NA	pm+ov	Prot	NA	
Protected Phases	4	4		3	3		5	2	3	1	6	
Permitted Phases									2			
Actuated Green, G (s)	12.1	12.1		15.7	15.7		8.5	78.2	93.9	6.6	76.5	
Effective Green, g (s)	12.1	12.1		15.7	15.7		8.5	78.2	93.9	6.6	76.5	
Actuated g/C Ratio	0.09	0.09		0.12	0.12		0.06	0.59	0.71	0.05	0.58	
Clearance Time (s)	4.9	4.9		4.9	4.9		4.4	5.6	4.9	4.4	5.4	
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	4.0	2.0	2.0	4.2	
Lane Grp Cap (vph)	153	141		407	198		113	2090	1122	88	2041	
v/s Ratio Prot	0.03	c0.07		c0.03	0.01		c0.06	0.29	0.01	0.03	c0.59	
v/s Ratio Perm									0.03			
v/c Ratio	0.31	0.71		0.28	0.12		0.97	0.49	0.05	0.53	1.03	
Uniform Delay, d1	56.3	58.5		53.2	52.2		61.8	15.6	5.8	61.4	28.0	
Progression Factor	1.00	1.00		1.00	1.00		0.99	0.92	2.70	1.00	1.00	
Incremental Delay, d2	0.4	13.3		0.1	0.1		74.9	0.8	0.0	3.1	27.5	
Delay (s)	56.7	71.8		53.3	52.3		136.4	15.2	15.7	64.5	55.5	
Level of Service	E	E		D	D		F	B	B	E	E	
Approach Delay (s)		69.3			53.0			26.2			55.7	
Approach LOS		E			D			C			E	

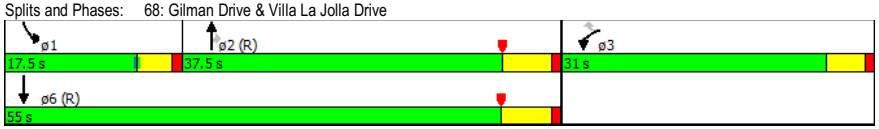
Intersection Summary			
HCM 2000 Control Delay	47.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	132.4	Sum of lost time (s)	19.8
Intersection Capacity Utilization	88.0%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	183	387	430	107	611	1717
Future Volume (vph)	183	387	430	107	611	1717
Turn Type	Prot	Perm	NA	Perm	Prot	NA
Protected Phases	3		2		1	6
Permitted Phases		3		2		
Detector Phase	3	3	2	2	1	6
Switch Phase						
Minimum Initial (s)	4.0	4.0	7.0	7.0	4.0	7.0
Minimum Split (s)	8.9	8.9	12.9	12.9	8.4	13.0
Total Split (s)	31.0	31.0	37.5	37.5	17.5	55.0
Total Split (%)	36.0%	36.0%	43.6%	43.6%	20.3%	64.0%
Yellow Time (s)	3.9	3.9	4.9	4.9	3.4	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	5.9	5.9	4.4	6.0
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	None	None	C-Max	C-Max	None	C-Max

Intersection Summary
Cycle Length: 86
Actuated Cycle Length: 86
Offset: 18 (21%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 65
Control Type: Actuated-Coordinated

Splits and Phases: 68: Gilman Drive & Villa La Jolla Drive



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	183	387	430	107	611	1717
Future Volume (vph)	183	387	430	107	611	1717
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9	5.9	5.9	4.4	6.0
Lane Util. Factor	0.97	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	3433	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	3433	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.86	0.86	0.93	0.93	0.88	0.88
Adj. Flow (vph)	213	450	462	115	694	1951
RTOR Reduction (vph)	0	380	0	73	0	0
Lane Group Flow (vph)	213	70	462	42	694	1951
Turn Type	Prot	Perm	NA	Perm	Prot	NA
Protected Phases	3		2		1	6
Permitted Phases		3		2		
Actuated Green, G (s)	13.3	13.3	31.6	31.6	25.9	61.8
Effective Green, g (s)	13.3	13.3	31.6	31.6	25.9	61.8
Actuated g/C Ratio	0.15	0.15	0.37	0.37	0.30	0.72
Clearance Time (s)	4.9	4.9	5.9	5.9	4.4	6.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	530	244	1300	581	533	2543
v/s Ratio Prot	c0.06		0.13		c0.39	c0.55
v/s Ratio Perm		0.04		0.03		
v/c Ratio	0.40	0.29	0.36	0.07	1.30	0.77
Uniform Delay, d1	32.8	32.1	19.8	17.7	30.1	7.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.5	0.6	0.8	0.2	149.2	2.3
Delay (s)	33.3	32.8	20.6	17.9	179.2	9.9
Level of Service	C	C	C	B	F	A
Approach Delay (s)	32.9		20.0			54.3
Approach LOS	C		C			D

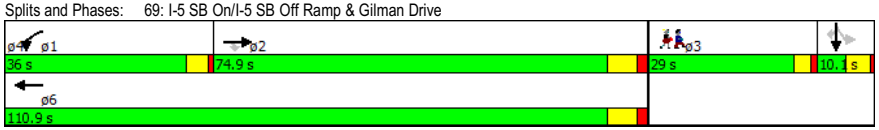
Intersection Summary			
HCM 2000 Control Delay	45.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.92		
Actuated Cycle Length (s)	86.0	Sum of lost time (s)	15.2
Intersection Capacity Utilization	63.6%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBT	EBR	WBL	WBT	SBT	SBR	ø3
Lane Configurations							
Traffic Volume (vph)	315	1448	451	616	11	41	
Future Volume (vph)	315	1448	451	616	11	41	
Turn Type	NA	Perm	Prot	NA	NA	Perm	
Protected Phases	2		1	6	4		3
Permitted Phases		2				4	
Detector Phase	2	2	1	6	4	4	
Switch Phase							
Minimum Initial (s)	13.0	13.0	5.0	12.0	5.0	5.0	1.0
Minimum Split (s)	20.2	20.2	9.7	19.2	10.1	10.1	29.0
Total Split (s)	74.9	74.9	36.0	110.9	10.1	10.1	29.0
Total Split (%)	49.9%	49.9%	24.0%	73.9%	6.7%	6.7%	19%
Yellow Time (s)	5.2	5.2	3.7	5.2	4.1	4.1	3.0
All-Red Time (s)	2.0	2.0	1.0	2.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	7.2	7.2	4.7	7.2	5.1	5.1	
Lead/Lag	Lag	Lag	Lead		Lag	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes
Recall Mode	Min	Min	None	Min	None	None	None

Intersection Summary
Cycle Length: 150
Actuated Cycle Length: 121
Natural Cycle: 150
Control Type: Actuated-Uncoordinated

Splits and Phases: 69: I-5 SB On/I-5 SB Off Ramp & Gilman Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	315	1448	451	616	0	0	0	0	37	11	41
Future Volume (vph)	0	315	1448	451	616	0	0	0	0	37	11	41
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		7.2	7.2	4.7	7.2						5.1	5.1
Lane Util. Factor		1.00	0.88	1.00	0.95						1.00	1.00
Frt		1.00	0.85	1.00	1.00						1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00						0.96	1.00
Satd. Flow (prot)		1863	2787	1770	3539						1794	1583
Flt Permitted		1.00	1.00	0.95	1.00						0.96	1.00
Satd. Flow (perm)		1863	2787	1770	3539						1794	1583
Peak-hour factor, PHF	0.89	0.89	0.89	0.92	0.92	0.92	0.25	0.25	0.25	0.80	0.80	0.80
Adj. Flow (vph)	0	354	1627	490	670	0	0	0	0	46	14	51
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	49
Lane Group Flow (vph)	0	354	1627	490	670	0	0	0	0	0	60	2
Turn Type		NA	Perm	Prot	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases			2							4		4
Actuated Green, G (s)		67.7	67.7	31.3	103.7						5.0	5.0
Effective Green, g (s)		67.7	67.7	31.3	103.7						5.0	5.0
Actuated g/C Ratio		0.56	0.56	0.26	0.86						0.04	0.04
Clearance Time (s)		7.2	7.2	4.7	7.2						5.1	5.1
Vehicle Extension (s)		2.0	2.0	2.0	2.0						2.0	2.0
Lane Grp Cap (vph)		1042	1559	457	3033						74	65
v/s Ratio Prot		0.19		c0.28	0.19							
v/s Ratio Perm			c0.58								0.03	0.00
v/c Ratio		0.34	1.04	1.07	0.22						0.81	0.03
Uniform Delay, d1		14.5	26.6	44.9	1.5						57.5	55.7
Progression Factor		1.00	1.00	1.00	1.00						1.00	1.00
Incremental Delay, d2		0.1	35.1	62.8	0.0						44.9	0.1
Delay (s)		14.6	61.7	107.6	1.5						102.4	55.8
Level of Service		B	E	F	A						F	E
Approach Delay (s)		53.3			46.3			0.0			81.0	
Approach LOS		D			D			A			F	

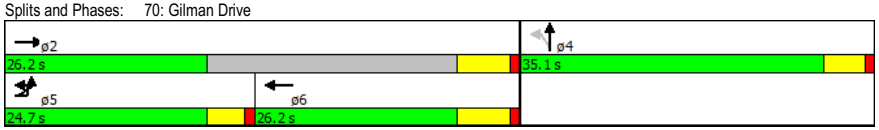
Intersection Summary				
HCM 2000 Control Delay	51.8	HCM 2000 Level of Service	D	
HCM 2000 Volume to Capacity ratio	1.08			
Actuated Cycle Length (s)	121.0	Sum of lost time (s)	21.0	
Intersection Capacity Utilization	100.7%	ICU Level of Service	G	
Analysis Period (min)	15			

c Critical Lane Group

Lane Group	EBL	EBT	WBT	NBL	NBT
Lane Configurations					
Traffic Volume (vph)	39	130	387	651	3
Future Volume (vph)	39	130	387	651	3
Turn Type	Prot	NA	NA	Perm	NA
Protected Phases	5	2	6		4
Permitted Phases				4	
Detector Phase	5	2	6	4	4
Switch Phase					
Minimum Initial (s)	5.0	12.0	12.0	5.0	5.0
Minimum Split (s)	9.7	18.2	18.2	10.1	10.1
Total Split (s)	24.7	26.2	26.2	35.1	35.1
Total Split (%)	28.7%	30.5%	30.5%	40.8%	40.8%
Yellow Time (s)	3.7	5.2	5.2	4.1	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.7	6.2	6.2	5.1	5.1
Lead/Lag	Lead		Lag		
Lead-Lag Optimize?	Yes		Yes		
Recall Mode	None	Min	Min	None	None

Intersection Summary
Cycle Length: 86
Actuated Cycle Length: 61.7
Natural Cycle: 60
Control Type: Actuated-Uncoordinated

Splits and Phases: 70: Gilman Drive



Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	88	39	130	0	0	387	3	651	3	189	0	0
Future Volume (vph)	88	39	130	0	0	387	3	651	3	189	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.7	6.2			6.2		5.1	5.1			
Lane Util. Factor		1.00	1.00			0.95		0.95	0.95			
Frt		1.00	1.00			1.00		1.00	0.93			
Flt Protected		0.95	1.00			1.00		0.95	0.97			
Satd. Flow (prot)		1770	1863			3536		1681	1605			
Flt Permitted		0.95	1.00			1.00		0.95	0.97			
Satd. Flow (perm)		1770	1863			3536		1681	1605			
Peak-hour factor, PHF	0.92	0.90	0.90	0.90	0.89	0.89	0.89	0.93	0.93	0.93	0.25	0.25
Adj. Flow (vph)	96	43	144	0	0	435	3	700	3	203	0	0
RTOR Reduction (vph)	0	0	0	0	0	1	0	0	34	0	0	0
Lane Group Flow (vph)	0	139	144	0	0	437	0	462	410	0	0	0
Turn Type	Prot	Prot	NA			NA		Perm	NA			
Protected Phases	5	5	2			6			4			
Permitted Phases								4				
Actuated Green, G (s)		8.0	27.3			14.6		23.3	23.3			
Effective Green, g (s)		8.0	27.3			14.6		23.3	23.3			
Actuated g/C Ratio		0.13	0.44			0.24		0.38	0.38			
Clearance Time (s)		4.7	6.2			6.2		5.1	5.1			
Vehicle Extension (s)		2.0	2.0			2.0		2.0	2.0			
Lane Grp Cap (vph)		228	821			834		632	604			
v/s Ratio Prot		c0.08	0.08			c0.12						
v/s Ratio Perm								c0.27	0.26			
v/c Ratio		0.61	0.18			0.52		0.73	0.68			
Uniform Delay, d1		25.5	10.5			20.6		16.6	16.2			
Progression Factor		1.00	1.00			1.00		1.00	1.00			
Incremental Delay, d2		3.1	0.0			0.3		3.8	2.4			
Delay (s)		28.6	10.5			20.9		20.4	18.6			
Level of Service		C	B			C		C	B			
Approach Delay (s)			19.4			20.9			19.5			0.0
Approach LOS			B			C			B			A

Intersection Summary			
HCM 2000 Control Delay	19.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	61.9	Sum of lost time (s)	16.0
Intersection Capacity Utilization	100.7%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

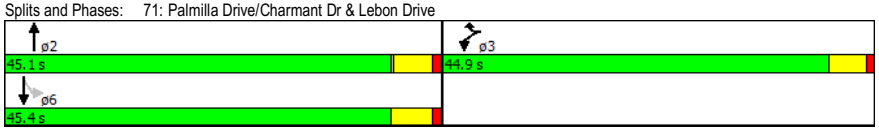
Movement	SBR
Lane Configurations	
Traffic Volume (vph)	0
Future Volume (vph)	0
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.25
Adj. Flow (vph)	0
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

Intersection Summary

Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Configurations					
Traffic Volume (vph)	383	7	152	6	130
Future Volume (vph)	383	7	152	6	130
Turn Type	Prot	Prot	NA	Perm	NA
Protected Phases	3	3	2		6
Permitted Phases				6	
Detector Phase	3	3	2	6	6
Switch Phase					
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	11.9	11.9	12.1	12.4	12.4
Total Split (s)	44.9	44.9	45.1	45.4	45.4
Total Split (%)	49.7%	49.7%	49.9%	50.3%	50.3%
Yellow Time (s)	3.9	3.9	4.1	4.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	5.1	5.4	5.4
Lead/Lag					
Lead-Lag Optimize?					
Recall Mode	Min	Min	None	None	None

Intersection Summary
Cycle Length: 90.3
Actuated Cycle Length: 38.9
Natural Cycle: 40
Control Type: Actuated-Uncoordinated

Splits and Phases: 71: Palmilla Drive/Charmant Dr & Lebon Drive



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	383	7	152	396	6	130
Future Volume (vph)	383	7	152	396	6	130
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9	5.1		5.4	5.4
Lane Util. Factor	0.97	0.91	0.95		1.00	0.95
Frt	1.00	0.85	0.89		1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	3441	1441	3156		1770	3539
Flt Permitted	0.95	1.00	1.00		0.41	1.00
Satd. Flow (perm)	3441	1441	3156		758	3539
Peak-hour factor, PHF	0.87	0.87	0.85	0.85	0.80	0.80
Adj. Flow (vph)	440	8	179	466	8	162
RTOR Reduction (vph)	0	5	266	0	0	0
Lane Group Flow (vph)	441	2	379	0	8	163
Turn Type	Prot	Prot	NA		Perm	NA
Protected Phases	3	3	2			6
Permitted Phases					6	
Actuated Green, G (s)	11.2	11.2	15.9		15.6	15.6
Effective Green, g (s)	11.2	11.2	15.9		15.6	15.6
Actuated g/C Ratio	0.30	0.30	0.43		0.42	0.42
Clearance Time (s)	4.9	4.9	5.1		5.4	5.4
Vehicle Extension (s)	2.0	2.0	3.8		3.4	3.4
Lane Grp Cap (vph)	1038	435	1352		318	1488
v/s Ratio Prot	c0.13	0.00	c0.12			0.05
v/s Ratio Perm					0.01	
v/c Ratio	0.42	0.00	0.28		0.03	0.11
Uniform Delay, d1	10.4	9.1	6.9		6.3	6.5
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	0.1	0.0	0.1		0.0	0.0
Delay (s)	10.5	9.1	7.0		6.3	6.6
Level of Service	B	A	A		A	A
Approach Delay (s)	10.5		7.0			6.6
Approach LOS	B		A			A

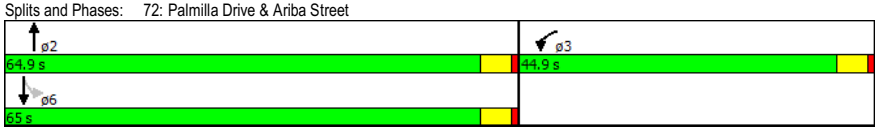
Intersection Summary			
HCM 2000 Control Delay	8.2	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.34		
Actuated Cycle Length (s)	37.1	Sum of lost time (s)	10.3
Intersection Capacity Utilization	36.3%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	WBL	NBT	SBL	SBT
Lane Configurations				
Traffic Volume (vph)	383	151	291	138
Future Volume (vph)	383	151	291	138
Turn Type	Prot	NA	Perm	NA
Protected Phases	3	2		6
Permitted Phases			6	
Detector Phase	3	2	6	6
Switch Phase				
Minimum Initial (s)	6.0	7.0	7.0	7.0
Minimum Split (s)	10.9	11.9	12.0	12.0
Total Split (s)	44.9	64.9	65.0	65.0
Total Split (%)	40.9%	59.1%	59.1%	59.1%
Yellow Time (s)	3.9	3.9	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	5.0	5.0
Lead/Lag				
Lead-Lag Optimize?				
Recall Mode	None	Min	Min	Min

Intersection Summary
Cycle Length: 109.9
Actuated Cycle Length: 66.8
Natural Cycle: 55
Control Type: Actuated-Uncoordinated

Splits and Phases: 72: Palmilla Drive & Ariba Street



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	383	577	151	137	291	138
Future Volume (vph)	383	577	151	137	291	138
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9		4.9		5.0	5.0
Lane Util. Factor	0.97		0.95		1.00	0.95
Frt	0.91		0.93		1.00	1.00
Flt Protected	0.98		1.00		0.95	1.00
Satd. Flow (prot)	3224		3287		1770	3539
Flt Permitted	0.98		1.00		0.55	1.00
Satd. Flow (perm)	3224		3287		1031	3539
Peak-hour factor, PHF	0.82	0.82	0.88	0.88	0.85	0.85
Adj. Flow (vph)	467	704	172	156	342	162
RTOR Reduction (vph)	247	0	81	0	0	0
Lane Group Flow (vph)	924	0	247	0	342	162
Turn Type	Prot		NA		Perm	NA
Protected Phases	3		2			6
Permitted Phases					6	
Actuated Green, G (s)	24.0		31.5		31.4	31.4
Effective Green, g (s)	24.0		31.5		31.4	31.4
Actuated g/C Ratio	0.37		0.48		0.48	0.48
Clearance Time (s)	4.9		4.9		5.0	5.0
Vehicle Extension (s)	2.0		4.0		3.8	3.8
Lane Grp Cap (vph)	1184		1585		495	1701
v/s Ratio Prot	c0.29		0.08			0.05
v/s Ratio Perm					c0.33	
v/c Ratio	0.78		0.16		0.69	0.10
Uniform Delay, d1	18.3		9.5		13.2	9.2
Progression Factor	1.00		1.00		1.00	1.00
Incremental Delay, d2	3.1		0.1		4.4	0.0
Delay (s)	21.5		9.5		17.6	9.3
Level of Service	C		A		B	A
Approach Delay (s)	21.5		9.5			14.9
Approach LOS	C		A			B

Intersection Summary			
HCM 2000 Control Delay	17.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	65.3	Sum of lost time (s)	9.9
Intersection Capacity Utilization	66.2%	ICU Level of Service	C
Analysis Period (min)	15		

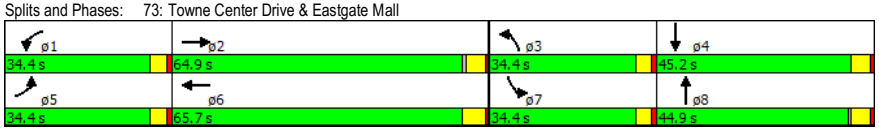
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	19	461	295	254	146	78	209	649
Future Volume (vph)	19	461	295	254	146	78	209	649
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	5	2	1	6	3	8	7	4
Permitted Phases								
Detector Phase	5	2	1	6	3	8	7	4
Switch Phase								
Minimum Initial (s)	4.0	7.0	4.0	7.0	4.0	7.0	4.0	7.0
Minimum Split (s)	8.4	11.9	8.4	12.7	8.4	12.2	8.4	12.7
Total Split (s)	34.4	64.9	34.4	65.7	34.4	44.9	34.4	45.2
Total Split (%)	19.1%	36.1%	19.1%	36.6%	19.1%	25.0%	19.1%	25.2%
Yellow Time (s)	3.4	3.9	3.4	4.7	3.4	4.2	3.4	4.2
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	4.9	4.4	5.7	4.4	5.2	4.4	5.2
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 179.7
Actuated Cycle Length: 152.7
Natural Cycle: 90
Control Type: Actuated-Uncoordinated

Splits and Phases: 73: Towne Center Drive & Eastgate Mall



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	19	461	379	295	254	6	146	78	149	209	649	91
Future Volume (vph)	19	461	379	295	254	6	146	78	149	209	649	91
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	5.7		4.4	5.2		4.4	5.2	
Lane Util. Factor	0.97	0.95		1.00	0.95		0.97	0.95		0.97	0.95	
Frt	1.00	0.93		1.00	1.00		1.00	0.90		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	3433	3300		1770	3526		3433	3191		3433	3474	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	3433	3300		1770	3526		3433	3191		3433	3474	
Peak-hour factor, PHF	0.87	0.87	0.87	0.91	0.91	0.91	0.88	0.88	0.88	0.80	0.80	0.80
Adj. Flow (vph)	22	530	436	324	279	7	166	89	169	261	811	114
RTOR Reduction (vph)	0	82	0	0	0	0	0	130	0	0	6	0
Lane Group Flow (vph)	22	884	0	324	286	0	166	128	0	261	919	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases												
Actuated Green, G (s)	3.5	53.5		30.1	79.3		11.9	35.9		16.2	40.2	
Effective Green, g (s)	3.5	53.5		30.1	79.3		11.9	35.9		16.2	40.2	
Actuated g/C Ratio	0.02	0.35		0.19	0.51		0.08	0.23		0.10	0.26	
Clearance Time (s)	4.4	4.9		4.4	5.7		4.4	5.2		4.4	5.2	
Vehicle Extension (s)	2.0	5.1		2.0	4.8		2.0	5.1		2.0	4.8	
Lane Grp Cap (vph)	77	1141		344	1808		264	740		359	903	
v/s Ratio Prot	0.01	c0.27		c0.18	0.08		0.05	0.04		c0.08	c0.26	
v/s Ratio Perm												
v/c Ratio	0.29	0.77		0.94	0.16		0.63	0.17		0.73	1.02	
Uniform Delay, d1	74.3	45.2		61.4	20.0		69.2	47.5		67.1	57.2	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.7	4.0		33.3	0.1		3.4	0.2		6.1	34.5	
Delay (s)	75.1	49.1		94.7	20.0		72.6	47.7		73.2	91.7	
Level of Service	E	D		F	C		E	D		E	F	
Approach Delay (s)		49.7			59.7			57.4			87.6	
Approach LOS		D			E			E			F	

Intersection Summary

HCM 2000 Control Delay	66.6	HCM 2000 Level of Service	E	
HCM 2000 Volume to Capacity ratio	0.89			
Actuated Cycle Length (s)	154.6	Sum of lost time (s)	19.7	
Intersection Capacity Utilization	82.0%	ICU Level of Service	E	
Analysis Period (min)	15			

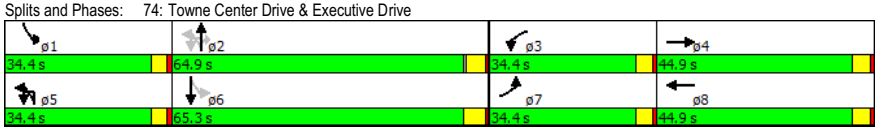
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	63	134	319	421	52	122	120	81	34	1000
Future Volume (vph)	63	134	319	421	52	122	120	81	34	1000
Turn Type	Prot	NA	Prot	NA	pm+pt	pm+pt	NA	Perm	pm+pt	NA
Protected Phases	7	4	3	8	5	5	2		1	6
Permitted Phases					2	2		2	6	
Detector Phase	7	4	3	8	5	5	2	2	1	6
Switch Phase										
Minimum Initial (s)	4.0	4.0	4.0	7.0	4.0	4.0	7.0	7.0	4.0	7.0
Minimum Split (s)	8.4	8.9	8.4	11.9	8.4	8.4	11.9	11.9	8.4	12.3
Total Split (s)	34.4	44.9	34.4	44.9	34.4	34.4	64.9	64.9	34.4	65.3
Total Split (%)	19.2%	25.1%	19.2%	25.1%	19.2%	19.2%	36.3%	36.3%	19.2%	36.5%
Yellow Time (s)	3.4	3.9	3.4	3.9	3.4	3.4	3.9	3.9	3.4	4.3
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	4.9	4.4	4.9		4.4	4.9	4.9	4.4	5.3
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min

Intersection Summary

Cycle Length: 179
Actuated Cycle Length: 146.5
Natural Cycle: 80
Control Type: Actuated-Uncoordinated

Splits and Phases: 74: Towne Center Drive & Executive Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	63	134	142	319	421	40	52	122	120	81	34	1000
Future Volume (vph)	63	134	142	319	421	40	52	122	120	81	34	1000
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	4.9			4.4	4.9	4.9	4.4	5.3
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.92		1.00	0.99			1.00	1.00	0.85	1.00	0.99
Flt Protected	0.95	1.00		0.95	1.00			0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	3266		1770	3493			1770	3539	1583	1770	3488
Flt Permitted	0.95	1.00		0.95	1.00			0.06	1.00	1.00	0.67	1.00
Satd. Flow (perm)	1770	3266		1770	3493			113	3539	1583	1244	3488
Peak-hour factor, PHF	0.86	0.86	0.86	0.94	0.94	0.94	0.92	0.90	0.90	0.90	0.89	0.89
Adj. Flow (vph)	73	156	165	339	448	43	57	136	133	90	38	1124
RTOR Reduction (vph)	0	122	0	0	4	0	0	0	0	43	0	4
Lane Group Flow (vph)	73	199	0	339	487	0	0	193	133	47	38	1239
Turn Type	Prot	NA		Prot	NA		pm+pt	pm+pt	NA	Perm	pm+pt	NA
Protected Phases	7	4		3	8		5	5	2		1	6
Permitted Phases							2	2		2	6	
Actuated Green, G (s)	10.4	17.0		30.2	36.8			86.0	76.8	76.8	66.1	61.3
Effective Green, g (s)	10.4	17.0		30.2	36.8			86.0	76.8	76.8	66.1	61.3
Actuated g/C Ratio	0.07	0.12		0.20	0.25			0.58	0.52	0.52	0.45	0.42
Clearance Time (s)	4.4	4.9		4.4	4.9			4.4	4.9	4.9	4.4	5.3
Vehicle Extension (s)	2.0	5.3		2.0	5.4			2.0	3.8	3.8	2.0	3.8
Lane Grp Cap (vph)	124	376		362	872			289	1843	824	574	1450
v/s Ratio Prot	0.04	0.06		c0.19	c0.14			c0.09	0.04		0.00	c0.36
v/s Ratio Perm								0.30		0.03	0.03	
v/c Ratio	0.59	0.53		0.94	0.56			0.67	0.07	0.06	0.07	0.85
Uniform Delay, d1	66.4	61.4		57.7	48.2			40.0	17.6	17.4	22.9	39.0
Progression Factor	1.00	1.00		1.00	1.00			1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	4.5	2.8		30.8	1.5			4.5	0.0	0.0	0.0	5.3
Delay (s)	71.0	64.2		88.5	49.7			44.4	17.6	17.5	22.9	44.3
Level of Service	E	E		F	D			D	B	B	C	D
Approach Delay (s)		65.5			65.5				30.0			43.7
Approach LOS		E			E				C			D

Intersection Summary

HCM 2000 Control Delay	50.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	147.4	Sum of lost time (s)	19.0
Intersection Capacity Utilization	82.4%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

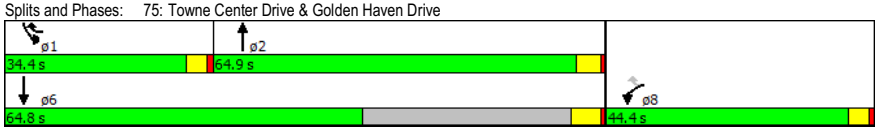
Movement	SBR
Lane Configurations	
Traffic Volume (vph)	106
Future Volume (vph)	106
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.89
Adj. Flow (vph)	119
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

Intersection Summary

Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Configurations					
Traffic Volume (vph)	325	340	213	182	659
Future Volume (vph)	325	340	213	182	659
Turn Type	Prot	pm+ov	NA	Prot	NA
Protected Phases	8	1	2	1	6
Permitted Phases		8			
Detector Phase	8	1	2	1	6
Switch Phase					
Minimum Initial (s)	4.0	4.0	10.0	4.0	10.0
Minimum Split (s)	8.4	8.4	14.9	8.4	15.8
Total Split (s)	44.4	34.4	64.9	34.4	64.8
Total Split (%)	30.9%	23.9%	45.2%	23.9%	45.1%
Yellow Time (s)	3.4	3.4	3.9	3.4	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	4.4	4.9	4.4	5.8
Lead/Lag		Lead	Lag	Lead	
Lead-Lag Optimize?		Yes	Yes	Yes	
Recall Mode	None	None	None	None	None

Intersection Summary
Cycle Length: 143.7
Actuated Cycle Length: 63.9
Natural Cycle: 50
Control Type: Actuated-Uncoordinated

Splits and Phases: 75: Towne Center Drive & Golden Haven Drive



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	325	340	213	164	182	659
Future Volume (vph)	325	340	213	164	182	659
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	0%		0%			-7%
Total Lost time (s)	4.4	4.4	4.9		4.4	5.8
Lane Util. Factor	1.00	1.00	0.95		1.00	0.95
Frt	1.00	0.85	0.93		1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1770	1583	3308		1832	3663
Flt Permitted	0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)	1770	1583	3308		1832	3663
Peak-hour factor, PHF	0.90	0.90	0.85	0.85	0.93	0.93
Adj. Flow (vph)	361	378	251	193	196	709
RTOR Reduction (vph)	0	183	122	0	0	0
Lane Group Flow (vph)	361	195	322	0	196	709
Turn Type	Prot	pm+ov	NA		Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8				
Actuated Green, G (s)	19.8	32.5	16.8		12.7	33.0
Effective Green, g (s)	19.8	32.5	16.8		12.7	33.0
Actuated g/C Ratio	0.31	0.52	0.27		0.20	0.52
Clearance Time (s)	4.4	4.4	4.9		4.4	5.8
Vehicle Extension (s)	2.0	2.0	5.0		2.0	5.0
Lane Grp Cap (vph)	556	927	882		369	1918
v/s Ratio Prot	c0.20	0.04	0.10		c0.11	c0.19
v/s Ratio Perm		0.08				
v/c Ratio	0.65	0.21	0.37		0.53	0.37
Uniform Delay, d1	18.6	8.3	18.8		22.5	8.9
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	2.0	0.0	0.5		0.7	0.3
Delay (s)	20.6	8.3	19.3		23.2	9.1
Level of Service	C	A	B		C	A
Approach Delay (s)	14.3		19.3			12.2
Approach LOS	B		B			B

Intersection Summary			
HCM 2000 Control Delay	14.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	63.0	Sum of lost time (s)	13.7
Intersection Capacity Utilization	50.7%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	8	81	365	104	104	54	76	11	173
Future Volume (vph)	8	81	365	104	104	54	76	11	173
Turn Type	Perm	NA	Perm	NA	pm+pt	NA	Perm	pm+pt	NA
Protected Phases		4		8	5	2		1	6
Permitted Phases	4		8		2		2	6	
Detector Phase	4	4	8	8	5	2	2	1	6
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	7.0	7.0	4.0	7.0
Minimum Split (s)	8.9	8.9	8.4	8.4	8.4	11.9	11.9	8.4	11.9
Total Split (s)	44.9	44.9	44.4	44.4	34.4	64.9	64.9	34.4	64.9
Total Split (%)	31.1%	31.1%	30.8%	30.8%	23.9%	45.0%	45.0%	23.9%	45.0%
Yellow Time (s)	3.9	3.9	3.4	3.4	3.4	3.9	3.9	3.4	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	4.4	4.4	4.4	4.9	4.9	4.4	4.9
Lead/Lag					Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Min	Min	None	Min

Intersection Summary
Cycle Length: 144.2
Actuated Cycle Length: 80.2
Natural Cycle: 120
Control Type: Actuated-Uncoordinated

Splits and Phases: 76: Executive Way & Executive Drive

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	81	581	365	104	3	104	54	76	11	173	38
Future Volume (vph)	8	81	581	365	104	3	104	54	76	11	173	38
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9		4.4	4.4		4.4	4.9	4.9	4.4	4.9	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.87		1.00	1.00		1.00	1.00	0.85	1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3073		1770	3526		1770	1863	1583	1770	1812	
Flt Permitted	0.67	1.00		0.26	1.00		0.34	1.00	1.00	0.71	1.00	
Satd. Flow (perm)	1256	3073		490	3526		637	1863	1583	1328	1812	
Peak-hour factor, PHF	0.80	0.80	0.80	0.87	0.87	0.87	0.80	0.80	0.80	0.80	0.80	0.80
Adj. Flow (vph)	10	101	726	420	120	3	130	68	95	14	216	48
RTOR Reduction (vph)	0	381	0	0	1	0	0	0	62	0	8	0
Lane Group Flow (vph)	10	446	0	420	122	0	130	68	33	14	256	0
Turn Type	Perm	NA		Perm	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2		2	6		
Actuated Green, G (s)	39.8	39.8		40.3	40.3		34.2	28.8	28.8	21.1	20.1	
Effective Green, g (s)	39.8	39.8		40.3	40.3		34.2	28.8	28.8	21.1	20.1	
Actuated g/C Ratio	0.47	0.47		0.48	0.48		0.41	0.34	0.34	0.25	0.24	
Clearance Time (s)	4.9	4.9		4.4	4.4		4.4	4.9	4.9	4.4	4.9	
Vehicle Extension (s)	2.0	2.0		2.3	2.3		2.0	2.9	2.9	2.0	2.6	
Lane Grp Cap (vph)	596	1459		235	1695		391	640	544	339	434	
v/s Ratio Prot		0.15			0.03		c0.04	0.04		0.00	c0.14	
v/s Ratio Perm	0.01			c0.86			0.10		0.02	0.01		
v/c Ratio	0.02	0.31		1.79	0.07		0.33	0.11	0.06	0.04	0.59	
Uniform Delay, d1	11.6	13.5		21.8	11.7		16.6	18.7	18.4	23.6	28.2	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.0	0.0		370.9	0.0		0.2	0.1	0.0	0.0	1.9	
Delay (s)	11.6	13.6		392.6	11.7		16.8	18.8	18.5	23.7	30.1	
Level of Service	B	B		F	B		B	B	B	C	C	
Approach Delay (s)		13.5			306.3			17.8			29.8	
Approach LOS		B			F			B			C	

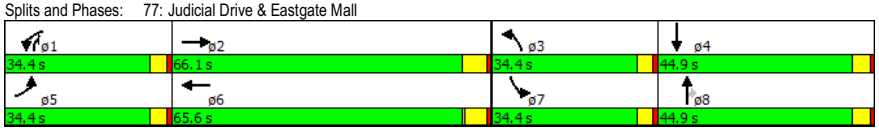
Intersection Summary			
HCM 2000 Control Delay	98.0	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.25		
Actuated Cycle Length (s)	83.8	Sum of lost time (s)	14.2
Intersection Capacity Utilization	74.0%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	14	709	265	250	176	11	532	119	162
Future Volume (vph)	14	709	265	250	176	11	532	119	162
Turn Type	Prot	NA	Prot	NA	Prot	NA	pm+ov	Prot	NA
Protected Phases	5	2	1	6	3	8	1	7	4
Permitted Phases							8		
Detector Phase	5	2	1	6	3	8	1	7	4
Switch Phase									
Minimum Initial (s)	4.0	7.0	4.0	7.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.4	13.1	8.4	12.6	8.4	8.9	8.4	8.4	8.9
Total Split (s)	34.4	66.1	34.4	65.6	34.4	44.9	34.4	34.4	44.9
Total Split (%)	19.1%	36.8%	19.1%	36.5%	19.1%	25.0%	19.1%	19.1%	25.0%
Yellow Time (s)	3.4	5.1	3.4	4.6	3.4	3.9	3.4	3.4	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	6.1	4.4	5.6	4.4	4.9	4.4	4.4	4.9
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 179.8
Actuated Cycle Length: 152.4
Natural Cycle: 90
Control Type: Actuated-Uncoordinated

Splits and Phases: 77: Judicial Drive & Eastgate Mall



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	14	709	185	265	250	10	176	11	532	119	162	97
Future Volume (vph)	14	709	185	265	250	10	176	11	532	119	162	97
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	6.1		4.4	5.6		4.4	4.9	4.4	4.4	4.9	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.97		1.00	0.99		1.00	1.00	0.85	1.00	0.94	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3429		1770	3519		1770	1863	1583	1770	1758	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	3429		1770	3519		1770	1863	1583	1770	1758	
Peak-hour factor, PHF	0.89	0.89	0.89	0.97	0.97	0.97	0.85	0.85	0.85	0.87	0.87	0.87
Adj. Flow (vph)	16	797	208	273	258	10	207	13	626	137	186	111
RTOR Reduction (vph)	0	13	0	0	1	0	0	0	110	0	12	0
Lane Group Flow (vph)	16	992	0	273	267	0	207	13	516	137	285	0
Turn Type	Prot	NA		Prot	NA		Prot	NA	pm+ov	Prot	NA	
Protected Phases	5	2		1	6		3	8	1	7	4	
Permitted Phases									8			
Actuated Green, G (s)	3.8	52.0		30.9	79.6		22.1	15.3	46.2	39.4	32.6	
Effective Green, g (s)	3.8	52.0		30.9	79.6		22.1	15.3	46.2	39.4	32.6	
Actuated g/C Ratio	0.02	0.33		0.20	0.51		0.14	0.10	0.29	0.25	0.21	
Clearance Time (s)	4.4	6.1		4.4	5.6		4.4	4.9	4.4	4.4	4.9	
Vehicle Extension (s)	2.0	2.7		2.0	3.0		2.0	2.0	2.0	2.0	2.0	
Lane Grp Cap (vph)	42	1132		347	1779		248	181	464	443	364	
v/s Ratio Prot	0.01	c0.29		0.15	0.08		c0.12	0.01	c0.22	0.08	c0.16	
v/s Ratio Perm									0.11			
v/c Ratio	0.38	0.88		0.79	0.15		0.83	0.07	1.11	0.31	0.78	
Uniform Delay, d1	75.6	49.7		60.1	20.8		65.9	64.6	55.6	47.9	59.1	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	2.1	7.8		10.4	0.0		20.0	0.1	76.4	0.1	9.7	
Delay (s)	77.7	57.5		70.5	20.8		85.9	64.7	132.0	48.1	68.8	
Level of Service	E	E		E	C		F	E	F	D	E	
Approach Delay (s)		57.8			45.9			119.7			62.3	
Approach LOS		E			D			F			E	

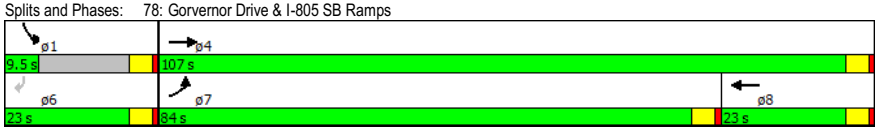
Intersection Summary			
HCM 2000 Control Delay	74.6	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.92		
Actuated Cycle Length (s)	157.4	Sum of lost time (s)	19.8
Intersection Capacity Utilization	80.9%	ICU Level of Service	D
Analysis Period (min)	15		

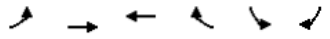
c Critical Lane Group

Lane Group	EBL	EBT	WBT	SBL	SBR
Lane Configurations					
Traffic Volume (vph)	888	324	375	16	188
Future Volume (vph)	888	324	375	16	188
Turn Type	Prot	NA	NA	Prot	Perm
Protected Phases	7	4	8	1	
Permitted Phases					6
Detector Phase	7	4	8	1	6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5
Total Split (s)	84.0	107.0	23.0	9.5	23.0
Total Split (%)	64.6%	82.3%	17.7%	7.3%	17.7%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead		Lag		
Lead-Lag Optimize?	Yes		Yes		
Recall Mode	None	None	None	None	Min

Intersection Summary
Cycle Length: 130
Actuated Cycle Length: 61.7
Natural Cycle: 70
Control Type: Actuated-Uncoordinated

Splits and Phases: 78: Gorvernor Drive & I-805 SB Ramps

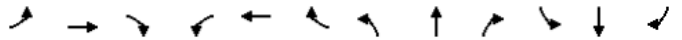




Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	888	324	375	39	16	188
Future Volume (vph)	888	324	375	39	16	188
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5		4.5	4.5
Lane Util. Factor	0.97	1.00	0.95		1.00	1.00
Frt	1.00	1.00	0.99		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	3433	1863	3489		1770	1583
Flt Permitted	0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)	3433	1863	3489		1770	1583
Peak-hour factor, PHF	0.95	0.95	0.80	0.80	0.88	0.88
Adj. Flow (vph)	935	341	469	49	18	214
RTOR Reduction (vph)	0	0	5	0	0	190
Lane Group Flow (vph)	935	341	513	0	18	24
Turn Type	Prot	NA	NA		Prot	Perm
Protected Phases	7	4	8		1	
Permitted Phases						6
Actuated Green, G (s)	22.6	45.8	18.7		6.8	6.8
Effective Green, g (s)	22.6	45.8	18.7		6.8	6.8
Actuated g/C Ratio	0.37	0.74	0.30		0.11	0.11
Clearance Time (s)	4.5	4.5	4.5		4.5	4.5
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	1259	1385	1059		195	174
v/s Ratio Prot	c0.27	0.18	c0.15		0.01	
v/s Ratio Perm						c0.01
v/c Ratio	0.74	0.25	0.48		0.09	0.14
Uniform Delay, d1	17.0	2.5	17.5		24.6	24.7
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	2.4	0.1	0.4		0.2	0.4
Delay (s)	19.4	2.6	17.9		24.8	25.1
Level of Service	B	A	B		C	C
Approach Delay (s)		14.9	17.9		25.1	
Approach LOS		B	B		C	

Intersection Summary				
HCM 2000 Control Delay	16.8	HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio	0.56			
Actuated Cycle Length (s)	61.6	Sum of lost time (s)	13.5	
Intersection Capacity Utilization	52.4%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	328	0	0	0	23	5	472	3	3	0	0	0
Future Volume (Veh/h)	328	0	0	0	23	5	472	3	3	0	0	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.94	0.94	0.94	0.25	0.25	0.25
Hourly flow rate (vph)	410	0	0	0	29	6	502	3	3	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1029	1010	0	1008	1008	4	0			6		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1029	1010	0	1008	1008	4	0			6		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	0	100	100	100	83	99	69			100		
cM capacity (veh/h)	140	166	1085	167	166	1079	1623			1615		

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	410	35	508
Volume Left	410	0	502
Volume Right	0	6	3
cSH	140	194	1623
Volume to Capacity	2.93	0.18	0.31
Queue Length 95th (ft)	945	16	33
Control Delay (s)	936.3	27.6	8.1
Lane LOS	F	D	A
Approach Delay (s)	936.3	27.6	8.1
Approach LOS	F	D	

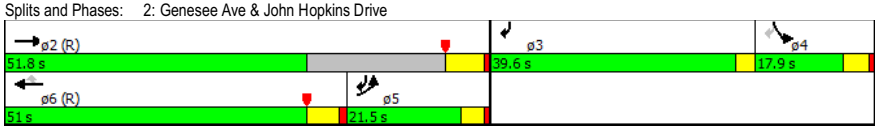
Intersection Summary				
Average Delay	408.2			
Intersection Capacity Utilization	58.0%	ICU Level of Service	B	
Analysis Period (min)	15			

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	ø3
Lane Configurations							
Traffic Volume (vph)	86	723	1483	1461	161	23	
Future Volume (vph)	86	723	1483	1461	161	23	
Turn Type	Prot	NA	NA	Perm	Prot	pt+ov	
Protected Phases	5	2	6		4	3 5	3
Permitted Phases				6		4	
Detector Phase	5	2	6	6	4	3 5	
Switch Phase							
Minimum Initial (s)	4.0	10.0	10.0	10.0	7.0		4.0
Minimum Split (s)	9.5	16.7	15.9	15.9	11.9		7.0
Total Split (s)	21.5	51.8	51.0	51.0	17.9		39.6
Total Split (%)	16.5%	39.8%	39.2%	39.2%	13.8%		30%
Yellow Time (s)	3.4	5.7	4.9	4.9	3.9		3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		0.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	4.4	6.7	5.9	5.9	4.9		
Lead/Lag	Lag		Lead	Lead	Lag		Lead
Lead-Lag Optimize?	Yes		Yes	Yes	Yes		Yes
Recall Mode	None	C-Min	C-Min	C-Min	None		None

Intersection Summary

Cycle Length: 130
Actuated Cycle Length: 130
Offset: 16 (12%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 2: Genesee Ave & John Hopkins Drive



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	86	723	1483	1461	161	23
Future Volume (vph)	86	723	1483	1461	161	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	6.7	5.9	5.9	4.9	3.0
Lane Util. Factor	1.00	0.91	0.86	0.88	0.97	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	5085	6408	2787	3433	1583
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	5085	6408	2787	3433	1583
Peak-hour factor, PHF	0.89	0.89	0.94	0.94	0.80	0.80
Adj. Flow (vph)	97	812	1578	1554	201	29
RTOR Reduction (vph)	0	0	0	0	0	1
Lane Group Flow (vph)	97	812	1578	1554	201	28
Turn Type	Prot	NA	NA	Perm	Prot	pt+ov
Protected Phases	5	2	6		4	3 5
Permitted Phases				6		4
Actuated Green, G (s)	11.5	92.6	77.5	77.5	13.7	38.7
Effective Green, g (s)	11.5	92.6	77.5	77.5	13.7	34.3
Actuated g/C Ratio	0.09	0.71	0.60	0.60	0.11	0.26
Clearance Time (s)	4.4	6.7	5.9	5.9	4.9	
Vehicle Extension (s)	2.0	4.0	3.9	3.9	5.0	
Lane Grp Cap (vph)	156	3622	3820	1661	361	454
v/s Ratio Prot	c0.05	0.16	0.25		c0.06	c0.01
v/s Ratio Perm				c0.56		0.01
v/c Ratio	0.62	0.22	0.41	0.94	0.56	0.06
Uniform Delay, d1	57.2	6.4	14.1	24.0	55.3	35.8
Progression Factor	0.80	0.51	1.16	1.00	1.00	1.00
Incremental Delay, d2	5.4	0.1	0.2	6.8	3.1	0.0
Delay (s)	51.3	3.4	16.5	30.9	58.4	35.8
Level of Service	D	A	B	C	E	D
Approach Delay (s)		8.5	23.6		55.6	
Approach LOS		A	C		E	

Intersection Summary

HCM 2000 Control Delay	22.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	18.2
Intersection Capacity Utilization	64.5%	ICU Level of Service	C
Analysis Period (min)	15		

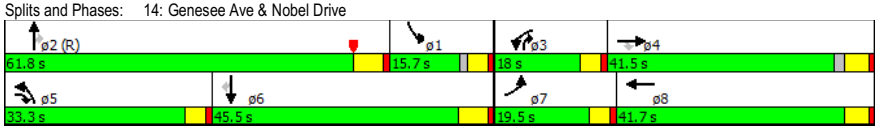
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	134	706	133	114	395	253	1710	251	66	265	52
Future Volume (vph)	134	706	133	114	395	253	1710	251	66	265	52
Turn Type	Prot	NA	pm+ov	Prot	NA	Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	7	4	5	3	8	5	2	3	1	6	
Permitted Phases			4					2			6
Detector Phase	7	4	5	3	8	5	2	3	1	6	6
Switch Phase											
Minimum Initial (s)	4.0	10.0	4.0	4.0	10.0	4.0	10.0	4.0	4.0	10.0	10.0
Minimum Split (s)	8.4	14.9	8.4	8.4	15.1	8.4	15.7	8.4	8.4	15.9	15.9
Total Split (s)	19.5	41.5	33.3	18.0	41.7	33.3	61.8	18.0	15.7	45.5	45.5
Total Split (%)	13.9%	29.6%	23.8%	12.9%	29.8%	23.8%	44.1%	12.9%	11.2%	32.5%	32.5%
Yellow Time (s)	3.4	3.9	3.4	3.4	4.1	3.4	4.7	3.4	3.4	4.9	4.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	4.9	4.4	4.4	5.1	4.4	5.7	4.4	4.4	5.9	5.9
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	None	None	None	None

Intersection Summary

Cycle Length: 140
Actuated Cycle Length: 140
Offset: 65 (46%), Referenced to phase 2:NBT, Start of Yellow
Natural Cycle: 80
Control Type: Actuated-Coordinated

Splits and Phases: 14: Genesee Ave & Nobel Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	134	706	133	114	395	54	253	1710	251	66	265	52
Future Volume (vph)	134	706	133	114	395	54	253	1710	251	66	265	52
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9	4.4	4.4	5.1		4.4	5.7	4.4	4.4	5.9	5.9
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95		0.97	0.91	1.00	0.97	0.91	1.00
Frt	1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	3539	1583	3433	3476		3433	5085	1583	3433	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3539	1583	3433	3476		3433	5085	1583	3433	5085	1583
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.94	0.94	0.94	0.80	0.80	0.80
Adj. Flow (vph)	160	840	158	125	434	59	269	1819	267	82	331	65
RTOR Reduction (vph)	0	0	95	0	7	0	0	0	43	0	0	39
Lane Group Flow (vph)	160	840	63	125	486	0	269	1819	224	83	331	26
Turn Type	Prot	NA	pm+ov	Prot	NA		Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	7	4	5	3	8		5	2	3	1	6	
Permitted Phases			4						2			6
Actuated Green, G (s)	10.9	40.2	55.6	9.5	38.6		15.4	63.1	72.6	7.8	55.3	55.3
Effective Green, g (s)	10.9	40.2	55.6	9.5	38.6		15.4	63.1	72.6	7.8	55.3	55.3
Actuated g/C Ratio	0.08	0.29	0.40	0.07	0.28		0.11	0.45	0.52	0.06	0.39	0.39
Clearance Time (s)	4.4	4.9	4.4	4.4	5.1		4.4	5.7	4.4	4.4	5.9	5.9
Vehicle Extension (s)	2.0	4.0	2.0	2.0	2.1		2.0	8.0	2.0	2.0	4.0	4.0
Lane Grp Cap (vph)	267	1016	628	232	958		377	2291	820	191	2008	625
v/s Ratio Prot	c0.05	c0.24	0.01	0.04	0.14		0.08	c0.36	0.02	c0.02	0.07	
v/s Ratio Perm			0.03						0.12			0.02
v/c Ratio	0.60	0.83	0.10	0.54	0.51		0.71	0.79	0.27	0.43	0.16	0.04
Uniform Delay, d1	62.4	46.6	26.5	63.1	42.7		60.2	32.9	18.9	64.0	27.4	26.0
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.07	0.61	0.97	1.00	1.23	3.20
Incremental Delay, d2	2.4	5.9	0.0	1.2	0.2		4.2	2.4	0.1	0.6	0.1	0.0
Delay (s)	64.8	52.5	26.5	64.3	42.9		68.9	22.4	18.4	64.6	33.8	83.4
Level of Service	E	D	C	E	D		E	C	B	E	C	F
Approach Delay (s)		50.7			47.2			27.2			45.9	
Approach LOS		D			D			C			D	

Intersection Summary

HCM 2000 Control Delay	37.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	19.8
Intersection Capacity Utilization	75.4%	ICU Level of Service	D
Analysis Period (min)	15		

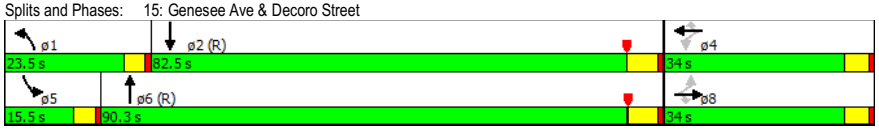
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	81	54	110	32	30	62	76	2007	38	602
Future Volume (vph)	81	54	110	32	30	62	76	2007	38	602
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA	Prot	NA
Protected Phases		8			4		1	6	5	2
Permitted Phases	8		8	4		4				
Detector Phase	8	8	8	4	4	4	1	6	5	2
Switch Phase										
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	10.0	4.0	10.0
Minimum Split (s)	8.9	8.9	8.9	8.9	8.9	8.9	8.4	15.7	8.4	15.9
Total Split (s)	34.0	34.0	34.0	34.0	34.0	34.0	23.5	90.3	15.5	82.5
Total Split (%)	24.3%	24.3%	24.3%	24.3%	24.3%	24.3%	16.8%	64.5%	11.1%	58.9%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.9	3.9	3.4	4.7	3.4	4.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.9	4.9		4.9	4.9	4.4	5.7	4.4	5.9
Lead/Lag							Lead	Lag	Lead	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	None	C-Max

Intersection Summary

Cycle Length: 140
Actuated Cycle Length: 140
Offset: 44 (31%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow
Natural Cycle: 55
Control Type: Actuated-Coordinated

Splits and Phases: 15: Genesee Ave & Decoro Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	81	54	110	32	30	62	76	2007	83	38	602	109
Future Volume (vph)	81	54	110	32	30	62	76	2007	83	38	602	109
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9	4.9		4.9	4.9	4.4	5.7		4.4	5.9	
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.91		1.00	0.91	
Frt		1.00	0.85		1.00	0.85	1.00	0.99		1.00	0.98	
Flt Protected		0.97	1.00		0.97	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1808	1583		1815	1583	1770	5055		1770	4969	
Flt Permitted		0.77	1.00		0.59	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1430	1583		1095	1583	1770	5055		1770	4969	
Peak-hour factor, PHF	0.84	0.84	0.84	0.85	0.85	0.85	0.93	0.93	0.93	0.80	0.80	0.80
Adj. Flow (vph)	96	64	131	38	35	73	82	2158	89	48	752	136
RTOR Reduction (vph)	0	0	112	0	0	63	0	2	0	0	14	0
Lane Group Flow (vph)	0	160	19	0	73	10	82	2245	0	48	875	0
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA		Prot	NA	
Protected Phases		8			4		1	6		5	2	
Permitted Phases	8		8	4		4						
Actuated Green, G (s)		20.1	20.1		20.1	20.1	10.9	97.7		7.2	93.8	
Effective Green, g (s)		20.1	20.1		20.1	20.1	10.9	97.7		7.2	93.8	
Actuated g/C Ratio		0.14	0.14		0.14	0.14	0.08	0.70		0.05	0.67	
Clearance Time (s)		4.9	4.9		4.9	4.9	4.4	5.7		4.4	5.9	
Vehicle Extension (s)		2.0	2.0		2.0	2.0	2.0	4.3		2.0	3.7	
Lane Grp Cap (vph)		205	227		157	227	137	3527		91	3329	
v/s Ratio Prot							c0.05	c0.44		0.03	0.18	
v/s Ratio Perm		c0.11	0.01		0.07	0.01						
v/c Ratio		0.78	0.08		0.46	0.05	0.60	0.64		0.53	0.26	
Uniform Delay, d1		57.8	52.0		55.0	51.7	62.4	11.5		64.7	9.3	
Progression Factor		1.00	1.00		1.00	1.00	0.86	0.93		1.00	1.45	
Incremental Delay, d2		16.1	0.1		0.8	0.0	2.0	0.4		2.5	0.2	
Delay (s)		73.9	52.0		55.8	51.7	55.5	11.1		67.1	13.6	
Level of Service		E	D		E	D	E	B		E	B	
Approach Delay (s)		64.1			53.8			12.6			16.3	
Approach LOS		E			D			B			B	

Intersection Summary

HCM 2000 Control Delay	19.2	HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio	0.67			
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	15.2	
Intersection Capacity Utilization	70.4%	ICU Level of Service	C	
Analysis Period (min)	15			

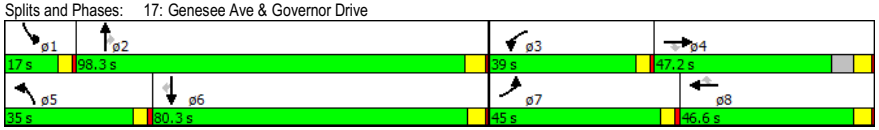
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	228	220	103	399	161	281	54	1594	382	220	603	132
Future Volume (vph)	228	220	103	399	161	281	54	1594	382	220	603	132
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	4.0	8.0	8.0	4.0	8.0	8.0	4.0	8.0	8.0	4.0	8.0	8.0
Minimum Split (s)	8.4	13.2	13.2	8.4	13.2	13.2	8.4	13.9	13.9	8.4	13.4	13.4
Total Split (s)	45.0	47.2	47.2	39.0	46.6	46.6	35.0	98.3	98.3	17.0	80.3	80.3
Total Split (%)	21.7%	22.8%	22.8%	18.8%	22.5%	22.5%	16.9%	47.5%	47.5%	8.2%	38.8%	38.8%
Yellow Time (s)	3.4	4.2	4.2	3.4	4.2	4.2	3.4	4.9	4.9	3.4	4.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.2	5.2	4.4	5.2	5.2	4.4	5.9	5.9	4.4	5.4	5.4
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	Min	Min	None	Min	Min

Intersection Summary

Cycle Length: 206.9
Actuated Cycle Length: 183.2
Natural Cycle: 75
Control Type: Actuated-Uncoordinated

Splits and Phases: 17: Genesee Ave & Governor Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	228	220	103	399	161	281	54	1594	382	220	603	132
Future Volume (vph)	228	220	103	399	161	281	54	1594	382	220	603	132
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	16	12	12	12	12	12	12	12
Total Lost time (s)	4.4	5.2	5.2	4.4	5.2	5.2	4.4	5.9	5.9	4.4	5.4	5.4
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.91	1.00	0.97	0.91	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	3539	1583	3433	4011	1583	3433	5085	1583	3433	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3539	1583	3433	4011	1583	3433	5085	1583	3433	5085	1583
Peak-hour factor, PHF	0.80	0.80	0.80	0.80	0.80	0.80	0.90	0.90	0.90	0.85	0.85	0.85
Adj. Flow (vph)	285	275	129	499	201	351	60	1771	424	259	709	155
RTOR Reduction (vph)	0	0	72	0	0	106	0	0	69	0	0	55
Lane Group Flow (vph)	285	275	57	499	201	245	60	1771	355	259	709	100
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Actuated Green, G (s)	19.9	39.3	39.3	30.5	49.9	49.9	7.7	80.6	80.6	12.7	86.1	86.1
Effective Green, g (s)	19.9	39.3	39.3	30.5	49.9	49.9	7.7	80.6	80.6	12.7	86.1	86.1
Actuated g/C Ratio	0.11	0.21	0.21	0.17	0.27	0.27	0.04	0.44	0.44	0.07	0.47	0.47
Clearance Time (s)	4.4	5.2	5.2	4.4	5.2	5.2	4.4	5.9	5.9	4.4	5.4	5.4
Vehicle Extension (s)	2.0	2.3	2.3	2.0	3.8	3.8	2.0	2.9	2.9	2.0	3.5	3.5
Lane Grp Cap (vph)	373	760	339	572	1093	431	144	2239	697	238	2392	744
v/s Ratio Prot	0.08	0.08		c0.15	0.05		0.02	c0.35		c0.08	0.14	
v/s Ratio Perm			0.04			c0.15			0.22			0.06
v/c Ratio	0.76	0.36	0.17	0.87	0.18	0.57	0.42	0.79	0.51	1.09	0.30	0.13
Uniform Delay, d1	79.3	61.2	58.5	74.4	51.0	57.3	85.5	44.0	36.9	85.2	29.8	27.4
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	8.1	0.2	0.1	13.4	0.1	2.0	0.7	2.0	0.6	83.9	0.1	0.1
Delay (s)	87.4	61.3	58.7	87.7	51.1	59.3	86.2	45.9	37.5	169.0	29.9	27.5
Level of Service	F	E	E	F	D	E	F	D	D	F	C	C
Approach Delay (s)		71.6			71.2			45.4			61.6	
Approach LOS		E			E			D			E	

Intersection Summary

HCM 2000 Control Delay	57.8	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	183.0	Sum of lost time (s)	19.9
Intersection Capacity Utilization	71.7%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBR	NBL	NBT	SBT	SBR
Lane Configurations					
Traffic Volume (vph)	144	404	1139	1002	193
Future Volume (vph)	144	404	1139	1002	193
Turn Type	Perm	Prot	NA	NA	Perm
Protected Phases		5	2	6	
Permitted Phases	4				6
Detector Phase	4	5	2	6	6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	36.5	9.5	22.5	32.5	32.5
Total Split (s)	37.0	55.0	127.0	72.0	72.0
Total Split (%)	22.6%	33.5%	77.4%	43.9%	43.9%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5
Lead/Lag		Lead		Lag	Lag
Lead-Lag Optimize?		Yes		Yes	Yes
Recall Mode	None	None	Min	Min	Min

Intersection Summary
Cycle Length: 164
Actuated Cycle Length: 107.6
Natural Cycle: 120
Control Type: Actuated-Uncoordinated

Splits and Phases: 18: Genesee Ave & SR-52 Ramp

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	144	404	1139	1002	193
Future Volume (vph)	0	144	404	1139	1002	193
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5	4.5	4.5	4.5	4.5
Lane Util. Factor		0.88	1.00	0.95	0.95	1.00
Frt		0.85	1.00	1.00	1.00	0.85
Flt Protected		1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)		2787	1770	3539	3539	1583
Flt Permitted		1.00	0.95	1.00	1.00	1.00
Satd. Flow (perm)		2787	1770	3539	3539	1583
Peak-hour factor, PHF	0.80	0.80	0.83	0.83	0.83	0.83
Adj. Flow (vph)	0	180	487	1372	1207	233
RTOR Reduction (vph)	0	170	0	0	0	55
Lane Group Flow (vph)	0	10	487	1372	1207	178
Turn Type		Perm	Prot	NA	NA	Perm
Protected Phases			5	2	6	
Permitted Phases		4				6
Actuated Green, G (s)		5.7	39.2	92.6	48.9	48.9
Effective Green, g (s)		5.7	39.2	92.6	48.9	48.9
Actuated g/C Ratio		0.05	0.37	0.86	0.46	0.46
Clearance Time (s)		4.5	4.5	4.5	4.5	4.5
Vehicle Extension (s)		3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)		148	646	3054	1612	721
v/s Ratio Prot			c0.28	0.39	c0.34	
v/s Ratio Perm		c0.00				0.11
v/c Ratio		0.06	0.75	0.45	0.75	0.25
Uniform Delay, d1		48.3	29.8	1.6	24.1	17.9
Progression Factor		1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2		0.2	5.0	0.1	1.9	0.2
Delay (s)		48.5	34.8	1.8	26.1	18.1
Level of Service		D	C	A	C	B
Approach Delay (s)	48.5			10.4	24.8	
Approach LOS	D			B	C	

Intersection Summary			
HCM 2000 Control Delay	18.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	107.3	Sum of lost time (s)	13.5
Intersection Capacity Utilization	57.6%	ICU Level of Service	B
Analysis Period (min)	15		

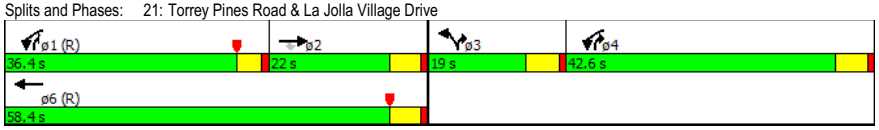
c Critical Lane Group

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	ø1	ø4
Lane Configurations								
Traffic Volume (vph)	389	64	1292	1723	279	1262		
Future Volume (vph)	389	64	1292	1723	279	1262		
Turn Type	NA	Perm	Prot	NA	Prot	custom		
Protected Phases	2		1 4	6	3	1 3 4	1	4
Permitted Phases		2						
Detector Phase	2	2	1 4	6	3	1 3 4		
Switch Phase								
Minimum Initial (s)	10.0	10.0		10.0	4.0		4.0	4.0
Minimum Split (s)	15.4	15.4		15.3	9.6		8.4	42.6
Total Split (s)	22.0	22.0		58.4	19.0		36.4	42.6
Total Split (%)	18.3%	18.3%		48.7%	15.8%		30%	36%
Yellow Time (s)	4.4	4.4		4.3	4.6		3.4	4.6
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			
Total Lost Time (s)	5.4	5.4		5.3	5.6			
Lead/Lag	Lag	Lag			Lead		Lead	Lag
Lead-Lag Optimize?	Yes	Yes			Yes		Yes	Yes
Recall Mode	None	None		C-Max	None		C-Max	None

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 1:WBL and 6:WBT, Start of Yellow
Natural Cycle: 100
Control Type: Actuated-Coordinated

Splits and Phases: 21: Torrey Pines Road & La Jolla Village Drive



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	389	64	1292	1723	279	1262
Future Volume (vph)	389	64	1292	1723	279	1262
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.4	5.4	4.4	5.3	5.6	4.4
Lane Util. Factor	0.91	1.00	0.97	0.91	0.97	0.88
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	5085	1583	3433	5085	3433	2787
Flt Permitted	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (perm)	5085	1583	3433	5085	3433	2787
Peak-hour factor, PHF	0.83	0.83	0.93	0.93	0.84	0.84
Adj. Flow (vph)	469	77	1389	1853	332	1502
RTOR Reduction (vph)	0	66	0	0	0	0
Lane Group Flow (vph)	469	11	1389	1853	332	1502
Turn Type	NA	Perm	Prot	NA	Prot	custom
Protected Phases	2		1 4	6	3	1 3 4
Permitted Phases		2				
Actuated Green, G (s)	16.6	16.6	74.6	54.5	13.4	93.6
Effective Green, g (s)	16.6	16.6	69.0	54.5	13.4	82.4
Actuated g/C Ratio	0.14	0.14	0.58	0.45	0.11	0.69
Clearance Time (s)	5.4	5.4		5.3	5.6	
Vehicle Extension (s)	5.5	5.5		8.0	2.0	
Lane Grp Cap (vph)	703	218	1973	2309	383	1913
v/s Ratio Prot	0.09		0.40	c0.36	c0.10	c0.54
v/s Ratio Perm		0.01				
v/c Ratio	0.67	0.05	0.70	0.80	0.87	0.79
Uniform Delay, d1	49.1	44.9	18.2	28.1	52.4	12.8
Progression Factor	0.69	0.78	1.18	0.62	1.00	1.00
Incremental Delay, d2	3.4	0.2	0.3	1.0	17.7	2.0
Delay (s)	37.1	35.3	21.8	18.6	70.1	14.8
Level of Service	D	D	C	B	E	B
Approach Delay (s)	36.9			19.9	24.8	
Approach LOS	D			B	C	

Intersection Summary

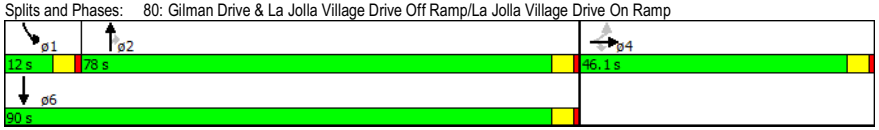
HCM 2000 Control Delay	23.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	21.0
Intersection Capacity Utilization	66.0%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBT	EBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	4	432	1181	143	23	167
Future Volume (vph)	4	432	1181	143	23	167
Turn Type	NA	Perm	NA	Perm	Prot	NA
Protected Phases	4		2		1	6
Permitted Phases		4		2		
Detector Phase	4	4	2	2	1	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	40.5	40.5	22.5	22.5	9.5	24.5
Total Split (s)	46.1	46.1	78.0	78.0	12.0	90.0
Total Split (%)	33.9%	33.9%	57.3%	57.3%	8.8%	66.1%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	None	None	Min	Min	None	Min

Intersection Summary
Cycle Length: 136.1
Actuated Cycle Length: 65.7
Natural Cycle: 90
Control Type: Actuated-Uncoordinated

Splits and Phases: 80: Gilman Drive & La Jolla Village Drive Off Ramp/La Jolla Village Drive On Ramp



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	4	432	0	0	0	0	1181	143	23	167	0
Future Volume (vph)	25	4	432	0	0	0	0	1181	143	23	167	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5	4.5					4.5	4.5	4.5	4.5	
Lane Util. Factor		0.95	0.95					0.95	1.00	1.00	0.95	
Frt		0.87	0.85					1.00	0.85	1.00	1.00	
Flt Protected		0.99	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1529	1504					3539	1583	1770	3539	
Flt Permitted		0.99	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		1529	1504					3539	1583	1770	3539	
Peak-hour factor, PHF	0.64	0.64	0.64	0.25	0.25	0.25	0.92	0.92	0.92	1.00	1.00	1.00
Adj. Flow (vph)	39	6	675	0	0	0	0	1284	155	23	167	0
RTOR Reduction (vph)	0	209	280	0	0	0	0	0	30	0	0	0
Lane Group Flow (vph)	0	153	78	0	0	0	0	1284	125	23	167	0
Turn Type	Perm	NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2			
Actuated Green, G (s)		14.7	14.7					36.9	36.9	2.0	43.4	
Effective Green, g (s)		14.7	14.7					36.9	36.9	2.0	43.4	
Actuated g/C Ratio		0.22	0.22					0.55	0.55	0.03	0.65	
Clearance Time (s)		4.5	4.5					4.5	4.5	4.5	4.5	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		334	329					1946	870	52	2289	
v/s Ratio Prot								c0.36		c0.01	0.05	
v/s Ratio Perm		0.10	0.05						0.08			
v/c Ratio		0.46	0.24					0.66	0.14	0.44	0.07	
Uniform Delay, d1		22.7	21.6					10.7	7.4	32.0	4.4	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		1.0	0.4					0.8	0.1	5.9	0.0	
Delay (s)		23.7	22.0					11.5	7.5	37.9	4.4	
Level of Service		C	C					B	A	D	A	
Approach Delay (s)		22.9			0.0			11.1			8.5	
Approach LOS		C			A			B			A	

Intersection Summary			
HCM 2000 Control Delay	14.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	67.1	Sum of lost time (s)	13.5
Intersection Capacity Utilization	66.2%	ICU Level of Service	C
Analysis Period (min)	15		

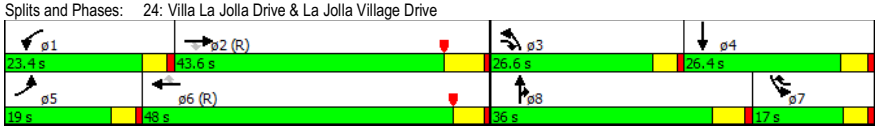
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	216	1186	35	471	1794	746	360	345	465	455	103
Future Volume (vph)	216	1186	35	471	1794	746	360	345	465	455	103
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	Prot	Prot	NA
Protected Phases	5	2	3	1	6	7	3	8	8	7	4
Permitted Phases			2			6					
Detector Phase	5	2	3	1	6	7	3	8	8	7	4
Switch Phase											
Minimum Initial (s)	4.0	10.0	4.0	4.0	10.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.4	16.4	8.4	8.4	15.3	8.4	8.4	9.5	9.5	8.4	8.9
Total Split (s)	19.0	43.6	26.6	23.4	48.0	17.0	26.6	36.0	36.0	17.0	26.4
Total Split (%)	15.8%	36.3%	22.2%	19.5%	40.0%	14.2%	22.2%	30.0%	30.0%	14.2%	22.0%
Yellow Time (s)	3.4	5.4	3.4	3.4	4.3	3.4	3.4	4.5	4.5	3.4	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	6.4	4.4	4.4	5.3	4.4	4.4	5.5	5.5	4.4	4.9
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	C-Max	None	None	None	None	None	None

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 65 (54%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 130
Control Type: Actuated-Coordinated

Splits and Phases: 24: Villa La Jolla Drive & La Jolla Village Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	216	1186	35	471	1794	746	360	345	465	455	103	37
Future Volume (vph)	216	1186	35	471	1794	746	360	345	465	455	103	37
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	6.4	4.4	4.4	5.3	4.4	4.4	5.5	5.5	4.4	4.9	
Lane Util. Factor	1.00	0.91	1.00	0.97	0.91	0.88	0.97	0.95	0.95	0.97	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.97	0.85	1.00	0.96	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	5085	1583	3433	5085	2787	3433	1718	1504	3433	1789	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	5085	1583	3433	5085	2787	3433	1718	1504	3433	1789	
Peak-hour factor, PHF	0.87	0.87	0.87	0.91	0.91	0.91	0.80	0.80	0.80	0.80	0.80	0.80
Adj. Flow (vph)	248	1363	40	518	1971	820	450	431	581	569	129	46
RTOR Reduction (vph)	0	0	21	0	0	95	0	7	187	0	10	0
Lane Group Flow (vph)	248	1363	19	518	1971	725	450	529	289	569	165	0
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	Prot	Prot	NA	
Protected Phases	5	2	3	1	6	7	3	8	8	7	4	
Permitted Phases			2			6						
Actuated Green, G (s)	14.6	37.2	56.6	19.0	42.7	55.3	19.4	30.5	30.5	12.6	24.3	
Effective Green, g (s)	14.6	37.2	56.6	19.0	42.7	55.3	19.4	30.5	30.5	12.6	24.3	
Actuated g/C Ratio	0.12	0.31	0.47	0.16	0.36	0.46	0.16	0.25	0.25	0.10	0.20	
Clearance Time (s)	4.4	6.4	4.4	4.4	5.3	4.4	4.4	5.5	5.5	4.4	4.9	
Vehicle Extension (s)	2.0	4.4	2.0	2.0	4.7	2.0	2.0	3.3	3.3	2.0	2.0	
Lane Grp Cap (vph)	215	1576	746	543	1809	1284	555	436	382	360	362	
v/s Ratio Prot	c0.14	0.27	0.00	0.15	c0.39	0.06	0.13	c0.31	0.19	c0.17	0.09	
v/s Ratio Perm			0.01			0.20						
v/c Ratio	1.15	0.86	0.03	0.95	1.09	0.56	0.81	1.21	0.76	1.58	0.45	
Uniform Delay, d1	52.7	39.0	17.0	50.1	38.6	23.6	48.5	44.8	41.3	53.7	42.0	
Progression Factor	1.42	0.57	1.00	1.04	1.00	1.11	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	96.5	4.2	0.0	4.6	41.4	0.0	8.3	115.1	8.4	274.2	0.3	
Delay (s)	171.1	26.5	17.0	56.7	80.2	26.3	56.9	159.8	49.7	327.9	42.4	
Level of Service	F	C	B	E	F	C	E	F	D	F	D	
Approach Delay (s)		48.0			63.1			92.3			260.8	
Approach LOS		D			E			F			F	

Intersection Summary

HCM 2000 Control Delay	86.1	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.21		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	20.7
Intersection Capacity Utilization	103.5%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Traffic Volume (vph)	609	2268	3	2236	783	148	216
Future Volume (vph)	609	2268	3	2236	783	148	216
Turn Type	Prot	NA	Prot	NA	Perm	Prot	Perm
Protected Phases	5	2	1	6		7	
Permitted Phases					6		7
Detector Phase	5	2	1	6	6	7	7
Switch Phase							
Minimum Initial (s)	4.0	10.0	4.0	10.0	10.0	10.0	10.0
Minimum Split (s)	8.4	16.3	8.4	15.4	15.4	14.4	14.4
Total Split (s)	34.4	66.3	24.4	65.4	65.4	44.4	44.4
Total Split (%)	23.9%	46.0%	16.9%	45.4%	45.4%	30.8%	30.8%
Yellow Time (s)	3.4	5.3	3.4	4.4	4.4	3.4	3.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	6.3	4.4	5.4	5.4	4.4	4.4
Lead/Lag	Lead	Lag	Lead	Lag	Lag		
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		
Recall Mode	None	Min	None	Min	Min	None	None

Intersection Summary

Cycle Length: 144.2
Actuated Cycle Length: 116.7
Natural Cycle: 90
Control Type: Actuated-Uncoordinated

Splits and Phases: 34: Miramar Road & Eastgate Mall

Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Traffic Volume (vph)	609	2268	3	2236	783	148	216
Future Volume (vph)	609	2268	3	2236	783	148	216
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	6.3	4.4	5.4	5.4	4.4	4.4
Lane Util. Factor	0.97	0.91	1.00	0.86	1.00	0.97	1.00
Frt	1.00	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)	3433	5085	1770	6408	1583	3433	1583
Flt Permitted	0.95	1.00	0.95	1.00	1.00	0.95	1.00
Satd. Flow (perm)	3433	5085	1770	6408	1583	3433	1583
Peak-hour factor, PHF	0.87	0.87	0.92	0.92	0.92	0.80	0.80
Adj. Flow (vph)	700	2607	3	2430	851	185	270
RTOR Reduction (vph)	0	0	0	0	315	0	240
Lane Group Flow (vph)	700	2607	3	2430	536	185	30
Turn Type	Prot	NA	Prot	NA	Perm	Prot	Perm
Protected Phases	5	2	1	6		7	
Permitted Phases					6		7
Actuated Green, G (s)	29.0	90.7	1.0	63.6	63.6	13.4	13.4
Effective Green, g (s)	29.0	90.7	1.0	63.6	63.6	13.4	13.4
Actuated g/C Ratio	0.24	0.75	0.01	0.53	0.53	0.11	0.11
Clearance Time (s)	4.4	6.3	4.4	5.4	5.4	4.4	4.4
Vehicle Extension (s)	2.0	5.0	2.0	6.1	6.1	4.5	4.5
Lane Grp Cap (vph)	828	3837	14	3390	837	382	176
v/s Ratio Prot	c0.20	0.51	0.00	c0.38		c0.05	
v/s Ratio Perm					0.34		0.02
v/c Ratio	0.85	0.68	0.21	0.72	0.64	0.48	0.17
Uniform Delay, d1	43.5	7.4	59.2	21.5	20.2	50.2	48.4
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	7.6	0.6	2.8	1.1	2.8	1.7	0.8
Delay (s)	51.1	8.1	62.0	22.6	22.9	51.8	49.2
Level of Service	D	A	E	C	C	D	D
Approach Delay (s)		17.2		22.7		50.2	
Approach LOS		B		C		D	

Intersection Summary

HCM 2000 Control Delay	21.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	120.2	Sum of lost time (s)	15.1
Intersection Capacity Utilization	74.0%	ICU Level of Service	D
Analysis Period (min)	15		

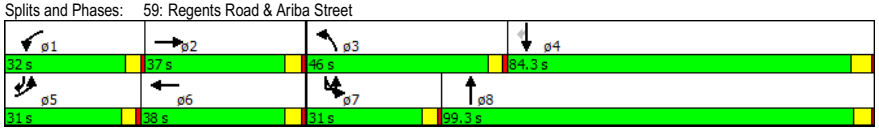
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	112	14	121	56	418	889	30	536	123
Future Volume (vph)	112	14	121	56	418	889	30	536	123
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA	pm+ov
Protected Phases	5	2	1	6	3	8	7	4	5
Permitted Phases									4
Detector Phase	5	2	1	6	3	8	7	4	5
Switch Phase									
Minimum Initial (s)	4.0	7.0	4.0	7.0	4.0	7.0	4.0	7.0	4.0
Minimum Split (s)	8.4	11.9	8.4	11.9	8.4	11.9	8.4	12.6	8.4
Total Split (s)	31.0	37.0	32.0	38.0	46.0	99.3	31.0	84.3	31.0
Total Split (%)	15.6%	18.6%	16.1%	19.1%	23.1%	49.8%	15.6%	42.3%	15.6%
Yellow Time (s)	3.4	3.9	3.4	3.9	3.4	3.9	3.4	4.6	3.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	4.9	4.4	4.9	4.4	4.9	4.4	5.6	4.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 199.3
Actuated Cycle Length: 163.9
Natural Cycle: 65
Control Type: Actuated-Uncoordinated

Splits and Phases: 59: Regents Road & Ariba Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	112	14	390	121	56	54	418	889	192	99	30	536
Future Volume (vph)	112	14	390	121	56	54	418	889	192	99	30	536
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	4.9		4.4	4.9			4.4	5.6
Lane Util. Factor	1.00	0.95		1.00	0.95		0.97	0.95			1.00	0.95
Frt	1.00	0.86		1.00	0.93		1.00	0.97			1.00	1.00
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			0.95	1.00
Satd. Flow (prot)	1770	3027		1770	3278		3433	3445			1770	3539
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00			0.95	1.00
Satd. Flow (perm)	1770	3027		1770	3278		3433	3445			1770	3539
Peak-hour factor, PHF	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.92	0.80	0.80
Adj. Flow (vph)	140	18	488	151	70	68	522	1111	240	108	38	670
RTOR Reduction (vph)	0	334	0	0	57	0	0	9	0	0	0	0
Lane Group Flow (vph)	140	172	0	151	81	0	523	1342	0	0	146	670
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	Prot	NA
Protected Phases	5	2		1	6		3	8		7	7	4
Permitted Phases												
Actuated Green, G (s)	18.2	26.3		19.2	27.3		31.2	80.3			18.7	67.1
Effective Green, g (s)	18.2	26.3		19.2	27.3		31.2	80.3			18.7	67.1
Actuated g/C Ratio	0.11	0.16		0.12	0.17		0.19	0.49			0.11	0.41
Clearance Time (s)	4.4	4.9		4.4	4.9		4.4	4.9			4.4	5.6
Vehicle Extension (s)	2.0	6.3		2.0	5.9		2.0	4.8			2.0	4.4
Lane Grp Cap (vph)	197	488		208	548		656	1696			202	1455
v/s Ratio Prot	0.08	c0.06		c0.09	0.02		c0.15	c0.39			0.08	0.19
v/s Ratio Perm												
v/c Ratio	0.71	0.35		0.73	0.15		0.80	0.79			0.72	0.46
Uniform Delay, d1	69.9	60.8		69.4	58.0		62.9	34.4			69.7	34.9
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2	9.6	1.3		10.2	0.3		6.3	3.0			10.3	0.4
Delay (s)	79.5	62.2		79.6	58.3		69.2	37.4			80.0	35.2
Level of Service	E	E		E	E		E	D			E	D
Approach Delay (s)		65.9			69.4			46.3				39.5
Approach LOS		E			E			D				D

Intersection Summary

HCM 2000 Control Delay	49.7	HCM 2000 Level of Service	D	
HCM 2000 Volume to Capacity ratio	0.72			
Actuated Cycle Length (s)	163.1	Sum of lost time (s)	19.3	
Intersection Capacity Utilization	73.1%	ICU Level of Service	D	
Analysis Period (min)	15			

c Critical Lane Group

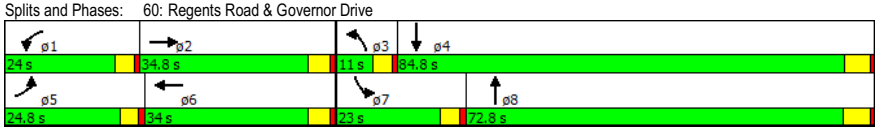
Movement	SBR
Lane Configurations	
Traffic Volume (vph)	123
Future Volume (vph)	123
Ideal Flow (vphpl)	1900
Total Lost time (s)	4.4
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1583
Flt Permitted	1.00
Satd. Flow (perm)	1583
Peak-hour factor, PHF	0.80
Adj. Flow (vph)	154
RTOR Reduction (vph)	73
Lane Group Flow (vph)	81
Turn Type	pm+ov
Protected Phases	5
Permitted Phases	4
Actuated Green, G (s)	85.3
Effective Green, g (s)	85.3
Actuated g/C Ratio	0.52
Clearance Time (s)	4.4
Vehicle Extension (s)	2.0
Lane Grp Cap (vph)	827
v/s Ratio Prot	0.01
v/s Ratio Perm	0.04
v/c Ratio	0.10
Uniform Delay, d1	19.6
Progression Factor	1.00
Incremental Delay, d2	0.0
Delay (s)	19.6
Level of Service	B
Approach Delay (s)	
Approach LOS	

Intersection Summary

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	164	70	334	67	23	1246	342	554
Future Volume (vph)	164	70	334	67	23	1246	342	554
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	5	2	1	6	3	8	7	4
Permitted Phases								
Detector Phase	5	2	1	6	3	8	7	4
Switch Phase								
Minimum Initial (s)	4.0	4.0	4.0	7.0	5.0	7.0	5.0	4.0
Minimum Split (s)	8.4	32.9	8.4	33.9	9.5	34.8	9.5	35.5
Total Split (s)	24.8	34.8	24.0	34.0	11.0	72.8	23.0	84.8
Total Split (%)	16.0%	22.5%	15.5%	22.0%	7.1%	47.1%	14.9%	54.9%
Yellow Time (s)	3.4	3.9	3.4	3.9	3.5	4.8	3.5	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	4.9	4.4	4.9	4.5	5.8	4.5	5.5
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Min	None	Min	None	None	None	None

Intersection Summary
Cycle Length: 154.6
Actuated Cycle Length: 145.3
Natural Cycle: 150
Control Type: Actuated-Uncoordinated

Splits and Phases: 60: Regents Road & Governor Drive



60: Regents Road & Governor Drive

Timing Plan: Morning Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	164	70	43	334	67	89	23	1246	155	342	554	151
Future Volume (vph)	164	70	43	334	67	89	23	1246	155	342	554	151
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	4.9		4.5	5.8		4.5	5.5	
Lane Util. Factor	1.00	0.95		0.97	0.95		1.00	0.95		0.97	0.95	
Frt	1.00	0.94		1.00	0.91		1.00	0.98		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3337		3433	3237		1770	3481		3433	3425	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	3337		3433	3237		1770	3481		3433	3425	
Peak-hour factor, PHF	0.80	0.80	0.80	0.80	0.80	0.80	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	205	88	54	418	84	111	26	1384	172	380	616	168
RTOR Reduction (vph)	0	46	0	0	95	0	0	6	0	0	14	0
Lane Group Flow (vph)	205	96	0	418	100	0	26	1550	0	380	770	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases												
Actuated Green, G (s)	19.0	20.5		19.4	20.9		3.7	69.4		18.3	84.3	
Effective Green, g (s)	19.0	20.5		19.4	20.9		3.7	69.4		18.3	84.3	
Actuated g/C Ratio	0.13	0.14		0.13	0.14		0.03	0.47		0.12	0.57	
Clearance Time (s)	4.4	4.9		4.4	4.9		4.5	5.8		4.5	5.5	
Vehicle Extension (s)	2.0	4.5		2.0	5.0		3.0	4.6		3.0	2.0	
Lane Grp Cap (vph)	228	464		452	459		44	1641		426	1961	
v/s Ratio Prot	0.12	0.03		c0.12	c0.03		0.01	c0.45		c0.11	0.22	
v/s Ratio Perm												
v/c Ratio	0.90	0.21		0.92	0.22		0.59	0.94		0.89	0.39	
Uniform Delay, d1	63.2	56.1		63.2	55.9		71.0	37.1		63.5	17.3	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	32.8	0.4		24.4	0.5		19.5	11.8		20.3	0.0	
Delay (s)	95.9	56.5		87.5	56.4		90.5	48.9		83.8	17.4	
Level of Service	F	E		F	E		F	D		F	B	
Approach Delay (s)		79.8			77.6			49.6			39.1	
Approach LOS		E			E			D			D	

Intersection Summary			
HCM 2000 Control Delay	53.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	147.2	Sum of lost time (s)	19.6
Intersection Capacity Utilization	80.4%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

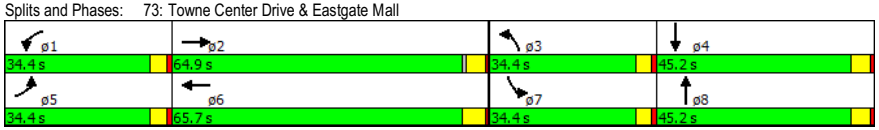
73: Towne Center Drive & Eastgate Mall

Timing Plan: Morning Peak

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	101	255	99	548	253	591	12	47
Future Volume (vph)	101	255	99	548	253	591	12	47
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	5	2	1	6	3	8	7	4
Permitted Phases								
Detector Phase	5	2	1	6	3	8	7	4
Switch Phase								
Minimum Initial (s)	4.0	7.0	4.0	7.0	4.0	7.0	4.0	7.0
Minimum Split (s)	8.4	11.9	8.4	12.7	8.4	12.2	8.4	12.7
Total Split (s)	34.4	64.9	34.4	65.7	34.4	45.2	34.4	45.2
Total Split (%)	19.1%	36.1%	19.1%	36.6%	19.1%	25.2%	19.1%	25.2%
Yellow Time (s)	3.4	3.9	3.4	4.7	3.4	4.2	3.4	4.2
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	4.9	4.4	5.7	4.4	5.2	4.4	5.2
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 179.7
Actuated Cycle Length: 96.1
Natural Cycle: 65
Control Type: Actuated-Uncoordinated

Splits and Phases: 73: Towne Center Drive & Eastgate Mall



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	101	255	148	99	548	116	253	591	327	12	47	8
Future Volume (vph)	101	255	148	99	548	116	253	591	327	12	47	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	5.7		4.4	5.2		4.4	5.2	
Lane Util. Factor	0.97	0.95		0.97	0.95		0.97	0.95		0.97	0.95	
Frt	1.00	0.94		1.00	0.97		1.00	0.95		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	3433	3344		3433	3446		3433	3350		3433	3462	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	3433	3344		3433	3446		3433	3350		3433	3462	
Peak-hour factor, PHF	0.94	0.94	0.94	0.96	0.96	0.96	0.86	0.86	0.86	0.80	0.80	0.80
Adj. Flow (vph)	107	271	157	103	571	121	294	687	380	15	59	10
RTOR Reduction (vph)	0	49	0	0	11	0	0	32	0	0	8	0
Lane Group Flow (vph)	107	379	0	103	681	0	294	1035	0	15	61	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases												
Actuated Green, G (s)	7.9	29.5		7.7	28.5		20.7	40.7		1.9	21.9	
Effective Green, g (s)	7.9	29.5		7.7	28.5		20.7	40.7		1.9	21.9	
Actuated g/C Ratio	0.08	0.30		0.08	0.29		0.21	0.41		0.02	0.22	
Clearance Time (s)	4.4	4.9		4.4	5.7		4.4	5.2		4.4	5.2	
Vehicle Extension (s)	2.0	5.1		2.0	4.8		2.0	5.1		2.0	4.8	
Lane Grp Cap (vph)	274	999		267	995		719	1381		66	768	
v/s Ratio Prot	c0.03	0.11		0.03	c0.20		c0.09	c0.31		0.00	0.02	
v/s Ratio Perm												
v/c Ratio	0.39	0.38		0.39	0.68		0.41	0.75		0.23	0.08	
Uniform Delay, d1	43.1	27.4		43.3	31.1		33.7	24.7		47.7	30.4	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.3	0.5		0.3	2.4		0.1	2.8		0.6	0.1	
Delay (s)	43.5	27.9		43.6	33.6		33.9	27.4		48.3	30.5	
Level of Service	D	C		D	C		C	C		D	C	
Approach Delay (s)		31.0			34.9			28.8			33.7	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM 2000 Control Delay	31.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	98.7	Sum of lost time (s)	19.7
Intersection Capacity Utilization	61.7%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	58	127	61	121	289	188	137	14	57
Future Volume (vph)	58	127	61	121	289	188	137	14	57
Turn Type	pm+pt	NA	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA
Protected Phases	7	4	3	8	5	2		1	6
Permitted Phases	4		8		2		2	6	
Detector Phase	7	4	3	8	5	2	2	1	6
Switch Phase									
Minimum Initial (s)	5.0	4.0	5.0	4.0	4.0	7.0	7.0	4.0	7.0
Minimum Split (s)	9.5	8.9	9.5	8.4	8.4	11.9	11.9	8.4	11.9
Total Split (s)	9.5	44.9	9.5	44.4	34.4	64.9	64.9	34.4	64.9
Total Split (%)	6.2%	29.2%	6.2%	28.9%	22.4%	42.2%	42.2%	22.4%	42.2%
Yellow Time (s)	3.5	3.9	3.5	3.4	3.4	3.9	3.9	3.4	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.9	4.5	4.4	4.4	4.9	4.9	4.4	4.9
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Min	Min	None	Min

Intersection Summary
Cycle Length: 153.7
Actuated Cycle Length: 61.8
Natural Cycle: 50
Control Type: Actuated-Uncoordinated

Splits and Phases: 76: Executive Way & Executive Drive

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	58	127	72	61	121	31	289	188	137	14	57	24
Future Volume (vph)	58	127	72	61	121	31	289	188	137	14	57	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.9		4.5	4.4		4.4	4.9	4.9	4.4	4.9	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.95		1.00	0.97		1.00	1.00	0.85	1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3346		1770	3432		1770	1863	1583	1770	1780	
Flt Permitted	0.65	1.00		0.61	1.00		0.54	1.00	1.00	0.62	1.00	
Satd. Flow (perm)	1203	3346		1129	3432		999	1863	1583	1152	1780	
Peak-hour factor, PHF	0.85	0.85	0.85	0.90	0.90	0.90	0.84	0.84	0.84	0.80	0.80	0.80
Adj. Flow (vph)	68	149	85	68	134	34	344	224	163	18	71	30
RTOR Reduction (vph)	0	60	0	0	17	0	0	0	84	0	12	0
Lane Group Flow (vph)	68	174	0	68	151	0	344	224	79	18	89	0
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		
Actuated Green, G (s)	14.3	10.3		14.8	10.8		36.9	31.8	31.8	15.9	15.2	
Effective Green, g (s)	14.3	10.3		14.8	10.8		36.9	31.8	31.8	15.9	15.2	
Actuated g/C Ratio	0.22	0.16		0.23	0.16		0.56	0.49	0.49	0.24	0.23	
Clearance Time (s)	4.5	4.9		4.5	4.4		4.4	4.9	4.9	4.4	4.9	
Vehicle Extension (s)	3.0	2.0		3.0	2.3		2.0	2.9	2.9	2.0	2.6	
Lane Grp Cap (vph)	297	526		294	565		766	904	768	286	413	
v/s Ratio Prot	0.01	c0.05		c0.01	0.04		c0.12	0.12		0.00	0.05	
v/s Ratio Perm	0.04			0.04			c0.13		0.05	0.01		
v/c Ratio	0.23	0.33		0.23	0.27		0.45	0.25	0.10	0.06	0.21	
Uniform Delay, d1	20.8	24.5		20.4	23.9		8.0	9.9	9.1	19.0	20.3	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.4	0.1		0.4	0.1		0.2	0.1	0.1	0.0	0.2	
Delay (s)	21.2	24.7		20.8	24.0		8.1	10.0	9.2	19.0	20.5	
Level of Service	C	C		C	C		A	A	A	B	C	
Approach Delay (s)		23.9			23.1			8.9			20.3	
Approach LOS		C			C			A			C	

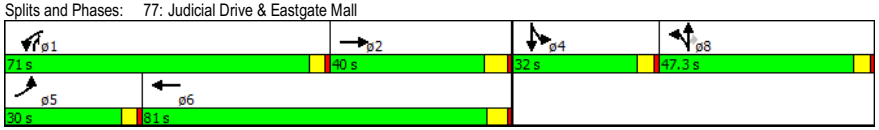
Intersection Summary			
HCM 2000 Control Delay	15.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.44		
Actuated Cycle Length (s)	65.5	Sum of lost time (s)	18.7
Intersection Capacity Utilization	44.6%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	139	338	446	584	258	236	282	4	17
Future Volume (vph)	139	338	446	584	258	236	282	4	17
Turn Type	Prot	NA	Prot	NA	Split	NA	pm+ov	Split	NA
Protected Phases	5	2	1	6	8	8	1	4	4
Permitted Phases							8		
Detector Phase	5	2	1	6	8	8	1	4	4
Switch Phase									
Minimum Initial (s)	4.0	7.0	4.0	7.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.4	13.1	8.4	12.6	8.9	8.9	8.4	8.9	8.9
Total Split (s)	30.0	40.0	71.0	81.0	47.3	47.3	71.0	32.0	32.0
Total Split (%)	15.8%	21.0%	37.3%	42.6%	24.9%	24.9%	37.3%	16.8%	16.8%
Yellow Time (s)	3.4	5.1	3.4	4.6	3.9	3.9	3.4	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	6.1	4.4	5.6	4.9	4.9	4.4	4.9	4.9
Lead/Lag	Lead	Lag	Lead	Lag			Lead		
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes		
Recall Mode	None	None	None	None	None	None	None	None	None

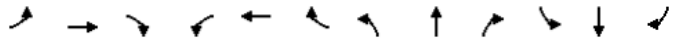
Intersection Summary
Cycle Length: 190.3
Actuated Cycle Length: 136.6
Natural Cycle: 90
Control Type: Actuated-Uncoordinated

Splits and Phases: 77: Judicial Drive & Eastgate Mall



77: Judicial Drive & Eastgate Mall

Timing Plan: Morning Peak



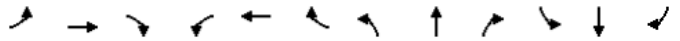
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	139	338	59	446	584	78	258	236	282	4	17	11
Future Volume (vph)	139	338	59	446	584	78	258	236	282	4	17	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	6.1		4.4	5.6		4.9	4.9	4.4	4.9	4.9	
Lane Util. Factor	1.00	0.95		1.00	0.95		0.95	0.91	0.95	1.00	1.00	
Frt	1.00	0.98		1.00	0.98		1.00	0.99	0.85	1.00	0.94	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3461		1770	3477		1681	1663	1504	1770	1751	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	3461		1770	3477		1681	1663	1504	1770	1751	
Peak-hour factor, PHF	0.93	0.93	0.93	0.84	0.84	0.84	0.94	0.94	0.94	0.80	0.80	0.80
Adj. Flow (vph)	149	363	63	531	695	93	274	251	300	5	21	14
RTOR Reduction (vph)	0	7	0	0	5	0	0	2	109	0	13	0
Lane Group Flow (vph)	149	419	0	531	783	0	247	306	161	5	22	0
Turn Type	Prot	NA		Prot	NA		Split	NA	pm+ov	Split	NA	
Protected Phases	5	2		1	6		8	8	1	4	4	
Permitted Phases									8			
Actuated Green, G (s)	17.5	24.1		48.6	55.7		32.1	32.1	80.7	10.5	10.5	
Effective Green, g (s)	17.5	24.1		48.6	55.7		32.1	32.1	80.7	10.5	10.5	
Actuated g/C Ratio	0.13	0.18		0.36	0.41		0.24	0.24	0.60	0.08	0.08	
Clearance Time (s)	4.4	6.1		4.4	5.6		4.9	4.9	4.4	4.9	4.9	
Vehicle Extension (s)	2.0	2.7		2.0	3.0		2.0	2.0	2.0	2.0	2.0	
Lane Grp Cap (vph)	228	615		634	1428		397	393	895	137	135	
v/s Ratio Prot	0.08	c0.12		c0.30	0.23		0.15	c0.18	0.06	0.00	c0.01	
v/s Ratio Perm									0.04			
v/c Ratio	0.65	0.68		0.84	0.55		0.62	0.78	0.18	0.04	0.16	
Uniform Delay, d1	56.2	52.2		39.9	30.4		46.3	48.4	12.4	57.9	58.4	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	5.0	2.9		9.0	0.4		2.2	8.6	0.0	0.0	0.2	
Delay (s)	61.2	55.1		48.9	30.8		48.5	57.0	12.5	57.9	58.7	
Level of Service	E	E		D	C		D	E	B	E	E	
Approach Delay (s)		56.7			38.1			39.9			58.6	
Approach LOS		E			D			D			E	

Intersection Summary				
HCM 2000 Control Delay	42.8	HCM 2000 Level of Service	D	
HCM 2000 Volume to Capacity ratio	0.73			
Actuated Cycle Length (s)	135.6	Sum of lost time (s)	20.3	
Intersection Capacity Utilization	71.6%	ICU Level of Service	C	
Analysis Period (min)	15			

c Critical Lane Group

79: I-805 NB Ramps/I-805 SB Ramps & Gorvernor Drive

Timing Plan: Morning Peak



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Right Turn Channelized												
Traffic Volume (veh/h)	374	24	0	0	33	14	478	12	22	0	0	0
Future Volume (veh/h)	374	24	0	0	33	14	478	12	22	0	0	0
Peak Hour Factor	0.96	0.96	0.96	0.55	0.55	0.55	0.95	0.95	0.95	1.00	1.00	1.00
Hourly flow rate (vph)	390	25	0	0	60	25	503	13	23	0	0	0
Approach Volume (veh/h)		415			85			539			0	
Crossing Volume (veh/h)		0			906			415			563	
High Capacity (veh/h)		1385			672			999			888	
High v/c (veh/h)		0.30			0.13			0.54			0.00	
Low Capacity (veh/h)		1161			526			813			714	
Low v/c (veh/h)		0.36			0.16			0.66			0.00	

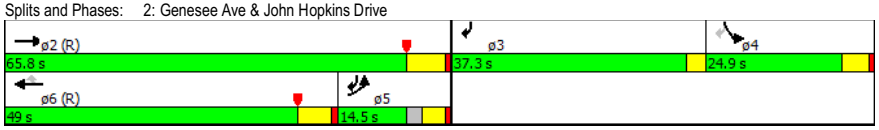
Intersection Summary				
Maximum v/c High	0.54			
Maximum v/c Low	0.66			
Intersection Capacity Utilization	63.8%	ICU Level of Service	B	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	ø3
Lane Configurations							
Traffic Volume (vph)	137	366	1607	491	503	53	
Future Volume (vph)	137	366	1607	491	503	53	
Turn Type	Prot	NA	NA	Perm	Prot	pt+ov	
Protected Phases	5	2	6		4	3 5	3
Permitted Phases				6		4	
Detector Phase	5	2	6	6	4	3 5	
Switch Phase							
Minimum Initial (s)	4.0	10.0	10.0	10.0	7.0		4.0
Minimum Split (s)	9.5	16.7	15.9	15.9	11.9		7.0
Total Split (s)	14.5	65.8	49.0	49.0	24.9		37.3
Total Split (%)	11.3%	51.4%	38.3%	38.3%	19.5%		29%
Yellow Time (s)	3.4	5.7	4.9	4.9	3.9		3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		0.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	4.4	6.7	5.9	5.9	4.9		
Lead/Lag	Lag		Lead	Lead	Lag		Lead
Lead-Lag Optimize?	Yes		Yes	Yes	Yes		Yes
Recall Mode	None	C-Max	C-Max	C-Max	None		None

Intersection Summary

Cycle Length: 128
Actuated Cycle Length: 128
Offset: 58 (45%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 70
Control Type: Actuated-Coordinated

Splits and Phases: 2: Genesee Ave & John Hopkins Drive



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	137	366	1607	491	503	53
Future Volume (vph)	137	366	1607	491	503	53
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	6.7	5.9	5.9	4.9	3.0
Lane Util. Factor	1.00	0.91	0.86	0.88	0.97	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	5085	6408	2787	3433	1583
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	5085	6408	2787	3433	1583
Peak-hour factor, PHF	0.80	0.80	0.90	0.90	0.79	0.79
Adj. Flow (vph)	171	458	1786	546	637	67
RTOR Reduction (vph)	0	0	0	227	0	1
Lane Group Flow (vph)	171	458	1786	319	637	66
Turn Type	Prot	NA	NA	Perm	Prot	pt+ov
Protected Phases	5	2	6		4	3 5
Permitted Phases				6		4
Actuated Green, G (s)	12.4	71.7	55.7	55.7	38.5	58.5
Effective Green, g (s)	12.4	71.7	55.7	55.7	38.5	54.1
Actuated g/C Ratio	0.10	0.56	0.44	0.44	0.30	0.42
Clearance Time (s)	4.4	6.7	5.9	5.9	4.9	
Vehicle Extension (s)	2.0	4.0	3.9	3.9	5.0	
Lane Grp Cap (vph)	171	2848	2788	1212	1032	706
v/s Ratio Prot	c0.10	0.09	c0.28		c0.19	c0.01
v/s Ratio Perm				0.11		0.03
v/c Ratio	1.00	0.16	0.64	0.26	0.62	0.09
Uniform Delay, d1	57.8	13.6	28.3	23.1	38.4	22.2
Progression Factor	0.94	0.74	1.41	2.54	1.00	1.00
Incremental Delay, d2	68.7	0.1	0.9	0.4	1.6	0.0
Delay (s)	123.0	10.2	40.9	59.0	40.0	22.2
Level of Service	F	B	D	E	D	C
Approach Delay (s)		40.9	45.1		38.3	
Approach LOS		D	D		D	

Intersection Summary

HCM 2000 Control Delay	43.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	128.0	Sum of lost time (s)	18.2
Intersection Capacity Utilization	57.9%	ICU Level of Service	B
Analysis Period (min)	15		

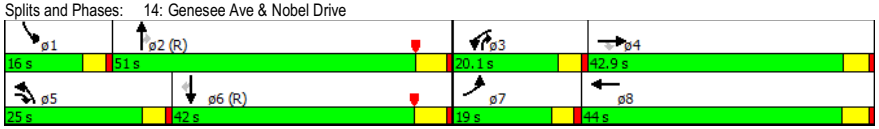
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	264	573	225	173	665	324	559	175	163	825	143
Future Volume (vph)	264	573	225	173	665	324	559	175	163	825	143
Turn Type	Prot	NA	pm+ov	Prot	NA	Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	7	4	5	3	8	5	2	3	1	6	
Permitted Phases			4					2			6
Detector Phase	7	4	5	3	8	5	2	3	1	6	6
Switch Phase											
Minimum Initial (s)	4.0	10.0	4.0	4.0	10.0	4.0	10.0	4.0	4.0	10.0	10.0
Minimum Split (s)	8.4	37.9	8.4	8.4	40.1	8.4	35.7	8.4	8.4	38.9	38.9
Total Split (s)	19.0	42.9	25.0	20.1	44.0	25.0	51.0	20.1	16.0	42.0	42.0
Total Split (%)	14.6%	33.0%	19.2%	15.5%	33.8%	19.2%	39.2%	15.5%	12.3%	32.3%	32.3%
Yellow Time (s)	3.4	3.9	3.4	3.4	4.1	3.4	4.7	3.4	3.4	4.9	4.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	4.9	4.4	4.4	5.1	4.4	5.7	4.4	4.4	5.9	5.9
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lag	Lead	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	None	None	C-Max	C-Max

Intersection Summary

Cycle Length: 130
Actuated Cycle Length: 130
Offset: 83 (64%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 110
Control Type: Actuated-Coordinated

Splits and Phases: 14: Genesee Ave & Nobel Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	264	573	225	173	665	78	324	559	175	163	825	143
Future Volume (vph)	264	573	225	173	665	78	324	559	175	163	825	143
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9	4.4	4.4	5.1		4.4	5.7	4.4	4.4	5.9	5.9
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95		0.97	0.91	1.00	0.97	0.91	1.00
Frt	1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	3539	1583	3433	3483		3433	5085	1583	3433	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3539	1583	3433	3483		3433	5085	1583	3433	5085	1583
Peak-hour factor, PHF	0.90	0.90	0.90	0.87	0.87	0.87	0.87	0.87	0.87	0.92	0.92	0.92
Adj. Flow (vph)	293	637	250	199	764	90	372	643	201	177	897	155
RTOR Reduction (vph)	0	0	35	0	7	0	0	0	33	0	0	104
Lane Group Flow (vph)	293	637	215	199	847	0	372	643	168	177	897	51
Turn Type	Prot	NA	pm+ov	Prot	NA		Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	7	4	5	3	8		5	2	3	1	6	
Permitted Phases			4						2			6
Actuated Green, G (s)	13.8	37.7	55.5	11.9	35.6		17.8	50.7	62.6	10.3	43.0	43.0
Effective Green, g (s)	13.8	37.7	55.5	11.9	35.6		17.8	50.7	62.6	10.3	43.0	43.0
Actuated g/C Ratio	0.11	0.29	0.43	0.09	0.27		0.14	0.39	0.48	0.08	0.33	0.33
Clearance Time (s)	4.4	4.9	4.4	4.4	5.1		4.4	5.7	4.4	4.4	5.9	5.9
Vehicle Extension (s)	2.0	4.0	2.0	2.0	2.1		2.0	8.0	2.0	2.0	4.0	4.0
Lane Grp Cap (vph)	364	1026	675	314	953		470	1983	762	271	1681	523
v/s Ratio Prot	c0.09	0.18	0.04	0.06	c0.24		c0.11	0.13	0.02	0.05	c0.18	
v/s Ratio Perm			0.09						0.09			0.03
v/c Ratio	0.80	0.62	0.32	0.63	0.89		0.79	0.32	0.22	0.65	0.53	0.10
Uniform Delay, d1	56.8	40.0	24.7	56.9	45.3		54.3	27.7	19.6	58.1	35.4	30.1
Progression Factor	1.00	1.00	1.00	1.00	1.00		0.96	0.49	0.38	1.23	0.60	0.56
Incremental Delay, d2	11.5	1.3	0.1	3.1	9.9		8.1	0.4	0.1	4.0	1.1	0.3
Delay (s)	68.3	41.3	24.8	60.0	55.2		60.2	14.1	7.5	75.7	22.4	17.3
Level of Service	E	D	C	E	E		E	B	A	E	C	B
Approach Delay (s)		44.5			56.1			27.1			29.4	
Approach LOS		D			E			C			C	

Intersection Summary

HCM 2000 Control Delay	38.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	19.8
Intersection Capacity Utilization	70.1%	ICU Level of Service	C
Analysis Period (min)	15		

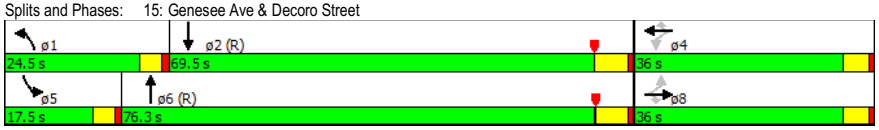
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	27	4	4	4	4	181	5	887	159	944
Future Volume (vph)	27	4	4	4	4	181	5	887	159	944
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA	Prot	NA
Protected Phases		8			4		1	6	5	2
Permitted Phases	8		8	4		4				
Detector Phase	8	8	8	4	4	4	1	6	5	2
Switch Phase										
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	10.0	4.0	10.0
Minimum Split (s)	8.9	8.9	8.9	8.9	8.9	8.9	8.4	15.7	8.4	15.9
Total Split (s)	36.0	36.0	36.0	36.0	36.0	36.0	24.5	76.3	17.5	69.5
Total Split (%)	27.7%	27.7%	27.7%	27.7%	27.7%	27.7%	18.8%	58.7%	13.5%	53.5%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.9	3.9	3.4	4.7	3.4	4.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.9	4.9		4.9	4.9	4.4	5.7	4.4	5.9
Lead/Lag							Lead	Lag	Lead	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	None	C-Max

Intersection Summary

Cycle Length: 130
Actuated Cycle Length: 130
Offset: 97 (75%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow
Natural Cycle: 45
Control Type: Actuated-Coordinated

Splits and Phases: 15: Genesee Ave & Decoro Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	27	4	4	4	4	181	5	887	7	159	944	35
Future Volume (vph)	27	4	4	4	4	181	5	887	7	159	944	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9	4.9		4.9	4.9	4.4	5.7		4.4	5.9	
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.91		1.00	0.91	
Frt		1.00	0.85		1.00	0.85	1.00	1.00		1.00	0.99	
Flt Protected		0.96	1.00		0.98	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1784	1583		1817	1583	1770	5079		1770	5058	
Flt Permitted		0.74	1.00		0.85	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1386	1583		1585	1583	1770	5079		1770	5058	
Peak-hour factor, PHF	0.73	0.73	0.73	0.88	0.88	0.88	0.91	0.91	0.91	0.96	0.96	0.96
Adj. Flow (vph)	37	5	5	5	5	206	5	975	8	166	983	36
RTOR Reduction (vph)	0	0	5	0	0	193	0	0	0	0	1	0
Lane Group Flow (vph)	0	42	0	0	10	13	5	983	0	166	1018	0
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA		Prot	NA	
Protected Phases		8			4		1	6		5	2	
Permitted Phases	8		8	4		4						
Actuated Green, G (s)		8.5	8.5		8.5	8.5	1.2	88.1		18.4	105.1	
Effective Green, g (s)		8.5	8.5		8.5	8.5	1.2	88.1		18.4	105.1	
Actuated g/C Ratio		0.07	0.07		0.07	0.07	0.01	0.68		0.14	0.81	
Clearance Time (s)		4.9	4.9		4.9	4.9	4.4	5.7		4.4	5.9	
Vehicle Extension (s)		2.0	2.0		2.0	2.0	2.0	4.3		2.0	3.7	
Lane Grp Cap (vph)		90	103		103	103	16	3441		250	4089	
v/s Ratio Prot							0.00	c0.19		c0.09	0.20	
v/s Ratio Perm		c0.03	0.00		0.01	0.01						
v/c Ratio		0.47	0.00		0.10	0.13	0.31	0.29		0.66	0.25	
Uniform Delay, d1		58.6	56.8		57.1	57.3	64.0	8.4		52.9	3.0	
Progression Factor		1.00	1.00		1.00	1.00	0.88	1.97		0.84	0.87	
Incremental Delay, d2		1.4	0.0		0.2	0.2	3.9	0.2		4.5	0.1	
Delay (s)		60.0	56.8		57.3	57.5	60.1	16.7		48.8	2.7	
Level of Service		E	E		E	E	E	B		D	A	
Approach Delay (s)		59.6			57.5			16.9			9.2	
Approach LOS		E			E			B			A	

Intersection Summary

HCM 2000 Control Delay	17.6	HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio	0.36			
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	15.2	
Intersection Capacity Utilization	47.0%	ICU Level of Service	A	
Analysis Period (min)	15			

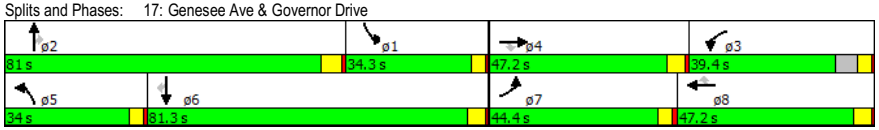
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	69	173	65	377	142	160	82	501	308	269	491	52
Future Volume (vph)	69	173	65	377	142	160	82	501	308	269	491	52
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	4.0	8.0	8.0	4.0	8.0	8.0	4.0	8.0	8.0	4.0	8.0	8.0
Minimum Split (s)	8.4	13.2	13.2	8.4	13.2	13.2	8.4	13.9	13.9	8.4	13.4	13.4
Total Split (s)	44.4	47.2	47.2	39.4	47.2	47.2	34.0	81.0	81.0	34.3	81.3	81.3
Total Split (%)	21.5%	22.8%	22.8%	19.0%	22.8%	22.8%	16.4%	39.1%	39.1%	16.6%	39.3%	39.3%
Yellow Time (s)	3.4	4.2	4.2	3.4	4.2	4.2	3.4	4.9	4.9	3.4	4.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.2	5.2	4.4	5.2	5.2	4.4	5.9	5.9	4.4	5.4	5.4
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lag	Lead	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	Min	Min	None	Min	Min

Intersection Summary

Cycle Length: 206.9
Actuated Cycle Length: 80.6
Natural Cycle: 60
Control Type: Actuated-Uncoordinated

Splits and Phases: 17: Genesee Ave & Governor Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	69	173	65	377	142	160	82	501	308	269	491	52
Future Volume (vph)	69	173	65	377	142	160	82	501	308	269	491	52
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	16	12	12	12	12	12	12	12
Total Lost time (s)	4.4	5.2	5.2	4.4	5.2	5.2	4.4	5.9	5.9	4.4	5.4	5.4
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.91	1.00	0.97	0.91	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	3539	1583	3433	4011	1583	3433	5085	1583	3433	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3539	1583	3433	4011	1583	3433	5085	1583	3433	5085	1583
Peak-hour factor, PHF	0.94	0.94	0.94	0.83	0.83	0.83	0.93	0.93	0.93	0.83	0.83	0.83
Adj. Flow (vph)	73	184	69	454	171	193	88	539	331	324	592	63
RTOR Reduction (vph)	0	0	60	0	0	137	0	0	213	0	0	40
Lane Group Flow (vph)	73	184	9	454	171	56	88	539	118	324	592	23
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Actuated Green, G (s)	5.5	10.5	10.5	18.4	23.4	23.4	7.3	18.4	18.4	14.0	25.6	25.6
Effective Green, g (s)	5.5	10.5	10.5	18.4	23.4	23.4	7.3	18.4	18.4	14.0	25.6	25.6
Actuated g/C Ratio	0.07	0.13	0.13	0.23	0.29	0.29	0.09	0.23	0.23	0.17	0.32	0.32
Clearance Time (s)	4.4	5.2	5.2	4.4	5.2	5.2	4.4	5.9	5.9	4.4	5.4	5.4
Vehicle Extension (s)	2.0	2.3	2.3	2.0	3.8	3.8	2.0	2.9	2.9	2.0	3.5	3.5
Lane Grp Cap (vph)	232	457	204	777	1155	456	308	1152	358	591	1603	499
v/s Ratio Prot	0.02	c0.05		c0.13	0.04		0.03	c0.11		c0.09	0.12	
v/s Ratio Perm			0.01			0.04			0.07			0.01
v/c Ratio	0.31	0.40	0.04	0.58	0.15	0.12	0.29	0.47	0.33	0.55	0.37	0.05
Uniform Delay, d1	36.1	32.5	31.0	28.0	21.5	21.3	34.5	27.2	26.3	30.7	21.5	19.3
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.3	0.3	0.1	0.7	0.1	0.2	0.2	0.3	0.5	0.6	0.2	0.0
Delay (s)	36.3	32.8	31.0	28.7	21.6	21.5	34.7	27.5	26.8	31.3	21.7	19.4
Level of Service	D	C	C	C	C	C	C	C	C	C	C	B
Approach Delay (s)		33.2			25.5			27.9			24.7	
Approach LOS		C			C			C			C	

Intersection Summary

HCM 2000 Control Delay	26.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	81.2	Sum of lost time (s)	19.9
Intersection Capacity Utilization	51.4%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBR	NBL	NBT	SBT	SBR
Lane Configurations					
Traffic Volume (vph)	231	155	716	632	248
Future Volume (vph)	231	155	716	632	248
Turn Type	Perm	Prot	NA	NA	Perm
Protected Phases		5	2	6	
Permitted Phases	4				6
Detector Phase	4	5	2	6	6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	36.5	9.5	22.5	32.5	32.5
Total Split (s)	38.0	26.0	74.0	48.0	48.0
Total Split (%)	33.9%	23.2%	66.1%	42.9%	42.9%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5
Lead/Lag		Lead		Lag	Lag
Lead-Lag Optimize?		Yes		Yes	Yes
Recall Mode	None	None	Min	Min	Min

Intersection Summary
Cycle Length: 112
Actuated Cycle Length: 49.3
Natural Cycle: 80
Control Type: Actuated-Uncoordinated

Splits and Phases: 18: Genesee Ave & SR-52 Ramp

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	231	155	716	632	248
Future Volume (vph)	0	231	155	716	632	248
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5	4.5	4.5	4.5	4.5
Lane Util. Factor		0.88	1.00	0.95	0.95	1.00
Frt		0.85	1.00	1.00	1.00	0.85
Flt Protected		1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)		2787	1770	3539	3539	1583
Flt Permitted		1.00	0.95	1.00	1.00	1.00
Satd. Flow (perm)		2787	1770	3539	3539	1583
Peak-hour factor, PHF	0.87	0.87	0.83	0.83	0.87	0.87
Adj. Flow (vph)	0	266	187	863	726	285
RTOR Reduction (vph)	0	236	0	0	0	177
Lane Group Flow (vph)	0	30	187	863	726	108
Turn Type		Perm	Prot	NA	NA	Perm
Protected Phases			5	2	6	
Permitted Phases		4				6
Actuated Green, G (s)		5.6	11.4	34.4	18.5	18.5
Effective Green, g (s)		5.6	11.4	34.4	18.5	18.5
Actuated g/C Ratio		0.11	0.23	0.70	0.38	0.38
Clearance Time (s)		4.5	4.5	4.5	4.5	4.5
Vehicle Extension (s)		3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)		318	411	2484	1336	597
v/s Ratio Prot			c0.11	0.24	c0.21	
v/s Ratio Perm		c0.01				0.07
v/c Ratio		0.10	0.45	0.35	0.54	0.18
Uniform Delay, d1		19.4	16.1	2.9	11.9	10.2
Progression Factor		1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2		0.1	0.8	0.1	0.5	0.1
Delay (s)		19.6	16.9	3.0	12.4	10.3
Level of Service		B	B	A	B	B
Approach Delay (s)	19.6			5.5	11.8	
Approach LOS	B			A	B	

Intersection Summary			
HCM 2000 Control Delay	9.8	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.44		
Actuated Cycle Length (s)	49.0	Sum of lost time (s)	13.5
Intersection Capacity Utilization	33.6%	ICU Level of Service	A
Analysis Period (min)	15		

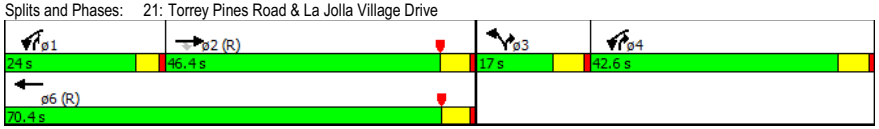
c Critical Lane Group

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	ø1	ø4
Lane Configurations								
Traffic Volume (vph)	791	164	757	720	141	720		
Future Volume (vph)	791	164	757	720	141	720		
Turn Type	NA	Perm	Prot	NA	Prot	custom		
Protected Phases	2		1 4	6	3	1 3 4	1	4
Permitted Phases		2						
Detector Phase	2	2	1 4	6	3	1 3 4		
Switch Phase								
Minimum Initial (s)	10.0	10.0		10.0	4.0		4.0	4.0
Minimum Split (s)	15.4	15.4		15.3	9.6		8.4	42.6
Total Split (s)	46.4	46.4		70.4	17.0		24.0	42.6
Total Split (%)	35.7%	35.7%		54.2%	13.1%		18%	33%
Yellow Time (s)	4.4	4.4		4.3	4.6		3.4	4.6
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			
Total Lost Time (s)	5.4	5.4		5.3	5.6			
Lead/Lag	Lag	Lag			Lead		Lead	Lag
Lead-Lag Optimize?	Yes	Yes			Yes		Yes	Yes
Recall Mode	C-Max	C-Max		C-Max	None		None	None

Intersection Summary

Cycle Length: 130
Actuated Cycle Length: 130
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 21: Torrey Pines Road & La Jolla Village Drive



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	791	164	757	720	141	720
Future Volume (vph)	791	164	757	720	141	720
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.4	5.4	4.4	5.3	5.6	4.4
Lane Util. Factor	0.91	1.00	0.97	0.91	0.97	0.88
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	5085	1583	3433	5085	3433	2787
Flt Permitted	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (perm)	5085	1583	3433	5085	3433	2787
Peak-hour factor, PHF	0.76	0.76	0.91	0.91	0.82	0.82
Adj. Flow (vph)	1041	216	832	791	172	878
RTOR Reduction (vph)	0	124	0	0	0	0
Lane Group Flow (vph)	1041	92	832	791	172	878
Turn Type	NA	Perm	Prot	NA	Prot	custom
Protected Phases	2		1 4	6	3	1 3 4
Permitted Phases		2				
Actuated Green, G (s)	55.5	55.5	47.7	68.3	11.4	64.7
Effective Green, g (s)	55.5	55.5	42.1	68.3	11.4	53.5
Actuated g/C Ratio	0.43	0.43	0.32	0.53	0.09	0.41
Clearance Time (s)	5.4	5.4		5.3	5.6	
Vehicle Extension (s)	5.5	5.5		8.0	2.0	
Lane Grp Cap (vph)	2170	675	1111	2671	301	1146
v/s Ratio Prot	c0.20		0.24	0.16	0.05	c0.32
v/s Ratio Perm		0.06				
v/c Ratio	0.48	0.14	0.75	0.30	0.57	0.77
Uniform Delay, d1	26.8	22.7	39.2	17.3	57.0	32.9
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.8	0.4	2.5	0.3	1.6	2.8
Delay (s)	27.6	23.1	41.7	17.6	58.6	35.7
Level of Service	C	C	D	B	E	D
Approach Delay (s)	26.8			30.0	39.4	
Approach LOS	C			C	D	

Intersection Summary

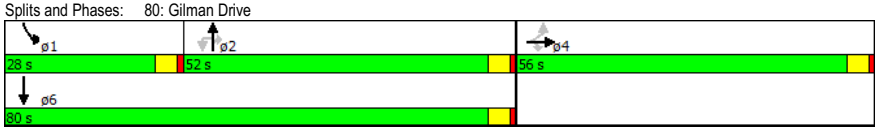
HCM 2000 Control Delay	31.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	21.0
Intersection Capacity Utilization	53.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBT	EBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	5	329	2	414	66	75	210
Future Volume (vph)	5	329	2	414	66	75	210
Turn Type	NA	Perm	Perm	NA	Perm	Prot	NA
Protected Phases	4			2		1	6
Permitted Phases		4	2		2		
Detector Phase	4	4	2	2	2	1	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	40.5	40.5	22.5	22.5	22.5	9.5	24.5
Total Split (s)	56.0	56.0	52.0	52.0	52.0	28.0	80.0
Total Split (%)	41.2%	41.2%	38.2%	38.2%	38.2%	20.6%	58.8%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5		4.5	4.5	4.5	4.5
Lead/Lag			Lag	Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	Yes	
Recall Mode	None	None	Min	Min	Min	None	Min

Intersection Summary
Cycle Length: 136
Actuated Cycle Length: 36.4
Natural Cycle: 75
Control Type: Actuated-Uncoordinated

Splits and Phases: 80: Gilman Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	18	5	329	0	0	0	2	0	414	66	75	210
Future Volume (vph)	18	5	329	0	0	0	2	0	414	66	75	210
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5	4.5						4.5	4.5	4.5	4.5
Lane Util. Factor		0.95	0.95						0.95	1.00	1.00	0.95
Frt		0.87	0.85						1.00	0.85	1.00	1.00
Flt Protected		0.99	1.00						1.00	1.00	0.95	1.00
Satd. Flow (prot)		1531	1504						3538	1583	1770	3539
Flt Permitted		0.99	1.00						0.95	1.00	0.95	1.00
Satd. Flow (perm)		1531	1504						3375	1583	1770	3539
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	20	5	358	0	0	0	2	0	450	72	82	228
RTOR Reduction (vph)	0	134	152	0	0	0	0	0	0	42	0	0
Lane Group Flow (vph)	0	59	38	0	0	0	0	0	452	30	82	228
Turn Type	Perm	NA	Perm				Perm		NA	Perm	Prot	NA
Protected Phases		4							2		1	6
Permitted Phases	4		4				2			2		
Actuated Green, G (s)		7.6	7.6						12.3	12.3	4.3	21.1
Effective Green, g (s)		7.6	7.6						12.3	12.3	4.3	21.1
Actuated g/C Ratio		0.20	0.20						0.33	0.33	0.11	0.56
Clearance Time (s)		4.5	4.5						4.5	4.5	4.5	4.5
Vehicle Extension (s)		3.0	3.0						3.0	3.0	3.0	3.0
Lane Grp Cap (vph)		308	303						1101	516	201	1980
v/s Ratio Prot											c0.05	0.06
v/s Ratio Perm		0.04	0.03						c0.13	0.02		
v/c Ratio		0.19	0.13						0.41	0.06	0.41	0.12
Uniform Delay, d1		12.5	12.3						9.9	8.7	15.5	3.9
Progression Factor		1.00	1.00						1.00	1.00	1.00	1.00
Incremental Delay, d2		0.3	0.2						0.3	0.0	1.4	0.0
Delay (s)		12.8	12.5						10.1	8.8	16.9	3.9
Level of Service		B	B						B	A	B	A
Approach Delay (s)		12.7			0.0				9.9			7.4
Approach LOS		B			A				A			A

Intersection Summary				
HCM 2000 Control Delay	10.1	HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio	0.34			
Actuated Cycle Length (s)	37.7	Sum of lost time (s)	13.5	
Intersection Capacity Utilization	37.0%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	0
Future Volume (vph)	0
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.92
Adj. Flow (vph)	0
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

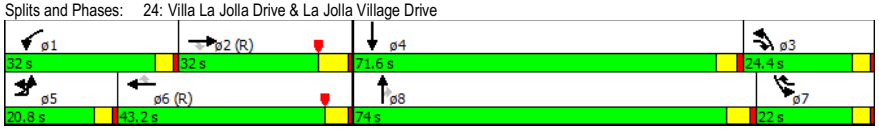
Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	68	1019	166	920	948	821	183	1115	654	692	297
Future Volume (vph)	68	1019	166	920	948	821	183	1115	654	692	297
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA
Protected Phases	5	2	3	1	6	7	3	8		7	4
Permitted Phases			2			6			8		
Detector Phase	5	2	3	1	6	7	3	8	8	7	4
Switch Phase											
Minimum Initial (s)	4.0	10.0	4.0	4.0	10.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.4	16.4	22.4	8.4	15.3	8.4	22.4	9.5	9.5	8.4	8.9
Total Split (s)	20.8	32.0	24.4	32.0	43.2	22.0	24.4	74.0	74.0	22.0	71.6
Total Split (%)	13.0%	20.0%	15.3%	20.0%	27.0%	13.8%	15.3%	46.3%	46.3%	13.8%	44.8%
Yellow Time (s)	3.4	5.4	3.4	3.4	4.3	3.4	3.4	4.5	4.5	3.4	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	6.4	4.4	4.4	5.3	4.4	4.4	5.5	5.5	4.4	4.9
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	C-Max	None	None	None	None	None	None

Intersection Summary

Cycle Length: 160
Actuated Cycle Length: 160
Offset: 4 (3%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 24: Villa La Jolla Drive & La Jolla Village Drive



Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	65	68	1019	166	920	948	821	183	1115	654	692	297
Future Volume (vph)	65	68	1019	166	920	948	821	183	1115	654	692	297
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.4	6.4	4.4	4.4	5.3	4.4	4.4	5.5	5.5	4.4	4.9
Lane Util. Factor		1.00	0.91	1.00	0.97	0.91	0.88	0.97	0.95	0.95	0.97	1.00
Frt		1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99	0.85	1.00	0.97
Flt Protected		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)		1770	5085	1583	3433	5085	2787	3433	1755	1504	3433	1812
Flt Permitted		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Satd. Flow (perm)		1770	5085	1583	3433	5085	2787	3433	1755	1504	3433	1812
Peak-hour factor, PHF	0.92	0.93	0.93	0.93	0.95	0.95	0.95	0.89	0.89	0.89	0.88	0.88
Adj. Flow (vph)	71	73	1096	178	968	998	864	206	1253	735	786	338
RTOR Reduction (vph)	0	0	0	87	0	0	116	0	1	130	0	7
Lane Group Flow (vph)	0	144	1096	91	968	998	748	206	1326	531	786	406
Turn Type	Prot	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA
Protected Phases	5	5	2	3	1	6	7	3	8		7	4
Permitted Phases				2			6			8		
Actuated Green, G (s)		15.3	25.6	70.3	27.6	39.0	56.6	44.7	68.5	68.5	17.6	42.0
Effective Green, g (s)		15.3	25.6	70.3	27.6	39.0	56.6	44.7	68.5	68.5	17.6	42.0
Actuated g/C Ratio		0.10	0.16	0.44	0.17	0.24	0.35	0.28	0.43	0.43	0.11	0.26
Clearance Time (s)		4.4	6.4	4.4	4.4	5.3	4.4	4.4	5.5	5.5	4.4	4.9
Vehicle Extension (s)		2.0	4.4	2.0	2.0	4.7	2.0	2.0	3.3	3.3	2.0	2.0
Lane Grp Cap (vph)		169	813	695	592	1239	985	959	751	643	377	475
v/s Ratio Prot		0.08	c0.22	0.04	c0.28	0.20	0.08	0.06	c0.76		c0.23	0.22
v/s Ratio Perm				0.02			0.18			0.35		
v/c Ratio		0.85	1.35	0.13	1.64	0.81	0.76	0.21	1.77	0.83	2.08	0.86
Uniform Delay, d1		71.2	67.2	26.7	66.2	56.9	45.7	44.2	45.8	40.5	71.2	56.1
Progression Factor		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2		30.7	164.8	0.0	293.4	5.7	3.0	0.0	349.9	8.6	497.2	13.6
Delay (s)		101.9	232.0	26.7	359.6	62.6	48.7	44.2	395.6	49.1	568.4	69.7
Level of Service		F	F	C	F	E	D	D	F	D	F	E
Approach Delay (s)			193.0			160.0			258.2			396.6
Approach LOS			F			F			F			F

Intersection Summary			
HCM 2000 Control Delay	231.4	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.70		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	20.7
Intersection Capacity Utilization	154.8%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	66
Future Volume (vph)	66
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.88
Adj. Flow (vph)	75
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

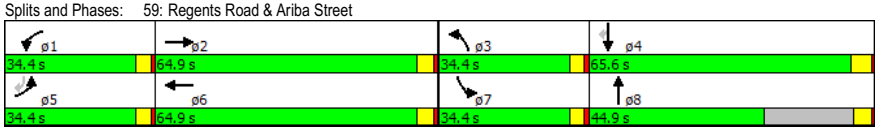
Intersection Summary

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	37	20	52	47	255	808	45	562	66
Future Volume (vph)	37	20	52	47	255	808	45	562	66
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA	custom
Protected Phases	5	2	1	6	3	8	7	4	
Permitted Phases									5 4
Detector Phase	5	2	1	6	3	8	7	4	5 4
Switch Phase									
Minimum Initial (s)	4.0	7.0	4.0	7.0	4.0	7.0	4.0	7.0	
Minimum Split (s)	8.4	11.9	8.4	11.9	8.4	11.9	8.4	12.6	
Total Split (s)	34.4	64.9	34.4	64.9	34.4	44.9	34.4	65.6	
Total Split (%)	17.3%	32.6%	17.3%	32.6%	17.3%	22.5%	17.3%	32.9%	
Yellow Time (s)	3.4	3.9	3.4	3.9	3.4	3.9	3.4	4.6	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.4	4.9	4.4	4.9	4.4	4.9	4.4	5.6	
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	None	None	None	None	None	

Intersection Summary

Cycle Length: 199.3
Actuated Cycle Length: 86.2
Natural Cycle: 55
Control Type: Actuated-Uncoordinated

Splits and Phases: 59: Regents Road & Ariba Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	37	20	322	52	47	18	255	808	159	45	562	66
Future Volume (vph)	37	20	322	52	47	18	255	808	159	45	562	66
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	4.9		4.4	4.9		4.4	5.6	4.4
Lane Util. Factor	1.00	0.95		1.00	0.95		0.97	0.95		1.00	0.95	1.00
Frt	1.00	0.86		1.00	0.96		1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	3040		1770	3393		3433	3452		1770	3539	1583
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1770	3040		1770	3393		3433	3452		1770	3539	1583
Peak-hour factor, PHF	0.85	0.85	0.85	0.71	0.71	0.71	0.88	0.88	0.88	0.87	0.87	0.87
Adj. Flow (vph)	44	24	379	73	66	25	290	918	181	52	646	76
RTOR Reduction (vph)	0	317	0	0	21	0	0	6	0	0	0	40
Lane Group Flow (vph)	44	86	0	73	70	0	290	1093	0	52	646	36
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	custom
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases												5 4
Actuated Green, G (s)	7.1	14.5		7.3	14.7		12.8	41.4		6.3	34.2	46.9
Effective Green, g (s)	7.1	14.5		7.3	14.7		12.8	41.4		6.3	34.2	41.3
Actuated g/C Ratio	0.08	0.16		0.08	0.17		0.15	0.47		0.07	0.39	0.47
Clearance Time (s)	4.4	4.9		4.4	4.9		4.4	4.9		4.4	5.6	
Vehicle Extension (s)	2.0	6.3		2.0	5.9		2.0	4.8		2.0	4.4	
Lane Grp Cap (vph)	142	500		146	566		498	1622		126	1373	742
v/s Ratio Prot	0.02	c0.03		c0.04	0.02		c0.08	c0.32		0.03	0.18	
v/s Ratio Perm												0.02
v/c Ratio	0.31	0.17		0.50	0.12		0.58	0.67		0.41	0.47	0.05
Uniform Delay, d1	38.2	31.6		38.7	31.2		35.2	18.1		39.1	20.2	12.7
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	0.5	0.5		1.0	0.3		1.1	1.4		0.8	0.4	0.0
Delay (s)	38.6	32.1		39.6	31.5		36.3	19.5		39.9	20.6	12.7
Level of Service	D	C		D	C		D	B		D	C	B
Approach Delay (s)		32.8			35.1			23.0			21.1	
Approach LOS		C			D			C			C	

Intersection Summary

HCM 2000 Control Delay	24.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	88.1	Sum of lost time (s)	19.3
Intersection Capacity Utilization	60.6%	ICU Level of Service	B
Analysis Period (min)	15		

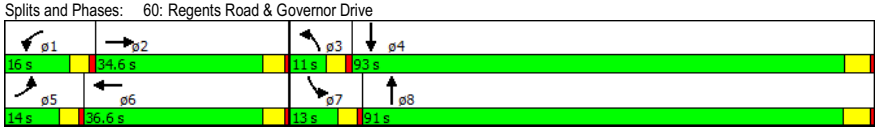
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	106	40	263	74	24	993	165	687
Future Volume (vph)	106	40	263	74	24	993	165	687
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	5	2	1	6	3	8	7	4
Permitted Phases								
Detector Phase	5	2	1	6	3	8	7	4
Switch Phase								
Minimum Initial (s)	4.0	4.0	4.0	7.0	5.0	7.0	5.0	4.0
Minimum Split (s)	8.4	32.9	8.4	33.9	9.5	34.8	9.5	35.5
Total Split (s)	14.0	34.6	16.0	36.6	11.0	91.0	13.0	93.0
Total Split (%)	9.1%	22.4%	10.3%	23.7%	7.1%	58.9%	8.4%	60.2%
Yellow Time (s)	3.4	3.9	3.4	3.9	3.5	4.8	3.5	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	4.9	4.4	4.9	4.5	5.8	4.5	5.5
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Min	None	Min	None	None	None	None

Intersection Summary

Cycle Length: 154.6
Actuated Cycle Length: 98.4
Natural Cycle: 100
Control Type: Actuated-Uncoordinated

Splits and Phases: 60: Regents Road & Governor Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	106	40	39	263	74	123	24	993	84	165	687	84
Future Volume (vph)	106	40	39	263	74	123	24	993	84	165	687	84
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	4.9		4.5	5.8		4.5	5.5	
Lane Util. Factor	1.00	0.95		0.97	0.95		1.00	0.95		0.97	0.95	
Frt	1.00	0.93		1.00	0.91		1.00	0.99		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3277		3433	3208		1770	3498		3433	3481	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	3277		3433	3208		1770	3498		3433	3481	
Peak-hour factor, PHF	0.90	0.90	0.90	0.86	0.86	0.86	0.84	0.84	0.84	0.83	0.83	0.83
Adj. Flow (vph)	118	44	43	306	86	143	29	1182	100	199	828	101
RTOR Reduction (vph)	0	39	0	0	115	0	0	4	0	0	6	0
Lane Group Flow (vph)	118	48	0	306	114	0	29	1278	0	199	923	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases												
Actuated Green, G (s)	9.8	9.3		11.8	11.3		3.6	50.8		8.6	56.1	
Effective Green, g (s)	9.8	9.3		11.8	11.3		3.6	50.8		8.6	56.1	
Actuated g/C Ratio	0.10	0.09		0.12	0.11		0.04	0.51		0.09	0.56	
Clearance Time (s)	4.4	4.9		4.4	4.9		4.5	5.8		4.5	5.5	
Vehicle Extension (s)	2.0	4.5		2.0	5.0		3.0	4.6		3.0	2.0	
Lane Grp Cap (vph)	173	304		404	362		63	1775		294	1950	
v/s Ratio Prot	0.07	0.01		c0.09	c0.04		0.02	c0.37		c0.06	0.27	
v/s Ratio Perm												
v/c Ratio	0.68	0.16		0.76	0.31		0.46	0.72		0.68	0.47	
Uniform Delay, d1	43.6	41.8		42.8	40.8		47.3	19.1		44.4	13.2	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	8.5	0.4		7.1	1.0		5.2	1.7		6.1	0.1	
Delay (s)	52.2	42.2		49.8	41.9		52.5	20.8		50.5	13.2	
Level of Service	D	D		D	D		D	C		D	B	
Approach Delay (s)		47.9			46.4			21.5			19.8	
Approach LOS		D			D			C			B	

Intersection Summary

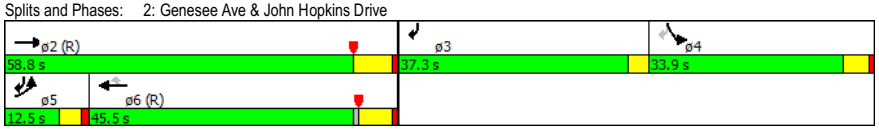
HCM 2000 Control Delay	26.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	100.1	Sum of lost time (s)	19.6
Intersection Capacity Utilization	63.0%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	ø3
Lane Configurations							
Traffic Volume (vph)	41	1291	710	209	1013	120	
Future Volume (vph)	41	1291	710	209	1013	120	
Turn Type	Prot	NA	NA	Perm	Prot	pt+ov	
Protected Phases	5	2	6		4	3 5	3
Permitted Phases				6		4	
Detector Phase	5	2	6	6	4	3 5	
Switch Phase							
Minimum Initial (s)	4.0	10.0	10.0	10.0	7.0		4.0
Minimum Split (s)	9.5	16.7	15.9	15.9	11.9		7.0
Total Split (s)	12.5	58.8	45.5	45.5	33.9		37.3
Total Split (%)	9.6%	45.2%	35.0%	35.0%	26.1%		29%
Yellow Time (s)	3.4	5.7	4.9	4.9	3.9		3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		0.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	4.4	6.7	5.9	5.9	4.9		
Lead/Lag	Lead		Lag	Lag	Lag		Lead
Lead-Lag Optimize?	Yes		Yes	Yes	Yes		Yes
Recall Mode	None	C-Max	C-Max	C-Max	None		None
Act Effct Green (s)	6.9	52.1	41.6	41.6	46.1	79.5	
Actuated g/C Ratio	0.05	0.40	0.32	0.32	0.35	0.61	
v/c Ratio	0.48	0.69	0.43	0.24	1.04	0.15	
Control Delay	77.0	20.8	33.0	5.9	76.8	9.4	
Queue Delay	0.0	0.9	0.0	0.0	0.0	0.0	
Total Delay	77.0	21.7	33.0	5.9	76.8	9.4	
LOS	E	C	C	A	E	A	
Approach Delay		23.4	26.8		69.6		
Approach LOS		C	C		E		

Intersection Summary			
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 22 (17%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.04			
Intersection Signal Delay: 40.7		Intersection LOS: D	
Intersection Capacity Utilization 63.5%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 2: Genesee Ave & John Hopkins Drive



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	41	1291	710	209	1013	120
Future Volume (vph)	41	1291	710	209	1013	120
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	6.7	5.9	5.9	4.9	3.0
Lane Util. Factor	1.00	0.91	0.86	0.88	0.97	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	5085	6408	2787	3433	1583
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	5085	6408	2787	3433	1583
Peak-hour factor, PHF	0.92	0.92	0.80	0.80	0.80	0.80
Adj. Flow (vph)	45	1403	888	261	1266	150
RTOR Reduction (vph)	0	0	0	177	0	10
Lane Group Flow (vph)	45	1403	888	84	1266	140
Turn Type	Prot	NA	NA	Perm	Prot	pt+ov
Protected Phases	5	2	6		4	3 5
Permitted Phases				6		4
Actuated Green, G (s)	6.9	52.1	41.6	41.6	46.1	70.2
Effective Green, g (s)	6.9	52.1	41.6	41.6	46.1	70.2
Actuated g/C Ratio	0.05	0.40	0.32	0.32	0.35	0.54
Clearance Time (s)	4.4	6.7	5.9	5.9	4.9	
Vehicle Extension (s)	2.0	4.0	3.9	3.9	5.0	
Lane Grp Cap (vph)	93	2037	2050	891	1217	891
v/s Ratio Prot	0.03	c0.28	0.14		c0.37	c0.03
v/s Ratio Perm				0.03		0.06
v/c Ratio	0.48	0.69	0.43	0.09	1.04	0.16
Uniform Delay, d1	59.8	32.2	34.9	31.0	41.9	15.0
Progression Factor	1.04	0.59	0.92	1.42	1.00	1.00
Incremental Delay, d2	1.3	1.7	0.6	0.2	36.9	0.0
Delay (s)	63.6	20.7	32.7	44.1	78.8	15.1
Level of Service	E	C	C	D	E	B
Approach Delay (s)		22.0	35.3		72.1	
Approach LOS		C	D		E	

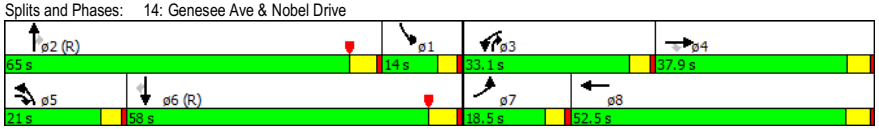
Intersection Summary			
HCM 2000 Control Delay	43.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	18.2
Intersection Capacity Utilization	63.5%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	259	508	329	406	845	294	518	172	136	1457	155
Future Volume (vph)	259	508	329	406	845	294	518	172	136	1457	155
Turn Type	Prot	NA	pm+ov	Prot	NA	Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	7	4	5	3	8	5	2	3	1	6	
Permitted Phases			4					2			6
Detector Phase	7	4	5	3	8	5	2	3	1	6	6
Switch Phase											
Minimum Initial (s)	4.0	10.0	4.0	4.0	10.0	4.0	10.0	4.0	4.0	10.0	10.0
Minimum Split (s)	8.4	37.9	8.4	8.4	40.1	8.4	35.7	8.4	8.4	38.9	38.9
Total Split (s)	18.5	37.9	21.0	33.1	52.5	21.0	65.0	33.1	14.0	58.0	58.0
Total Split (%)	12.3%	25.3%	14.0%	22.1%	35.0%	14.0%	43.3%	22.1%	9.3%	38.7%	38.7%
Yellow Time (s)	3.4	3.9	3.4	3.4	4.1	3.4	4.7	3.4	3.4	4.9	4.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	4.9	4.4	4.4	5.1	4.4	5.7	4.4	4.4	5.9	5.9
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	None	None	C-Max	C-Max
Act Effct Green (s)	13.9	36.9	58.1	24.8	47.6	16.3	59.3	85.4	9.6	52.4	52.4
Actuated g/C Ratio	0.09	0.25	0.39	0.17	0.32	0.11	0.40	0.57	0.06	0.35	0.35
v/c Ratio	0.90	0.64	0.52	0.85	0.99	0.91	0.30	0.21	0.74	0.98	0.29
Control Delay	105.9	64.3	22.4	75.2	74.3	77.6	21.1	10.9	86.8	63.0	19.0
Queue Delay	0.0	0.0	0.0	0.0	17.5	0.0	0.0	0.0	0.0	5.9	0.0
Total Delay	105.9	64.3	22.4	75.2	91.9	77.6	21.1	10.9	86.8	68.9	19.0
LOS	F	E	C	E	F	E	C	B	F	E	B
Approach Delay		61.5			86.8		36.2			65.8	
Approach LOS		E			F		D			E	

Intersection Summary			
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 40 (27%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow			
Natural Cycle: 130			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.99			
Intersection Signal Delay: 64.9		Intersection LOS: E	
Intersection Capacity Utilization 86.2%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 14: Genesee Ave & Nobel Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	259	508	329	406	845	77	294	518	172	136	1457	155
Future Volume (vph)	259	508	329	406	845	77	294	518	172	136	1457	155
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9	4.4	4.4	5.1		4.4	5.7	4.4	4.4	5.9	5.9
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95		0.97	0.91	1.00	0.97	0.91	1.00
Frt	1.00	1.00	0.85	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	3539	1583	3433	3495		3433	5085	1583	3433	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3539	1583	3433	3495		3433	5085	1583	3433	5085	1583
Peak-hour factor, PHF	0.91	0.91	0.91	0.84	0.84	0.84	0.87	0.87	0.87	0.84	0.84	0.84
Adj. Flow (vph)	285	558	362	483	1006	92	338	595	198	162	1735	185
RTOR Reduction (vph)	0	0	82	0	5	0	0	0	25	0	0	75
Lane Group Flow (vph)	285	558	280	483	1093	0	338	595	173	162	1735	110
Turn Type	Prot	NA	pm+ov	Prot	NA		Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	7	4	5	3	8		5	2	3	1	6	
Permitted Phases			4						2			6
Actuated Green, G (s)	13.9	36.9	53.2	24.8	47.6		16.3	59.3	84.1	9.6	52.4	52.4
Effective Green, g (s)	13.9	36.9	53.2	24.8	47.6		16.3	59.3	84.1	9.6	52.4	52.4
Actuated g/C Ratio	0.09	0.25	0.35	0.17	0.32		0.11	0.40	0.56	0.06	0.35	0.35
Clearance Time (s)	4.4	4.9	4.4	4.4	5.1		4.4	5.7	4.4	4.4	5.9	5.9
Vehicle Extension (s)	2.0	4.0	2.0	2.0	2.1		2.0	8.0	2.0	2.0	4.0	4.0
Lane Grp Cap (vph)	318	870	561	567	1109		373	2010	887	219	1776	552
v/s Ratio Prot	0.08	0.16	0.05	c0.14	c0.31		c0.10	0.12	0.03	0.05	c0.34	
v/s Ratio Perm			0.12						0.08			0.07
v/c Ratio	0.90	0.64	0.50	0.85	0.99		0.91	0.30	0.19	0.74	0.98	0.20
Uniform Delay, d1	67.3	50.6	38.0	60.8	50.9		66.1	31.1	16.2	69.0	48.2	34.1
Progression Factor	1.20	1.18	0.87	1.00	1.00		0.76	0.66	1.68	1.04	1.03	1.34
Incremental Delay, d2	22.6	1.6	0.2	11.4	23.3		23.3	0.4	0.0	8.0	13.6	0.6
Delay (s)	103.3	61.4	33.2	72.2	74.2		73.6	21.0	27.3	79.8	63.2	46.5
Level of Service	F	E	C	E	E		E	C	C	E	E	D
Approach Delay (s)		62.9			73.6			37.8			63.0	
Approach LOS		E			E			D			E	

Intersection Summary					
HCM 2000 Control Delay	61.0	HCM 2000 Level of Service	E		
HCM 2000 Volume to Capacity ratio	0.97				
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	19.8		
Intersection Capacity Utilization	86.2%	ICU Level of Service	E		
Analysis Period (min)	15				

c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	85	32	141	190	68	74	87	859	39	2162
Future Volume (vph)	85	32	141	190	68	74	87	859	39	2162
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA	Prot	NA
Protected Phases		8			4		1	6	5	2
Permitted Phases	8		8	4		4				
Detector Phase	8	8	8	4	4	4	1	6	5	2
Switch Phase										
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	10.0	4.0	10.0
Minimum Split (s)	8.9	8.9	8.9	8.9	8.9	8.9	8.4	15.7	8.4	15.9
Total Split (s)	49.0	49.0	49.0	49.0	49.0	49.0	15.0	87.2	13.8	86.0
Total Split (%)	32.7%	32.7%	32.7%	32.7%	32.7%	32.7%	10.0%	58.1%	9.2%	57.3%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.9	3.9	3.4	4.7	3.4	4.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.9	4.9		4.9	4.9	4.4	5.7	4.4	5.9
Lead/Lag							Lead	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	None	C-Max
Act Effct Green (s)		42.6	42.6		42.6	42.6	10.3	85.8	8.4	81.9
Actuated g/C Ratio		0.28	0.28		0.28	0.28	0.07	0.57	0.06	0.55
v/c Ratio		0.76	0.30		0.97	0.18	0.84	0.35	0.43	0.93
Control Delay		75.2	10.9		94.5	7.6	128.9	13.3	87.2	49.9
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		75.2	10.9		94.5	7.6	128.9	13.3	87.2	49.9
LOS		E	B		F	A	F	B	F	D
Approach Delay		40.1			75.1			23.7		50.5
Approach LOS		D			E			C		D

Intersection Summary			
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 21 (14%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow			
Natural Cycle: 100			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.97			
Intersection Signal Delay: 45.3		Intersection LOS: D	
Intersection Capacity Utilization 83.0%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 15: Genesee Ave & Decoro Street

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	85	32	141	190	68	74	87	859	15	39	2162	136
Future Volume (vph)	85	32	141	190	68	74	87	859	15	39	2162	136
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9	4.9		4.9	4.9	4.4	5.7		4.4	5.9	
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.91		1.00	0.91	
Frt		1.00	0.85		1.00	0.85	1.00	1.00		1.00	0.99	
Flt Protected		0.97	1.00		0.96	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1798	1583		1797	1583	1770	5072		1770	5040	
Flt Permitted		0.34	1.00		0.63	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)		640	1583		1175	1583	1770	5072		1770	5040	
Peak-hour factor, PHF	0.85	0.85	0.85	0.80	0.80	0.80	0.85	0.85	0.85	0.90	0.90	0.90
Adj. Flow (vph)	100	38	166	238	85	92	102	1011	18	43	2402	151
RTOR Reduction (vph)	0	0	99	0	0	67	0	1	0	0	5	0
Lane Group Flow (vph)	0	138	67	0	323	26	102	1028	0	43	2548	0
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA		Prot	NA	
Protected Phases		8			4		1	6		5	2	
Permitted Phases	8		8	4		4						
Actuated Green, G (s)		42.6	42.6		42.6	42.6	10.3	84.9		7.5	81.9	
Effective Green, g (s)		42.6	42.6		42.6	42.6	10.3	84.9		7.5	81.9	
Actuated g/C Ratio		0.28	0.28		0.28	0.28	0.07	0.57		0.05	0.55	
Clearance Time (s)		4.9	4.9		4.9	4.9	4.4	5.7		4.4	5.9	
Vehicle Extension (s)		2.0	2.0		2.0	2.0	2.0	4.3		2.0	3.7	
Lane Grp Cap (vph)		181	449		333	449	121	2870		88	2751	
v/s Ratio Prot							c0.06	0.20		0.02	c0.51	
v/s Ratio Perm		0.22	0.04		c0.27	0.02						
v/c Ratio		0.76	0.15		0.97	0.06	0.84	0.36		0.49	0.93	
Uniform Delay, d1		49.1	40.2		53.1	39.1	69.1	17.7		69.4	31.3	
Progression Factor		1.00	1.00		1.00	1.00	1.23	0.72		1.18	1.47	
Incremental Delay, d2		15.6	0.1		40.5	0.0	35.8	0.3		0.7	3.6	
Delay (s)		64.7	40.2		93.6	39.1	121.0	13.1		82.7	49.6	
Level of Service		E	D		F	D	F	B		F	D	
Approach Delay (s)		51.3			81.4			22.8			50.1	
Approach LOS		D			F			C			D	

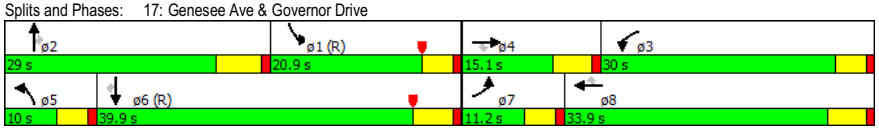
Intersection Summary				
HCM 2000 Control Delay	46.2	HCM 2000 Level of Service	D	
HCM 2000 Volume to Capacity ratio	0.93			
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	15.2	
Intersection Capacity Utilization	83.0%	ICU Level of Service	E	
Analysis Period (min)	15			

c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	94	187	84	524	232	129	144	611	429	452	1622	227
Future Volume (vph)	94	187	84	524	232	129	144	611	429	452	1622	227
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	4.0	8.0	8.0	4.0	8.0	8.0	4.0	8.0	8.0	4.0	8.0	8.0
Minimum Split (s)	8.4	13.2	13.2	8.4	13.2	13.2	8.4	13.9	13.9	8.4	13.4	13.4
Total Split (s)	11.2	15.1	15.1	30.0	33.9	33.9	10.0	29.0	29.0	20.9	39.9	39.9
Total Split (%)	11.8%	15.9%	15.9%	31.6%	35.7%	35.7%	10.5%	30.5%	30.5%	22.0%	42.0%	42.0%
Yellow Time (s)	3.4	4.2	4.2	3.4	4.2	4.2	3.4	4.9	4.9	3.4	4.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.2	5.2	4.4	5.2	5.2	4.4	5.9	5.9	4.4	5.4	5.4
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lag	Lead	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	Min	Min	C-Max	C-Max	C-Max
Act Effct Green (s)	6.3	9.3	9.3	20.8	25.7	25.7	7.5	20.1	20.1	24.9	38.0	38.0
Actuated g/C Ratio	0.07	0.10	0.10	0.22	0.27	0.27	0.08	0.21	0.21	0.26	0.40	0.40
v/c Ratio	0.43	0.57	0.26	0.80	0.25	0.26	0.58	0.62	0.66	0.57	0.90	0.36
Control Delay	48.5	47.7	1.8	43.4	27.7	2.7	52.3	36.3	8.1	35.7	34.9	12.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	48.5	47.7	1.8	43.4	27.7	2.7	52.3	36.3	8.1	35.7	34.9	12.3
LOS	D	D	A	D	C	A	D	D	A	D	C	B
Approach Delay		37.4			33.4			28.1			32.9	
Approach LOS		D			C			C			C	

Intersection Summary			
Cycle Length: 95			
Actuated Cycle Length: 95			
Offset: 0 (0%), Referenced to phase 1:SBL and 6:SBT, Start of Yellow			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.90			
Intersection Signal Delay: 32.1		Intersection LOS: C	
Intersection Capacity Utilization 73.2%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 17: Genesee Ave & Governor Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	94	187	84	524	232	129	144	611	429	452	1622	227
Future Volume (vph)	94	187	84	524	232	129	144	611	429	452	1622	227
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	16	12	12	12	12	12	12	12
Total Lost time (s)	4.4	5.2	5.2	4.4	5.2	5.2	4.4	5.9	5.9	4.4	5.4	5.4
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.91	1.00	0.97	0.91	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	3539	1583	3433	4011	1583	3433	5085	1583	3433	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3539	1583	3433	4011	1583	3433	5085	1583	3433	5085	1583
Peak-hour factor, PHF	0.95	0.95	0.95	0.87	0.87	0.87	0.92	0.92	0.92	0.89	0.89	0.89
Adj. Flow (vph)	99	197	88	602	267	148	157	664	466	508	1822	255
RTOR Reduction (vph)	0	0	79	0	0	108	0	0	367	0	0	77
Lane Group Flow (vph)	99	197	9	602	267	40	157	664	99	508	1822	178
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Actuated Green, G (s)	5.3	9.3	9.3	21.7	25.7	25.7	7.5	20.1	20.1	24.0	37.1	37.1
Effective Green, g (s)	5.3	9.3	9.3	21.7	25.7	25.7	7.5	20.1	20.1	24.0	37.1	37.1
Actuated g/C Ratio	0.06	0.10	0.10	0.23	0.27	0.27	0.08	0.21	0.21	0.25	0.39	0.39
Clearance Time (s)	4.4	5.2	5.2	4.4	5.2	5.2	4.4	5.9	5.9	4.4	5.4	5.4
Vehicle Extension (s)	2.0	2.3	2.3	2.0	3.8	3.8	2.0	2.9	2.9	2.0	3.5	3.5
Lane Grp Cap (vph)	191	346	154	784	1085	428	271	1075	334	867	1985	618
v/s Ratio Prot	0.03	c0.06		c0.18	c0.07		0.05	c0.13		0.15	c0.36	
v/s Ratio Perm			0.01			0.03			0.06			0.11
v/c Ratio	0.52	0.57	0.06	0.77	0.25	0.09	0.58	0.62	0.30	0.59	0.92	0.29
Uniform Delay, d1	43.6	40.9	38.9	34.3	27.1	25.9	42.2	34.0	31.5	31.1	27.5	19.9
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.0	1.6	0.1	4.1	0.2	0.1	1.9	1.0	0.5	2.9	8.3	1.2
Delay (s)	44.6	42.5	39.0	38.4	27.2	26.1	44.1	35.0	32.0	34.0	35.8	21.1
Level of Service	D	D	D	D	C	C	D	C	C	C	D	C
Approach Delay (s)		42.2			33.7			35.0			34.0	
Approach LOS		D			C			D			C	

Intersection Summary					
HCM 2000 Control Delay		34.8	HCM 2000 Level of Service		C
HCM 2000 Volume to Capacity ratio		0.81			
Actuated Cycle Length (s)		95.0	Sum of lost time (s)		19.9
Intersection Capacity Utilization		73.2%	ICU Level of Service		D
Analysis Period (min)		15			
c Critical Lane Group					

Lane Group	EBR	NBL	NBT	SBT	SBR
Lane Configurations					
Traffic Volume (vph)	462	314	558	1802	447
Future Volume (vph)	462	314	558	1802	447
Turn Type	Perm	Prot	NA	NA	Perm
Protected Phases		5	2	6	
Permitted Phases	4				6
Detector Phase	4	5	2	6	6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	36.5	9.5	22.5	32.5	32.5
Total Split (s)	36.5	27.5	113.5	86.0	86.0
Total Split (%)	24.3%	18.3%	75.7%	57.3%	57.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5
Lead/Lag		Lead		Lag	Lag
Lead-Lag Optimize?		Yes		Yes	Yes
Recall Mode	None	None	Min	Min	Min
Act Effct Green (s)	13.3	23.1	109.3	81.7	81.7
Actuated g/C Ratio	0.10	0.18	0.83	0.62	0.62
v/c Ratio	0.85	1.11	0.21	0.90	0.47
Control Delay	26.9	134.7	2.9	29.4	10.1
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	26.9	134.7	2.9	29.4	10.1
LOS	C	F	A	C	B
Approach Delay			50.4	25.5	
Approach LOS			D	C	

Intersection Summary			
Cycle Length: 150			
Actuated Cycle Length: 131.6			
Natural Cycle: 150			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 1.11			
Intersection Signal Delay: 31.7		Intersection LOS: C	
Intersection Capacity Utilization 74.7%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 18: Genesee Ave & SR-52 Ramp

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	462	314	558	1802	447
Future Volume (vph)	0	462	314	558	1802	447
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5	4.5	4.5	4.5	4.5
Lane Util. Factor		0.88	1.00	0.95	0.95	1.00
Frt		0.85	1.00	1.00	1.00	0.85
Flt Protected		1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)		2787	1770	3539	3539	1583
Flt Permitted		1.00	0.95	1.00	1.00	1.00
Satd. Flow (perm)		2787	1770	3539	3539	1583
Peak-hour factor, PHF	0.81	0.81	0.91	0.91	0.91	0.91
Adj. Flow (vph)	0	570	345	613	1980	491
RTOR Reduction (vph)	0	388	0	0	0	69
Lane Group Flow (vph)	0	182	345	613	1980	422
Turn Type		Perm	Prot	NA	NA	Perm
Protected Phases			5	2	6	
Permitted Phases		4				6
Actuated Green, G (s)		13.3	23.0	109.2	81.7	81.7
Effective Green, g (s)		13.3	23.0	109.2	81.7	81.7
Actuated g/C Ratio		0.10	0.17	0.83	0.62	0.62
Clearance Time (s)		4.5	4.5	4.5	4.5	4.5
Vehicle Extension (s)		3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)		281	309	2938	2198	983
v/s Ratio Prot			c0.19	0.17	c0.56	
v/s Ratio Perm		c0.07				0.27
v/c Ratio		0.65	1.12	0.21	0.90	0.43
Uniform Delay, d1		56.8	54.2	2.3	21.4	12.9
Progression Factor		1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2		5.0	86.3	0.0	5.6	0.3
Delay (s)		61.9	140.6	2.3	27.0	13.2
Level of Service		E	F	A	C	B
Approach Delay (s)	61.9			52.1	24.2	
Approach LOS	E			D	C	

Intersection Summary				
HCM 2000 Control Delay	36.3	HCM 2000 Level of Service	D	
HCM 2000 Volume to Capacity ratio	0.91			
Actuated Cycle Length (s)	131.5	Sum of lost time (s)	13.5	
Intersection Capacity Utilization	74.7%	ICU Level of Service	D	
Analysis Period (min)	15			

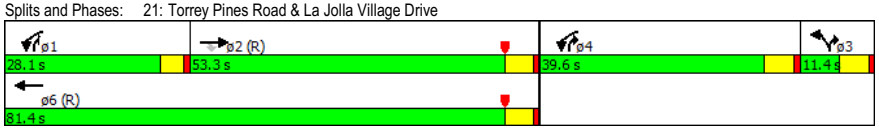
c Critical Lane Group

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	ø1	ø4
Lane Configurations								
Traffic Volume (vph)	1729	343	1401	772	128	1037		
Future Volume (vph)	1729	343	1401	772	128	1037		
Turn Type	NA	Perm	Prot	NA	Prot	custom		
Protected Phases	2		1 4	6	3	1 3 4	1	4
Permitted Phases		2						
Detector Phase	2	2	1 4	6	3	1 3 4		
Switch Phase								
Minimum Initial (s)	10.0	10.0		10.0	4.0		4.0	4.0
Minimum Split (s)	15.4	15.4		15.3	9.6		8.4	39.6
Total Split (s)	53.3	53.3		81.4	11.4		28.1	39.6
Total Split (%)	40.3%	40.3%		61.5%	8.6%		21%	30%
Yellow Time (s)	4.4	4.4		4.3	4.6		3.4	4.6
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			
Total Lost Time (s)	5.4	5.4		5.3	5.6			
Lead/Lag	Lag	Lag			Lag		Lead	Lead
Lead-Lag Optimize?					Yes			Yes
Recall Mode	C-Max	C-Max		C-Max	None		None	None
Act Effct Green (s)	47.9	47.9	58.9	76.1	5.8	74.7		
Actuated g/C Ratio	0.36	0.36	0.44	0.57	0.04	0.56		
v/c Ratio	1.04	0.60	1.03	0.30	0.94	0.73		
Control Delay	51.4	9.7	58.7	14.8	121.5	24.7		
Queue Delay	23.0	1.5	21.6	0.5	0.0	0.0		
Total Delay	74.4	11.2	80.3	15.2	121.5	24.7		
LOS	E	B	F	B	F	C		
Approach Delay	63.9			57.2	35.3			
Approach LOS	E			E	D			

Intersection Summary

Cycle Length: 132.4
Actuated Cycle Length: 132.4
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 140
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.04
Intersection Signal Delay: 55.1 — Intersection LOS: E
Intersection Capacity Utilization 89.9% — ICU Level of Service E
Analysis Period (min) 15

Splits and Phases: 21: Torrey Pines Road & La Jolla Village Drive



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1729	343	1401	772	128	1037
Future Volume (vph)	1729	343	1401	772	128	1037
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.4	5.4	4.4	5.3	5.6	4.4
Lane Util. Factor	0.91	1.00	0.97	0.91	0.97	0.88
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	5085	1583	3433	5085	3433	2787
Flt Permitted	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (perm)	5085	1583	3433	5085	3433	2787
Peak-hour factor, PHF	0.90	0.90	0.89	0.89	0.91	0.91
Adj. Flow (vph)	1921	381	1574	867	141	1140
RTOR Reduction (vph)	0	68	0	0	0	0
Lane Group Flow (vph)	1921	313	1574	867	141	1140
Turn Type	NA	Perm	Prot	NA	Prot	custom
Protected Phases	2		1 4	6	3	1 3 4
Permitted Phases		2				
Actuated Green, G (s)	47.9	47.9	57.7	76.1	5.8	74.7
Effective Green, g (s)	47.9	47.9	57.7	76.1	5.8	63.5
Actuated g/C Ratio	0.36	0.36	0.44	0.57	0.04	0.48
Clearance Time (s)	5.4	5.4		5.3	5.6	
Vehicle Extension (s)	5.5	5.5		8.0	2.0	
Lane Grp Cap (vph)	1839	572	1496	2922	150	1336
v/s Ratio Prot	c0.38		c0.46	0.17	c0.04	0.41
v/s Ratio Perm		0.20				
v/c Ratio	1.04	0.55	1.05	0.30	0.94	0.85
Uniform Delay, d1	42.2	33.6	37.4	14.4	63.1	30.3
Progression Factor	0.59	0.35	1.00	1.00	1.00	1.00
Incremental Delay, d2	25.5	1.1	38.3	0.3	54.5	5.3
Delay (s)	50.4	12.7	75.7	14.7	117.6	35.6
Level of Service	D	B	E	B	F	D
Approach Delay (s)	44.2			54.0	44.7	
Approach LOS	D			D	D	

Intersection Summary

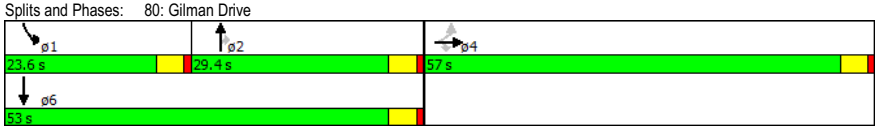
HCM 2000 Control Delay	48.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.04		
Actuated Cycle Length (s)	132.4	Sum of lost time (s)	21.0
Intersection Capacity Utilization	89.9%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBT	EBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	5	1020	413	123	166	969
Future Volume (vph)	5	1020	413	123	166	969
Turn Type	NA	Perm	NA	Perm	Prot	NA
Protected Phases	4		2		1	6
Permitted Phases		4		2		
Detector Phase	4	4	2	2	1	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	40.5	40.5	9.5	9.5	9.5	24.5
Total Split (s)	57.0	57.0	29.4	29.4	23.6	53.0
Total Split (%)	51.8%	51.8%	26.7%	26.7%	21.5%	48.2%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	None	None	Min	Min	None	Min
Act Effct Green (s)	35.8	35.8	18.3	18.3	13.7	36.9
Actuated g/C Ratio	0.43	0.43	0.22	0.22	0.17	0.45
v/c Ratio	0.77	0.78	0.63	0.33	0.59	0.64
Control Delay	27.1	27.3	35.4	12.3	44.9	21.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.1
Total Delay	27.1	27.3	35.4	12.3	44.9	21.2
LOS	C	C	D	B	D	C
Approach Delay	27.2		30.1			24.7
Approach LOS	C		C			C

Intersection Summary			
Cycle Length: 110			
Actuated Cycle Length: 82.4			
Natural Cycle: 70			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.78			
Intersection Signal Delay: 26.8		Intersection LOS: C	
Intersection Capacity Utilization 76.4%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 80: Gilman Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	5	1020	0	0	0	0	413	123	166	969	0
Future Volume (vph)	8	5	1020	0	0	0	0	413	123	166	969	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5	4.5					4.5	4.5	4.5	4.5	
Lane Util. Factor		0.95	0.95					0.95	1.00	1.00	0.95	
Frt		0.85	0.85					1.00	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1510	1504					3539	1583	1770	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		1510	1504					3539	1583	1770	3539	
Peak-hour factor, PHF	0.97	0.97	0.97	0.25	0.25	0.25	0.83	0.83	0.83	0.96	0.96	0.96
Adj. Flow (vph)	8	5	1052	0	0	0	0	498	148	173	1009	0
RTOR Reduction (vph)	0	29	34	0	0	0	0	0	92	0	0	0
Lane Group Flow (vph)	0	499	503	0	0	0	0	498	56	173	1009	0
Turn Type	Perm	NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2			
Actuated Green, G (s)		35.8	35.8					18.7	18.7	13.7	36.9	
Effective Green, g (s)		35.8	35.8					18.7	18.7	13.7	36.9	
Actuated g/C Ratio		0.44	0.44					0.23	0.23	0.17	0.45	
Clearance Time (s)		4.5	4.5					4.5	4.5	4.5	4.5	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		661	659					810	362	296	1598	
v/s Ratio Prot								0.14		0.10	c0.29	
v/s Ratio Perm		0.33	c0.33						0.04			
v/c Ratio		0.76	0.76					0.61	0.16	0.58	0.63	
Uniform Delay, d1		19.3	19.4					28.3	25.2	31.4	17.2	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		4.9	5.2					1.4	0.2	2.9	0.8	
Delay (s)		24.2	24.6					29.7	25.4	34.3	18.0	
Level of Service		C	C					C	C	C	B	
Approach Delay (s)		24.4			0.0			28.7			20.4	
Approach LOS		C			A			C			C	

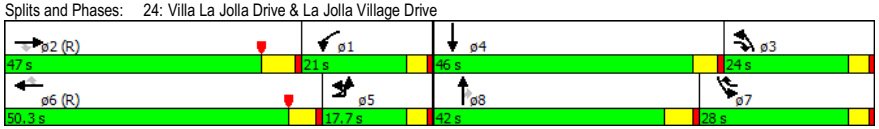
Intersection Summary					
HCM 2000 Control Delay		23.7	HCM 2000 Level of Service		C
HCM 2000 Volume to Capacity ratio		0.74			
Actuated Cycle Length (s)		81.7	Sum of lost time (s)		13.5
Intersection Capacity Utilization		76.4%	ICU Level of Service		D
Analysis Period (min)		15			

c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	57	1887	67	605	1115	390	451	237	662	1208	721
Future Volume (vph)	57	1887	67	605	1115	390	451	237	662	1208	721
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA
Protected Phases	5	2	3	1	6	7	3	8		7	4
Permitted Phases			2			6			8		
Detector Phase	5	2	3	1	6	7	3	8	8	7	4
Switch Phase											
Minimum Initial (s)	4.0	10.0	4.0	4.0	10.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.4	16.4	22.4	8.4	15.3	8.4	22.4	9.5	9.5	8.4	8.9
Total Split (s)	17.7	47.0	24.0	21.0	50.3	28.0	24.0	42.0	42.0	28.0	46.0
Total Split (%)	12.8%	34.1%	17.4%	15.2%	36.4%	20.3%	17.4%	30.4%	30.4%	20.3%	33.3%
Yellow Time (s)	3.4	5.4	3.4	3.4	4.3	3.4	3.4	4.5	4.5	3.4	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	6.4	4.4	4.4	5.3	4.4	4.4	5.5	5.5	4.4	4.9
Lead/Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	C-Max	None	None	None	None	None	None
Act Effct Green (s)	13.3	40.6	66.6	16.6	45.0	73.9	19.6	36.5	36.5	23.6	41.1
Actuated g/C Ratio	0.10	0.29	0.48	0.12	0.33	0.54	0.14	0.26	0.26	0.17	0.30
v/c Ratio	0.76	1.58	0.11	1.73	0.79	0.27	1.13	1.24	0.97	2.51	1.86
Control Delay	88.4	296.3	8.4	370.5	36.1	1.0	133.6	166.7	62.9	707.7	422.4
Queue Delay	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.5	14.2	0.0	0.0
Total Delay	88.4	296.5	8.4	370.5	36.1	1.0	133.6	167.2	77.1	707.7	422.4
LOS	F	F	A	F	D	A	F	F	E	F	F
Approach Delay		276.5			125.5			127.2			591.2
Approach LOS		F			F			F			F

Intersection Summary			
Cycle Length: 138			
Actuated Cycle Length: 138			
Offset: 44 (32%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow			
Natural Cycle: 150			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 2.51			
Intersection Signal Delay: 294.2		Intersection LOS: F	
Intersection Capacity Utilization 131.4%		ICU Level of Service H	
Analysis Period (min) 15			

Splits and Phases: 24: Villa La Jolla Drive & La Jolla Village Drive



Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	54	57	1887	67	605	1115	390	451	237	662	1208	721
Future Volume (vph)	54	57	1887	67	605	1115	390	451	237	662	1208	721
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.4	6.4	4.4	4.4	5.3	4.4	4.4	5.5	5.5	4.4	4.9
Lane Util. Factor		1.00	0.91	1.00	0.97	0.91	0.88	0.97	0.95	0.95	0.97	1.00
Frt		1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.93	0.85	1.00	0.98
Flt Protected		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)		1770	5085	1583	3433	5085	2787	3433	1639	1504	3433	1825
Flt Permitted		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Satd. Flow (perm)		1770	5085	1583	3433	5085	2787	3433	1639	1504	3433	1825
Peak-hour factor, PHF	0.92	0.80	0.80	0.80	0.85	0.85	0.85	0.82	0.82	0.82	0.82	0.82
Adj. Flow (vph)	59	71	2359	84	712	1312	459	550	289	807	1473	879
RTOR Reduction (vph)	0	0	0	31	0	0	231	0	26	145	0	4
Lane Group Flow (vph)	0	130	2359	53	712	1312	228	550	545	380	1473	1013
Turn Type	Prot	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA
Protected Phases	5	5	2	3	1	6	7	3	8		7	4
Permitted Phases				2			6			8		
Actuated Green, G (s)		13.3	40.6	60.2	16.6	45.0	68.6	19.6	36.5	36.5	23.6	41.1
Effective Green, g (s)		13.3	40.6	60.2	16.6	45.0	68.6	19.6	36.5	36.5	23.6	41.1
Actuated g/C Ratio		0.10	0.29	0.44	0.12	0.33	0.50	0.14	0.26	0.26	0.17	0.30
Clearance Time (s)		4.4	6.4	4.4	4.4	5.3	4.4	4.4	5.5	5.5	4.4	4.9
Vehicle Extension (s)		2.0	4.4	2.0	2.0	4.7	2.0	2.0	3.3	3.3	2.0	2.0
Lane Grp Cap (vph)		170	1496	741	412	1658	1474	487	433	397	587	543
v/s Ratio Prot		0.07	c0.46	0.01	c0.21	0.26	0.03	0.16	0.33		c0.43	c0.56
v/s Ratio Perm				0.02			0.06			0.25		
v/c Ratio		0.76	1.58	0.07	1.73	0.79	0.15	1.13	1.26	0.96	2.51	1.87
Uniform Delay, d1		60.8	48.7	22.6	60.7	42.2	18.9	59.2	50.8	50.0	57.2	48.5
Progression Factor		1.00	1.00	1.00	0.95	0.77	0.49	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2		16.7	262.8	0.0	336.5	3.5	0.0	81.3	134.2	34.0	684.3	396.3
Delay (s)		77.5	311.5	22.7	394.3	35.9	9.3	140.5	185.0	84.0	741.5	444.8
Level of Service		E	F	C	F	D	A	F	F	F	F	F
Approach Delay (s)			290.3			133.7			137.9			620.3
Approach LOS			F			F			F			F

Intersection Summary				
HCM 2000 Control Delay	310.1	HCM 2000 Level of Service	F	
HCM 2000 Volume to Capacity ratio	1.92			
Actuated Cycle Length (s)	138.0	Sum of lost time (s)	20.7	
Intersection Capacity Utilization	131.4%	ICU Level of Service	H	
Analysis Period (min)	15			

c Critical Lane Group

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	113
Future Volume (vph)	113
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.82
Adj. Flow (vph)	138
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

Intersection Summary

Lane Group	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Traffic Volume (vph)	395	1476	9	2439	365	700	569
Future Volume (vph)	395	1476	9	2439	365	700	569
Turn Type	Prot	NA	Prot	NA	Perm	Prot	Perm
Protected Phases	5	2	1	6		7	
Permitted Phases					6		7
Detector Phase	5	2	1	6	6	7	7
Switch Phase							
Minimum Initial (s)	4.0	10.0	4.0	10.0	10.0	10.0	10.0
Minimum Split (s)	8.4	16.3	8.4	29.4	29.4	38.4	38.4
Total Split (s)	34.4	66.3	24.4	65.4	65.4	44.4	44.4
Total Split (%)	23.9%	46.0%	16.9%	45.4%	45.4%	30.8%	30.8%
Yellow Time (s)	3.4	5.3	3.4	4.4	4.4	3.4	3.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	6.3	4.4	5.4	5.4	4.4	4.4
Lead/Lag	Lead	Lag	Lead	Lag	Lag		
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		
Recall Mode	None	Min	None	Min	Min	None	None
Act Effct Green (s)	24.7	85.9	6.4	60.0	60.0	40.0	40.0
Actuated g/C Ratio	0.18	0.62	0.05	0.43	0.43	0.29	0.29
v/c Ratio	0.81	0.59	0.12	1.02	0.46	0.89	1.03
Control Delay	66.0	17.3	68.2	62.7	4.0	59.4	68.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	66.0	17.3	68.2	62.7	4.0	59.4	68.4
LOS	E	B	E	E	A	E	E
Approach Delay		27.6		55.1		63.4	
Approach LOS		C		E		E	

Intersection Summary	
Cycle Length: 144.2	
Actuated Cycle Length: 139	
Natural Cycle: 130	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.03	
Intersection Signal Delay: 48.0	Intersection LOS: D
Intersection Capacity Utilization 78.7%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 34: Miramar Road & Eastgate Mall

34: Miramar Road & Eastgate Mall

Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Traffic Volume (vph)	395	1476	9	2439	365	700	569
Future Volume (vph)	395	1476	9	2439	365	700	569
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	6.3	4.4	5.4	5.4	4.4	4.4
Lane Util. Factor	0.97	0.91	1.00	0.86	1.00	0.97	1.00
Frt	1.00	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)	3433	5085	1770	6408	1583	3433	1583
Flt Permitted	0.95	1.00	0.95	1.00	1.00	0.95	1.00
Satd. Flow (perm)	3433	5085	1770	6408	1583	3433	1583
Peak-hour factor, PHF	0.80	0.80	0.92	0.86	0.86	0.80	0.80
Adj. Flow (vph)	494	1845	10	2836	424	875	711
RTOR Reduction (vph)	0	0	0	0	235	0	237
Lane Group Flow (vph)	494	1845	10	2836	189	875	474
Turn Type	Prot	NA	Prot	NA	Perm	Prot	Perm
Protected Phases	5	2	1	6		7	
Permitted Phases					6		7
Actuated Green, G (s)	24.7	85.9	1.5	63.6	63.6	40.0	40.0
Effective Green, g (s)	24.7	85.9	1.5	63.6	63.6	40.0	40.0
Actuated g/C Ratio	0.17	0.60	0.01	0.45	0.45	0.28	0.28
Clearance Time (s)	4.4	6.3	4.4	5.4	5.4	4.4	4.4
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	595	3065	18	2859	706	963	444
v/s Ratio Prot	c0.14	0.36	0.01	c0.44		0.25	
v/s Ratio Perm					0.12		c0.30
v/c Ratio	0.83	0.60	0.56	0.99	0.27	0.91	1.07
Uniform Delay, d1	56.9	17.6	70.2	39.2	24.8	49.5	51.2
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	9.6	0.3	32.3	14.9	0.2	12.1	61.6
Delay (s)	66.4	18.0	102.5	54.1	25.0	61.6	112.9
Level of Service	E	B	F	D	C	E	F
Approach Delay (s)		28.2		50.5		84.6	
Approach LOS		C		D		F	

Intersection Summary			
HCM 2000 Control Delay	50.8	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.99		
Actuated Cycle Length (s)	142.5	Sum of lost time (s)	15.1
Intersection Capacity Utilization	78.7%	ICU Level of Service	D
Analysis Period (min)	15		

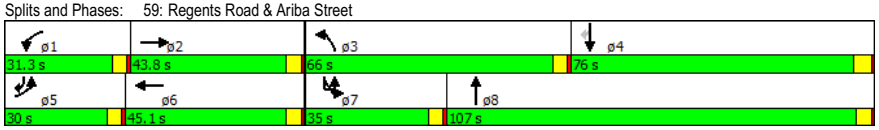
c Critical Lane Group

59: Regents Road & Ariba Street

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	35	42	116	51	687	802	59	1004	389
Future Volume (vph)	35	42	116	51	687	802	59	1004	389
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA	pm+ov
Protected Phases	5	2	1	6	3	8	7	4	5
Permitted Phases									4
Detector Phase	5	2	1	6	3	8	7	4	5
Switch Phase									
Minimum Initial (s)	4.0	7.0	4.0	7.0	4.0	7.0	4.0	7.0	4.0
Minimum Split (s)	8.4	32.9	8.4	36.9	8.4	28.9	8.4	37.6	8.4
Total Split (s)	30.0	43.8	31.3	45.1	66.0	107.0	35.0	76.0	30.0
Total Split (%)	13.8%	20.2%	14.4%	20.8%	30.4%	49.3%	16.1%	35.0%	13.8%
Yellow Time (s)	3.4	3.9	3.4	3.9	3.4	3.9	3.4	4.6	3.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	4.9	4.4	4.9	4.4	4.9	4.4	5.6	4.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None
Act Effct Green (s)	8.5	22.6	18.4	32.5	43.6	89.2	20.5	65.4	79.7
Actuated g/C Ratio	0.05	0.13	0.11	0.19	0.26	0.53	0.12	0.38	0.47
v/c Ratio	0.44	0.69	0.72	0.11	0.86	0.64	0.74	0.81	0.47
Control Delay	102.1	18.3	98.2	53.1	72.4	32.3	96.2	54.2	10.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
Total Delay	102.1	18.3	98.2	53.1	72.4	32.3	96.2	54.3	10.9
LOS	F	B	F	D	E	C	F	D	B
Approach Delay		23.9		82.8		48.1		47.3	
Approach LOS		C		F		D		D	

Intersection Summary			
Cycle Length: 217.1			
Actuated Cycle Length: 169.9			
Natural Cycle: 125			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.86			
Intersection Signal Delay: 46.2		Intersection LOS: D	
Intersection Capacity Utilization 85.7%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 59: Regents Road & Ariba Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	35	42	451	116	51	9	687	802	253	86	59	1004
Future Volume (vph)	35	42	451	116	51	9	687	802	253	86	59	1004
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	4.9		4.4	4.9			4.4	5.6
Lane Util. Factor	1.00	0.95		1.00	0.95		0.97	0.95			1.00	0.95
Frt	1.00	0.86		1.00	0.98		1.00	0.96			1.00	1.00
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			0.95	1.00
Satd. Flow (prot)	1770	3054		1770	3458		3433	3412			1770	3539
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00			0.95	1.00
Satd. Flow (perm)	1770	3054		1770	3458		3433	3412			1770	3539
Peak-hour factor, PHF	0.90	0.90	0.90	0.84	0.84	0.84	0.91	0.91	0.91	0.92	0.91	0.91
Adj. Flow (vph)	39	47	501	138	61	11	755	881	278	93	65	1103
RTOR Reduction (vph)	0	394	0	0	6	0	0	12	0	0	0	0
Lane Group Flow (vph)	39	154	0	138	66	0	755	1147	0	0	158	1103
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	Prot	NA
Protected Phases	5	2		1	6		3	8		7	7	4
Permitted Phases												
Actuated Green, G (s)	8.5	22.6		18.4	32.5		43.6	89.2			20.5	65.4
Effective Green, g (s)	8.5	22.6		18.4	32.5		43.6	89.2			20.5	65.4
Actuated g/C Ratio	0.05	0.13		0.11	0.19		0.26	0.53			0.12	0.39
Clearance Time (s)	4.4	4.9		4.4	4.9		4.4	4.9			4.4	5.6
Vehicle Extension (s)	2.0	6.3		2.0	5.9		2.0	4.8			2.0	4.4
Lane Grp Cap (vph)	88	407		192	663		884	1797			214	1367
v/s Ratio Prot	0.02	c0.05		c0.08	0.02		c0.22	0.34			0.09	c0.31
v/s Ratio Perm												
v/c Ratio	0.44	0.38		0.72	0.10		0.85	0.64			0.74	0.81
Uniform Delay, d1	78.1	66.9		72.9	56.3		59.8	28.5			71.8	46.3
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2	1.3	1.8		10.2	0.2		7.8	1.0			10.9	4.0
Delay (s)	79.4	68.7		83.1	56.5		67.6	29.6			82.7	50.3
Level of Service	E	E		F	E		E	C			F	D
Approach Delay (s)		69.4			74.0			44.6				48.7
Approach LOS		E			E			D				D

Intersection Summary				
HCM 2000 Control Delay	50.9	HCM 2000 Level of Service	D	
HCM 2000 Volume to Capacity ratio	0.74			
Actuated Cycle Length (s)	169.3	Sum of lost time (s)	19.3	
Intersection Capacity Utilization	85.7%	ICU Level of Service	E	
Analysis Period (min)	15			

c Critical Lane Group

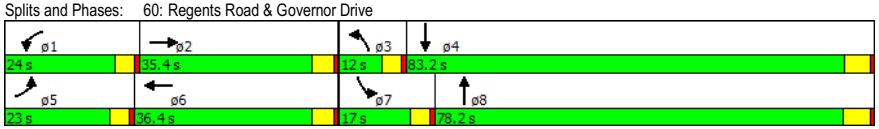
Movement	SBR
Lane Configurations	
Traffic Volume (vph)	389
Future Volume (vph)	389
Ideal Flow (vphpl)	1900
Total Lost time (s)	4.4
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1583
Flt Permitted	1.00
Satd. Flow (perm)	1583
Peak-hour factor, PHF	0.91
Adj. Flow (vph)	427
RTOR Reduction (vph)	174
Lane Group Flow (vph)	253
Turn Type	pm+ov
Protected Phases	5
Permitted Phases	4
Actuated Green, G (s)	73.9
Effective Green, g (s)	73.9
Actuated g/C Ratio	0.44
Clearance Time (s)	4.4
Vehicle Extension (s)	2.0
Lane Grp Cap (vph)	690
v/s Ratio Prot	0.02
v/s Ratio Perm	0.14
v/c Ratio	0.37
Uniform Delay, d1	32.0
Progression Factor	1.00
Incremental Delay, d2	0.1
Delay (s)	32.1
Level of Service	C
Approach Delay (s)	
Approach LOS	

Intersection Summary

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	175	58	345	204	40	1405	273	1245
Future Volume (vph)	175	58	345	204	40	1405	273	1245
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	5	2	1	6	3	8	7	4
Permitted Phases								
Detector Phase	5	2	1	6	3	8	7	4
Switch Phase								
Minimum Initial (s)	4.0	4.0	4.0	7.0	5.0	7.0	5.0	4.0
Minimum Split (s)	8.4	32.9	8.4	33.9	9.5	34.8	9.5	35.5
Total Split (s)	23.0	35.4	24.0	36.4	12.0	78.2	17.0	83.2
Total Split (%)	14.9%	22.9%	15.5%	23.5%	7.8%	50.6%	11.0%	53.8%
Yellow Time (s)	3.4	3.9	3.4	3.9	3.5	4.8	3.5	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	4.9	4.4	4.9	4.5	5.8	4.5	5.5
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Min	None	Min	None	None	None	None
Act Effct Green (s)	18.6	21.0	18.7	21.0	7.1	72.5	12.5	80.3
Actuated g/C Ratio	0.13	0.15	0.13	0.15	0.05	0.50	0.09	0.56
v/c Ratio	0.96	0.20	0.86	0.70	0.51	0.99	1.02	0.74
Control Delay	112.1	39.2	81.2	48.3	88.3	53.5	120.8	28.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	112.1	39.2	81.2	48.3	88.3	53.5	120.8	28.2
LOS	F	D	F	D	F	D	F	C
Approach Delay		89.0		64.3		54.4		44.3
Approach LOS		F		E		D		D

Intersection Summary			
Cycle Length: 154.6			
Actuated Cycle Length: 144.3			
Natural Cycle: 150			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 1.02			
Intersection Signal Delay: 54.7		Intersection LOS: D	
Intersection Capacity Utilization 88.3%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 60: Regents Road & Governor Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	175	58	23	345	204	162	40	1405	152	273	1245	53
Future Volume (vph)	175	58	23	345	204	162	40	1405	152	273	1245	53
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	4.9		4.5	5.8		4.5	5.5	
Lane Util. Factor	1.00	0.95		0.97	0.95		1.00	0.95		0.97	0.95	
Frt	1.00	0.96		1.00	0.93		1.00	0.99		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3388		3433	3304		1770	3487		3433	3517	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	3388		3433	3304		1770	3487		3433	3517	
Peak-hour factor, PHF	0.80	0.80	0.80	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	219	72	29	383	227	180	44	1561	169	303	1383	59
RTOR Reduction (vph)	0	25	0	0	98	0	0	5	0	0	2	0
Lane Group Flow (vph)	219	77	0	383	309	0	44	1725	0	303	1440	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases												
Actuated Green, G (s)	18.6	21.0		18.7	21.1		5.9	73.4		12.5	80.3	
Effective Green, g (s)	18.6	21.0		18.7	21.1		5.9	73.4		12.5	80.3	
Actuated g/C Ratio	0.13	0.14		0.13	0.15		0.04	0.51		0.09	0.55	
Clearance Time (s)	4.4	4.9		4.4	4.9		4.5	5.8		4.5	5.5	
Vehicle Extension (s)	2.0	4.5		2.0	5.0		3.0	4.6		3.0	2.0	
Lane Grp Cap (vph)	226	490		442	480		71	1762		295	1945	
v/s Ratio Prot	c0.12	0.02		0.11	c0.09		0.02	c0.49		c0.09	0.41	
v/s Ratio Perm												
v/c Ratio	0.97	0.16		0.87	0.64		0.62	0.98		1.03	0.74	
Uniform Delay, d1	63.0	54.4		62.0	58.5		68.5	35.1		66.3	24.6	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	50.2	0.3		15.7	4.0		15.0	16.7		59.6	1.4	
Delay (s)	113.2	54.6		77.7	62.5		83.6	51.8		125.9	25.9	
Level of Service	F	D		E	E		F	D		F	C	
Approach Delay (s)		94.6			69.9			52.6			43.3	
Approach LOS		F			E			D			D	

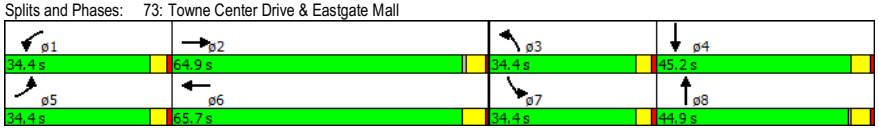
Intersection Summary				
HCM 2000 Control Delay	54.9	HCM 2000 Level of Service	D	
HCM 2000 Volume to Capacity ratio	0.92			
Actuated Cycle Length (s)	145.2	Sum of lost time (s)	19.6	
Intersection Capacity Utilization	88.3%	ICU Level of Service	E	
Analysis Period (min)	15			

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	19	461	295	254	146	78	209	649
Future Volume (vph)	19	461	295	254	146	78	209	649
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	5	2	1	6	3	8	7	4
Permitted Phases								
Detector Phase	5	2	1	6	3	8	7	4
Switch Phase								
Minimum Initial (s)	4.0	7.0	4.0	7.0	4.0	7.0	4.0	7.0
Minimum Split (s)	8.4	11.9	8.4	12.7	8.4	12.2	8.4	12.7
Total Split (s)	34.4	64.9	34.4	65.7	34.4	44.9	34.4	45.2
Total Split (%)	19.1%	36.1%	19.1%	36.6%	19.1%	25.0%	19.1%	25.2%
Yellow Time (s)	3.4	3.9	3.4	4.7	3.4	4.2	3.4	4.2
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	4.9	4.4	5.7	4.4	5.2	4.4	5.2
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None
Act Effct Green (s)	5.5	48.5	17.9	64.3	11.4	36.6	15.4	40.5
Actuated g/C Ratio	0.04	0.35	0.13	0.47	0.08	0.27	0.11	0.29
v/c Ratio	0.16	0.78	0.72	0.17	0.58	0.27	0.68	0.90
Control Delay	72.2	39.3	68.7	21.9	71.5	16.8	69.8	59.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	72.2	39.3	68.7	21.9	71.5	16.8	69.8	59.8
LOS	E	D	E	C	E	B	E	E
Approach Delay		40.0		46.8		38.2		62.0
Approach LOS		D		D		D		E

Intersection Summary			
Cycle Length: 179.7			
Actuated Cycle Length: 137.6			
Natural Cycle: 75			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.90			
Intersection Signal Delay: 49.2		Intersection LOS: D	
Intersection Capacity Utilization 74.1%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 73: Towne Center Drive & Eastgate Mall



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	19	461	379	295	254	6	146	78	149	209	649	91
Future Volume (vph)	19	461	379	295	254	6	146	78	149	209	649	91
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	5.7		4.4	5.2		4.4	5.2	
Lane Util. Factor	0.97	0.95		0.97	0.95		0.97	0.95		0.97	0.95	
Frt	1.00	0.93		1.00	1.00		1.00	0.90		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	3433	3300		3433	3526		3433	3191		3433	3474	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	3433	3300		3433	3526		3433	3191		3433	3474	
Peak-hour factor, PHF	0.87	0.87	0.87	0.91	0.91	0.91	0.88	0.88	0.88	0.80	0.80	0.80
Adj. Flow (vph)	22	530	436	324	279	7	166	89	169	261	811	114
RTOR Reduction (vph)	0	80	0	0	1	0	0	125	0	0	6	0
Lane Group Flow (vph)	22	886	0	324	285	0	166	133	0	261	919	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases												
Actuated Green, G (s)	3.3	50.5		18.0	64.4		11.4	36.6		15.4	40.6	
Effective Green, g (s)	3.3	50.5		18.0	64.4		11.4	36.6		15.4	40.6	
Actuated g/C Ratio	0.02	0.36		0.13	0.46		0.08	0.26		0.11	0.29	
Clearance Time (s)	4.4	4.9		4.4	5.7		4.4	5.2		4.4	5.2	
Vehicle Extension (s)	2.0	5.1		2.0	4.8		2.0	5.1		2.0	4.8	
Lane Grp Cap (vph)	81	1195		443	1628		280	837		379	1011	
v/s Ratio Prot	0.01	c0.27		c0.09	0.08		0.05	0.04		c0.08	c0.26	
v/s Ratio Perm												
v/c Ratio	0.27	0.74		0.73	0.18		0.59	0.16		0.69	0.91	
Uniform Delay, d1	66.9	38.8		58.4	22.0		61.8	39.6		59.7	47.6	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.7	3.1		5.3	0.1		2.2	0.2		4.1	12.2	
Delay (s)	67.5	41.8		63.7	22.1		64.0	39.8		63.8	59.9	
Level of Service	E	D		E	C		E	D		E	E	
Approach Delay (s)		42.4			44.2			49.2			60.7	
Approach LOS		D			D			D			E	

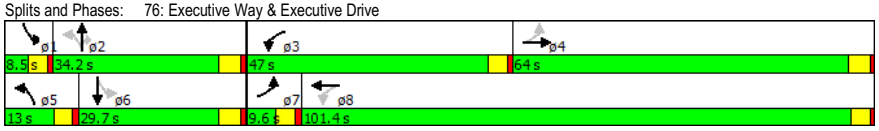
Intersection Summary			
HCM 2000 Control Delay	50.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	139.4	Sum of lost time (s)	19.7
Intersection Capacity Utilization	74.1%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	8	81	365	104	104	54	76	11	173
Future Volume (vph)	8	81	365	104	104	54	76	11	173
Turn Type	pm+pt	NA	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA
Protected Phases	7	4	3	8	5	2		1	6
Permitted Phases	4		8		2		2	6	
Detector Phase	7	4	3	8	5	2	2	1	6
Switch Phase									
Minimum Initial (s)	5.0	4.0	5.0	4.0	4.0	7.0	7.0	4.0	7.0
Minimum Split (s)	9.5	8.9	9.5	8.4	8.4	11.9	11.9	8.4	11.9
Total Split (s)	9.6	64.0	47.0	101.4	13.0	34.2	34.2	8.5	29.7
Total Split (%)	6.2%	41.6%	30.6%	66.0%	8.5%	22.3%	22.3%	5.5%	19.3%
Yellow Time (s)	3.5	3.9	3.5	3.4	3.4	3.9	3.9	3.4	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.9	4.5	4.4	4.4	4.9	4.9	4.4	4.9
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Min	Min	None	Min
Act Effct Green (s)	31.9	26.1	53.2	51.9	34.8	31.5	31.5	25.5	20.7
Actuated g/C Ratio	0.33	0.27	0.55	0.53	0.36	0.32	0.32	0.26	0.21
v/c Ratio	0.02	1.19dr	0.90	0.07	0.41	0.11	0.16	0.04	0.68
Control Delay	13.6	31.0	48.4	11.2	30.3	31.1	6.2	27.5	47.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	13.6	31.0	48.4	11.2	30.3	31.1	6.2	27.5	47.2
LOS	B	C	D	B	C	C	A	C	D
Approach Delay		30.8		40.0		22.7			46.2
Approach LOS		C		D		C			D

Intersection Summary			
Cycle Length: 153.7			
Actuated Cycle Length: 97.4			
Natural Cycle: 75			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.90			
Intersection Signal Delay: 34.3		Intersection LOS: C	
Intersection Capacity Utilization 74.0%		ICU Level of Service D	
Analysis Period (min) 15			
dr Defacto Right Lane. Recode with 1 though lane as a right lane.			

Splits and Phases: 76: Executive Way & Executive Drive



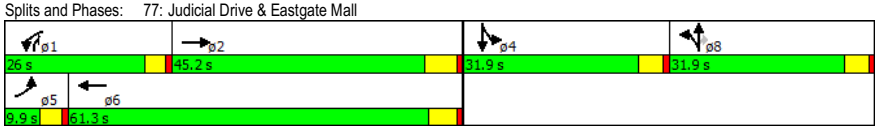
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	81	581	365	104	3	104	54	76	11	173	38
Future Volume (vph)	8	81	581	365	104	3	104	54	76	11	173	38
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.9		4.5	4.4		4.4	4.9	4.9	4.4	4.9	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.87		1.00	1.00		1.00	1.00	0.85	1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3073		1770	3526		1770	1863	1583	1770	1812	
Flt Permitted	0.67	1.00		0.12	1.00		0.32	1.00	1.00	0.71	1.00	
Satd. Flow (perm)	1256	3073		219	3526		590	1863	1583	1328	1812	
Peak-hour factor, PHF	0.80	0.80	0.80	0.87	0.87	0.87	0.80	0.80	0.80	0.80	0.80	0.80
Adj. Flow (vph)	10	101	726	420	120	3	130	68	95	14	216	48
RTOR Reduction (vph)	0	180	0	0	1	0	0	0	66	0	5	0
Lane Group Flow (vph)	10	647	0	420	122	0	130	68	29	14	259	0
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		
Actuated Green, G (s)	31.0	30.2		57.2	51.9		37.2	31.5	31.5	25.1	23.8	
Effective Green, g (s)	31.0	30.2		57.2	51.9		37.2	31.5	31.5	25.1	23.8	
Actuated g/C Ratio	0.30	0.29		0.55	0.50		0.36	0.30	0.30	0.24	0.23	
Clearance Time (s)	4.5	4.9		4.5	4.4		4.4	4.9	4.9	4.4	4.9	
Vehicle Extension (s)	3.0	2.0		3.0	2.3		2.0	2.9	2.9	2.0	2.6	
Lane Grp Cap (vph)	379	894		449	1764		314	565	480	326	415	
v/s Ratio Prot	0.00	0.21		c0.20	0.03		c0.04	0.04		0.00	c0.14	
v/s Ratio Perm	0.01			c0.32			0.11		0.02	0.01		
v/c Ratio	0.03	1.19dr		0.94	0.07		0.41	0.12	0.06	0.04	0.63	
Uniform Delay, d1	25.6	33.0		28.9	13.4		24.0	26.1	25.6	30.0	35.9	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.0	2.5		26.8	0.0		0.3	0.1	0.0	0.0	2.6	
Delay (s)	25.7	35.5		55.7	13.4		24.3	26.2	25.7	30.0	38.5	
Level of Service	C	D		E	B		C	C	C	C	D	
Approach Delay (s)		35.4			46.1			25.2			38.1	
Approach LOS		D			D			C			D	

Intersection Summary				
HCM 2000 Control Delay	37.2	HCM 2000 Level of Service	D	
HCM 2000 Volume to Capacity ratio	0.83			
Actuated Cycle Length (s)	103.7	Sum of lost time (s)	18.7	
Intersection Capacity Utilization	74.0%	ICU Level of Service	D	
Analysis Period (min)	15			
dr Defacto Right Lane. Recode with 1 though lane as a right lane.				
c Critical Lane Group				

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	14	709	265	250	176	11	532	119	162
Future Volume (vph)	14	709	265	250	176	11	532	119	162
Turn Type	Prot	NA	Prot	NA	Split	NA	pm+ov	Split	NA
Protected Phases	5	2	1	6	8	8	1	4	4
Permitted Phases							8		
Detector Phase	5	2	1	6	8	8	1	4	4
Switch Phase									
Minimum Initial (s)	4.0	7.0	4.0	7.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.4	13.1	8.4	12.6	8.9	8.9	8.4	8.9	8.9
Total Split (s)	9.9	45.2	26.0	61.3	31.9	31.9	26.0	31.9	31.9
Total Split (%)	7.3%	33.5%	19.3%	45.4%	23.6%	23.6%	19.3%	23.6%	23.6%
Yellow Time (s)	3.4	5.1	3.4	4.6	3.9	3.9	3.4	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	6.1	4.4	5.6	4.9	4.9	4.4	4.9	4.9
Lead/Lag	Lead	Lag	Lead	Lag			Lead		
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes		
Recall Mode	None	None	None	None	None	None	None	None	None
Act Effct Green (s)	5.2	39.0	21.3	61.6	18.0	18.0	44.2	22.7	22.7
Actuated g/C Ratio	0.04	0.32	0.18	0.51	0.15	0.15	0.36	0.19	0.19
v/c Ratio	0.21	0.90	0.88	0.15	0.75	0.72	0.48	0.42	0.86
Control Delay	67.4	51.3	78.8	18.7	68.8	17.8	13.7	48.7	69.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	67.4	51.3	78.8	18.7	68.8	17.8	13.7	48.7	69.6
LOS	E	D	E	B	E	B	B	D	E
Approach Delay		51.6		49.1		27.4			63.0
Approach LOS		D		D		C			E

Intersection Summary			
Cycle Length: 135			
Actuated Cycle Length: 121.4			
Natural Cycle: 90			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.90			
Intersection Signal Delay: 45.7		Intersection LOS: D	
Intersection Capacity Utilization 82.1%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 77: Judicial Drive & Eastgate Mall



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	14	709	185	265	250	10	176	11	532	119	162	97
Future Volume (vph)	14	709	185	265	250	10	176	11	532	119	162	97
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	6.1		4.4	5.6		4.9	4.9	4.4	4.9	4.9	
Lane Util. Factor	1.00	0.95		1.00	0.95		0.95	0.91	0.95	1.00	1.00	
Frt	1.00	0.97		1.00	0.99		1.00	0.87	0.85	1.00	0.94	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3429		1770	3519		1681	1462	1504	1770	1758	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	3429		1770	3519		1681	1462	1504	1770	1758	
Peak-hour factor, PHF	0.89	0.89	0.89	0.97	0.97	0.97	0.85	0.85	0.85	0.87	0.87	0.87
Adj. Flow (vph)	16	797	208	273	258	10	207	13	626	137	186	111
RTOR Reduction (vph)	0	16	0	0	2	0	0	251	137	0	16	0
Lane Group Flow (vph)	16	989	0	273	266	0	186	83	189	137	281	0
Turn Type	Prot	NA		Prot	NA		Split	NA	pm+ov	Split	NA	
Protected Phases	5	2		1	6		8	8	1	4	4	
Permitted Phases									8			
Actuated Green, G (s)	2.0	41.8		21.3	61.6		18.0	18.0	39.3	22.6	22.6	
Effective Green, g (s)	2.0	41.8		21.3	61.6		18.0	18.0	39.3	22.6	22.6	
Actuated g/C Ratio	0.02	0.34		0.17	0.50		0.15	0.15	0.32	0.18	0.18	
Clearance Time (s)	4.4	6.1		4.4	5.6		4.9	4.9	4.4	4.9	4.9	
Vehicle Extension (s)	2.0	2.7		2.0	3.0		2.0	2.0	2.0	2.0	2.0	
Lane Grp Cap (vph)	28	1155		304	1748		244	212	476	322	320	
v/s Ratio Prot	0.01	c0.29		c0.15	0.08		c0.11	0.06	0.07	0.08	c0.16	
v/s Ratio Perm									0.06			
v/c Ratio	0.57	0.86		0.90	0.15		0.76	0.39	0.40	0.43	0.88	
Uniform Delay, d1	60.6	38.3		50.3	17.0		50.9	48.0	33.1	44.9	49.3	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	16.3	6.4		26.5	0.0		11.9	0.4	0.2	0.3	22.0	
Delay (s)	76.9	44.7		76.8	17.0		62.9	48.5	33.3	45.3	71.3	
Level of Service	E	D		E	B		E	D	C	D	E	
Approach Delay (s)		45.2			47.2			45.8			63.1	
Approach LOS		D			D			D			E	

Intersection Summary			
HCM 2000 Control Delay	48.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	124.0	Sum of lost time (s)	20.3
Intersection Capacity Utilization	82.1%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Right Turn Channelized												
Traffic Volume (veh/h)	328	0	0	0	23	5	472	3	3	0	0	0
Future Volume (veh/h)	328	0	0	0	23	5	472	3	3	0	0	0
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.94	0.94	0.94	0.25	0.25	0.25
Hourly flow rate (vph)	410	0	0	0	29	6	502	3	3	0	0	0
Approach Volume (veh/h)		410			35			508			0	
Crossing Volume (veh/h)		0			915			410			531	
High Capacity (veh/h)		1385			667			1003			911	
High v/c (veh/h)		0.30			0.05			0.51			0.00	
Low Capacity (veh/h)		1161			521			816			734	
Low v/c (veh/h)		0.35			0.07			0.62			0.00	

Intersection Summary					
Maximum v/c High		0.51			
Maximum v/c Low		0.62			
Intersection Capacity Utilization		58.0%	ICU Level of Service		B

AM Peak-Hour Arterial Segment Analysis Summary Genesee Avenue

ROADWAY SEGMENT	DIRECTION	URBAN STREET CLASS	EXISTING				HORIZON YEAR											
							Alt A Regents Bridge 6-lane Genesee			Alt B Regents Bridge 4-lane Genesee			Alt C No Bridge 6-lane Genesee			Alt D No Bridge 4-lane Genesee		
			TRAVEL TIME (S)		SIMULATION		SIMULATION			SIMULATION			SIMULATION			SIMULATION		
			FIELD	SIMULATION	SPEED (a)	LOS (b)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)
Genesee Ave																		
SR-52 EB Ramps to Governor Dr	NB	I	217	140	19.9	**E**	204.3	**F**		212.1	F		249.9	**F**		330.2	**F**	
	SB	I	68	67	41.4	B	66.9	B		66.9	B		67.0	B		67.6	B	
Governor Dr to Centurion Sq	NB	I	65	91	22.1	D	71.4	C		92.6	D		136.6	**F**		294.8	**F**	
	SB	I	99	82	24.6	D	80.5	D		80.5	D		89.4	D		88.0	D	
Centurion Sq to Decoro St	NB	I	58	42	25.3	D	41.7	D		61.4	E		51.1	**E**		168.1	**F**	
	SB	I	30	39	27.3	C	35.4	C		36.2	C		35.7	C		36.7	C	
Decoro St to Nobel Dr	NB	I	43	40	17.2	**E**	41.2	**E**		114.2	F		46.7	**F**		179.7	**F**	
	SB	I	59	37	18.7	**E**	39.7	**E**		42.5	E		42.6	**E**		46.6	**F**	
Nobel Dr to Esplanade Ct	NB	I	21	35	21.1	D	47.0	**F**		53.6	F		47.1	**F**		80.7	**F**	
	SB	I	40	41	18.0	**E**	58.6	**F**		57.5	F		60.0	**F**		62.1	**F**	
Esplanade Ct to La Jolla Village Dr	NB	I	29	45	15.0	**F**	216.2	**F**		214.0	F		273.0	**F**		273.4	**F**	
	SB	I	47	25	26.7	D	22.2	C		22.3	C		21.6	C		22.4	C	
La Jolla Village Dr to Executive Sq	NB	I	15	17	22.2	D	18.1	**E**		18.2	E		20.4	**F**		20.4	**F**	
	SB	I	17	45	8.2	**F**	70.5	**F**		70.5	F		70.3	**F**		70.4	**F**	
Executive Square to Executive Dr	NB	I	8	19	14.4	**F**	30.4	**F**		30.0	F		30.7	**F**		30.4	**F**	
	SB	I	6	11	25.2	D	13.1	D		13.3	D		13.2	D		13.3	D	
Executive Dr to Eastgate Mall	NB	I	57	42	14.0	**F**	55.8	**F**		53.4	F		56.1	**F**		57.5	**F**	
	SB	I	13	23	25.9	D	22.0	D		22.0	D		22.3	D		22.3	D	
Eastgate Mall to Regents Rd	NB	I	38	49	25.6	D	50.4	D		50.7	D		47.6	D		47.8	D	
	SB	I	30	57	22.1	D	81.9	**F**		80.9	F		84.8	**F**		85.2	**F**	
Regents Rd to Campus Point Dr	NB	I	13	32	17.6	**E**	47.4	**F**		47.3	F		48.3	**F**		48.1	**F**	
	SB	I	14	47	11.8	**F**	46.8	**F**		47.5	F		43.2	**F**		43.1	**F**	
Campus Point Dr to Scripps Hospital	NB	I	16	24	32.3	C	23.3	C		23.3	C		23.2	C		23.2	C	
	SB	I	56	32	24.0	D	57.0	**F**		56.7	F		55.3	**F**		55.6	**F**	
Scripps Hospital to I-5 NB Ramps	NB	I	140	61	19.3	**E**	69.2	**E**		69.4	E		68.7	**E**		68.8	**E**	
	SB	I	32	51	23.3	D	62.9	**E**		62.3	E		62.8	**E**		62.7	**E**	
I-5 NB Ramps to I-5 SB Ramps	NB	I	26	110	3.5	**F**	52.1	**F**		52.0	F		52.7	**F**		52.8	**F**	
	SB	I	39	28	14.0	**F**	67.6	**F**		71.6	F		68.5	**F**		67.3	**F**	
I-5 SB Ramps to Science Center Dr	NB	I	24	42	27.0	D	48.0	D		48.0	D		48.0	D		48.0	D	
	SB	I	38	59	19.3	**E**	54.8	**E**		55.0	E		55.0	**E**		55.3	**E**	
Science Center Dr to John Hopkins Dr	NB	I	38	46	28.5	C	51.4	D		51.4	D		51.3	D		51.2	D	
	SB	I	30	34	38.1	B	34.5	B		34.4	B		34.4	B		34.3	B	
John Hopkins Drive to N. Torrey Pines Rd	NB	I	13	11	29.1	C	13.5	D		13.5	D		13.9	D		14.0	D	
	SB	I	8	14	23.6	D	13.1	D		13.0	D		13.2	D		12.9	D	
Total	*NB*	*I*	*821*	*845*	*19.0*	**E**	*1081.4*	**F**	**No**	*1205.1*	*F*	**No**	*1265.3*	**F**	**No**	*1789.1*	**F**	**No**
	SB	*I*	*626*	*677*	*23.3*	*D*	*827.5*	**E**	**Yes**	*833.1*	*E*	**Yes**	*839.3*	**E**	**Yes**	*845.8*	**E**	**Yes**

Notes: (a) Travel time in miles per hour (mph).

(b) The arterial LOS is based on average through-vehicle travel speed for the segment or for the entire street under consideration and is influenced both by the number of signals per mile and by the intersection control delay.

(c) A significant impact resulted in a change from LOS D or better to LOS E or LOS F, or a decrease of speeds of more than 1.0 mph at LOS E and LOS F.

MID Peak-Hour Arterial Segment Analysis Summary Genesee Avenue

ROADWAY SEGMENT	DIRECTION	URBAN STREET CLASS	EXISTING				HORIZON YEAR											
							Alt A Regents Bridge 6-lane Genesee			Alt B Regents Bridge 4-lane Genesee			Alt C No Bridge 6-lane Genesee			Alt D No Bridge 4-lane Genesee		
			TRAVEL TIME (S)		SIMULATION		SIMULATION			SIMULATION			SIMULATION			SIMULATION		
			FIELD	SIMULATION	SPEED (a)	LOS (b)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)
Genesee Ave																		
SR-52 EB Ramps to Governor Dr	NB	I	85	93	30.0	C	92.2	C		93.6	C		102.5	C		103.0	C	
	SB	I	62	68	41.4	B	67.1	B		67.1	B		67.1	B		67.7	B	
Governor Dr to Centurion Sq	NB	I	52	55	36.8	B	60.0	C		51.9	B		51.9	A		53.3	A	
	SB	I	76	74	27.0	D	70.3	C		71.4	C		79.9	D		81.3	D	
Centurion Sq to Decoro St	NB	I	25	46	23.1	D	44.8	D		51.1	E		49.4	D		53.4	D	
	SB	I	40	33	32.3	C	32.1	C		30.3	B		31.0	B		33.5	C	
Decoro St to Nobel Dr	NB	I	57	29	23.5	D	30.8	D		34.9	E		31.1	C		34.0	D	
	SB	I	18	26	26.8	D	34.9	**E**		23.9	C		23.5	C		27.0	D	
Nobel Dr to Esplanade Ct	NB	I	26	42	17.4	**E**	84.6	**F**		83.5	F		69.7	**F**		120.5	**F**	
	SB	I	32	46	15.9	**F**	45.0	**E**		44.5	E		53.2	**F**		49.0	**F**	
Esplanade Ct to La Jolla Village Dr	NB	I	75	86	7.8	**F**	81.8	**F**		81.5	F		88.4	**F**		89.0	**F**	
	SB	I	48	37	18.0	**E**	43.9	**F**		43.5	F		44.2	**F**		46.3	**F**	
La Jolla Village Dr to Executive Sq	NB	I	12	20	18.9	**E**	29.4	**F**		29.3	F		32.1	**F**		30.6	**F**	
	SB	I	59	52	7.1	**F**	49.2	**F**		49.6	F		51.9	**F**		51.6	**F**	
Executive Square to Executive Dr	NB	I	43	15	18.0	**E**	16.8	**E**		16.8	E		17.4	**E**		17.3	**E**	
	SB	I	9	17	16.4	**E**	29.3	**F**		29.2	F		28.6	**F**		30.5	**F**	
Executive Dr to Eastgate Mall	NB	I	17	25	23.8	D	19.9	C		19.9	C		20.6	B		20.6	B	
	SB	I	16	20	29.3	C	21.2	C		21.3	C		21.5	C		21.5	C	
Eastgate Mall to Regents Rd	NB	I	34	48	26.0	D	48.3	D		48.3	D		45.4	C		45.8	C	
	SB	I	29	44	28.8	C	57.5	D		57.4	D		58.4	D		59.1	D	
Regents Rd to Campus Point Dr	NB	I	13	26	21.5	D	34.4	**E**		34.4	E		34.3	**E**		34.1	**E**	
	SB	I	13	21	26.8	D	22.4	D		22.4	D		21.7	D		21.3	D	
Campus Point Dr to Scripps Hospital	NB	I	16	34	22.9	D	46.9	**E**		46.8	E		47.6	**E**		47.6	**E**	
	SB	I	17	38	20.2	**E**	41.9	**E**		41.9	E		41.3	**E**		41.5	**E**	
Scripps Hospital to I-5 NB Ramps	NB	I	49	61	19.2	**E**	62.9	**E**		62.6	E		63.2	D		63.0	D	
	SB	I	40	46	25.6	D	64.6	**E**		64.7	E		64.8	**E**		65.0	**E**	
I-5 NB Ramps to I-5 SB Ramps	NB	I	26	26	15.0	**F**	12.8	C		13.2	C		12.9	B		13.2	B	
	SB	I	13	13	30.5	C	21.6	**E**		21.8	E		21.9	**E**		22.1	**E**	
I-5 SB Ramps to Science Center Dr	NB	I	29	37	30.7	C	37.2	C		37.3	C		37.2	B		37.1	B	
	SB	I	67	56	20.0	**E**	57.1	**E**		57.6	E		57.0	**E**		57.9	**E**	
Science Center Dr to John Hopkins Dr	NB	I	49	53	24.7	D	65.0	**E**		65.1	E		81.7	**E**		80.2	**E**	
	SB	I	28	39	32.9	C	39.4	C		39.4	C		40.3	C		40.2	C	
John Hopkins Drive to N. Torrey Pines Rd	NB	I	9	10	32.4	C	11.6	C		11.7	C		11.7	C		12.8	C	
	SB	I	12	15	21.6	D	18.9	**E**		18.7	E		18.4	**E**		17.1	**E**	
Total	*NB*	*I*	*617*	*705*	*22.8*	*D*	*779.4*	**E**	**Yes**	*781.9*	*E*	**Yes**	*797.1*	**E**	**Yes**	*855.5*	**E**	**Yes**
	SB	*I*	*579*	*630*	*24.9*	*D*	*716.4*	*D*	**No**	*704.7*	*D*	**No**	*724.7*	*D*	**No**	*732.6*	*D*	**No**

Notes: (a) Travel time in miles per hour (mph).

(b) The arterial LOS is based on average through-vehicle travel speed for the segment or for the entire street under consideration and is influenced both by the number of signals per mile and by the intersection control delay.

(c) A significant impact resulted in a change from LOS D or better to LOS E or LOS F, or a decrease of speeds of more than 1.0 mph at LOS E and LOS F.

PM Peak-Hour Arterial Segment Analysis Summary Genesee Avenue

ROADWAY SEGMENT	DIRECTION	URBAN STREET CLASS	EXISTING				HORIZON YEAR											
							Alt A Regents Bridge 6-lane Genesee			Alt B Regents Bridge 4-lane Genesee			Alt C No Bridge 6-lane Genesee			Alt D No Bridge 4-lane Genesee		
			TRAVEL TIME (S)		SIMULATION		SIMULATION			SIMULATION			SIMULATION			SIMULATION		
			FIELD	SIMULATION	SPEED (a)	LOS (b)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)
Genesee Ave																		
SR-52 EB Ramps to Governor Dr	NB	I	110	144	19.3	**E**	109.5	D		135.0	E		113.7	D		119.2	D	
	SB	I	60	80	35.0	B	76.5	B		76.2	B		77.7	B		76.5	B	
Governor Dr to Centurion Sq	NB	I	44	51	39.5	B	48.0	B		50.9	B		51.2	B		54.7	B	
	SB	I	214	106	18.8	**E**	80.1	D		152.5	F		216.6	**F**		167.3	**F**	
Centurion Sq to Decoro St	NB	I	43	44	24.2	D	36.3	C		50.7	E		35.9	C		39.4	D	
	SB	I	88	46	23.3	D	37.7	C		49.8	D		55.9	**E**		161.3	**F**	
Decoro St to Nobel Dr	NB	I	20	46	14.8	**F**	33.4	**E**		35.6	E		28.1	D		32.1	D	
	SB	I	70	142	4.9	**F**	99.4	**F**		253.4	F		265.0	**F**		483.0	**F**	
Nobel Dr to Esplanade Ct	NB	I	17	61	12.1	**F**	102.2	**F**		102.9	F		98.3	**F**		149.1	**F**	
	SB	I	100	37	19.9	**E**	75.4	**F**		71.0	F		142.7	**F**		121.1	**F**	
Esplanade Ct to La Jolla Village Dr	NB	I	86	76	8.8	**F**	78.2	**F**		78.2	F		77.9	**F**		76.6	**F**	
	SB	I	35	37	18.1	**E**	38.6	**E**		38.5	E		40.2	**E**		42.5	**F**	
La Jolla Village Dr to Executive Sq	NB	I	29	19	20.0	**E**	18.9	**E**		19.0	E		18.3	**E**		18.3	**E**	
	SB	I	88	51	7.3	**F**	78.4	**F**		76.6	F		115.3	**F**		117.2	**F**	
Executive Square to Executive Dr	NB	I	37	20	13.8	**F**	16.7	**E**		16.6	E		16.8	**E**		16.6	**E**	
	SB	I	71	25	11.0	**F**	53.7	**F**		51.0	F		37.8	**F**		37.9	**F**	
Executive Dr to Eastgate Mall	NB	I	15	49	12.2	**F**	51.4	**F**		51.4	F		50.9	**F**		51.4	**F**	
	SB	I	126	35	16.7	**E**	49.0	**F**		48.8	F		51.5	**F**		51.9	**F**	
Eastgate Mall to Regents Rd	NB	I	37	53	23.8	D	49.4	D		49.2	D		49.5	D		49.0	D	
	SB	I	42	42	30.2	C	46.5	C		46.5	C		46.8	D		46.7	D	
Regents Rd to Campus Point Dr	NB	I	15	27	20.8	**E**	39.4	**F**		39.6	F		38.4	**F**		38.3	**F**	
	SB	I	16	24	23.0	D	42.2	**F**		42.2	F		42.2	**F**		42.2	**F**	
Campus Point Dr to Scripps Hospital	NB	I	21	27	28.5	C	27.8	C		27.9	C		27.9	C		28.0	C	
	SB	I	45	58	13.1	**F**	62.5	**F**		61.8	F		57.6	**F**		56.2	**F**	
Scripps Hospital to I-5 NB Ramps	NB	I	77	61	19.1	**E**	63.3	**E**		63.2	E		63.6	**E**		63.5	**E**	
	SB	I	33	49	23.9	D	59.5	**E**		59.3	E		60.1	**E**		60.6	**E**	
I-5 NB Ramps to I-5 SB Ramps	NB	I	12	14	28.5	C	15.8	D		15.9	D		16.0	D		16.9	D	
	SB	I	13	11	34.2	B	16.7	D		16.8	D		16.8	D		17.1	D	
I-5 SB Ramps to Science Center Dr	NB	I	33	41	27.7	C	43.4	D		43.4	D		43.3	D		43.3	D	
	SB	I	137	95	11.9	**F**	76.2	**F**		76.1	F		76.0	**F**		75.3	**F**	
Science Center Dr to John Hopkins Dr	NB	I	50	55	23.6	D	65.0	**E**		65.0	E		64.9	**E**		64.9	**E**	
	SB	I	70	37	35.1	B	42.0	C		41.9	C		41.6	C		41.0	C	
John Hopkins Drive to N. Torrey Pines Rd	NB	I	9	13	25.1	D	12.7	D		12.7	D		12.7	D		12.4	D	
	SB	I	8	28	11.6	**F**	29.9	**F**		29.8	F		29.2	**F**		29.9	**F**	
Total	*NB*	*I*	*655*	*800*	*20.0*	**E**	*811.4*	**E**	**No**	*857.2*	*E*	**No**	*807.4*	**E**	**No**	*873.7*	**E**	**No**
	SB	*I*	*1216*	*875*	*17.9*	**E**	*964.3*	**E**	**No**	*1192.2*	*F*	**No**	*1373.0*	**F**	**No**	*1627.7*	**F**	**No**

Notes: (a) Travel time in miles per hour (mph).

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(c) A significant impact resulted in a change from LOS D or better to LOS E or LOS F, or a decrease of speeds of more than 1.0 mph at LOS E and LOS F.

AM Peak-Hour Arterial Segment Analysis Summary Genesee Avenue

ROADWAY SEGMENT	DIRECTION	URBAN STREET CLASS	EXISTING				HORIZON YEAR WITH RECOMMENDED MITIGATIONS											
							Alt A Regents Bridge 6-lane Genesee			Alt B Regents Bridge 4-lane Genesee			Alt C No Bridge 6-lane Genesee			Alt D No Bridge 4-lane Genesee		
			TRAVEL TIME (S)		SIMULATION		SIMULATION			SIMULATION			SIMULATION			SIMULATION		
			FIELD	SIMULATION	SPEED (a)	LOS (b)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)
Genesee Ave																		
SR-52 EB Ramps to Governor Dr	NB	I	217	140	19.9	**E**	34.3	B		34.7	B		34.2	B		34.6	B	
	SB	I	68	67	41.4	B	37.5	C		37.5	C		37.6	C		38.2	C	
Governor Dr to Centurion Sq	NB	I	65	91	22.1	D	40.0	B		87.1	E		121.0	**F**		119.7	**F**	
	SB	I	99	82	24.6	D	63.7	D		68.5	D		66.2	D		70.2	D	
Centurion Sq to Decoro St	NB	I	58	42	25.3	D	71.4	C		92.6	D		136.6	**F**		294.8	**F**	
	SB	I	30	39	27.3	C	44.6	A		76.6	D		113.7	**E**		112.9	**E**	
Decoro St to Nobel Dr	NB	I	43	40	17.2	**E**	40.3	D		41.5	D		48.8	D		118.8	**F**	
	SB	I	59	37	18.7	**E**	35.7	C		37.3	C		35.7	C		36.7	C	
Nobel Dr to Esplanade Ct	NB	I	21	35	21.1	D	41.5	**E**		43.3	F		49.4	**F**		182.2	**F**	
	SB	I	40	41	18.0	**E**	37.3	**E**		34.3	E		39.6	**E**		39.5	**E**	
Esplanade Ct to La Jolla Village Dr	NB	I	29	45	15.0	**F**	47.0	**F**		57.8	F		47.1	**F**		80.8	**F**	
	SB	I	47	25	26.7	D	58.6	**F**		57.2	F		60.0	**F**		62.1	**F**	
La Jolla Village Dr to Executive Sq	NB	I	15	17	22.2	D	216.2	**F**		213.9	F		273.0	**F**		273.4	**F**	
	SB	I	17	45	8.2	**F**	22.2	C		22.3	C		21.6	C		22.4	C	
Executive Square to Executive Dr	NB	I	8	19	14.4	**F**	18.1	**E**		18.2	E		20.4	**F**		20.4	**F**	
	SB	I	6	11	25.2	D	70.5	**F**		70.5	F		70.3	**F**		70.4	**F**	
Executive Dr to Eastgate Mall	NB	I	57	42	14.0	**F**	30.4	**F**		30.0	F		30.7	**F**		30.4	**F**	
	SB	I	13	23	25.9	D	13.1	D		13.3	D		13.2	D		13.3	D	
Eastgate Mall to Regents Rd	NB	I	38	49	25.6	D	55.8	**F**		53.4	F		56.1	**F**		57.5	**F**	
	SB	I	30	57	22.1	D	22.0	D		22.0	D		22.3	D		22.3	D	
Regents Rd to Campus Point Dr	NB	I	13	32	17.6	**E**	50.4	D		50.7	D		47.6	D		47.8	D	
	SB	I	14	47	11.8	**F**	81.9	**F**		81.2	F		84.8	**F**		85.2	**F**	
Campus Point Dr to Scripps Hospital	NB	I	16	24	32.3	C	47.4	**F**		47.3	F		48.3	**F**		48.1	**F**	
	SB	I	56	32	24.0	D	46.8	**F**		47.4	F		43.2	**F**		43.1	**F**	
Scripps Hospital to I-5 NB Ramps	NB	I	140	61	19.3	**E**	23.3	C		23.3	C		23.2	C		23.2	C	
	SB	I	32	51	23.3	D	57.0	**F**		56.7	F		55.3	**F**		55.6	**F**	
I-5 NB Ramps to I-5 SB Ramps	NB	I	26	110	3.5	**F**	69.2	**E**		69.4	E		68.7	**E**		68.8	**E**	
	SB	I	39	28	14.0	**F**	62.9	**E**		62.3	E		62.8	**E**		62.7	**E**	
I-5 SB Ramps to Science Center Dr	NB	I	24	42	27.0	D	52.1	**F**		52.0	F		52.7	**F**		52.8	**F**	
	SB	I	38	59	19.3	**E**	67.6	**F**		71.6	F		68.5	**F**		67.3	**F**	
Science Center Dr to John Hopkins Dr	NB	I	38	46	28.5	C	48.0	D		48.0	D		48.0	D		48.0	D	
	SB	I	30	34	38.1	B	54.8	**E**		55.0	E		55.0	**E**		55.3	**E**	
John Hopkins Drive to N. Torrey Pines Rd	NB	I	13	11	29.1	C	52.2	D		52.2	D		52.1	D		52.0	D	
	SB	I	8	14	23.6	D	34.5	B		34.4	D		34.4	B		34.3	B	
Total	*NB*	*I*	*821*	*845*	*19.0*	**E**	*950.4*	**E**	**No**	*1028.2*	*F*	**No**	*1171.1*	**F**	**No**	*1566.5*	**F**	**No**
	SB	*I*	*626*	*677*	*23.3*	*D*	*823.8*	**E**	**Yes**	*861.1*	*E*	**Yes**	*897.4*	**E**	**Yes**	*904.4*	**E**	**Yes**

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MID Peak-Hour Arterial Segment Analysis Summary Genesee Avenue

ROADWAY SEGMENT	DIRECTION	URBAN STREET CLASS	EXISTING				HORIZON YEAR WITH RECOMMENDED MITIGATIONS											
							Alt A Regents Bridge 6-lane Genesee			Alt B Regents Bridge 4-lane Genesee			Alt C No Bridge 6-lane Genesee			Alt D No Bridge 4-lane Genesee		
			TRAVEL TIME (S)		SIMULATION		SIMULATION			SIMULATION			SIMULATION			SIMULATION		
			FIELD	SIMULATION	SPEED (a)	LOS (b)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)
Genesee Ave																		
SR-52 EB Ramps to Governor Dr	NB	I	85	93	30.0	C	35.6	B		35.8	C		35.3	B		35.6	B	
	SB	I	62	68	41.4	B	37.7	C		37.7	C		37.7	C		38.3	C	
Governor Dr to Centurion Sq	NB	I	52	55	36.8	B	70.2	D		69.1	D		82.5	**E**		77.3	**E**	
	SB	I	76	74	27.0	D	51.8	C		54.0	C		53.6	C		54.7	C	
Centurion Sq to Decoro St	NB	I	25	46	23.1	D	60.0	C		51.9	B		51.9	B		53.3	B	
	SB	I	40	33	32.3	C	70.3	C		65.2	C		74.2	C		76.0	D	
Decoro St to Nobel Dr	NB	I	57	29	23.5	D	43.8	D		47.2	D		48.9	D		52.0	**E**	
	SB	I	18	26	26.8	D	32.1	C		30.3	B		30.8	B		32.8	C	
Nobel Dr to Esplanade Ct	NB	I	26	42	17.4	**E**	31.0	D		34.6	E		30.5	D		32.6	D	
	SB	I	32	46	15.9	**F**	34.9	**E**		22.4	C		23.4	C		26.3	D	
Esplanade Ct to La Jolla Village Dr	NB	I	75	86	7.8	**F**	84.5	**F**		82.8	F		68.4	**F**		119.2	**F**	
	SB	I	48	37	18.0	**E**	45.0	**E**		44.5	E		53.2	**F**		49.0	**F**	
La Jolla Village Dr to Executive Sq	NB	I	12	20	18.9	**E**	81.8	**F**		81.5	F		87.5	**F**		88.1	**F**	
	SB	I	59	52	7.1	**F**	43.9	**F**		43.5	F		44.2	**F**		46.3	**F**	
Executive Square to Executive Dr	NB	I	43	15	18.0	**E**	29.4	**F**		29.3	F		31.6	**F**		30.1	**F**	
	SB	I	9	17	16.4	**E**	49.2	**F**		49.6	F		51.9	**F**		51.6	**F**	
Executive Dr to Eastgate Mall	NB	I	17	25	23.8	D	16.8	**E**		16.8	E		17.0	**E**		16.9	**E**	
	SB	I	16	20	29.3	C	29.3	**F**		29.2	F		28.6	**F**		30.5	**F**	
Eastgate Mall to Regents Rd	NB	I	34	48	26.0	D	19.9	C		19.9	C		19.8	C		19.8	C	
	SB	I	29	44	28.8	C	21.2	C		21.3	C		21.5	C		21.5	C	
Regents Rd to Campus Point Dr	NB	I	13	26	21.5	D	48.3	D		48.3	D		45.8	C		46.2	C	
	SB	I	13	21	26.8	D	57.5	D		57.4	D		58.4	D		58.5	D	
Campus Point Dr to Scripps Hospital	NB	I	16	34	22.9	D	34.4	**E**		34.4	E		33.5	**E**		33.3	**E**	
	SB	I	17	38	20.2	**E**	22.4	D		22.4	D		21.7	D		21.8	D	
Scripps Hospital to I-5 NB Ramps	NB	I	49	61	19.2	**E**	46.9	**E**		46.8	E		46.6	**E**		46.6	**E**	
	SB	I	40	46	25.6	D	41.9	**E**		41.9	E		41.3	**E**		41.5	**E**	
I-5 NB Ramps to I-5 SB Ramps	NB	I	26	26	15.0	**F**	62.9	**E**		62.6	E		63.2	**E**		63.0	**E**	
	SB	I	13	13	30.5	C	64.6	**E**		64.7	E		64.8	**E**		65.0	**E**	
I-5 SB Ramps to Science Center Dr	NB	I	29	37	30.7	C	12.8	C		13.2	C		12.9	C		13.2	C	
	SB	I	67	56	20.0	**E**	21.6	**E**		21.8	E		22.0	**E**		22.1	**E**	
Science Center Dr to John Hopkins Dr	NB	I	49	53	24.7	D	37.2	C		37.3	C		37.2	C		37.1	C	
	SB	I	28	39	32.9	C	57.1	**E**		57.6	E		57.7	**E**		57.9	**E**	
John Hopkins Drive to N. Torrey Pines Rd	NB	I	9	10	32.4	C	67.0	**E**		67.1	E		65.4	**E**		64.4	**E**	
	SB	I	12	15	21.6	D	39.4	C		39.4	C		39.4	C		40.2	C	
Total	*NB*	*I*	*617*	*705*	*22.8*	*D*	*792.6*	**E**	**Yes**	*789.0*	*E*	**Yes**	*788.0*	**E**	**Yes**	*838.9*	**E**	**Yes**
	SB	*I*	*579*	*630*	*24.9*	*D*	*738.8*	*D*	**No**	*721.8*	*D*	**No**	*742.8*	*D*	**No**	*751.1*	*D*	**No**

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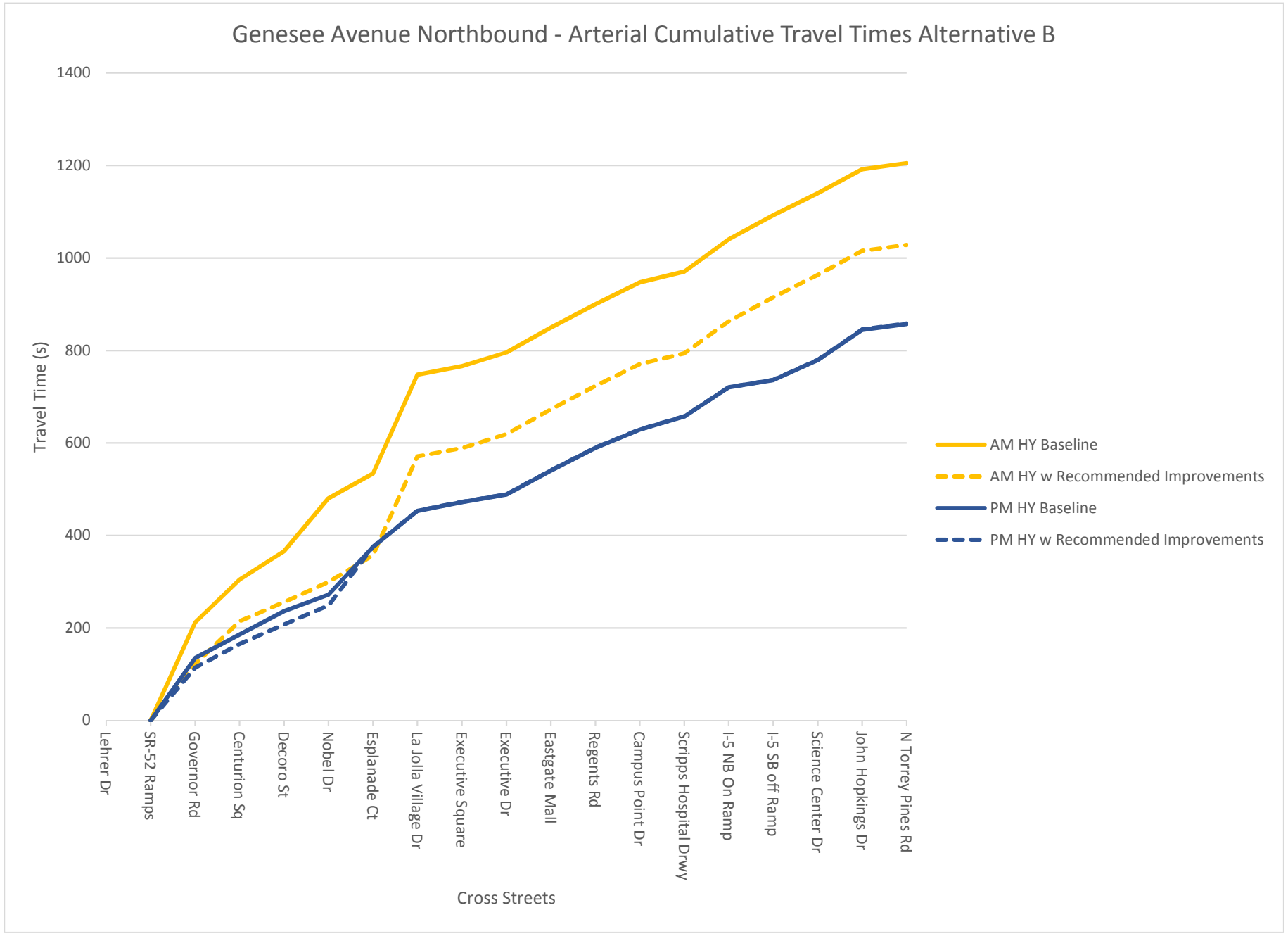
PM Peak-Hour Arterial Segment Analysis Summary Genesee Avenue

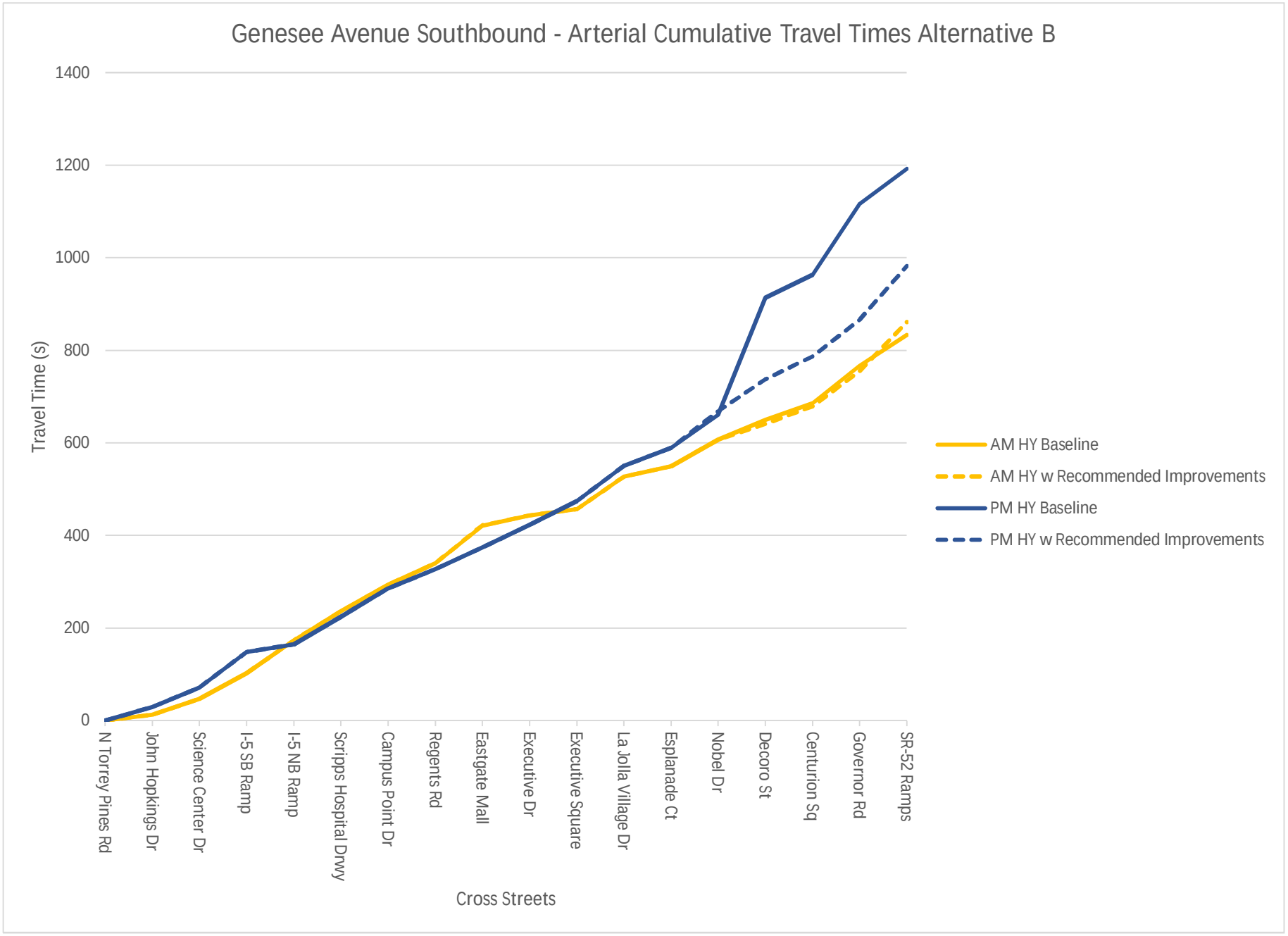
ROADWAY SEGMENT	DIRECTION	URBAN STREET CLASS	EXISTING				HORIZON YEAR WITH RECOMMENDED MITIGATIONS											
							Alt A Regents Bridge 6-lane Genesee			Alt B Regents Bridge 4-lane Genesee			Alt C No Bridge 6-lane Genesee			Alt D No Bridge 4-lane Genesee		
			TRAVEL TIME (S)		SIMULATION		SIMULATION			SIMULATION			SIMULATION			SIMULATION		
			FIELD	SIMULATION	SPEED (a)	LOS (b)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)
Genesee Ave																		
SR-52 EB Ramps to Governor Dr	NB	I	110	144	19.3	**E**	35.8	C		35.5	B		34.6	B		34.9	B	
	SB	I	60	80	35.0	B	47.1	D		46.8	D		48.3	D		47.1	D	
Governor Dr to Centurion Sq	NB	I	44	51	39.5	B	83.6	**E**		79.0	E		131.6	**F**		130.1	**F**	
	SB	I	214	106	18.8	**E**	76.6	**E**		69.4	D		79.2	**E**		69.2	D	
Centurion Sq to Decoro St	NB	I	43	44	24.2	D	50.0	B		50.9	B		50.9	B		54.7	B	
	SB	I	88	46	23.3	D	184.7	**F**		79.4	D		70.6	C		60.7	C	
Decoro St to Nobel Dr	NB	I	20	46	14.8	**F**	45.4	D		42.5	D		39.3	C		39.2	C	
	SB	I	70	142	4.9	**F**	38.0	C		49.1	D		48.2	D		159.2	**F**	
Nobel Dr to Esplanade Ct	NB	I	17	61	12.1	**F**	35.9	**E**		41.0	E		39.2	**E**		43.0	**F**	
	SB	I	100	37	19.9	**E**	84.6	**F**		69.1	F		180.4	**F**		428.3	**F**	
Esplanade Ct to La Jolla Village Dr	NB	I	86	76	8.8	**F**	98.7	**F**		126.6	F		81.2	**F**		143.5	**F**	
	SB	I	35	37	18.1	**E**	75.4	**F**		79.1	F		142.7	**F**		121.1	**F**	
La Jolla Village Dr to Executive Sq	NB	I	29	19	20.0	**E**	78.2	**F**		78.2	F		77.7	**F**		76.6	**F**	
	SB	I	88	51	7.3	**F**	38.6	**E**		38.5	E		40.2	**E**		42.5	**F**	
Executive Square to Executive Dr	NB	I	37	20	13.8	**F**	18.9	**E**		19.0	E		18.3	**E**		18.3	**E**	
	SB	I	71	25	11.0	**F**	78.4	**F**		76.6	F		115.3	**F**		117.2	**F**	
Executive Dr to Eastgate Mall	NB	I	15	49	12.2	**F**	16.7	**E**		16.6	E		16.8	**E**		16.6	**E**	
	SB	I	126	35	16.7	**E**	53.7	**F**		51.0	F		37.8	**F**		37.9	**F**	
Eastgate Mall to Regents Rd	NB	I	37	53	23.8	D	51.4	**F**		51.4	F		50.9	**F**		51.4	**F**	
	SB	I	42	42	30.2	C	49.0	**F**		48.8	F		51.5	**F**		51.9	**F**	
Regents Rd to Campus Point Dr	NB	I	15	27	20.8	**E**	49.4	D		49.2	D		49.5	D		49.0	D	
	SB	I	16	24	23.0	D	46.5	C		46.5	C		46.8	D		46.7	D	
Campus Point Dr to Scripps Hospital	NB	I	21	27	28.5	C	39.4	**F**		39.6	F		38.4	**F**		38.3	**F**	
	SB	I	45	58	13.1	**F**	42.2	**F**		42.2	F		42.2	**F**		42.2	**F**	
Scripps Hospital to I-5 NB Ramps	NB	I	77	61	19.1	**E**	27.8	C		27.9	C		27.9	C		28.0	C	
	SB	I	33	49	23.9	D	62.5	**F**		61.8	F		57.6	**F**		56.2	**F**	
I-5 NB Ramps to I-5 SB Ramps	NB	I	12	14	28.5	C	63.3	**E**		63.2	E		63.6	**E**		63.5	**E**	
	SB	I	13	11	34.2	B	59.5	**E**		59.3	E		60.1	**E**		60.6	**E**	
I-5 SB Ramps to Science Center Dr	NB	I	33	41	27.7	C	15.8	D		15.9	D		16.0	D		16.9	D	
	SB	I	137	95	11.9	**F**	16.7	D		16.8	D		16.8	D		17.1	D	
Science Center Dr to John Hopkins Dr	NB	I	50	55	23.6	D	43.4	D		43.4	D		43.3	D		43.3	D	
	SB	I	70	37	35.1	B	76.2	**F**		76.1	F		76.0	**F**		75.3	**F**	
John Hopkins Drive to N. Torrey Pines Rd	NB	I	9	13	25.1	D	65.7	**E**		65.7	E		65.6	**E**		65.6	**E**	
	SB	I	8	28	11.6	**F**	42.0	C		41.9	C		41.6	C		41.0	C	
Total	*NB*	*I*	*655*	*800*	*20.0*	**E**	*832.1*	*D*	**No**	*858.3*	*D*	**No**	*857.5*	*D*	**No**	*925.3*	*D*	**No**
	SB	*I*	*1216*	*875*	*17.9*	**E**	*1101.6*	*D*	**No**	*982.2*	*D*	**No**	*1184.5*	*D*	**No**	*1504.1*	*D*	**No**

Notes: (a) Travel time in miles per hour (mph).

(b) The arterial LOS is based on average through-vehicle travel speed for the segment or for the entire street under consideration and is influenced both by the number of signals per mile and by the intersection control delay.

(c) A significant impact resulted in a change from LOS D or better to LOS E or LOS F, or a decrease of speeds of more than 1.0 mph at LOS E and LOS F.


Genesee Avenue Northbound - Arterial Cumulative Travel Times Alternative B
1400
1200
1000
800
600
400
200
0
Travel Time (s)
Lehrer Dr
SR-52 Ramps
Governor Rd
Centurion Sq
Decoro St
Nobel Dr
Esplanade Ct
La Jolla Village Dr
Executive Square
Executive Dr
Eastgate Mall
Regents Rd
Campus Point Dr
Scripps Hospital Drwy
I-5 NB On Ramp
I-5 SB off Ramp
Science Center Dr
John Hopkings Dr
N Torrey Pines Rd
Cross Streets
AM HY Baseline
AM HY w Recommended Improvements
PM HY Baseline
PM HY w Recommended Improvements


Genesee Avenue Southbound - Arterial Cumulative Travel Times Alternative B
Travel Time (s)
1400
1200
1000
800
600
400
200
0
N Torrey Pines Rd
John Hopkings Dr
Science Center Dr
I-5 SB Ramp
I-5 NB Ramp
Scripps Hospital Drwy
Campus Point Dr
Regents Rd
Eastgate Mall
Executive Dr
Executive Square
La Jolla Village Dr
Esplanade Ct
Nobel Dr
Decoro St
Centurion Sq
Governor Rd
SR-52 Ramps
Cross Streets
AM HY Baseline
AM HY w Recommended Improvements
PM HY Baseline
PM HY w Recommended Improvements

AM Peak-Hour Arterial Segment Analysis Summary La Jolla Village Drive

ROADWAY SEGMENT	DIRECTION	URBAN STREET CLASS	EXISTING				HORIZON YEAR											
							Alt A Regents Bridge 6-lane Genesee			Alt B Regents Bridge 4-lane Genesee			Alt C No Bridge 6-lane Genesee			Alt D No Bridge 4-lane Genesee		
			TRAVEL TIME (S)		SIMULATION		SIMULATION			SIMULATION			SIMULATION			SIMULATION		
			FIELD	SIMULATION	SPEED (a)	LOS (b)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)
La Jolla Village Drive																		
Torrey Pines Rd to La Jolla Scenic Dr	EB	I	10	27	11.3	**F**	41.8	**F**		41.7	**F**		40.7	**F**		40.4	**F**	
	WB	I	9	14	22.0	D	16.8	**E**		16.9	**E**		15.8	**E**		15.6	**E**	
La Jolla Scenic Dr to Villa La Jolla Dr	EB	I	33	67	23.5	D	90.6	**E**		91.8	**E**		158.0	**F**		95.1	**E**	
	WB	I	47	60	26.4	D	65.2	D		65.3	D		51.8	C		61.9	D	
Villa La Jolla Dr to I-5 SB Off-Ramp	EB	I	28	25	26.6	D	26.8	D		26.8	D		19.9	C		26.6	D	
	WB	I	58	83	8.0	**F**	189.4	**F**		191.8	**F**		192.4	**F**		200.9	**F**	
I-5 SB Off-Ramp to I-5 NB Ramps	EB	I	35	44	14.8	**F**	54.3	**F**		55.0	**F**		46.4	**F**		57.1	**F**	
	WB	I	66	63	10.5	**F**	93.5	**F**		94.5	**F**		94.1	**F**		95.4	**F**	
I-5 NB Ramps to Lebon Dr	EB	I	53	56	17.4	**E**	62.4	**F**		62.7	**F**		63.1	**F**		63.3	**F**	
	WB	I	36	41	24.2	D	42.9	D		43.0	D		43.6	D		43.5	D	
Lebon Dr to Regents Rd	EB	I	29	74	16.1	**E**	92.4	**F**		92.5	**F**		81.4	**F**		82.5	**F**	
	WB	I	29	48	24.8	D	49.8	D		50.0	D		50.7	D		49.7	D	
Regents Rd to Genesee Ave	EB	I	58	89	10.4	**F**	78.0	**F**		78.1	**F**		70.5	**F**		70.8	**F**	
	WB	I	39	48	19.1	**E**	68.2	**F**		67.9	**F**		56.4	**E**		58.7	**F**	
Genesee Ave to Executive Way	EB	I	40	34	28.3	C	44.4	D		44.5	D		47.3	**E**		47.5	**E**	
	WB	I	68	160	6.0	**F**	156.0	**F**		156.8	**F**		132.6	**F**		134.3	**F**	
Executive Way to Towne Center Dr	EB	I	16	20	25.4	D	28.9	**E**		30.4	**E**		32.9	**F**		31.9	**F**	
	WB	I	33	35	14.4	**F**	153.9	**F**		149.5	**F**		139.3	**F**		138.5	**F**	
Towne Center Dr to I-805 SB Ramps	EB	I	62	52	26.9	D	44.5	C		46.9	C		49.8	C		47.3	C	
	WB	I	80	117	11.9	**F**	296.8	**F**		311.5	**F**		313.7	**F**		308.8	**F**	
I-805 SB Ramps to I-805 NB Ramps	EB	I	17	51	14.0	**F**	53.1	**F**		51.8	**F**		50.8	**F**		52.8	**F**	
	WB	I	54	183	3.9	**F**	192.3	**F**		209.1	**F**		239.2	**F**		209.9	**F**	
I-805 NB Ramps to Nobel Dr	EB	I	34	51	26.6	D	58.9	D		58.3	D		60.6	D		59.8	D	
	WB	I	45	50	27.5	C	49.6	C		49.7	C		49.9	C		50.2	C	
Miramar Road																		
Nobel Dr to Eastgate Mall	EB	I	25	35	28.8	C	35.7	C		35.3	C		35.7	C		35.7	C	
	WB	I	21	29	34.5	B	29.5	B		29.1	B		30.3	C		30.2	C	
Eastgate Mall to Miramar Mall	EB	I	16	28	27.2	C	30.9	D		30.3	D		30.8	D		30.8	D	
	WB	I	29	44	17.5	**E**	45.9	**E**		46.7	**E**		46.0	**E**		45.9	**E**	
Miramar Mall to Miramar Place	EB	I	34	34	27.0	C	34.2	D		33.9	D		34.2	D		34.2	D	
	WB	I	19	50	18.0	**E**	63.0	**F**		60.1	**F**		62.7	**F**		63.1	**F**	
Miramar Place to Camino Sante Fe	EB	I	36	41	30.3	C	42.3	C		42.3	C		42.5	C		42.5	C	
	WB	I	30	52	23.7	D	55.5	D		54.0	D		55.4	D		55.4	D	
Total	*EB*	*I*	*526*	*725*	*20.8*	**E**	*819.2*	**E**	**No**	*822.3*	**E**	**No**	*864.6*	**E**	**No**	*818.3*	**E**	**No**
	WB	*I*	*663*	*1074*	*14.0*	**F**	*1568.3*	**F**	**No**	*1595.9*	**F**	**No**	*1573.9*	**F**	**No**	*1562.0*	**F**	**No**

Notes:

Notes: (a) Travel time in miles per hour (mph).

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MID Peak-Hour Arterial Segment Analysis Summary La Jolla Village Drive

ROADWAY SEGMENT	DIRECTION	URBAN STREET CLASS	EXISTING				HORIZON YEAR											
							Alt A Regents Bridge 6-lane Genesee			Alt B Regents Bridge 4-lane Genesee			Alt C No Bridge 6-lane Genesee			Alt D No Bridge 4-lane Genesee		
			TRAVEL TIME (S)		SIMULATION		SIMULATION			SIMULATION			SIMULATION			SIMULATION		
			FIELD	SIMULATION	SPEED (a)	LOS (b)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)
La Jolla Village Drive																		
Torrey Pines Rd to La Jolla Scenic Dr	EB	I	10	15	19.6	**E**	27.8	**F**		27.6	**F**		29.2	**F**		29.1	**F**	
	WB	I	9	14	21.2	D	15.8	**E**		15.8	**E**		16.1	**E**		16.1	**E**	
La Jolla Scenic Dr to Villa La Jolla Dr	EB	I	33	92	15.0	**F**	96.5	**F**		96.5	**F**		97.0	**F**		97.1	**F**	
	WB	I	47	7	25.8	D	9.1	**E**		9.0	D		9.4	**E**		9.2	**E**	
Villa La Jolla Dr to I-5 SB Off-Ramp	EB	I	28	29	22.9	D	28.7	D		28.7	D		28.6	D		28.6	D	
	WB	I	58	51	13.0	**F**	52.9	**F**		52.9	**F**		53.0	**F**		53.2	**F**	
I-5 SB Off-Ramp to I-5 NB Ramps	EB	I	35	29	22.9	D	32.2	**E**		32.6	**E**		32.9	**E**		33.0	**E**	
	WB	I	66	66	10.0	**F**	152.0	**F**		147.5	**F**		156.8	**F**		154.7	**F**	
I-5 NB Ramps to Lebon Dr	EB	I	53	42	23.6	D	46.7	D		47.0	**E**		45.9	D		46.5	D	
	WB	I	36	34	29.1	C	36.2	C		36.3	C		36.1	C		36.1	C	
Lebon Dr to Regents Rd	EB	I	29	65	18.3	**E**	88.7	**F**		89.4	**F**		84.3	**F**		85.9	**F**	
	WB	I	29	38	31.1	C	59.1	**E**		59.7	**E**		61.2	**E**		61.1	**E**	
Regents Rd to Genesee Ave	EB	I	58	79	11.7	**F**	62.8	**F**		62.6	**F**		63.6	**F**		62.7	**F**	
	WB	I	39	48	19.2	**E**	58.2	**F**		58.1	**F**		57.3	**E**		57.5	**E**	
Genesee Ave to Executive Way	EB	I	40	48	19.8	**E**	55.0	**E**		54.9	**E**		55.5	**E**		55.3	**E**	
	WB	I	68	50	18.9	**E**	64.5	**F**		64.3	**F**		63.2	**F**		63.9	**F**	
Executive Way to Towne Center Dr	EB	I	16	23	21.8	D	29.0	**E**		29.6	**E**		31.2	**E**		30.7	**E**	
	WB	I	33	30	16.8	**E**	42.8	**F**		42.6	**F**		41.4	**F**		41.2	**F**	
Towne Center Dr to I-805 SB Ramps	EB	I	62	14	36.0	B	15.0	B		15.0	B		15.0	B		15.0	B	
	WB	I	80	39	22.2	D	41.6	**E**		41.7	**E**		41.6	**E**		41.6	**E**	
Total	*EB*	*I*	*364*	*435*	*18.4*	**E**	*482.4*	**E**	**No**	*483.9*	**E**	**No**	*483.2*	**E**	**No**	*483.9*	**E**	**No**
	WB	*I*	*465*	*377*	*19.0*	**E**	*537.0*	**F**	**No**	*1184.0*	**E**	**No**	*536.1*	**F**	**No**	*534.6*	**F**	**No**

Notes:

Notes: (a) Travel time in miles per hour (mph).

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PM Peak-Hour Arterial Segment Analysis Summary La Jolla Village Drive

ROADWAY SEGMENT	DIRECTION	URBAN STREET CLASS	EXISTING				HORIZON YEAR											
							Alt A Regents Bridge 6-lane Genesee			Alt B Regents Bridge 4-lane Genesee			Alt C No Bridge 6-lane Genesee			Alt D No Bridge 4-lane Genesee		
			TRAVEL TIME (S)		SIMULATION		SIMULATION			SIMULATION			SIMULATION			SIMULATION		
			FIELD	SIMULATION	SPEED (a)	LOS (b)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)
La Jolla Village Drive																		
Torrey Pines Rd to La Jolla Scenic Dr	EB	I	10	34	8.9	**F**	100.2	**F**		99.3	**F**		70.0	**F**		70.0	**F**	
	WB	I	11	21	14.7	**F**	22.2	**F**		22.2	**F**		22.3	**F**		22.3	**F**	
La Jolla Scenic Dr to Villa La Jolla Dr	EB	I	55	447	3.5	**F**	478.5	**F**		479.5	**F**		481.5	**F**		481.5	**F**	
	WB	I	39	46	34.3	B	47.3	C		47.4	C		45.2	B		45.2	B	
Villa La Jolla Dr to I-5 SB Off-Ramp	EB	I	25	24	28.0	C	28.2	D		28.7	D		28.0	D		28.0	D	
	WB	I	20	50	13.3	**F**	46.6	**F**		46.3	**F**		47.1	**F**		47.1	**F**	
I-5 SB Off-Ramp to I-5 NB Ramps	EB	I	13	28	23.9	D	29.0	D		29.0	D		30.6	D		30.6	D	
	WB	I	25	35	18.8	**E**	37.2	**E**		37.5	**E**		35.8	**E**		35.8	**E**	
I-5 NB Ramps to Lebon Dr	EB	I	42	68	14.4	**F**	93.0	**F**		90.4	**F**		95.7	**F**		95.7	**F**	
	WB	I	31	33	29.5	C	36.0	C		36.1	C		37.2	D		37.2	D	
Lebon Dr to Regents Rd	EB	I	73	79	15.0	**F**	174.1	**F**		174.7	**F**		182.7	**F**		182.7	**F**	
	WB	I	48	57	20.8	**E**	46.0	D		46.7	D		46.8	D		46.8	D	
Regents Rd to Genesee Ave	EB	I	27	50	18.5	**E**	51.8	**E**		51.8	**E**		43.7	D		43.7	D	
	WB	I	100	78	11.8	**F**	150.7	**F**		150.3	**F**		147.0	**F**		147.0	**F**	
Genesee Ave to Executive Way	EB	I	55	78	12.2	**F**	146.9	**F**		144.7	**F**		124.3	**F**		124.3	**F**	
	WB	I	38	48	20.0	**E**	79.7	**F**		79.6	**F**		67.5	**F**		67.5	**F**	
Executive Way to Towne Center Dr	EB	I	29	200	2.5	**F**	326.5	**F**		330.4	**F**		320.9	**F**		320.9	**F**	
	WB	I	15	58	8.6	**F**	71.7	**F**		67.2	**F**		50.3	**F**		50.3	**F**	
Towne Center Dr to I-805 SB Ramps	EB	I	29	47	29.2	C	49.5	C		51.0	C		61.0	D		61.0	D	
	WB	I	36	83	16.7	**E**	117.7	**F**		118.6	**F**		113.1	**F**		113.1	**F**	
I-805 SB Ramps to I-805 NB Ramps	EB	I	12	38	19.0	**E**	38.0	**E**		38.2	**E**		38.0	**E**		38.0	**E**	
	WB	I	16	29	24.7	D	34.7	**E**		35.6	**E**		34.2	**E**		34.2	**E**	
I-805 NB Ramps to Nobel Dr	EB	I	45	61	22.2	D	63.6	D		84.2	**E**		96.9	**F**		96.9	**F**	
	WB	I	38	54	25.1	D	54.6	D		54.6	D		55.2	D		55.2	D	
Miramar Road																		
Nobel Dr to Eastgate Mall	EB	I	22	47	21.2	D	43.7	D		43.8	D		43.7	D		43.7	D	
	WB	I	22	31	32.8	C	31.4	C		31.5	C		34.1	C		34.1	C	
Eastgate Mall to Miramar Mall	EB	I	15	27	28.0	C	31.6	D		30.5	D		31.6	D		31.6	D	
	WB	I	61	196	3.9	**F**	79.8	**F**		83.8	**F**		79.8	**F**		79.8	**F**	
Miramar Mall to Miramar Place	EB	I	25	31	29.3	C	32.6	C		32.4	C		32.6	C		32.6	C	
	WB	I	36	41	21.9	D	51.1	**E**		49.2	**E**		50.4	**E**		50.4	**E**	
Miramar Place to Camino Sante Fe	EB	I	69	54	23.0	D	49.8	D		49.7	D		50.4	D		50.4	D	
	WB	I	31	37	33.3	C	43.0	C		41.6	C		43.3	C		43.3	C	
Total	*EB*	*I*	*546*	*1313*	*11.5*	**F**	*1737.0*	**F**	**No**	*1758.3*	**F**	**No**	*1731.6*	**F**	**No**	*1731.6*	**F**	**No**
	WB	*I*	*567*	*897*	*16.8*	**E**	*949.7*	**F**	**No**	*948.2*	**F**	**No**	*909.3*	**E**	**No**	*909.3*	**E**	**No**

Notes:

Notes: (a) Travel time in miles per hour (mph).

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(c) A significant impact resulted in a change from LOS D or better to LOS E or LOS F, or a decrease of speeds of more than 1.0 mph at LOS E and LOS F.

AM Peak-Hour Arterial Segment Analysis Summary La Jolla Village Drive

ROADWAY SEGMENT	DIRECTION	URBAN STREET CLASS	EXISTING				HORIZON YEAR WITH RECOMMENDED MITIGATIONS											
							Alt A Regents Bridge 6-lane Genesee			Alt B Regents Bridge 4-lane Genesee			Alt C No Bridge 6-lane Genesee			Alt D No Bridge 4-lane Genesee		
			TRAVEL TIME (S)		SIMULATION		SIMULATION			SIMULATION			SIMULATION			SIMULATION		
			FIELD	SIMULATION	SPEED (a)	LOS (b)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)
La Jolla Village Drive																		
Torrey Pines Rd to La Jolla Scenic Dr	EB	I	10	27	11.3	**F**	56.1	**F**		55.9	**F**		62.0	**F**		61.7	**F**	
	WB	I	9	14	22.0	D	35.9	**F**		27.7	**F**		28.0	**F**		27.8	**F**	
La Jolla Scenic Dr to Villa La Jolla Dr	EB	I	33	67	23.5	D	89.8	**E**		66.6	D		73.7	D		68.0	D	
	WB	I	47	60	26.4	D	54.3	C		67.9	D		59.2	D		64.5	D	
Villa La Jolla Dr to I-5 SB Off-Ramp	EB	I	28	25	26.6	D	21.3	C		24.3	C		20.0	C		24.0	C	
	WB	I	58	83	8.0	**F**	96.0	**F**		97.7	**F**		95.5	**F**		103.3	**F**	
I-5 SB Off-Ramp to I-5 NB Ramps	EB	I	35	44	14.8	**F**	55.6	**F**		50.8	**F**		43.7	**F**		53.2	**F**	
	WB	I	66	63	10.5	**F**	93.5	**F**		94.5	**F**		94.1	**F**		95.4	**F**	
I-5 NB Ramps to Lebon Dr	EB	I	53	56	17.4	**E**	62.4	**F**		62.7	**F**		63.1	**F**		63.3	**F**	
	WB	I	36	41	24.2	D	42.9	D		43.0	D		43.6	D		43.5	D	
Lebon Dr to Regents Rd	EB	I	29	74	16.1	**E**	92.4	**F**		92.5	**F**		81.4	**F**		82.5	**F**	
	WB	I	29	48	24.8	D	49.8	D		50.0	D		50.7	D		49.7	D	
Regents Rd to Genesee Ave	EB	I	58	89	10.4	**F**	78.0	**F**		78.1	**F**		70.5	**F**		70.8	**F**	
	WB	I	39	48	19.1	**E**	68.2	**F**		67.9	**F**		56.4	**E**		58.7	**F**	
Genesee Ave to Executive Way	EB	I	40	34	28.3	C	44.4	D		44.5	D		47.3	**E**		47.5	**E**	
	WB	I	68	160	6.0	**F**	156.0	**F**		156.8	**F**		132.6	**F**		134.3	**F**	
Executive Way to Towne Center Dr	EB	I	16	20	25.4	D	28.9	**E**		30.4	**E**		32.9	**F**		31.9	**F**	
	WB	I	33	35	14.4	**F**	153.9	**F**		149.5	**F**		139.3	**F**		138.5	**F**	
Towne Center Dr to I-805 SB Ramps	EB	I	62	52	26.9	D	44.5	C		46.9	C		49.8	C		47.3	C	
	WB	I	80	117	11.9	**F**	296.8	**F**		311.5	**F**		313.7	**F**		308.8	**F**	
I-805 SB Ramps to I-805 NB Ramps	EB	I	17	51	14.0	**F**	53.1	**F**		51.8	**F**		50.8	**F**		52.8	**F**	
	WB	I	54	183	3.9	**F**	192.3	**F**		209.1	**F**		239.2	**F**		209.9	**F**	
I-805 NB Ramps to Nobel Dr	EB	I	34	51	26.6	D	58.9	D		58.3	D		60.6	D		59.8	D	
	WB	I	45	50	27.5	C	49.6	C		49.7	C		49.9	C		50.2	C	
Miramar Road																		
Nobel Dr to Eastgate Mall	EB	I	25	35	28.8	C	34.4	C		34.3	C		34.5	C		34.5	C	
	WB	I	21	29	34.5	B	29.5	B		29.1	B		30.3	C		30.2	C	
Eastgate Mall to Miramar Mall	EB	I	16	28	27.2	C	30.9	D		30.3	D		30.8	D		30.8	D	
	WB	I	29	44	17.5	**E**	44.3	**E**		45.4	**E**		44.4	**E**		44.3	**E**	
Miramar Mall to Miramar Place	EB	I	34	34	27.0	C	34.2	D		33.9	D		34.2	D		34.2	D	
	WB	I	19	50	18.0	**E**	63.0	**F**		60.1	**F**		62.7	**F**		63.1	**F**	
Miramar Place to Camino Sante Fe	EB	I	36	41	30.3	C	42.3	C		42.3	C		42.5	C		42.5	C	
	WB	I	30	52	23.7	D	55.5	D		54.0	D		55.4	D		55.4	D	
Total	*EB*	*I*	*526*	*725*	*20.8*	**E**	*827.2*	**E**	**No**	*803.6*	**E**	**No**	*797.8*	**E**	**No**	*804.8*	**E**	**No**
	WB	*I*	*663*	*1074*	*14.0*	**F**	*1481.5*	**F**	**No**	*1513.9*	**F**	**No**	*1495.0*	**F**	**No**	*1477.6*	**F**	**No**

Notes:

Notes: (a) Travel time in miles per hour (mph).

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MID Peak-Hour Arterial Segment Analysis Summary La Jolla Village Drive

ROADWAY SEGMENT	DIRECTION	URBAN STREET CLASS	EXISTING				HORIZON YEAR WITH RECOMMENDED MITIGATIONS											
							Alt A Regents Bridge 6-lane Genesee			Alt B Regents Bridge 4-lane Genesee			Alt C No Bridge 6-lane Genesee			Alt D No Bridge 4-lane Genesee		
			TRAVEL TIME (S)		SIMULATION		SIMULATION			SIMULATION			SIMULATION			SIMULATION		
			FIELD	SIMULATION	SPEED (a)	LOS (b)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)
La Jolla Village Drive																		
Torrey Pines Rd to La Jolla Scenic Dr	EB	I	10	15	19.6	**E**	27.3	**F**		27.0	**F**		29.2	**F**		29.1	**F**	
	WB	I	9	14	21.2	D	26.9	**F**		26.8	**F**		27.1	**F**		27.1	**F**	
La Jolla Scenic Dr to Villa La Jolla Dr	EB	I	33	92	15.0	**F**	249.2	**F**		249.2	**F**		255.1	**F**		256.1	**F**	
	WB	I	47	7	25.8	D	9.1	**E**		9.0	D		9.4	**E**		9.2	**E**	
Villa La Jolla Dr to I-5 SB Off-Ramp	EB	I	28	29	22.9	D	28.7	D		28.7	D		28.6	D		28.6	D	
	WB	I	58	51	13.0	**F**	82.1	**F**		82.2	**F**		82.6	**F**		83.1	**F**	
I-5 SB Off-Ramp to I-5 NB Ramps	EB	I	35	29	22.9	D	32.2	**E**		32.6	**E**		32.9	**E**		33.0	**E**	
	WB	I	66	66	10.0	**F**	152.0	**F**		147.5	**F**		156.8	**F**		154.7	**F**	
I-5 NB Ramps to Lebon Dr	EB	I	53	42	23.6	D	46.7	D		47.0	**E**		45.9	D		46.5	D	
	WB	I	36	34	29.1	C	36.2	C		36.3	C		36.1	C		36.1	C	
Lebon Dr to Regents Rd	EB	I	29	65	18.3	**E**	88.7	**F**		89.4	**F**		84.3	**F**		85.9	**F**	
	WB	I	29	38	31.1	C	59.1	**E**		59.7	**E**		61.2	**E**		61.1	**E**	
Regents Rd to Genesee Ave	EB	I	58	79	11.7	**F**	62.8	**F**		62.6	**F**		63.6	**F**		62.7	**F**	
	WB	I	39	48	19.2	**E**	58.2	**F**		58.1	**F**		57.3	**E**		57.5	**E**	
Genesee Ave to Executive Way	EB	I	40	48	19.8	**E**	55.0	**E**		54.9	**E**		55.5	**E**		55.3	**E**	
	WB	I	68	50	18.9	**E**	64.5	**F**		64.3	**F**		63.2	**F**		63.9	**F**	
Executive Way to Towne Center Dr	EB	I	16	23	21.8	D	29.0	**E**		29.6	**E**		31.2	**E**		30.7	**E**	
	WB	I	33	30	16.8	**E**	42.8	**F**		42.6	**F**		41.4	**F**		41.2	**F**	
Towne Center Dr to I-805 SB Ramps	EB	I	62	14	36.0	B	15.0	B		15.0	B		15.0	B		15.0	B	
	WB	I	80	39	22.2	D	41.6	**E**		41.7	**E**		41.6	**E**		41.6	**E**	
Total	*EB*	*I*	*364*	*435*	*18.4*	**E**	*634.6*	**F**	**No**	*660.3*	**F**	**No**	*641.3*	**F**	**No**	*642.9*	**F**	**No**
	WB	*I*	*465*	*377*	*19.0*	**E**	*572.5*	**F**	**No**	*562.0*	**F**	**No**	*570.2*	**F**	**No**	*569.0*	**F**	**No**

Notes:

Notes: (a) Travel time in miles per hour (mph).

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PM Peak-Hour Arterial Segment Analysis Summary La Jolla Village Drive

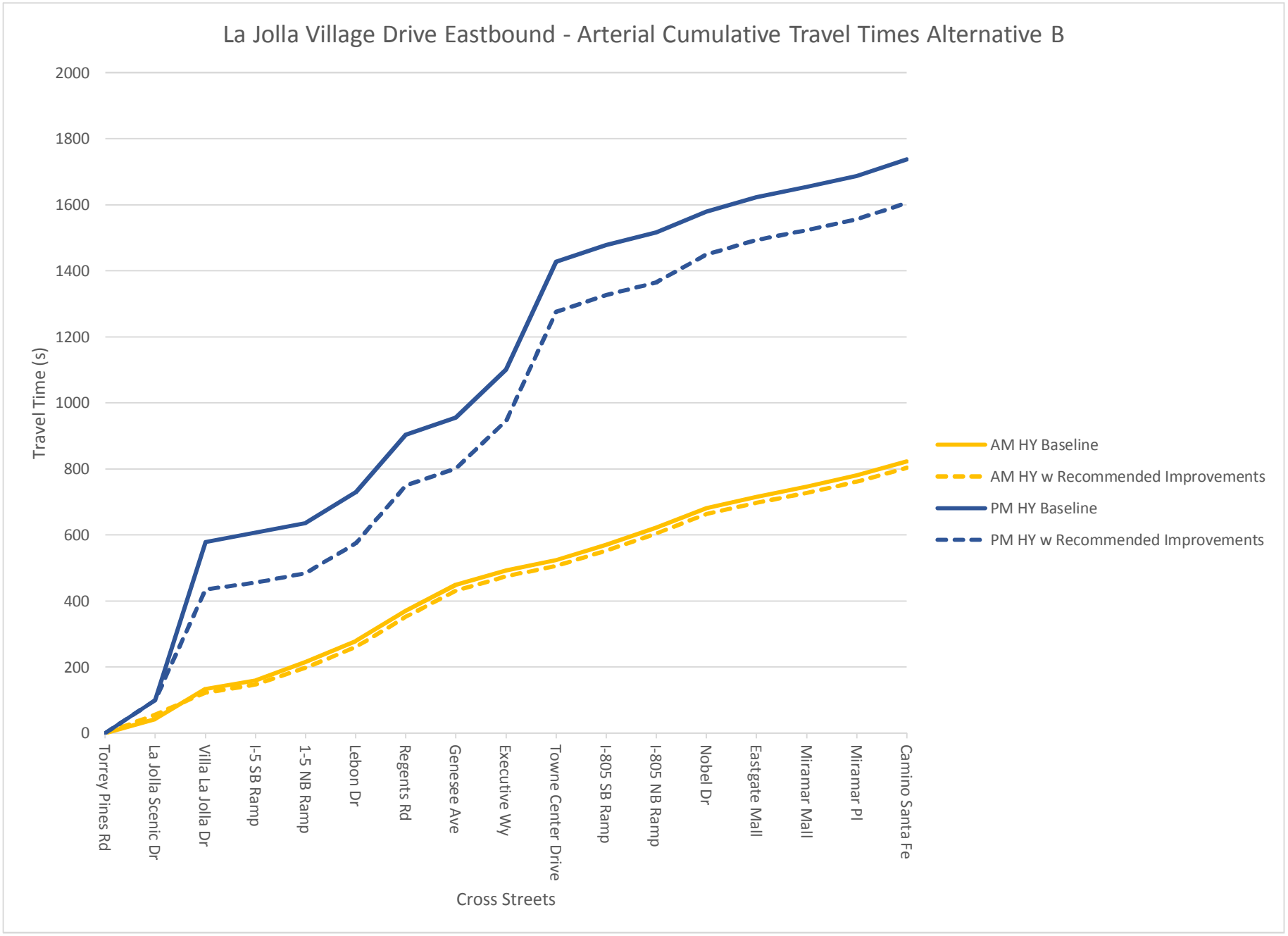
ROADWAY SEGMENT	DIRECTION	URBAN STREET CLASS	EXISTING				HORIZON YEAR WITH RECOMMENDED MITIGATIONS											
							Alt A Regents Bridge 6-lane Genesee			Alt B Regents Bridge 4-lane Genesee			Alt C No Bridge 6-lane Genesee			Alt D No Bridge 4-lane Genesee		
			TRAVEL TIME (S)		SIMULATION		SIMULATION			SIMULATION			SIMULATION			SIMULATION		
			FIELD	SIMULATION	SPEED (a)	LOS (b)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)
La Jolla Village Drive																		
Torrey Pines Rd to La Jolla Scenic Dr	EB	I	10	34	8.9	**F**	100.2	**F**		99.3	**F**		70.0	**F**		70.0	**F**	
	WB	I	11	21	14.7	**F**	23.5	**F**		23.5	**F**		23.5	**F**		23.5	**F**	
La Jolla Scenic Dr to Villa La Jolla Dr	EB	I	55	447	3.5	**F**	335.2	**F**		336.0	**F**		340.0	**F**		340.0	**F**	
	WB	I	39	46	34.3	B	47.3	C		47.4	C		45.2	B		45.2	B	
Villa La Jolla Dr to I-5 SB Off-Ramp	EB	I	25	24	28.0	C	20.7	C		20.8	C		24.3	C		24.3	C	
	WB	I	20	50	13.3	**F**	55.5	**F**		55.2	**F**		54.1	**F**		54.1	**F**	
I-5 SB Off-Ramp to I-5 NB Ramps	EB	I	13	28	23.9	D	27.7	D		27.8	D		29.5	D		29.5	D	
	WB	I	25	35	18.8	**E**	37.2	**E**		37.5	**E**		35.8	**E**		35.8	**E**	
I-5 NB Ramps to Lebon Dr	EB	I	42	68	14.4	**F**	93.0	**F**		90.4	**F**		95.7	**F**		95.7	**F**	
	WB	I	31	33	29.5	C	36.0	C		36.1	C		37.2	D		37.2	D	
Lebon Dr to Regents Rd	EB	I	73	79	15.0	**F**	174.1	**F**		174.7	**F**		182.7	**F**		182.7	**F**	
	WB	I	48	57	20.8	**E**	46.0	D		46.7	D		46.8	D		46.8	D	
Regents Rd to Genesee Ave	EB	I	27	50	18.5	**E**	51.8	**E**		51.8	**E**		43.7	D		43.7	D	
	WB	I	100	78	11.8	**F**	150.7	**F**		150.3	**F**		147.0	**F**		147.0	**F**	
Genesee Ave to Executive Way	EB	I	55	78	12.2	**F**	146.9	**F**		144.7	**F**		124.3	**F**		124.3	**F**	
	WB	I	38	48	20.0	**E**	79.7	**F**		79.6	**F**		67.5	**F**		67.5	**F**	
Executive Way to Towne Center Dr	EB	I	29	200	2.5	**F**	326.5	**F**		330.4	**F**		320.9	**F**		320.9	**F**	
	WB	I	15	58	8.6	**F**	71.7	**F**		67.2	**F**		50.3	**F**		50.3	**F**	
Towne Center Dr to I-805 SB Ramps	EB	I	29	47	29.2	C	49.5	C		51.0	C		61.0	D		61.0	D	
	WB	I	36	83	16.7	**E**	117.7	**F**		118.6	**F**		113.1	**F**		113.1	**F**	
I-805 SB Ramps to I-805 NB Ramps	EB	I	12	38	19.0	**E**	38.0	**E**		38.2	**E**		38.0	**E**		38.0	**E**	
	WB	I	16	29	24.7	D	34.7	**E**		35.6	**E**		34.2	**E**		34.2	**E**	
I-805 NB Ramps to Nobel Dr	EB	I	45	61	22.2	D	63.6	D		84.2	**E**		96.9	**F**		96.9	**F**	
	WB	I	38	54	25.1	D	54.6	D		54.6	D		55.2	D		55.2	D	
Miramar Road																		
Nobel Dr to Eastgate Mall	EB	I	22	47	21.2	D	43.7	D		43.8	D		43.2	D		43.2	D	
	WB	I	22	31	32.8	C	31.4	C		31.5	C		34.1	C		34.1	C	
Eastgate Mall to Miramar Mall	EB	I	15	27	28.0	C	31.6	D		30.5	D		31.6	D		31.6	D	
	WB	I	61	196	3.9	**F**	79.8	**F**		83.8	**F**		76.4	**F**		76.4	**F**	
Miramar Mall to Miramar Place	EB	I	25	31	29.3	C	32.6	C		32.4	C		32.6	C		32.6	C	
	WB	I	36	41	21.9	D	51.1	**E**		49.2	**E**		50.4	**E**		50.4	**E**	
Miramar Place to Camino Sante Fe	EB	I	69	54	23.0	D	49.8	D		49.7	D		50.4	D		50.4	D	
	WB	I	31	37	33.3	C	43.0	C		41.6	C		43.3	C		43.3	C	
Total	*EB*	*I*	*546*	*1313*	*11.5*	**F**	*1584.9*	**F**	**No**	*1605.7*	**F**	**No**	*1584.8*	**F**	**No**	*1584.8*	**F**	**No**
	WB	*I*	*567*	*897*	*16.8*	**E**	*959.9*	**F**	**No**	*958.4*	**F**	**No**	*914.1*	**E**	**No**	*914.1*	**E**	**No**

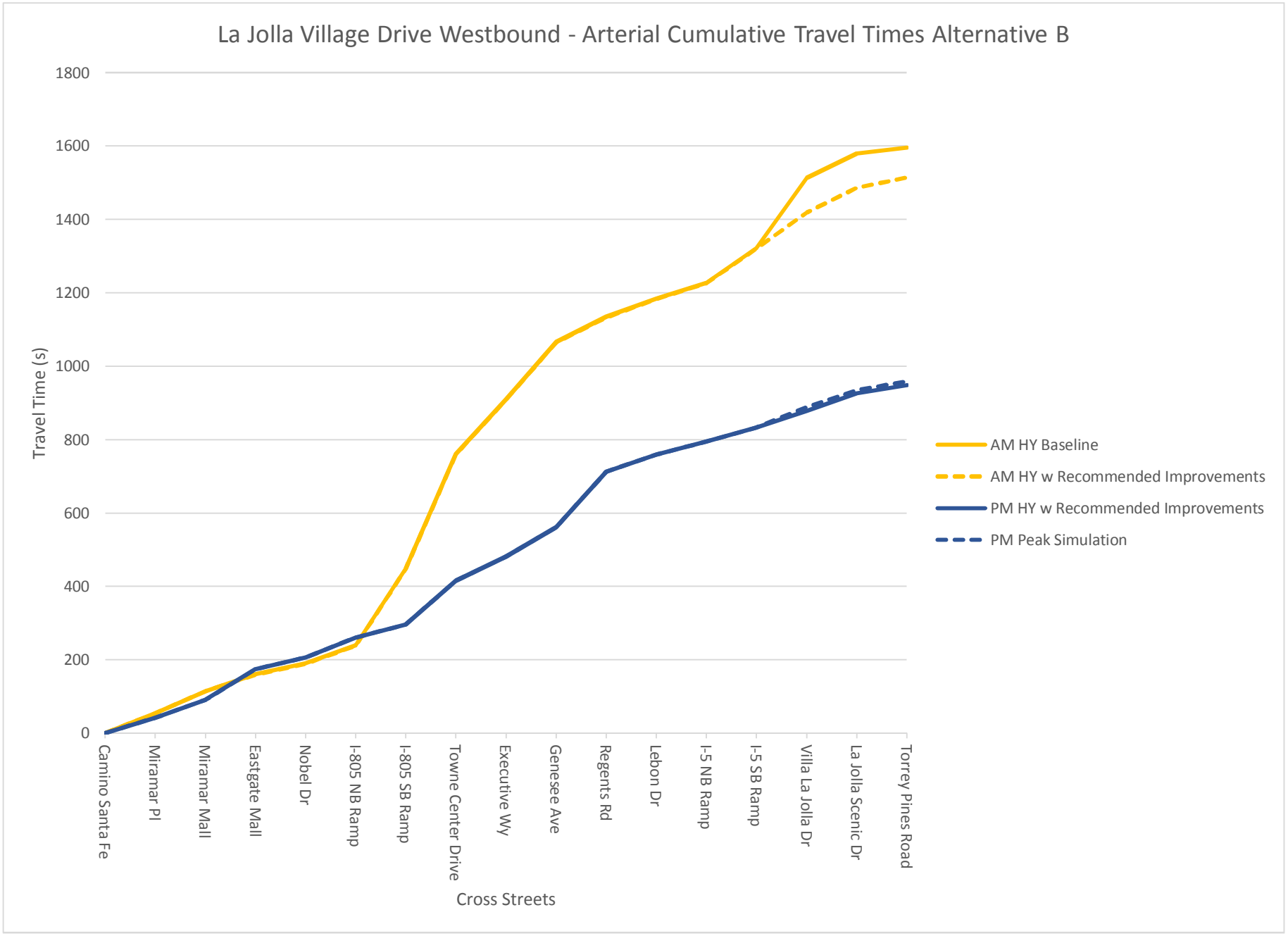
Notes:

Notes: (a) Travel time in miles per hour (mph).

(b) The arterial LOS is based on average through-vehicle travel speed for the segment or for the entire street under consideration and is influenced both by the number of signals per mile and by the intersection control delay.

(c) A significant impact resulted in a change from LOS D or better to LOS E or LOS F, or a decrease of speeds of more than 1.0 mph at LOS E and LOS F.


La Jolla Village Drive Eastbound - Arterial Cumulative Travel Times Alternative B
2000
1800
1600
1400
1200
1000
800
600
400
200
0
Travel Time (s)
Torrey Pines Rd
La Jolla Scenic Dr
Villa La Jolla Dr
I-5 SB Ramp
1-5 NB Ramp
Lebon Dr
Regents Rd
Genesee Ave
Executive Wy
Towne Center Drive
I-805 SB Ramp
I-805 NB Ramp
Nobel Dr
Eastgate Mall
Miramar Mall
Miramar Pl
Camino Santa Fe
Cross Streets
AM HY Baseline
AM HY w Recommended Improvements
PM HY Baseline
PM HY w Recommended Improvements


La Jolla Village Drive Westbound - Arterial Cumulative Travel Times Alternative B
Travel Time (s)
1800
1600
1400
1200
1000
800
600
400
200
0
Camino Santa Fe
Miramar Pl
Miramar Mall
Eastgate Mall
Nobel Dr
I-805 NB Ramp
I-805 SB Ramp
Towne Center Drive
Executive Wy
Genesee Ave
Regents Rd
Lebon Dr
I-5 NB Ramp
I-5 SB Ramp
Villa La Jolla Dr
La Jolla Scenic Dr
Torrey Pines Road
Cross Streets
AM HY Baseline
AM HY w Recommended Improvements
PM HY w Recommended Improvements
PM Peak Simulation

AM Peak-Hour Arterial Segment Analysis Summary Nobel Dr

ROADWAY SEGMENT	DIRECTION	URBAN STREET CLASS	EXISTING				HORIZON YEAR											
							Alt A Regents Bridge 6-lane Genesee			Alt B Regents Bridge 4-lane Genesee			Alt C No Bridge 6-lane Genesee			Alt D No Bridge 4-lane Genesee		
			TRAVEL TIME (S)		SIMULATION		SIMULATION			SIMULATION			SIMULATION			SIMULATION		
			FIELD	SIMULATION	SPEED (a)	LOS (b)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)
Nobel Drive																		
Villa La Jolla Dr to La Jolla Village Sq	EB		27.0	41.9	10.6	**F**	56.2	**F**		56.1	**F**		55.7	**F**		56.4	**F**	
	WB		35.0	25.2	17.6	D	28.8	**E**		28.7	**E**		28.7	**E**		28.7	**E**	
La Jolla Village Sq to I-5 SB On-Ramp	EB	II	11	11.7	18.8	D	11.9	D		11.9	D		11.9	D		12.2	D	
	WB	II	14	26.3	8.4	**F**	24.9	**F**		24.8	**F**		25.0	**F**		25.0	**F**	
I-5 SB On-Ramp to I-5 NB Off-Ramp	EB	II	11	16.8	15.7	**E**	17.2	**E**		17.5	**E**		18.1	**E**		19.2	**E**	
	WB	II	8	9.3	28.3	B	9.5	C		9.4	C		9.4	C		9.4	C	
I-5 NB Off-Ramp to Caminito Plaza Centro	EB	II	30	33.7	11.5	**F**	28.7	**E**		28.7	**E**		28.6	**E**		28.6	**E**	
	WB	II	14	28.4	13.7	**E**	31.6	**F**		30.7	**F**		33.2	**F**		35.2	**F**	
Caminito Plaza Centro to Lebon Dr	EB	II	42	43.6	11.0	**F**	46.7	**F**		46.7	**F**		46.5	**F**		46.6	**F**	
	WB	II	23	30.2	15.9	**E**	28.3	**E**		28.2	**E**		28.3	**E**		28.1	D	
Lebon Dr to Regents Rd	EB	II	52	54.8	22.6	C	65.6	D		65.7	D		64.0	D		64.2	D	
	WB	II	61	60.7	20.4	D	65.8	D		65.8	D		62.9	D		63.2	D	
Regents Rd to Costa Verde Blvd	EB	II	29	42.4	14.5	**E**	30.3	D		30.4	D		34.0	D		34.2	D	
	WB	II	49	54.9	11.2	**F**	34.3	D		34.4	D		33.5	D		33.5	D	
Coste Verde Blvd to Genesee Ave	EB	II	46	73.0	8.4	**F**	73.9	**F**		73.0	**F**		74.4	**F**		73.7	**F**	
	WB	II	23	46.0	13.4	**E**	59.6	**F**		59.9	**F**		59.1	**F**		59.5	**F**	
Genesee Ave to Lombard Pl	EB	II	24	24.3	17.0	D	25.3	**E**		25.3	**E**		25.3	**E**		25.3	**E**	
	WB	II	52	60.0	6.9	**F**	53.8	**F**		56.4	**F**		51.1	**F**		52.1	**F**	
Lombard Pl to Towne Center Dr	EB	II	32	45.5	17.8	D	51.3	**E**		51.3	**E**		51.3	**E**		51.3	**E**	
	WB	II	25	41.1	19.7	D	41.8	D		41.8	D		42.9	D		42.2	D	
Towne Center Dr to Shoreline Dr	EB	II	48	77.8	22.3	C	77.5	C		77.6	C		77.5	C		78.2	C	
	WB	II	72	70.0	24.8	C	75.5	C		75.4	C		75.6	C		74.8	C	
Shoreline Dr to Judicial Dr	EB	II	26	36.4	29.5	B	36.7	B		36.6	B		36.7	B		36.9	B	
	WB	II	34	58.0	18.5	D	59.8	D		59.7	D		59.8	D		60.4	D	
Judicial Dr to I-805 SB On-Ramp	EB	II	15	21.8	23.7	C	16.8	B		16.8	B		18.0	B		16.8	B	
	WB	II	19	21.8	23.7	C	24.4	D		24.8	D		24.9	D		25.1	D	
I-805 SB On-Ramp to I-805 NB Off-Ramp	EB	II	20	35.2	14.0	**E**	47.0	**F**		44.7	**F**		44.8	**F**		46.4	**F**	
	WB	II	17	15.1	32.7	B	15.2	B		15.2	B		15.2	B		15.2	B	
I-805 NB Off-Ramp to Avenue of Flags	EB	II	17	24.0	30.3	B	24.0	B		24.0	B		24.0	B		24.0	B	
	WB	II	30	31.4	23.2	C	36.3	D		35.8	D		35.8	D		36.6	D	
Avenue of Flags to Miramar Rd	EB	II	55	88.8	10.7	**F**	97.7	**F**		97.2	**F**		101.8	**F**		101.0	**F**	
	WB	II	25	28.1	33.8	B	28.0	B		28.0	B		28.0	B		28.0	B	
Total	*EB*	*II*	*458*	*671.7*	*16.6*	**E**	*706.8*	*B*	**No**	*703.5*	*B*	**No**	*712.6*	*B*	**No**	*715.0*	*B*	**No**
	WB	*II*	*466*	*606.5*	*17.2*	*D*	*617.6*	*B*	**No**	*619.0*	*B*	**No**	*613.4*	*B*	**No**	*617.0*	*B*	**No**

Notes: (a) Travel time in miles per hour (mph).

(b) The arterial LOS is based on average through-vehicle travel speed for the segment or for the entire street under consideration and is influenced both by the number of signals per mile and by the intersection control delay.

(c) A significant impact resulted in a change from LOS D or better to LOS E or LOS F, or a decrease of speeds of more than 1.0 mph at LOS E and LOS F.

MID Peak-Hour Arterial Segment Analysis Summary Nobel Dr

ROADWAY SEGMENT	DIRECTION	URBAN STREET CLASS	EXISTING				HORIZON YEAR											
							Alt A Regents Bridge 6-lane Genesee			Alt B Regents Bridge 4-lane Genesee			Alt C No Bridge 6-lane Genesee			Alt D No Bridge 4-lane Genesee		
			TRAVEL TIME (S)		SIMULATION		SIMULATION			SIMULATION			SIMULATION			SIMULATION		
			FIELD	SIMULATION	SPEED (a)	LOS (b)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)
Nobel Drive																		
Villa La Jolla Dr to La Jolla Village Sq	EB		24	44.4	10.0	**F**	53.1	**F**		53.1	**F**		53.7	**F**		53.7	**F**	
	WB		18	25.8	17.2	D	29.5	**E**		29.5	**E**		29.3	**E**		29.3	**E**	
La Jolla Village Sq to I-5 SB On-Ramp	EB	II	24	39.7	5.5	**F**	41.8	**F**		40.4	**F**		46.1	**F**		46.2	**F**	
	WB	II	18	23.8	9.3	**F**	35.8	**F**		35.6	**F**		37.1	**F**		38.7	**F**	
I-5 SB On-Ramp to I-5 NB Off-Ramp	EB	II	13	10.0	26.3	C	29.0	**F**		28.8	**F**		29.1	**F**		25.1	**F**	
	WB	II	9	9.5	27.7	C	11.3	C		11.3	C		11.1	C		11.0	C	
I-5 NB Off-Ramp to Caminito Plaza Centro	EB	II	12	16.9	22.4	C	28.5	**E**		28.2	**E**		28.8	**E**		29.2	**F**	
	WB	II	23	22.2	17.1	D	29.1	**E**		29.2	**F**		31.1	**F**		34.2	**F**	
Caminito Plaza Centro to Lebon Dr	EB	II	33	33.6	14.5	**E**	35.0	**E**		34.8	**E**		35.1	**E**		35.0	**E**	
	WB	II	23	26.0	18.8	D	30.5	**E**		30.2	**E**		30.6	**E**		30.2	**E**	
Lebon Dr to Regents Rd	EB	II	50	49.5	25.0	C	71.3	D		71.4	D		56.1	C		56.2	C	
	WB	II	54	54.9	22.6	C	58.9	D		58.8	D		57.8	D		57.9	D	
Regents Rd to Costa Verde Blvd	EB	II	31	51.1	12.0	**F**	32.7	D		32.8	D		34.3	D		34.3	D	
	WB	II	32	35.7	17.2	D	38.2	**E**		38.3	**E**		31.5	D		31.9	D	
Coste Verde Blvd to Genesee Ave	EB	II	50	63.7	9.7	**F**	65.4	**F**		62.3	**F**		68.4	**F**		68.6	**F**	
	WB	II	38	47.3	13.0	**E**	62.9	**F**		63.1	**F**		62.4	**F**		62.9	**F**	
Genesee Ave to Lombard Pl	EB	II	14	24.8	17.5	D	27.2	**E**		27.2	**E**		25.7	**E**		25.8	**E**	
	WB	II	52	74.4	5.8	**F**	70.5	**F**		70.5	**F**		63.8	**F**		68.0	**F**	
Lombard Pl to Towne Center Dr	EB	II	23	38.5	20.5	D	44.2	D		44.2	D		44.1	D		45.8	D	
	WB	II	39	47.8	16.5	**E**	56.1	**E**		56.0	**E**		56.4	**E**		56.8	**E**	
Towne Center Dr to Shoreline Dr	EB	II	44	52.9	32.8	B	62.4	C		62.5	C		63.1	C		63.1	C	
	WB	II	72	66.0	26.3	C	70.1	C		70.0	C		70.1	C		69.9	C	
Shoreline Dr to Judicial Dr	EB	II	33	35.4	30.4	B	36.9	B		36.8	B		36.8	B		36.8	B	
	WB	II	31	42.1	25.5	C	52.8	D		52.8	D		53.9	D		54.1	D	
Judicial Dr to I-805 SB On-Ramp	EB	II	19	22.1	23.4	C	21.5	C		21.5	C		22.8	C		19.8	C	
	WB	II	17	26.0	19.9	D	27.0	D		28.0	D		28.0	D		28.1	D	
I-805 SB On-Ramp to I-805 NB Off-Ramp	EB	II	28	30.1	16.4	**E**	32.2	**E**		31.2	**E**		31.2	**E**		31.6	**E**	
	WB	II	12	15.1	32.7	B	18.3	C		18.2	C		18.2	C		18.8	C	
I-805 NB Off-Ramp to Avenue of Flags	EB	II	20	28.3	25.8	C	31.6	C		31.5	C		32.5	C		32.6	C	
	WB	II	26	29.1	25.1	C	36.4	D		35.1	D		35.4	D		35.7	D	
Avenue of Flags to Miramar Rd	EB	II	46	73.6	12.8	**F**	77.7	**F**		77.5	**F**		81.7	**F**		81.6	**F**	
	WB	II	25	29.7	31.8	B	30.4	B		30.3	B		30.3	B		30.3	B	
Total	*EB*	*II*	*440*	*614.6*	*18.4*	*D*	*690.5*	*B*	**No**	*684.2*	*B*	**No**	*689.5*	*B*	**No**	*685.4*	*B*	**No**
	WB	*II*	*471*	*575.4*	*19.1*	*D*	*657.8*	*B*	**No**	*656.9*	*B*	**No**	*647.0*	*B*	**No**	*657.8*	*B*	**No**

Notes: (a) Travel time in miles per hour (mph).

(b) The arterial LOS is based on average through-vehicle travel speed for the segment or for the entire street under consideration and is influenced both by the number of signals per mile and by the intersection control delay.

(c) A significant impact resulted in a change from LOS D or better to LOS E or LOS F, or a decrease of speeds of more than 1.0 mph at LOS E and LOS F.

PM Peak-Hour Arterial Segment Analysis Summary Nobel Dr

ROADWAY SEGMENT	DIRECTION	URBAN STREET CLASS	EXISTING				HORIZON YEAR											
							Alt A Regents Bridge 6-lane Genesee			Alt B Regents Bridge 4-lane Genesee			Alt C No Bridge 6-lane Genesee			Alt D No Bridge 4-lane Genesee		
			TRAVEL TIME (S)		SIMULATION		SIMULATION			SIMULATION			SIMULATION			SIMULATION		
			FIELD	SIMULATION	SPEED (a)	LOS (b)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)
Nobel Drive																		
Villa La Jolla Dr to La Jolla Village Sq	EB		37	49.0	9.1	**F**	145.0	**F**		140.6	**F**		197.8	**F**		198.6	**F**	
	WB		34	27.1	16.4	**E**	29.8	**E**		29.7	**E**		29.7	**E**		29.6	**E**	
La Jolla Village Sq to I-5 SB On-Ramp	EB	II	37	31.1	7.1	**F**	265.1	**F**		264.0	**F**		281.6	**F**		293.0	**F**	
	WB	II	34	28.6	7.7	**F**	38.3	**F**		39.0	**F**		29.5	**F**		28.4	**F**	
I-5 SB On-Ramp to I-5 NB Off-Ramp	EB	II	9	10.5	25.1	C	11.3	C		23.6	**F**		19.7	**E**		21.2	**F**	
	WB	II	9	9.7	27.1	C	13.5	D		13.4	D		10.2	C		10.0	C	
I-5 NB Off-Ramp to Caminito Plaza Centro	EB	II	37	20.1	19.3	D	24.0	**E**		22.5	D		21.9	D		20.8	D	
	WB	II	26	36.0	10.8	**F**	94.1	**F**		106.1	**F**		44.3	**F**		44.5	**F**	
Caminito Plaza Centro to Lebon Dr	EB	II	42	47.5	10.1	**F**	51.8	**F**		52.0	**F**		52.1	**F**		52.0	**F**	
	WB	II	19	28.1	17.1	D	34.8	**E**		34.4	**E**		35.0	**E**		34.5	**E**	
Lebon Dr to Regents Rd	EB	II	85	81.3	15.2	**E**	100.4	**F**		100.6	**F**		106.2	**F**		111.3	**F**	
	WB	II	58	62.6	19.8	D	67.3	D		67.3	D		64.5	D		64.6	D	
Regents Rd to Costa Verde Blvd	EB	II	30	61.4	10.0	**F**	29.0	D		28.9	D		27.0	C		27.3	C	
	WB	II	52	81.0	7.6	**F**	82.0	**F**		83.6	**F**		151.6	**F**		163.1	**F**	
Coste Verde Blvd to Genesee Ave	EB	II	54	69.5	8.8	**F**	85.7	**F**		82.4	**F**		88.3	**F**		88.8	**F**	
	WB	II	18	69.1	8.9	**F**	31.5	D		33.5	D		29.9	D		30.6	D	
Genesee Ave to Lombard Pl	EB	II	26	24.0	17.6	D	24.3	D		24.3	D		24.2	D		24.0	D	
	WB	II	71	78.4	5.4	**F**	85.9	**F**		88.7	**F**		65.4	**F**		68.2	**F**	
Lombard Pl to Towne Center Dr	EB	II	48	57.6	13.9	**E**	73.5	**F**		81.7	**F**		73.9	**F**		74.7	**F**	
	WB	II	50	52.4	15.2	**E**	85.9	**F**		83.7	**F**		87.0	**F**		81.8	**F**	
Towne Center Dr to Shoreline Dr	EB	II	43	59.0	29.4	B	69.3	C		69.3	C		69.3	C		69.7	C	
	WB	II	72	73.9	23.5	C	88.6	D		99.7	D		89.7	D		89.2	D	
Shoreline Dr to Judicial Dr	EB	II	32	38.1	28.2	B	42.3	C		42.2	C		42.3	C		42.4	C	
	WB	II	39	51.2	21.0	D	71.4	**E**		71.2	**E**		71.4	**E**		73.9	**E**	
Judicial Dr to I-805 SB On-Ramp	EB	II	19	22.8	22.6	C	32.7	**E**		32.8	**E**		33.0	**E**		31.4	**E**	
	WB	II	23	31.6	16.3	**E**	40.5	**F**		40.4	**F**		40.7	**F**		41.6	**F**	
I-805 SB On-Ramp to I-805 NB Off-Ramp	EB	II	34	32.7	15.1	**E**	40.8	**F**		36.6	**E**		35.7	**E**		37.6	**E**	
	WB	II	12	15.1	32.7	B	15.2	B		15.2	B		15.2	B		15.2	B	
I-805 NB Off-Ramp to Avenue of Flags	EB	II	21	24.0	30.0	B	24.9	B		24.9	B		24.8	B		24.9	B	
	WB	II	23	30.9	23.3	C	45.0	**E**		40.6	D		40.0	D		41.5	D	
Avenue of Flags to Miramar Rd	EB	II	37	102.3	9.4	**F**	102.8	**F**		103.7	**F**		105.4	**F**		105.1	**F**	
	WB	II	25	28.4	33.7	B	29.1	B		29.1	B		29.1	B		29.1	B	
Total	*EB*	*II*	*554*	*730.9*	*15.4*	**E**	*1122.9*	*D*	**No**	*1130.1*	*D*	**No**	*1203.2*	*D*	**No**	*1222.8*	*D*	**No**
	WB	*II*	*531*	*704.1*	*14.8*	**E**	*852.9*	*C*	**No**	*875.6*	*C*	**No**	*833.2*	*C*	**No**	*845.8*	*C*	**No**

Notes: (a) Travel time in miles per hour (mph).

(b) The arterial LOS is based on average through-vehicle travel speed for the segment or for the entire street under consideration and is influenced both by the number of signals per mile and by the intersection control delay.

(c) A significant impact resulted in a change from LOS D or better to LOS E or LOS F, or a decrease of speeds of more than 1.0 mph at LOS E and LOS F.

AM Peak-Hour Arterial Segment Analysis Summary Nobel Dr

ROADWAY SEGMENT	DIRECTION	URBAN STREET CLASS	EXISTING				HORIZON YEAR WITH RECOMMENDED MITIGATIONS											
							Alt A Regents Bridge 6-lane Genesee			Alt B Regents Bridge 4-lane Genesee			Alt C No Bridge 6-lane Genesee			Alt D No Bridge 4-lane Genesee		
			TRAVEL TIME (S)		SIMULATION		SIMULATION			SIMULATION			SIMULATION			SIMULATION		
			FIELD	SIMULATION	SPEED (a)	LOS (b)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)
Nobel Drive																		
Villa La Jolla Dr to La Jolla Village Sq	EB		27.0	41.9	10.6	**F**	56.2	**F**		56.1	**F**		55.7	**F**		56.4	**F**	
	WB		35.0	25.2	17.6	D	28.8	**E**		28.7	**E**		28.7	**E**		28.7	**E**	
La Jolla Village Sq to I-5 SB On-Ramp	EB	II	11	11.7	18.8	D	11.9	D		11.9	D		11.9	D		12.2	D	
	WB	II	14	26.3	8.4	**F**	24.9	**F**		24.8	**F**		25.0	**F**		25.0	**F**	
I-5 SB On-Ramp to I-5 NB Off-Ramp	EB	II	11	16.8	15.7	**E**	17.2	**E**		17.5	**E**		18.1	**E**		19.2	**E**	
	WB	II	8	9.3	28.3	B	9.5	C		9.4	C		9.4	C		9.4	C	
I-5 NB Off-Ramp to Caminito Plaza Centro	EB	II	30	33.7	11.5	**F**	28.7	**E**		28.7	**E**		28.6	**E**		28.6	**E**	
	WB	II	14	28.4	13.7	**E**	31.6	**F**		30.7	**F**		33.2	**F**		35.2	**F**	
Caminito Plaza Centro to Lebon Dr	EB	II	42	43.6	11.0	**F**	46.7	**F**		46.7	**F**		46.5	**F**		46.6	**F**	
	WB	II	23	30.2	15.9	**E**	28.3	**E**		28.2	**E**		28.3	**E**		28.1	D	
Lebon Dr to Regents Rd	EB	II	52	54.8	22.6	C	65.6	D		65.7	D		64.0	D		64.2	D	
	WB	II	61	60.7	20.4	D	65.8	D		65.8	D		62.9	D		63.2	D	
Regents Rd to Costa Verde Blvd	EB	II	29	42.4	14.5	**E**	30.3	D		30.4	D		34.0	D		34.2	D	
	WB	II	49	54.9	11.2	**F**	34.3	D		34.4	D		33.5	D		33.5	D	
Coste Verde Blvd to Genesee Ave	EB	II	46	73.0	8.4	**F**	73.9	**F**		73.8	**F**		74.4	**F**		73.7	**F**	
	WB	II	23	46.0	13.4	**E**	59.6	**F**		59.9	**F**		59.1	**F**		59.5	**F**	
Genesee Ave to Lombard Pl	EB	II	24	24.3	17.0	D	25.3	**E**		25.3	**E**		25.3	**E**		25.3	**E**	
	WB	II	52	60.0	6.9	**F**	53.8	**F**		56.7	**F**		51.1	**F**		52.1	**F**	
Lombard Pl to Towne Center Dr	EB	II	32	45.5	17.8	D	51.3	**E**		51.3	**E**		51.3	**E**		51.3	**E**	
	WB	II	25	41.1	19.7	D	41.8	D		41.8	D		42.9	D		42.2	D	
Towne Center Dr to Shoreline Dr	EB	II	48	77.8	22.3	C	77.5	C		77.6	C		77.5	C		78.2	C	
	WB	II	72	70.0	24.8	C	75.5	C		75.4	C		75.6	C		74.8	C	
Shoreline Dr to Judicial Dr	EB	II	26	36.4	29.5	B	36.7	B		36.6	B		36.7	B		36.9	B	
	WB	II	34	58.0	18.5	D	59.8	D		59.7	D		59.8	D		60.4	D	
Judicial Dr to I-805 SB On-Ramp	EB	II	15	21.8	23.7	C	16.8	B		16.8	B		18.0	B		16.8	B	
	WB	II	19	21.8	23.7	C	24.4	D		24.8	D		24.9	D		25.1	D	
I-805 SB On-Ramp to I-805 NB Off-Ramp	EB	II	20	35.2	14.0	**E**	47.0	**F**		44.7	**F**		44.8	**F**		46.4	**F**	
	WB	II	17	15.1	32.7	B	15.2	B		15.2	B		15.2	B		15.2	B	
I-805 NB Off-Ramp to Avenue of Flags	EB	II	17	24.0	30.3	B	24.0	B		24.0	B		24.0	B		24.0	B	
	WB	II	30	31.4	23.2	C	36.3	D		35.8	D		35.8	D		36.6	D	
Avenue of Flags to Miramar Rd	EB	II	55	88.8	10.7	**F**	97.7	**F**		97.2	**F**		101.8	**F**		101.0	**F**	
	WB	II	25	28.1	33.8	B	28.0	B		28.0	B		28.0	B		28.0	B	
Total	*EB*	*II*	*458*	*671.7*	*16.6*	**E**	*650.6*	**E**	**No**	*704.3*	*B*	**No**	*712.6*	*B*	**No**	*715.0*	*B*	**No**
	WB	*II*	*466*	*606.5*	*17.2*	*D*	*589.6*	**E**	**Yes**	*619.3*	*B*	**No**	*613.4*	*B*	**No**	*617.0*	*B*	**No**

Notes: (a) Travel time in miles per hour (mph).

(b) The arterial LOS is based on average through-vehicle travel speed for the segment or for the entire street under consideration and is influenced both by the number of signals per mile and by the intersection control delay.

(c) A significant impact resulted in a change from LOS D or better to LOS E or LOS F, or a decrease of speeds of more than 1.0 mph at LOS E and LOS F.

MID Peak-Hour Arterial Segment Analysis Summary Nobel Dr

ROADWAY SEGMENT	DIRECTION	URBAN STREET CLASS	EXISTING				HORIZON YEAR WITH RECOMMENDED MITIGATIONS											
							Alt A Regents Bridge 6-lane Genesee			Alt B Regents Bridge 4-lane Genesee			Alt C No Bridge 6-lane Genesee			Alt D No Bridge 4-lane Genesee		
			TRAVEL TIME (S)		SIMULATION		SIMULATION			SIMULATION			SIMULATION			SIMULATION		
			FIELD	SIMULATION	SPEED (a)	LOS (b)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)
Nobel Drive																		
Villa La Jolla Dr to La Jolla Village Sq	EB		24	44.4	10.0	**F**	53.1	**F**		53.1	**F**		53.7	**F**		53.7	**F**	
	WB		18	25.8	17.2	D	-	-		29.5	**E**		29.3	**E**		29.3	**E**	
La Jolla Village Sq to I-5 SB On-Ramp	EB	II	24	39.7	5.5	**F**	41.8	**F**		40.4	**F**		46.1	**F**		46.2	**F**	
	WB	II	18	23.8	9.3	**F**	35.8	**F**		35.6	**F**		37.1	**F**		38.7	**F**	
I-5 SB On-Ramp to I-5 NB Off-Ramp	EB	II	13	10.0	26.3	C	29.0	**F**		28.8	**F**		29.1	**F**		25.1	**F**	
	WB	II	9	9.5	27.7	C	11.3	C		11.3	C		11.1	C		11.0	C	
I-5 NB Off-Ramp to Caminito Plaza Centro	EB	II	12	16.9	22.4	C	26.7	**E**		26.4	**E**		28.8	**E**		29.2	**F**	
	WB	II	23	22.2	17.1	D	29.1	**E**		29.2	**F**		31.1	**F**		34.2	**F**	
Caminito Plaza Centro to Lebon Dr	EB	II	33	33.6	14.5	**E**	35.0	**E**		34.8	**E**		35.1	**E**		35.0	**E**	
	WB	II	23	26.0	18.8	D	29.3	**E**		29.0	**E**		30.6	**E**		30.2	**E**	
Lebon Dr to Regents Rd	EB	II	50	49.5	25.0	C	71.3	D		71.4	D		56.1	C		56.2	C	
	WB	II	54	54.9	22.6	C	58.9	D		58.8	D		57.8	D		57.9	D	
Regents Rd to Costa Verde Blvd	EB	II	31	51.1	12.0	**F**	32.7	D		32.8	D		34.3	D		34.3	D	
	WB	II	32	35.7	17.2	D	38.2	**E**		38.3	**E**		31.5	D		31.9	D	
Coste Verde Blvd to Genesee Ave	EB	II	50	63.7	9.7	**F**	65.4	**F**		62.3	**F**		68.4	**F**		68.6	**F**	
	WB	II	38	47.3	13.0	**E**	62.9	**F**		63.1	**F**		62.4	**F**		62.9	**F**	
Genesee Ave to Lombard Pl	EB	II	14	24.8	17.5	D	27.1	**E**		27.2	**E**		25.7	**E**		25.8	**E**	
	WB	II	52	74.4	5.8	**F**	70.5	**F**		70.5	**F**		63.8	**F**		68.0	**F**	
Lombard Pl to Towne Center Dr	EB	II	23	38.5	20.5	D	44.2	D		44.2	D		44.1	D		45.8	D	
	WB	II	39	47.8	16.5	**E**	56.1	**E**		56.0	**E**		56.4	**E**		56.8	**E**	
Towne Center Dr to Shoreline Dr	EB	II	44	52.9	32.8	B	62.4	C		62.5	C		63.1	C		63.1	C	
	WB	II	72	66.0	26.3	C	70.1	C		70.0	C		70.1	C		69.9	C	
Shoreline Dr to Judicial Dr	EB	II	33	35.4	30.4	B	36.9	B		36.8	B		36.8	B		36.8	B	
	WB	II	31	42.1	25.5	C	52.8	D		52.8	D		53.9	D		54.1	D	
Judicial Dr to I-805 SB On-Ramp	EB	II	19	22.1	23.4	C	21.5	C		21.5	C		22.8	C		19.8	C	
	WB	II	17	26.0	19.9	D	27.0	D		28.0	D		28.0	D		28.1	D	
I-805 SB On-Ramp to I-805 NB Off-Ramp	EB	II	28	30.1	16.4	**E**	32.2	**E**		31.2	**E**		31.2	**E**		31.6	**E**	
	WB	II	12	15.1	32.7	B	18.3	C		18.2	C		18.2	C		18.8	C	
I-805 NB Off-Ramp to Avenue of Flags	EB	II	20	28.3	25.8	C	31.6	C		31.5	C		32.5	C		32.6	C	
	WB	II	26	29.1	25.1	C	36.4	D		35.1	D		35.4	D		35.7	D	
Avenue of Flags to Miramar Rd	EB	II	46	73.6	12.8	**F**	77.7	**F**		77.5	**F**		81.7	**F**		81.6	**F**	
	WB	II	25	29.7	31.8	B	30.4	B		30.3	B		30.3	B		30.3	B	
Total	*EB*	*II*	*440*	*614.6*	*18.4*	*D*	*635.5*	**E**	**Yes**	*682.4*	*B*	**No**	*689.5*	*B*	**No**	*685.4*	*B*	**No**
	WB	*II*	*471*	*575.4*	*19.1*	*D*	*626.2*	**E**	**Yes**	*655.7*	*B*	**No**	*647.0*	*B*	**No**	*657.8*	*B*	**No**

Notes: (a) Travel time in miles per hour (mph).

(b) The arterial LOS is based on average through-vehicle travel speed for the segment or for the entire street under consideration and is influenced both by the number of signals per mile and by the intersection control delay.

(c) A significant impact resulted in a change from LOS D or better to LOS E or LOS F, or a decrease of speeds of more than 1.0 mph at LOS E and LOS F.

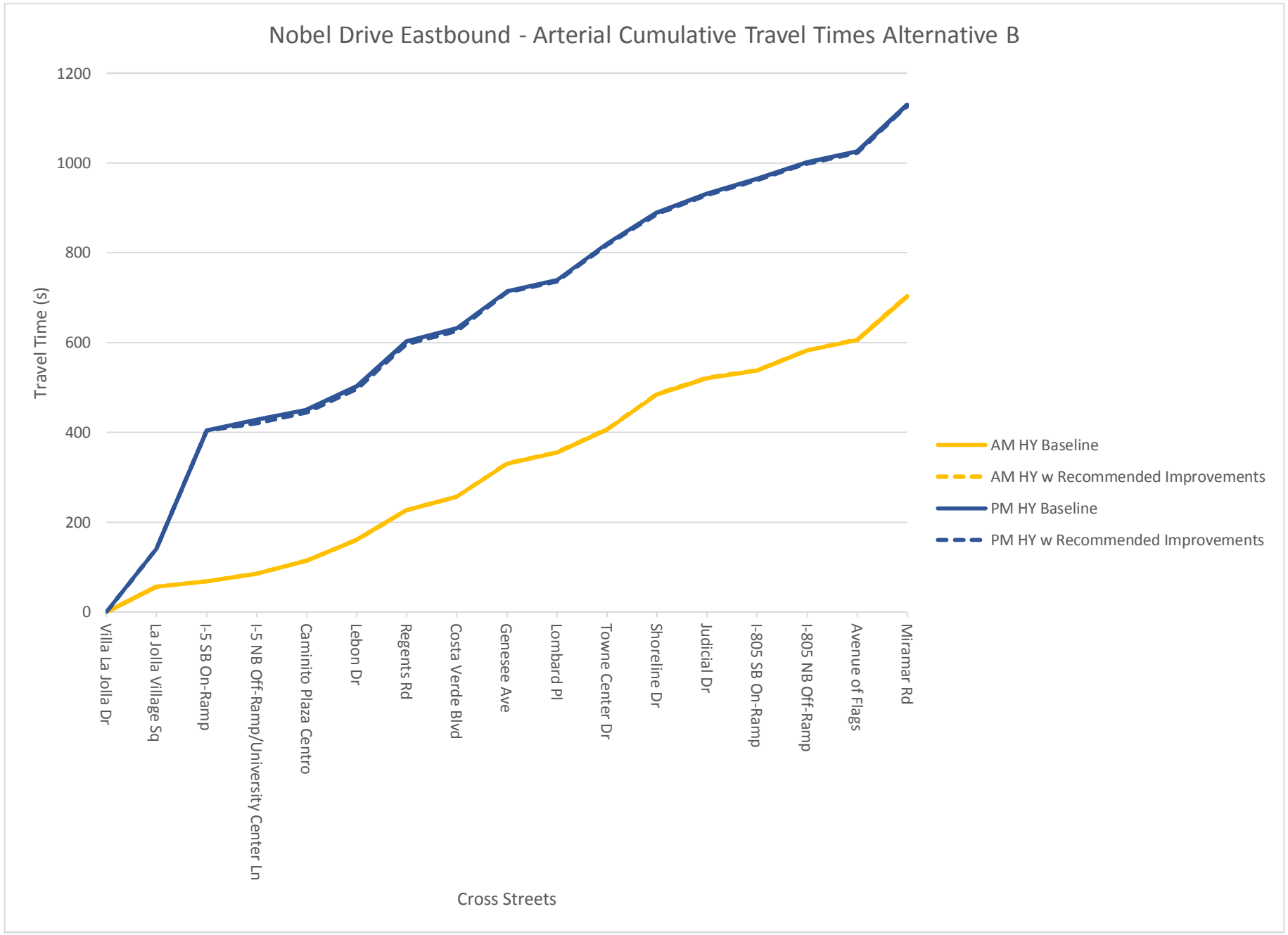
PM Peak-Hour Arterial Segment Analysis Summary Nobel Dr

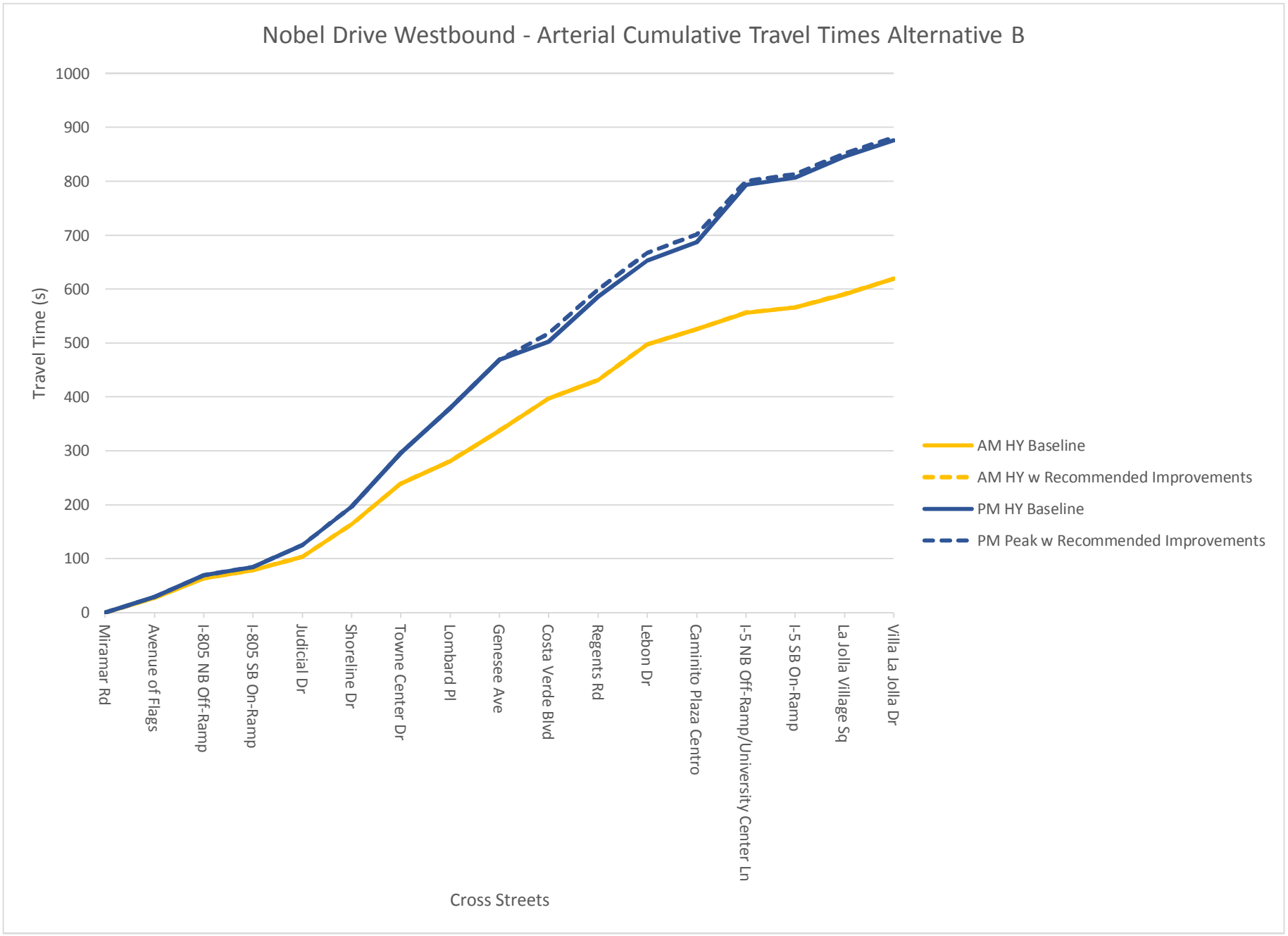
ROADWAY SEGMENT	DIRECTION	URBAN STREET CLASS	EXISTING				HORIZON YEAR WITH RECOMMENDED MITIGATIONS											
							Alt A Regents Bridge 6-lane Genesee			Alt B Regents Bridge 4-lane Genesee			Alt C No Bridge 6-lane Genesee			Alt D No Bridge 4-lane Genesee		
			TRAVEL TIME (S)		SIMULATION		SIMULATION			SIMULATION			SIMULATION			SIMULATION		
			FIELD	SIMULATION	SPEED (a)	LOS (b)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)
Nobel Drive																		
Villa La Jolla Dr to La Jolla Village Sq	EB		37	49.0	9.1	**F**	145.0	**F**		140.6	**F**		197.8	**F**		198.6	**F**	
	WB		34	27.1	16.4	**E**	29.8	**E**		29.7	**E**		29.7	**E**		29.6	**E**	
La Jolla Village Sq to I-5 SB On-Ramp	EB	II	37	31.1	7.1	**F**	265.1	**F**		264.0	**F**		281.6	**F**		293.0	**F**	
	WB	II	34	28.6	7.7	**F**	38.3	**F**		38.4	**F**		29.5	**F**		28.4	**F**	
I-5 SB On-Ramp to I-5 NB Off-Ramp	EB	II	9	10.5	25.1	C	11.3	C		16.1	**E**		19.7	**E**		21.2	**F**	
	WB	II	9	9.7	27.1	C	13.5	D		13.5	D		10.2	C		10.0	C	
I-5 NB Off-Ramp to Caminito Plaza Centro	EB	II	37	20.1	19.3	D	24.0	**E**		23.9	**E**		21.9	D		20.8	D	
	WB	II	26	36.0	10.8	**F**	94.1	**F**		98.3	**F**		44.3	**F**		44.5	**F**	
Caminito Plaza Centro to Lebon Dr	EB	II	42	47.5	10.1	**F**	51.8	**F**		52.0	**F**		52.1	**F**		52.0	**F**	
	WB	II	19	28.1	17.1	D	34.8	**E**		34.4	**E**		35.0	**E**		34.5	**E**	
Lebon Dr to Regents Rd	EB	II	85	81.3	15.2	**E**	100.4	**F**		100.6	**F**		106.2	**F**		111.3	**F**	
	WB	II	58	62.6	19.8	D	67.3	D		67.3	D		64.5	D		64.6	D	
Regents Rd to Costa Verde Blvd	EB	II	30	61.4	10.0	**F**	29.0	D		28.9	D		27.0	C		27.3	C	
	WB	II	52	81.0	7.6	**F**	82.0	**F**		82.4	**F**		151.6	**F**		163.1	**F**	
Coste Verde Blvd to Genesee Ave	EB	II	54	69.5	8.8	**F**	85.7	**F**		85.6	**F**		88.3	**F**		88.8	**F**	
	WB	II	18	69.1	8.9	**F**	31.5	D		48.5	**F**		29.9	D		30.6	D	
Genesee Ave to Lombard Pl	EB	II	26	24.0	17.6	D	24.4	D		24.3	D		24.2	D		24.0	D	
	WB	II	71	78.4	5.4	**F**	85.9	**F**		88.7	**F**		65.4	**F**		68.2	**F**	
Lombard Pl to Towne Center Dr	EB	II	48	57.6	13.9	**E**	73.5	**F**		81.7	**F**		73.9	**F**		74.7	**F**	
	WB	II	50	52.4	15.2	**E**	89.7	**F**		83.7	**F**		87.0	**F**		81.8	**F**	
Towne Center Dr to Shoreline Dr	EB	II	43	59.0	29.4	B	69.3	C		69.3	C		69.3	C		69.7	C	
	WB	II	72	73.9	23.5	C	88.6	D		99.7	D		89.7	D		89.2	D	
Shoreline Dr to Judicial Dr	EB	II	32	38.1	28.2	B	42.3	C		42.2	C		42.3	C		42.4	C	
	WB	II	39	51.2	21.0	D	71.4	**E**		71.2	**E**		71.4	**E**		73.9	**E**	
Judicial Dr to I-805 SB On-Ramp	EB	II	19	22.8	22.6	C	32.7	**E**		32.8	**E**		33.0	**E**		31.4	**E**	
	WB	II	23	31.6	16.3	**E**	40.5	**F**		40.4	**F**		40.7	**F**		41.6	**F**	
I-805 SB On-Ramp to I-805 NB Off-Ramp	EB	II	34	32.7	15.1	**E**	40.8	**F**		36.6	**E**		35.7	**E**		37.6	**E**	
	WB	II	12	15.1	32.7	B	15.2	B		15.2	B		15.2	B		15.2	B	
I-805 NB Off-Ramp to Avenue of Flags	EB	II	21	24.0	30.0	B	24.9	B		24.9	B		24.8	B		24.9	B	
	WB	II	23	30.9	23.3	C	45.0	**E**		40.6	D		40.0	D		41.5	D	
Avenue of Flags to Miramar Rd	EB	II	37	102.3	9.4	**F**	102.8	**F**		103.7	**F**		105.4	**F**		105.1	**F**	
	WB	II	25	28.4	33.7	B	29.1	B		29.1	B		29.1	B		29.1	B	
Total	*EB*	*II*	*554*	*730.9*	*15.4*	**E**	*978.0*	**F**	**No**	*1127.2*	*D*	**No**	*1203.2*	*D*	**No**	*1222.8*	*D*	**No**
	WB	*II*	*531*	*704.1*	*14.8*	**E**	*827.6*	**F**	**No**	*881.1*	*C*	**No**	*833.2*	*C*	**No**	*845.8*	*C*	**No**

Notes: (a) Travel time in miles per hour (mph).

(b) The arterial LOS is based on average through-vehicle travel speed for the segment or for the entire street under consideration and is influenced both by the number of signals per mile and by the intersection control delay.

(c) A significant impact resulted in a change from LOS D or better to LOS E or LOS F, or a decrease of speeds of more than 1.0 mph at LOS E and LOS F.


Nobel Drive Eastbound - Arterial Cumulative Travel Times Alternative B
Travel Time (s)
1200
1000
800
600
400
200
0
Villa La Jolla Dr
La Jolla Village Sq
I-5 SB On-Ramp
I-5 NB Off-Ramp/University Center Ln
Caminito Plaza Centro
Lebon Dr
Regents Rd
Costa Verde Blvd
Genesee Ave
Lombard Pl
Towne Center Dr
Shoreline Dr
Judicial Dr
I-805 SB On-Ramp
I-805 NB Off-Ramp
Avenue of Flags
Miramar Rd
Cross Streets
AM HY Baseline
AM HY w Recommended Improvements
PM HY Baseline
PM HY w Recommended Improvements


Nobel Drive Westbound - Arterial Cumulative Travel Times Alternative B
Travel Time (s)
1000
900
800
700
600
500
400
300
200
100
0
Miramar Rd
Avenue of Flags
I-805 NB Off-Ramp
I-805 SB On-Ramp
Judicial Dr
Shoreline Dr
Towne Center Dr
Lombard Pl
Genesee Ave
Costa Verde Blvd
Regents Rd
Lebon Dr
Caminito Plaza Centro
I-5 NB Off-Ramp/University Center Ln
I-5 SB On-Ramp
La Jolla Village Sq
Villa La Jolla Dr
Cross Streets
AM HY Baseline
AM HY w Recommended Improvements
PM HY Baseline
PM Peak w Recommended Improvements

AM Peak-Hour Arterial Segment Analysis Summary Regents Road

ROADWAY SEGMENT	DIRECTION	URBAN STREET CLASS	HORIZON YEAR			
			Alt A Regents Bridge 6-lane Genesee		Alt B Regents Bridge 4-lane Genesee	
			SIMULATION		SIMULATION	
			TIME (a)	LOS (b)	TIME (a)	LOS (b)
Regents Road						
Luna Ave to SR-52 EB Ramps	NB	II	105.3	C	106.4	C
	SB	II	103.6	C	104.0	C
SR-52 EB Ramps to SR-52 WB Ramps	NB	II	14.4	C	19.1	**E**
	SB	II	15.9	D	16.1	D
SR-52 WB Ramps to Governor Dr	NB	II	166.7	**E**	173.0	**E**
	SB	II	92.3	C	76.5	B
Governor Dr to Ariba St	NB	II	138.8	D	139.4	D
	SB	II	98.5	B	94.7	B
Ariba St to Berino Ct	NB	II	87.2	**F**	92.8	**F**
	SB	II	67.6	**F**	67.4	**F**
Berino Ct to Nobel Dr	NB	II	65.9	D	66.0	D
	SB	II	41.2	B	41.1	B
Nobel Dr to Plaza De Palmas	NB	II	29.5	D	29.5	D
	SB	II	54.7	**F**	54.7	**F**
Plaza De Palmas to La Jolla Village Dr	NB	II	69.3	**F**	69.5	**F**
	SB	II	24.4	D	24.4	D
La Jolla Village Dr to Regents Park Row	NB	II	31.3	**F**	34.0	**F**
	SB	II	42.3	**F**	42.7	**F**
Regents Park Row to Executive Dr	NB	II	36.1	**E**	36.1	**E**
	SB	II	35.6	D	36.5	**E**
Executive Dr to Eastgate Mall	*NB*	II	29.6	**E**	29.8	**E**
	SB	II	19.3	C	19.2	C
Eastgate Mall to Health Science Dr	NB	II	19.7	C	19.7	C
	SB	II	25.4	D	25.5	D
Health Science Dr to Genesee Ave	NB	II	83.3	**F**	83.1	**F**
	SB	II	33.1	**E**	33.2	**E**
Total	*NB*	*II*	*877.1*	**E**	*898.4*	**E**
	SB	*II*	*653.9*	*D*	*636.0*	*D*

Notes: (a) Travel time in miles per hour (mph).

(b) The arterial LOS is based on average through-vehicle travel speed for the segment or for the entire street under consideration and is influenced both by the number of signals per mile and by the intersection control delay.

MID Peak-Hour Arterial Segment Analysis Summary Regents Road

ROADWAY SEGMENT	DIRECTION	URBAN STREET CLASS	HORIZON YEAR			
			Alt A Regents Bridge 6-lane Genesee		Alt B Regents Bridge 4-lane Genesee	
			SIMULATION		SIMULATION	
			TIME (a)	LOS (b)	TIME (a)	LOS (b)
Regents Road						
Luna Ave to SR-52 EB Ramps	NB	II	77.8	B	78.6	B
	SB	II	70.7	A	70.6	A
SR-52 EB Ramps to SR-52 WB Ramps	NB	II	15.3	D	15.4	D
	SB	II	17.2	D	17.5	D
SR-52 WB Ramps to Governor Dr	NB	II	68.5	A	70.4	B
	SB	II	73.8	B	74.4	B
Governor Dr to Ariba St	NB	II	92.2	B	92.2	B
	SB	II	89.3	B	90.4	B
Ariba St to Berino Ct	NB	II	28.9	D	28.9	D
	SB	II	55.1	**F**	55.1	**F**
Berino Ct to Nobel Dr	NB	II	71.8	**E**	72.3	**E**
	SB	II	34.1	B	34.1	B
Nobel Dr to Plaza De Palmas	NB	II	27.7	D	27.8	D
	SB	II	59.9	**F**	59.9	**F**
Plaza De Palmas to La Jolla Village Dr	NB	II	69.1	**F**	68.2	**F**
	SB	II	21.7	D	21.7	D
La Jolla Village Dr to Regents Park Row	NB	II	26	**F**	26.3	**F**
	SB	II	55.5	**F**	55	**F**
Regents Park Row to Executive Dr	*NB*	II	32.5	D	33.4	D
	SB	II	37.8	**E**	37	**E**
Executive Dr to Eastgate Mall	*NB*	II	21.4	D	21.4	D
	SB	II	21.7	D	21.4	D
Eastgate Mall to Health Science Dr	NB	II	19.6	C	19.6	C
	SB	II	22	D	22	D
Health Science Dr to Genesee Ave	NB	II	86.7	**F**	86.6	**F**
	SB	II	33.3	**E**	33.4	**E**
Total	*NB*	*II*	*637.5*	*D*	*641.1*	*D*
	SB	*II*	*592.1*	*C*	*592.5*	*C*

Notes: (a) Travel time in miles per hour (mph).

(b) The arterial LOS is based on average through-vehicle travel speed for the segment or for the entire street under consideration and is influenced both by the number of signals per mile and by the intersection control delay.

PM Peak-Hour Arterial Segment Analysis Summary Regents Road

ROADWAY SEGMENT	DIRECTION	URBAN STREET CLASS	HORIZON YEAR			
			Alt A Regents Bridge 6-lane Genesee		Alt B Regents Bridge 4-lane Genesee	
			SIMULATION		SIMULATION	
			TIME (a)	LOS (b)	TIME (a)	LOS (b)
Regents Road						
Luna Ave to SR-52 EB Ramps	NB	II	98.2	C	104.3	C
	SB	II	177.2	**E**	165.4	**E**
SR-52 EB Ramps to SR-52 WB Ramps	NB	II	24.5	**E**	24.9	**E**
	SB	II	27.8	**F**	28.7	**F**
SR-52 WB Ramps to Governor Dr	NB	II	161.8	**E**	171.5	**E**
	SB	II	99.5	C	106.3	C
Governor Dr to Ariba St	NB	II	100.3	B	100.4	B
	SB	II	103.0	B	110.3	C
Ariba St to Berino Ct	NB	II	46.5	**E**	46.6	**E**
	SB	II	116.8	**F**	169.9	**F**
Berino Ct to Nobel Dr	NB	II	84.8	**E**	85.0	**E**
	SB	II	44.0	C	45.3	C
Nobel Dr to Plaza De Palmas	NB	II	24.2	D	24.2	D
	SB	II	59.3	**F**	59.6	**F**
Plaza De Palmas to La Jolla Village Dr	NB	II	46.8	**F**	46.9	**F**
	SB	II	50.3	**F**	51.0	**F**
La Jolla Village Dr to Regents Park Row	NB	II	41.3	**F**	25.8	**F**
	SB	II	89.9	**F**	93.0	**F**
Regents Park Row to Executive Dr	NB	II	49.8	**F**	50.0	**F**
	SB	II	74.3	**F**	88.0	**F**
Executive Dr to Eastgate Mall	*NB*	II	25.8	**E**	25.9	**E**
	SB	II	28.1	**E**	28.4	**E**
Eastgate Mall to Health Science Dr	NB	II	24.3	D	24.5	D
	SB	II	33.4	**E**	33.8	**E**
Health Science Dr to Genesee Ave	NB	II	67.1	**F**	67.3	**F**
	SB	II	48.0	**F**	48.2	**F**
Total	*NB*	*II*	*795.4*	**E**	*797.3*	**E**
	SB	*II*	*951.6*	**E**	*1027.9*	**E**

Notes: (a) Travel time in miles per hour (mph).

(b) The arterial LOS is based on average through-vehicle travel speed for the segment or for the entire street under consideration and is influenced both by the number of signals per mile and by the intersection control delay.

AM Peak-Hour Arterial Segment Analysis Summary Regents Road

ROADWAY SEGMENT	DIRECTION	URBAN STREET CLASS	HORIZON YEAR WITH RECOMMENDED MITIGATIONS			
			Alt A Regents Bridge 6-lane Genesee		Alt B Regents Bridge 4-lane Genesee	
			SIMULATION		SIMULATION	
			TIME (a)	LOS (b)	TIME (a)	LOS (b)
Regents Road						
Luna Ave to SR-52 EB Ramps	NB	II	105.4	C	106.5	C
	SB	II	103.6	C	89.0	B
SR-52 EB Ramps to SR-52 WB Ramps	NB	II	14.4	C	14.3	C
	SB	II	15.9	D	16.1	D
SR-52 WB Ramps to Governor Dr	NB	II	98.5	C	101.6	C
	SB	II	92.3	C	97.4	C
Governor Dr to Ariba St	NB	II	115.0	C	115.0	C
	SB	II	98.5	B	97.0	B
Ariba St to Berino Ct	NB	II	87.2	**F**	92.8	**F**
	SB	II	67.6	**F**	57.9	**F**
Berino Ct to Nobel Dr	NB	II	65.9	D	66.0	D
	SB	II	41.2	B	41.1	B
Nobel Dr to Plaza De Palmas	NB	II	29.5	D	29.5	D
	SB	II	54.7	**F**	54.7	**F**
Plaza De Palmas to La Jolla Village Dr	NB	II	69.3	**F**	69.5	**F**
	SB	II	24.4	D	24.4	D
La Jolla Village Dr to Regents Park Row	NB	II	31.3	**F**	34.0	**F**
	SB	II	42.3	**F**	42.7	**F**
Regents Park Row to Executive Dr	NB	II	36.1	**E**	36.1	**E**
	SB	II	35.6	D	36.5	**E**
Executive Dr to Eastgate Mall	*NB*	II	29.6	**E**	29.8	**E**
	SB	II	19.3	C	19.2	C
Eastgate Mall to Health Science Dr	NB	II	19.7	C	19.7	C
	SB	II	25.4	D	25.5	D
Health Science Dr to Genesee Ave	NB	II	83.3	**F**	83.1	**F**
	SB	II	33.1	**E**	33.2	**E**
Total	*NB*	*II*	*785.2*	*D*	*797.9*	**E**
	SB	*II*	*607.3*	*C*	*634.7*	*D*

Notes: (a) Travel time in miles per hour (mph).

(b) The arterial LOS is based on average through-vehicle travel speed for the segment or for the entire street under consideration and is influenced both by the number of signals per mile and by the intersection control delay.

MID Peak-Hour Arterial Segment Analysis Summary Regents Road

ROADWAY SEGMENT	DIRECTION	URBAN STREET CLASS	HORIZON YEAR WITH RECOMMENDED MITIGATIONS			
			Alt A Regents Bridge 6-lane Genesee		Alt B Regents Bridge 4-lane Genesee	
			SIMULATION		SIMULATION	
			TIME (a)	LOS (b)	TIME (a)	LOS (b)
Regents Road						
Luna Ave to SR-52 EB Ramps	NB	II	77.9	B	78.7	B
	SB	II	55.7	A	55.7	A
SR-52 EB Ramps to SR-52 WB Ramps	NB	II	15.3	D	15.4	D
	SB	II	17.2	D	17.5	D
SR-52 WB Ramps to Governor Dr	NB	II	71.4	B	71.1	B
	SB	II	74.4	B	80.3	B
Governor Dr to Ariba St	NB	II	94.7	B	94.7	B
	SB	II	91.1	B	90.9	B
Ariba St to Berino Ct	NB	II	28.9	D	31.9	D
	SB	II	42.4	**E**	45.8	**E**
Berino Ct to Nobel Dr	NB	II	71.8	**E**	81.5	**E**
	SB	II	34.1	B	43.3	C
Nobel Dr to Plaza De Palmas	NB	II	27.7	D	30.3	D
	SB	II	59.9	**F**	61.9	**F**
Plaza De Palmas to La Jolla Village Dr	NB	II	69.1	**F**	70.3	**F**
	SB	II	21.7	D	24	D
La Jolla Village Dr to Regents Park Row	NB	II	26	**F**	27.7	**F**
	SB	II	55.5	**F**	57	**F**
Regents Park Row to Executive Dr	*NB*	II	32.5	D	34.9	D
	SB	II	37.8	**E**	38.4	**E**
Executive Dr to Eastgate Mall	*NB*	II	21.4	D	23.3	D
	SB	II	21.7	D	23.3	D
Eastgate Mall to Health Science Dr	NB	II	19.6	C	21.6	D
	SB	II	22	D	24	D
Health Science Dr to Genesee Ave	NB	II	86.7	**F**	87.9	**F**
	SB	II	33.3	**E**	34.7	**E**
Total	*NB*	*II*	*643.0*	*D*	*669.3*	*D*
	SB	*II*	*566.8*	*C*	*596.8*	*C*

Notes: (a) Travel time in miles per hour (mph).

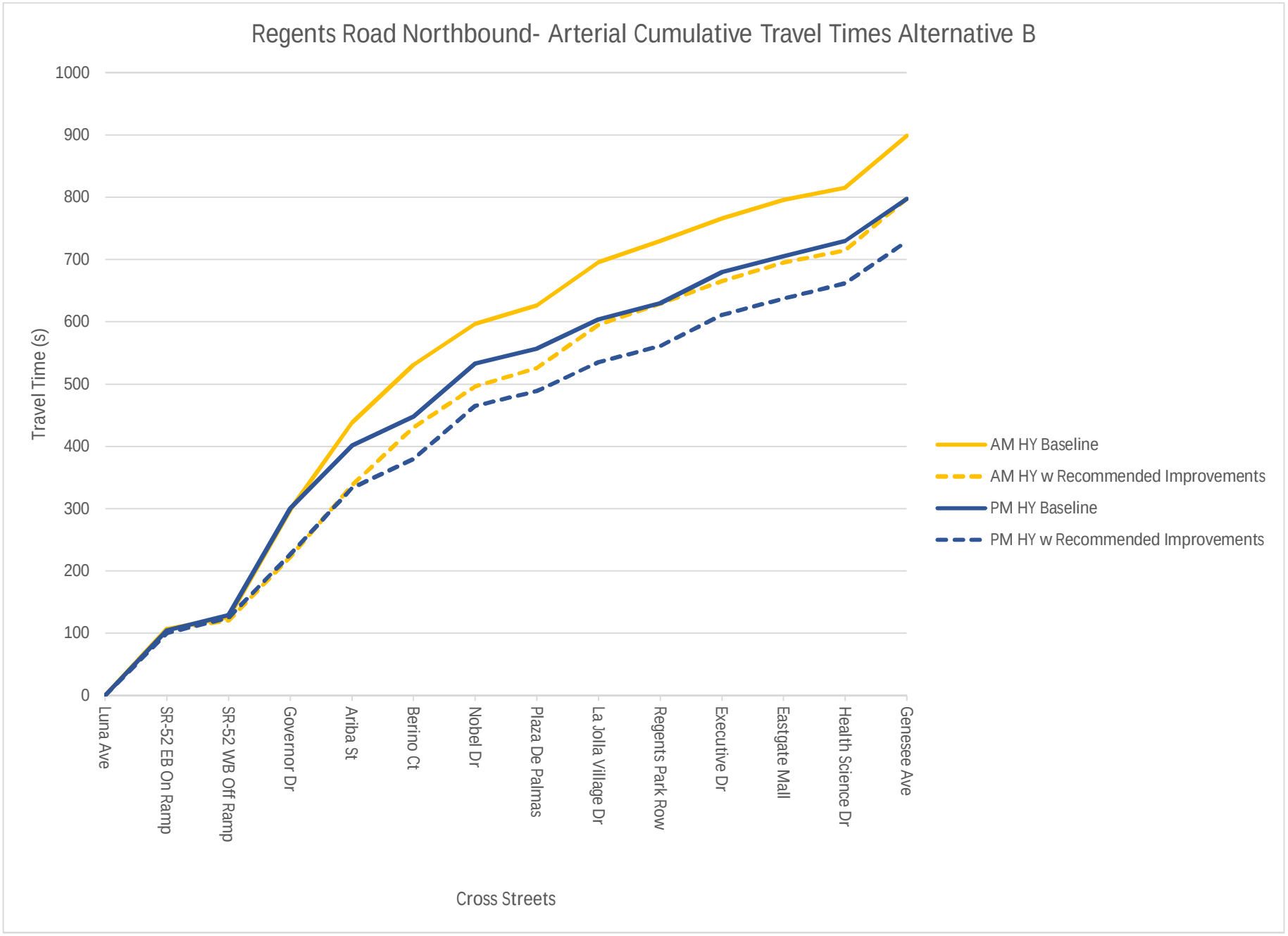
(b) The arterial LOS is based on average through-vehicle travel speed for the segment or for the entire street under consideration and is influenced both by the number of signals per mile and by the intersection control delay.

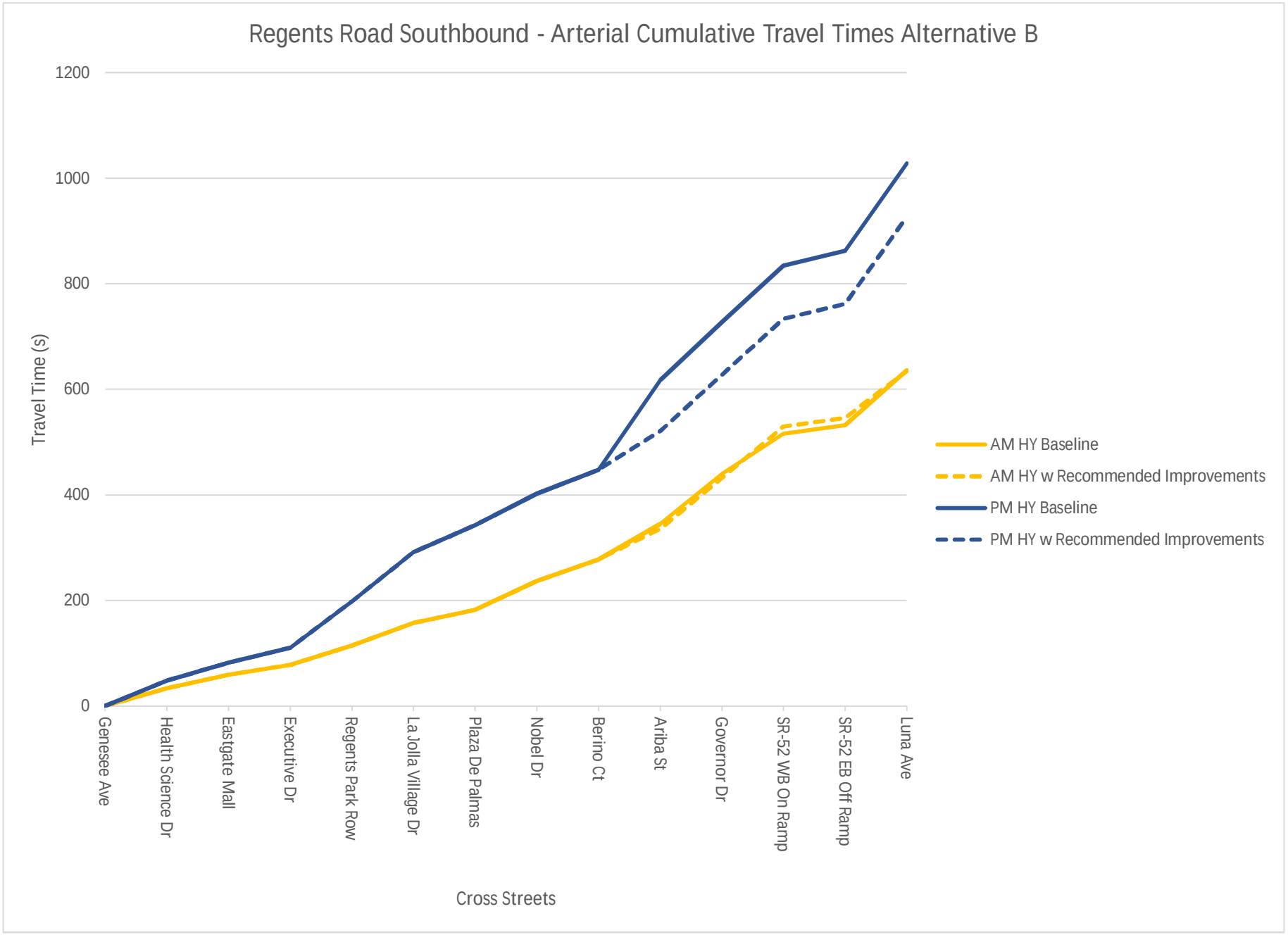
PM Peak-Hour Arterial Segment Analysis Summary Regents Road

ROADWAY SEGMENT	DIRECTION	URBAN STREET CLASS	HORIZON YEAR WITH RECOMMENDED MITIGATIONS			
			Alt A Regents Bridge 6-lane Genesee SIMULATION		Alt B Regents Bridge 4-lane Genesee SIMULATION	
			TIME (a)	LOS (b)	TIME (a)	LOS (b)
Regents Road						
Luna Ave to SR-52 EB Ramps	NB	II	98.3	C	100.0	C
	SB	II	177.2	**E**	165.1	**E**
SR-52 EB Ramps to SR-52 WB Ramps	NB	II	24.5	**E**	24.9	**E**
	SB	II	27.8	**F**	28.7	**F**
SR-52 WB Ramps to Governor Dr	NB	II	109.1	C	101.9	C
	SB	II	99.5	C	106.0	C
Governor Dr to Ariba St	NB	II	108.4	C	106.3	C
	SB	II	103.0	B	106.0	C
Ariba St to Berino Ct	NB	II	46.5	**E**	46.6	**E**
	SB	II	116.8	**F**	73.9	**F**
Berino Ct to Nobel Dr	NB	II	84.8	**E**	85.0	**E**
	SB	II	44.0	C	45.3	C
Nobel Dr to Plaza De Palmas	NB	II	24.2	D	24.2	D
	SB	II	59.3	**F**	59.6	**F**
Plaza De Palmas to La Jolla Village Dr	NB	II	46.8	**F**	46.5	**F**
	SB	II	50.3	**F**	51.0	**F**
La Jolla Village Dr to Regents Park Row	NB	II	41.3	**F**	25.8	**F**
	SB	II	89.9	**F**	93.0	**F**
Regents Park Row to Executive Dr	NB	II	49.8	**F**	50.0	**F**
	SB	II	74.3	**F**	88.0	**F**
Executive Dr to Eastgate Mall	*NB*	II	25.8	**E**	25.9	**E**
	SB	II	28.1	**E**	28.4	**E**
Eastgate Mall to Health Science Dr	NB	II	24.3	D	24.5	D
	SB	II	33.4	**E**	33.8	**E**
Health Science Dr to Genesee Ave	NB	II	67.1	**F**	67.3	**F**
	SB	II	48.0	**F**	48.2	**F**
Total	*NB*	*II*	*750.9*	*D*	*728.9*	*D*
	SB	*II*	*894.5*	**E**	*927.0*	**E**

Notes: (a) Travel time in miles per hour (mph).

(b) The arterial LOS is based on average through-vehicle travel speed for the segment or for the entire street under consideration and is influenced both by the number of signals per mile and by the intersection control delay.


Regents Road Northbound- Arterial Cumulative Travel Times Alternative B
1000
900
800
700
600
500
400
300
200
100
0
Travel Time (s)
Luna Ave
SR-52 EB On Ramp
SR-52 WB Off Ramp
Governor Dr
Ariba St
Berino Ct
Nobel Dr
Plaza De Palmas
La Jolla Village Dr
Regents Park Row
Executive Dr
Eastgate Mall
Health Science Dr
Genesee Ave
Cross Streets
AM HY Baseline
AM HY w Recommended Improvements
PM HY Baseline
PM HY w Recommended Improvements


Regents Road Southbound - Arterial Cumulative Travel Times Alternative B
1200
1000
800
600
400
200
0
Travel Time (s)
Genesee Ave
Health Science Dr
Eastgate Mall
Executive Dr
Regents Park Row
La Jolla Village Dr
Plaza De Palmas
Nobel Dr
Berino Ct
Ariba St
Governor Dr
SR-52 WB On Ramp
SR-52 EB Off Ramp
Luna Ave
Cross Streets
AM HY Baseline
AM HY w Recommended Improvements
PM HY Baseline
PM HY w Recommended Improvements

APPENDIX I

ALTERNATIVE C SUPPORTING INFORMATION

- Intersection LOS Worksheets
- Detailed Arterial Analysis Worksheets

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	ø4
Lane Configurations							
Traffic Volume (vph)	487	493	298	1143	662	184	
Future Volume (vph)	487	493	298	1143	662	184	
Turn Type	NA	Perm	Prot	NA	Prot	pt+ov	
Protected Phases	2		1	6	8	8 1	4
Permitted Phases		2					
Detector Phase	2	2	1	6	8	8 1	
Switch Phase							
Minimum Initial (s)	10.0	10.0	7.0	10.0	10.0		4.0
Minimum Split (s)	43.2	43.2	11.4	24.0	23.3		8.0
Total Split (s)	45.8	45.8	37.4	84.7	45.3		42.8
Total Split (%)	35.2%	35.2%	28.8%	65.2%	34.8%		33%
Yellow Time (s)	5.2	5.2	3.4	5.0	4.3		3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	6.2	6.2	4.4	6.0	5.3		
Lead/Lag	Lag	Lag	Lead				
Lead-Lag Optimize?							
Recall Mode	C-Max	C-Max	None	C-Max	None		None

Intersection Summary

Cycle Length: 130
Actuated Cycle Length: 130
Offset: 30 (23%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 80
Control Type: Actuated-Coordinated

Splits and Phases: 1: N. Torrey Pines Rd. & Genesee Ave

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	487	493	298	1143	662	184
Future Volume (vph)	487	493	298	1143	662	184
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.2	6.2	4.4	6.0	5.3	5.3
Lane Util. Factor	0.91	1.00	0.97	0.91	0.97	0.88
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	5085	1583	3433	5085	3433	2787
Flt Permitted	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (perm)	5085	1583	3433	5085	3433	2787
Peak-hour factor, PHF	0.85	0.85	0.91	0.91	0.85	0.85
Adj. Flow (vph)	573	580	327	1256	779	216
RTOR Reduction (vph)	0	307	0	0	0	96
Lane Group Flow (vph)	573	273	327	1256	779	120
Turn Type	NA	Perm	Prot	NA	Prot	pt+ov
Protected Phases	2		1	6	8	8 1
Permitted Phases		2				
Actuated Green, G (s)	61.3	61.3	16.8	82.7	36.0	58.1
Effective Green, g (s)	61.3	61.3	16.8	82.7	36.0	58.1
Actuated g/C Ratio	0.47	0.47	0.13	0.64	0.28	0.45
Clearance Time (s)	6.2	6.2	4.4	6.0	5.3	
Vehicle Extension (s)	4.0	4.0	2.0	3.7	3.8	
Lane Grp Cap (vph)	2397	746	443	3234	950	1245
v/s Ratio Prot	0.11		c0.10	c0.25	c0.23	0.04
v/s Ratio Perm		0.17				
v/c Ratio	0.24	0.37	0.74	0.39	0.82	0.10
Uniform Delay, d1	20.5	21.9	54.5	11.4	44.0	20.8
Progression Factor	1.00	1.00	1.07	0.30	0.80	0.26
Incremental Delay, d2	0.2	1.4	5.2	0.3	5.7	0.0
Delay (s)	20.7	23.3	63.5	3.8	40.9	5.5
Level of Service	C	C	E	A	D	A
Approach Delay (s)	22.0			16.1	33.3	
Approach LOS	C			B	C	

Intersection Summary

HCM 2000 Control Delay	22.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	15.9
Intersection Capacity Utilization	50.4%	ICU Level of Service	A
Analysis Period (min)	15		

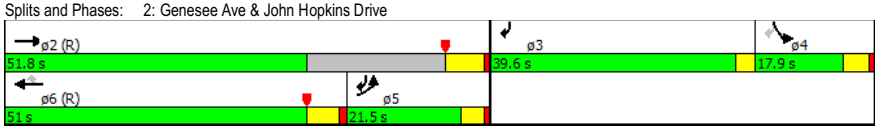
c Critical Lane Group

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	ø3
Lane Configurations							
Traffic Volume (vph)	82	734	1510	1415	154	22	
Future Volume (vph)	82	734	1510	1415	154	22	
Turn Type	Prot	NA	NA	Perm	Prot	pt+ov	
Protected Phases	5	2	6		4	3 5	3
Permitted Phases				6		4	
Detector Phase	5	2	6	6	4	3 5	
Switch Phase							
Minimum Initial (s)	4.0	10.0	10.0	10.0	7.0		4.0
Minimum Split (s)	9.5	16.7	15.9	15.9	11.9		7.0
Total Split (s)	21.5	51.8	51.0	51.0	17.9		39.6
Total Split (%)	16.5%	39.8%	39.2%	39.2%	13.8%		30%
Yellow Time (s)	3.4	5.7	4.9	4.9	3.9		3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		0.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	4.4	6.7	5.9	5.9	4.9		
Lead/Lag	Lag		Lead	Lead	Lag		Lead
Lead-Lag Optimize?	Yes		Yes	Yes	Yes		Yes
Recall Mode	None	C-Min	C-Min	C-Min	None		None

Intersection Summary

Cycle Length: 130
Actuated Cycle Length: 130
Offset: 16 (12%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 2: Genesee Ave & John Hopkins Drive



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	82	734	1510	1415	154	22
Future Volume (vph)	82	734	1510	1415	154	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	6.7	5.9	5.9	4.9	3.0
Lane Util. Factor	1.00	0.91	0.81	1.00	0.97	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	5085	7544	1583	3433	1583
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	5085	7544	1583	3433	1583
Peak-hour factor, PHF	0.89	0.89	0.94	0.94	0.80	0.80
Adj. Flow (vph)	92	825	1606	1505	192	28
RTOR Reduction (vph)	0	0	0	0	0	1
Lane Group Flow (vph)	92	825	1606	1505	193	27
Turn Type	Prot	NA	NA	Perm	Prot	pt+ov
Protected Phases	5	2	6		4	3 5
Permitted Phases				6		4
Actuated Green, G (s)	11.1	92.7	78.0	78.0	13.5	38.2
Effective Green, g (s)	11.1	92.7	78.0	78.0	13.5	33.8
Actuated g/C Ratio	0.09	0.71	0.60	0.60	0.10	0.26
Clearance Time (s)	4.4	6.7	5.9	5.9	4.9	
Vehicle Extension (s)	2.0	4.0	3.9	3.9	5.0	
Lane Grp Cap (vph)	151	3625	4526	949	356	448
v/s Ratio Prot	c0.05	0.16	0.21		c0.06	c0.01
v/s Ratio Perm				c0.95		0.01
v/c Ratio	0.61	0.23	0.35	1.59	0.54	0.06
Uniform Delay, d1	57.4	6.4	13.2	26.0	55.3	36.2
Progression Factor	0.82	0.55	1.17	1.19	1.00	1.00
Incremental Delay, d2	4.7	0.1	0.1	266.3	3.0	0.0
Delay (s)	51.6	3.6	15.6	297.3	58.3	36.2
Level of Service	D	A	B	F	E	D
Approach Delay (s)		8.4	151.9		55.5	
Approach LOS		A	F		E	

Intersection Summary

HCM 2000 Control Delay	115.9	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.24		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	18.2
Intersection Capacity Utilization	100.7%	ICU Level of Service	G
Analysis Period (min)	15		

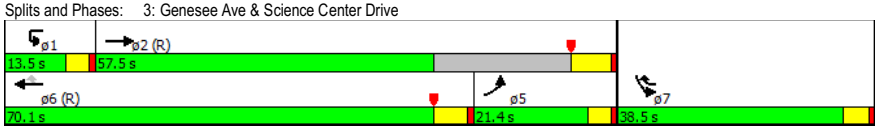
c Critical Lane Group

Lane Group	EBL	EBT	WBU	WBT	WBR	SBL
Lane Configurations						
Traffic Volume (vph)	98	809	3	2872	323	33
Future Volume (vph)	98	809	3	2872	323	33
Turn Type	Prot	NA	Prot	NA	pm+ov	Prot
Protected Phases	5	2	1	6	7	7
Permitted Phases					6	
Detector Phase	5	2	1	6	7	7
Switch Phase						
Minimum Initial (s)	4.0	10.0	4.0	10.0	4.0	4.0
Minimum Split (s)	9.5	22.5	9.5	16.0	8.9	8.9
Total Split (s)	21.4	57.5	13.5	70.1	38.5	38.5
Total Split (%)	16.5%	44.2%	10.4%	53.9%	29.6%	29.6%
Yellow Time (s)	3.4	5.9	3.4	5.0	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	6.9	4.4	6.0	4.9	4.9
Lead/Lag	Lag	Lag	Lead	Lead		
Lead-Lag Optimize?	Yes	Yes	Yes	Yes		
Recall Mode	None	C-Max	None	C-Max	None	None

Intersection Summary

Cycle Length: 130
Actuated Cycle Length: 130
Offset: 39 (30%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 70
Control Type: Actuated-Coordinated

Splits and Phases: 3: Genesee Ave & Science Center Drive



Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Traffic Volume (vph)	98	809	3	2872	323	33	18
Future Volume (vph)	98	809	3	2872	323	33	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	6.9	4.4	6.0	4.9	4.9	
Lane Util. Factor	1.00	0.91	1.00	0.91	1.00	0.97	
Frt	1.00	1.00	1.00	1.00	0.85	0.95	
Flt Protected	0.95	1.00	0.95	1.00	1.00	0.97	
Satd. Flow (prot)	1770	5085	1770	5085	1583	3313	
Flt Permitted	0.95	1.00	0.95	1.00	1.00	0.97	
Satd. Flow (perm)	1770	5085	1770	5085	1583	3313	
Peak-hour factor, PHF	0.88	0.88	0.92	0.95	0.95	0.80	0.80
Adj. Flow (vph)	111	919	3	3023	340	41	22
RTOR Reduction (vph)	0	0	0	0	94	22	0
Lane Group Flow (vph)	111	919	3	3023	246	42	0
Turn Type	Prot	NA	Prot	NA	pm+ov	Prot	
Protected Phases	5	2	1	6	7	7	
Permitted Phases					6		
Actuated Green, G (s)	20.5	105.4	1.3	87.1	94.2	7.1	
Effective Green, g (s)	20.5	105.4	1.3	87.1	94.2	7.1	
Actuated g/C Ratio	0.16	0.81	0.01	0.67	0.72	0.05	
Clearance Time (s)	4.4	6.9	4.4	6.0	4.9	4.9	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	279	4122	17	3406	1206	180	
v/s Ratio Prot	c0.06	0.18	0.00	c0.59	c0.01	0.01	
v/s Ratio Perm					0.14		
v/c Ratio	0.40	0.22	0.18	0.89	0.20	0.23	
Uniform Delay, d1	49.2	2.8	63.8	17.5	5.8	58.8	
Progression Factor	0.93	0.64	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.9	0.1	4.9	3.9	0.1	0.7	
Delay (s)	46.8	1.9	68.7	21.3	5.9	59.5	
Level of Service	D	A	E	C	A	E	
Approach Delay (s)		6.8		19.8		59.5	
Approach LOS		A		B		E	

Intersection Summary

HCM 2000 Control Delay	17.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	16.2
Intersection Capacity Utilization	77.0%	ICU Level of Service	D
Analysis Period (min)	15		

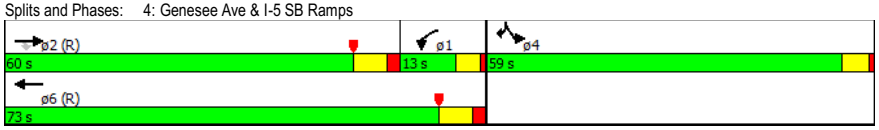
c Critical Lane Group

Lane Group	EBT	EBR	WBL	WBT	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	637	196	99	2214	1055	669
Future Volume (vph)	637	196	99	2214	1055	669
Turn Type	NA	Perm	Prot	NA	Prot	Prot
Protected Phases	2		1	6	4	4
Permitted Phases		2				
Detector Phase	2	2	1	6	4	4
Switch Phase						
Minimum Initial (s)	10.0	10.0	5.0	10.0	13.0	13.0
Minimum Split (s)	25.2	25.2	9.7	28.2	18.1	18.1
Total Split (s)	60.0	60.0	13.0	73.0	59.0	59.0
Total Split (%)	45.5%	45.5%	9.8%	55.3%	44.7%	44.7%
Yellow Time (s)	5.2	5.2	3.7	5.2	4.1	4.1
All-Red Time (s)	2.0	2.0	1.0	2.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.2	7.2	4.7	7.2	5.1	5.1
Lead/Lag	Lead	Lead	Lag			
Lead-Lag Optimize?	Yes	Yes	Yes			
Recall Mode	C-Max	C-Max	None	C-Max	Min	Min

Intersection Summary

Cycle Length: 132
Actuated Cycle Length: 132
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 4: Genesee Ave & I-5 SB Ramps



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	637	196	99	2214	0	0	0	0	1055	0	669
Future Volume (vph)	0	637	196	99	2214	0	0	0	0	1055	0	669
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		7.2	7.2	4.7	7.2					5.1		5.1
Lane Util. Factor		0.81	0.88	0.97	0.91					0.97		0.88
Frt		1.00	0.85	1.00	1.00					1.00		0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (prot)		7544	2787	3433	5085					3433		2787
Flt Permitted		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (perm)		7544	2787	3433	5085					3433		2787
Peak-hour factor, PHF	0.99	0.99	0.99	0.93	0.93	0.93	0.25	0.25	0.25	0.85	0.85	0.85
Adj. Flow (vph)	0	643	198	106	2381	0	0	0	0	1241	0	787
RTOR Reduction (vph)	0	0	116	0	0	0	0	0	0	0	0	57
Lane Group Flow (vph)	0	643	82	106	2381	0	0	0	0	1241	0	730
Turn Type		NA	Perm	Prot	NA					Prot		Prot
Protected Phases		2		1	6					4		4
Permitted Phases			2									
Actuated Green, G (s)		54.8	54.8	8.3	67.8					51.9		51.9
Effective Green, g (s)		54.8	54.8	8.3	67.8					51.9		51.9
Actuated g/C Ratio		0.42	0.42	0.06	0.51					0.39		0.39
Clearance Time (s)		7.2	7.2	4.7	7.2					5.1		5.1
Vehicle Extension (s)		2.0	2.0	2.0	2.0					2.0		2.0
Lane Grp Cap (vph)		3131	1157	215	2611					1349		1095
v/s Ratio Prot		0.09		0.03	c0.47					c0.36		0.26
v/s Ratio Perm			0.03									
v/c Ratio		0.21	0.07	0.49	0.91					0.92		0.67
Uniform Delay, d1		24.7	23.3	59.8	29.4					38.1		32.9
Progression Factor		1.00	1.00	1.17	1.29					1.00		1.00
Incremental Delay, d2		0.1	0.1	0.3	3.5					10.0		1.2
Delay (s)		24.8	23.4	70.3	41.3					48.1		34.1
Level of Service		C	C	E	D					D		C
Approach Delay (s)		24.5			42.5			0.0			42.7	
Approach LOS		C			D			A			D	

Intersection Summary

HCM 2000 Control Delay	39.8	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.95		
Actuated Cycle Length (s)	132.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	103.5%	ICU Level of Service	G
Analysis Period (min)	15		

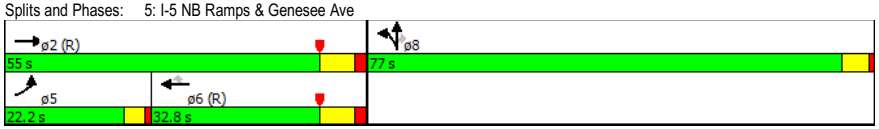
c Critical Lane Group

Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Configurations							
Traffic Volume (vph)	241	1557	611	385	1585	9	557
Future Volume (vph)	241	1557	611	385	1585	9	557
Turn Type	Prot	NA	NA	Perm	Split	NA	Perm
Protected Phases	5	2	6		8	8	
Permitted Phases				6			8
Detector Phase	5	2	6	6	8	8	8
Switch Phase							
Minimum Initial (s)	11.0	10.0	10.0	10.0	5.0	5.0	5.0
Minimum Split (s)	22.2	28.2	25.2	25.2	10.1	10.1	10.1
Total Split (s)	22.2	55.0	32.8	32.8	77.0	77.0	77.0
Total Split (%)	16.8%	41.7%	24.8%	24.8%	58.3%	58.3%	58.3%
Yellow Time (s)	3.2	5.2	5.2	5.2	4.1	4.1	4.1
All-Red Time (s)	1.0	2.0	2.0	2.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.2	7.2	7.2	7.2	5.1	5.1	5.1
Lead/Lag	Lead		Lag	Lag			
Lead-Lag Optimize?	Yes		Yes	Yes			
Recall Mode	None	C-Max	C-Max	C-Max	None	None	None

Intersection Summary

Cycle Length: 132
Actuated Cycle Length: 132
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 110
Control Type: Actuated-Coordinated

Splits and Phases: 5: I-5 NB Ramps & Genesee Ave



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	241	1557	0	0	611	385	1585	9	557	0	0	0
Future Volume (vph)	241	1557	0	0	611	385	1585	9	557	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	7.2			7.2	7.2	5.1	5.1	5.1			
Lane Util. Factor	0.97	0.91			0.81	0.88	0.95	0.95	0.88			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.95	1.00			
Satd. Flow (prot)	3433	5085			7544	2787	1681	1686	2787			
Flt Permitted	0.95	1.00			1.00	1.00	0.95	0.95	1.00			
Satd. Flow (perm)	3433	5085			7544	2787	1681	1686	2787			
Peak-hour factor, PHF	0.86	0.86	0.86	0.80	0.80	0.80	0.88	0.88	0.88	0.25	0.25	0.25
Adj. Flow (vph)	280	1810	0	0	764	481	1801	10	633	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	376	0	0	31	0	0	0
Lane Group Flow (vph)	280	1810	0	0	764	105	900	911	602	0	0	0
Turn Type	Prot	NA			NA	Perm	Split	NA	Perm			
Protected Phases	5	2			6		8	8				
Permitted Phases						6			8			
Actuated Green, G (s)	14.8	47.8			28.8	28.8	71.9	71.9	71.9			
Effective Green, g (s)	14.8	47.8			28.8	28.8	71.9	71.9	71.9			
Actuated g/C Ratio	0.11	0.36			0.22	0.22	0.54	0.54	0.54			
Clearance Time (s)	4.2	7.2			7.2	7.2	5.1	5.1	5.1			
Vehicle Extension (s)	2.0	2.0			2.0	2.0	2.0	2.0	2.0			
Lane Grp Cap (vph)	384	1841			1645	608	915	918	1518			
v/s Ratio Prot	0.08	c0.36			0.10		0.54	c0.54				
v/s Ratio Perm						0.04			0.22			
v/c Ratio	0.73	0.98			0.46	0.17	0.98	0.99	0.40			
Uniform Delay, d1	56.7	41.7			44.9	41.9	29.5	29.8	17.4			
Progression Factor	0.67	1.02			0.79	1.47	1.00	1.00	1.00			
Incremental Delay, d2	4.7	15.3			0.9	0.6	25.5	27.7	0.1			
Delay (s)	42.5	57.7			36.4	62.2	55.0	57.4	17.5			
Level of Service	D	E			D	E	D	E	B			
Approach Delay (s)		55.7			46.4			46.2			0.0	
Approach LOS		E			D			D			A	

Intersection Summary

HCM 2000 Control Delay	49.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.02		
Actuated Cycle Length (s)	132.0	Sum of lost time (s)	16.5
Intersection Capacity Utilization	103.5%	ICU Level of Service	G
Analysis Period (min)	15		

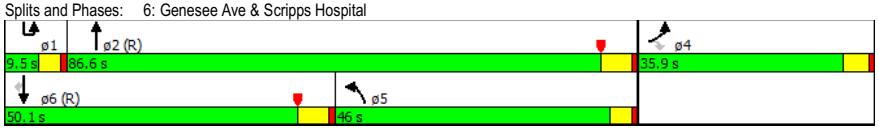
c Critical Lane Group

Lane Group	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	112	367	654	819	6	1516	933
Future Volume (vph)	112	367	654	819	6	1516	933
Turn Type	Prot	Perm	Prot	NA	Prot	NA	Perm
Protected Phases	4		5	2	1	6	
Permitted Phases		4					6
Detector Phase	4	4	5	2	1	6	6
Switch Phase							
Minimum Initial (s)	7.0	7.0	4.0	10.0	4.0	10.0	10.0
Minimum Split (s)	35.9	35.9	9.5	22.5	9.5	30.5	30.5
Total Split (s)	35.9	35.9	46.0	86.6	9.5	50.1	50.1
Total Split (%)	27.2%	27.2%	34.8%	65.6%	7.2%	38.0%	38.0%
Yellow Time (s)	3.9	3.9	3.4	4.7	3.4	4.7	4.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	4.4	5.7	4.4	5.7	5.7
Lead/Lag			Lag	Lag	Lead	Lead	Lead
Lead-Lag Optimize?			Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	C-Max	None	C-Max	C-Max

Intersection Summary

Cycle Length: 132
Actuated Cycle Length: 132
Offset: 69 (52%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 6: Genesee Ave & Scripps Hospital



Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	112	367	654	819	6	1516	933
Future Volume (vph)	112	367	654	819	6	1516	933
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9	4.4	5.7	4.4	5.7	5.7
Lane Util. Factor	0.97	1.00	1.00	0.91	1.00	0.91	1.00
Frt	1.00	0.85	1.00	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	1583	1770	5085	1770	5085	1583
Flt Permitted	0.95	1.00	0.95	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	1583	1770	5085	1770	5085	1583
Peak-hour factor, PHF	0.90	0.90	0.90	0.80	0.92	0.89	0.90
Adj. Flow (vph)	124	408	727	1024	7	1703	1037
RTOR Reduction (vph)	0	355	0	0	0	0	294
Lane Group Flow (vph)	124	53	727	1024	7	1703	743
Turn Type	Prot	Perm	Prot	NA	Prot	NA	Perm
Protected Phases	4		5	2	1	6	
Permitted Phases		4					6
Actuated Green, G (s)	17.2	17.2	45.1	98.8	1.0	54.7	54.7
Effective Green, g (s)	17.2	17.2	45.1	98.8	1.0	54.7	54.7
Actuated g/C Ratio	0.13	0.13	0.34	0.75	0.01	0.41	0.41
Clearance Time (s)	4.9	4.9	4.4	5.7	4.4	5.7	5.7
Vehicle Extension (s)	2.0	2.0	2.0	5.2	2.0	4.0	4.0
Lane Grp Cap (vph)	447	206	604	3806	13	2107	655
v/s Ratio Prot	c0.04		c0.41	0.20	0.00	0.33	
v/s Ratio Perm		0.03					c0.47
v/c Ratio	0.28	0.26	1.20	0.27	0.54	0.81	1.13
Uniform Delay, d1	51.8	51.7	43.5	5.2	65.3	34.0	38.6
Progression Factor	1.00	1.00	0.55	0.15	0.78	0.88	1.38
Incremental Delay, d2	0.1	0.2	104.4	0.1	13.2	2.3	73.0
Delay (s)	51.9	51.9	128.5	0.9	64.4	32.2	126.4
Level of Service	D	D	F	A	E	C	F
Approach Delay (s)	51.9			53.9		67.9	
Approach LOS	D			D		E	

Intersection Summary

HCM 2000 Control Delay	61.3	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.03		
Actuated Cycle Length (s)	132.0	Sum of lost time (s)	15.0
Intersection Capacity Utilization	102.4%	ICU Level of Service	G
Analysis Period (min)	15		

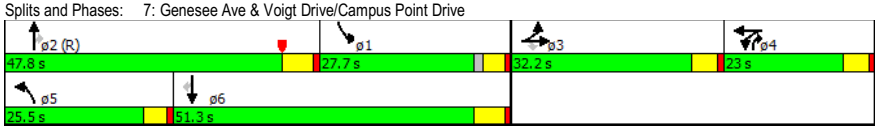
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	141	12	112	26	12	458	1319	495	364	1049	467
Future Volume (vph)	141	12	112	26	12	458	1319	495	364	1049	467
Turn Type	Split	NA	Perm	Split	NA	Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	3	3		4	4	5	2	4	1	6	
Permitted Phases			3					2			6
Detector Phase	3	3	3	4	4	5	2	4	1	6	6
Switch Phase											
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	4.0	10.0	7.0	4.0	10.0	10.0
Minimum Split (s)	11.9	11.9	11.9	22.5	22.5	22.5	37.7	22.5	22.5	33.7	33.7
Total Split (s)	32.2	32.2	32.2	23.0	23.0	25.5	47.8	23.0	27.7	51.3	51.3
Total Split (%)	24.4%	24.4%	24.4%	17.4%	17.4%	19.3%	36.2%	17.4%	21.0%	38.9%	38.9%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.9	3.4	4.7	3.9	3.4	4.7	4.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	4.9	4.9	4.9	4.4	5.7	4.9	4.4	5.7	5.7
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	None	None	None	None

Intersection Summary

Cycle Length: 132
Actuated Cycle Length: 132
Offset: 99 (75%), Referenced to phase 2:NBT, Start of Yellow
Natural Cycle: 95
Control Type: Actuated-Coordinated

Splits and Phases: 7: Genesee Ave & Voigt Drive/Campus Point Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	141	12	112	26	12	57	458	1319	495	364	1049	467
Future Volume (vph)	141	12	112	26	12	57	458	1319	495	364	1049	467
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9	4.9	4.9	4.9		4.4	5.7	4.9	4.4	5.7	5.7
Lane Util. Factor	0.97	1.00	0.88	0.97	0.95		0.97	0.91	1.00	0.97	0.91	1.00
Frt	1.00	1.00	0.85	1.00	0.88		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	1863	2787	3433	3098		3433	5085	1583	3433	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	1863	2787	3433	3098		3433	5085	1583	3433	5085	1583
Peak-hour factor, PHF	0.90	0.90	0.90	0.83	0.83	0.83	0.88	0.88	0.88	0.80	0.80	0.80
Adj. Flow (vph)	157	13	124	31	14	69	520	1499	562	455	1311	584
RTOR Reduction (vph)	0	0	109	0	63	0	0	0	205	0	0	245
Lane Group Flow (vph)	157	13	15	31	20	0	520	1499	358	455	1311	339
Turn Type	Split	NA	Perm	Split	NA		Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	3	3		4	4		5	2	4	1	6	
Permitted Phases			3						2			6
Actuated Green, G (s)	16.3	16.3	16.3	12.0	12.0		22.8	61.0	73.0	22.8	61.0	61.0
Effective Green, g (s)	16.3	16.3	16.3	12.0	12.0		22.8	61.0	73.0	22.8	61.0	61.0
Actuated g/C Ratio	0.12	0.12	0.12	0.09	0.09		0.17	0.46	0.55	0.17	0.46	0.46
Clearance Time (s)	4.9	4.9	4.9	4.9	4.9		4.4	5.7	4.9	4.4	5.7	5.7
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0		2.0	3.7	2.0	2.0	4.0	4.0
Lane Grp Cap (vph)	423	230	344	312	281		592	2349	934	592	2349	731
v/s Ratio Prot	c0.05	0.01		0.01	0.01		c0.15	c0.29	c0.03	c0.13	0.26	
v/s Ratio Perm			0.01						0.19			0.21
v/c Ratio	0.37	0.06	0.04	0.10	0.07		0.88	0.64	0.38	0.77	0.56	0.46
Uniform Delay, d1	53.1	51.1	51.0	55.0	54.9		53.2	27.1	16.7	52.1	25.7	24.3
Progression Factor	1.00	1.00	1.00	1.00	1.00		0.78	1.03	1.84	1.15	1.14	2.58
Incremental Delay, d2	0.2	0.0	0.0	0.1	0.0		11.2	1.1	0.1	4.1	0.3	0.5
Delay (s)	53.3	51.1	51.0	55.1	54.9		52.8	28.9	30.8	64.2	29.7	63.2
Level of Service	D	D	D	E	D		D	C	C	E	C	E
Approach Delay (s)		52.3			55.0			34.1			44.7	
Approach LOS		D			D			C			D	

Intersection Summary

HCM 2000 Control Delay	40.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	132.0	Sum of lost time (s)	19.9
Intersection Capacity Utilization	60.3%	ICU Level of Service	B
Analysis Period (min)	15		

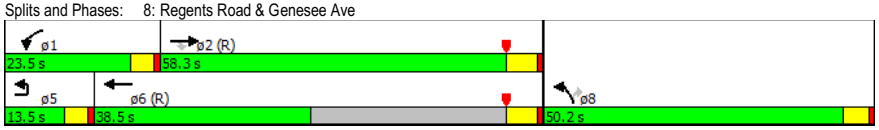
c Critical Lane Group

Lane Group	EBU	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations							
Traffic Volume (vph)	98	885	151	85	1774	269	66
Future Volume (vph)	98	885	151	85	1774	269	66
Turn Type	Prot	NA	Perm	Prot	NA	Prot	Perm
Protected Phases	5	2		1	6	8	
Permitted Phases			2				8
Detector Phase	5	2	2	1	6	8	8
Switch Phase							
Minimum Initial (s)	4.0	10.0	10.0	4.0	10.0	7.0	7.0
Minimum Split (s)	9.5	22.7	22.7	9.5	22.5	37.9	37.9
Total Split (s)	13.5	58.3	58.3	23.5	38.5	50.2	50.2
Total Split (%)	10.2%	44.2%	44.2%	17.8%	29.2%	38.0%	38.0%
Yellow Time (s)	3.4	4.7	4.7	3.4	4.7	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.7	5.7	4.4	5.7	4.9	4.9
Lead/Lag	Lead	Lag	Lag	Lead	Lag		
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		
Recall Mode	None	C-Max	C-Max	None	C-Max	None	None

Intersection Summary

Cycle Length: 132
Actuated Cycle Length: 132
Offset: 60 (45%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 8: Regents Road & Genesee Ave



Movement	EBU	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations							
Traffic Volume (vph)	98	885	151	85	1774	269	66
Future Volume (vph)	98	885	151	85	1774	269	66
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	12	16	12
Total Lost time (s)	4.4	5.7	5.7	4.4	5.7	4.9	4.9
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	1770	5085	1583	1770	5085	2006	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (perm)	1770	5085	1583	1770	5085	2006	1583
Peak-hour factor, PHF	0.92	0.80	0.80	0.90	0.90	0.80	0.80
Adj. Flow (vph)	107	1106	189	94	1971	336	82
RTOR Reduction (vph)	0	0	76	0	0	0	66
Lane Group Flow (vph)	107	1106	113	94	1971	336	17
Turn Type	Prot	NA	Perm	Prot	NA	Prot	Perm
Protected Phases	5	2		1	6	8	
Permitted Phases			2				8
Actuated Green, G (s)	13.6	78.6	78.6	11.4	76.4	27.0	27.0
Effective Green, g (s)	13.6	78.6	78.6	11.4	76.4	27.0	27.0
Actuated g/C Ratio	0.10	0.60	0.60	0.09	0.58	0.20	0.20
Clearance Time (s)	4.4	5.7	5.7	4.4	5.7	4.9	4.9
Vehicle Extension (s)	2.0	5.0	5.0	2.0	3.9	2.0	2.0
Lane Grp Cap (vph)	182	3027	942	152	2943	410	323
v/s Ratio Prot	c0.06	0.22		0.05	c0.39	c0.17	
v/s Ratio Perm			0.07				0.01
v/c Ratio	0.59	0.37	0.12	0.62	0.67	0.82	0.05
Uniform Delay, d1	56.5	13.8	11.6	58.2	19.1	50.2	42.2
Progression Factor	0.76	1.54	4.40	1.32	0.65	1.00	1.00
Incremental Delay, d2	2.7	0.3	0.2	1.3	0.3	11.5	0.0
Delay (s)	45.7	21.6	51.4	78.0	12.7	61.7	42.2
Level of Service	D	C	D	E	B	E	D
Approach Delay (s)		27.4			15.6	57.8	
Approach LOS		C			B	E	

Intersection Summary

HCM 2000 Control Delay	24.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	132.0	Sum of lost time (s)	15.0
Intersection Capacity Utilization	67.1%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	100	259	73	378	358	1605	193	533
Future Volume (vph)	100	259	73	378	358	1605	193	533
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	7	4	3	8	5	2	1	6
Permitted Phases								
Detector Phase	7	4	3	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	4.0	7.0	4.0	7.0	4.0	10.0	4.0	10.0
Minimum Split (s)	15.0	38.9	9.5	39.1	9.5	31.7	9.5	32.7
Total Split (s)	15.0	39.7	14.4	39.1	40.0	62.9	15.0	37.9
Total Split (%)	11.4%	30.1%	10.9%	29.6%	30.3%	47.7%	11.4%	28.7%
Yellow Time (s)	3.4	3.9	3.4	4.1	3.4	4.7	3.4	4.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	4.9	4.4	5.1	4.4	5.7	4.4	5.7
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max

Intersection Summary

Cycle Length: 132
Actuated Cycle Length: 132
Offset: 101 (77%), Referenced to phase 6:SBT, Start of Yellow
Natural Cycle: 130
Control Type: Actuated-Coordinated

Splits and Phases: 9: Genesee Ave & Eastgate Mall

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	100	259	116	73	378	398	358	1605	277	193	533	161
Future Volume (vph)	100	259	116	73	378	398	358	1605	277	193	533	161
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	5.1		4.4	5.7		4.4	5.7	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.91		0.97	0.91	
Frt	1.00	0.95		1.00	0.92		1.00	0.98		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3375		1770	3267		1770	4973		3433	4908	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	3375		1770	3267		1770	4973		3433	4908	
Peak-hour factor, PHF	0.80	0.80	0.80	0.82	0.82	0.82	0.86	0.86	0.86	0.80	0.80	0.80
Adj. Flow (vph)	125	324	145	89	461	485	416	1866	322	241	666	201
RTOR Reduction (vph)	0	0	0	0	135	0	0	18	0	0	41	0
Lane Group Flow (vph)	125	469	0	89	811	0	416	2170	0	241	826	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Actuated Green, G (s)	10.5	35.3		9.2	33.8		35.6	57.5		10.6	32.5	
Effective Green, g (s)	10.5	35.3		9.2	33.8		35.6	57.5		10.6	32.5	
Actuated g/C Ratio	0.08	0.27		0.07	0.26		0.27	0.44		0.08	0.25	
Clearance Time (s)	4.4	4.9		4.4	5.1		4.4	5.7		4.4	5.7	
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	4.2		2.0	4.3	
Lane Grp Cap (vph)	140	902		123	836		477	2166		275	1208	
v/s Ratio Prot	c0.07	0.14		0.05	c0.25		0.24	c0.44		c0.07	0.17	
v/s Ratio Perm												
v/c Ratio	0.89	0.52		0.72	0.97		0.87	1.00		0.88	0.68	
Uniform Delay, d1	60.2	41.1		60.2	48.6		46.0	37.2		60.1	45.1	
Progression Factor	1.00	1.00		1.00	1.00		0.66	0.57		0.82	1.16	
Incremental Delay, d2	44.6	0.2		16.3	23.5		11.8	16.8		23.7	3.0	
Delay (s)	104.8	41.4		76.4	72.1		42.2	38.0		73.0	55.4	
Level of Service	F	D		E	E		D	D		E	E	
Approach Delay (s)		54.7			72.4			38.7			59.2	
Approach LOS		D			E			D			E	

Intersection Summary

HCM 2000 Control Delay	51.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.97		
Actuated Cycle Length (s)	132.0	Sum of lost time (s)	19.6
Intersection Capacity Utilization	87.8%	ICU Level of Service	E
Analysis Period (min)	15		

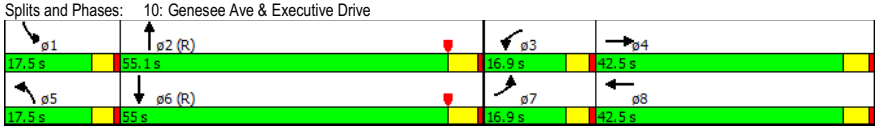
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	17	93	100	65	87	1840	40	557
Future Volume (vph)	17	93	100	65	87	1840	40	557
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	7	4	3	8	5	2	1	6
Permitted Phases								
Detector Phase	7	4	3	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	10.0	4.0	10.0
Minimum Split (s)	8.4	8.9	8.4	8.9	8.4	15.5	9.5	15.4
Total Split (s)	16.9	42.5	16.9	42.5	17.5	55.1	17.5	55.0
Total Split (%)	12.8%	32.2%	12.8%	32.2%	13.3%	41.7%	13.3%	41.7%
Yellow Time (s)	3.4	3.9	3.4	3.9	3.4	4.5	3.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	4.9	4.4	4.9	4.4	5.5	4.4	5.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	None	C-Max

Intersection Summary

Cycle Length: 132
Actuated Cycle Length: 132
Offset: 127 (96%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 80
Control Type: Actuated-Coordinated

Splits and Phases: 10: Genesee Ave & Executive Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	17	93	49	100	65	88	87	1840	522	40	557	15
Future Volume (vph)	17	93	49	100	65	88	87	1840	522	40	557	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	4.9		4.4	5.5		4.4	5.4	
Lane Util. Factor	1.00	0.95		0.97	0.95		1.00	0.91		1.00	0.91	
Frt	1.00	0.95		1.00	0.91		1.00	0.97		1.00	1.00	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3357		3433	3233		1770	4917		1770	5065	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	3357		3433	3233		1770	4917		1770	5065	
Peak-hour factor, PHF	0.92	0.92	0.92	0.80	0.80	0.80	0.91	0.91	0.91	0.80	0.80	0.80
Adj. Flow (vph)	18	101	53	125	81	110	96	2022	574	50	696	19
RTOR Reduction (vph)	0	45	0	0	88	0	0	26	0	0	1	0
Lane Group Flow (vph)	18	109	0	125	103	0	96	2570	0	50	714	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Actuated Green, G (s)	2.9	20.4		9.2	26.7		11.5	76.0		7.2	71.8	
Effective Green, g (s)	2.9	20.4		9.2	26.7		11.5	76.0		7.2	71.8	
Actuated g/C Ratio	0.02	0.15		0.07	0.20		0.09	0.58		0.05	0.54	
Clearance Time (s)	4.4	4.9		4.4	4.9		4.4	5.5		4.4	5.4	
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	3.6		2.0	3.8	
Lane Grp Cap (vph)	38	518		239	653		154	2831		96	2755	
v/s Ratio Prot	0.01	c0.03		c0.04	0.03		c0.05	c0.52		0.03	0.14	
v/s Ratio Perm												
v/c Ratio	0.47	0.21		0.52	0.16		0.62	0.91		0.52	0.26	
Uniform Delay, d1	63.8	48.8		59.3	43.4		58.2	24.9		60.7	16.0	
Progression Factor	1.00	1.00		1.00	1.00		1.29	0.67		1.23	0.28	
Incremental Delay, d2	3.4	0.1		1.0	0.0		3.9	4.0		1.7	0.2	
Delay (s)	67.2	48.8		60.2	43.4		78.7	20.8		76.5	4.7	
Level of Service	E	D		E	D		E	C		E	A	
Approach Delay (s)		50.8			50.1			22.8			9.4	
Approach LOS		D			D			C			A	

Intersection Summary

HCM 2000 Control Delay	23.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	132.0	Sum of lost time (s)	19.2
Intersection Capacity Utilization	74.5%	ICU Level of Service	D
Analysis Period (min)	15		

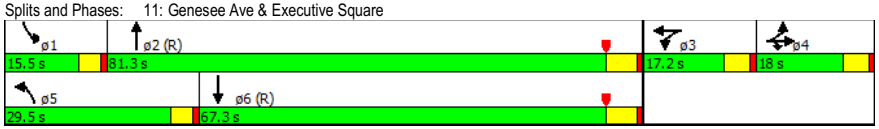
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	19	5	31	4	11	288	2559	23	625
Future Volume (vph)	19	5	31	4	11	288	2559	23	625
Turn Type	Split	NA	Prot	NA	NA	Prot	NA	Prot	NA
Protected Phases	4	4	4	3		5	2	1	6
Permitted Phases									
Detector Phase	4	4	4	3		5	2	1	6
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	4.0		4.0	10.0	4.0	10.0
Minimum Split (s)	8.9	8.9	8.9	8.9		8.4	15.7	8.4	15.7
Total Split (s)	18.0	18.0	18.0	17.2		29.5	81.3	15.5	67.3
Total Split (%)	13.6%	13.6%	13.6%	13.0%		22.3%	61.6%	11.7%	51.0%
Yellow Time (s)	3.9	3.9	3.9	3.9		3.4	4.7	3.4	4.7
All-Red Time (s)	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	4.9	4.9		4.4	5.7	4.4	5.7
Lead/Lag	Lag	Lag	Lag	Lead		Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None		None	C-Max	None	C-Max

Intersection Summary

Cycle Length: 132
Actuated Cycle Length: 132
Offset: 14 (11%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 80
Control Type: Actuated-Coordinated

Splits and Phases: 11: Genesee Ave & Executive Square



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	19	5	31	10	4	11	288	2559	209	23	625	30
Future Volume (vph)	19	5	31	10	4	11	288	2559	209	23	625	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9	4.9		4.9	4.0	4.4	5.7		4.4	5.7	
Lane Util. Factor	0.95	0.91	0.95		0.95	0.95	1.00	0.91		1.00	0.91	
Frt	1.00	0.90	0.85		0.99	0.85	1.00	0.99		1.00	0.99	
Flt Protected	0.95	1.00	1.00		0.97	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1526	1504		1698	1504	1770	5028		1770	5050	
Flt Permitted	0.95	1.00	1.00		0.97	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1681	1526	1504		1698	1504	1770	5028		1770	5050	
Peak-hour factor, PHF	0.87	0.87	0.87	0.80	0.80	0.80	0.96	0.96	0.96	0.80	0.80	0.80
Adj. Flow (vph)	22	6	36	12	5	14	300	2666	218	29	781	38
RTOR Reduction (vph)	0	13	21	0	1	13	0	4	0	0	3	0
Lane Group Flow (vph)	20	9	1	0	18	0	300	2880	0	29	816	0
Turn Type	Split	NA	Prot	Split	NA	NA	Prot	NA		Prot	NA	
Protected Phases	4	4	4	3	3		5	2		1	6	
Permitted Phases												
Actuated Green, G (s)	5.3	5.3	5.3		3.0	0.0	27.9	99.1		4.7	75.9	
Effective Green, g (s)	5.3	5.3	5.3		3.0	0.0	27.9	99.1		4.7	75.9	
Actuated g/C Ratio	0.04	0.04	0.04		0.02	0.00	0.21	0.75		0.04	0.58	
Clearance Time (s)	4.9	4.9	4.9		4.9		4.4	5.7		4.4	5.7	
Vehicle Extension (s)	2.0	2.0	2.0		2.0		2.0	3.9		2.0	2.2	
Lane Grp Cap (vph)	67	61	60		38	0	374	3774		63	2903	
v/s Ratio Prot	c0.01	0.01	0.00		c0.01		c0.17	c0.57		0.02	0.16	
v/s Ratio Perm												
v/c Ratio	0.30	0.14	0.01		0.47	0.00	0.80	0.76		0.46	0.28	
Uniform Delay, d1	61.5	61.2	60.8		63.7	66.0	49.4	9.6		62.4	14.2	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.18	0.25	
Incremental Delay, d2	0.9	0.4	0.0		3.4	0.0	11.1	1.5		1.9	0.2	
Delay (s)	62.5	61.5	60.9		67.1	66.0	60.5	11.1		75.2	3.8	
Level of Service	E	E	E		E	E	E	B		E	A	
Approach Delay (s)		61.6			66.6			15.8			6.3	
Approach LOS		E			E			B			A	

Intersection Summary

HCM 2000 Control Delay	14.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	132.0	Sum of lost time (s)	19.9
Intersection Capacity Utilization	77.6%	ICU Level of Service	D
Analysis Period (min)	15		

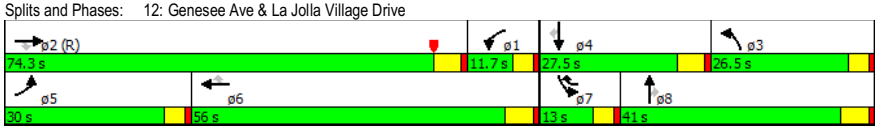
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	677	1640	160	116	1777	344	355	1705	110	191	316	116
Future Volume (vph)	677	1640	160	116	1777	344	355	1705	110	191	316	116
Turn Type	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6	7	3	8		7	4	
Permitted Phases			2			6			8			4
Detector Phase	5	2	2	1	6	7	3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	4.0	10.0	10.0	4.0	10.0	4.0	4.0	10.0	10.0	4.0	10.0	10.0
Minimum Split (s)	8.4	15.3	15.3	8.4	15.5	8.4	8.4	15.7	15.7	8.4	15.4	15.4
Total Split (s)	30.0	74.3	74.3	11.7	56.0	13.0	26.5	41.0	41.0	13.0	27.5	27.5
Total Split (%)	21.4%	53.1%	53.1%	8.4%	40.0%	9.3%	18.9%	29.3%	29.3%	9.3%	19.6%	19.6%
Yellow Time (s)	3.4	4.3	4.3	3.4	4.5	3.4	3.4	4.7	4.7	3.4	4.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.3	5.3	4.4	5.5	4.4	4.4	5.7	5.7	4.4	5.4	5.4
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lead	Lag	Lag	Lag	Lead	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 140
Actuated Cycle Length: 140
Offset: 21 (15%), Referenced to phase 2:EBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 12: Genesee Ave & La Jolla Village Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	677	1640	160	116	1777	344	355	1705	110	191	316	116
Future Volume (vph)	677	1640	160	116	1777	344	355	1705	110	191	316	116
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.3	5.3	4.4	5.5	4.4	4.4	5.7	5.7	4.4	5.4	5.4
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.91	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5085	1583	3433	5085	1583	3433	5085	1583	3433	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5085	1583	3433	5085	1583	3433	5085	1583	3433	5085	1583
Peak-hour factor, PHF	0.87	0.87	0.87	0.82	0.82	0.82	0.89	0.89	0.89	0.80	0.80	0.80
Adj. Flow (vph)	778	1885	184	141	2167	420	399	1916	124	239	395	145
RTOR Reduction (vph)	0	0	76	0	0	56	0	0	93	0	0	126
Lane Group Flow (vph)	778	1885	108	141	2167	364	399	1916	31	239	395	19
Turn Type	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6	7	3	8		7	4	
Permitted Phases			2			6			8			4
Actuated Green, G (s)	25.6	69.0	69.0	7.3	50.5	59.1	26.0	35.3	35.3	8.6	18.2	18.2
Effective Green, g (s)	25.6	69.0	69.0	7.3	50.5	59.1	26.0	35.3	35.3	8.6	18.2	18.2
Actuated g/C Ratio	0.18	0.49	0.49	0.05	0.36	0.42	0.19	0.25	0.25	0.06	0.13	0.13
Clearance Time (s)	4.4	5.3	5.3	4.4	5.5	4.4	4.4	5.7	5.7	4.4	5.4	5.4
Vehicle Extension (s)	2.0	6.0	6.0	2.0	5.8	2.0	2.0	3.5	3.5	2.0	4.1	4.1
Lane Grp Cap (vph)	627	2506	780	179	1834	668	637	1282	399	210	661	205
v/s Ratio Prot	c0.23	0.37		0.04	c0.43	0.03	0.12	c0.38		c0.07	0.08	
v/s Ratio Perm			0.07			0.20			0.02			0.01
v/c Ratio	1.24	0.75	0.14	0.79	1.18	0.54	0.63	1.49	0.08	1.14	0.60	0.09
Uniform Delay, d1	57.2	28.6	19.3	65.6	44.8	30.4	52.5	52.4	39.9	65.7	57.4	53.6
Progression Factor	1.07	1.45	3.46	0.61	0.47	0.07	0.68	0.68	0.26	1.00	1.00	1.00
Incremental Delay, d2	120.4	1.9	0.3	2.0	82.3	0.0	0.6	224.3	0.0	104.3	1.8	0.3
Delay (s)	181.6	43.5	67.2	41.9	103.4	2.3	36.5	260.1	10.5	170.0	59.2	53.9
Level of Service	F	D	E	D	F	A	D	F	B	F	E	D
Approach Delay (s)		82.8			84.6			210.8			92.2	
Approach LOS		F			F			F			F	

Intersection Summary

HCM 2000 Control Delay	119.7	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.28		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	108.7%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	215	22	70	35	519	32	1767	401	207
Future Volume (vph)	215	22	70	35	519	32	1767	401	207
Turn Type	Split	NA	Split	NA	Perm	Prot	NA	Prot	NA
Protected Phases	4	4	3	3		5	2	1	6
Permitted Phases					3				
Detector Phase	4	4	3	3	3	5	2	1	6
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	10.0	4.0	10.0
Minimum Split (s)	8.9	8.9	8.9	8.9	8.9	8.4	16.0	8.4	15.7
Total Split (s)	18.0	18.0	41.9	41.9	41.9	16.5	63.6	16.5	63.3
Total Split (%)	12.9%	12.9%	29.9%	29.9%	29.9%	11.8%	45.4%	11.8%	45.2%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.9	3.4	5.0	3.4	4.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	4.9	4.9	4.9	4.4	6.0	4.4	5.7
Lead/Lag	Lag	Lag	Lead	Lead	Lead	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	None	C-Max

Intersection Summary

Cycle Length: 140
Actuated Cycle Length: 140
Offset: 75 (54%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 13: Genesee Ave & Esplanade Court

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	215	22	18	70	35	519	32	1767	139	401	207	143
Future Volume (vph)	215	22	18	70	35	519	32	1767	139	401	207	143
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9		4.9	4.9	4.9	4.4	6.0		4.4	5.7	
Lane Util. Factor	0.97	1.00		0.97	0.95	0.95	1.00	0.91		0.97	0.91	
Frt	1.00	0.93		1.00	0.87	0.85	1.00	0.99		1.00	0.94	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	3433	1737		3433	1538	1504	1770	5030		3433	4774	
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	3433	1737		3433	1538	1504	1770	5030		3433	4774	
Peak-hour factor, PHF	0.80	0.80	0.80	0.80	0.80	0.80	0.92	0.92	0.92	0.87	0.87	0.87
Adj. Flow (vph)	269	28	22	88	44	649	35	1921	151	461	238	164
RTOR Reduction (vph)	0	21	0	0	134	134	0	6	0	0	71	0
Lane Group Flow (vph)	269	30	0	88	215	210	35	2066	0	461	331	0
Turn Type	Split	NA		Split	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	4	4		3	3		5	2		1	6	
Permitted Phases						3						
Actuated Green, G (s)	13.6	13.6		25.6	25.6	25.6	6.3	57.6		23.0	74.6	
Effective Green, g (s)	13.6	13.6		25.6	25.6	25.6	6.3	57.6		23.0	74.6	
Actuated g/C Ratio	0.10	0.10		0.18	0.18	0.18	0.04	0.41		0.16	0.53	
Clearance Time (s)	4.9	4.9		4.9	4.9	4.9	4.4	6.0		4.4	5.7	
Vehicle Extension (s)	2.0	2.0		2.0	2.0	2.0	2.0	3.7		2.0	4.1	
Lane Grp Cap (vph)	333	168		627	281	275	79	2069		563	2543	
v/s Ratio Prot	c0.08	0.02		0.03	c0.14		0.02	c0.41		c0.13	0.07	
v/s Ratio Perm						0.14						
v/c Ratio	0.81	0.18		0.14	0.77	0.76	0.44	1.00		0.82	0.13	
Uniform Delay, d1	61.9	58.1		48.0	54.3	54.3	65.1	41.2		56.5	16.4	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.35	0.29		1.33	0.18	
Incremental Delay, d2	12.7	0.2		0.0	10.6	10.8	0.6	12.2		8.1	0.1	
Delay (s)	74.6	58.3		48.0	65.0	65.1	88.8	24.3		83.0	3.0	
Level of Service	E	E		D	E	E	F	C		F	A	
Approach Delay (s)		72.0			63.1			25.4			45.7	
Approach LOS		E			E			C			D	

Intersection Summary

HCM 2000 Control Delay	40.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	20.2
Intersection Capacity Utilization	84.1%	ICU Level of Service	E
Analysis Period (min)	15		

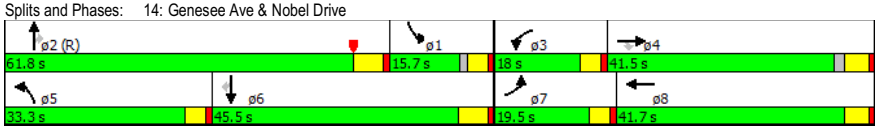
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	74	608	218	215	309	378	2099	473	46	327	30
Future Volume (vph)	74	608	218	215	309	378	2099	473	46	327	30
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8	5	2		1	6	
Permitted Phases			4					2			6
Detector Phase	7	4	4	3	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	4.0	10.0	10.0	4.0	10.0	4.0	10.0	10.0	4.0	10.0	10.0
Minimum Split (s)	8.4	14.9	14.9	8.4	15.1	8.4	15.7	15.7	8.4	15.9	15.9
Total Split (s)	19.5	41.5	41.5	18.0	41.7	33.3	61.8	61.8	15.7	45.5	45.5
Total Split (%)	13.9%	29.6%	29.6%	12.9%	29.8%	23.8%	44.1%	44.1%	11.2%	32.5%	32.5%
Yellow Time (s)	3.4	3.9	3.9	3.4	4.1	3.4	4.7	4.7	3.4	4.9	4.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	4.9	4.9	4.4	5.1	4.4	5.7	5.7	4.4	5.9	5.9
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	None	None	None

Intersection Summary

Cycle Length: 140
Actuated Cycle Length: 140
Offset: 65 (46%), Referenced to phase 2:NBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 14: Genesee Ave & Nobel Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	74	608	218	215	309	36	378	2099	473	46	327	30
Future Volume (vph)	74	608	218	215	309	36	378	2099	473	46	327	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9	4.9	4.4	5.1		4.4	5.7	5.7	4.4	5.9	5.9
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95		0.97	0.91	1.00	0.97	0.91	1.00
Frt	1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	3539	1583	3433	3483		3433	5085	1583	3433	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3539	1583	3433	3483		3433	5085	1583	3433	5085	1583
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.94	0.94	0.94	0.80	0.80	0.80
Adj. Flow (vph)	88	724	260	236	340	40	402	2233	503	58	409	38
RTOR Reduction (vph)	0	0	192	0	6	0	0	0	88	0	0	25
Lane Group Flow (vph)	88	724	68	236	374	0	402	2233	415	58	409	13
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4						2			6
Actuated Green, G (s)	8.0	36.4	36.4	13.9	42.1		20.7	64.5	64.5	5.8	49.4	49.4
Effective Green, g (s)	8.0	36.4	36.4	13.9	42.1		20.7	64.5	64.5	5.8	49.4	49.4
Actuated g/C Ratio	0.06	0.26	0.26	0.10	0.30		0.15	0.46	0.46	0.04	0.35	0.35
Clearance Time (s)	4.4	4.9	4.9	4.4	5.1		4.4	5.7	5.7	4.4	5.9	5.9
Vehicle Extension (s)	2.0	4.0	4.0	2.0	2.1		2.0	8.0	8.0	2.0	4.0	4.0
Lane Grp Cap (vph)	196	920	411	340	1047		507	2342	729	142	1794	558
v/s Ratio Prot	0.03	c0.20		c0.07	0.11		0.12	c0.44		c0.02	0.08	
v/s Ratio Perm			0.04						0.26			0.01
v/c Ratio	0.45	0.79	0.16	0.69	0.36		0.79	0.95	0.57	0.41	0.23	0.02
Uniform Delay, d1	63.9	48.2	40.0	61.0	38.3		57.6	36.3	27.6	65.4	31.9	29.6
Progression Factor	1.00	1.00	1.00	1.00	1.00		0.97	0.58	0.54	0.96	1.14	1.00
Incremental Delay, d2	0.6	4.8	0.3	4.9	0.1		2.9	4.6	1.1	0.7	0.1	0.0
Delay (s)	64.5	53.0	40.3	65.9	38.4		58.5	25.6	16.2	63.5	36.3	29.6
Level of Service	E	D	D	E	D		E	C	B	E	D	C
Approach Delay (s)		50.8			49.0			28.3			38.9	
Approach LOS		D			D			C			D	

Intersection Summary

HCM 2000 Control Delay	36.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	19.8
Intersection Capacity Utilization	83.0%	ICU Level of Service	E
Analysis Period (min)	15		

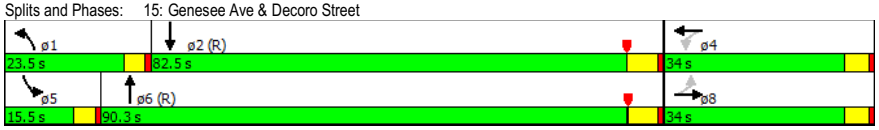
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	42	29	51	22	132	3007	19	953
Future Volume (vph)	42	29	51	22	132	3007	19	953
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		8		4	1	6	5	2
Permitted Phases	8		4					
Detector Phase	8	8	4	4	1	6	5	2
Switch Phase								
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	10.0	4.0	10.0
Minimum Split (s)	8.9	8.9	8.9	8.9	8.4	15.7	8.4	15.9
Total Split (s)	34.0	34.0	34.0	34.0	23.5	90.3	15.5	82.5
Total Split (%)	24.3%	24.3%	24.3%	24.3%	16.8%	64.5%	11.1%	58.9%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.4	4.7	3.4	4.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.9		4.9	4.4	5.7	4.4	5.9
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	None	C-Max

Intersection Summary

Cycle Length: 140
Actuated Cycle Length: 140
Offset: 44 (31%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow
Natural Cycle: 110
Control Type: Actuated-Coordinated

Splits and Phases: 15: Genesee Ave & Decoro Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	42	29	170	51	22	36	132	3007	114	19	953	66
Future Volume (vph)	42	29	170	51	22	36	132	3007	114	19	953	66
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9			4.9		4.4	5.7		4.4	5.9	
Lane Util. Factor		1.00			1.00		1.00	0.91		1.00	0.91	
Frt		0.90			0.96		1.00	0.99		1.00	0.99	
Flt Protected		0.99			0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1671			1739		1770	5057		1770	5036	
Flt Permitted		0.90			0.41		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1516			732		1770	5057		1770	5036	
Peak-hour factor, PHF	0.84	0.84	0.84	0.85	0.85	0.85	0.93	0.93	0.93	0.80	0.80	0.80
Adj. Flow (vph)	50	35	202	60	26	42	142	3233	123	24	1191	82
RTOR Reduction (vph)	0	64	0	0	13	0	0	2	0	0	5	0
Lane Group Flow (vph)	0	223	0	0	115	0	142	3354	0	24	1269	0
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		8			4		1	6		5	2	
Permitted Phases	8			4								
Actuated Green, G (s)		23.5			23.5		15.1	97.0		4.5	86.2	
Effective Green, g (s)		23.5			23.5		15.1	97.0		4.5	86.2	
Actuated g/C Ratio		0.17			0.17		0.11	0.69		0.03	0.62	
Clearance Time (s)		4.9			4.9		4.4	5.7		4.4	5.9	
Vehicle Extension (s)		2.0			2.0		2.0	4.3		2.0	3.7	
Lane Grp Cap (vph)		254			122		190	3503		56	3100	
v/s Ratio Prot							c0.08	c0.66		0.01	0.25	
v/s Ratio Perm		0.15			c0.16							
v/c Ratio		0.88			0.94		0.75	0.96		0.43	0.41	
Uniform Delay, d1		56.8			57.6		60.6	19.6		66.5	13.8	
Progression Factor		1.00			1.00		0.95	1.06		1.02	1.50	
Incremental Delay, d2		26.3			62.3		1.3	1.0		1.9	0.4	
Delay (s)		83.2			119.9		59.0	21.8		69.8	21.2	
Level of Service		F			F		E	C		E	C	
Approach Delay (s)		83.2			119.9			23.3			22.1	
Approach LOS		F			F			C			C	

Intersection Summary

HCM 2000 Control Delay	28.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.96		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	15.2
Intersection Capacity Utilization	91.4%	ICU Level of Service	F
Analysis Period (min)	15		

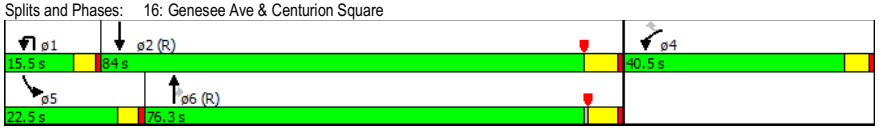
c Critical Lane Group

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	ø1
Lane Configurations							
Traffic Volume (vph)	344	198	2937	302	165	1046	
Future Volume (vph)	344	198	2937	302	165	1046	
Turn Type	Prot	Perm	NA	Perm	Prot	NA	
Protected Phases	4		6		5	2	1
Permitted Phases		4		6			
Detector Phase	4	4	6	6	5	2	
Switch Phase							
Minimum Initial (s)	7.0	7.0	10.0	10.0	4.0	10.0	4.0
Minimum Split (s)	34.9	34.9	28.7	28.7	8.4	16.4	8.4
Total Split (s)	40.5	40.5	76.3	76.3	22.5	84.0	15.5
Total Split (%)	28.9%	28.9%	54.5%	54.5%	16.1%	60.0%	11%
Yellow Time (s)	3.9	3.9	4.7	4.7	3.4	5.4	3.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.9	4.9	5.7	5.7	4.4	6.4	
Lead/Lag			Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?			Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	C-Max	C-Max	None	C-Max	None

Intersection Summary

Cycle Length: 140
Actuated Cycle Length: 140
Offset: 43 (31%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow
Natural Cycle: 140
Control Type: Actuated-Coordinated

Splits and Phases: 16: Genesee Ave & Centurion Square



Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	344	198	0	2937	302	165	1046
Future Volume (vph)	344	198	0	2937	302	165	1046
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9		5.7	5.7	4.4	6.4
Lane Util. Factor	1.00	1.00		0.91	1.00	0.97	0.91
Frt	1.00	0.85		1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00		1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583		5085	1583	3433	5085
Flt Permitted	0.95	1.00		1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583		5085	1583	3433	5085
Peak-hour factor, PHF	0.80	0.80	0.92	0.93	0.93	0.81	0.81
Adj. Flow (vph)	430	248	0	3158	325	204	1291
RTOR Reduction (vph)	0	133	0	0	59	0	0
Lane Group Flow (vph)	430	115	0	3158	266	204	1291
Turn Type	Prot	Perm	Prot	NA	Perm	Prot	NA
Protected Phases	4		1	6		5	2
Permitted Phases		4			6		
Actuated Green, G (s)	35.0	35.0		77.3	77.3	12.7	93.7
Effective Green, g (s)	35.0	35.0		77.3	77.3	12.7	93.7
Actuated g/C Ratio	0.25	0.25		0.55	0.55	0.09	0.67
Clearance Time (s)	4.9	4.9		5.7	5.7	4.4	6.4
Vehicle Extension (s)	2.0	2.0		4.2	4.2	2.0	3.4
Lane Grp Cap (vph)	442	395		2807	874	311	3403
v/s Ratio Prot	c0.24			c0.62		c0.06	0.25
v/s Ratio Perm		0.07			0.17		
v/c Ratio	0.97	0.29		1.13	0.30	0.66	0.38
Uniform Delay, d1	52.0	42.5		31.4	16.9	61.5	10.3
Progression Factor	1.00	1.00		1.00	1.00	1.18	0.59
Incremental Delay, d2	35.4	0.2		61.5	0.9	3.4	0.3
Delay (s)	87.4	42.6		92.9	17.8	75.8	6.4
Level of Service	F	D		F	B	E	A
Approach Delay (s)	71.0			85.9			15.9
Approach LOS	E			F			B

Intersection Summary

HCM 2000 Control Delay	65.6	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.04		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	15.7
Intersection Capacity Utilization	93.0%	ICU Level of Service	F
Analysis Period (min)	15		

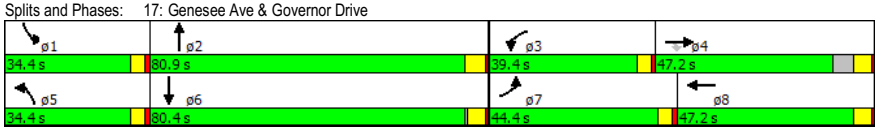
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	783	317	144	236	240	67	2005	302	792
Future Volume (vph)	783	317	144	236	240	67	2005	302	792
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Prot	NA
Protected Phases	7	4		3	8	5	2	1	6
Permitted Phases			4						
Detector Phase	7	4	4	3	8	5	2	1	6
Switch Phase									
Minimum Initial (s)	4.0	8.0	8.0	4.0	8.0	4.0	8.0	4.0	8.0
Minimum Split (s)	8.4	13.2	13.2	8.4	13.2	8.4	13.9	8.4	13.4
Total Split (s)	44.4	47.2	47.2	39.4	47.2	34.4	80.9	34.4	80.4
Total Split (%)	21.5%	22.8%	22.8%	19.0%	22.8%	16.6%	39.1%	16.6%	38.9%
Yellow Time (s)	3.4	4.2	4.2	3.4	4.2	3.4	4.9	3.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.2	5.2	4.4	5.2	4.4	5.9	4.4	5.4
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	None	Min

Intersection Summary

Cycle Length: 206.9
Actuated Cycle Length: 200.4
Natural Cycle: 150
Control Type: Actuated-Uncoordinated

Splits and Phases: 17: Genesee Ave & Governor Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	783	317	144	236	240	410	67	2005	204	302	792	433
Future Volume (vph)	783	317	144	236	240	410	67	2005	204	302	792	433
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	16	12	12	12	12	12	12	12
Total Lost time (s)	4.4	5.2	5.2	4.4	5.2		4.4	5.9		4.4	5.4	
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95		1.00	0.91		0.97	0.91	
Frt	1.00	1.00	0.85	1.00	0.91		1.00	0.99		1.00	0.95	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	3433	3539	1583	3433	3631		1770	5015		3433	4816	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	3433	3539	1583	3433	3631		1770	5015		3433	4816	
Peak-hour factor, PHF	0.80	0.80	0.80	0.80	0.80	0.80	0.90	0.90	0.90	0.85	0.85	0.85
Adj. Flow (vph)	979	396	180	295	300	512	74	2228	227	355	932	509
RTOR Reduction (vph)	0	0	63	0	149	0	0	6	0	0	42	0
Lane Group Flow (vph)	979	396	117	295	664	0	74	2449	0	355	1399	0
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4									
Actuated Green, G (s)	40.0	59.1	59.1	21.6	40.7		12.8	75.1		24.7	87.5	
Effective Green, g (s)	40.0	59.1	59.1	21.6	40.7		12.8	75.1		24.7	87.5	
Actuated g/C Ratio	0.20	0.29	0.29	0.11	0.20		0.06	0.37		0.12	0.44	
Clearance Time (s)	4.4	5.2	5.2	4.4	5.2		4.4	5.9		4.4	5.4	
Vehicle Extension (s)	2.0	2.3	2.3	2.0	3.8		2.0	2.9		2.0	3.5	
Lane Grp Cap (vph)	685	1043	466	370	737		113	1879		423	2102	
v/s Ratio Prot	c0.29	0.11		0.09	c0.18		0.04	c0.49		c0.10	0.29	
v/s Ratio Perm			0.07									
v/c Ratio	1.43	0.38	0.25	0.80	1.00dr		0.65	1.30		0.84	0.67	
Uniform Delay, d1	80.2	56.1	53.8	87.3	77.9		91.6	62.7		85.9	44.8	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	201.5	0.1	0.2	10.6	14.4		9.9	140.6		13.1	0.8	
Delay (s)	281.7	56.2	53.9	97.9	92.3		101.6	203.2		99.0	45.7	
Level of Service	F	E	D	F	F		F	F		F	D	
Approach Delay (s)		197.9			93.8			200.3			56.2	
Approach LOS		F			F			F			E	

Intersection Summary

HCM 2000 Control Delay	145.8	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.18		
Actuated Cycle Length (s)	200.4	Sum of lost time (s)	19.9
Intersection Capacity Utilization	110.7%	ICU Level of Service	H
Analysis Period (min)	15		

dr Defacto Right Lane. Recode with 1 though lane as a right lane.
c Critical Lane Group

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	129	368	1247	1098	180
Future Volume (Veh/h)	0	129	368	1247	1098	180
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.80	0.80	0.83	0.83	0.83	0.83
Hourly flow rate (vph)	0	161	443	1502	1323	217
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2710	662	1323			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2710	662	1323			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	60	14			
cM capacity (veh/h)	2	405	518			

Direction, Lane #	EB 1	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3
Volume Total	161	443	501	501	501	662	662	217
Volume Left	0	443	0	0	0	0	0	0
Volume Right	161	0	0	0	0	0	0	217
cSH	405	518	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.40	0.86	0.29	0.29	0.29	0.39	0.39	0.13
Queue Length 95th (ft)	47	226	0	0	0	0	0	0
Control Delay (s)	19.7	40.5	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	C	E						
Approach Delay (s)	19.7	9.2				0.0		
Approach LOS	C							

Intersection Summary			
Average Delay	5.8		
Intersection Capacity Utilization	57.4%	ICU Level of Service	B
Analysis Period (min)	15		

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	125	146	1570	710	405	794
Future Volume (vph)	125	146	1570	710	405	794
Turn Type	Prot	Perm	NA	Perm	Prot	NA
Protected Phases	4		2		1	6
Permitted Phases		4		2		
Detector Phase	4	4	2	2	1	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	13.0	13.0	5.0	10.0
Minimum Split (s)	37.1	37.1	38.5	38.5	10.7	17.5
Total Split (s)	37.1	37.1	73.9	73.9	39.0	112.9
Total Split (%)	24.7%	24.7%	49.3%	49.3%	26.0%	75.3%
Yellow Time (s)	4.1	4.1	5.5	5.5	3.7	5.5
All-Red Time (s)	1.0	1.0	2.0	2.0	1.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.1	5.1	7.5	7.5	4.7	7.5
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	None	None	Min	Min	None	Min

Intersection Summary
Cycle Length: 150
Actuated Cycle Length: 134.8
Natural Cycle: 150
Control Type: Actuated-Uncoordinated

Splits and Phases: 19: Genesee Ave & SR-52 EB Ramps

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	125	146	1570	710	405	794
Future Volume (vph)	125	146	1570	710	405	794
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1	7.5	7.5	4.7	7.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.83	0.83	0.83	0.83	0.84	0.84
Adj. Flow (vph)	151	176	1892	855	482	945
RTOR Reduction (vph)	0	154	0	112	0	0
Lane Group Flow (vph)	151	22	1892	743	482	945
Turn Type	Prot	Perm	NA	Perm	Prot	NA
Protected Phases	4		2		1	6
Permitted Phases		4		2		
Actuated Green, G (s)	16.7	16.7	66.5	66.5	34.3	105.5
Effective Green, g (s)	16.7	16.7	66.5	66.5	34.3	105.5
Actuated g/C Ratio	0.12	0.12	0.49	0.49	0.25	0.78
Clearance Time (s)	5.1	5.1	7.5	7.5	4.7	7.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	219	196	1745	780	450	2769
v/s Ratio Prot	c0.09		c0.53		c0.27	0.27
v/s Ratio Perm		0.01		0.47		
v/c Ratio	0.69	0.11	1.08	0.95	1.07	0.34
Uniform Delay, d1	56.6	52.5	34.2	32.6	50.3	4.3
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	8.7	0.3	48.3	21.2	62.7	0.1
Delay (s)	65.3	52.7	82.5	53.8	113.0	4.4
Level of Service	E	D	F	D	F	A
Approach Delay (s)	58.5		73.6			41.1
Approach LOS	E		E			D

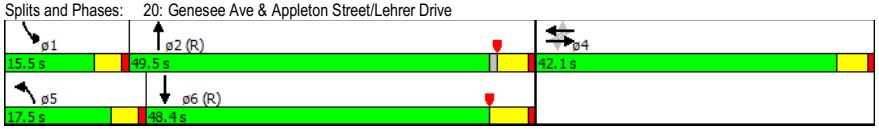
Intersection Summary			
HCM 2000 Control Delay	62.2	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.02		
Actuated Cycle Length (s)	134.8	Sum of lost time (s)	17.3
Intersection Capacity Utilization	87.2%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	497	5	8	11	4	1417	63	658
Future Volume (vph)	497	5	8	11	4	1417	63	658
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		4	5	2	1	6
Permitted Phases	4		4					
Detector Phase	4	4	4	4	5	2	1	6
Switch Phase								
Minimum Initial (s)	6.0	6.0	6.0	6.0	4.0	10.0	4.0	10.0
Minimum Split (s)	10.9	10.9	10.9	10.9	8.4	14.9	8.4	15.8
Total Split (s)	42.1	42.1	42.1	42.1	17.5	49.5	15.5	48.4
Total Split (%)	39.0%	39.0%	39.0%	39.0%	16.2%	45.8%	14.4%	44.8%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.4	3.9	3.4	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.9		4.9	4.4	4.9	4.4	5.8
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	None	C-Max

Intersection Summary
Cycle Length: 108
Actuated Cycle Length: 108
Offset: 7 (6%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 130
Control Type: Actuated-Coordinated

Splits and Phases: 20: Genesee Ave & Appleton Street/Lehrer Drive



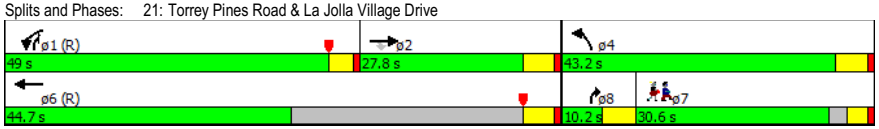
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	497	5	10	8	11	369	4	1417	4	63	658	111
Future Volume (vph)	497	5	10	8	11	369	4	1417	4	63	658	111
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	16	12	12	16	12	12	12	12	12	12	12
Total Lost time (s)		4.9			4.9		4.4	4.9		4.4	5.8	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frt		1.00			0.87		1.00	1.00		1.00	0.98	
Flt Protected		0.95			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		2008			1838		1770	3538		1770	3463	
Flt Permitted		0.31			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		651			1820		1770	3538		1770	3463	
Peak-hour factor, PHF	0.83	0.83	0.83	0.89	0.89	0.89	0.80	0.80	0.80	0.80	0.80	0.80
Adj. Flow (vph)	599	6	12	9	12	415	5	1771	5	79	822	139
RTOR Reduction (vph)	0	1	0	0	149	0	0	0	0	0	10	0
Lane Group Flow (vph)	0	616	0	0	287	0	5	1776	0	79	952	0
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4			4								
Actuated Green, G (s)		37.2			37.2		1.4	48.4		8.2	54.3	
Effective Green, g (s)		37.2			37.2		1.4	48.4		8.2	54.3	
Actuated g/C Ratio		0.34			0.34		0.01	0.45		0.08	0.50	
Clearance Time (s)		4.9			4.9		4.4	4.9		4.4	5.8	
Vehicle Extension (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		224			626		22	1585		134	1741	
v/s Ratio Prot							0.00	c0.50		c0.04	0.27	
v/s Ratio Perm		c0.95			0.16							
v/c Ratio		2.75			0.46		0.23	1.12		0.59	0.55	
Uniform Delay, d1		35.4			27.6		52.8	29.8		48.3	18.4	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		800.6			0.5		5.2	63.3		6.5	1.2	
Delay (s)		836.0			28.1		58.0	93.1		54.8	19.6	
Level of Service		F			C		E	F		D	B	
Approach Delay (s)		836.0			28.1			93.0			22.3	
Approach LOS		F			C			F			C	

Intersection Summary			
HCM 2000 Control Delay	185.0	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.74		
Actuated Cycle Length (s)	108.0	Sum of lost time (s)	15.1
Intersection Capacity Utilization	111.0%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	ø7	ø8
Lane Configurations								
Traffic Volume (vph)	390	62	1324	1738	273	1294		
Future Volume (vph)	390	62	1324	1738	273	1294		
Turn Type	NA	Perm	Prot	NA	Prot	pt+ov		
Protected Phases	2		1	6	4	8 1	7	8
Permitted Phases		2						
Detector Phase	2	2	1	6	4	8 1		
Switch Phase								
Minimum Initial (s)	10.0	10.0	4.0	10.0	4.0		4.0	4.0
Minimum Split (s)	15.4	15.4	8.4	15.3	9.6		8.0	9.6
Total Split (s)	27.8	27.8	49.0	44.7	43.2		30.6	10.2
Total Split (%)	23.2%	23.2%	40.8%	37.3%	36.0%		26%	9%
Yellow Time (s)	4.4	4.4	3.4	4.3	4.6		3.0	4.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	0.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0			
Total Lost Time (s)	5.4	5.4	4.4	5.3	5.6			
Lead/Lag	Lag	Lag	Lead				Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes				Yes	Yes
Recall Mode	None	None	C-Max	C-Max	None		None	None

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 117 (98%), Referenced to phase 1:WBL and 6:WBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 21: Torrey Pines Road & La Jolla Village Drive



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	390	62	1324	1738	273	1294
Future Volume (vph)	390	62	1324	1738	273	1294
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.4	5.4	4.4	5.3	5.6	4.6
Lane Util. Factor	0.91	1.00	0.97	0.91	0.97	0.88
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	5085	1583	3433	5085	3433	2787
Flt Permitted	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (perm)	5085	1583	3433	5085	3433	2787
Peak-hour factor, PHF	0.83	0.83	0.93	0.93	0.84	0.84
Adj. Flow (vph)	470	75	1424	1869	325	1540
RTOR Reduction (vph)	0	61	0	0	0	0
Lane Group Flow (vph)	470	14	1424	1869	325	1540
Turn Type	NA	Perm	Prot	NA	Prot	pt+ov
Protected Phases	2		1	6	4	8 1
Permitted Phases		2				
Actuated Green, G (s)	22.4	22.4	49.0	75.9	33.2	56.0
Effective Green, g (s)	22.4	22.4	49.0	75.9	33.2	56.0
Actuated g/C Ratio	0.19	0.19	0.41	0.63	0.28	0.47
Clearance Time (s)	5.4	5.4	4.4	5.3	5.6	
Vehicle Extension (s)	5.5	5.5	2.0	8.0	2.0	
Lane Grp Cap (vph)	949	295	1401	3216	949	1300
v/s Ratio Prot	0.09		0.41	c0.37	c0.09	c0.55
v/s Ratio Perm		0.01				
v/c Ratio	0.50	0.05	1.02	0.58	0.34	1.18
Uniform Delay, d1	43.7	40.0	35.5	12.8	34.7	32.0
Progression Factor	0.66	0.72	0.98	0.50	1.00	1.00
Incremental Delay, d2	1.0	0.2	15.9	0.2	0.1	91.2
Delay (s)	30.0	29.2	50.7	6.6	34.8	123.2
Level of Service	C	C	D	A	C	F
Approach Delay (s)	29.9			25.7	107.8	
Approach LOS	C			C	F	

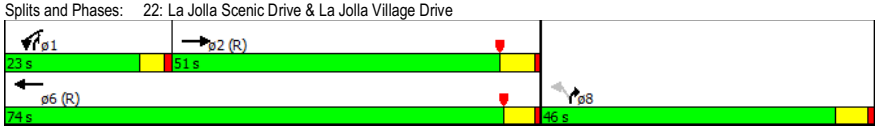
Intersection Summary			
HCM 2000 Control Delay	52.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	18.4
Intersection Capacity Utilization	66.7%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Configurations					
Traffic Volume (vph)	1569	526	2416	709	532
Future Volume (vph)	1569	526	2416	709	532
Turn Type	NA	Prot	NA	Perm	pt+ov
Protected Phases	2	1	6		8 1
Permitted Phases				8	
Detector Phase	2	1	6	8	8 1
Switch Phase					
Minimum Initial (s)	10.0	4.0	10.0	4.0	
Minimum Split (s)	15.7	8.4	15.3	9.5	
Total Split (s)	51.0	23.0	74.0	46.0	
Total Split (%)	42.5%	19.2%	61.7%	38.3%	
Yellow Time (s)	4.7	3.4	4.3	4.5	
All-Red Time (s)	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.7	4.4	5.3	5.5	
Lead/Lag	Lag	Lead			
Lead-Lag Optimize?	Yes	Yes			
Recall Mode	C-Max	None	C-Max	None	

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 29 (24%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 130
Control Type: Actuated-Coordinated

Splits and Phases: 22: La Jolla Scenic Drive & La Jolla Village Drive



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1569	75	526	2416	709	532
Future Volume (vph)	1569	75	526	2416	709	532
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.7		4.4	5.3	5.5	5.5
Lane Util. Factor	0.91		0.97	0.91	1.00	0.88
Frt	0.99		1.00	1.00	1.00	0.85
Flt Protected	1.00		0.95	1.00	0.95	1.00
Satd. Flow (prot)	5051		3433	5085	1770	2787
Flt Permitted	1.00		0.95	1.00	0.95	1.00
Satd. Flow (perm)	5051		3433	5085	1770	2787
Peak-hour factor, PHF	0.88	0.88	0.96	0.96	0.85	0.85
Adj. Flow (vph)	1783	85	548	2517	834	626
RTOR Reduction (vph)	4	0	0	0	0	1
Lane Group Flow (vph)	1864	0	548	2517	834	625
Turn Type	NA		Prot	NA	Perm	pt+ov
Protected Phases	2		1	6		8 1
Permitted Phases					8	
Actuated Green, G (s)	45.3		18.6	68.7	40.5	64.6
Effective Green, g (s)	45.3		18.6	68.7	40.5	64.6
Actuated g/C Ratio	0.38		0.16	0.57	0.34	0.54
Clearance Time (s)	5.7		4.4	5.3	5.5	
Vehicle Extension (s)	4.0		2.0	5.9	2.0	
Lane Grp Cap (vph)	1906		532	2911	597	1500
v/s Ratio Prot	c0.37		c0.16	0.49		0.22
v/s Ratio Perm					c0.47	
v/c Ratio	0.98		1.03	0.86	1.40	0.42
Uniform Delay, d1	36.9		50.7	21.7	39.8	16.5
Progression Factor	0.69		1.12	0.46	1.00	1.00
Incremental Delay, d2	5.9		35.3	1.9	188.7	0.1
Delay (s)	31.2		91.8	11.9	228.4	16.6
Level of Service	C		F	B	F	B
Approach Delay (s)	31.2			26.2	137.6	
Approach LOS	C			C	F	

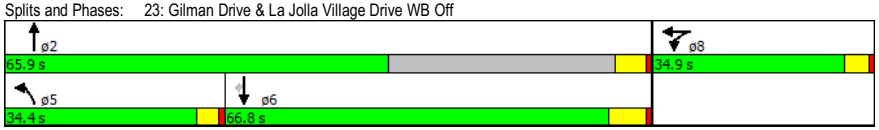
Intersection Summary			
HCM 2000 Control Delay	53.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.15		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	15.6
Intersection Capacity Utilization	99.3%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	WBT	NBL	NBT	SBT	SBR
Lane Configurations					
Traffic Volume (vph)	0	600	663	145	62
Future Volume (vph)	0	600	663	145	62
Turn Type	NA	Prot	NA	NA	Perm
Protected Phases	8	5	2	6	
Permitted Phases					6
Detector Phase	8	5	2	6	6
Switch Phase					
Minimum Initial (s)	4.0	4.0	10.0	10.0	10.0
Minimum Split (s)	8.9	8.4	15.9	16.8	16.8
Total Split (s)	34.9	34.4	65.9	66.8	66.8
Total Split (%)	25.6%	25.3%	48.4%	49.1%	49.1%
Yellow Time (s)	3.9	3.4	4.9	5.8	5.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.4	5.9	6.8	6.8
Lead/Lag		Lead		Lag	Lag
Lead-Lag Optimize?		Yes		Yes	Yes
Recall Mode	None	None	Min	Min	Min

Intersection Summary
Cycle Length: 136.1
Actuated Cycle Length: 68.1
Natural Cycle: 65
Control Type: Actuated-Uncoordinated

Splits and Phases: 23: Gilman Drive & La Jolla Village Drive WB Off



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	30	0	256	600	663	0	0	145	62
Future Volume (vph)	0	0	0	30	0	256	600	663	0	0	145	62
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.9		4.4	5.9			6.8	6.8
Lane Util. Factor					1.00		1.00	0.95			0.95	1.00
Frt					0.88		1.00	1.00			1.00	0.85
Flt Protected					0.99		0.95	1.00			1.00	1.00
Satd. Flow (prot)					1629		1770	3539			3539	1583
Flt Permitted					0.99		0.95	1.00			1.00	1.00
Satd. Flow (perm)					1629		1770	3539			3539	1583
Peak-hour factor, PHF	0.25	0.25	0.25	0.90	0.90	0.90	0.90	0.90	0.90	0.83	0.83	0.83
Adj. Flow (vph)	0	0	0	33	0	284	667	737	0	0	175	75
RTOR Reduction (vph)	0	0	0	0	234	0	0	0	0	0	0	63
Lane Group Flow (vph)	0	0	0	0	83	0	667	737	0	0	175	12
Turn Type				Split	NA		Prot	NA			NA	Perm
Protected Phases				8	8		5	2			6	
Permitted Phases												6
Actuated Green, G (s)					10.6		30.6	46.5			10.6	10.6
Effective Green, g (s)					10.6		30.6	46.5			10.6	10.6
Actuated g/C Ratio					0.16		0.45	0.68			0.16	0.16
Clearance Time (s)					4.9		4.4	5.9			6.8	6.8
Vehicle Extension (s)					3.0		3.0	3.0			3.0	3.0
Lane Grp Cap (vph)					254		797	2423			552	247
v/s Ratio Prot					c0.05		c0.38	c0.21			0.05	
v/s Ratio Perm												0.01
v/c Ratio					0.33		0.84	0.30			0.32	0.05
Uniform Delay, d1					25.5		16.4	4.3			25.4	24.4
Progression Factor					1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2					0.8		7.6	0.1			0.3	0.1
Delay (s)					26.2		24.1	4.3			25.8	24.4
Level of Service					C		C	A			C	C
Approach Delay (s)		0.0			26.2			13.7			25.4	
Approach LOS		A			C			B			C	

Intersection Summary				
HCM 2000 Control Delay	17.2	HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio	0.64			
Actuated Cycle Length (s)	67.9	Sum of lost time (s)	16.1	
Intersection Capacity Utilization	Err%	ICU Level of Service	H	
Analysis Period (min)	15			

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	42	4	431	0	0	0	0	1159	129	37	148	0
Future Volume (Veh/h)	42	4	431	0	0	0	0	1159	129	37	148	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.64	0.64	0.64	0.25	0.25	0.25	0.92	0.92	0.92	1.00	1.00	1.00
Hourly flow rate (vph)	66	6	673	0	0	0	0	1260	140	37	148	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)			13									
Median type								None			None	
Median storage veh)												
Upstream signal (ft)											483	
pX, platoon unblocked												
vC, conflicting volume	852	1622	74	1748	1482	630	148			1400		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	852	1622	74	1748	1482	630	148			1400		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	72	94	31	100	100	100	100			92		
cM capacity (veh/h)	238	94	973	15	115	424	1431			484		

Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	739	630	630	140	37	74	74
Volume Left	66	0	0	0	37	0	0
Volume Right	673	0	0	140	0	0	0
cSH	1068	1700	1700	1700	484	1700	1700
Volume to Capacity	0.69	0.37	0.37	0.08	0.08	0.04	0.04
Queue Length 95th (ft)	147	0	0	0	6	0	0
Control Delay (s)	17.4	0.0	0.0	0.0	13.1	0.0	0.0
Lane LOS	C				B		
Approach Delay (s)	Err	0.0			2.6		
Approach LOS	F						

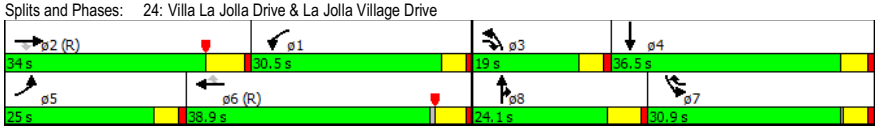
Intersection Summary				
Average Delay	Err			
Intersection Capacity Utilization	Err%	ICU Level of Service	H	
Analysis Period (min)	15			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	219	1196	34	465	1807	752	359	344	454	459	102
Future Volume (vph)	219	1196	34	465	1807	752	359	344	454	459	102
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	Prot	Prot	NA
Protected Phases	5	2	3	1	6	7	3	8	8	7	4
Permitted Phases			2			6					
Detector Phase	5	2	3	1	6	7	3	8	8	7	4
Switch Phase											
Minimum Initial (s)	4.0	10.0	4.0	4.0	10.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.4	16.4	8.4	8.4	15.3	8.4	8.4	9.5	9.5	8.4	8.9
Total Split (s)	25.0	34.0	19.0	30.5	38.9	30.9	19.0	24.1	24.1	30.9	36.5
Total Split (%)	20.8%	28.3%	15.8%	25.4%	32.4%	25.8%	15.8%	20.1%	20.1%	25.8%	30.4%
Yellow Time (s)	3.4	5.4	3.4	3.4	4.3	3.4	3.4	4.5	4.5	3.4	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	6.4	4.4	4.4	5.3	4.4	4.4	5.5	5.5	4.4	4.9
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lag	Lead	Lead	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	C-Max	None	None	None	None	None	None

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 52 (43%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 24: Villa La Jolla Drive & La Jolla Village Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	219	1196	34	465	1807	752	359	344	454	459	102	38
Future Volume (vph)	219	1196	34	465	1807	752	359	344	454	459	102	38
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	6.4	4.4	4.4	5.3	4.4	4.4	5.5	5.5	4.4	4.9	
Lane Util. Factor	1.00	0.91	1.00	0.97	0.91	1.00	0.97	0.95	0.95	0.97	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.97	0.85	1.00	0.96	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	5085	1583	3433	5085	1583	3433	1719	1504	3433	1787	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	5085	1583	3433	5085	1583	3433	1719	1504	3433	1787	
Peak-hour factor, PHF	0.87	0.87	0.87	0.91	0.91	0.91	0.80	0.80	0.80	0.80	0.80	0.80
Adj. Flow (vph)	252	1375	39	511	1986	826	449	430	568	574	128	48
RTOR Reduction (vph)	0	0	25	0	0	49	0	7	320	0	11	0
Lane Group Flow (vph)	252	1375	14	511	1986	777	449	525	146	574	165	0
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	Prot	Prot	NA	
Protected Phases	5	2	3	1	6	7	3	8	8	7	4	
Permitted Phases			2			6						
Actuated Green, G (s)	19.3	27.6	42.2	26.1	35.5	62.5	14.6	18.6	18.6	27.0	31.6	
Effective Green, g (s)	19.3	27.6	42.2	26.1	35.5	62.5	14.6	18.6	18.6	27.0	31.6	
Actuated g/C Ratio	0.16	0.23	0.35	0.22	0.30	0.52	0.12	0.16	0.16	0.22	0.26	
Clearance Time (s)	4.4	6.4	4.4	4.4	5.3	4.4	4.4	5.5	5.5	4.4	4.9	
Vehicle Extension (s)	2.0	4.4	2.0	2.0	4.7	2.0	2.0	3.3	3.3	2.0	2.0	
Lane Grp Cap (vph)	284	1169	556	746	1504	824	417	266	233	772	470	
v/s Ratio Prot	0.14	c0.27	0.00	0.15	c0.39	c0.21	0.13	c0.31	0.10	0.17	c0.09	
v/s Ratio Perm			0.01			0.28						
v/c Ratio	0.89	1.18	0.02	0.68	1.32	0.94	1.08	1.97	0.63	0.74	0.35	
Uniform Delay, d1	49.3	46.2	25.4	43.2	42.2	27.1	52.7	50.7	47.4	43.3	35.9	
Progression Factor	0.97	0.77	1.11	0.76	0.76	0.84	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	16.8	84.8	0.0	0.2	144.7	2.6	66.2	451.9	5.3	3.4	0.2	
Delay (s)	64.7	120.4	28.2	32.9	176.6	25.4	118.9	502.6	52.7	46.7	36.0	
Level of Service	E	F	C	C	F	C	F	F	D	D	D	
Approach Delay (s)		109.8			116.9			238.6			44.2	
Approach LOS		F			F			F			D	

Intersection Summary

HCM 2000 Control Delay	132.2	HCM 2000 Level of Service	F		
HCM 2000 Volume to Capacity ratio	1.32				
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	20.7		
Intersection Capacity Utilization	103.8%	ICU Level of Service	G		
Analysis Period (min)	15				

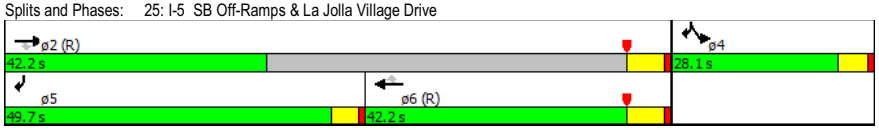
c Critical Lane Group

Lane Group	EBT	EBR	WBT	WBR	SBL	SBR	ø5
Lane Configurations							
Traffic Volume (vph)	1763	388	1515	347	626	1457	
Future Volume (vph)	1763	388	1515	347	626	1457	
Turn Type	NA	Perm	NA	Perm	Prot	custom	
Protected Phases	2		6		4	4 5	5
Permitted Phases		2		6			
Detector Phase	2	2	6	6	4	4 5	
Switch Phase							
Minimum Initial (s)	10.0	10.0	15.0	15.0	5.0		2.0
Minimum Split (s)	16.2	16.2	21.2	21.2	10.1		6.7
Total Split (s)	42.2	42.2	42.2	42.2	28.1		49.7
Total Split (%)	35.2%	35.2%	35.2%	35.2%	23.4%		41%
Yellow Time (s)	5.2	5.2	5.2	5.2	4.1		3.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	6.2	6.2	6.2	6.2	5.1		
Lead/Lag			Lag	Lag			Lead
Lead-Lag Optimize?			Yes	Yes			Yes
Recall Mode	C-Max	C-Max	C-Max	C-Max	Min		None

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 70 (58%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 100
Control Type: Actuated-Coordinated

Splits and Phases: 25: I-5 SB Off-Ramps & La Jolla Village Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1763	388	0	1515	347	0	0	0	626	0	1457
Future Volume (vph)	0	1763	388	0	1515	347	0	0	0	626	0	1457
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.2	6.2		6.2	6.2				5.1		5.1
Lane Util. Factor		0.86	1.00		0.91	1.00				0.97		0.88
Frt		1.00	0.85		1.00	0.85				1.00		0.85
Flt Protected		1.00	1.00		1.00	1.00				0.95		1.00
Satd. Flow (prot)		6408	1583		5085	1583				3433		2787
Flt Permitted		1.00	1.00		1.00	1.00				0.95		1.00
Satd. Flow (perm)		6408	1583		5085	1583				3433		2787
Peak-hour factor, PHF	0.93	0.93	0.93	0.94	0.94	0.94	0.25	0.25	0.25	0.84	0.84	0.84
Adj. Flow (vph)	0	1896	417	0	1612	369	0	0	0	745	0	1735
RTOR Reduction (vph)	0	0	119	0	0	207	0	0	0	0	0	11
Lane Group Flow (vph)	0	1896	298	0	1612	163	0	0	0	745	0	1724
Turn Type		NA	Perm		NA	Perm				Prot		custom
Protected Phases		2			6					4		4 5
Permitted Phases			2			6						
Actuated Green, G (s)		85.7	85.7		36.0	36.0				23.0		73.1
Effective Green, g (s)		85.7	85.7		36.0	36.0				23.0		73.1
Actuated g/C Ratio		0.71	0.71		0.30	0.30				0.19		0.61
Clearance Time (s)		6.2	6.2		6.2	6.2				5.1		
Vehicle Extension (s)		2.0	2.0		2.0	2.0				2.0		
Lane Grp Cap (vph)		4576	1130		1525	474				657		1697
v/s Ratio Prot		0.30			c0.32					c0.22		c0.62
v/s Ratio Perm			0.19			0.10						
v/c Ratio		0.41	0.26		1.06	0.34				1.13		1.02
Uniform Delay, d1		7.0	6.0		42.0	32.8				48.5		23.5
Progression Factor		0.11	0.00		0.89	0.77				1.00		1.00
Incremental Delay, d2		0.0	0.1		38.4	1.7				78.2		25.8
Delay (s)		0.8	0.1		75.8	26.9				126.7		49.3
Level of Service		A	A		E	C				F		D
Approach Delay (s)		0.7			66.7			0.0			72.5	
Approach LOS		A			E			A			E	

Intersection Summary

HCM 2000 Control Delay	46.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.08		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	89.7%	ICU Level of Service	E
Analysis Period (min)	15		

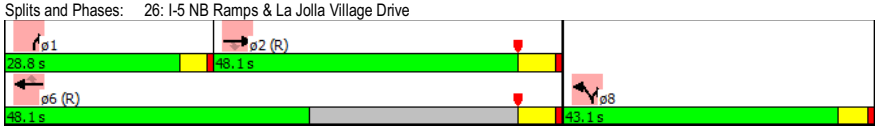
c Critical Lane Group

Lane Group	EBT	EBR	WBT	WBR	NBL	NBR	ø1
Lane Configurations							
Traffic Volume (vph)	1410	985	1400	644	510	959	
Future Volume (vph)	1410	985	1400	644	510	959	
Turn Type	NA	Perm	NA	Perm	Prot	custom	
Protected Phases	2		6		8	1 8	1
Permitted Phases		2		6			
Detector Phase	2	2	6	6	8	1 8	
Switch Phase							
Minimum Initial (s)	16.0	16.0	16.0	16.0	5.0		2.0
Minimum Split (s)	36.2	36.2	22.2	22.2	21.1		9.5
Total Split (s)	48.1	48.1	48.1	48.1	43.1		28.8
Total Split (%)	40.1%	40.1%	40.1%	40.1%	35.9%		24%
Yellow Time (s)	5.2	5.2	5.2	5.2	4.1		3.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	6.2	6.2	6.2	6.2	5.1		
Lead/Lag	Lag	Lag					Lead
Lead-Lag Optimize?	Yes	Yes					Yes
Recall Mode	C-Max	C-Max	C-Max	C-Max	Min		None

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 75 (63%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 70
Control Type: Actuated-Coordinated

Splits and Phases: 26: I-5 NB Ramps & La Jolla Village Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1410	985	0	1400	644	510	0	959	0	0	0
Future Volume (vph)	0	1410	985	0	1400	644	510	0	959	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.2	6.2		6.2	6.2	5.1		4.7			
Lane Util. Factor		0.91	1.00		0.91	1.00	0.97		0.88			
Frt		1.00	0.85		1.00	0.85	1.00		0.85			
Flt Protected		1.00	1.00		1.00	1.00	0.95		1.00			
Satd. Flow (prot)		5085	1583		5085	1583	3433		2787			
Flt Permitted		1.00	1.00		1.00	1.00	0.95		1.00			
Satd. Flow (perm)		5085	1583		5085	1583	3433		2787			
Peak-hour factor, PHF	0.98	0.98	0.98	0.92	0.92	0.92	0.92	0.92	0.92	0.25	0.25	0.25
Adj. Flow (vph)	0	1439	1005	0	1522	700	554	0	1042	0	0	0
RTOR Reduction (vph)	0	0	549	0	0	288	0	0	16	0	0	0
Lane Group Flow (vph)	0	1439	456	0	1522	412	554	0	1026	0	0	0
Turn Type		NA	Perm		NA	Perm	Prot		custom			
Protected Phases		2			6		8		1 8			
Permitted Phases			2			6						
Actuated Green, G (s)		51.9	51.9		70.7	70.7	38.0		57.2			
Effective Green, g (s)		51.9	51.9		70.7	70.7	38.0		52.1			
Actuated g/C Ratio		0.43	0.43		0.59	0.59	0.32		0.43			
Clearance Time (s)		6.2	6.2		6.2	6.2	5.1					
Vehicle Extension (s)		2.0	2.0		2.0	2.0	2.0					
Lane Grp Cap (vph)		2199	684		2995	932	1087		1210			
v/s Ratio Prot		0.28			0.30		0.16		c0.37			
v/s Ratio Perm			c0.29			0.26						
v/c Ratio		0.65	0.67		0.51	0.44	0.51		0.85			
Uniform Delay, d1		27.0	27.2		14.5	13.7	33.4		30.4			
Progression Factor		0.93	2.57		1.00	1.00	1.00		1.00			
Incremental Delay, d2		1.2	4.0		0.6	1.5	0.1		5.7			
Delay (s)		26.3	73.8		15.1	15.2	33.5		36.1			
Level of Service		C	E		B	B	C		D			
Approach Delay (s)		45.8			15.1			35.2			0.0	
Approach LOS		D			B			D			A	

Intersection Summary

HCM 2000 Control Delay	32.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	69.9%	ICU Level of Service	C
Analysis Period (min)	15		

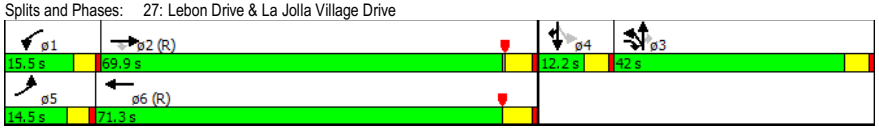
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	4	1596	157	192	1459	596	7	243	17	3	23
Future Volume (vph)	4	1596	157	192	1459	596	7	243	17	3	23
Turn Type	Prot	NA	pm+ov	Prot	NA	Split	NA	Perm	Perm	NA	Prot
Protected Phases	5	2	3	1	6	3	3			4	4
Permitted Phases			2					3	4		
Detector Phase	5	2	3	1	6	3	3	3	4	4	4
Switch Phase											
Minimum Initial (s)	4.0	10.0	7.0	4.0	10.0	7.0	7.0	7.0	4.0	4.0	4.0
Minimum Split (s)	8.4	15.3	11.9	8.4	15.7	11.9	11.9	11.9	8.9	8.9	8.9
Total Split (s)	14.5	69.9	42.0	15.5	71.3	42.0	42.0	42.0	12.2	12.2	12.2
Total Split (%)	10.4%	49.9%	30.0%	11.1%	50.9%	30.0%	30.0%	30.0%	8.7%	8.7%	8.7%
Yellow Time (s)	3.4	4.3	3.9	3.4	4.7	3.9	3.9	3.9	3.9	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	4.4	5.3	4.9	4.4	5.7	4.9	4.9	4.9		4.9	4.9
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lag	Lag	Lead	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	C-Max	None	None	None	None	None	None

Intersection Summary

Cycle Length: 140
Actuated Cycle Length: 140
Offset: 83 (59%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 27: Lebon Drive & La Jolla Village Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	4	1596	157	192	1459	11	596	7	243	17	3	23
Future Volume (vph)	4	1596	157	192	1459	11	596	7	243	17	3	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.3	4.9	4.4	5.7		4.9	4.9	4.9		4.9	4.9
Lane Util. Factor	1.00	0.91	1.00	0.97	0.91		0.97	0.95	0.95		1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00		1.00	0.86	0.85		1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00		0.96	1.00
Satd. Flow (prot)	1770	5085	1583	3433	5079		3433	1518	1504		1788	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00		0.65	1.00
Satd. Flow (perm)	1770	5085	1583	3433	5079		3433	1518	1504		1203	1583
Peak-hour factor, PHF	0.80	0.80	0.80	0.94	0.94	0.94	0.84	0.84	0.84	0.80	0.80	0.80
Adj. Flow (vph)	5	1995	196	204	1552	12	710	8	289	21	4	29
RTOR Reduction (vph)	0	0	50	0	0	0	0	104	108	0	0	28
Lane Group Flow (vph)	5	1995	146	204	1564	0	710	46	39	0	25	1
Turn Type	Prot	NA	pm+ov	Prot	NA		Split	NA	Perm	Perm	NA	Prot
Protected Phases	5	2	3	1	6		3	3			4	4
Permitted Phases			2						3	4		
Actuated Green, G (s)	1.2	66.8	104.1	10.7	75.9		37.3	37.3	37.3		5.7	5.7
Effective Green, g (s)	1.2	66.8	104.1	10.7	75.9		37.3	37.3	37.3		5.7	5.7
Actuated g/C Ratio	0.01	0.48	0.74	0.08	0.54		0.27	0.27	0.27		0.04	0.04
Clearance Time (s)	4.4	5.3	4.9	4.4	5.7		4.9	4.9	4.9		4.9	4.9
Vehicle Extension (s)	2.0	6.1	6.5	2.0	5.6		6.5	6.5	6.5		2.0	2.0
Lane Grp Cap (vph)	15	2426	1177	262	2753		914	404	400		48	64
v/s Ratio Prot	0.00	c0.39	0.03	c0.06	0.31		c0.21	0.03				0.00
v/s Ratio Perm			0.06						0.03		c0.02	
v/c Ratio	0.33	0.82	0.12	0.78	0.57		0.78	0.11	0.10		0.52	0.02
Uniform Delay, d1	69.0	31.5	5.1	63.5	21.2		47.5	38.8	38.7		65.8	64.5
Progression Factor	1.00	1.00	1.00	1.10	0.96		1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	4.7	3.3	0.2	4.0	0.3		5.5	0.4	0.3		4.6	0.0
Delay (s)	73.7	34.8	5.2	73.8	20.6		53.0	39.2	39.0		70.4	64.5
Level of Service	E	C	A	E	C		D	D	D		E	E
Approach Delay (s)		32.2			26.8			48.9			67.3	
Approach LOS		C			C			D			E	

Intersection Summary

HCM 2000 Control Delay	34.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	19.9
Intersection Capacity Utilization	72.2%	ICU Level of Service	C
Analysis Period (min)	15		

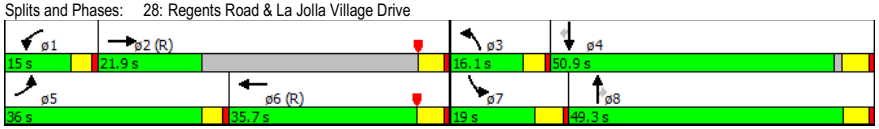
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	756	1417	96	804	347	451	148	91	153	235
Future Volume (vph)	756	1417	96	804	347	451	148	91	153	235
Turn Type	Prot	NA	Prot	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2	1	6	3	8		7	4	
Permitted Phases							8			4
Detector Phase	5	2	1	6	3	8	8	7	4	4
Switch Phase										
Minimum Initial (s)	4.0	10.0	4.0	10.0	4.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	8.4	15.3	8.4	15.4	8.4	15.3	15.3	15.4	15.4	15.4
Total Split (s)	36.0	21.9	15.0	35.7	16.1	49.3	49.3	19.0	50.9	50.9
Total Split (%)	25.7%	15.6%	10.7%	25.5%	11.5%	35.2%	35.2%	13.6%	36.4%	36.4%
Yellow Time (s)	3.4	4.3	3.4	4.4	3.4	4.3	4.3	4.4	4.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.3	4.4	5.4	4.4	5.3	5.3	5.4	5.4	5.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Min	None	C-Min	None	Min	Min	Min	Min	Min

Intersection Summary

Cycle Length: 140
Actuated Cycle Length: 140
Offset: 55 (39%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 28: Regents Road & La Jolla Village Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	756	1417	41	96	804	89	347	451	148	91	153	235
Future Volume (vph)	756	1417	41	96	804	89	347	451	148	91	153	235
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.3		4.4	5.4		4.4	5.3	5.3	5.4	5.4	5.4
Lane Util. Factor	0.97	0.91		0.97	0.91		0.97	0.95	1.00	1.00	0.95	1.00
Frt	1.00	1.00		1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5064		3433	5009		3433	3539	1583	1770	3539	1583
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5064		3433	5009		3433	3539	1583	1770	3539	1583
Peak-hour factor, PHF	0.86	0.86	0.86	0.84	0.84	0.84	0.80	0.80	0.80	0.80	0.80	0.80
Adj. Flow (vph)	879	1648	48	114	957	106	434	564	185	114	191	294
RTOR Reduction (vph)	0	2	0	0	9	0	0	0	145	0	0	227
Lane Group Flow (vph)	879	1694	0	114	1054	0	434	564	40	114	191	67
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases									8			4
Actuated Green, G (s)	46.2	66.7		10.0	30.4		11.7	30.3	30.3	12.6	32.1	32.1
Effective Green, g (s)	46.2	66.7		10.0	30.4		11.7	30.3	30.3	12.6	32.1	32.1
Actuated g/C Ratio	0.33	0.48		0.07	0.22		0.08	0.22	0.22	0.09	0.23	0.23
Clearance Time (s)	4.4	5.3		4.4	5.4		4.4	5.3	5.3	5.4	5.4	5.4
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	1132	2412		245	1087		286	765	342	159	811	362
v/s Ratio Prot	c0.26	0.33		0.03	c0.21		c0.13	c0.16		0.06	0.05	
v/s Ratio Perm									0.03			0.04
v/c Ratio	0.78	0.70		0.47	0.97		1.52	0.74	0.12	0.72	0.24	0.19
Uniform Delay, d1	42.2	28.8		62.4	54.3		64.2	51.1	44.1	62.0	44.0	43.4
Progression Factor	1.30	1.58		1.30	0.46		1.00	1.00	1.00	0.99	1.11	1.97
Incremental Delay, d2	2.6	1.3		0.1	3.7		250.1	3.7	0.2	14.1	0.1	0.2
Delay (s)	57.7	47.0		81.5	28.7		314.2	54.9	44.2	75.3	48.7	86.0
Level of Service	E	D		F	C		F	D	D	E	D	F
Approach Delay (s)		50.6			33.8			148.3			72.1	
Approach LOS		D			C			F			E	

Intersection Summary

HCM 2000 Control Delay	70.3	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	20.5
Intersection Capacity Utilization	77.0%	ICU Level of Service	D
Analysis Period (min)	15		

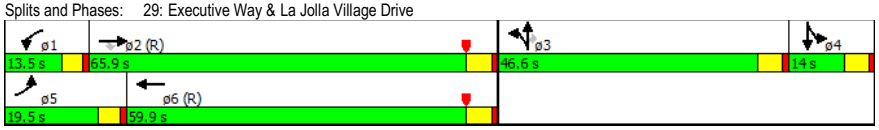
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	75	1884	113	165	2277	37	58	174	60	26
Future Volume (vph)	75	1884	113	165	2277	37	58	174	60	26
Turn Type	Prot	NA	Perm	Prot	NA	Split	NA	Perm	Split	NA
Protected Phases	5	2		1	6	3	3		4	4
Permitted Phases			2					3		
Detector Phase	5	2	2	1	6	3	3	3	4	4
Switch Phase										
Minimum Initial (s)	4.0	10.0	10.0	4.0	10.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.4	15.3	15.3	8.4	15.3	45.9	45.9	45.9	8.9	8.9
Total Split (s)	19.5	65.9	65.9	13.5	59.9	46.6	46.6	46.6	14.0	14.0
Total Split (%)	13.9%	47.1%	47.1%	9.6%	42.8%	33.3%	33.3%	33.3%	10.0%	10.0%
Yellow Time (s)	3.4	4.3	4.3	3.4	4.3	3.9	3.9	3.9	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.3	5.3	4.4	5.3	4.9	4.9	4.9	4.9	4.9
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	None	None	None	None	None

Intersection Summary

Cycle Length: 140
Actuated Cycle Length: 140
Offset: 20 (14%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 29: Executive Way & La Jolla Village Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	75	1884	113	165	2277	470	37	58	174	60	26	25
Future Volume (vph)	75	1884	113	165	2277	470	37	58	174	60	26	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.3	5.3	4.4	5.3		4.9	4.9	4.9	4.9	4.9	
Lane Util. Factor	1.00	0.91	1.00	0.97	0.91		0.95	0.95	1.00	1.00	0.95	
Frt	1.00	1.00	0.85	1.00	0.97		1.00	1.00	0.85	1.00	0.93	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	5085	1583	3433	4955		1681	1765	1583	1770	3282	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	5085	1583	3433	4955		1681	1765	1583	1770	3282	
Peak-hour factor, PHF	0.91	0.91	0.91	0.87	0.87	0.87	0.85	0.85	0.85	0.80	0.80	0.80
Adj. Flow (vph)	82	2070	124	190	2617	540	44	68	205	75	32	31
RTOR Reduction (vph)	0	0	50	0	18	0	0	0	132	0	29	0
Lane Group Flow (vph)	82	2070	74	190	3139	0	40	72	73	75	35	0
Turn Type	Prot	NA	Perm	Prot	NA		Split	NA	Perm	Split	NA	
Protected Phases	5	2		1	6		3	3		4	4	
Permitted Phases			2						3			
Actuated Green, G (s)	10.8	73.0	73.0	9.6	71.8		27.4	27.4	27.4	10.5	10.5	
Effective Green, g (s)	10.8	73.0	73.0	9.6	71.8		27.4	27.4	27.4	10.5	10.5	
Actuated g/C Ratio	0.08	0.52	0.52	0.07	0.51		0.20	0.20	0.20	0.08	0.08	
Clearance Time (s)	4.4	5.3	5.3	4.4	5.3		4.9	4.9	4.9	4.9	4.9	
Vehicle Extension (s)	2.0	5.8	5.8	2.0	5.5		2.0	2.0	2.0	6.1	6.1	
Lane Grp Cap (vph)	136	2651	825	235	2541		328	345	309	132	246	
v/s Ratio Prot	0.05	0.41		c0.06	c0.63		0.02	0.04		c0.04	0.01	
v/s Ratio Perm			0.05						c0.05			
v/c Ratio	0.60	0.78	0.09	0.81	1.24		0.12	0.21	0.24	0.57	0.14	
Uniform Delay, d1	62.5	27.0	16.8	64.3	34.1		46.4	47.2	47.5	62.6	60.5	
Progression Factor	1.22	0.60	0.43	1.30	0.39		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	3.3	1.5	0.1	1.8	106.2		0.1	0.1	0.1	11.4	0.8	
Delay (s)	79.5	17.6	7.4	85.7	119.5		46.4	47.3	47.6	73.9	61.3	
Level of Service	E	B	A	F	F		D	D	D	E	E	
Approach Delay (s)		19.3			117.6			47.4			68.1	
Approach LOS		B			F			D			E	

Intersection Summary

HCM 2000 Control Delay	76.0	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	19.5
Intersection Capacity Utilization	80.8%	ICU Level of Service	D
Analysis Period (min)	15		

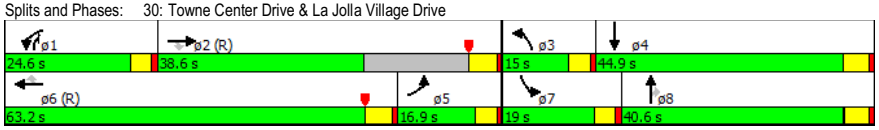
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	347	1686	75	273	2804	1015	133	315	503	186	28
Future Volume (vph)	347	1686	75	273	2804	1015	133	315	503	186	28
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA
Protected Phases	5	2		1	6		3	8	1	7	4
Permitted Phases			2			6			8		
Detector Phase	5	2	2	1	6	6	3	8	1	7	4
Switch Phase											
Minimum Initial (s)	4.0	10.0	10.0	4.0	10.0	10.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.4	15.5	15.5	8.4	15.3	15.3	8.4	9.0	8.4	8.4	9.3
Total Split (s)	16.9	38.6	38.6	24.6	63.2	63.2	15.0	40.6	24.6	19.0	44.9
Total Split (%)	12.1%	27.6%	27.6%	17.6%	45.1%	45.1%	10.7%	29.0%	17.6%	13.6%	32.1%
Yellow Time (s)	3.4	4.5	4.5	3.4	4.3	4.3	3.4	4.0	3.4	3.4	4.3
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.5	5.5	4.4	5.3	5.3	4.4	5.0	4.4	4.4	5.3
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lead	Lead	Lag	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	None	None	None	None

Intersection Summary

Cycle Length: 140
Actuated Cycle Length: 140
Offset: 13 (9%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 30: Towne Center Drive & La Jolla Village Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	347	1686	75	273	2804	1015	133	315	503	186	28	31
Future Volume (vph)	347	1686	75	273	2804	1015	133	315	503	186	28	31
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.5	5.5	4.4	5.3	5.3	4.4	5.0	4.4	4.4	5.3	
Lane Util. Factor	0.97	0.91	1.00	0.97	0.86	0.86	0.97	1.00	0.88	0.97	0.95	
Frt	1.00	1.00	0.85	1.00	0.99	0.85	1.00	1.00	0.85	1.00	0.92	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	3433	5085	1583	3433	4767	1362	3433	1863	2787	3433	3257	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	3433	5085	1583	3433	4767	1362	3433	1863	2787	3433	3257	
Peak-hour factor, PHF	0.93	0.93	0.93	0.90	0.90	0.90	0.80	0.80	0.80	0.92	0.92	0.92
Adj. Flow (vph)	373	1813	81	303	3116	1128	166	394	629	202	30	34
RTOR Reduction (vph)	0	0	49	0	4	163	0	0	60	0	27	0
Lane Group Flow (vph)	373	1813	32	303	3292	785	166	394	569	202	37	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	
Protected Phases	5	2		1	6		3	8	1	7	4	
Permitted Phases			2			6			8			
Actuated Green, G (s)	12.5	56.0	56.0	17.7	61.4	61.4	16.7	34.1	51.8	12.9	30.0	
Effective Green, g (s)	12.5	56.0	56.0	17.7	61.4	61.4	16.7	34.1	51.8	12.9	30.0	
Actuated g/C Ratio	0.09	0.40	0.40	0.13	0.44	0.44	0.12	0.24	0.37	0.09	0.21	
Clearance Time (s)	4.4	5.5	5.5	4.4	5.3	5.3	4.4	5.0	4.4	4.4	5.3	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	306	2034	633	434	2090	597	409	453	1031	316	697	
v/s Ratio Prot	c0.11	0.36		0.09	c0.69		0.05	c0.21	0.07	c0.06	0.01	
v/s Ratio Perm			0.02			0.58			0.13			
v/c Ratio	1.22	0.89	0.05	0.70	1.58	1.32	0.41	0.87	0.55	0.64	0.05	
Uniform Delay, d1	63.8	39.2	25.7	58.6	39.3	39.3	57.1	50.8	34.9	61.3	43.7	
Progression Factor	0.59	0.33	0.11	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	116.7	4.4	0.1	4.9	261.2	153.5	0.7	16.1	0.6	4.2	0.0	
Delay (s)	154.1	17.3	2.9	63.4	300.5	192.8	57.7	67.0	35.6	65.5	43.7	
Level of Service	F	B	A	E	F	F	E	E	D	E	D	
Approach Delay (s)		39.3			262.2			49.1			60.3	
Approach LOS		D			F			D			E	

Intersection Summary

HCM 2000 Control Delay	164.0	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.24		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	19.6
Intersection Capacity Utilization	109.4%	ICU Level of Service	H
Analysis Period (min)	15		

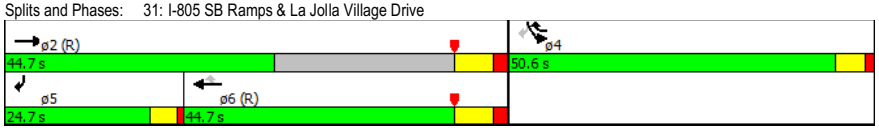
c Critical Lane Group

Lane Group	EBT	WBT	WBR	SBL	SBR
Lane Configurations					
Traffic Volume (vph)	1794	2137	502	423	1966
Future Volume (vph)	1794	2137	502	423	1966
Turn Type	NA	NA	pm+ov	Prot	custom
Protected Phases	2	6	4	4	5
Permitted Phases			6		4
Detector Phase	2	6	4	4	5
Switch Phase					
Minimum Initial (s)	15.0	15.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	10.6	10.6	9.7
Total Split (s)	44.7	44.7	50.6	50.6	24.7
Total Split (%)	37.3%	37.3%	42.2%	42.2%	20.6%
Yellow Time (s)	5.5	5.5	4.1	4.1	3.7
All-Red Time (s)	2.0	2.0	1.5	1.5	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.5	7.5	5.6	5.6	4.7
Lead/Lag		Lag			Lead
Lead-Lag Optimize?		Yes			Yes
Recall Mode	C-Max	C-Max	None	None	None

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 10 (8%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 31: I-805 SB Ramps & La Jolla Village Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1794	553	0	2137	502	0	0	0	423	0	1966
Future Volume (vph)	0	1794	553	0	2137	502	0	0	0	423	0	1966
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		7.5			7.5	5.6				5.6		4.7
Lane Util. Factor		0.91			0.91	1.00				0.97		0.88
Frt		0.96			1.00	0.85				1.00		0.85
Flt Protected		1.00			1.00	1.00				0.95		1.00
Satd. Flow (prot)		4906			5085	1583				3433		2787
Flt Permitted		1.00			1.00	1.00				0.95		1.00
Satd. Flow (perm)		4906			5085	1583				3433		2787
Peak-hour factor, PHF	0.92	0.92	0.92	0.96	0.96	0.96	0.25	0.25	0.25	0.80	0.80	0.80
Adj. Flow (vph)	0	1950	601	0	2226	523	0	0	0	529	0	2458
RTOR Reduction (vph)	0	29	0	0	0	257	0	0	0	0	0	19
Lane Group Flow (vph)	0	2522	0	0	2226	266	0	0	0	529	0	2439
Turn Type		NA			NA	pm+ov				Prot		custom
Protected Phases		2			6	4				4		5
Permitted Phases						6						4
Actuated Green, G (s)		83.0			37.2	61.1				23.9		65.0
Effective Green, g (s)		83.0			37.2	61.1				23.9		65.0
Actuated g/C Ratio		0.69			0.31	0.51				0.20		0.54
Clearance Time (s)		7.5			7.5	5.6				5.6		4.7
Vehicle Extension (s)		2.0			2.0	2.0				2.0		2.0
Lane Grp Cap (vph)		3393			1576	806				683		1509
v/s Ratio Prot		0.51			c0.44	0.07				0.15		c0.55
v/s Ratio Perm						0.10						0.32
v/c Ratio		0.74			1.41	0.33				0.77		1.62
Uniform Delay, d1		11.7			41.4	17.4				45.5		27.5
Progression Factor		1.00			0.87	3.39				1.00		1.00
Incremental Delay, d2		1.5			188.2	0.1				5.0		280.5
Delay (s)		13.3			224.2	59.0				50.5		308.0
Level of Service		B			F	E				D		F
Approach Delay (s)		13.3			192.8			0.0			262.4	
Approach LOS		B			F			A			F	

Intersection Summary

HCM 2000 Control Delay	162.6	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.54		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	17.8
Intersection Capacity Utilization	120.2%	ICU Level of Service	H
Analysis Period (min)	15		

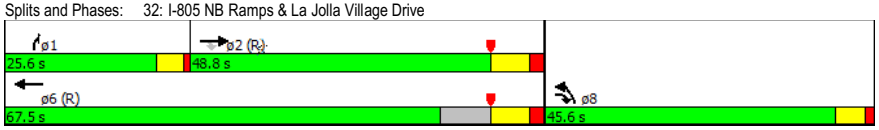
c Critical Lane Group

Lane Group	EBT	EBR	WBT	NBL	NBR
Lane Configurations					
Traffic Volume (vph)	1374	826	1545	938	570
Future Volume (vph)	1374	826	1545	938	570
Turn Type	NA	pm+ov	NA	Prot	Prot
Protected Phases	2	8	6	8	1
Permitted Phases		2			
Detector Phase	2	8	6	8	1
Switch Phase					
Minimum Initial (s)	16.0	5.0	15.0	5.0	5.0
Minimum Split (s)	23.5	10.6	22.5	10.6	10.6
Total Split (s)	48.8	45.6	67.5	45.6	25.6
Total Split (%)	40.7%	38.0%	56.3%	38.0%	21.3%
Yellow Time (s)	5.5	4.1	5.5	4.1	3.7
All-Red Time (s)	2.0	1.5	2.0	1.5	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.5	5.6	7.5	5.6	4.7
Lead/Lag	Lag				Lead
Lead-Lag Optimize?	Yes				Yes
Recall Mode	C-Max	None	C-Max	None	None

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 18 (15%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 75
Control Type: Actuated-Coordinated

Splits and Phases: 32: I-805 NB Ramps & La Jolla Village Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1374	826	0	1545	490	938	0	570	0	0	0
Future Volume (vph)	0	1374	826	0	1545	490	938	0	570	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		7.5	5.6		7.5		5.6		4.7			
Lane Util. Factor		0.91	1.00		0.86		0.97		0.88			
Frt		1.00	0.85		0.96		1.00		0.85			
Flt Protected		1.00	1.00		1.00		0.95		1.00			
Satd. Flow (prot)		5085	1583		6177		3433		2787			
Flt Permitted		1.00	1.00		1.00		0.95		1.00			
Satd. Flow (perm)		5085	1583		6177		3433		2787			
Peak-hour factor, PHF	0.90	0.90	0.90	0.96	0.96	0.96	0.88	0.88	0.88	0.25	0.25	0.25
Adj. Flow (vph)	0	1527	918	0	1609	510	1066	0	648	0	0	0
RTOR Reduction (vph)	0	0	238	0	47	0	0	0	420	0	0	0
Lane Group Flow (vph)	0	1527	680	0	2072	0	1066	0	228	0	0	0
Turn Type		NA	pm+ov		NA		Prot		Prot			
Protected Phases		2	8		6		8		1			
Permitted Phases			2									
Actuated Green, G (s)		49.5	88.9		67.5		39.4		13.3			
Effective Green, g (s)		49.5	88.9		67.5		39.4		13.3			
Actuated g/C Ratio		0.41	0.74		0.56		0.33		0.11			
Clearance Time (s)		7.5	5.6		7.5		5.6		4.7			
Vehicle Extension (s)		2.0	2.0		2.0		2.0		2.0			
Lane Grp Cap (vph)		2097	1172		3474		1127		308			
v/s Ratio Prot		c0.30	0.19		0.34		c0.31		c0.08			
v/s Ratio Perm			0.24									
v/c Ratio		0.73	0.58		0.60		0.95		0.74			
Uniform Delay, d1		29.6	7.1		17.3		39.3		51.7			
Progression Factor		0.92	9.94		1.00		1.00		1.00			
Incremental Delay, d2		1.7	0.3		0.8		15.3		8.1			
Delay (s)		28.9	70.6		18.0		54.6		59.8			
Level of Service		C	E		B		D		E			
Approach Delay (s)		44.5			18.0			56.5			0.0	
Approach LOS		D			B			E			A	

Intersection Summary

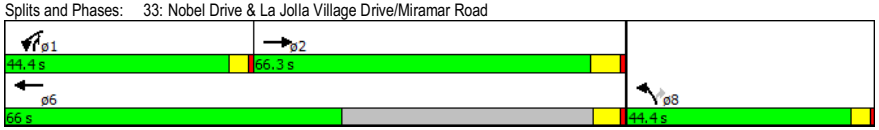
HCM 2000 Control Delay	38.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	17.8
Intersection Capacity Utilization	66.9%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Configurations					
Traffic Volume (vph)	1864	429	2046	121	917
Future Volume (vph)	1864	429	2046	121	917
Turn Type	NA	Prot	NA	Prot	pm+ov
Protected Phases	2	1	6	8	1
Permitted Phases					8
Detector Phase	2	1	6	8	1
Switch Phase					
Minimum Initial (s)	10.0	4.0	10.0	7.0	4.0
Minimum Split (s)	16.3	8.4	16.0	11.4	8.4
Total Split (s)	66.3	44.4	66.0	44.4	44.4
Total Split (%)	42.7%	28.6%	42.6%	28.6%	28.6%
Yellow Time (s)	5.3	3.4	5.0	3.4	3.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.3	4.4	6.0	4.4	4.4
Lead/Lag	Lag	Lead			Lead
Lead-Lag Optimize?	Yes	Yes			Yes
Recall Mode	Min	None	Min	None	None

Intersection Summary
Cycle Length: 155.1
Actuated Cycle Length: 121.7
Natural Cycle: 65
Control Type: Actuated-Uncoordinated

Splits and Phases: 33: Nobel Drive & La Jolla Village Drive/Miramar Road



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1864	209	429	2046	121	917
Future Volume (vph)	1864	209	429	2046	121	917
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.3		4.4	6.0	4.4	4.4
Lane Util. Factor	0.86		0.97	0.86	1.00	0.88
Frt	0.98		1.00	1.00	1.00	0.85
Flt Protected	1.00		0.95	1.00	0.95	1.00
Satd. Flow (prot)	6311		3433	6408	1770	2787
Flt Permitted	1.00		0.95	1.00	0.95	1.00
Satd. Flow (perm)	6311		3433	6408	1770	2787
Peak-hour factor, PHF	0.86	0.86	0.91	0.91	0.94	0.94
Adj. Flow (vph)	2167	243	471	2248	129	976
RTOR Reduction (vph)	10	0	0	0	0	0
Lane Group Flow (vph)	2400	0	471	2248	129	976
Turn Type	NA		Prot	NA	Prot	pm+ov
Protected Phases	2		1	6	8	1
Permitted Phases						8
Actuated Green, G (s)	60.3		33.7	98.7	12.6	46.3
Effective Green, g (s)	60.3		33.7	98.7	12.6	46.3
Actuated g/C Ratio	0.50		0.28	0.81	0.10	0.38
Clearance Time (s)	6.3		4.4	6.0	4.4	4.4
Vehicle Extension (s)	5.0		2.0	5.4	2.0	2.0
Lane Grp Cap (vph)	3126		950	5196	183	1161
v/s Ratio Prot	c0.38		0.14	0.35	0.07	c0.23
v/s Ratio Perm						0.12
v/c Ratio	0.77		0.50	0.43	0.70	0.84
Uniform Delay, d1	25.0		36.9	3.3	52.8	34.3
Progression Factor	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	1.4		0.1	0.1	9.6	5.4
Delay (s)	26.4		37.0	3.5	62.4	39.8
Level of Service	C		D	A	E	D
Approach Delay (s)	26.4			9.3	42.4	
Approach LOS	C			A	D	

Intersection Summary			
HCM 2000 Control Delay	21.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	121.7	Sum of lost time (s)	15.1
Intersection Capacity Utilization	71.5%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBU	WBT	WBR	SBL
Lane Configurations						
Traffic Volume (vph)	582	2255	3	2202	815	158
Future Volume (vph)	582	2255	3	2202	815	158
Turn Type	Prot	NA	Prot	NA	Perm	Prot
Protected Phases	5	2	1	6		7
Permitted Phases					6	
Detector Phase	5	2	1	6	6	7
Switch Phase						
Minimum Initial (s)	4.0	10.0	4.0	10.0	10.0	10.0
Minimum Split (s)	8.4	16.3	8.4	15.4	15.4	14.4
Total Split (s)	34.4	66.3	24.4	65.4	65.4	44.4
Total Split (%)	23.9%	46.0%	16.9%	45.4%	45.4%	30.8%
Yellow Time (s)	3.4	5.3	3.4	4.4	4.4	3.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	6.3	4.4	5.4	5.4	4.4
Lead/Lag	Lead	Lag	Lead	Lag	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	Min	None	Min	Min	None

Intersection Summary

Cycle Length: 144.2
Actuated Cycle Length: 117.7
Natural Cycle: 90
Control Type: Actuated-Uncoordinated

Splits and Phases: 34: Miramar Road & Eastgate Mall

Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Traffic Volume (vph)	582	2255	3	2202	815	158	209
Future Volume (vph)	582	2255	3	2202	815	158	209
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	6.3	4.4	5.4	5.4	4.4	
Lane Util. Factor	0.97	0.91	1.00	0.86	1.00	0.97	
Frt	1.00	1.00	1.00	1.00	0.85	0.91	
Flt Protected	0.95	1.00	0.95	1.00	1.00	0.98	
Satd. Flow (prot)	3433	5085	1770	6408	1583	3236	
Flt Permitted	0.95	1.00	0.95	1.00	1.00	0.98	
Satd. Flow (perm)	3433	5085	1770	6408	1583	3236	
Peak-hour factor, PHF	0.87	0.87	0.92	0.92	0.92	0.80	0.80
Adj. Flow (vph)	669	2592	3	2393	886	198	261
RTOR Reduction (vph)	0	0	0	0	317	201	0
Lane Group Flow (vph)	669	2592	3	2393	569	258	0
Turn Type	Prot	NA	Prot	NA	Perm	Prot	
Protected Phases	5	2	1	6		7	
Permitted Phases					6		
Actuated Green, G (s)	27.4	89.3	1.0	63.8	63.8	15.8	
Effective Green, g (s)	27.4	89.3	1.0	63.8	63.8	15.8	
Actuated g/C Ratio	0.23	0.74	0.01	0.53	0.53	0.13	
Clearance Time (s)	4.4	6.3	4.4	5.4	5.4	4.4	
Vehicle Extension (s)	2.0	5.0	2.0	6.1	6.1	4.5	
Lane Grp Cap (vph)	776	3746	14	3373	833	421	
v/s Ratio Prot	c0.19	0.51	0.00	c0.37		c0.08	
v/s Ratio Perm					0.36		
v/c Ratio	0.86	0.69	0.21	0.71	0.68	0.61	
Uniform Delay, d1	45.1	8.6	59.7	21.7	21.2	49.8	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	9.4	0.7	2.8	1.0	3.6	3.4	
Delay (s)	54.5	9.3	62.5	22.7	24.8	53.2	
Level of Service	D	A	E	C	C	D	
Approach Delay (s)		18.6		23.3		53.2	
Approach LOS		B		C		D	

Intersection Summary

HCM 2000 Control Delay	23.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	121.2	Sum of lost time (s)	15.1
Intersection Capacity Utilization	75.2%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBT	WBR	SBL
Lane Configurations					
Traffic Volume (vph)	120	2635	3049	125	67
Future Volume (vph)	120	2635	3049	125	67
Turn Type	Prot	NA	NA	Perm	Prot
Protected Phases	5	2	6		4
Permitted Phases				6	
Detector Phase	5	2	6	6	4
Switch Phase					
Minimum Initial (s)	4.0	10.0	10.0	10.0	4.0
Minimum Split (s)	8.4	15.8	15.4	15.4	8.9
Total Split (s)	22.6	89.9	89.9	89.9	37.5
Total Split (%)	15.1%	59.9%	59.9%	59.9%	25.0%
Yellow Time (s)	3.4	4.8	4.4	4.4	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.8	5.4	5.4	4.9
Lead/Lag	Lag		Lead	Lead	
Lead-Lag Optimize?	Yes		Yes	Yes	
Recall Mode	None	C-Max	C-Max	C-Max	None

Intersection Summary

Cycle Length: 150
Actuated Cycle Length: 150
Offset: 87 (58%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 35: Miramar Road & Miramar Mall

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	120	2635	3049	125	67	61
Future Volume (vph)	120	2635	3049	125	67	61
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.8	5.4	5.4	4.9	
Lane Util. Factor	1.00	0.91	0.91	1.00	1.00	
Frt	1.00	1.00	1.00	0.85	0.94	
Flt Protected	0.95	1.00	1.00	1.00	0.97	
Satd. Flow (prot)	1770	5085	5085	1583	1699	
Flt Permitted	0.95	1.00	1.00	1.00	0.97	
Satd. Flow (perm)	1770	5085	5085	1583	1699	
Peak-hour factor, PHF	0.86	0.86	0.92	0.92	0.81	0.81
Adj. Flow (vph)	140	3064	3314	136	83	75
RTOR Reduction (vph)	0	0	0	30	25	0
Lane Group Flow (vph)	140	3064	3314	106	133	0
Turn Type	Prot	NA	NA	Perm	Prot	
Protected Phases	5	2	6		4	
Permitted Phases				6		
Actuated Green, G (s)	18.2	121.3	99.1	99.1	18.0	
Effective Green, g (s)	18.2	121.3	99.1	99.1	18.0	
Actuated g/C Ratio	0.12	0.81	0.66	0.66	0.12	
Clearance Time (s)	4.4	5.8	5.4	5.4	4.9	
Vehicle Extension (s)	2.0	4.6	5.2	5.2	2.0	
Lane Grp Cap (vph)	214	4112	3359	1045	203	
v/s Ratio Prot	0.08	c0.60	c0.65		c0.08	
v/s Ratio Perm				0.07		
v/c Ratio	0.65	0.75	0.99	0.10	0.66	
Uniform Delay, d1	62.9	6.9	24.8	9.3	63.1	
Progression Factor	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	5.4	1.3	12.7	0.2	5.7	
Delay (s)	68.3	8.2	37.5	9.5	68.8	
Level of Service	E	A	D	A	E	
Approach Delay (s)		10.8	36.4		68.8	
Approach LOS		B	D		E	

Intersection Summary

HCM 2000 Control Delay	25.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.92		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	14.7
Intersection Capacity Utilization	85.3%	ICU Level of Service	E
Analysis Period (min)	15		

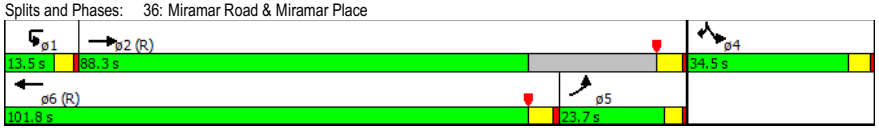
c Critical Lane Group

Lane Group	EBL	EBT	WBU	WBT	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	150	2545	24	2938	103	56
Future Volume (vph)	150	2545	24	2938	103	56
Turn Type	Prot	NA	Prot	NA	Prot	Prot
Protected Phases	5	2	1	6	4	4
Permitted Phases						
Detector Phase	5	2	1	6	4	4
Switch Phase						
Minimum Initial (s)	4.0	10.0	4.0	10.0	4.0	4.0
Minimum Split (s)	8.4	15.7	8.4	15.7	8.9	8.9
Total Split (s)	23.7	88.3	13.5	101.8	34.5	34.5
Total Split (%)	14.8%	55.2%	8.4%	63.6%	21.6%	21.6%
Yellow Time (s)	3.4	4.7	3.4	4.7	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.7	4.4	5.7	4.9	4.9
Lead/Lag	Lag	Lag	Lead	Lead		
Lead-Lag Optimize?	Yes	Yes	Yes	Yes		
Recall Mode	None	C-Max	None	C-Max	None	None

Intersection Summary

Cycle Length: 160
Actuated Cycle Length: 160
Offset: 150 (94%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 36: Miramar Road & Miramar Place



Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Traffic Volume (vph)	150	2545	24	2938	178	103	56
Future Volume (vph)	150	2545	24	2938	178	103	56
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.7	4.4	5.7		4.9	4.9
Lane Util. Factor	1.00	0.91	1.00	0.91		0.97	0.91
Frt	1.00	1.00	1.00	0.99		0.99	0.85
Flt Protected	0.95	1.00	0.95	1.00		0.96	1.00
Satd. Flow (prot)	1770	5085	1770	5042		3421	1441
Flt Permitted	0.95	1.00	0.95	1.00		0.96	1.00
Satd. Flow (perm)	1770	5085	1770	5042		3421	1441
Peak-hour factor, PHF	0.85	0.85	0.92	0.95	0.95	0.80	0.80
Adj. Flow (vph)	176	2994	26	3093	187	129	70
RTOR Reduction (vph)	0	0	0	3	0	4	58
Lane Group Flow (vph)	176	2994	26	3277	0	133	4
Turn Type	Prot	NA	Prot	NA		Prot	Prot
Protected Phases	5	2	1	6		4	4
Permitted Phases							
Actuated Green, G (s)	21.0	128.6	4.8	112.4		11.6	11.6
Effective Green, g (s)	21.0	128.6	4.8	112.4		11.6	11.6
Actuated g/C Ratio	0.13	0.80	0.03	0.70		0.07	0.07
Clearance Time (s)	4.4	5.7	4.4	5.7		4.9	4.9
Vehicle Extension (s)	3.0	4.8	2.0	5.4		3.0	3.0
Lane Grp Cap (vph)	232	4087	53	3542		248	104
v/s Ratio Prot	0.10	c0.59	0.01	c0.65		c0.04	0.00
v/s Ratio Perm							
v/c Ratio	0.76	0.73	0.49	0.93		0.54	0.04
Uniform Delay, d1	67.1	7.5	76.4	20.2		71.6	69.0
Progression Factor	1.00	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	13.3	1.2	2.6	5.4		2.2	0.2
Delay (s)	80.3	8.7	79.0	25.6		73.8	69.2
Level of Service	F	A	E	C		E	E
Approach Delay (s)		12.7		26.1		72.4	
Approach LOS		B		C		E	

Intersection Summary

HCM 2000 Control Delay	21.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	15.0
Intersection Capacity Utilization	85.1%	ICU Level of Service	E
Analysis Period (min)	15		

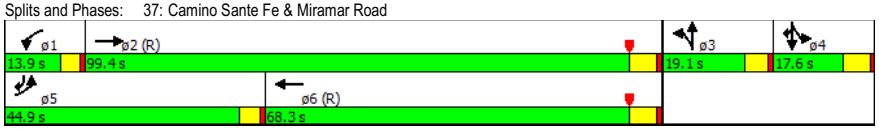
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	756	990	42	1931	23	13	85	18	650
Future Volume (vph)	756	990	42	1931	23	13	85	18	650
Turn Type	Prot	NA	Prot	NA	Split	NA	Split	NA	pt+ov
Protected Phases	5	2	1	6	3	3	4	4	4 5
Permitted Phases									
Detector Phase	5	2	1	6	3	3	4	4	4 5
Switch Phase									
Minimum Initial (s)	12.0	10.0	4.0	10.0	4.0	4.0	4.0	4.0	
Minimum Split (s)	16.4	15.8	8.4	15.7	8.9	8.9	9.5	9.5	
Total Split (s)	44.9	99.4	13.9	68.3	19.1	19.1	17.6	17.6	
Total Split (%)	29.9%	66.3%	9.3%	45.5%	12.7%	12.7%	11.7%	11.7%	
Yellow Time (s)	3.4	4.8	3.4	4.7	3.9	3.9	4.5	4.5	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.4	5.8	4.4	5.7	4.9	4.9	5.5	5.5	
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lead	Lag	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	C-Max	None	C-Max	None	None	None	None	

Intersection Summary

Cycle Length: 150
Actuated Cycle Length: 150
Offset: 98 (65%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 100
Control Type: Actuated-Coordinated

Splits and Phases: 37: Camino Sante Fe & Miramar Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	756	990	49	42	1931	171	23	13	10	85	18	650
Future Volume (vph)	756	990	49	42	1931	171	23	13	10	85	18	650
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.8		4.4	5.7		4.9	4.9		5.5	5.5	5.5
Lane Util. Factor	0.97	0.91		0.97	0.91		1.00	1.00		0.95	0.95	0.88
Frt	1.00	0.99		1.00	0.99		1.00	0.93		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	0.97	1.00
Satd. Flow (prot)	3433	5050		3433	5023		1770	1737		1681	1714	2787
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	0.97	1.00
Satd. Flow (perm)	3433	5050		3433	5023		1770	1737		1681	1714	2787
Peak-hour factor, PHF	0.99	0.99	0.99	0.97	0.97	0.97	0.80	0.80	0.80	0.80	0.80	0.80
Adj. Flow (vph)	764	1000	49	43	1991	176	29	16	12	106	22	812
RTOR Reduction (vph)	0	3	0	0	7	0	0	12	0	0	0	141
Lane Group Flow (vph)	764	1046	0	43	2160	0	29	17	0	64	65	672
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	pt+ov
Protected Phases	5	2		1	6		3	3		4	4	4 5
Permitted Phases												
Actuated Green, G (s)	37.4	98.2		5.4	66.3		6.1	6.1		19.7	19.7	62.6
Effective Green, g (s)	37.4	98.2		5.4	66.3		6.1	6.1		19.7	19.7	62.6
Actuated g/C Ratio	0.25	0.65		0.04	0.44		0.04	0.04		0.13	0.13	0.42
Clearance Time (s)	4.4	5.8		4.4	5.7		4.9	4.9		5.5	5.5	
Vehicle Extension (s)	2.0	4.8		2.0	5.4		2.0	2.0		2.8	2.8	
Lane Grp Cap (vph)	855	3306		123	2220		71	70		220	225	1163
v/s Ratio Prot	c0.22	0.21		0.01	c0.43		c0.02	0.01		0.04	0.04	c0.24
v/s Ratio Perm												
v/c Ratio	0.89	0.32		0.35	0.97		0.41	0.24		0.29	0.29	0.58
Uniform Delay, d1	54.4	11.3		70.6	41.0		70.2	69.7		58.8	58.8	33.6
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	11.4	0.3		0.6	13.7		1.4	0.6		0.7	0.6	0.7
Delay (s)	65.8	11.5		71.2	54.7		71.6	70.3		59.5	59.5	34.2
Level of Service	E	B		E	D		E	E		E	E	C
Approach Delay (s)		34.4			55.0			71.0			37.7	
Approach LOS		C			E			E			D	

Intersection Summary

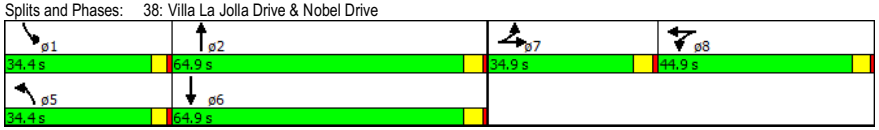
HCM 2000 Control Delay	44.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	20.6
Intersection Capacity Utilization	85.2%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	5	55	1	9	684	124	266
Future Volume (vph)	5	55	1	9	684	124	266
Turn Type	NA	Split	NA	Prot	NA	Prot	NA
Protected Phases	7	8	8	5	2	1	6
Permitted Phases							
Detector Phase	7	8	8	5	2	1	6
Switch Phase							
Minimum Initial (s)	6.0	6.0	6.0	4.0	7.0	6.0	10.0
Minimum Split (s)	10.9	10.9	10.9	8.4	11.9	10.4	14.9
Total Split (s)	34.9	44.9	44.9	34.4	64.9	34.4	64.9
Total Split (%)	19.5%	25.1%	25.1%	19.2%	36.2%	19.2%	36.2%
Yellow Time (s)	3.9	3.9	3.9	3.4	3.9	3.4	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	4.9	4.4	4.9	4.4	4.9
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	Min	None	Min

Intersection Summary
Cycle Length: 179.1
Actuated Cycle Length: 69.8
Natural Cycle: 55
Control Type: Actuated-Uncoordinated

Splits and Phases: 38: Villa La Jolla Drive & Nobel Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	27	5	7	55	1	339	9	684	112	124	266	11
Future Volume (vph)	27	5	7	55	1	339	9	684	112	124	266	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9		4.9	4.9		4.4	4.9		4.4	4.9	
Lane Util. Factor		1.00		0.97	1.00		1.00	0.95		0.97	0.95	
Frt		0.97		1.00	0.85		1.00	0.98		1.00	0.99	
Flt Protected		0.97		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1755		3433	1584		1770	3465		3433	3519	
Flt Permitted		0.97		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1755		3433	1584		1770	3465		3433	3519	
Peak-hour factor, PHF	0.81	0.81	0.81	0.92	0.92	0.92	0.91	0.91	0.91	0.89	0.89	0.89
Adj. Flow (vph)	33	6	9	60	1	368	10	752	123	139	299	12
RTOR Reduction (vph)	0	6	0	0	327	0	0	6	0	0	1	0
Lane Group Flow (vph)	0	42	0	60	42	0	10	869	0	139	310	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	7	7		8	8		5	2		1	6	
Permitted Phases												
Actuated Green, G (s)		5.6		8.2	8.2		0.9	32.6		8.6	40.3	
Effective Green, g (s)		5.6		8.2	8.2		0.9	32.6		8.6	40.3	
Actuated g/C Ratio		0.08		0.11	0.11		0.01	0.44		0.12	0.54	
Clearance Time (s)		4.9		4.9	4.9		4.4	4.9		4.4	4.9	
Vehicle Extension (s)		2.0		2.0	2.0		2.0	4.3		2.0	3.7	
Lane Grp Cap (vph)		132		379	175		21	1524		398	1913	
v/s Ratio Prot		c0.02		0.02	c0.03		0.01	c0.25		c0.04	0.09	
v/s Ratio Perm												
v/c Ratio		0.32		0.16	0.24		0.48	0.57		0.35	0.16	
Uniform Delay, d1		32.5		29.8	30.1		36.4	15.5		30.2	8.5	
Progression Factor		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.5		0.1	0.3		6.1	0.7		0.2	0.1	
Delay (s)		33.0		29.9	30.4		42.4	16.2		30.4	8.5	
Level of Service		C		C	C		D	B		C	A	
Approach Delay (s)		33.0			30.3			16.5			15.3	
Approach LOS		C			C			B			B	

Intersection Summary				
HCM 2000 Control Delay	19.9	HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio	0.46			
Actuated Cycle Length (s)	74.1	Sum of lost time (s)	19.1	
Intersection Capacity Utilization	64.4%	ICU Level of Service	C	
Analysis Period (min)	15			

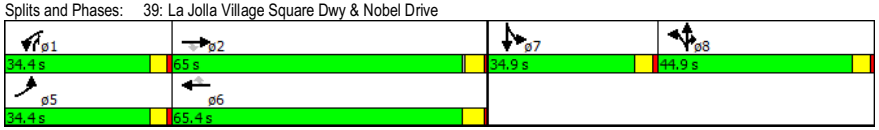
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	5	257	10	537	361	296	7	7	263	149	9
Future Volume (vph)	5	257	10	537	361	296	7	7	263	149	9
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Split	NA	pt+ov	Split	NA
Protected Phases	5	2		1	6		8	8	8 1	7	7
Permitted Phases			2			6					
Detector Phase	5	2	2	1	6	6	8	8	8 1	7	7
Switch Phase											
Minimum Initial (s)	4.0	7.0	7.0	4.0	7.0	7.0	8.0	8.0		8.0	8.0
Minimum Split (s)	9.4	12.0	12.0	8.4	12.4	12.4	12.9	12.9		12.9	12.9
Total Split (s)	34.4	65.0	65.0	34.4	65.4	65.4	44.9	44.9		34.9	34.9
Total Split (%)	19.2%	36.2%	36.2%	19.2%	36.4%	36.4%	25.0%	25.0%		19.4%	19.4%
Yellow Time (s)	3.4	4.0	4.0	3.4	4.4	4.4	3.9	3.9		3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	4.4	5.0	5.0	4.4	5.4	5.4	4.9	4.9		4.9	4.9
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lag	Lag		Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None		None	None

Intersection Summary

Cycle Length: 179.6
Actuated Cycle Length: 99.5
Natural Cycle: 60
Control Type: Actuated-Uncoordinated

Splits and Phases: 39: La Jolla Village Square Dwy & Nobel Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	257	10	537	361	296	7	7	263	149	9	0
Future Volume (vph)	5	257	10	537	361	296	7	7	263	149	9	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.0	5.0	4.4	5.4	5.4	4.9	4.9	4.9	4.9	4.9	
Lane Util. Factor	1.00	0.95	1.00	0.97	0.95	1.00	0.95	0.95	1.00	0.95	0.95	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.96	
Satd. Flow (prot)	1770	3539	1583	3433	3539	1583	1681	1761	1583	1681	1694	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.96	
Satd. Flow (perm)	1770	3539	1583	3433	3539	1583	1681	1761	1583	1681	1694	
Peak-hour factor, PHF	0.87	0.87	0.87	0.91	0.91	0.91	0.80	0.80	0.80	0.80	0.80	0.80
Adj. Flow (vph)	6	295	11	590	397	325	9	9	329	186	11	0
RTOR Reduction (vph)	0	0	9	0	0	165	0	0	183	0	0	0
Lane Group Flow (vph)	6	295	2	590	397	160	8	10	146	99	98	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Split	NA	pt+ov	Split	NA	
Protected Phases	5	2		1	6		8	8	8 1	7	7	
Permitted Phases			2			6						
Actuated Green, G (s)	0.9	22.1	22.1	28.6	49.4	49.4	10.0	10.0	43.5	22.5	22.5	
Effective Green, g (s)	0.9	22.1	22.1	28.6	49.4	49.4	10.0	10.0	43.5	22.5	22.5	
Actuated g/C Ratio	0.01	0.22	0.22	0.28	0.48	0.48	0.10	0.10	0.42	0.22	0.22	
Clearance Time (s)	4.4	5.0	5.0	4.4	5.4	5.4	4.9	4.9		4.9	4.9	
Vehicle Extension (s)	2.0	4.1	4.1	2.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)	15	763	341	958	1707	763	164	171	672	369	372	
v/s Ratio Prot	0.00	c0.08		c0.17	0.11		0.00	0.01	c0.09	c0.06	0.06	
v/s Ratio Perm			0.00			0.10						
v/c Ratio	0.40	0.39	0.01	0.62	0.23	0.21	0.05	0.06	0.22	0.27	0.26	
Uniform Delay, d1	50.5	34.4	31.5	32.1	15.4	15.3	41.9	41.9	18.7	33.1	33.1	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	6.3	0.5	0.0	0.8	0.1	0.2	0.2	0.2	0.2	0.5	0.5	
Delay (s)	56.7	34.8	31.5	33.0	15.5	15.5	42.1	42.1	18.9	33.7	33.6	
Level of Service	E	C	C	C	B	B	D	D	B	C	C	
Approach Delay (s)		35.1			23.3			20.1			33.6	
Approach LOS		D			C			C			C	

Intersection Summary

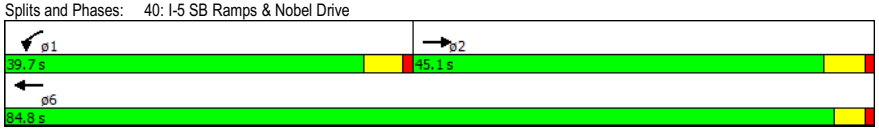
HCM 2000 Control Delay	25.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.42		
Actuated Cycle Length (s)	102.4	Sum of lost time (s)	19.6
Intersection Capacity Utilization	45.4%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBT	WBL	WBT
Lane Configurations			
Traffic Volume (vph)	358	299	1283
Future Volume (vph)	358	299	1283
Turn Type	NA	Prot	NA
Protected Phases	2	1	6
Permitted Phases			
Detector Phase	2	1	6
Switch Phase			
Minimum Initial (s)	13.0	5.0	1.0
Minimum Split (s)	18.1	9.7	5.5
Total Split (s)	45.1	39.7	84.8
Total Split (%)	53.2%	46.8%	100.0%
Yellow Time (s)	4.1	3.7	3.0
All-Red Time (s)	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0
Total Lost Time (s)	5.1	4.7	4.0
Lead/Lag	Lag	Lead	
Lead-Lag Optimize?	Yes	Yes	
Recall Mode	Min	None	Min

Intersection Summary
Cycle Length: 84.8
Actuated Cycle Length: 34.5
Natural Cycle: 40
Control Type: Actuated-Uncoordinated

Splits and Phases: 40: I-5 SB Ramps & Nobel Drive



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	358	305	299	1283	0	0
Future Volume (vph)	358	305	299	1283	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1		4.7	4.0		
Lane Util. Factor	0.95		0.97	0.95		
Frt	0.93		1.00	1.00		
Flt Protected	1.00		0.95	1.00		
Satd. Flow (prot)	3295		3433	3539		
Flt Permitted	1.00		0.95	1.00		
Satd. Flow (perm)	3295		3433	3539		
Peak-hour factor, PHF	0.87	0.87	0.90	0.90	0.25	0.25
Adj. Flow (vph)	411	351	332	1426	0	0
RTOR Reduction (vph)	186	0	0	0	0	0
Lane Group Flow (vph)	576	0	332	1426	0	0
Turn Type	NA		Prot	NA		
Protected Phases	2		1	6		
Permitted Phases						
Actuated Green, G (s)	15.8		8.8	34.4		
Effective Green, g (s)	15.8		8.8	34.4		
Actuated g/C Ratio	0.46		0.26	1.00		
Clearance Time (s)	5.1		4.7	4.0		
Vehicle Extension (s)	3.0		3.0	3.0		
Lane Grp Cap (vph)	1513		878	3539		
v/s Ratio Prot	0.17		0.10	c0.40		
v/s Ratio Perm						
v/c Ratio	0.38		0.38	0.40		
Uniform Delay, d1	6.1		10.5	0.0		
Progression Factor	1.00		1.00	1.00		
Incremental Delay, d2	0.2		0.3	0.1		
Delay (s)	6.3		10.8	0.1		
Level of Service	A		B	A		
Approach Delay (s)	6.3			2.1	0.0	
Approach LOS	A			A	A	

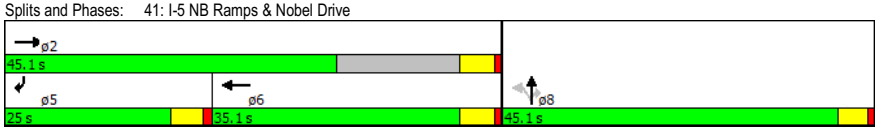
Intersection Summary			
HCM 2000 Control Delay	3.4	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	34.4	Sum of lost time (s)	9.8
Intersection Capacity Utilization	38.8%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBT	WBT	NBL	NBT	NBR	SBR
Lane Configurations						
Traffic Volume (vph)	392	1026	336	174	420	106
Future Volume (vph)	392	1026	336	174	420	106
Turn Type	NA	NA	Perm	NA	Perm	Prot
Protected Phases	2	6		8		5
Permitted Phases			8		8	
Detector Phase	2	6	8	8	8	5
Switch Phase						
Minimum Initial (s)	11.0	13.0	5.0	5.0	5.0	5.0
Minimum Split (s)	16.1	18.1	22.5	22.5	22.5	10.0
Total Split (s)	45.1	35.1	45.1	45.1	45.1	25.0
Total Split (%)	42.9%	33.4%	42.9%	42.9%	42.9%	23.8%
Yellow Time (s)	4.1	4.1	3.5	3.5	3.5	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.1	5.1	4.5	4.5	4.5	5.0
Lead/Lag		Lag				Lead
Lead-Lag Optimize?		Yes				Yes
Recall Mode	Min	Min	None	None	None	None

Intersection Summary
Cycle Length: 105.2
Actuated Cycle Length: 64.7
Natural Cycle: 60
Control Type: Actuated-Uncoordinated

Splits and Phases: 41: I-5 NB Ramps & Nobel Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	392	0	0	1026	30	336	174	420	0	0	106
Future Volume (vph)	0	392	0	0	1026	30	336	174	420	0	0	106
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.1			5.1		4.5	4.5	4.5			5.0
Lane Util. Factor		0.95			0.91		0.95	0.95	1.00			1.00
Frt		1.00			1.00		1.00	1.00	0.85			0.86
Flt Protected		1.00			1.00		0.95	0.98	1.00			1.00
Satd. Flow (prot)		3539			5063		1681	1741	1583			1611
Flt Permitted		1.00			1.00		0.95	0.98	1.00			1.00
Satd. Flow (perm)		3539			5063		1681	1741	1583			1611
Peak-hour factor, PHF	0.90	0.90	0.90	0.80	0.80	0.80	0.95	0.95	0.95	0.80	0.80	0.80
Adj. Flow (vph)	0	436	0	0	1282	38	354	183	442	0	0	132
RTOR Reduction (vph)	0	0	0	0	2	0	0	0	257	0	0	122
Lane Group Flow (vph)	0	436	0	0	1319	0	265	272	185	0	0	11
Turn Type		NA			NA		Perm	NA	Perm			Prot
Protected Phases		2			6			8				5
Permitted Phases							8		8			
Actuated Green, G (s)		35.0			24.6		19.7	19.7	19.7			5.4
Effective Green, g (s)		35.0			24.6		19.7	19.7	19.7			5.4
Actuated g/C Ratio		0.54			0.38		0.31	0.31	0.31			0.08
Clearance Time (s)		5.1			5.1		4.5	4.5	4.5			5.0
Vehicle Extension (s)		2.0			2.0		3.0	3.0	3.0			2.0
Lane Grp Cap (vph)		1926			1937		515	533	484			135
v/s Ratio Prot		c0.12			c0.26							0.01
v/s Ratio Perm							c0.16	0.16	0.12			
v/c Ratio		0.23			0.68		0.51	0.51	0.38			0.08
Uniform Delay, d1		7.6			16.6		18.4	18.3	17.5			27.2
Progression Factor		1.00			1.00		1.00	1.00	1.00			1.00
Incremental Delay, d2		0.0			0.8		0.9	0.8	0.5			0.1
Delay (s)		7.6			17.4		19.2	19.2	18.0			27.3
Level of Service		A			B		B	B	B			C
Approach Delay (s)		7.6			17.4			18.7			27.3	
Approach LOS		A			B			B			C	

Intersection Summary			
HCM 2000 Control Delay	16.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	64.3	Sum of lost time (s)	14.6
Intersection Capacity Utilization	53.1%	ICU Level of Service	A
Analysis Period (min)	15		

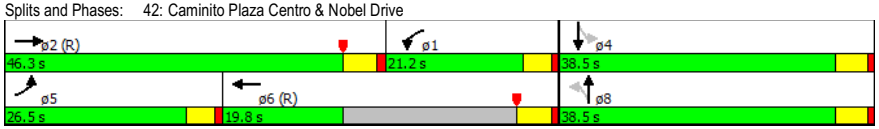
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	54	758	58	840	49	2	4	5
Future Volume (vph)	54	758	58	840	49	2	4	5
Turn Type	Prot	NA	Prot	NA	Perm	NA	Perm	NA
Protected Phases	5	2	1	6		8		4
Permitted Phases					8		4	
Detector Phase	5	2	1	6	8	8	4	4
Switch Phase								
Minimum Initial (s)	4.0	10.0	4.0	10.0	6.0	6.0	6.0	6.0
Minimum Split (s)	8.4	15.2	8.4	15.2	10.9	10.9	10.9	10.9
Total Split (s)	26.5	46.3	21.2	19.8	38.5	38.5	38.5	38.5
Total Split (%)	25.0%	43.7%	20.0%	18.7%	36.3%	36.3%	36.3%	36.3%
Yellow Time (s)	3.4	4.2	3.4	4.2	3.9	3.9	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	4.4	5.2	4.4	5.2		4.9		4.9
Lead/Lag	Lead	Lead	Lag	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes				
Recall Mode	None	C-Max	None	C-Max	None	None	None	None

Intersection Summary

Cycle Length: 106
Actuated Cycle Length: 106
Offset: 26 (25%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 40
Control Type: Actuated-Coordinated

Splits and Phases: 42: Caminito Plaza Centro & Nobel Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	54	758	117	58	840	18	49	2	21	4	5	48
Future Volume (vph)	54	758	117	58	840	18	49	2	21	4	5	48
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.2		4.4	5.2			4.9			4.9	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Frt	1.00	0.98		1.00	1.00			0.96			0.89	
Flt Protected	0.95	1.00		0.95	1.00			0.97			1.00	
Satd. Flow (prot)	1770	4983		1770	5070			1731			1644	
Flt Permitted	0.95	1.00		0.95	1.00			0.77			0.98	
Satd. Flow (perm)	1770	4983		1770	5070			1386			1620	
Peak-hour factor, PHF	0.92	0.92	0.92	0.93	0.93	0.93	0.80	0.80	0.80	0.80	0.80	0.80
Adj. Flow (vph)	59	824	127	62	903	19	61	2	26	5	6	60
RTOR Reduction (vph)	0	13	0	0	1	0	0	17	0	0	50	0
Lane Group Flow (vph)	59	938	0	62	921	0	0	73	0	0	21	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8			4		
Actuated Green, G (s)	7.0	61.3		13.4	67.7			16.8			16.8	
Effective Green, g (s)	7.0	61.3		13.4	67.7			16.8			16.8	
Actuated g/C Ratio	0.07	0.58		0.13	0.64			0.16			0.16	
Clearance Time (s)	4.4	5.2		4.4	5.2			4.9			4.9	
Vehicle Extension (s)	2.0	5.0		2.0	4.5			2.5			2.0	
Lane Grp Cap (vph)	116	2881		223	3238			219			256	
v/s Ratio Prot	c0.03	c0.19		0.04	c0.18							
v/s Ratio Perm								c0.05			0.01	
v/c Ratio	0.51	0.33		0.28	0.28			0.33			0.08	
Uniform Delay, d1	47.8	11.6		41.9	8.5			39.6			38.0	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	1.3	0.3		0.2	0.2			0.7			0.0	
Delay (s)	49.1	11.9		42.2	8.7			40.3			38.1	
Level of Service	D	B		D	A			D			D	
Approach Delay (s)		14.1			10.8			40.3			38.1	
Approach LOS		B			B			D			D	

Intersection Summary

HCM 2000 Control Delay	14.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.33		
Actuated Cycle Length (s)	106.0	Sum of lost time (s)	14.5
Intersection Capacity Utilization	43.4%	ICU Level of Service	A
Analysis Period (min)	15		

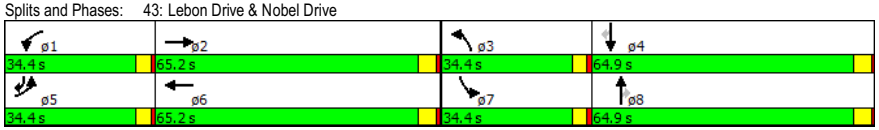
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	45	676	84	663	169	272	126	56	65	62
Future Volume (vph)	45	676	84	663	169	272	126	56	65	62
Turn Type	Prot	NA	Prot	NA	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	5	2	1	6	3	8		7	4	5
Permitted Phases							8			4
Detector Phase	5	2	1	6	3	8	8	7	4	5
Switch Phase										
Minimum Initial (s)	4.0	10.0	4.0	10.0	4.0	8.0	8.0	10.0	10.0	4.0
Minimum Split (s)	8.4	15.2	8.4	15.2	8.4	12.9	12.9	14.4	14.9	8.4
Total Split (s)	34.4	65.2	34.4	65.2	34.4	64.9	64.9	34.4	64.9	34.4
Total Split (%)	17.3%	32.8%	17.3%	32.8%	17.3%	32.6%	32.6%	17.3%	32.6%	17.3%
Yellow Time (s)	3.4	4.2	3.4	4.2	3.4	3.9	3.9	3.4	3.9	3.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.2	4.4	5.2	4.4	4.9	4.9	4.4	4.9	4.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 198.9
Actuated Cycle Length: 99
Natural Cycle: 60
Control Type: Actuated-Uncoordinated

Splits and Phases: 43: Lebon Drive & Nobel Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	45	676	53	84	663	134	169	272	126	56	65	62
Future Volume (vph)	45	676	53	84	663	134	169	272	126	56	65	62
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.2		4.4	5.2		4.4	4.9	4.9	4.4	4.9	4.4
Lane Util. Factor	0.97	0.91		1.00	0.91		0.97	0.95	1.00	0.97	0.95	1.00
Frt	1.00	0.99		1.00	0.97		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5030		1770	4957		3433	3539	1583	3433	3539	1583
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5030		1770	4957		3433	3539	1583	3433	3539	1583
Peak-hour factor, PHF	0.88	0.88	0.88	0.91	0.91	0.91	0.85	0.85	0.85	0.85	0.85	0.85
Adj. Flow (vph)	51	768	60	92	729	147	199	320	148	66	76	73
RTOR Reduction (vph)	0	4	0	0	14	0	0	0	90	0	0	52
Lane Group Flow (vph)	51	824	0	92	862	0	199	320	58	66	76	21
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	5	2		1	6		3	8		7	4	5
Permitted Phases									8			4
Actuated Green, G (s)	6.5	32.8		10.8	37.1		14.3	29.3	29.3	7.3	22.3	28.8
Effective Green, g (s)	6.5	32.8		10.8	37.1		14.3	29.3	29.3	7.3	22.3	28.8
Actuated g/C Ratio	0.07	0.33		0.11	0.37		0.14	0.30	0.30	0.07	0.23	0.29
Clearance Time (s)	4.4	5.2		4.4	5.2		4.4	4.9	4.9	4.4	4.9	4.4
Vehicle Extension (s)	2.0	4.5		2.0	4.5		2.0	6.4	6.4	2.0	5.5	2.0
Lane Grp Cap (vph)	225	1664		192	1855		495	1046	468	252	796	460
v/s Ratio Prot	0.01	0.16		c0.05	c0.17		c0.06	c0.09		0.02	0.02	0.00
v/s Ratio Perm									0.04			0.01
v/c Ratio	0.23	0.50		0.48	0.46		0.40	0.31	0.12	0.26	0.10	0.05
Uniform Delay, d1	43.9	26.5		41.5	23.5		38.5	27.0	25.5	43.4	30.4	25.3
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2	0.4		0.7	0.3		0.2	0.5	0.4	0.2	0.1	0.0
Delay (s)	44.1	26.9		42.2	23.8		38.7	27.5	25.9	43.6	30.5	25.3
Level of Service	D	C		D	C		D	C	C	D	C	C
Approach Delay (s)		27.9			25.5			30.5			32.8	
Approach LOS		C			C			C			C	

Intersection Summary

HCM 2000 Control Delay	28.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.43		
Actuated Cycle Length (s)	99.1	Sum of lost time (s)	18.9
Intersection Capacity Utilization	50.7%	ICU Level of Service	A
Analysis Period (min)	15		

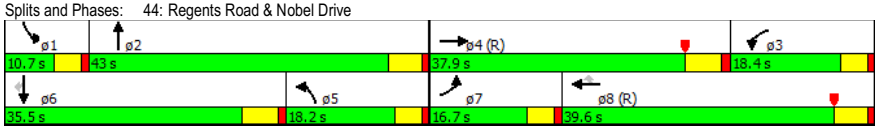
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	206	705	183	569	215	74	272	106	195	59
Future Volume (vph)	206	705	183	569	215	74	272	106	195	59
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Prot	NA	Perm
Protected Phases	7	4	3	8		5	2	1	6	
Permitted Phases					8					6
Detector Phase	7	4	3	8	8	5	2	1	6	6
Switch Phase										
Minimum Initial (s)	4.0	10.0	4.0	10.0	10.0	4.0	10.0	4.0	10.0	10.0
Minimum Split (s)	8.4	37.7	8.4	37.3	37.3	8.4	41.2	8.4	35.5	35.5
Total Split (s)	16.7	37.9	18.4	39.6	39.6	18.2	43.0	10.7	35.5	35.5
Total Split (%)	15.2%	34.5%	16.7%	36.0%	36.0%	16.5%	39.1%	9.7%	32.3%	32.3%
Yellow Time (s)	3.4	4.7	3.4	4.3	4.3	3.4	4.2	3.4	4.5	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.7	4.4	5.3	5.3	4.4	5.2	4.4	5.5	5.5
Lead/Lag	Lead	Lead	Lag	Lag	Lag	Lag	Lag	Lead	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	C-Max	None	Min	None	Min	Min

Intersection Summary

Cycle Length: 110
Actuated Cycle Length: 110
Offset: 0 (0%), Referenced to phase 4:EBT and 8:WBT, Start of Yellow
Natural Cycle: 100
Control Type: Actuated-Coordinated

Splits and Phases: 44: Regents Road & Nobel Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	206	705	41	183	569	215	74	272	219	106	195	59
Future Volume (vph)	206	705	41	183	569	215	74	272	219	106	195	59
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.7		4.4	5.3	5.3	4.4	5.2		4.4	5.5	5.5
Lane Util. Factor	0.97	0.91		0.97	0.95	1.00	1.00	0.91		1.00	0.95	1.00
Frt	1.00	0.99		1.00	1.00	0.85	1.00	0.93		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3433	5044		3433	3539	1583	1770	4745		1770	3539	1583
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	3433	5044		3433	3539	1583	1770	4745		1770	3539	1583
Peak-hour factor, PHF	0.97	0.97	0.97	0.88	0.88	0.88	0.80	0.80	0.80	0.80	0.80	0.80
Adj. Flow (vph)	212	727	42	208	647	244	92	340	274	132	244	74
RTOR Reduction (vph)	0	5	0	0	0	154	0	141	0	0	0	54
Lane Group Flow (vph)	212	764	0	208	647	90	93	473	0	133	244	20
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA		Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8						6
Actuated Green, G (s)	10.7	36.9		14.1	40.7	40.7	10.0	33.0		6.3	29.0	29.0
Effective Green, g (s)	10.7	36.9		14.1	40.7	40.7	10.0	33.0		6.3	29.0	29.0
Actuated g/C Ratio	0.10	0.34		0.13	0.37	0.37	0.09	0.30		0.06	0.26	0.26
Clearance Time (s)	4.4	5.7		4.4	5.3	5.3	4.4	5.2		4.4	5.5	5.5
Vehicle Extension (s)	2.0	4.4		2.0	6.1	6.1	2.0	5.7		2.0	6.2	6.2
Lane Grp Cap (vph)	333	1692		440	1309	585	160	1423		101	933	417
v/s Ratio Prot	c0.06	0.15		0.06	c0.18		c0.05	c0.10		c0.08	0.07	
v/s Ratio Perm						0.06						0.01
v/c Ratio	0.64	0.45		0.47	0.49	0.15	0.58	0.33		1.32	0.26	0.05
Uniform Delay, d1	47.8	28.6		44.5	26.7	23.2	48.0	29.9		51.9	32.0	30.2
Progression Factor	1.00	1.00		0.63	0.45	0.07	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	2.9	0.9		0.2	1.1	0.5	3.4	0.4		196.4	0.4	0.1
Delay (s)	50.7	29.5		28.3	13.2	2.1	51.4	30.3		248.2	32.5	30.3
Level of Service	D	C		C	B	A	D	C		F	C	C
Approach Delay (s)		34.1			13.6			33.1			95.7	
Approach LOS		C			B			C			F	

Intersection Summary

HCM 2000 Control Delay	35.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	53.7%	ICU Level of Service	A
Analysis Period (min)	15		

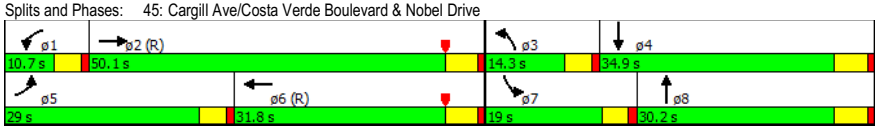
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	266	621	31	675	56	58	143	36
Future Volume (vph)	266	621	31	675	56	58	143	36
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	5	2	1	6	3	8	7	4
Permitted Phases								
Detector Phase	5	2	1	6	3	8	7	4
Switch Phase								
Minimum Initial (s)	4.0	25.0	4.0	25.0	4.0	25.0	4.0	25.0
Minimum Split (s)	8.4	30.2	8.4	30.2	8.4	30.2	8.4	30.2
Total Split (s)	29.0	50.1	10.7	31.8	14.3	30.2	19.0	34.9
Total Split (%)	26.4%	45.5%	9.7%	28.9%	13.0%	27.5%	17.3%	31.7%
Yellow Time (s)	3.4	4.2	3.4	4.2	3.4	4.2	3.4	4.2
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.2	4.4	5.2	4.4	5.2	4.4	5.2
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	Max	None	Max

Intersection Summary

Cycle Length: 110
Actuated Cycle Length: 110
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 45: Cargill Ave/Costa Verde Boulevard & Nobel Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	266	621	26	31	675	138	56	58	32	143	36	181
Future Volume (vph)	266	621	26	31	675	138	56	58	32	143	36	181
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.2		4.4	5.2		4.4	5.2		4.4	5.2	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	1.00		1.00	1.00	
Frt	1.00	0.99		1.00	0.97		1.00	0.95		1.00	0.87	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	5054		1770	4956		1770	1764		1770	1629	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	5054		1770	4956		1770	1764		1770	1629	
Peak-hour factor, PHF	0.88	0.88	0.88	0.91	0.91	0.91	0.80	0.80	0.80	0.87	0.87	0.87
Adj. Flow (vph)	302	706	30	34	742	152	70	72	40	164	41	208
RTOR Reduction (vph)	0	4	0	0	27	0	0	17	0	0	145	0
Lane Group Flow (vph)	302	732	0	34	867	0	70	96	0	164	104	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases												
Actuated Green, G (s)	21.8	46.6		3.8	28.6		7.1	27.3		13.1	33.3	
Effective Green, g (s)	21.8	46.6		3.8	28.6		7.1	27.3		13.1	33.3	
Actuated g/C Ratio	0.20	0.42		0.03	0.26		0.06	0.25		0.12	0.30	
Clearance Time (s)	4.4	5.2		4.4	5.2		4.4	5.2		4.4	5.2	
Vehicle Extension (s)	2.0	4.5		2.0	4.5		2.0	4.5		2.0	4.5	
Lane Grp Cap (vph)	350	2141		61	1288		114	437		210	493	
v/s Ratio Prot	c0.17	0.14		0.02	c0.17		0.04	0.05		c0.09	c0.06	
v/s Ratio Perm												
v/c Ratio	0.86	0.34		0.56	0.67		0.61	0.22		0.78	0.21	
Uniform Delay, d1	42.7	21.4		52.3	36.5		50.1	32.9		47.1	28.6	
Progression Factor	1.27	0.61		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	16.5	0.4		6.1	2.8		6.7	1.2		15.8	1.0	
Delay (s)	70.8	13.4		58.4	39.3		56.8	34.0		62.9	29.5	
Level of Service	E	B		E	D		E	C		E	C	
Approach Delay (s)		30.1			40.0			42.8			42.8	
Approach LOS		C			D			D			D	

Intersection Summary

HCM 2000 Control Delay	36.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	19.2
Intersection Capacity Utilization	80.3%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	82	1140	8	711	37	0	61	0
Future Volume (vph)	82	1140	8	711	37	0	61	0
Turn Type	Prot	NA	Prot	NA	Perm	NA	Perm	NA
Protected Phases	5	2	1	6		8		4
Permitted Phases					8		4	
Detector Phase	5	2	1	6	8	8	4	4
Switch Phase								
Minimum Initial (s)	4.0	7.0	4.0	7.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.4	19.0	8.4	28.9	32.9	32.9	32.9	32.9
Total Split (s)	34.4	65.0	34.4	64.9	44.9	44.9	44.9	44.9
Total Split (%)	23.8%	45.0%	23.8%	45.0%	31.1%	31.1%	31.1%	31.1%
Yellow Time (s)	3.4	4.0	3.4	3.9	3.9	3.9	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.4	5.0	4.4	4.9		4.9	4.9	4.9
Lead/Lag	Lead	Lag	Lead	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes				
Recall Mode	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 144.3
Actuated Cycle Length: 68.1
Natural Cycle: 80
Control Type: Actuated-Uncoordinated

Splits and Phases: 46: Lombard Place & Nobel Drive

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	82	1140	16	8	711	37	37	0	20	61	0	38
Future Volume (vph)	82	1140	16	8	711	37	37	0	20	61	0	38
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.0		4.4	4.9			4.9		4.9	4.9	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00		1.00	1.00	
Frt	1.00	1.00		1.00	0.99			0.95		1.00	0.85	
Flt Protected	0.95	1.00		0.95	1.00			0.97		0.95	1.00	
Satd. Flow (prot)	1770	3532		1770	3513			1719		1770	1583	
Flt Permitted	0.95	1.00		0.95	1.00			0.78		0.82	1.00	
Satd. Flow (perm)	1770	3532		1770	3513			1375		1520	1583	
Peak-hour factor, PHF	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Adj. Flow (vph)	102	1425	20	10	889	46	46	0	25	76	0	48
RTOR Reduction (vph)	0	0	0	0	2	0	0	42	0	0	42	0
Lane Group Flow (vph)	103	1445	0	10	933	0	0	29	0	76	6	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8			4		
Actuated Green, G (s)	9.8	48.2		0.8	39.3			9.3		9.3	9.3	
Effective Green, g (s)	9.8	48.2		0.8	39.3			9.3		9.3	9.3	
Actuated g/C Ratio	0.13	0.66		0.01	0.54			0.13		0.13	0.13	
Clearance Time (s)	4.4	5.0		4.4	4.9			4.9		4.9	4.9	
Vehicle Extension (s)	2.0	3.7		2.0	4.4			2.0		2.0	2.0	
Lane Grp Cap (vph)	238	2344		19	1901			176		194	202	
v/s Ratio Prot	c0.06	c0.41		0.01	0.27						0.00	
v/s Ratio Perm								0.02		c0.05		
v/c Ratio	0.43	0.62		0.53	0.49			0.17		0.39	0.03	
Uniform Delay, d1	28.8	6.9		35.7	10.4			28.2		29.1	27.7	
Progression Factor	1.00	1.00		1.00	1.00			1.00		1.00	1.00	
Incremental Delay, d2	0.5	0.5		11.6	0.3			0.2		0.5	0.0	
Delay (s)	29.3	7.5		47.3	10.7			28.4		29.5	27.7	
Level of Service	C	A		D	B			C		C	C	
Approach Delay (s)		8.9			11.1			28.4			28.8	
Approach LOS		A			B			C			C	

Intersection Summary

HCM 2000 Control Delay	11.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	72.6	Sum of lost time (s)	14.3
Intersection Capacity Utilization	57.2%	ICU Level of Service	B
Analysis Period (min)	15		

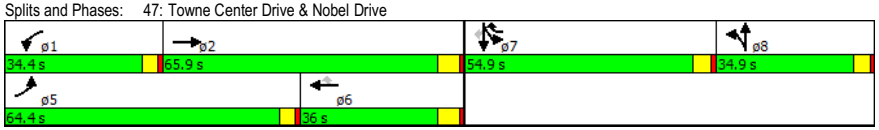
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	429	783	13	327	66	156	19	34	227
Future Volume (vph)	429	783	13	327	66	156	19	34	227
Turn Type	Prot	NA	Prot	NA	pm+ov	NA	Split	NA	Perm
Protected Phases	5	2	1	6	7	8	7	7	
Permitted Phases					6				7
Detector Phase	5	2	1	6	7	8	7	7	7
Switch Phase									
Minimum Initial (s)	4.0	7.0	4.0	7.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.4	12.9	8.4	13.0	8.9	8.9	8.9	8.9	8.9
Total Split (s)	64.4	65.9	34.4	36.0	54.9	34.9	54.9	54.9	54.9
Total Split (%)	33.9%	34.6%	18.1%	18.9%	28.9%	18.3%	28.9%	28.9%	28.9%
Yellow Time (s)	3.4	4.9	3.4	5.0	3.9	3.9	3.9	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.9	4.4	6.0	4.9	4.9	4.9	4.9	4.9
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 190.2
Actuated Cycle Length: 90.2
Natural Cycle: 55
Control Type: Actuated-Uncoordinated

Splits and Phases: 47: Towne Center Drive & Nobel Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	429	783	28	13	327	66	51	156	131	19	34	227
Future Volume (vph)	429	783	28	13	327	66	51	156	131	19	34	227
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.9		4.4	6.0	4.9		4.9		4.9	4.9	4.9
Lane Util. Factor	0.97	0.95		1.00	0.91	1.00		0.95		1.00	1.00	1.00
Frt	1.00	0.99		1.00	1.00	0.85		0.94		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.99		0.95	1.00	1.00
Satd. Flow (prot)	3433	3521		1770	5085	1583		3308		1770	1863	1583
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.99		0.95	1.00	1.00
Satd. Flow (perm)	3433	3521		1770	5085	1583		3308		1770	1863	1583
Peak-hour factor, PHF	0.85	0.85	0.85	0.91	0.91	0.91	0.80	0.80	0.80	0.82	0.82	0.82
Adj. Flow (vph)	505	921	33	14	359	73	64	195	164	23	41	277
RTOR Reduction (vph)	0	1	0	0	0	46	0	50	0	0	0	241
Lane Group Flow (vph)	505	953	0	14	359	27	0	373	0	23	41	36
Turn Type	Prot	NA		Prot	NA	pm+ov	Split	NA		Split	NA	Perm
Protected Phases	5	2		1	6	7	8	8		7	7	
Permitted Phases						6						7
Actuated Green, G (s)	21.0	40.6		2.0	21.5	33.5		17.1		12.0	12.0	12.0
Effective Green, g (s)	21.0	40.6		2.0	21.5	33.5		17.1		12.0	12.0	12.0
Actuated g/C Ratio	0.23	0.44		0.02	0.23	0.36		0.19		0.13	0.13	0.13
Clearance Time (s)	4.4	5.9		4.4	6.0	4.9		4.9		4.9	4.9	4.9
Vehicle Extension (s)	2.0	4.9		2.0	3.3	4.0		2.0		4.0	4.0	4.0
Lane Grp Cap (vph)	785	1557		38	1190	577		616		231	243	206
v/s Ratio Prot	c0.15	c0.27		0.01	0.07	0.01		c0.11		0.01	0.02	
v/s Ratio Perm						0.01						c0.02
v/c Ratio	0.64	0.61		0.37	0.30	0.05		0.60		0.10	0.17	0.18
Uniform Delay, d1	32.0	19.6		44.3	29.0	18.8		34.3		35.1	35.5	35.5
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00
Incremental Delay, d2	1.4	1.0		2.2	0.2	0.0		1.2		0.3	0.5	0.6
Delay (s)	33.4	20.6		46.5	29.1	18.9		35.4		35.4	35.9	36.1
Level of Service	C	C		D	C	B		D		D	D	D
Approach Delay (s)		25.0			28.0			35.4			36.0	
Approach LOS		C			C			D			D	

Intersection Summary

HCM 2000 Control Delay	28.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	91.8	Sum of lost time (s)	20.2
Intersection Capacity Utilization	54.3%	ICU Level of Service	A
Analysis Period (min)	15		

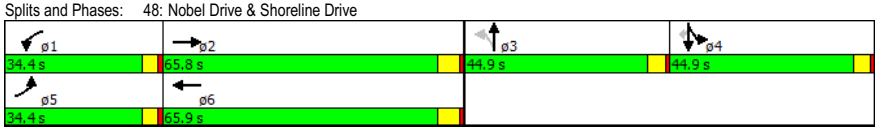
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	16	933	9	308	42	6	162	2	29
Future Volume (vph)	16	933	9	308	42	6	162	2	29
Turn Type	Prot	NA	Prot	NA	Perm	NA	Split	NA	Perm
Protected Phases	5	2	1	6		3	4	4	
Permitted Phases					3				4
Detector Phase	5	2	1	6	3	3	4	4	4
Switch Phase									
Minimum Initial (s)	4.0	10.0	4.0	10.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.4	15.8	8.4	30.9	8.9	8.9	33.9	33.9	33.9
Total Split (s)	34.4	65.8	34.4	65.9	44.9	44.9	44.9	44.9	44.9
Total Split (%)	18.1%	34.6%	18.1%	34.7%	23.6%	23.6%	23.6%	23.6%	23.6%
Yellow Time (s)	3.4	4.8	3.4	4.9	3.9	3.9	3.9	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.8	4.4	5.9		4.9	4.9	4.9	4.9
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 190.1
Actuated Cycle Length: 112.9
Natural Cycle: 85
Control Type: Actuated-Uncoordinated

Splits and Phases: 48: Nobel Drive & Shoreline Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	16	933	8	9	308	47	42	6	76	162	2	29
Future Volume (vph)	16	933	8	9	308	47	42	6	76	162	2	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.8		4.4	5.9			4.9		4.9	4.9	4.9
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00		1.00	1.00	0.88
Frt	1.00	1.00		1.00	0.98			0.92		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.98		0.95	1.00	1.00
Satd. Flow (prot)	1770	5079		1770	4984			1681		1770	1863	2787
Flt Permitted	0.95	1.00		0.95	1.00			0.20		0.95	1.00	1.00
Satd. Flow (perm)	1770	5079		1770	4984			346		1770	1863	2787
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.88	0.88	0.88	0.86	0.86	0.86
Adj. Flow (vph)	18	1025	9	10	338	52	48	7	86	188	2	34
RTOR Reduction (vph)	0	1	0	0	11	0	0	25	0	0	0	29
Lane Group Flow (vph)	18	1033	0	10	379	0	0	116	0	188	2	5
Turn Type	Prot	NA		Prot	NA		Perm	NA		Split	NA	Perm
Protected Phases	5	2		1	6			3		4	4	
Permitted Phases							3					4
Actuated Green, G (s)	2.5	36.1		1.1	34.6			41.0		18.1	18.1	18.1
Effective Green, g (s)	2.5	36.1		1.1	34.6			41.0		18.1	18.1	18.1
Actuated g/C Ratio	0.02	0.31		0.01	0.30			0.35		0.16	0.16	0.16
Clearance Time (s)	4.4	5.8		4.4	5.9			4.9		4.9	4.9	4.9
Vehicle Extension (s)	2.0	4.6		2.0	4.4			2.0		2.0	2.0	2.0
Lane Grp Cap (vph)	38	1576		16	1482			121		275	289	433
v/s Ratio Prot	c0.01	c0.20		0.01	0.08					c0.11	0.00	
v/s Ratio Perm								c0.34				0.00
v/c Ratio	0.47	0.66		0.62	0.26			0.96		0.68	0.01	0.01
Uniform Delay, d1	56.2	34.7		57.4	31.1			36.9		46.4	41.5	41.5
Progression Factor	1.00	1.00		1.00	1.00			1.00		1.00	1.00	1.00
Incremental Delay, d2	3.4	1.2		44.0	0.2			69.2		5.5	0.0	0.0
Delay (s)	59.6	36.0		101.4	31.2			106.1		51.9	41.5	41.5
Level of Service	E	D		F	C			F		D	D	D
Approach Delay (s)		36.4			33.0			106.1			50.2	
Approach LOS		D			C			F			D	

Intersection Summary

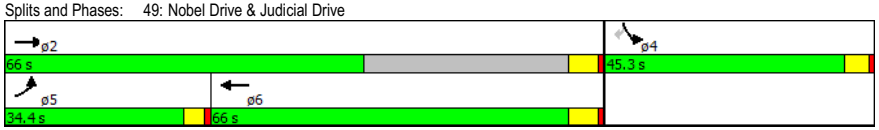
HCM 2000 Control Delay	42.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	116.3	Sum of lost time (s)	20.1
Intersection Capacity Utilization	42.8%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBT	SBL	SBR
Lane Configurations					
Traffic Volume (vph)	80	1145	363	307	12
Future Volume (vph)	80	1145	363	307	12
Turn Type	Prot	NA	NA	Prot	Perm
Protected Phases	5	2	6	4	
Permitted Phases					4
Detector Phase	5	2	6	4	4
Switch Phase					
Minimum Initial (s)	4.0	10.0	10.0	7.0	7.0
Minimum Split (s)	11.4	16.0	16.0	12.3	12.3
Total Split (s)	34.4	66.0	66.0	45.3	45.3
Total Split (%)	23.6%	45.3%	45.3%	31.1%	31.1%
Yellow Time (s)	3.4	5.0	5.0	4.3	4.3
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	6.0	6.0	5.3	5.3
Lead/Lag	Lead		Lag		
Lead-Lag Optimize?	Yes		Yes		
Recall Mode	None	Min	Min	None	None

Intersection Summary
Cycle Length: 145.7
Actuated Cycle Length: 100.2
Natural Cycle: 60
Control Type: Actuated-Uncoordinated

Splits and Phases: 49: Nobel Drive & Judicial Drive



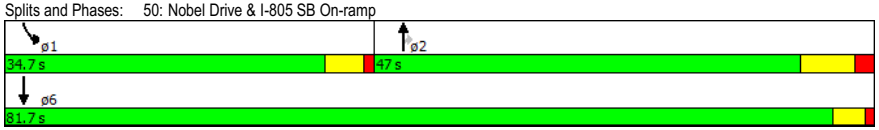
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	80	1145	363	1308	307	12
Future Volume (vph)	80	1145	363	1308	307	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	6.0	6.0		5.3	5.3
Lane Util. Factor	0.97	0.91	0.91		0.97	1.00
Frt	1.00	1.00	0.88		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	3433	5085	4488		3433	1583
Flt Permitted	0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)	3433	5085	4488		3433	1583
Peak-hour factor, PHF	0.91	0.91	0.90	0.90	0.87	0.87
Adj. Flow (vph)	88	1258	403	1453	353	14
RTOR Reduction (vph)	0	0	318	0	0	11
Lane Group Flow (vph)	88	1258	1538	0	353	3
Turn Type	Prot	NA	NA		Prot	Perm
Protected Phases	5	2	6		4	
Permitted Phases						4
Actuated Green, G (s)	7.1	69.8	58.3		18.9	18.9
Effective Green, g (s)	7.1	69.8	58.3		18.9	18.9
Actuated g/C Ratio	0.07	0.70	0.58		0.19	0.19
Clearance Time (s)	4.4	6.0	6.0		5.3	5.3
Vehicle Extension (s)	2.0	5.4	5.4		4.4	4.4
Lane Grp Cap (vph)	243	3549	2616		648	299
v/s Ratio Prot	0.03	c0.25	c0.34		c0.10	
v/s Ratio Perm						0.00
v/c Ratio	0.36	0.35	1.16dr		0.54	0.01
Uniform Delay, d1	44.3	6.1	13.2		36.7	32.9
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	0.3	0.1	0.6		1.4	0.0
Delay (s)	44.6	6.2	13.8		38.0	33.0
Level of Service	D	A	B		D	C
Approach Delay (s)		8.7	13.8		37.8	
Approach LOS		A	B		D	

Intersection Summary			
HCM 2000 Control Delay	14.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	15.7
Intersection Capacity Utilization	54.8%	ICU Level of Service	A
Analysis Period (min)	15		
dr Defacto Right Lane. Recode with 1 though lane as a right lane.			
c Critical Lane Group			

Lane Group	NBT	NBR	SBL	SBT
Lane Configurations				
Traffic Volume (vph)	536	719	40	1792
Future Volume (vph)	536	719	40	1792
Turn Type	NA	Perm	Prot	NA
Protected Phases	2		1	6
Permitted Phases		2		
Detector Phase	2	2	1	6
Switch Phase				
Minimum Initial (s)	12.0	12.0	5.0	1.0
Minimum Split (s)	19.0	19.0	9.7	5.0
Total Split (s)	47.0	47.0	34.7	81.7
Total Split (%)	57.5%	57.5%	42.5%	100.0%
Yellow Time (s)	5.0	5.0	3.7	3.0
All-Red Time (s)	2.0	2.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	4.7	4.0
Lead/Lag	Lag	Lag	Lead	
Lead-Lag Optimize?	Yes	Yes	Yes	
Recall Mode	Min	Min	None	Min

Intersection Summary
Cycle Length: 81.7
Actuated Cycle Length: 44.8
Natural Cycle: 40
Control Type: Actuated-Uncoordinated

Splits and Phases: 50: Nobel Drive & I-805 SB On-ramp



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	536	719	40	1792
Future Volume (vph)	0	0	536	719	40	1792
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)			7.0	7.0	4.7	4.0
Lane Util. Factor			0.95	0.88	0.97	0.91
Frt			1.00	0.85	1.00	1.00
Flt Protected			1.00	1.00	0.95	1.00
Satd. Flow (prot)			3539	2787	3433	5085
Flt Permitted			1.00	1.00	0.95	1.00
Satd. Flow (perm)			3539	2787	3433	5085
Peak-hour factor, PHF	0.25	0.25	0.90	0.90	0.93	0.93
Adj. Flow (vph)	0	0	596	799	43	1927
RTOR Reduction (vph)	0	0	0	235	0	0
Lane Group Flow (vph)	0	0	596	564	43	1927
Turn Type			NA	Perm	Prot	NA
Protected Phases			2		1	6
Permitted Phases				2		
Actuated Green, G (s)			33.7	33.7	2.3	47.7
Effective Green, g (s)			33.7	33.7	2.3	47.7
Actuated g/C Ratio			0.71	0.71	0.05	1.00
Clearance Time (s)			7.0	7.0	4.7	4.0
Vehicle Extension (s)			3.0	3.0	3.0	3.0
Lane Grp Cap (vph)			2500	1969	165	5085
v/s Ratio Prot			0.17		0.01	c0.38
v/s Ratio Perm				0.20		
v/c Ratio			0.24	0.29	0.26	0.38
Uniform Delay, d1			2.5	2.6	21.9	0.0
Progression Factor			1.00	1.00	1.00	1.00
Incremental Delay, d2			0.0	0.1	0.8	0.0
Delay (s)			2.5	2.7	22.7	0.0
Level of Service			A	A	C	A
Approach Delay (s)	0.0		2.6			0.5
Approach LOS	A		A			A

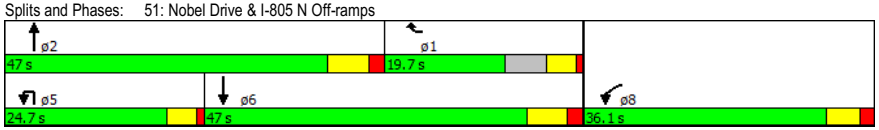
Intersection Summary			
HCM 2000 Control Delay	1.4	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	47.7	Sum of lost time (s)	11.7
Intersection Capacity Utilization	51.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	WBL	WBR	NBT	SBT	ø5
Lane Configurations					
Traffic Volume (vph)	930	640	516	606	
Future Volume (vph)	930	640	516	606	
Turn Type	Prot	Prot	NA	NA	
Protected Phases	8	1	2	6	5
Permitted Phases					
Detector Phase	8	1	2	6	
Switch Phase					
Minimum Initial (s)	5.0	5.0	16.0	11.0	5.0
Minimum Split (s)	11.1	9.7	23.0	18.0	9.7
Total Split (s)	36.1	19.7	47.0	47.0	24.7
Total Split (%)	33.5%	18.3%	43.6%	43.6%	23%
Yellow Time (s)	4.1	3.7	5.0	5.0	3.7
All-Red Time (s)	2.0	1.0	2.0	2.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.1	4.7	7.0	7.0	
Lead/Lag		Lag	Lead	Lag	Lead
Lead-Lag Optimize?		Yes	Yes	Yes	Yes
Recall Mode	None	None	Min	Min	None

Intersection Summary
Cycle Length: 107.8
Actuated Cycle Length: 73.1
Natural Cycle: 60
Control Type: Actuated-Uncoordinated

Splits and Phases: 51: Nobel Drive & I-805 N Off-ramps



Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	930	640	0	516	0	0	606
Future Volume (vph)	930	640	0	516	0	0	606
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.1	4.7		7.0			7.0
Lane Util. Factor	0.97	0.88		0.95			0.91
Frt	1.00	0.85		1.00			1.00
Flt Protected	0.95	1.00		1.00			1.00
Satd. Flow (prot)	3433	2787		3539			5085
Flt Permitted	0.95	1.00		1.00			1.00
Satd. Flow (perm)	3433	2787		3539			5085
Peak-hour factor, PHF	0.97	0.97	0.92	0.84	0.84	0.84	0.84
Adj. Flow (vph)	959	660	0	614	0	0	721
RTOR Reduction (vph)	0	532	0	0	0	0	0
Lane Group Flow (vph)	959	128	0	614	0	0	721
Turn Type	Prot	Prot	Prot	NA			NA
Protected Phases	8	1	5	2			6
Permitted Phases							
Actuated Green, G (s)	28.0	8.6		18.5			31.8
Effective Green, g (s)	28.0	8.6		18.5			31.8
Actuated g/C Ratio	0.38	0.12		0.25			0.44
Clearance Time (s)	6.1	4.7		7.0			7.0
Vehicle Extension (s)	2.0	3.0		2.0			2.0
Lane Grp Cap (vph)	1318	328		898			2218
v/s Ratio Prot	c0.28	c0.05		c0.17			0.14
v/s Ratio Perm							
v/c Ratio	0.73	0.39		0.68			0.33
Uniform Delay, d1	19.2	29.7		24.6			13.5
Progression Factor	1.00	1.00		1.00			1.00
Incremental Delay, d2	1.7	0.8		1.7			0.0
Delay (s)	20.9	30.5		26.3			13.5
Level of Service	C	C		C			B
Approach Delay (s)	24.8			26.3			13.5
Approach LOS	C			C			B

Intersection Summary			
HCM 2000 Control Delay	22.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	72.9	Sum of lost time (s)	17.8
Intersection Capacity Utilization	51.7%	ICU Level of Service	A
Analysis Period (min)	15		

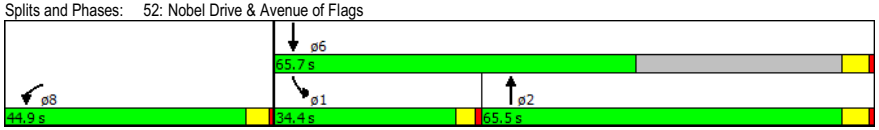
c Critical Lane Group

Lane Group	WBL	NBT	SBL	SBT
Lane Configurations				
Traffic Volume (vph)	2	1223	4	654
Future Volume (vph)	2	1223	4	654
Turn Type	Prot	NA	Prot	NA
Protected Phases	8	2	1	6
Permitted Phases				
Detector Phase	8	2	1	6
Switch Phase				
Minimum Initial (s)	4.0	7.0	4.0	7.0
Minimum Split (s)	8.9	12.5	8.4	12.7
Total Split (s)	44.9	65.5	34.4	65.7
Total Split (%)	31.0%	45.2%	23.8%	45.4%
Yellow Time (s)	3.9	4.5	3.4	4.7
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	5.5	4.4	5.7
Lead/Lag		Lag	Lead	
Lead-Lag Optimize?		Yes	Yes	
Recall Mode	None	Min	None	Min

Intersection Summary

Cycle Length: 144.8
Actuated Cycle Length: 66.5
Natural Cycle: 50
Control Type: Actuated-Uncoordinated

Splits and Phases: 52: Nobel Drive & Avenue of Flags



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	2	2	1223	10	4	654
Future Volume (vph)	2	2	1223	10	4	654
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9		5.5		4.4	5.7
Lane Util. Factor	1.00		0.95		1.00	0.95
Frt	0.93		1.00		1.00	1.00
Flt Protected	0.98		1.00		0.95	1.00
Satd. Flow (prot)	1695		3535		1770	3539
Flt Permitted	0.98		1.00		0.95	1.00
Satd. Flow (perm)	1695		3535		1770	3539
Peak-hour factor, PHF	0.25	0.25	0.88	0.88	0.97	0.97
Adj. Flow (vph)	8	8	1390	11	4	674
RTOR Reduction (vph)	8	0	0	0	0	0
Lane Group Flow (vph)	8	0	1401	0	4	674
Turn Type	Prot		NA		Prot	NA
Protected Phases	8		2		1	6
Permitted Phases						
Actuated Green, G (s)	0.9		57.9		0.7	62.8
Effective Green, g (s)	0.9		57.9		0.7	62.8
Actuated g/C Ratio	0.01		0.78		0.01	0.85
Clearance Time (s)	4.9		5.5		4.4	5.7
Vehicle Extension (s)	2.0		5.2		2.0	4.9
Lane Grp Cap (vph)	20		2754		16	2991
v/s Ratio Prot	c0.00		c0.40		0.00	c0.19
v/s Ratio Perm						
v/c Ratio	0.40		0.51		0.25	0.23
Uniform Delay, d1	36.4		3.0		36.5	1.1
Progression Factor	1.00		1.00		1.00	1.00
Incremental Delay, d2	4.8		0.3		3.0	0.1
Delay (s)	41.2		3.3		39.5	1.2
Level of Service	D		A		D	A
Approach Delay (s)	41.2		3.3			1.4
Approach LOS	D		A			A

Intersection Summary

HCM 2000 Control Delay	3.0	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	74.3	Sum of lost time (s)	14.8
Intersection Capacity Utilization	46.1%	ICU Level of Service	A
Analysis Period (min)	15		

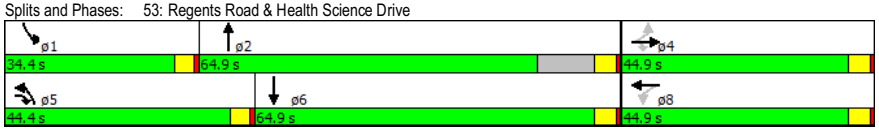
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	27	0	95	3	0	952	301	22	110
Future Volume (vph)	27	0	95	3	0	952	301	22	110
Turn Type	Perm	NA	pm+ov	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4	5		8	5	2	1	6
Permitted Phases	4		4	8					
Detector Phase	4	4	5	8	8	5	2	1	6
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	10.0	4.0	10.0
Minimum Split (s)	8.9	8.9	8.4	22.9	22.9	8.4	14.9	8.4	14.9
Total Split (s)	44.9	44.9	44.4	44.9	44.9	44.4	64.9	34.4	64.9
Total Split (%)	29.1%	29.1%	28.8%	29.1%	29.1%	28.8%	42.1%	22.3%	42.1%
Yellow Time (s)	3.9	3.9	3.4	3.9	3.9	3.4	3.9	3.4	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.9	4.4		4.9	4.4	4.9	4.4	4.9
Lead/Lag			Lead			Lead	Lag	Lead	Lag
Lead-Lag Optimize?			Yes			Yes	Yes	Yes	Yes
Recall Mode	None	None	Min	None	None	Min	None	None	None

Intersection Summary

Cycle Length: 154.2
Actuated Cycle Length: 68.8
Natural Cycle: 110
Control Type: Actuated-Uncoordinated

Splits and Phases: 53: Regents Road & Health Science Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	27	0	95	3	0	3	952	301	49	22	110	142
Future Volume (vph)	27	0	95	3	0	3	952	301	49	22	110	142
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9	4.4		4.9		4.4	4.9		4.4	4.9	
Lane Util. Factor		1.00	1.00		1.00		1.00	0.95		1.00	0.95	
Frt		1.00	0.85		0.93		1.00	0.98		1.00	0.92	
Flt Protected		0.95	1.00		0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1770	1583		1695		1770	3464		1770	3240	
Flt Permitted		1.00	1.00		0.83		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1863	1583		1436		1770	3464		1770	3240	
Peak-hour factor, PHF	0.93	0.93	0.93	0.80	0.80	0.80	0.85	0.85	0.85	0.80	0.80	0.80
Adj. Flow (vph)	29	0	102	4	0	4	1120	354	58	28	138	178
RTOR Reduction (vph)	0	0	38	0	8	0	0	5	0	0	147	0
Lane Group Flow (vph)	0	29	64	0	0	0	1120	407	0	28	169	0
Turn Type	Perm	NA	pm+ov	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4	5		8		5	2		1	6	
Permitted Phases	4		4	8								
Actuated Green, G (s)		3.7	45.0		3.7		41.3	51.4		2.3	12.4	
Effective Green, g (s)		3.7	45.0		3.7		41.3	51.4		2.3	12.4	
Actuated g/C Ratio		0.05	0.63		0.05		0.58	0.72		0.03	0.17	
Clearance Time (s)		4.9	4.4		4.9		4.4	4.9		4.4	4.9	
Vehicle Extension (s)		2.0	2.0		2.0		2.0	3.8		2.0	3.8	
Lane Grp Cap (vph)		96	994		74		1020	2486		56	561	
v/s Ratio Prot			0.04				c0.63	0.12		0.02	c0.05	
v/s Ratio Perm		c0.02	0.00		0.00							
v/c Ratio		0.30	0.06		0.01		1.10	0.16		0.50	0.30	
Uniform Delay, d1		32.7	5.1		32.2		15.1	3.2		34.1	25.8	
Progression Factor		1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.6	0.0		0.0		58.9	0.0		2.5	0.4	
Delay (s)		33.4	5.2		32.2		74.1	3.3		36.6	26.2	
Level of Service		C	A		C		E	A		D	C	
Approach Delay (s)		11.4			32.2			55.0			27.1	
Approach LOS		B			C			E			C	

Intersection Summary

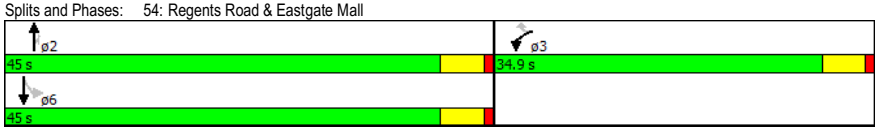
HCM 2000 Control Delay	47.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	71.6	Sum of lost time (s)	14.2
Intersection Capacity Utilization	76.2%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	247	421	798	361	89	170
Future Volume (vph)	247	421	798	361	89	170
Turn Type	Prot	Perm	NA	Perm	Perm	NA
Protected Phases	3		2			6
Permitted Phases		3		2	6	
Detector Phase	3	3	2	2	6	6
Switch Phase						
Minimum Initial (s)	4.0	4.0	7.0	7.0	7.0	7.0
Minimum Split (s)	8.9	8.9	12.0	12.0	12.0	12.0
Total Split (s)	34.9	34.9	45.0	45.0	45.0	45.0
Total Split (%)	43.7%	43.7%	56.3%	56.3%	56.3%	56.3%
Yellow Time (s)	3.9	3.9	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	5.0	5.0	5.0	5.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None	None	Min	Min	Min	Min

Intersection Summary
Cycle Length: 79.9
Actuated Cycle Length: 64.1
Natural Cycle: 45
Control Type: Actuated-Uncoordinated

Splits and Phases: 54: Regents Road & Eastgate Mall



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	247	421	798	361	89	170
Future Volume (vph)	247	421	798	361	89	170
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9	5.0	5.0	5.0	5.0
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.21	1.00
Satd. Flow (perm)	1770	1583	3539	1583	395	3539
Peak-hour factor, PHF	0.80	0.80	0.81	0.81	0.87	0.87
Adj. Flow (vph)	309	526	985	446	102	195
RTOR Reduction (vph)	0	50	0	231	0	0
Lane Group Flow (vph)	309	476	985	215	102	195
Turn Type	Prot	Perm	NA	Perm	Perm	NA
Protected Phases	3		2			6
Permitted Phases		3		2	6	
Actuated Green, G (s)	22.9	22.9	30.6	30.6	30.6	30.6
Effective Green, g (s)	22.9	22.9	30.6	30.6	30.6	30.6
Actuated g/C Ratio	0.36	0.36	0.48	0.48	0.48	0.48
Clearance Time (s)	4.9	4.9	5.0	5.0	5.0	5.0
Vehicle Extension (s)	2.0	2.0	3.4	3.4	3.5	3.5
Lane Grp Cap (vph)	639	571	1708	764	190	1708
v/s Ratio Prot	0.17		c0.28			0.06
v/s Ratio Perm		c0.30		0.14	0.26	
v/c Ratio	0.48	0.83	0.58	0.28	0.54	0.11
Uniform Delay, d1	15.7	18.5	11.8	9.8	11.5	9.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2	9.7	0.5	0.2	3.3	0.0
Delay (s)	15.9	28.2	12.3	10.1	14.7	9.0
Level of Service	B	C	B	B	B	A
Approach Delay (s)	23.6		11.6			11.0
Approach LOS	C		B			B

Intersection Summary			
HCM 2000 Control Delay	15.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	63.4	Sum of lost time (s)	9.9
Intersection Capacity Utilization	56.4%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	3	4	4	1	83	2	1007	96	268
Future Volume (vph)	3	4	4	1	83	2	1007	96	268
Turn Type	Perm	NA	Perm	NA	Perm	Prot	NA	Prot	NA
Protected Phases		4		8		5	2	1	6
Permitted Phases	4		8		8				
Detector Phase	4	4	8	8	8	5	2	1	6
Switch Phase									
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	4.0	10.0	4.0	10.0
Minimum Split (s)	11.9	11.9	11.9	11.9	11.9	8.4	14.9	8.4	14.9
Total Split (s)	34.9	34.9	44.9	44.9	44.9	34.4	64.9	34.4	64.9
Total Split (%)	24.2%	24.2%	31.1%	31.1%	31.1%	23.9%	45.0%	23.9%	45.0%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.9	3.4	3.9	3.4	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.9		4.9	4.9	4.4	4.9	4.4	4.9
Lead/Lag						Lead	Lag	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	None	Min

Intersection Summary

Cycle Length: 144.2
Actuated Cycle Length: 76.1
Natural Cycle: 60
Control Type: Actuated-Uncoordinated

Splits and Phases: 55: Regents Road & Executive Drive

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	4	2	4	1	83	2	1007	26	96	268	7
Future Volume (vph)	3	4	2	4	1	83	2	1007	26	96	268	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9			4.9	4.9	4.4	4.9		4.4	4.9	
Lane Util. Factor		1.00			1.00	1.00	1.00	0.95		1.00	0.95	
Frt		0.97			1.00	0.85	1.00	1.00		1.00	1.00	
Flt Protected		0.98			0.96	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1770			1788	1583	1770	3526		1770	3525	
Flt Permitted		0.92			0.83	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1663			1544	1583	1770	3526		1770	3525	
Peak-hour factor, PHF	0.80	0.80	0.80	0.82	0.82	0.82	0.82	0.82	0.82	0.80	0.80	0.80
Adj. Flow (vph)	4	5	2	5	1	101	2	1228	32	120	335	9
RTOR Reduction (vph)	0	3	0	0	0	89	0	1	0	0	1	0
Lane Group Flow (vph)	0	9	0	0	6	12	2	1259	0	120	343	0
Turn Type	Perm	NA		Perm	NA	Perm	Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8		8						
Actuated Green, G (s)		9.8			9.8	9.8	0.7	44.2		11.1	54.6	
Effective Green, g (s)		9.8			9.8	9.8	0.7	44.2		11.1	54.6	
Actuated g/C Ratio		0.12			0.12	0.12	0.01	0.56		0.14	0.69	
Clearance Time (s)		4.9			4.9	4.9	4.4	4.9		4.4	4.9	
Vehicle Extension (s)		2.0			3.1	3.1	2.0	3.1		2.0	3.1	
Lane Grp Cap (vph)		205			190	195	15	1965		247	2427	
v/s Ratio Prot							0.00	c0.36		c0.07	0.10	
v/s Ratio Perm		0.01			0.00	c0.01						
v/c Ratio		0.05			0.03	0.06	0.13	0.64		0.49	0.14	
Uniform Delay, d1		30.6			30.6	30.7	39.0	12.1		31.5	4.3	
Progression Factor		1.00			1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.0			0.1	0.1	1.5	0.7		0.5	0.0	
Delay (s)		30.7			30.6	30.8	40.5	12.8		32.0	4.3	
Level of Service		C			C	C	D	B		C	A	
Approach Delay (s)		30.7			30.8			12.9			11.5	
Approach LOS		C			C			B			B	

Intersection Summary

HCM 2000 Control Delay	13.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	79.3	Sum of lost time (s)	14.2
Intersection Capacity Utilization	52.6%	ICU Level of Service	A
Analysis Period (min)	15		

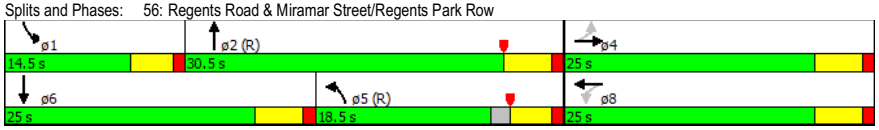
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	122	15	48	32	227	700	67	190
Future Volume (vph)	122	15	48	32	227	700	67	190
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	7.0	4.0	7.0
Minimum Split (s)	8.9	8.9	8.9	8.9	8.4	11.9	8.4	11.9
Total Split (s)	25.0	25.0	25.0	25.0	18.5	30.5	14.5	25.0
Total Split (%)	35.7%	35.7%	35.7%	35.7%	26.4%	43.6%	20.7%	35.7%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.4	3.9	3.4	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	4.9	4.9	4.4	4.9	4.4	4.9
Lead/Lag					Lag	Lag	Lead	Lead
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	C-Max	C-Max	None	Max

Intersection Summary

Cycle Length: 70
Actuated Cycle Length: 70
Offset: 10 (14%), Referenced to phase 2:NBT and 5:NBL, Start of Yellow
Natural Cycle: 50
Control Type: Actuated-Coordinated

Splits and Phases: 56: Regents Road & Miramar Street/Regents Park Row



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	122	15	201	48	32	87	227	700	199	67	190	66
Future Volume (vph)	122	15	201	48	32	87	227	700	199	67	190	66
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9		4.9	4.9		4.4	4.9		4.4	4.9	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frt	1.00	0.86		1.00	0.89		1.00	0.97		1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1602		1770	1658		1770	3422		1770	3402	
Flt Permitted	0.65	1.00		0.48	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1213	1602		887	1658		1770	3422		1770	3402	
Peak-hour factor, PHF	0.97	0.97	0.97	0.80	0.80	0.80	0.81	0.81	0.81	0.87	0.87	0.87
Adj. Flow (vph)	126	15	207	60	40	109	280	864	246	77	218	76
RTOR Reduction (vph)	0	168	0	0	88	0	0	29	0	0	42	0
Lane Group Flow (vph)	126	54	0	60	61	0	280	1081	0	77	252	0
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8								
Actuated Green, G (s)	13.3	13.3		13.3	13.3		15.6	36.0		6.5	26.9	
Effective Green, g (s)	13.3	13.3		13.3	13.3		15.6	36.0		6.5	26.9	
Actuated g/C Ratio	0.19	0.19		0.19	0.19		0.22	0.51		0.09	0.38	
Clearance Time (s)	4.9	4.9		4.9	4.9		4.4	4.9		4.4	4.9	
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	3.8		2.0	3.8	
Lane Grp Cap (vph)	230	304		168	315		394	1759		164	1307	
v/s Ratio Prot		0.03			0.04		c0.16	c0.32		c0.04	0.07	
v/s Ratio Perm	c0.10			0.07								
v/c Ratio	0.55	0.18		0.36	0.19		0.71	0.61		0.47	0.19	
Uniform Delay, d1	25.6	23.8		24.6	23.8		25.1	12.1		30.1	14.3	
Progression Factor	1.00	1.00		1.00	1.00		1.36	1.54		1.00	1.00	
Incremental Delay, d2	1.4	0.1		0.5	0.1		7.5	1.2		0.8	0.3	
Delay (s)	27.1	23.9		25.1	23.9		41.6	19.7		30.9	14.7	
Level of Service	C	C		C	C		D	B		C	B	
Approach Delay (s)		25.0			24.3			24.1			18.0	
Approach LOS		C			C			C			B	

Intersection Summary

HCM 2000 Control Delay	23.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	70.0	Sum of lost time (s)	14.2
Intersection Capacity Utilization	61.9%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	62	9	39	9	163	20	788	17	218
Future Volume (vph)	62	9	39	9	163	20	788	17	218
Turn Type	Perm	NA	Perm	NA	pm+ov	Prot	NA	Prot	NA
Protected Phases		4		8	1	5	2	1	6
Permitted Phases	4		8		8				
Detector Phase	4	4	8	8	1	5	2	1	6
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	10.0	4.0	10.0
Minimum Split (s)	8.9	8.9	8.9	8.9	8.4	8.4	15.2	8.4	15.3
Total Split (s)	44.9	44.9	44.9	44.9	34.4	34.4	65.2	34.4	65.3
Total Split (%)	31.1%	31.1%	31.1%	31.1%	23.8%	23.8%	45.1%	23.8%	45.2%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.4	3.4	4.2	3.4	4.3
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.9		4.9	4.4	4.4	5.2	4.4	5.3
Lead/Lag					Lead	Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 144.6
Actuated Cycle Length: 56.5
Natural Cycle: 40
Control Type: Actuated-Uncoordinated

Splits and Phases: 57: Regents Road & Plaza De Palmas

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	62	9	22	39	9	163	20	788	26	17	218	10
Future Volume (vph)	62	9	22	39	9	163	20	788	26	17	218	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9			4.9	4.4	4.4	5.2		4.4	5.3	
Lane Util. Factor		1.00			1.00	1.00	1.00	0.91		1.00	0.95	
Frt		0.97			1.00	0.85	1.00	1.00		1.00	0.99	
Flt Protected		0.97			0.96	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1744			1790	1583	1770	5061		1770	3515	
Flt Permitted		0.76			0.75	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1376			1399	1583	1770	5061		1770	3515	
Peak-hour factor, PHF	0.80	0.80	0.80	0.81	0.81	0.81	0.80	0.80	0.80	0.80	0.80	0.80
Adj. Flow (vph)	78	11	28	48	11	201	25	985	32	21	272	12
RTOR Reduction (vph)	0	9	0	0	0	33	0	2	0	0	2	0
Lane Group Flow (vph)	0	108	0	0	59	168	25	1016	0	21	284	0
Turn Type	Perm	NA		Perm	NA	pm+ov	Prot	NA		Prot	NA	
Protected Phases		4			8	1	5	2		1	6	
Permitted Phases	4			8		8						
Actuated Green, G (s)		10.3			10.3	16.3	2.1	29.0		6.0	32.8	
Effective Green, g (s)		10.3			10.3	16.3	2.1	29.0		6.0	32.8	
Actuated g/C Ratio		0.17			0.17	0.27	0.04	0.48		0.10	0.55	
Clearance Time (s)		4.9			4.9	4.4	4.4	5.2		4.4	5.3	
Vehicle Extension (s)		2.0			2.0	2.0	2.0	4.5		2.0	4.2	
Lane Grp Cap (vph)		237			240	431	62	2454		177	1927	
v/s Ratio Prot						c0.04	0.01	c0.20		0.01	c0.08	
v/s Ratio Perm		c0.08			0.04	0.07						
v/c Ratio		0.46			0.25	0.39	0.40	0.41		0.12	0.15	
Uniform Delay, d1		22.2			21.4	17.7	28.2	9.9		24.5	6.6	
Progression Factor		1.00			1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.5			0.2	0.2	1.6	0.2		0.1	0.1	
Delay (s)		22.7			21.6	17.9	29.8	10.1		24.6	6.7	
Level of Service		C			C	B	C	B		C	A	
Approach Delay (s)		22.7			18.8			10.6			7.9	
Approach LOS		C			B			B			A	

Intersection Summary

HCM 2000 Control Delay	12.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	59.8	Sum of lost time (s)	14.6
Intersection Capacity Utilization	43.2%	ICU Level of Service	A
Analysis Period (min)	15		

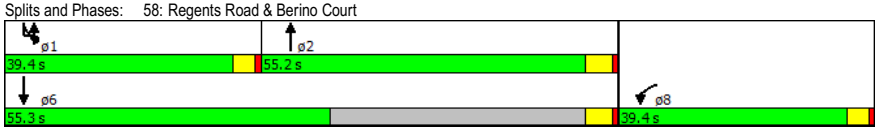
c Critical Lane Group

Lane Group	WBL	NBT	SBL	SBT
Lane Configurations				
Traffic Volume (vph)	114	217	233	153
Future Volume (vph)	114	217	233	153
Turn Type	Prot	NA	Prot	NA
Protected Phases	8	2	1	6
Permitted Phases				
Detector Phase	8	2	1	6
Switch Phase				
Minimum Initial (s)	4.0	7.0	4.0	7.0
Minimum Split (s)	8.4	12.2	8.4	23.3
Total Split (s)	39.4	55.2	39.4	55.3
Total Split (%)	29.4%	41.2%	29.4%	41.3%
Yellow Time (s)	3.4	4.2	3.4	4.3
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.2	4.4	5.3
Lead/Lag		Lag	Lead	
Lead-Lag Optimize?		Yes	Yes	
Recall Mode	None	None	None	None

Intersection Summary

Cycle Length: 134
Actuated Cycle Length: 84.2
Natural Cycle: 55
Control Type: Actuated-Uncoordinated

Splits and Phases: 58: Regents Road & Berino Court



Movement	WBL	WBR	NBT	NBR	SBU	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	114	137	217	185	89	233	153
Future Volume (vph)	114	137	217	185	89	233	153
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4		5.2			4.4	5.3
Lane Util. Factor	1.00		0.95			1.00	0.95
Frt	0.93		0.93			1.00	1.00
Flt Protected	0.98		1.00			0.95	1.00
Satd. Flow (prot)	1687		3295			1770	3539
Flt Permitted	0.98		1.00			0.95	1.00
Satd. Flow (perm)	1687		3295			1770	3539
Peak-hour factor, PHF	0.80	0.80	0.80	0.80	0.92	0.80	0.80
Adj. Flow (vph)	142	171	271	231	97	291	191
RTOR Reduction (vph)	0	0	147	0	0	0	0
Lane Group Flow (vph)	314	0	355	0	0	388	191
Turn Type	Prot		NA		Prot	Prot	NA
Protected Phases	8		2		1	1	6
Permitted Phases							
Actuated Green, G (s)	29.8		16.3			23.9	44.5
Effective Green, g (s)	29.8		16.3			23.9	44.5
Actuated g/C Ratio	0.35		0.19			0.28	0.53
Clearance Time (s)	4.4		5.2			4.4	5.3
Vehicle Extension (s)	2.0		3.9			2.0	3.7
Lane Grp Cap (vph)	598		639			503	1874
v/s Ratio Prot	c0.19		c0.11			c0.22	0.05
v/s Ratio Perm							
v/c Ratio	0.53		0.55			0.77	0.10
Uniform Delay, d1	21.5		30.6			27.5	9.8
Progression Factor	1.00		1.00			1.00	1.00
Incremental Delay, d2	0.4		1.3			6.6	0.0
Delay (s)	21.9		31.8			34.1	9.8
Level of Service	C		C			C	A
Approach Delay (s)	21.9		31.8				26.1
Approach LOS	C		C				C

Intersection Summary

HCM 2000 Control Delay	27.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	84.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	56.2%	ICU Level of Service	B
Analysis Period (min)	15		

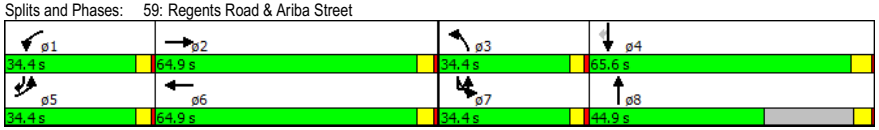
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	147	120	7	172	10	20	99	7	86
Future Volume (vph)	147	120	7	172	10	20	99	7	86
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA	pm+ov
Protected Phases	5	2	1	6	3	8	7	4	5
Permitted Phases									4
Detector Phase	5	2	1	6	3	8	7	4	5
Switch Phase									
Minimum Initial (s)	4.0	7.0	4.0	7.0	4.0	7.0	4.0	7.0	4.0
Minimum Split (s)	8.4	11.9	8.4	11.9	8.4	11.9	8.4	12.6	8.4
Total Split (s)	34.4	64.9	34.4	64.9	34.4	44.9	34.4	65.6	34.4
Total Split (%)	17.3%	32.6%	17.3%	32.6%	17.3%	22.5%	17.3%	32.9%	17.3%
Yellow Time (s)	3.4	3.9	3.4	3.9	3.4	3.9	3.4	4.6	3.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	4.9	4.4	4.9	4.4	4.9	4.4	5.6	4.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 199.3
Actuated Cycle Length: 95.1
Natural Cycle: 60
Control Type: Actuated-Uncoordinated

Splits and Phases: 59: Regents Road & Ariba Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	147	120	14	7	172	109	10	20	24	99	99	7
Future Volume (vph)	147	120	14	7	172	109	10	20	24	99	99	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	4.9		4.4	4.9			4.4	5.6
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95			1.00	0.95
Frt	1.00	0.98		1.00	0.94		1.00	0.92			1.00	1.00
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			0.95	1.00
Satd. Flow (prot)	1770	3482		1770	3334		1770	3250			1770	3539
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00			0.95	1.00
Satd. Flow (perm)	1770	3482		1770	3334		1770	3250			1770	3539
Peak-hour factor, PHF	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.92	0.80	0.80
Adj. Flow (vph)	184	150	18	9	215	136	12	25	30	108	124	9
RTOR Reduction (vph)	0	4	0	0	49	0	0	27	0	0	0	0
Lane Group Flow (vph)	184	164	0	9	302	0	13	28	0	0	232	9
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	Prot	NA
Protected Phases	5	2		1	6		3	8		7	7	4
Permitted Phases												
Actuated Green, G (s)	16.3	47.6		1.0	32.3		2.0	10.7			21.1	29.1
Effective Green, g (s)	16.3	47.6		1.0	32.3		2.0	10.7			21.1	29.1
Actuated g/C Ratio	0.16	0.48		0.01	0.33		0.02	0.11			0.21	0.29
Clearance Time (s)	4.4	4.9		4.4	4.9		4.4	4.9			4.4	5.6
Vehicle Extension (s)	2.0	6.3		2.0	5.9		2.0	4.8			2.0	4.4
Lane Grp Cap (vph)	291	1674		17	1087		35	351			377	1040
v/s Ratio Prot	c0.10	0.05		0.01	c0.09		0.01	c0.01			c0.13	0.00
v/s Ratio Perm												
v/c Ratio	0.63	0.10		0.53	0.28		0.37	0.08			0.62	0.01
Uniform Delay, d1	38.6	14.0		48.8	24.7		47.9	39.7			35.3	24.7
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2	3.3	0.1		13.0	0.4		2.4	0.2			2.1	0.0
Delay (s)	41.8	14.1		61.8	25.1		50.3	39.9			37.4	24.7
Level of Service	D	B		E	C		D	D			D	C
Approach Delay (s)		28.6			26.0			41.9				30.1
Approach LOS		C			C			D				C

Intersection Summary

HCM 2000 Control Delay	29.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.42		
Actuated Cycle Length (s)	99.0	Sum of lost time (s)	19.3
Intersection Capacity Utilization	46.4%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

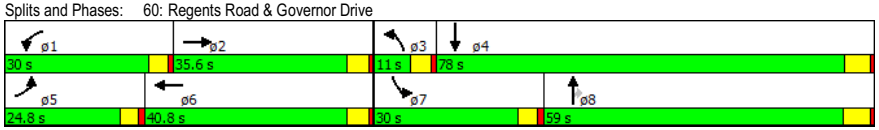
Movement	SBR
Lane Configurations	
Traffic Volume (vph)	86
Future Volume (vph)	86
Ideal Flow (vphpl)	1900
Total Lost time (s)	4.4
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1583
Flt Permitted	1.00
Satd. Flow (perm)	1583
Peak-hour factor, PHF	0.80
Adj. Flow (vph)	108
RTOR Reduction (vph)	58
Lane Group Flow (vph)	50
Turn Type	pm+ov
Protected Phases	5
Permitted Phases	4
Actuated Green, G (s)	45.4
Effective Green, g (s)	45.4
Actuated g/C Ratio	0.46
Clearance Time (s)	4.4
Vehicle Extension (s)	2.0
Lane Grp Cap (vph)	725
v/s Ratio Prot	0.01
v/s Ratio Perm	0.02
v/c Ratio	0.07
Uniform Delay, d1	15.0
Progression Factor	1.00
Incremental Delay, d2	0.0
Delay (s)	15.0
Level of Service	B
Approach Delay (s)	
Approach LOS	

Intersection Summary

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	9	206	403	169	36	53	412	36	31
Future Volume (vph)	9	206	403	169	36	53	412	36	31
Turn Type	Prot	NA	Prot	NA	Prot	NA	Perm	Prot	NA
Protected Phases	5	2	1	6	3	8		7	4
Permitted Phases							8		
Detector Phase	5	2	1	6	3	8	8	7	4
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	7.0	5.0	7.0	7.0	5.0	4.0
Minimum Split (s)	8.4	32.9	8.4	33.9	9.5	34.8	34.8	9.5	35.5
Total Split (s)	24.8	35.6	30.0	40.8	11.0	59.0	59.0	30.0	78.0
Total Split (%)	16.0%	23.0%	19.4%	26.4%	7.1%	38.2%	38.2%	19.4%	50.5%
Yellow Time (s)	3.4	3.9	3.4	3.9	3.5	4.8	4.8	3.5	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	4.9	4.4	4.9	4.5	5.8	5.8	4.5	5.5
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Min	None	Min	None	None	None	None	None

Intersection Summary
Cycle Length: 154.6
Actuated Cycle Length: 80.8
Natural Cycle: 110
Control Type: Actuated-Uncoordinated

Splits and Phases: 60: Regents Road & Governor Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	9	206	38	403	169	14	36	53	412	36	31	11
Future Volume (vph)	9	206	38	403	169	14	36	53	412	36	31	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	4.9		4.5	5.8	5.8	4.5	5.5	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00	1.00	1.00	0.95	
Frt	1.00	0.98		1.00	0.99		1.00	1.00	0.85	1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3456		1770	3497		1770	1863	1583	1770	3401	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	3456		1770	3497		1770	1863	1583	1770	3401	
Peak-hour factor, PHF	0.80	0.80	0.80	0.80	0.80	0.80	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	11	258	48	504	211	18	40	59	458	40	34	12
RTOR Reduction (vph)	0	9	0	0	2	0	0	0	388	0	10	0
Lane Group Flow (vph)	11	297	0	504	227	0	40	59	70	40	36	0
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases									8			
Actuated Green, G (s)	0.9	21.5		27.2	47.8		3.4	13.2	13.2	4.5	14.6	
Effective Green, g (s)	0.9	21.5		27.2	47.8		3.4	13.2	13.2	4.5	14.6	
Actuated g/C Ratio	0.01	0.25		0.32	0.56		0.04	0.15	0.15	0.05	0.17	
Clearance Time (s)	4.4	4.9		4.4	4.9		4.5	5.8	5.8	4.5	5.5	
Vehicle Extension (s)	2.0	4.5		2.0	5.0		3.0	4.6	4.6	3.0	2.0	
Lane Grp Cap (vph)	18	864		559	1943		69	285	242	92	577	
v/s Ratio Prot	0.01	c0.09		c0.28	0.06		c0.02	0.03		0.02	0.01	
v/s Ratio Perm									c0.04			
v/c Ratio	0.61	0.34		0.90	0.12		0.58	0.21	0.29	0.43	0.06	
Uniform Delay, d1	42.4	26.5		28.1	9.1		40.6	31.8	32.3	39.5	30.0	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	36.2	0.4		17.4	0.1		11.3	0.7	1.2	3.3	0.0	
Delay (s)	78.6	26.9		45.5	9.1		51.9	32.5	33.5	42.8	30.0	
Level of Service	E	C		D	A		D	C	C	D	C	
Approach Delay (s)		28.7			34.1			34.7			35.9	
Approach LOS		C			C			C			D	

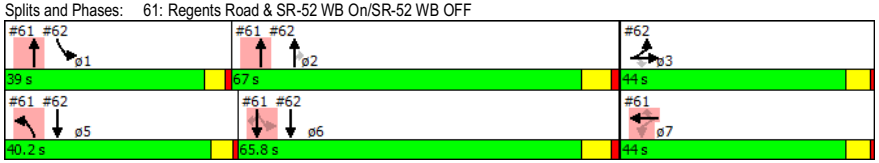
Intersection Summary			
HCM 2000 Control Delay	33.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	86.0	Sum of lost time (s)	19.6
Intersection Capacity Utilization	50.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	WBT	WBR	NBL	NBT	SBL	SBT	SBR	ø1	ø2	ø3
Lane Configurations										
Traffic Volume (vph)	1	142	592	767	1	421	390			
Future Volume (vph)	1	142	592	767	1	421	390			
Turn Type	NA	Perm	Prot	NA	Perm	NA	Perm			
Protected Phases	7		5	1 2		6		1	2	3
Permitted Phases		7			6		6			
Detector Phase	7	7	5	1 2	6	6	6			
Switch Phase										
Minimum Initial (s)	5.0	5.0	5.0		13.0	13.0	13.0	5.0	13.0	5.0
Minimum Split (s)	10.1	10.1	9.7		23.7	23.7	23.7	22.7	23.7	10.1
Total Split (s)	44.0	44.0	40.2		65.8	65.8	65.8	39.0	67.0	44.0
Total Split (%)	29.3%	29.3%	26.8%		43.9%	43.9%	43.9%	26%	45%	29%
Yellow Time (s)	4.1	4.1	3.7		5.2	5.2	5.2	3.7	5.2	4.1
All-Red Time (s)	1.0	1.0	1.0		1.5	1.5	1.5	1.0	1.5	1.0
Lost Time Adjust (s)	0.0	0.0	0.0			0.0	0.0			
Total Lost Time (s)	5.1	5.1	4.7			6.7	6.7			
Lead/Lag			Lead		Lag	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?			Yes		Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None	None		Max	Max	Max	None	Max	None

Intersection Summary
Cycle Length: 150
Actuated Cycle Length: 146.7
Natural Cycle: 90
Control Type: Actuated-Uncoordinated

Splits and Phases: 61: Regents Road & SR-52 WB On/SR-52 WB OFF



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	337	1	142	592	767	0	1	421	390
Future Volume (vph)	0	0	0	337	1	142	592	767	0	1	421	390
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					5.1	5.1	4.7	4.7			6.7	6.7
Lane Util. Factor					1.00	1.00	0.97	0.95			0.95	1.00
Frt					1.00	0.85	1.00	1.00			1.00	0.85
Flt Protected					0.95	1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)					1774	1583	3433	3539			3539	1583
Flt Permitted					0.95	1.00	0.95	1.00			0.95	1.00
Satd. Flow (perm)					1774	1583	3433	3539			3377	1583
Peak-hour factor, PHF	0.25	0.25	0.25	0.80	0.80	0.80	0.96	0.96	0.96	0.89	0.89	0.89
Adj. Flow (vph)	0	0	0	421	1	178	617	799	0	1	473	438
RTOR Reduction (vph)	0	0	0	0	0	98	0	0	0	0	0	255
Lane Group Flow (vph)	0	0	0	0	422	80	617	799	0	0	474	183
Turn Type				Perm	NA	Perm	Prot	NA		Perm	NA	Perm
Protected Phases					7		5	1 2			6	
Permitted Phases				7		7				6		6
Actuated Green, G (s)					36.8	36.8	32.0	98.1			61.4	61.4
Effective Green, g (s)					36.8	36.8	32.0	98.1			61.4	61.4
Actuated g/C Ratio					0.25	0.25	0.22	0.67			0.42	0.42
Clearance Time (s)					5.1	5.1	4.7				6.7	6.7
Vehicle Extension (s)					2.0	2.0	2.0				3.0	3.0
Lane Grp Cap (vph)					445	397	748	2366			1413	662
v/s Ratio Prot							c0.18	c0.23				
v/s Ratio Perm					0.24	0.05					0.14	0.12
v/c Ratio					0.95	0.20	0.82	0.34			0.34	0.28
Uniform Delay, d1					54.0	43.4	54.7	10.4			28.8	28.1
Progression Factor					1.00	1.00	1.37	0.93			1.00	1.00
Incremental Delay, d2					29.3	0.1	4.5	0.1			0.6	1.0
Delay (s)					83.3	43.4	79.2	9.7			29.5	29.1
Level of Service					F	D	E	A			C	C
Approach Delay (s)		0.0			71.5			40.0			29.3	
Approach LOS		A			E			D			C	

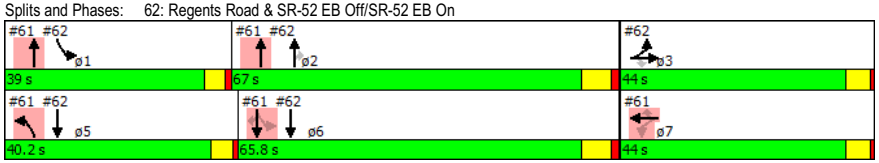
Intersection Summary			
HCM 2000 Control Delay	43.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	146.7	Sum of lost time (s)	16.5
Intersection Capacity Utilization	77.8%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	EBR	NBT	NBR	SBL	SBT	ø5	ø6	ø7
Lane Configurations										
Traffic Volume (vph)	268	0	168	1155	466	285	442			
Future Volume (vph)	268	0	168	1155	466	285	442			
Turn Type	Split	NA	Perm	NA	Perm	Prot	NA			
Protected Phases	3	3		2		1	5 6	5	6	7
Permitted Phases			3		2					
Detector Phase	3	3	3	2	2	1	5 6			
Switch Phase										
Minimum Initial (s)	5.0	5.0	5.0	13.0	13.0	5.0		5.0	13.0	5.0
Minimum Split (s)	10.1	10.1	10.1	23.7	23.7	22.7		9.7	23.7	10.1
Total Split (s)	44.0	44.0	44.0	67.0	67.0	39.0		40.2	65.8	44.0
Total Split (%)	29.3%	29.3%	29.3%	44.7%	44.7%	26.0%		27%	44%	29%
Yellow Time (s)	4.1	4.1	4.1	5.2	5.2	3.7		3.7	5.2	4.1
All-Red Time (s)	1.0	1.0	1.0	1.5	1.5	1.0		1.0	1.5	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0				
Total Lost Time (s)	5.1	5.1	5.1	6.7	6.7	4.7				
Lead/Lag				Lag	Lag	Lead		Lead	Lag	
Lead-Lag Optimize?				Yes	Yes	Yes		Yes	Yes	
Recall Mode	None	None	None	Max	Max	None		None	Max	None

Intersection Summary
Cycle Length: 150
Actuated Cycle Length: 146.7
Natural Cycle: 90
Control Type: Actuated-Uncoordinated

Splits and Phases: 62: Regents Road & SR-52 EB Off/SR-52 EB On



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	268	0	168	0	0	0	0	1155	466	285	442	0
Future Volume (vph)	268	0	168	0	0	0	0	1155	466	285	442	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1	5.1					6.7	6.7	4.7	4.7	
Lane Util. Factor	0.95	0.95	1.00					0.95	1.00	1.00	0.95	
Frt	1.00	1.00	0.85					1.00	0.85	1.00	1.00	
Flt Protected	0.95	0.95	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1681	1681	1583					3539	1583	1770	3539	
Flt Permitted	0.95	0.95	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1681	1681	1583					3539	1583	1770	3539	
Peak-hour factor, PHF	0.80	0.80	0.80	0.25	0.25	0.25	0.91	0.91	0.91	0.80	0.80	0.80
Adj. Flow (vph)	335	0	210	0	0	0	0	1269	512	356	552	0
RTOR Reduction (vph)	0	0	91	0	0	0	0	0	54	0	0	0
Lane Group Flow (vph)	167	168	119	0	0	0	0	1269	458	356	553	0
Turn Type	Split	NA	Perm					NA	Perm	Prot	NA	
Protected Phases	3	3						2		1	5 6	
Permitted Phases			3						2			
Actuated Green, G (s)	36.8	36.8	36.8					60.5	60.5	32.9	98.1	
Effective Green, g (s)	36.8	36.8	36.8					60.5	60.5	32.9	98.1	
Actuated g/C Ratio	0.25	0.25	0.25					0.41	0.41	0.22	0.67	
Clearance Time (s)	5.1	5.1	5.1					6.7	6.7	4.7		
Vehicle Extension (s)	2.0	2.0	2.0					3.0	3.0	3.0		
Lane Grp Cap (vph)	421	421	397					1459	652	396	2366	
v/s Ratio Prot	0.10	c0.10						c0.36		c0.20	c0.16	
v/s Ratio Perm			0.07						0.29			
v/c Ratio	0.40	0.40	0.30					0.87	0.70	0.90	0.23	
Uniform Delay, d1	45.7	45.7	44.5					39.5	35.7	55.3	9.5	
Progression Factor	1.00	1.00	1.00					1.00	1.00	1.17	1.23	
Incremental Delay, d2	0.2	0.2	0.2					7.3	6.2	19.0	0.0	
Delay (s)	45.9	46.0	44.7					46.8	41.9	84.0	11.8	
Level of Service	D	D	D					D	D	F	B	
Approach Delay (s)		45.5			0.0			45.4			40.1	
Approach LOS		D			A			D			D	

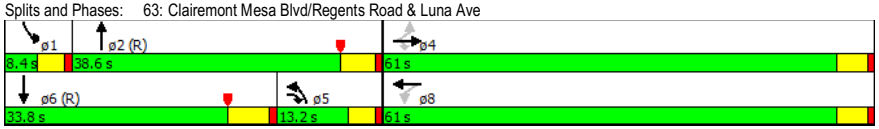
Intersection Summary				
HCM 2000 Control Delay	43.9	HCM 2000 Level of Service	D	
HCM 2000 Volume to Capacity ratio	0.74			
Actuated Cycle Length (s)	146.7	Sum of lost time (s)	16.5	
Intersection Capacity Utilization	68.9%	ICU Level of Service	C	
Analysis Period (min)	15			

c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	582	5	87	7	11	112	1003	11	319
Future Volume (vph)	582	5	87	7	11	112	1003	11	319
Turn Type	Perm	NA	pm+ov	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4	5		8	5	2	1	6
Permitted Phases	4		4	8					
Detector Phase	4	4	5	8	8	5	2	1	6
Switch Phase									
Minimum Initial (s)	10.0	10.0	4.0	1.0	1.0	4.0	10.0	4.0	4.0
Minimum Split (s)	14.9	14.9	8.4	5.9	5.9	8.4	15.3	8.4	10.2
Total Split (s)	61.0	61.0	13.2	61.0	61.0	13.2	38.6	8.4	33.8
Total Split (%)	56.5%	56.5%	12.2%	56.5%	56.5%	12.2%	35.7%	7.8%	31.3%
Yellow Time (s)	3.9	3.9	3.4	3.9	3.9	3.4	4.3	3.4	5.2
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.9	4.4		4.9	4.4	5.3	4.4	6.2
Lead/Lag			Lag			Lag	Lag	Lead	Lead
Lead-Lag Optimize?			Yes			Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	None	C-Max

Intersection Summary
Cycle Length: 108
Actuated Cycle Length: 108
Offset: 78 (72%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 110
Control Type: Actuated-Coordinated

Splits and Phases: 63: Clairemont Mesa Blvd/Regents Road & Luna Ave



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	582	5	87	7	11	85	112	1003	5	11	319	262
Future Volume (vph)	582	5	87	7	11	85	112	1003	5	11	319	262
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9	4.4		4.9		4.4	5.3		4.4	6.2	
Lane Util. Factor		1.00	1.00		1.00		1.00	0.95		1.00	0.95	
Frt		1.00	0.85		0.89		1.00	1.00		1.00	0.93	
Flt Protected		0.95	1.00		1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1775	1583		1650		1770	3537		1770	3300	
Flt Permitted		0.65	1.00		0.96		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1219	1583		1584		1770	3537		1770	3300	
Peak-hour factor, PHF	0.87	0.87	0.87	0.80	0.80	0.80	0.94	0.94	0.94	0.80	0.80	0.80
Adj. Flow (vph)	669	6	100	9	14	106	119	1067	5	14	399	328
RTOR Reduction (vph)	0	0	38	0	51	0	0	0	0	0	143	0
Lane Group Flow (vph)	0	675	63	0	78	0	119	1072	0	14	584	0
Turn Type	Perm	NA	pm+ov	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4	5		8		5	2		1	6	
Permitted Phases	4		4	8								
Actuated Green, G (s)		56.1	67.5		56.1		11.4	35.7		1.6	25.0	
Effective Green, g (s)		56.1	67.5		56.1		11.4	35.7		1.6	25.0	
Actuated g/C Ratio		0.52	0.62		0.52		0.11	0.33		0.01	0.23	
Clearance Time (s)		4.9	4.4		4.9		4.4	5.3		4.4	6.2	
Vehicle Extension (s)		4.0	2.0		2.0		2.0	4.4		2.0	3.2	
Lane Grp Cap (vph)		633	1053		822		186	1169		26	763	
v/s Ratio Prot			0.01				0.07	c0.30		0.01	c0.18	
v/s Ratio Perm		c0.55	0.03		0.05							
v/c Ratio		1.07	0.06		0.09		0.64	0.92		0.54	0.77	
Uniform Delay, d1		25.9	7.9		13.1		46.3	34.7		52.8	38.8	
Progression Factor		1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		54.8	0.0		0.0		5.2	12.7		10.3	7.2	
Delay (s)		80.7	7.9		13.1		51.6	47.4		63.1	46.0	
Level of Service		F	A		B		D	D		E	D	
Approach Delay (s)		71.3			13.1			47.8			46.3	
Approach LOS		E			B			D			D	

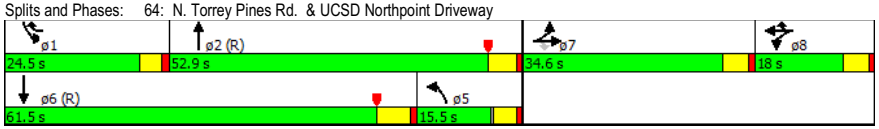
Intersection Summary			
HCM 2000 Control Delay	52.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.03		
Actuated Cycle Length (s)	108.0	Sum of lost time (s)	15.5
Intersection Capacity Utilization	82.6%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	22	16	39	17	45	76	674	129	505
Future Volume (vph)	22	16	39	17	45	76	674	129	505
Turn Type	NA	Perm	Split	NA	pt+ov	Prot	NA	Prot	NA
Protected Phases	7		8	8	8 1	5	2	1	6
Permitted Phases		7							
Detector Phase	7	7	8	8	8 1	5	2	1	6
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	4.0		4.0	10.0	4.0	10.0
Minimum Split (s)	8.9	8.9	8.9	8.9		8.4	15.3	8.4	15.9
Total Split (s)	34.6	34.6	18.0	18.0		15.5	52.9	24.5	61.5
Total Split (%)	26.6%	26.6%	13.8%	13.8%		11.9%	40.7%	18.8%	47.3%
Yellow Time (s)	3.9	3.9	3.9	3.9		3.4	4.3	3.4	4.9
All-Red Time (s)	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	4.9	4.9		4.4	5.3	4.4	5.9
Lead/Lag	Lead	Lead	Lag	Lag		Lag	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None		None	C-Max	None	C-Max

Intersection Summary
Cycle Length: 130
Actuated Cycle Length: 130
Offset: 72 (55%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 55
Control Type: Actuated-Coordinated

Splits and Phases: 64: N. Torrey Pines Rd. & UCSD Northpoint Driveway



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	22	16	39	17	45	76	674	112	129	505	59
Future Volume (vph)	10	22	16	39	17	45	76	674	112	129	505	59
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9	4.9	4.9	4.9	4.9	4.4	5.3		4.4	5.9	
Lane Util. Factor		1.00	1.00	1.00	1.00	1.00	1.00	0.95		0.97	0.95	
Frt		1.00	0.85	1.00	1.00	0.85	1.00	0.98		1.00	0.98	
Flt Protected		0.98	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1835	1583	1770	1863	1583	1770	3463		3433	3484	
Flt Permitted		0.98	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1835	1583	1770	1863	1583	1770	3463		3433	3484	
Peak-hour factor, PHF	0.89	0.89	0.89	0.80	0.80	0.80	0.89	0.89	0.89	0.91	0.91	0.91
Adj. Flow (vph)	11	25	18	49	21	56	85	757	126	142	555	65
RTOR Reduction (vph)	0	0	16	0	0	47	0	6	0	0	5	0
Lane Group Flow (vph)	0	36	2	49	21	9	85	877	0	142	615	0
Turn Type	Split	NA	Perm	Split	NA	pt+ov	Prot	NA		Prot	NA	
Protected Phases	7	7		8	8	8 1	5	2		1	6	
Permitted Phases			7									
Actuated Green, G (s)		14.4	14.4	7.1	7.1	21.8	11.6	79.2		9.8	76.8	
Effective Green, g (s)		14.4	14.4	7.1	7.1	21.8	11.6	79.2		9.8	76.8	
Actuated g/C Ratio		0.11	0.11	0.05	0.05	0.17	0.09	0.61		0.08	0.59	
Clearance Time (s)		4.9	4.9	4.9	4.9		4.4	5.3		4.4	5.9	
Vehicle Extension (s)		2.0	2.0	2.0	2.0		2.0	4.8		2.0	4.7	
Lane Grp Cap (vph)		203	175	96	101	265	157	2109		258	2058	
v/s Ratio Prot		c0.02		c0.03	0.01	0.01	c0.05	c0.25		c0.04	0.18	
v/s Ratio Perm			0.00									
v/c Ratio		0.18	0.01	0.51	0.21	0.04	0.54	0.42		0.55	0.30	
Uniform Delay, d1		52.4	51.5	59.8	58.8	45.3	56.7	13.3		58.0	13.2	
Progression Factor		1.00	1.00	1.00	1.00	1.00	1.00	1.00		0.79	1.37	
Incremental Delay, d2		0.2	0.0	1.9	0.4	0.0	2.0	0.6		1.3	0.3	
Delay (s)		52.6	51.5	61.7	59.1	45.3	58.7	13.9		47.1	18.4	
Level of Service		D	D	E	E	D	E	B		D	B	
Approach Delay (s)		52.2			54.0			17.8			23.7	
Approach LOS		D			D			B			C	

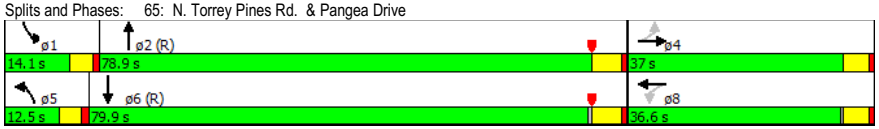
Intersection Summary			
HCM 2000 Control Delay	23.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	20.1
Intersection Capacity Utilization	46.9%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	9	0	13	0	10	1084	39	387
Future Volume (vph)	9	0	13	0	10	1084	39	387
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	7.0	7.0	7.0	7.0	4.0	10.0	4.0	10.0
Minimum Split (s)	11.9	11.9	11.9	11.9	8.4	15.3	8.4	15.3
Total Split (s)	37.0	37.0	36.6	36.6	12.5	78.9	14.1	79.9
Total Split (%)	28.5%	28.5%	28.2%	28.2%	9.6%	60.7%	10.8%	61.5%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.4	4.3	3.4	4.3
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.9	4.9	4.9	4.4	5.3	4.4	5.3
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	None	C-Max

Intersection Summary
Cycle Length: 130
Actuated Cycle Length: 130
Offset: 59 (45%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 55
Control Type: Actuated-Coordinated

Splits and Phases: 65: N. Torrey Pines Rd. & Pangea Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	9	0	10	13	0	14	10	1084	53	39	387	10
Future Volume (vph)	9	0	10	13	0	14	10	1084	53	39	387	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9		4.9	4.9		4.4	5.3		4.4	5.3	
Lane Util. Factor		1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frt		0.93		1.00	0.85		1.00	0.99		1.00	1.00	
Flt Protected		0.98		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1688		1770	1583		1770	3514		1770	3526	
Flt Permitted		0.88		0.74	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1526		1381	1583		1770	3514		1770	3526	
Peak-hour factor, PHF	0.80	0.80	0.80	0.81	0.81	0.81	0.90	0.90	0.90	0.93	0.93	0.93
Adj. Flow (vph)	11	0	12	16	0	17	11	1204	59	42	416	11
RTOR Reduction (vph)	0	22	0	0	15	0	0	2	0	0	1	0
Lane Group Flow (vph)	0	2	0	16	2	0	11	1261	0	42	426	0
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8								
Actuated Green, G (s)		13.4		13.4	13.4		2.5	95.4		6.6	99.5	
Effective Green, g (s)		13.4		13.4	13.4		2.5	95.4		6.6	99.5	
Actuated g/C Ratio		0.10		0.10	0.10		0.02	0.73		0.05	0.77	
Clearance Time (s)		4.9		4.9	4.9		4.4	5.3		4.4	5.3	
Vehicle Extension (s)		2.0		2.0	2.0		2.0	5.7		2.0	5.5	
Lane Grp Cap (vph)		157		142	163		34	2578		89	2698	
v/s Ratio Prot					0.00		0.01	c0.36		c0.02	c0.12	
v/s Ratio Perm		0.00		c0.01								
v/c Ratio		0.02		0.11	0.01		0.32	0.49		0.47	0.16	
Uniform Delay, d1		52.4		52.9	52.3		62.9	7.2		60.0	4.1	
Progression Factor		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.0		0.1	0.0		2.0	0.7		1.4	0.1	
Delay (s)		52.4		53.0	52.4		64.9	7.9		61.4	4.2	
Level of Service		D		D	D		E	A		E	A	
Approach Delay (s)		52.4			52.7			8.3			9.3	
Approach LOS		D			D			A			A	

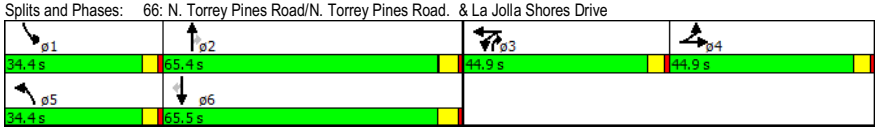
Intersection Summary			
HCM 2000 Control Delay	10.0	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.44		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	14.6
Intersection Capacity Utilization	48.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	203	13	25	21	176	1537	62	29	276	131
Future Volume (vph)	203	13	25	21	176	1537	62	29	276	131
Turn Type	Split	NA	Split	NA	Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	4	4	3	3	5	2	3	1	6	
Permitted Phases							2			6
Detector Phase	4	4	3	3	5	2	3	1	6	6
Switch Phase										
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	10.0	4.0	4.0	10.0	10.0
Minimum Split (s)	8.9	8.9	8.9	8.9	8.4	15.4	8.9	8.4	15.5	15.5
Total Split (s)	44.9	44.9	44.9	44.9	34.4	65.4	44.9	34.4	65.5	65.5
Total Split (%)	23.7%	23.7%	23.7%	23.7%	18.1%	34.5%	23.7%	18.1%	34.5%	34.5%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.4	4.4	3.9	3.4	4.5	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	4.9	4.9	4.4	5.4	4.9	4.4	5.5	5.5
Lead/Lag	Lag	Lag	Lead	Lead	Lead	Lag	Lead	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 189.7
Actuated Cycle Length: 139.3
Natural Cycle: 90
Control Type: Actuated-Uncoordinated

Splits and Phases: 66: N. Torrey Pines Road/N. Torrey Pines Road. & La Jolla Shores Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	203	13	122	25	21	62	176	1537	62	29	276	131
Future Volume (vph)	203	13	122	25	21	62	176	1537	62	29	276	131
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9		4.9	4.9		4.4	5.4	4.9	4.4	5.5	5.5
Lane Util. Factor	0.95	0.95		0.97	1.00		1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	0.89		1.00	0.89		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	0.99		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1681	1555		3433	1653		1770	3539	1583	1770	3539	1583
Flt Permitted	0.95	0.99		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1681	1555		3433	1653		1770	3539	1583	1770	3539	1583
Peak-hour factor, PHF	0.90	0.90	0.90	0.80	0.80	0.80	0.93	0.93	0.93	0.80	0.80	0.80
Adj. Flow (vph)	226	14	136	31	26	78	189	1653	67	36	345	164
RTOR Reduction (vph)	0	62	0	0	59	0	0	0	13	0	0	0
Lane Group Flow (vph)	197	117	0	31	45	0	189	1653	54	36	345	164
Turn Type	Split	NA		Split	NA		Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	4	4		3	3		5	2	3	1	6	
Permitted Phases									2			6
Actuated Green, G (s)	25.6	25.6		25.7	25.7		19.1	62.8	88.5	6.1	49.7	49.7
Effective Green, g (s)	25.6	25.6		25.7	25.7		19.1	62.8	88.5	6.1	49.7	49.7
Actuated g/C Ratio	0.18	0.18		0.18	0.18		0.14	0.45	0.63	0.04	0.36	0.36
Clearance Time (s)	4.9	4.9		4.9	4.9		4.4	5.4	4.9	4.4	5.5	5.5
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	4.0	2.0	2.0	3.9	3.9
Lane Grp Cap (vph)	307	284		631	303		241	1589	1002	77	1258	562
v/s Ratio Prot	c0.12	0.08		0.01	c0.03		c0.11	c0.47	0.01	0.02	0.10	
v/s Ratio Perm									0.02			0.10
v/c Ratio	0.64	0.41		0.05	0.15		0.78	1.04	0.05	0.47	0.27	0.29
Uniform Delay, d1	52.9	50.4		47.0	47.9		58.4	38.5	9.7	65.3	32.2	32.4
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	3.4	0.4		0.0	0.1		14.2	33.8	0.0	1.6	0.2	0.4
Delay (s)	56.3	50.8		47.0	48.0		72.6	72.3	9.8	66.9	32.3	32.8
Level of Service	E	D		D	D		E	E	A	E	C	C
Approach Delay (s)		53.7			47.7			70.1			34.7	
Approach LOS		D			D			E			C	

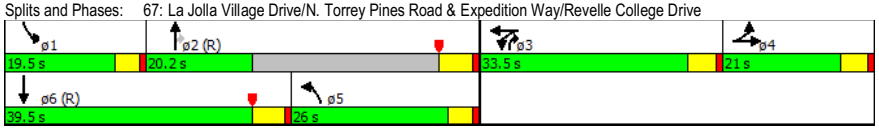
Intersection Summary			
HCM 2000 Control Delay	60.5	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	139.8	Sum of lost time (s)	19.7
Intersection Capacity Utilization	74.4%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	8	33	20	25	237	1759	155	50	356
Future Volume (vph)	8	33	20	25	237	1759	155	50	356
Turn Type	Split	NA	Split	NA	Prot	NA	pm+ov	Prot	NA
Protected Phases	4	4	3	3	5	2	3	1	6
Permitted Phases							2		
Detector Phase	4	4	3	3	5	2	3	1	6
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	10.0	4.0	4.0	10.0
Minimum Split (s)	8.9	8.9	8.9	8.9	8.4	15.6	8.9	8.4	15.4
Total Split (s)	21.0	21.0	33.5	33.5	26.0	20.2	33.5	19.5	39.5
Total Split (%)	17.5%	17.5%	27.9%	27.9%	21.7%	16.8%	27.9%	16.3%	32.9%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.4	4.6	3.9	3.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	4.9	4.9	4.4	5.6	4.9	4.4	5.4
Lead/Lag	Lag	Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	None	None	C-Max

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 27 (23%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 80
Control Type: Actuated-Coordinated

Splits and Phases: 67: La Jolla Village Drive/N. Torrey Pines Road & Expedition Way/Revelle College Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	33	45	20	25	8	237	1759	155	50	356	16
Future Volume (vph)	8	33	45	20	25	8	237	1759	155	50	356	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9		4.9	4.9		4.4	5.6	4.9	4.4	5.4	
Lane Util. Factor	0.95	0.95		0.97	1.00		1.00	0.95	1.00	1.00	0.95	
Frt	1.00	0.91		1.00	0.96		1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1681	1617		3433	1795		1770	3539	1583	1770	3516	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1681	1617		3433	1795		1770	3539	1583	1770	3516	
Peak-hour factor, PHF	0.91	0.91	0.91	0.80	0.80	0.80	0.94	0.94	0.94	0.80	0.80	0.80
Adj. Flow (vph)	9	36	49	25	31	10	252	1871	165	62	445	20
RTOR Reduction (vph)	0	43	0	0	9	0	0	0	42	0	2	0
Lane Group Flow (vph)	8	43	0	25	32	0	252	1871	123	63	463	0
Turn Type	Split	NA		Split	NA		Prot	NA	pm+ov	Prot	NA	
Protected Phases	4	4		3	3		5	2	3	1	6	
Permitted Phases									2			
Actuated Green, G (s)	7.0	7.0		10.4	10.4		22.5	75.1	85.5	7.7	60.5	
Effective Green, g (s)	7.0	7.0		10.4	10.4		22.5	75.1	85.5	7.7	60.5	
Actuated g/C Ratio	0.06	0.06		0.09	0.09		0.19	0.63	0.71	0.06	0.50	
Clearance Time (s)	4.9	4.9		4.9	4.9		4.4	5.6	4.9	4.4	5.4	
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	4.0	2.0	2.0	4.2	
Lane Grp Cap (vph)	98	94		297	155		331	2214	1127	113	1772	
v/s Ratio Prot	0.00	c0.03		0.01	c0.02		0.14	c0.53	0.01	c0.04	0.13	
v/s Ratio Perm									0.07			
v/c Ratio	0.08	0.45		0.08	0.21		0.76	0.85	0.11	0.56	0.26	
Uniform Delay, d1	53.5	54.7		50.4	51.0		46.2	17.8	5.4	54.5	17.0	
Progression Factor	1.00	1.00		1.00	1.00		0.96	0.82	2.73	1.00	1.00	
Incremental Delay, d2	0.1	1.3		0.0	0.2		7.9	3.7	0.0	3.4	0.4	
Delay (s)	53.6	55.9		50.5	51.2		52.1	18.2	14.7	57.9	17.3	
Level of Service	D	E		D	D		D	B	B	E	B	
Approach Delay (s)		55.7			50.9			21.7			22.2	
Approach LOS		E			D			C			C	

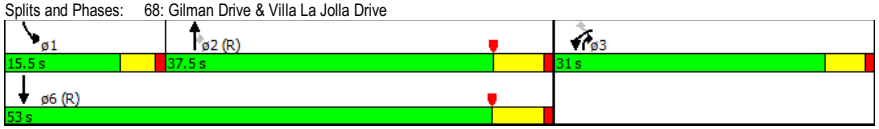
Intersection Summary			
HCM 2000 Control Delay	23.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	19.8
Intersection Capacity Utilization	71.6%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	29	276	820	48	363	351
Future Volume (vph)	29	276	820	48	363	351
Turn Type	Prot	Perm	NA	pm+ov	Prot	NA
Protected Phases	3		2	3	1	6
Permitted Phases		3		2		
Detector Phase	3	3	2	3	1	6
Switch Phase						
Minimum Initial (s)	4.0	4.0	7.0	4.0	4.0	7.0
Minimum Split (s)	8.9	8.9	12.9	8.9	8.4	13.0
Total Split (s)	31.0	31.0	37.5	31.0	15.5	53.0
Total Split (%)	36.9%	36.9%	44.6%	36.9%	18.5%	63.1%
Yellow Time (s)	3.9	3.9	4.9	3.9	3.4	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	5.9	4.9	4.4	6.0
Lead/Lag			Lag		Lead	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None	None	C-Max	None	None	C-Max

Intersection Summary
Cycle Length: 84
Actuated Cycle Length: 84
Offset: 9 (11%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 65
Control Type: Actuated-Coordinated

Splits and Phases: 68: Gilman Drive & Villa La Jolla Drive



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	29	276	820	48	363	351
Future Volume (vph)	29	276	820	48	363	351
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9	5.9	4.9	4.4	6.0
Lane Util. Factor	0.97	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	3433	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	3433	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.80	0.80	0.80	0.80	0.80	0.80
Adj. Flow (vph)	36	345	1025	60	454	439
RTOR Reduction (vph)	0	268	0	5	0	0
Lane Group Flow (vph)	36	77	1025	55	454	439
Turn Type	Prot	Perm	NA	pm+ov	Prot	NA
Protected Phases	3		2	3	1	6
Permitted Phases		3		2		
Actuated Green, G (s)	10.0	10.0	31.6	41.6	27.2	63.1
Effective Green, g (s)	10.0	10.0	31.6	41.6	27.2	63.1
Actuated g/C Ratio	0.12	0.12	0.38	0.50	0.32	0.75
Clearance Time (s)	4.9	4.9	5.9	4.9	4.4	6.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	408	188	1331	783	573	2658
v/s Ratio Prot	0.01		c0.29	0.01	c0.26	0.12
v/s Ratio Perm		c0.05		0.03		
v/c Ratio	0.09	0.41	0.77	0.07	0.79	0.17
Uniform Delay, d1	32.9	34.3	23.0	11.1	25.8	3.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.1	1.5	4.3	0.0	7.4	0.1
Delay (s)	33.0	35.7	27.4	11.1	33.2	3.1
Level of Service	C	D	C	B	C	A
Approach Delay (s)	35.5		26.5			18.4
Approach LOS	D		C			B

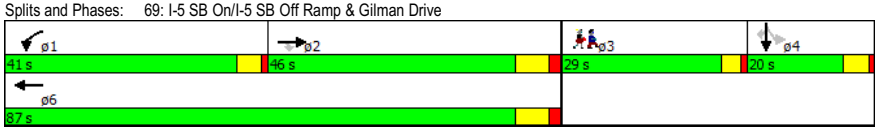
Intersection Summary			
HCM 2000 Control Delay	24.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	84.0	Sum of lost time (s)	15.2
Intersection Capacity Utilization	58.8%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBT	EBR	WBL	WBT	SBT	SBR	ø3
Lane Configurations							
Traffic Volume (vph)	97	555	347	970	0	48	
Future Volume (vph)	97	555	347	970	0	48	
Turn Type	NA	Perm	Prot	NA	NA	Perm	
Protected Phases	2		1	6	4		3
Permitted Phases		2				4	
Detector Phase	2	2	1	6	4	4	
Switch Phase							
Minimum Initial (s)	13.0	13.0	5.0	12.0	5.0	5.0	1.0
Minimum Split (s)	20.2	20.2	9.7	19.2	17.1	17.1	29.0
Total Split (s)	46.0	46.0	41.0	87.0	20.0	20.0	29.0
Total Split (%)	33.8%	33.8%	30.1%	64.0%	14.7%	14.7%	21%
Yellow Time (s)	5.2	5.2	3.7	5.2	4.1	4.1	3.0
All-Red Time (s)	2.0	2.0	1.0	2.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	7.2	7.2	4.7	7.2	5.1	5.1	
Lead/Lag	Lag	Lag	Lead		Lag	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes
Recall Mode	Min	Min	None	Min	None	None	None

Intersection Summary
Cycle Length: 136
Actuated Cycle Length: 48.7
Natural Cycle: 90
Control Type: Actuated-Uncoordinated

Splits and Phases: 69: I-5 SB On/I-5 SB Off Ramp & Gilman Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	97	555	347	970	0	0	0	0	12	0	48
Future Volume (vph)	0	97	555	347	970	0	0	0	0	12	0	48
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		7.2	7.2	4.7	7.2						5.1	5.1
Lane Util. Factor		1.00	0.88	1.00	0.95						1.00	1.00
Frt		1.00	0.85	1.00	1.00						1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00						0.95	1.00
Satd. Flow (prot)		1863	2787	1770	3539						1770	1583
Flt Permitted		1.00	1.00	0.95	1.00						0.95	1.00
Satd. Flow (perm)		1863	2787	1770	3539						1770	1583
Peak-hour factor, PHF	0.84	0.84	0.84	0.94	0.94	0.94	0.25	0.25	0.25	0.80	0.80	0.80
Adj. Flow (vph)	0	115	661	369	1032	0	0	0	0	15	0	60
RTOR Reduction (vph)	0	0	480	0	0	0	0	0	0	0	0	55
Lane Group Flow (vph)	0	115	181	369	1032	0	0	0	0	0	15	5
Turn Type		NA	Perm	Prot	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases			2							4		4
Actuated Green, G (s)		13.6	13.6	15.1	33.4						4.0	4.0
Effective Green, g (s)		13.6	13.6	15.1	33.4						4.0	4.0
Actuated g/C Ratio		0.27	0.27	0.30	0.67						0.08	0.08
Clearance Time (s)		7.2	7.2	4.7	7.2						5.1	5.1
Vehicle Extension (s)		2.0	2.0	2.0	2.0						2.0	2.0
Lane Grp Cap (vph)		509	762	537	2378						142	127
v/s Ratio Prot		0.06		c0.21	c0.29							
v/s Ratio Perm			0.06								0.01	0.00
v/c Ratio		0.23	0.24	0.69	0.43						0.11	0.04
Uniform Delay, d1		14.0	14.0	15.2	3.8						21.2	21.1
Progression Factor		1.00	1.00	1.00	1.00						1.00	1.00
Incremental Delay, d2		0.1	0.1	2.9	0.0						0.1	0.0
Delay (s)		14.1	14.1	18.1	3.8						21.3	21.1
Level of Service		B	B	B	A						C	C
Approach Delay (s)		14.1			7.6			0.0			21.2	
Approach LOS		B			A			A			C	

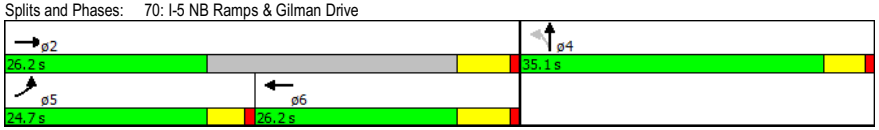
Intersection Summary			
HCM 2000 Control Delay	10.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	49.7	Sum of lost time (s)	21.0
Intersection Capacity Utilization	77.5%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBT	NBL	NBT
Lane Configurations					
Traffic Volume (vph)	72	37	408	952	0
Future Volume (vph)	72	37	408	952	0
Turn Type	Prot	NA	NA	Perm	NA
Protected Phases	5	2	6		4
Permitted Phases				4	
Detector Phase	5	2	6	4	4
Switch Phase					
Minimum Initial (s)	5.0	12.0	12.0	5.0	5.0
Minimum Split (s)	9.7	18.2	18.2	10.1	10.1
Total Split (s)	24.7	26.2	26.2	35.1	35.1
Total Split (%)	28.7%	30.5%	30.5%	40.8%	40.8%
Yellow Time (s)	3.7	5.2	5.2	4.1	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.7	6.2	6.2	5.1	5.1
Lead/Lag	Lead		Lag		
Lead-Lag Optimize?	Yes		Yes		
Recall Mode	None	Min	Min	None	None

Intersection Summary
Cycle Length: 86
Actuated Cycle Length: 65.3
Natural Cycle: 60
Control Type: Actuated-Uncoordinated

Splits and Phases: 70: I-5 NB Ramps & Gilman Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	72	37	0	0	408	54	952	0	109	0	0	0
Future Volume (vph)	72	37	0	0	408	54	952	0	109	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.7	6.2			6.2		5.1	5.1				
Lane Util. Factor	1.00	1.00			0.95		0.95	0.95				
Frt	1.00	1.00			0.98		1.00	0.97				
Flt Protected	0.95	1.00			1.00		0.95	0.96				
Satd. Flow (prot)	1770	1863			3477		1681	1649				
Flt Permitted	0.95	1.00			1.00		0.95	0.96				
Satd. Flow (perm)	1770	1863			3477		1681	1649				
Peak-hour factor, PHF	0.80	0.80	0.80	0.84	0.84	0.84	0.95	0.95	0.95	0.25	0.25	0.25
Adj. Flow (vph)	90	46	0	0	486	64	1002	0	115	0	0	0
RTOR Reduction (vph)	0	0	0	0	12	0	0	58	0	0	0	0
Lane Group Flow (vph)	90	46	0	0	538	0	561	498	0	0	0	0
Turn Type	Prot	NA			NA		Perm	NA				
Protected Phases	5	2			6			4				
Permitted Phases							4					
Actuated Green, G (s)	6.5	26.7			15.5		28.0	28.0				
Effective Green, g (s)	6.5	26.7			15.5		28.0	28.0				
Actuated g/C Ratio	0.10	0.40			0.23		0.42	0.42				
Clearance Time (s)	4.7	6.2			6.2		5.1	5.1				
Vehicle Extension (s)	2.0	2.0			2.0		2.0	2.0				
Lane Grp Cap (vph)	174	753			816		713	699				
v/s Ratio Prot	c0.05	0.02			c0.15							
v/s Ratio Perm							c0.33	0.30				
v/c Ratio	0.52	0.06			0.66		0.79	0.71				
Uniform Delay, d1	28.3	12.0			22.9		16.4	15.7				
Progression Factor	1.00	1.00			1.00		1.00	1.00				
Incremental Delay, d2	1.1	0.0			1.5		5.3	2.9				
Delay (s)	29.3	12.0			24.3		21.7	18.6				
Level of Service	C	B			C		C	B				
Approach Delay (s)		23.5			24.3			20.1			0.0	
Approach LOS		C			C			C			A	

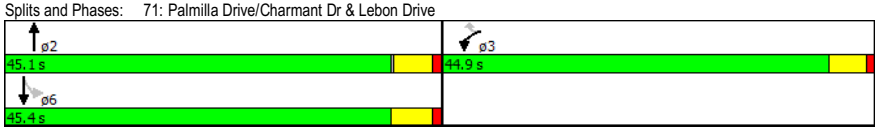
Intersection Summary			
HCM 2000 Control Delay	21.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	66.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	77.5%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Configurations					
Traffic Volume (vph)	80	38	22	235	40
Future Volume (vph)	80	38	22	235	40
Turn Type	Prot	Perm	NA	Perm	NA
Protected Phases	3		2		6
Permitted Phases		3		6	
Detector Phase	3	3	2	6	6
Switch Phase					
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	11.9	11.9	12.1	12.4	12.4
Total Split (s)	44.9	44.9	45.1	45.4	45.4
Total Split (%)	49.7%	49.7%	49.9%	50.3%	50.3%
Yellow Time (s)	3.9	3.9	4.1	4.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	5.1	5.4	5.4
Lead/Lag					
Lead-Lag Optimize?					
Recall Mode	Min	Min	None	None	None

Intersection Summary
Cycle Length: 90.3
Actuated Cycle Length: 39.4
Natural Cycle: 40
Control Type: Actuated-Uncoordinated

Splits and Phases: 71: Palmilla Drive/Charmant Dr & Lebon Drive



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	80	38	22	288	235	40
Future Volume (vph)	80	38	22	288	235	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9	5.1		5.4	5.4
Lane Util. Factor	0.97	0.91	0.95		1.00	0.95
Frt	0.99	0.85	0.86		1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	3427	1441	3046		1770	3539
Flt Permitted	0.95	1.00	1.00		0.53	1.00
Satd. Flow (perm)	3427	1441	3046		983	3539
Peak-hour factor, PHF	0.88	0.88	0.82	0.82	0.93	0.93
Adj. Flow (vph)	91	43	27	351	253	43
RTOR Reduction (vph)	3	29	182	0	0	0
Lane Group Flow (vph)	92	10	196	0	253	43
Turn Type	Prot	Perm	NA		Perm	NA
Protected Phases	3		2			6
Permitted Phases		3			6	
Actuated Green, G (s)	9.8	9.8	18.3		18.0	18.0
Effective Green, g (s)	9.8	9.8	18.3		18.0	18.0
Actuated g/C Ratio	0.26	0.26	0.48		0.47	0.47
Clearance Time (s)	4.9	4.9	5.1		5.4	5.4
Vehicle Extension (s)	2.0	2.0	3.8		3.4	3.4
Lane Grp Cap (vph)	881	370	1463		464	1671
v/s Ratio Prot	c0.03		0.06			0.01
v/s Ratio Perm		0.01			c0.26	
v/c Ratio	0.10	0.03	0.13		0.55	0.03
Uniform Delay, d1	10.8	10.6	5.5		7.1	5.4
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	0.0	0.0	0.1		1.4	0.0
Delay (s)	10.8	10.6	5.6		8.6	5.4
Level of Service	B	B	A		A	A
Approach Delay (s)	10.8		5.6			8.1
Approach LOS	B		A			A

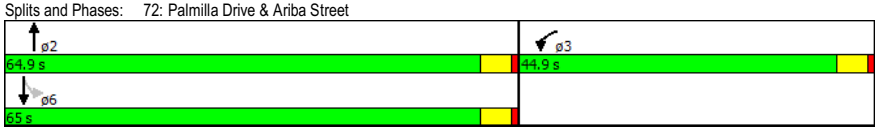
Intersection Summary				
HCM 2000 Control Delay	7.4	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.39		
Actuated Cycle Length (s)	38.1	Sum of lost time (s)	10.3
Intersection Capacity Utilization	41.6%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	WBL	NBT	SBL	SBT
Lane Configurations				
Traffic Volume (vph)	139	74	91	51
Future Volume (vph)	139	74	91	51
Turn Type	Prot	NA	Perm	NA
Protected Phases	3	2		6
Permitted Phases			6	
Detector Phase	3	2	6	6
Switch Phase				
Minimum Initial (s)	6.0	7.0	7.0	7.0
Minimum Split (s)	10.9	11.9	12.0	12.0
Total Split (s)	44.9	64.9	65.0	65.0
Total Split (%)	40.9%	59.1%	59.1%	59.1%
Yellow Time (s)	3.9	3.9	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	5.0	5.0
Lead/Lag				
Lead-Lag Optimize?				
Recall Mode	None	Min	Min	Min

Intersection Summary
Cycle Length: 109.9
Actuated Cycle Length: 32.8
Natural Cycle: 40
Control Type: Actuated-Uncoordinated

Splits and Phases: 72: Palmilla Drive & Ariba Street



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	139	121	74	168	91	51
Future Volume (vph)	139	121	74	168	91	51
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9		4.9		5.0	5.0
Lane Util. Factor	0.97		0.95		1.00	0.95
Frt	0.93		0.90		1.00	1.00
Flt Protected	0.97		1.00		0.95	1.00
Satd. Flow (prot)	3274		3171		1770	3539
Flt Permitted	0.97		1.00		0.58	1.00
Satd. Flow (perm)	3274		3171		1072	3539
Peak-hour factor, PHF	0.83	0.83	0.84	0.84	0.80	0.80
Adj. Flow (vph)	167	146	88	200	114	64
RTOR Reduction (vph)	106	0	118	0	0	0
Lane Group Flow (vph)	207	0	170	0	114	64
Turn Type	Prot		NA		Perm	NA
Protected Phases	3		2			6
Permitted Phases					6	
Actuated Green, G (s)	8.7		12.9		12.8	12.8
Effective Green, g (s)	8.7		12.9		12.8	12.8
Actuated g/C Ratio	0.28		0.41		0.41	0.41
Clearance Time (s)	4.9		4.9		5.0	5.0
Vehicle Extension (s)	2.0		4.0		3.8	3.8
Lane Grp Cap (vph)	907		1302		436	1442
v/s Ratio Prot	c0.06		0.05			0.02
v/s Ratio Perm					c0.11	
v/c Ratio	0.23		0.13		0.26	0.04
Uniform Delay, d1	8.8		5.8		6.2	5.6
Progression Factor	1.00		1.00		1.00	1.00
Incremental Delay, d2	0.0		0.1		0.4	0.0
Delay (s)	8.8		5.8		6.6	5.6
Level of Service	A		A		A	A
Approach Delay (s)	8.8		5.8			6.2
Approach LOS	A		A			A

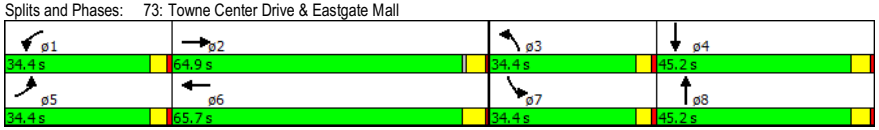
Intersection Summary			
HCM 2000 Control Delay	7.1	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.25		
Actuated Cycle Length (s)	31.4	Sum of lost time (s)	9.9
Intersection Capacity Utilization	33.4%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	99	243	99	535	263	604	11	49
Future Volume (vph)	99	243	99	535	263	604	11	49
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	5	2	1	6	3	8	7	4
Permitted Phases								
Detector Phase	5	2	1	6	3	8	7	4
Switch Phase								
Minimum Initial (s)	4.0	7.0	4.0	7.0	4.0	7.0	4.0	7.0
Minimum Split (s)	8.4	11.9	8.4	12.7	8.4	12.2	8.4	12.7
Total Split (s)	34.4	64.9	34.4	65.7	34.4	45.2	34.4	45.2
Total Split (%)	19.1%	36.1%	19.1%	36.6%	19.1%	25.2%	19.1%	25.2%
Yellow Time (s)	3.4	3.9	3.4	4.7	3.4	4.2	3.4	4.2
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	4.9	4.4	5.7	4.4	5.2	4.4	5.2
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 179.7
Actuated Cycle Length: 95.3
Natural Cycle: 65
Control Type: Actuated-Uncoordinated

Splits and Phases: 73: Towne Center Drive & Eastgate Mall



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	99	243	155	99	535	109	263	604	330	11	49	8
Future Volume (vph)	99	243	155	99	535	109	263	604	330	11	49	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	5.7		4.4	5.2		4.4	5.2	
Lane Util. Factor	0.97	0.95		1.00	0.95		0.97	0.95		0.97	0.95	
Frt	1.00	0.94		1.00	0.97		1.00	0.95		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	3433	3333		1770	3449		3433	3352		3433	3464	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	3433	3333		1770	3449		3433	3352		3433	3464	
Peak-hour factor, PHF	0.94	0.94	0.94	0.96	0.96	0.96	0.86	0.86	0.86	0.80	0.80	0.80
Adj. Flow (vph)	105	259	165	103	557	114	306	702	384	14	61	10
RTOR Reduction (vph)	0	63	0	0	10	0	0	31	0	0	8	0
Lane Group Flow (vph)	105	361	0	103	661	0	306	1055	0	14	63	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases												
Actuated Green, G (s)	7.8	25.9		10.6	27.9		20.9	40.7		1.9	21.7	
Effective Green, g (s)	7.8	25.9		10.6	27.9		20.9	40.7		1.9	21.7	
Actuated g/C Ratio	0.08	0.26		0.11	0.28		0.21	0.42		0.02	0.22	
Clearance Time (s)	4.4	4.9		4.4	5.7		4.4	5.2		4.4	5.2	
Vehicle Extension (s)	2.0	5.1		2.0	4.8		2.0	5.1		2.0	4.8	
Lane Grp Cap (vph)	273	880		191	981		732	1392		66	767	
v/s Ratio Prot	0.03	0.11		c0.06	c0.19		c0.09	c0.31		0.00	0.02	
v/s Ratio Perm												
v/c Ratio	0.38	0.41		0.54	0.67		0.42	0.76		0.21	0.08	
Uniform Delay, d1	42.8	29.7		41.4	31.0		33.3	24.4		47.3	30.3	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.3	0.7		1.5	2.3		0.1	2.9		0.6	0.1	
Delay (s)	43.2	30.4		42.9	33.3		33.4	27.4		47.9	30.3	
Level of Service	D	C		D	C		C	C		D	C	
Approach Delay (s)		32.9			34.6			28.7			33.2	
Approach LOS		C			C			C			C	

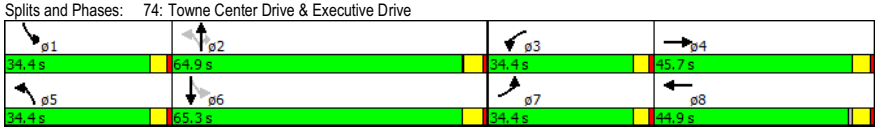
Intersection Summary			
HCM 2000 Control Delay	31.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	98.0	Sum of lost time (s)	19.7
Intersection Capacity Utilization	61.6%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	100	316	36	153	266	792	568	40	154
Future Volume (vph)	100	316	36	153	266	792	568	40	154
Turn Type	Prot	NA	Prot	NA	pm+pt	NA	Perm	pm+pt	NA
Protected Phases	7	4	3	8	5	2		1	6
Permitted Phases					2		2	6	
Detector Phase	7	4	3	8	5	2	2	1	6
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	7.0	4.0	7.0	7.0	4.0	7.0
Minimum Split (s)	8.4	8.9	8.4	11.9	8.4	11.9	11.9	8.4	12.3
Total Split (s)	34.4	45.7	34.4	44.9	34.4	64.9	64.9	34.4	65.3
Total Split (%)	19.1%	25.4%	19.1%	25.0%	19.1%	36.1%	36.1%	19.1%	36.3%
Yellow Time (s)	3.4	3.9	3.4	3.9	3.4	3.9	3.9	3.4	4.3
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	4.9	4.4	4.9	4.4	4.9	4.9	4.4	5.3
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Min	Min	None	Min

Intersection Summary
Cycle Length: 179.8
Actuated Cycle Length: 95.5
Natural Cycle: 60
Control Type: Actuated-Uncoordinated

Splits and Phases: 74: Towne Center Drive & Executive Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	100	316	24	36	153	25	266	792	568	40	154	64
Future Volume (vph)	100	316	24	36	153	25	266	792	568	40	154	64
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	4.9		4.4	4.9	4.9	4.4	5.3	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95	1.00	1.00	0.95	
Frt	1.00	0.99		1.00	0.98		1.00	1.00	0.85	1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3501		1770	3465		1770	3539	1583	1770	3384	
Flt Permitted	0.95	1.00		0.95	1.00		0.50	1.00	1.00	0.33	1.00	
Satd. Flow (perm)	1770	3501		1770	3465		929	3539	1583	616	3384	
Peak-hour factor, PHF	0.84	0.84	0.84	0.80	0.80	0.80	0.95	0.95	0.95	0.80	0.80	0.80
Adj. Flow (vph)	119	376	29	45	191	31	280	834	598	50	192	80
RTOR Reduction (vph)	0	3	0	0	7	0	0	0	191	0	27	0
Lane Group Flow (vph)	119	402	0	45	215	0	280	834	407	50	246	0
Turn Type	Prot	NA		Prot	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases							2		2	6		
Actuated Green, G (s)	12.2	25.7		6.0	19.5		51.0	41.9	41.9	34.0	29.3	
Effective Green, g (s)	12.2	25.7		6.0	19.5		51.0	41.9	41.9	34.0	29.3	
Actuated g/C Ratio	0.13	0.27		0.06	0.20		0.53	0.43	0.43	0.35	0.30	
Clearance Time (s)	4.4	4.9		4.4	4.9		4.4	4.9	4.9	4.4	5.3	
Vehicle Extension (s)	2.0	5.3		2.0	5.4		2.0	3.8	3.8	2.0	3.8	
Lane Grp Cap (vph)	222	928		109	697		635	1530	684	272	1023	
v/s Ratio Prot	c0.07	c0.11		0.03	0.06		c0.08	0.24		0.01	0.07	
v/s Ratio Perm							0.16		c0.26	0.06		
v/c Ratio	0.54	0.43		0.41	0.31		0.44	0.55	0.59	0.18	0.24	
Uniform Delay, d1	39.7	29.6		43.8	33.0		13.1	20.4	21.0	21.0	25.4	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	1.2	0.8		0.9	0.6		0.2	0.5	1.6	0.1	0.2	
Delay (s)	40.9	30.3		44.7	33.6		13.3	20.9	22.6	21.1	25.6	
Level of Service	D	C		D	C		B	C	C	C	C	
Approach Delay (s)		32.7			35.4			20.2			24.9	
Approach LOS		C			D			C			C	

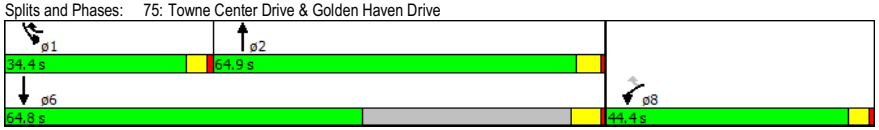
Intersection Summary			
HCM 2000 Control Delay	24.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	96.9	Sum of lost time (s)	19.0
Intersection Capacity Utilization	59.8%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Configurations					
Traffic Volume (vph)	181	444	319	181	94
Future Volume (vph)	181	444	319	181	94
Turn Type	Prot	pm+ov	NA	Prot	NA
Protected Phases	8	1	2	1	6
Permitted Phases		8			
Detector Phase	8	1	2	1	6
Switch Phase					
Minimum Initial (s)	4.0	4.0	10.0	4.0	10.0
Minimum Split (s)	33.4	8.4	14.9	8.4	15.8
Total Split (s)	44.4	34.4	64.9	34.4	64.8
Total Split (%)	30.9%	23.9%	45.2%	23.9%	45.1%
Yellow Time (s)	3.4	3.4	3.9	3.4	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	4.4	4.9	4.4	5.8
Lead/Lag		Lead	Lag	Lead	
Lead-Lag Optimize?		Yes	Yes	Yes	
Recall Mode	None	None	None	None	None

Intersection Summary
Cycle Length: 143.7
Actuated Cycle Length: 67.3
Natural Cycle: 65
Control Type: Actuated-Uncoordinated

Splits and Phases: 75: Towne Center Drive & Golden Haven Drive



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	181	444	319	331	181	94
Future Volume (vph)	181	444	319	331	181	94
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	0%		0%			-7%
Total Lost time (s)	4.4	4.4	4.9		4.4	5.8
Lane Util. Factor	1.00	1.00	0.95		1.00	0.95
Frt	1.00	0.85	0.92		1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1770	1583	3269		1832	3663
Flt Permitted	0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)	1770	1583	3269		1832	3663
Peak-hour factor, PHF	0.91	0.91	0.86	0.86	0.85	0.85
Adj. Flow (vph)	199	488	371	385	213	111
RTOR Reduction (vph)	0	198	142	0	0	0
Lane Group Flow (vph)	199	290	614	0	213	111
Turn Type	Prot	pm+ov	NA		Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8				
Actuated Green, G (s)	14.4	28.1	24.3		13.7	41.5
Effective Green, g (s)	14.4	28.1	24.3		13.7	41.5
Actuated g/C Ratio	0.22	0.43	0.37		0.21	0.63
Clearance Time (s)	4.4	4.4	4.9		4.4	5.8
Vehicle Extension (s)	2.0	2.0	5.0		2.0	5.0
Lane Grp Cap (vph)	385	778	1201		379	2299
v/s Ratio Prot	c0.11	0.08	c0.19		c0.12	0.03
v/s Ratio Perm		0.11				
v/c Ratio	0.52	0.37	0.51		0.56	0.05
Uniform Delay, d1	22.8	13.0	16.3		23.5	4.7
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	0.5	0.1	0.7		1.1	0.0
Delay (s)	23.3	13.1	17.0		24.6	4.7
Level of Service	C	B	B		C	A
Approach Delay (s)	16.0		17.0			17.8
Approach LOS	B		B			B

Intersection Summary				
HCM 2000 Control Delay	16.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	66.1	Sum of lost time (s)	13.7
Intersection Capacity Utilization	54.7%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	91	363	59	360	386	121	146	21	37
Future Volume (vph)	91	363	59	360	386	121	146	21	37
Turn Type	Perm	NA	Perm	NA	pm+pt	NA	Perm	pm+pt	NA
Protected Phases		4		8	5	2		1	6
Permitted Phases	4		8		2		2	6	
Detector Phase	4	4	8	8	5	2	2	1	6
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	7.0	7.0	4.0	7.0
Minimum Split (s)	8.9	8.9	8.4	8.4	8.4	11.9	11.9	8.4	11.9
Total Split (s)	44.9	44.9	44.4	44.4	34.4	64.9	64.9	34.4	64.9
Total Split (%)	31.1%	31.1%	30.8%	30.8%	23.9%	45.0%	45.0%	23.9%	45.0%
Yellow Time (s)	3.9	3.9	3.4	3.4	3.4	3.9	3.9	3.4	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	4.4	4.4	4.4	4.9	4.9	4.4	4.9
Lead/Lag					Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Min	Min	None	Min

Intersection Summary
Cycle Length: 144.2
Actuated Cycle Length: 64.8
Natural Cycle: 55
Control Type: Actuated-Uncoordinated

Splits and Phases: 76: Executive Way & Executive Drive

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	91	363	81	59	360	45	386	121	146	21	37	43
Future Volume (vph)	91	363	81	59	360	45	386	121	146	21	37	43
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9		4.4	4.4		4.4	4.9	4.9	4.4	4.9	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.97		1.00	0.98		1.00	1.00	0.85	1.00	0.92	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3443		1770	3480		1770	1863	1583	1770	1712	
Flt Permitted	0.40	1.00		0.34	1.00		0.52	1.00	1.00	0.67	1.00	
Satd. Flow (perm)	736	3443		639	3480		978	1863	1583	1239	1712	
Peak-hour factor, PHF	0.85	0.85	0.85	0.90	0.90	0.90	0.84	0.84	0.84	0.80	0.80	0.80
Adj. Flow (vph)	107	427	95	66	400	50	460	144	174	26	46	54
RTOR Reduction (vph)	0	14	0	0	7	0	0	0	84	0	40	0
Lane Group Flow (vph)	107	508	0	66	443	0	460	144	90	26	60	0
Turn Type	Perm	NA		Perm	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2		2	6		
Actuated Green, G (s)	16.3	16.3		16.8	16.8		40.9	34.7	34.7	15.6	13.8	
Effective Green, g (s)	16.3	16.3		16.8	16.8		40.9	34.7	34.7	15.6	13.8	
Actuated g/C Ratio	0.24	0.24		0.25	0.25		0.61	0.52	0.52	0.23	0.21	
Clearance Time (s)	4.9	4.9		4.4	4.4		4.4	4.9	4.9	4.4	4.9	
Vehicle Extension (s)	2.0	2.0		2.3	2.3		2.0	2.9	2.9	2.0	2.6	
Lane Grp Cap (vph)	179	837		160	872		865	964	819	302	352	
v/s Ratio Prot		c0.15			0.13		c0.18	0.08		0.00	0.04	
v/s Ratio Perm	0.15			0.10			c0.14		0.06	0.02		
v/c Ratio	0.60	0.61		0.41	0.51		0.53	0.15	0.11	0.09	0.17	
Uniform Delay, d1	22.4	22.5		21.0	21.6		7.1	8.4	8.3	20.0	21.9	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	3.5	0.9		1.0	0.3		0.3	0.1	0.1	0.0	0.2	
Delay (s)	26.0	23.4		22.0	21.8		7.4	8.5	8.3	20.1	22.1	
Level of Service	C	C		C	C		A	A	A	C	C	
Approach Delay (s)		23.8			21.8			7.8			21.7	
Approach LOS		C			C			A			C	

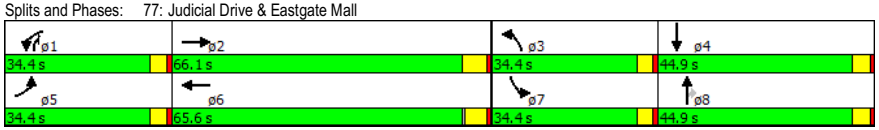
Intersection Summary			
HCM 2000 Control Delay	17.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	67.0	Sum of lost time (s)	14.2
Intersection Capacity Utilization	56.3%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	136	335	435	584	236	232	281	4	16
Future Volume (vph)	136	335	435	584	236	232	281	4	16
Turn Type	Prot	NA	Prot	NA	Prot	NA	pm+ov	Prot	NA
Protected Phases	5	2	1	6	3	8	1	7	4
Permitted Phases							8		
Detector Phase	5	2	1	6	3	8	1	7	4
Switch Phase									
Minimum Initial (s)	4.0	7.0	4.0	7.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.4	13.1	8.4	12.6	8.4	8.9	8.4	8.4	8.9
Total Split (s)	34.4	66.1	34.4	65.6	34.4	44.9	34.4	34.4	44.9
Total Split (%)	19.1%	36.8%	19.1%	36.5%	19.1%	25.0%	19.1%	19.1%	25.0%
Yellow Time (s)	3.4	5.1	3.4	4.6	3.4	3.9	3.4	3.4	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	6.1	4.4	5.6	4.4	4.9	4.4	4.4	4.9
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 179.8
Actuated Cycle Length: 97.3
Natural Cycle: 75
Control Type: Actuated-Uncoordinated

Splits and Phases: 77: Judicial Drive & Eastgate Mall



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	136	335	53	435	584	85	236	232	281	4	16	13
Future Volume (vph)	136	335	53	435	584	85	236	232	281	4	16	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	6.1		4.4	5.6		4.4	4.9	4.4	4.4	4.9	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.98		1.00	0.98		1.00	1.00	0.85	1.00	0.93	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3467		1770	3472		1770	1863	1583	1770	1739	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	3467		1770	3472		1770	1863	1583	1770	1739	
Peak-hour factor, PHF	0.93	0.93	0.93	0.84	0.84	0.84	0.94	0.94	0.94	0.80	0.80	0.80
Adj. Flow (vph)	146	360	57	518	695	101	251	247	299	5	20	16
RTOR Reduction (vph)	0	9	0	0	6	0	0	0	120	0	15	0
Lane Group Flow (vph)	146	408	0	518	790	0	251	247	179	5	21	0
Turn Type	Prot	NA		Prot	NA		Prot	NA	pm+ov	Prot	NA	
Protected Phases	5	2		1	6		3	8	1	7	4	
Permitted Phases									8			
Actuated Green, G (s)	14.0	19.6		32.1	38.2		20.9	27.7	59.8	0.8	7.6	
Effective Green, g (s)	14.0	19.6		32.1	38.2		20.9	27.7	59.8	0.8	7.6	
Actuated g/C Ratio	0.14	0.20		0.32	0.38		0.21	0.28	0.60	0.01	0.08	
Clearance Time (s)	4.4	6.1		4.4	5.6		4.4	4.9	4.4	4.4	4.9	
Vehicle Extension (s)	2.0	2.7		2.0	3.0		2.0	2.0	2.0	2.0	2.0	
Lane Grp Cap (vph)	247	679		568	1326		369	516	946	14	132	
v/s Ratio Prot	0.08	0.12		c0.29	c0.23		c0.14	c0.13	0.06	0.00	0.01	
v/s Ratio Perm									0.05			
v/c Ratio	0.59	0.60		0.91	0.60		0.68	0.48	0.19	0.36	0.16	
Uniform Delay, d1	40.3	36.6		32.6	24.7		36.5	30.1	9.1	49.3	43.2	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	2.5	1.4		18.7	0.7		4.1	0.3	0.0	5.6	0.2	
Delay (s)	42.8	38.0		51.3	25.4		40.5	30.4	9.1	54.9	43.4	
Level of Service	D	D		D	C		D	C	A	D	D	
Approach Delay (s)		39.3			35.6			25.6			44.8	
Approach LOS		D			D			C			D	

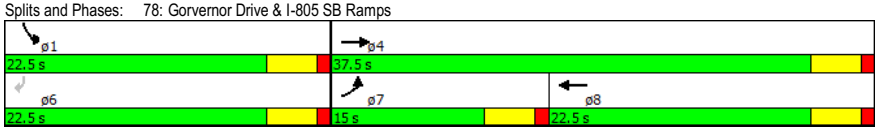
Intersection Summary			
HCM 2000 Control Delay	33.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	19.8
Intersection Capacity Utilization	67.6%	ICU Level of Service	C
Analysis Period (min)	15		

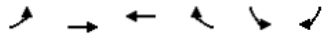
c Critical Lane Group

Lane Group	EBL	EBT	WBT	SBL	SBR
Lane Configurations					
Traffic Volume (vph)	423	329	420	79	322
Future Volume (vph)	423	329	420	79	322
Turn Type	Prot	NA	NA	Prot	Perm
Protected Phases	7	4	8	1	
Permitted Phases					6
Detector Phase	7	4	8	1	6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5
Total Split (s)	15.0	37.5	22.5	22.5	22.5
Total Split (%)	25.0%	62.5%	37.5%	37.5%	37.5%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead		Lag		
Lead-Lag Optimize?	Yes		Yes		
Recall Mode	None	None	None	None	Min

Intersection Summary
Cycle Length: 60
Actuated Cycle Length: 43.2
Natural Cycle: 60
Control Type: Actuated-Uncoordinated

Splits and Phases: 78: Gorvernor Drive & I-805 SB Ramps

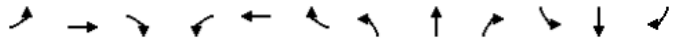




Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	423	329	420	20	79	322
Future Volume (vph)	423	329	420	20	79	322
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5		4.5	4.5
Lane Util. Factor	0.97	1.00	0.95		1.00	1.00
Frt	1.00	1.00	0.99		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	3433	1863	3516		1770	1583
Flt Permitted	0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)	3433	1863	3516		1770	1583
Peak-hour factor, PHF	0.88	0.88	0.89	0.89	1.00	1.00
Adj. Flow (vph)	481	374	472	22	79	322
RTOR Reduction (vph)	0	0	6	0	0	264
Lane Group Flow (vph)	481	374	488	0	79	58
Turn Type	Prot	NA	NA		Prot	Perm
Protected Phases	7	4	8		1	
Permitted Phases						6
Actuated Green, G (s)	10.1	26.3	11.7		7.7	7.7
Effective Green, g (s)	10.1	26.3	11.7		7.7	7.7
Actuated g/C Ratio	0.23	0.61	0.27		0.18	0.18
Clearance Time (s)	4.5	4.5	4.5		4.5	4.5
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	806	1139	956		316	283
v/s Ratio Prot	c0.14	0.20	c0.14		c0.04	
v/s Ratio Perm						0.04
v/c Ratio	0.60	0.33	0.51		0.25	0.20
Uniform Delay, d1	14.6	4.1	13.2		15.2	15.0
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	1.2	0.2	0.5		0.4	0.4
Delay (s)	15.8	4.2	13.7		15.6	15.4
Level of Service	B	A	B		B	B
Approach Delay (s)		10.8	13.7		15.4	
Approach LOS		B	B		B	

Intersection Summary				
HCM 2000 Control Delay	12.7	HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio	0.47			
Actuated Cycle Length (s)	43.0	Sum of lost time (s)	13.5	
Intersection Capacity Utilization	39.9%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	372	22	0	0	33	15	442	16	22	0	0	0
Future Volume (Veh/h)	372	22	0	0	33	15	442	16	22	0	0	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.96	0.96	0.96	0.55	0.55	0.55	0.95	0.95	0.95	1.00	1.00	1.00
Hourly flow rate (vph)	388	23	0	0	60	27	465	17	23	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1016	970	0	970	958	28	0			40		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1016	970	0	970	958	28	0			40		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	0	87	100	100	67	97	71			100		
cM capacity (veh/h)	124	181	1085	164	183	1046	1623			1570		

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	411	87	505
Volume Left	388	0	465
Volume Right	0	27	23
cSH	127	247	1623
Volume to Capacity	3.25	0.35	0.29
Queue Length 95th (ft)	Err	38	30
Control Delay (s)	Err	27.4	7.7
Lane LOS	F	D	A
Approach Delay (s)	Err	27.4	7.7
Approach LOS	F	D	

Intersection Summary				
Average Delay	4103.5			
Intersection Capacity Utilization	61.8%	ICU Level of Service	B	
Analysis Period (min)	15			

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	ø4
Lane Configurations							
Traffic Volume (vph)	167	410	270	1303	359	209	
Future Volume (vph)	167	410	270	1303	359	209	
Turn Type	NA	Perm	Prot	NA	Prot	pt+ov	
Protected Phases	2		1	6	8	8 1	4
Permitted Phases		2					
Detector Phase	2	2	1	6	8	8 1	
Switch Phase							
Minimum Initial (s)	10.0	10.0	7.0	10.0	10.0		4.0
Minimum Split (s)	43.2	43.2	11.4	24.9	23.3		41.0
Total Split (s)	48.6	48.6	34.1	82.7	45.3		43.8
Total Split (%)	38.0%	38.0%	26.6%	64.6%	35.4%		34%
Yellow Time (s)	5.2	5.2	3.4	5.0	4.3		3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	6.2	6.2	4.4	6.0	5.3		
Lead/Lag	Lag	Lag	Lead				
Lead-Lag Optimize?							
Recall Mode	C-Max	C-Max	None	C-Max	None		None

Intersection Summary

Cycle Length: 128
Actuated Cycle Length: 128
Offset: 70 (55%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 100
Control Type: Actuated-Coordinated

Splits and Phases: 1: N. Torrey Pines Rd. & Genesee Ave

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	167	410	270	1303	359	209
Future Volume (vph)	167	410	270	1303	359	209
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.2	6.2	4.4	6.0	5.3	5.3
Lane Util. Factor	0.91	1.00	0.97	0.91	0.97	0.88
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	5085	1583	3433	5085	3433	2787
Flt Permitted	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (perm)	5085	1583	3433	5085	3433	2787
Peak-hour factor, PHF	0.67	0.67	0.92	0.92	0.87	0.87
Adj. Flow (vph)	249	612	293	1416	413	240
RTOR Reduction (vph)	0	255	0	0	0	160
Lane Group Flow (vph)	249	357	293	1416	413	80
Turn Type	NA	Perm	Prot	NA	Prot	pt+ov
Protected Phases	2		1	6	8	8 1
Permitted Phases		2				
Actuated Green, G (s)	74.6	74.6	15.3	94.5	22.2	42.8
Effective Green, g (s)	74.6	74.6	15.3	94.5	22.2	42.8
Actuated g/C Ratio	0.58	0.58	0.12	0.74	0.17	0.33
Clearance Time (s)	6.2	6.2	4.4	6.0	5.3	
Vehicle Extension (s)	4.0	4.0	2.0	3.7	3.8	
Lane Grp Cap (vph)	2963	922	410	3754	595	931
v/s Ratio Prot	0.05		c0.09	c0.28	c0.12	0.03
v/s Ratio Perm		0.23				
v/c Ratio	0.08	0.39	0.71	0.38	0.69	0.09
Uniform Delay, d1	11.7	14.4	54.2	6.1	49.7	29.2
Progression Factor	1.00	1.00	1.51	0.36	1.00	1.00
Incremental Delay, d2	0.1	1.2	4.3	0.3	3.7	0.1
Delay (s)	11.8	15.6	86.0	2.4	53.4	29.2
Level of Service	B	B	F	A	D	C
Approach Delay (s)	14.5			16.8	44.5	
Approach LOS	B			B	D	

Intersection Summary

HCM 2000 Control Delay	21.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	128.0	Sum of lost time (s)	15.9
Intersection Capacity Utilization	44.8%	ICU Level of Service	A
Analysis Period (min)	15		

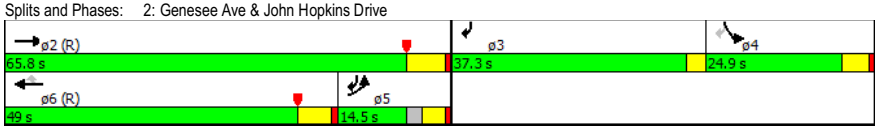
c Critical Lane Group

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	ø3
Lane Configurations							
Traffic Volume (vph)	131	380	1627	472	486	50	
Future Volume (vph)	131	380	1627	472	486	50	
Turn Type	Prot	NA	NA	Perm	Prot	pt+ov	
Protected Phases	5	2	6		4	3 5	3
Permitted Phases				6		4	
Detector Phase	5	2	6	6	4	3 5	
Switch Phase							
Minimum Initial (s)	4.0	10.0	10.0	10.0	7.0		4.0
Minimum Split (s)	9.5	16.7	15.9	15.9	11.9		7.0
Total Split (s)	14.5	65.8	49.0	49.0	24.9		37.3
Total Split (%)	11.3%	51.4%	38.3%	38.3%	19.5%		29%
Yellow Time (s)	3.4	5.7	4.9	4.9	3.9		3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		0.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	4.4	6.7	5.9	5.9	4.9		
Lead/Lag	Lag		Lead	Lead	Lag		Lead
Lead-Lag Optimize?	Yes		Yes	Yes	Yes		Yes
Recall Mode	None	C-Max	C-Max	C-Max	None		None

Intersection Summary

Cycle Length: 128
Actuated Cycle Length: 128
Offset: 58 (45%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 60
Control Type: Actuated-Coordinated

Splits and Phases: 2: Genesee Ave & John Hopkins Drive



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	131	380	1627	472	486	50
Future Volume (vph)	131	380	1627	472	486	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	6.7	5.9	5.9	4.9	3.0
Lane Util. Factor	1.00	0.91	0.81	1.00	0.97	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	5085	7544	1583	3433	1583
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	5085	7544	1583	3433	1583
Peak-hour factor, PHF	0.80	0.80	0.90	0.90	0.79	0.79
Adj. Flow (vph)	164	475	1808	524	615	63
RTOR Reduction (vph)	0	0	0	246	0	1
Lane Group Flow (vph)	164	475	1808	278	615	62
Turn Type	Prot	NA	NA	Perm	Prot	pt+ov
Protected Phases	5	2	6		4	3 5
Permitted Phases				6		4
Actuated Green, G (s)	12.4	73.6	57.6	57.6	36.6	56.6
Effective Green, g (s)	12.4	73.6	57.6	57.6	36.6	52.2
Actuated g/C Ratio	0.10	0.57	0.45	0.45	0.29	0.41
Clearance Time (s)	4.4	6.7	5.9	5.9	4.9	
Vehicle Extension (s)	2.0	4.0	3.9	3.9	5.0	
Lane Grp Cap (vph)	171	2923	3394	712	981	682
v/s Ratio Prot	c0.09	0.09	c0.24		c0.18	c0.01
v/s Ratio Perm				0.18		0.03
v/c Ratio	0.96	0.16	0.53	0.39	0.63	0.09
Uniform Delay, d1	57.5	12.8	25.5	23.5	39.8	23.3
Progression Factor	0.95	0.76	1.41	3.53	1.00	1.00
Incremental Delay, d2	55.7	0.1	0.5	1.3	1.8	0.0
Delay (s)	110.1	9.8	36.4	84.2	41.5	23.3
Level of Service	F	A	D	F	D	C
Approach Delay (s)		35.6	47.2		39.8	
Approach LOS		D	D		D	

Intersection Summary

HCM 2000 Control Delay	43.8	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	128.0	Sum of lost time (s)	18.2
Intersection Capacity Utilization	52.7%	ICU Level of Service	A
Analysis Period (min)	15		

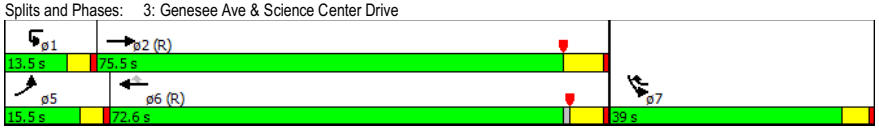
c Critical Lane Group

Lane Group	EBL	EBT	WBU	WBT	WBR	SBL
Lane Configurations						
Traffic Volume (vph)	64	755	8	2187	303	37
Future Volume (vph)	64	755	8	2187	303	37
Turn Type	Prot	NA	Prot	NA	pm+ov	Prot
Protected Phases	5	2	1	6	7	7
Permitted Phases					6	
Detector Phase	5	2	1	6	7	7
Switch Phase						
Minimum Initial (s)	4.0	10.0	4.0	10.0	4.0	4.0
Minimum Split (s)	9.5	22.5	9.5	16.0	8.9	8.9
Total Split (s)	15.5	75.5	13.5	72.6	39.0	39.0
Total Split (%)	12.1%	59.0%	10.5%	56.7%	30.5%	30.5%
Yellow Time (s)	3.4	5.9	3.4	5.0	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	6.9	4.4	6.0	4.9	4.9
Lead/Lag	Lead	Lag	Lead	Lag		
Lead-Lag Optimize?	Yes	Yes	Yes	Yes		
Recall Mode	None	C-Max	None	C-Max	None	None

Intersection Summary

Cycle Length: 128
Actuated Cycle Length: 128
Offset: 108 (84%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 60
Control Type: Actuated-Coordinated

Splits and Phases: 3: Genesee Ave & Science Center Drive



Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Traffic Volume (vph)	64	755	8	2187	303	37	16
Future Volume (vph)	64	755	8	2187	303	37	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	6.9	4.4	6.0	4.9	4.9	
Lane Util. Factor	1.00	0.91	1.00	0.91	1.00	0.97	
Frt	1.00	1.00	1.00	1.00	0.85	0.95	
Flt Protected	0.95	1.00	0.95	1.00	1.00	0.97	
Satd. Flow (prot)	1770	5085	1770	5085	1583	3332	
Flt Permitted	0.95	1.00	0.95	1.00	1.00	0.97	
Satd. Flow (perm)	1770	5085	1770	5085	1583	3332	
Peak-hour factor, PHF	0.82	0.82	0.92	0.92	0.92	0.86	0.86
Adj. Flow (vph)	78	921	9	2377	329	43	19
RTOR Reduction (vph)	0	0	0	0	64	18	0
Lane Group Flow (vph)	78	921	9	2377	265	44	0
Turn Type	Prot	NA	Prot	NA	pm+ov	Prot	
Protected Phases	5	2	1	6	7	7	
Permitted Phases					6		
Actuated Green, G (s)	9.6	103.1	1.5	95.9	103.1	7.2	
Effective Green, g (s)	9.6	103.1	1.5	95.9	103.1	7.2	
Actuated g/C Ratio	0.07	0.81	0.01	0.75	0.81	0.06	
Clearance Time (s)	4.4	6.9	4.4	6.0	4.9	4.9	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	132	4095	20	3809	1275	187	
v/s Ratio Prot	c0.04	0.18	0.01	c0.47	0.01	c0.01	
v/s Ratio Perm					0.16		
v/c Ratio	0.59	0.22	0.45	0.62	0.21	0.24	
Uniform Delay, d1	57.3	3.0	62.8	7.6	2.9	57.8	
Progression Factor	0.78	2.06	0.91	0.82	1.29	1.00	
Incremental Delay, d2	6.4	0.1	13.7	0.7	0.1	0.7	
Delay (s)	51.0	6.2	70.6	6.9	3.8	58.4	
Level of Service	D	A	E	A	A	E	
Approach Delay (s)		9.7		6.7		58.4	
Approach LOS		A		A		E	

Intersection Summary

HCM 2000 Control Delay	8.4	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	128.0	Sum of lost time (s)	16.2
Intersection Capacity Utilization	61.9%	ICU Level of Service	B
Analysis Period (min)	15		

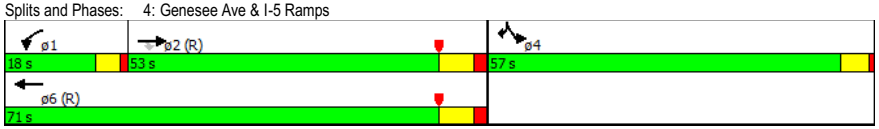
c Critical Lane Group

Lane Group	EBT	EBR	WBL	WBT	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	663	274	161	1613	730	506
Future Volume (vph)	663	274	161	1613	730	506
Turn Type	NA	Perm	Prot	NA	Prot	Prot
Protected Phases	2		1	6	4	4
Permitted Phases		2				
Detector Phase	2	2	1	6	4	4
Switch Phase						
Minimum Initial (s)	10.0	10.0	5.0	10.0	13.0	13.0
Minimum Split (s)	25.2	25.2	9.7	25.2	18.1	18.1
Total Split (s)	53.0	53.0	18.0	71.0	57.0	57.0
Total Split (%)	41.4%	41.4%	14.1%	55.5%	44.5%	44.5%
Yellow Time (s)	5.2	5.2	3.7	5.2	4.1	4.1
All-Red Time (s)	2.0	2.0	1.0	2.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.2	7.2	4.7	7.2	5.1	5.1
Lead/Lag	Lag	Lag	Lead			
Lead-Lag Optimize?	Yes	Yes	Yes			
Recall Mode	C-Max	C-Max	None	C-Max	Min	Min

Intersection Summary

Cycle Length: 128
Actuated Cycle Length: 128
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 60
Control Type: Actuated-Coordinated

Splits and Phases: 4: Genesee Ave & I-5 Ramps



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	663	274	161	1613	0	0	0	0	730	0	506
Future Volume (vph)	0	663	274	161	1613	0	0	0	0	730	0	506
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		7.2	7.2	4.7	7.2					5.1		5.1
Lane Util. Factor		0.81	0.88	0.97	0.91					0.97		0.88
Frt		1.00	0.85	1.00	1.00					1.00		0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (prot)		7544	2787	3433	5085					3433		2787
Flt Permitted		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (perm)		7544	2787	3433	5085					3433		2787
Peak-hour factor, PHF	0.67	0.67	0.67	0.92	0.92	0.92	0.25	0.25	0.25	0.86	0.86	0.86
Adj. Flow (vph)	0	990	409	175	1753	0	0	0	0	849	0	588
RTOR Reduction (vph)	0	0	212	0	0	0	0	0	0	0	0	53
Lane Group Flow (vph)	0	990	197	175	1753	0	0	0	0	849	0	535
Turn Type		NA	Perm	Prot	NA					Prot		Prot
Protected Phases		2		1	6					4		4
Permitted Phases			2									
Actuated Green, G (s)		61.7	61.7	10.9	77.3					38.4		38.4
Effective Green, g (s)		61.7	61.7	10.9	77.3					38.4		38.4
Actuated g/C Ratio		0.48	0.48	0.09	0.60					0.30		0.30
Clearance Time (s)		7.2	7.2	4.7	7.2					5.1		5.1
Vehicle Extension (s)		2.0	2.0	2.0	2.0					2.0		2.0
Lane Grp Cap (vph)		3636	1343	292	3070					1029		836
v/s Ratio Prot		0.13		0.05	c0.34					c0.25		0.19
v/s Ratio Perm			0.07									
v/c Ratio		0.27	0.15	0.60	0.57					0.83		0.64
Uniform Delay, d1		19.8	18.5	56.4	15.3					41.7		38.8
Progression Factor		1.29	5.29	1.24	0.10					1.00		1.00
Incremental Delay, d2		0.2	0.2	1.4	0.5					5.2		1.2
Delay (s)		25.6	97.9	71.2	2.0					46.9		40.0
Level of Service		C	F	E	A					D		D
Approach Delay (s)		46.8			8.3			0.0			44.1	
Approach LOS		D			A			A			D	

Intersection Summary

HCM 2000 Control Delay	30.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	128.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	82.1%	ICU Level of Service	E
Analysis Period (min)	15		

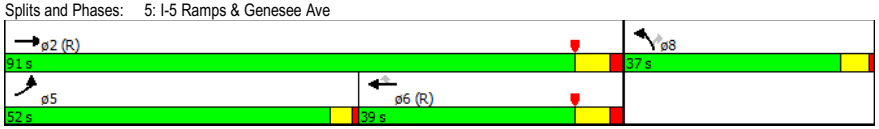
c Critical Lane Group

Lane Group	EBL	EBT	WBT	WBR	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	981	313	1368	805	563	293
Future Volume (vph)	981	313	1368	805	563	293
Turn Type	Prot	NA	NA	Perm	Prot	Perm
Protected Phases	5	2	6		8	
Permitted Phases				6		8
Detector Phase	5	2	6	6	8	8
Switch Phase						
Minimum Initial (s)	11.0	10.0	10.0	10.0	5.0	5.0
Minimum Split (s)	25.2	17.2	17.2	17.2	22.1	22.1
Total Split (s)	52.0	91.0	39.0	39.0	37.0	37.0
Total Split (%)	40.6%	71.1%	30.5%	30.5%	28.9%	28.9%
Yellow Time (s)	3.2	5.2	5.2	5.2	4.1	4.1
All-Red Time (s)	1.0	2.0	2.0	2.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.2	7.2	7.2	7.2	5.1	5.1
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Recall Mode	Min	C-Max	C-Max	C-Max	None	None

Intersection Summary

Cycle Length: 128
Actuated Cycle Length: 128
Offset: 81 (63%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 80
Control Type: Actuated-Coordinated

Splits and Phases: 5: I-5 Ramps & Genesee Ave



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	981	313	0	0	1368	805	563	0	293	0	0	0
Future Volume (vph)	981	313	0	0	1368	805	563	0	293	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	7.2			7.2	7.2	5.1		5.1			
Lane Util. Factor	0.97	0.91			0.81	0.88	0.97		0.88			
Frt	1.00	1.00			1.00	0.85	1.00		0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95		1.00			
Satd. Flow (prot)	3433	5085			7544	2787	3433		2787			
Flt Permitted	0.95	1.00			1.00	1.00	0.95		1.00			
Satd. Flow (perm)	3433	5085			7544	2787	3433		2787			
Peak-hour factor, PHF	0.90	0.90	0.90	0.88	0.88	0.88	0.79	0.79	0.79	0.25	0.25	0.25
Adj. Flow (vph)	1090	348	0	0	1555	915	713	0	371	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	559	0	0	285	0	0	0
Lane Group Flow (vph)	1090	348	0	0	1555	356	713	0	86	0	0	0
Turn Type	Prot	NA			NA	Perm	Prot		Perm			
Protected Phases	5	2			6		8					
Permitted Phases						6			8			
Actuated Green, G (s)	44.4	86.0			37.4	37.4	29.7		29.7			
Effective Green, g (s)	44.4	86.0			37.4	37.4	29.7		29.7			
Actuated g/C Ratio	0.35	0.67			0.29	0.29	0.23		0.23			
Clearance Time (s)	4.2	7.2			7.2	7.2	5.1		5.1			
Vehicle Extension (s)	2.0	2.0			2.0	2.0	2.0		2.0			
Lane Grp Cap (vph)	1190	3416			2204	814	796		646			
v/s Ratio Prot	c0.32	0.07			c0.21		c0.21					
v/s Ratio Perm						0.13			0.03			
v/c Ratio	0.92	0.10			0.71	0.44	0.90		0.13			
Uniform Delay, d1	40.0	7.4			40.4	36.8	47.6		38.9			
Progression Factor	0.92	1.43			0.70	0.46	1.00		1.00			
Incremental Delay, d2	10.0	0.1			1.8	1.6	12.3		0.0			
Delay (s)	46.9	10.6			30.1	18.5	60.0		39.0			
Level of Service	D	B			C	B	E		D			
Approach Delay (s)		38.1			25.8			52.8			0.0	
Approach LOS		D			C			D			A	

Intersection Summary

HCM 2000 Control Delay	35.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	128.0	Sum of lost time (s)	16.5
Intersection Capacity Utilization	82.1%	ICU Level of Service	E
Analysis Period (min)	15		

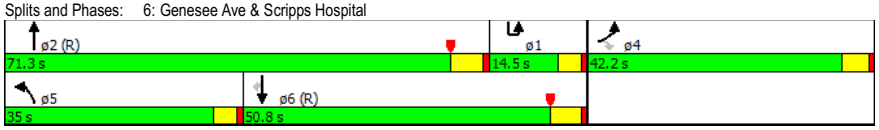
c Critical Lane Group

Lane Group	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	782	773	473	762	31	750	593
Future Volume (vph)	782	773	473	762	31	750	593
Turn Type	Prot	Perm	Prot	NA	Prot	NA	Perm
Protected Phases	4		5	2	1	6	
Permitted Phases		4					6
Detector Phase	4	4	5	2	1	6	6
Switch Phase							
Minimum Initial (s)	7.0	7.0	4.0	10.0	4.0	10.0	10.0
Minimum Split (s)	11.9	11.9	9.5	22.5	9.5	30.5	30.5
Total Split (s)	42.2	42.2	35.0	71.3	14.5	50.8	50.8
Total Split (%)	33.0%	33.0%	27.3%	55.7%	11.3%	39.7%	39.7%
Yellow Time (s)	3.9	3.9	3.4	4.7	3.4	4.7	4.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	4.4	5.7	4.4	5.7	5.7
Lead/Lag			Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?			Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	C-Max	None	C-Max	C-Max

Intersection Summary

Cycle Length: 128
Actuated Cycle Length: 128
Offset: 106 (83%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 6: Genesee Ave & Scripps Hospital



Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	782	773	473	762	31	750	593
Future Volume (vph)	782	773	473	762	31	750	593
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9	4.4	5.7	4.4	5.7	5.7
Lane Util. Factor	0.97	1.00	1.00	0.91	1.00	0.91	1.00
Frt	1.00	0.85	1.00	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	1583	1770	5085	1770	5085	1583
Flt Permitted	0.95	1.00	0.95	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	1583	1770	5085	1770	5085	1583
Peak-hour factor, PHF	0.93	0.93	0.96	0.96	0.92	0.93	0.93
Adj. Flow (vph)	841	831	493	794	34	806	638
RTOR Reduction (vph)	0	358	0	0	0	0	409
Lane Group Flow (vph)	841	473	493	794	34	806	229
Turn Type	Prot	Perm	Prot	NA	Prot	NA	Perm
Protected Phases	4		5	2	1	6	
Permitted Phases		4					6
Actuated Green, G (s)	37.3	37.3	30.6	69.6	6.1	45.1	45.1
Effective Green, g (s)	37.3	37.3	30.6	69.6	6.1	45.1	45.1
Actuated g/C Ratio	0.29	0.29	0.24	0.54	0.05	0.35	0.35
Clearance Time (s)	4.9	4.9	4.4	5.7	4.4	5.7	5.7
Vehicle Extension (s)	2.0	2.0	2.0	5.2	2.0	4.0	4.0
Lane Grp Cap (vph)	1000	461	423	2764	84	1791	557
v/s Ratio Prot	0.24		c0.28	0.16	0.02	c0.16	
v/s Ratio Perm		c0.30					0.14
v/c Ratio	0.84	1.03	1.17	0.29	0.40	0.45	0.41
Uniform Delay, d1	42.6	45.4	48.7	15.8	59.2	31.9	31.4
Progression Factor	1.00	1.00	1.01	1.53	1.02	0.99	1.79
Incremental Delay, d2	6.2	48.8	96.2	0.2	1.2	0.8	2.2
Delay (s)	48.8	94.2	145.5	24.4	61.4	32.4	58.5
Level of Service	D	F	F	C	E	C	E
Approach Delay (s)	71.3			70.8		44.4	
Approach LOS	E			E		D	

Intersection Summary

HCM 2000 Control Delay	62.2	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	128.0	Sum of lost time (s)	15.0
Intersection Capacity Utilization	75.5%	ICU Level of Service	D
Analysis Period (min)	15		

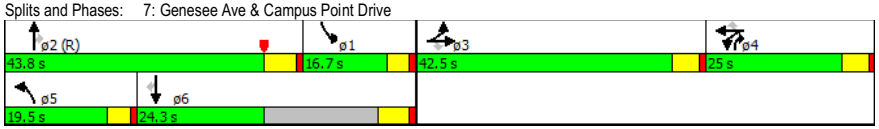
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	269	10	249	155	18	138	302	999	210	118	1001	309
Future Volume (vph)	269	10	249	155	18	138	302	999	210	118	1001	309
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	3	3		4	4		5	2	4	1	6	
Permitted Phases			3			4			2			6
Detector Phase	3	3	3	4	4	4	5	2	4	1	6	6
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	4.0	10.0	7.0	4.0	10.0	10.0
Minimum Split (s)	11.9	11.9	11.9	22.5	22.5	22.5	8.4	37.7	22.5	8.4	33.7	33.7
Total Split (s)	42.5	42.5	42.5	25.0	25.0	25.0	19.5	43.8	25.0	16.7	24.3	24.3
Total Split (%)	33.2%	33.2%	33.2%	19.5%	19.5%	19.5%	15.2%	34.2%	19.5%	13.0%	19.0%	19.0%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.9	3.9	3.4	4.7	3.9	3.4	4.7	4.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	4.9	4.9	4.9	4.9	4.4	5.7	4.9	4.4	5.7	5.7
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lag	Lead	Lead	Lag	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	None	None	None	None

Intersection Summary

Cycle Length: 128
Actuated Cycle Length: 128
Offset: 26 (20%), Referenced to phase 2:NBT, Start of Yellow
Natural Cycle: 85
Control Type: Actuated-Coordinated

Splits and Phases: 7: Genesee Ave & Campus Point Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	269	10	249	155	18	138	302	999	210	118	1001	309
Future Volume (vph)	269	10	249	155	18	138	302	999	210	118	1001	309
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9	4.9	4.9	4.9	4.9	4.4	5.7	4.9	4.4	5.7	5.7
Lane Util. Factor	0.97	1.00	0.88	0.95	0.95	0.88	0.97	0.91	1.00	0.97	0.91	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	0.96	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	1863	2787	1681	1702	2787	3433	5085	1583	3433	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	0.96	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	1863	2787	1681	1702	2787	3433	5085	1583	3433	5085	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.89	0.89	0.89	0.84	0.84	0.84	0.94	0.94	0.94
Adj. Flow (vph)	292	11	271	174	20	155	360	1189	250	126	1065	329
RTOR Reduction (vph)	0	0	237	0	0	140	0	0	90	0	0	154
Lane Group Flow (vph)	292	11	34	96	98	15	360	1189	160	126	1065	175
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	3	3		4	4		5	2	4	1	6	
Permitted Phases			3			4			2			6
Actuated Green, G (s)	15.9	15.9	15.9	12.5	12.5	12.5	18.5	69.5	82.0	10.2	61.2	61.2
Effective Green, g (s)	15.9	15.9	15.9	12.5	12.5	12.5	18.5	69.5	82.0	10.2	61.2	61.2
Actuated g/C Ratio	0.12	0.12	0.12	0.10	0.10	0.10	0.14	0.54	0.64	0.08	0.48	0.48
Clearance Time (s)	4.9	4.9	4.9	4.9	4.9	4.9	4.4	5.7	4.9	4.4	5.7	5.7
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	3.7	2.0	2.0	4.0	4.0
Lane Grp Cap (vph)	426	231	346	164	166	272	496	2760	1074	273	2431	756
v/s Ratio Prot	c0.09	0.01		0.06	c0.06		c0.10	0.23	0.01	0.04	c0.21	
v/s Ratio Perm			0.01			0.01			0.09			0.11
v/c Ratio	0.69	0.05	0.10	0.59	0.59	0.06	0.73	0.43	0.15	0.46	0.44	0.23
Uniform Delay, d1	53.7	49.4	49.7	55.3	55.3	52.4	52.3	17.4	9.1	56.3	22.0	19.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.34	0.90	2.36	0.93	0.78	1.27
Incremental Delay, d2	3.6	0.0	0.0	3.4	3.7	0.0	3.4	0.4	0.0	0.3	0.1	0.1
Delay (s)	57.3	49.4	49.7	58.7	59.0	52.4	73.4	16.0	21.6	52.5	17.4	24.9
Level of Service	E	D	D	E	E	D	E	B	C	D	B	C
Approach Delay (s)		53.6			56.0			28.3			21.9	
Approach LOS		D			E			C			C	

Intersection Summary

HCM 2000 Control Delay	31.7	HCM 2000 Level of Service	C	
HCM 2000 Volume to Capacity ratio	0.54			
Actuated Cycle Length (s)	128.0	Sum of lost time (s)	19.9	
Intersection Capacity Utilization	54.8%	ICU Level of Service	A	
Analysis Period (min)	15			

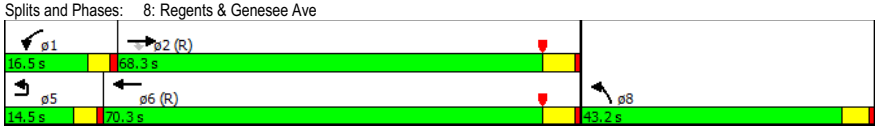
c Critical Lane Group

Lane Group	EBU	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations							
Traffic Volume (vph)	41	1181	144	36	1719	211	18
Future Volume (vph)	41	1181	144	36	1719	211	18
Turn Type	Prot	NA	Perm	Prot	NA	Prot	custom
Protected Phases	5	2		1	6	8	
Permitted Phases			2				
Detector Phase	5	2	2	1	6	8	
Switch Phase							
Minimum Initial (s)	4.0	10.0	10.0	4.0	10.0	7.0	
Minimum Split (s)	9.5	22.7	22.7	9.5	22.5	37.9	
Total Split (s)	14.5	68.3	68.3	16.5	70.3	43.2	
Total Split (%)	11.3%	53.4%	53.4%	12.9%	54.9%	33.8%	
Yellow Time (s)	3.4	4.7	4.7	3.4	4.7	3.9	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.4	5.7	5.7	4.4	5.7	4.9	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		
Recall Mode	None	C-Max	C-Max	None	C-Max	None	

Intersection Summary

Cycle Length: 128
Actuated Cycle Length: 128
Offset: 56 (44%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 100
Control Type: Actuated-Coordinated

Splits and Phases: 8: Regents & Genesee Ave



Movement	EBU	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations							
Traffic Volume (vph)	41	1181	144	36	1719	211	18
Future Volume (vph)	41	1181	144	36	1719	211	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	12	16	12
Total Lost time (s)	4.4	5.7	5.7	4.4	5.7	4.9	4.0
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	1770	5085	1583	1770	5085	2006	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (perm)	1770	5085	1583	1770	5085	2006	1583
Peak-hour factor, PHF	0.92	0.70	0.70	0.72	0.72	0.96	0.96
Adj. Flow (vph)	45	1687	206	50	2388	220	19
RTOR Reduction (vph)	0	0	64	0	0	0	19
Lane Group Flow (vph)	45	1687	142	50	2388	220	0
Turn Type	Prot	NA	Perm	Prot	NA	Prot	custom
Protected Phases	5	2		1	6	8	
Permitted Phases			2				
Actuated Green, G (s)	6.8	87.3	87.3	7.1	87.6	18.6	0.0
Effective Green, g (s)	6.8	87.3	87.3	7.1	87.6	18.6	0.0
Actuated g/C Ratio	0.05	0.68	0.68	0.06	0.68	0.15	0.00
Clearance Time (s)	4.4	5.7	5.7	4.4	5.7	4.9	
Vehicle Extension (s)	2.0	5.0	5.0	2.0	3.9	2.0	
Lane Grp Cap (vph)	94	3468	1079	98	3480	291	0
v/s Ratio Prot	0.03	0.33		c0.03	c0.47	c0.11	
v/s Ratio Perm			0.09				
v/c Ratio	0.48	0.49	0.13	0.51	0.69	0.76	0.00
Uniform Delay, d1	58.9	9.7	7.1	58.8	12.0	52.5	64.0
Progression Factor	1.03	0.51	0.29	1.05	0.82	1.00	1.00
Incremental Delay, d2	1.4	0.5	0.2	1.8	1.1	9.5	0.0
Delay (s)	61.9	5.4	2.3	63.5	10.9	62.0	64.0
Level of Service	E	A	A	E	B	E	E
Approach Delay (s)		6.4			12.0	62.2	
Approach LOS		A			B	E	

Intersection Summary

HCM 2000 Control Delay	12.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	128.0	Sum of lost time (s)	15.0
Intersection Capacity Utilization	54.6%	ICU Level of Service	A
Analysis Period (min)	15		

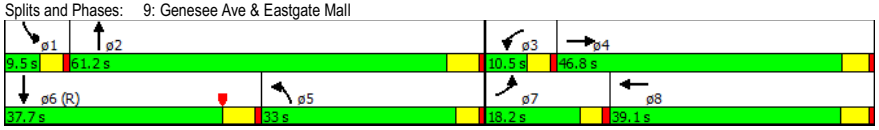
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	159	119	20	124	420	885	36	925
Future Volume (vph)	159	119	20	124	420	885	36	925
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	7	4	3	8	5	2	1	6
Permitted Phases								
Detector Phase	7	4	3	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	4.0	7.0	4.0	7.0	4.0	10.0	4.0	10.0
Minimum Split (s)	8.4	38.9	9.5	39.1	9.5	31.7	9.5	32.7
Total Split (s)	18.2	46.8	10.5	39.1	33.0	61.2	9.5	37.7
Total Split (%)	14.2%	36.6%	8.2%	30.5%	25.8%	47.8%	7.4%	29.5%
Yellow Time (s)	3.4	3.9	3.4	4.1	3.4	4.7	3.4	4.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	4.9	4.4	5.1	4.4	5.7	4.4	5.7
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max

Intersection Summary

Cycle Length: 128
Actuated Cycle Length: 128
Offset: 93 (73%), Referenced to phase 6:SBT, Start of Yellow
Natural Cycle: 145
Control Type: Actuated-Coordinated

Splits and Phases: 9: Genesee Ave & Eastgate Mall



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	159	119	406	20	124	25	420	885	21	36	925	174
Future Volume (vph)	159	119	406	20	124	25	420	885	21	36	925	174
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	5.1		4.4	5.7		4.4	5.7	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.91		0.97	0.91	
Frt	1.00	0.88		1.00	0.97		1.00	1.00		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3128		1770	3449		1770	5068		3433	4965	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	3128		1770	3449		1770	5068		3433	4965	
Peak-hour factor, PHF	0.83	0.83	0.83	0.79	0.79	0.79	0.96	0.96	0.96	0.82	0.82	0.82
Adj. Flow (vph)	192	143	489	25	157	32	438	922	22	44	1128	212
RTOR Reduction (vph)	0	402	0	0	16	0	0	1	0	0	17	0
Lane Group Flow (vph)	192	230	0	25	173	0	438	943	0	44	1323	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Actuated Green, G (s)	13.8	22.9		3.7	12.6		29.5	76.8		5.2	52.5	
Effective Green, g (s)	13.8	22.9		3.7	12.6		29.5	76.8		5.2	52.5	
Actuated g/C Ratio	0.11	0.18		0.03	0.10		0.23	0.60		0.04	0.41	
Clearance Time (s)	4.4	4.9		4.4	5.1		4.4	5.7		4.4	5.7	
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	4.2		2.0	4.3	
Lane Grp Cap (vph)	190	559		51	339		407	3040		139	2036	
v/s Ratio Prot	c0.11	0.07		0.01	c0.05		c0.25	0.19		0.01	c0.27	
v/s Ratio Perm												
v/c Ratio	1.01	0.41		0.49	0.51		1.08	0.31		0.32	0.65	
Uniform Delay, d1	57.1	46.6		61.2	54.8		49.2	12.6		59.7	30.4	
Progression Factor	1.00	1.00		1.00	1.00		0.57	0.21		0.95	0.75	
Incremental Delay, d2	68.0	0.2		2.7	0.4		62.6	0.1		0.4	1.4	
Delay (s)	125.1	46.8		63.9	55.2		90.8	2.7		57.2	24.2	
Level of Service	F	D		E	E		F	A		E	C	
Approach Delay (s)		65.0			56.2			30.6			25.3	
Approach LOS		E			E			C			C	

Intersection Summary

HCM 2000 Control Delay	37.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	128.0	Sum of lost time (s)	19.6
Intersection Capacity Utilization	80.9%	ICU Level of Service	D
Analysis Period (min)	15		

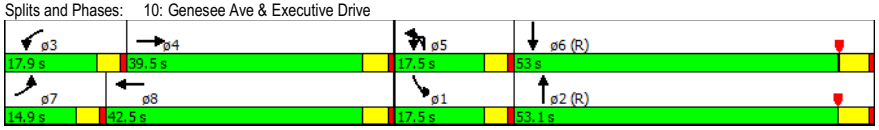
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	16	60	280	77	65	1218	58	1170
Future Volume (vph)	16	60	280	77	65	1218	58	1170
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	7	4	3	8	5	2	1	6
Permitted Phases								
Detector Phase	7	4	3	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	10.0	4.0	10.0
Minimum Split (s)	8.4	8.9	8.4	8.9	8.4	15.5	8.4	15.4
Total Split (s)	14.9	39.5	17.9	42.5	17.5	53.1	17.5	53.0
Total Split (%)	11.6%	30.9%	14.0%	33.2%	13.7%	41.5%	13.7%	41.4%
Yellow Time (s)	3.4	3.9	3.4	3.9	3.4	4.5	3.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	4.9	4.4	4.9	4.4	5.5	4.4	5.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	None	C-Max

Intersection Summary

Cycle Length: 128
Actuated Cycle Length: 128
Offset: 114 (89%), Referenced to phase 6:SBT and 2:NBT, Start of Yellow
Natural Cycle: 60
Control Type: Actuated-Coordinated

Splits and Phases: 10: Genesee Ave & Executive Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	16	60	83	280	77	80	18	65	1218	280	58	1170
Future Volume (vph)	16	60	83	280	77	80	18	65	1218	280	58	1170
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	4.9			4.4	5.5		4.4	5.4
Lane Util. Factor	1.00	0.95		0.97	0.95			1.00	0.91		1.00	0.91
Frt	1.00	0.91		1.00	0.92			1.00	0.97		1.00	1.00
Flt Protected	0.95	1.00		0.95	1.00			0.95	1.00		0.95	1.00
Satd. Flow (prot)	1770	3231		3433	3269			1770	4943		1770	5071
Flt Permitted	0.95	1.00		0.95	1.00			0.95	1.00		0.95	1.00
Satd. Flow (perm)	1770	3231		3433	3269			1770	4943		1770	5071
Peak-hour factor, PHF	0.85	0.85	0.85	0.86	0.86	0.86	0.92	0.80	0.80	0.80	0.94	0.94
Adj. Flow (vph)	19	71	98	326	90	93	20	81	1522	350	62	1245
RTOR Reduction (vph)	0	90	0	0	78	0	0	0	19	0	0	1
Lane Group Flow (vph)	19	79	0	326	105	0	0	101	1854	0	62	1267
Turn Type	Prot	NA		Prot	NA		Prot	Prot	NA		Prot	NA
Protected Phases	7	4		3	8		5	5	2		1	6
Permitted Phases												
Actuated Green, G (s)	2.9	10.1		13.4	20.6			11.6	77.4		7.9	73.8
Effective Green, g (s)	2.9	10.1		13.4	20.6			11.6	77.4		7.9	73.8
Actuated g/C Ratio	0.02	0.08		0.10	0.16			0.09	0.60		0.06	0.58
Clearance Time (s)	4.4	4.9		4.4	4.9			4.4	5.5		4.4	5.4
Vehicle Extension (s)	2.0	2.0		2.0	2.0			2.0	3.6		2.0	3.8
Lane Grp Cap (vph)	40	254		359	526			160	2988		109	2923
v/s Ratio Prot	0.01	c0.02		c0.09	0.03			c0.06	c0.38		0.04	0.25
v/s Ratio Perm												
v/c Ratio	0.47	0.31		0.91	0.20			0.63	0.62		0.57	0.43
Uniform Delay, d1	61.8	55.7		56.7	46.6			56.1	16.0		58.4	15.3
Progression Factor	1.00	1.00		1.00	1.00			1.07	0.56		1.29	0.28
Incremental Delay, d2	3.2	0.3		25.2	0.1			5.0	0.8		3.3	0.4
Delay (s)	65.0	55.9		81.9	46.6			64.8	9.9		78.9	4.6
Level of Service	E	E		F	D			E	A		E	A
Approach Delay (s)		56.8			69.2				12.7			8.1
Approach LOS		E			E				B			A

Intersection Summary

HCM 2000 Control Delay	20.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	128.0	Sum of lost time (s)	19.2
Intersection Capacity Utilization	61.4%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

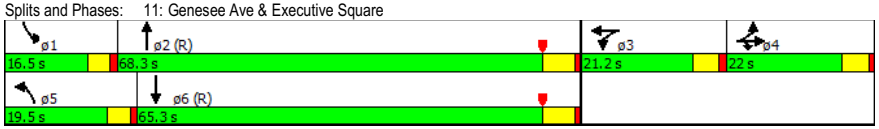
Movement	SBR
Lane Configurations	
Traffic Volume (vph)	22
Future Volume (vph)	22
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.94
Adj. Flow (vph)	23
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

Intersection Summary

Lane Group	EBL	EBT	EBR	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	19	2	104	3	19	74	1558	20	1526
Future Volume (vph)	19	2	104	3	19	74	1558	20	1526
Turn Type	Split	NA	Prot	NA	NA	Prot	NA	Prot	NA
Protected Phases	4	4	4	3		5	2	1	6
Permitted Phases									
Detector Phase	4	4	4	3		5	2	1	6
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	4.0		4.0	10.0	4.0	10.0
Minimum Split (s)	8.9	8.9	8.9	8.9		8.4	15.7	8.4	15.7
Total Split (s)	22.0	22.0	22.0	21.2		19.5	68.3	16.5	65.3
Total Split (%)	17.2%	17.2%	17.2%	16.6%		15.2%	53.4%	12.9%	51.0%
Yellow Time (s)	3.9	3.9	3.9	3.9		3.4	4.7	3.4	4.7
All-Red Time (s)	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	4.9	4.9		4.4	5.7	4.4	5.7
Lead/Lag	Lag	Lag	Lag	Lead		Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None		None	C-Max	None	C-Max

Intersection Summary
Cycle Length: 128
Actuated Cycle Length: 128
Offset: 4 (3%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 70
Control Type: Actuated-Coordinated

Splits and Phases: 11: Genesee Ave & Executive Square



Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	1	19	2	104	234	3	19	74	1558	118	20	1526
Future Volume (vph)	1	19	2	104	234	3	19	74	1558	118	20	1526
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9	4.9	4.9		4.9	4.0	4.4	5.7		4.4	5.7
Lane Util. Factor		0.95	0.91	0.95		0.95	0.95	1.00	0.91		1.00	0.91
Frt		1.00	0.86	0.85		1.00	0.85	1.00	0.99		1.00	1.00
Flt Protected		0.95	1.00	1.00		0.95	1.00	0.95	1.00		0.95	1.00
Satd. Flow (prot)		1681	1456	1504		1685	1504	1770	5032		1770	5073
Flt Permitted		0.60	1.00	1.00		0.95	1.00	0.95	1.00		0.95	1.00
Satd. Flow (perm)		1057	1456	1504		1685	1504	1770	5032		1770	5073
Peak-hour factor, PHF	0.92	0.94	0.94	0.94	0.96	0.96	0.96	0.92	0.92	0.92	0.96	0.96
Adj. Flow (vph)	1	20	2	111	244	3	20	80	1693	128	21	1590
RTOR Reduction (vph)	0	0	46	50	0	0	18	0	6	0	0	1
Lane Group Flow (vph)	0	19	11	8	0	249	0	80	1815	0	21	1616
Turn Type		Split	NA	Prot	Split	NA	NA	Prot	NA		Prot	NA
Protected Phases		4	4	4	3	3		5	2		1	6
Permitted Phases												
Actuated Green, G (s)		17.1	17.1	17.1		16.3	0.0	9.0	70.5		4.2	65.7
Effective Green, g (s)		17.1	17.1	17.1		16.3	0.0	9.0	70.5		4.2	65.7
Actuated g/C Ratio		0.13	0.13	0.13		0.13	0.00	0.07	0.55		0.03	0.51
Clearance Time (s)		4.9	4.9	4.9		4.9		4.4	5.7		4.4	5.7
Vehicle Extension (s)		2.0	2.0	2.0		2.0		2.0	3.9		2.0	2.2
Lane Grp Cap (vph)		141	194	200		214	0	124	2771		58	2603
v/s Ratio Prot			0.01	0.01		c0.15		c0.05	c0.36		0.01	0.32
v/s Ratio Perm		c0.02										
v/c Ratio		0.13	0.06	0.04		1.16	0.00	0.65	0.66		0.36	0.62
Uniform Delay, d1		48.9	48.4	48.3		55.9	64.0	57.9	20.2		60.6	22.2
Progression Factor		1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.23	0.86
Incremental Delay, d2		0.2	0.0	0.0		112.7	0.0	8.3	1.2		1.2	1.0
Delay (s)		49.1	48.5	48.3		168.5	64.0	66.3	21.4		75.7	20.2
Level of Service		D	D	D		F	E	E	C		E	C
Approach Delay (s)			48.5			161.5			23.3			20.9
Approach LOS			D			F			C			C

Intersection Summary			
HCM 2000 Control Delay	32.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	128.0	Sum of lost time (s)	19.9
Intersection Capacity Utilization	68.7%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	26
Future Volume (vph)	26
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.96
Adj. Flow (vph)	27
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

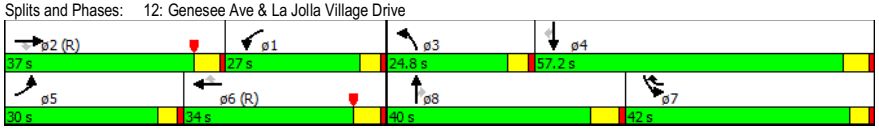
Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	326	365	317	415	628	350	330	1041	253	632	924	329
Future Volume (vph)	326	365	317	415	628	350	330	1041	253	632	924	329
Turn Type	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6	7	3	8		7	4	
Permitted Phases			2			6			8			4
Detector Phase	5	2	2	1	6	7	3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	4.0	10.0	10.0	4.0	10.0	4.0	4.0	10.0	10.0	4.0	10.0	10.0
Minimum Split (s)	8.4	15.3	15.3	8.4	15.5	8.4	8.4	15.7	15.7	8.4	15.4	15.4
Total Split (s)	30.0	37.0	37.0	27.0	34.0	42.0	24.8	40.0	40.0	42.0	57.2	57.2
Total Split (%)	20.5%	25.3%	25.3%	18.5%	23.3%	28.8%	17.0%	27.4%	27.4%	28.8%	39.2%	39.2%
Yellow Time (s)	3.4	4.3	4.3	3.4	4.5	3.4	3.4	4.7	4.7	3.4	4.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.3	5.3	4.4	5.5	4.4	4.4	5.7	5.7	4.4	5.4	5.4
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lag	Lead	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 146
Actuated Cycle Length: 146
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow, Master Intersection
Natural Cycle: 75
Control Type: Actuated-Coordinated

Splits and Phases: 12: Genesee Ave & La Jolla Village Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	326	365	317	415	628	350	330	1041	253	632	924	329
Future Volume (vph)	326	365	317	415	628	350	330	1041	253	632	924	329
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.3	5.3	4.4	5.5	4.4	4.4	5.7	5.7	4.4	5.4	5.4
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.91	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5085	1583	3433	5085	1583	3433	5085	1583	3433	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5085	1583	3433	5085	1583	3433	5085	1583	3433	5085	1583
Peak-hour factor, PHF	0.80	0.80	0.80	0.87	0.87	0.87	0.94	0.94	0.94	0.93	0.93	0.93
Adj. Flow (vph)	408	456	396	477	722	402	351	1107	269	680	994	354
RTOR Reduction (vph)	0	0	203	0	0	45	0	0	187	0	0	148
Lane Group Flow (vph)	408	456	193	477	722	357	351	1107	82	680	994	206
Turn Type	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6	7	3	8		7	4	
Permitted Phases			2			6			8			4
Actuated Green, G (s)	21.3	36.2	36.2	22.6	37.3	70.4	18.3	34.3	34.3	33.1	49.4	49.4
Effective Green, g (s)	21.3	36.2	36.2	22.6	37.3	70.4	18.3	34.3	34.3	33.1	49.4	49.4
Actuated g/C Ratio	0.15	0.25	0.25	0.15	0.26	0.48	0.13	0.23	0.23	0.23	0.34	0.34
Clearance Time (s)	4.4	5.3	5.3	4.4	5.5	4.4	4.4	5.7	5.7	4.4	5.4	5.4
Vehicle Extension (s)	2.0	6.0	6.0	2.0	5.8	2.0	2.0	3.5	3.5	2.0	4.1	4.1
Lane Grp Cap (vph)	500	1260	392	531	1299	763	430	1194	371	778	1720	535
v/s Ratio Prot	c0.12	0.09		c0.14	c0.14	0.11	0.10	c0.22		c0.20	0.20	
v/s Ratio Perm			0.12			0.12			0.05			0.13
v/c Ratio	0.82	0.36	0.49	0.90	0.56	0.47	0.82	0.93	0.22	0.87	0.58	0.39
Uniform Delay, d1	60.5	45.4	47.0	60.6	47.2	25.3	62.2	54.6	45.1	54.4	39.7	36.8
Progression Factor	0.68	0.79	1.80	0.75	0.71	0.56	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	7.3	0.6	3.3	15.1	1.4	0.1	10.8	12.4	0.4	10.4	0.6	0.7
Delay (s)	48.3	36.3	87.8	60.8	34.7	14.2	73.0	67.0	45.4	64.8	40.3	37.4
Level of Service	D	D	F	E	C	B	E	E	D	E	D	D
Approach Delay (s)		56.3			37.3			64.9			48.0	
Approach LOS		E			D			E			D	

Intersection Summary

HCM 2000 Control Delay	51.4	HCM 2000 Level of Service	D	
HCM 2000 Volume to Capacity ratio	0.84			
Actuated Cycle Length (s)	146.0	Sum of lost time (s)	20.0	
Intersection Capacity Utilization	76.2%	ICU Level of Service	D	
Analysis Period (min)	15			

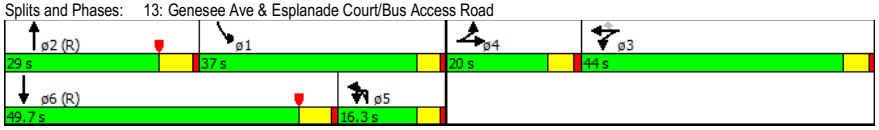
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	299	88	268	116	753	45	433	874	322
Future Volume (vph)	299	88	268	116	753	45	433	874	322
Turn Type	Split	NA	Split	NA	Perm	Prot	NA	Prot	NA
Protected Phases	4	4	3	3		5	2	1	6
Permitted Phases					3				
Detector Phase	4	4	3	3	3	5	2	1	6
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	10.0	4.0	10.0
Minimum Split (s)	8.9	8.9	8.9	8.9	8.9	8.4	16.0	8.4	15.7
Total Split (s)	20.0	20.0	44.0	44.0	44.0	16.3	29.0	37.0	49.7
Total Split (%)	15.4%	15.4%	33.8%	33.8%	33.8%	12.5%	22.3%	28.5%	38.2%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.9	3.4	5.0	3.4	4.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	4.9	4.9	4.9	4.4	6.0	4.4	5.7
Lead/Lag	Lead	Lead	Lag	Lag	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	None	C-Max

Intersection Summary

Cycle Length: 130
Actuated Cycle Length: 130
Offset: 77 (59%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 110
Control Type: Actuated-Coordinated

Splits and Phases: 13: Genesee Ave & Esplanade Court/Bus Access Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	299	88	62	268	116	753	8	45	433	303	874	322
Future Volume (vph)	299	88	62	268	116	753	8	45	433	303	874	322
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9		4.9	4.9	4.9		4.4	6.0		4.4	5.7
Lane Util. Factor	0.97	1.00		0.97	0.95	0.95		1.00	0.91		0.97	0.91
Frt	1.00	0.94		1.00	0.89	0.85		1.00	0.94		1.00	0.94
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.95	1.00		0.95	1.00
Satd. Flow (prot)	3433	1748		3433	1574	1504		1770	4771		3433	4788
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.95	1.00		0.95	1.00
Satd. Flow (perm)	3433	1748		3433	1574	1504		1770	4771		3433	4788
Peak-hour factor, PHF	0.78	0.78	0.78	0.68	0.68	0.68	0.92	0.84	0.84	0.84	0.82	0.82
Adj. Flow (vph)	383	113	79	394	171	1107	9	54	515	361	1066	393
RTOR Reduction (vph)	0	19	0	0	77	323	0	0	98	0	0	87
Lane Group Flow (vph)	383	173	0	394	570	308	0	63	778	0	1066	557
Turn Type	Split	NA		Split	NA	Perm	Prot	Prot	NA		Prot	NA
Protected Phases	4	4		3	3		5	5	2		1	6
Permitted Phases						3						
Actuated Green, G (s)	15.1	15.1		39.1	39.1	39.1		9.5	22.1		33.5	46.4
Effective Green, g (s)	15.1	15.1		39.1	39.1	39.1		9.5	22.1		33.5	46.4
Actuated g/C Ratio	0.12	0.12		0.30	0.30	0.30		0.07	0.17		0.26	0.36
Clearance Time (s)	4.9	4.9		4.9	4.9	4.9		4.4	6.0		4.4	5.7
Vehicle Extension (s)	2.0	2.0		2.0	2.0	2.0		2.0	3.7		2.0	4.1
Lane Grp Cap (vph)	398	203		1032	473	452		129	811		884	1708
v/s Ratio Prot	c0.11	0.10		0.11	c0.36			0.04	c0.16		c0.31	0.12
v/s Ratio Perm						0.20						
v/c Ratio	0.96	0.85		0.38	1.21	0.68		0.49	0.96dr		1.21	0.33
Uniform Delay, d1	57.2	56.3		35.9	45.5	40.0		57.9	53.5		48.2	30.4
Progression Factor	1.00	1.00		1.00	1.00	1.00		0.70	0.68		1.00	1.00
Incremental Delay, d2	35.0	26.4		0.1	111.0	3.4		1.0	21.8		103.3	0.5
Delay (s)	92.2	82.7		36.0	156.4	43.3		41.5	58.3		151.6	30.9
Level of Service	F	F		D	F	D		D	E		F	C
Approach Delay (s)		89.0			85.4				57.2			106.1
Approach LOS		F			F				E			F

Intersection Summary

HCM 2000 Control Delay	87.6	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.12		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	20.2
Intersection Capacity Utilization	87.0%	ICU Level of Service	E
Analysis Period (min)	15		

dr Defacto Right Lane. Recode with 1 though lane as a right lane.
c Critical Lane Group

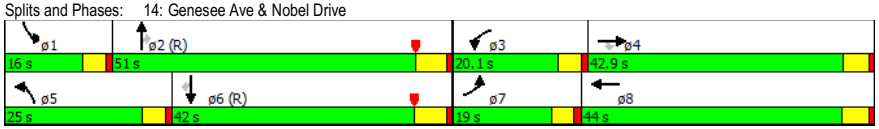
Movement	SBR
Lane Configurations	
Traffic Volume (vph)	206
Future Volume (vph)	206
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.82
Adj. Flow (vph)	251
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	178	515	341	323	569	441	744	306	124	1044	84
Future Volume (vph)	178	515	341	323	569	441	744	306	124	1044	84
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8	5	2		1	6	
Permitted Phases			4					2			6
Detector Phase	7	4	4	3	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	4.0	10.0	10.0	4.0	10.0	4.0	10.0	10.0	4.0	10.0	10.0
Minimum Split (s)	8.4	37.9	37.9	8.4	40.1	8.4	35.7	35.7	8.4	38.9	38.9
Total Split (s)	19.0	42.9	42.9	20.1	44.0	25.0	51.0	51.0	16.0	42.0	42.0
Total Split (%)	14.6%	33.0%	33.0%	15.5%	33.8%	19.2%	39.2%	39.2%	12.3%	32.3%	32.3%
Yellow Time (s)	3.4	3.9	3.9	3.4	4.1	3.4	4.7	4.7	3.4	4.9	4.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	4.9	4.9	4.4	5.1	4.4	5.7	5.7	4.4	5.9	5.9
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max

Intersection Summary
Cycle Length: 130
Actuated Cycle Length: 130
Offset: 83 (64%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 110
Control Type: Actuated-Coordinated

Splits and Phases: 14: Genesee Ave & Nobel Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	178	515	341	323	569	67	441	744	306	124	1044	84
Future Volume (vph)	178	515	341	323	569	67	441	744	306	124	1044	84
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9	4.9	4.4	5.1		4.4	5.7	5.7	4.4	5.9	5.9
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95		0.97	0.91	1.00	0.97	0.91	1.00
Frt	1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	3539	1583	3433	3483		3433	5085	1583	3433	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3539	1583	3433	3483		3433	5085	1583	3433	5085	1583
Peak-hour factor, PHF	0.90	0.90	0.90	0.87	0.87	0.87	0.87	0.87	0.87	0.92	0.92	0.92
Adj. Flow (vph)	198	572	379	371	654	77	507	855	352	135	1135	91
RTOR Reduction (vph)	0	0	206	0	7	0	0	0	171	0	0	62
Lane Group Flow (vph)	198	572	173	371	724	0	507	855	181	135	1135	29
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4						2			6
Actuated Green, G (s)	11.7	31.0	31.0	15.5	34.6		22.5	54.8	54.8	9.3	41.4	41.4
Effective Green, g (s)	11.7	31.0	31.0	15.5	34.6		22.5	54.8	54.8	9.3	41.4	41.4
Actuated g/C Ratio	0.09	0.24	0.24	0.12	0.27		0.17	0.42	0.42	0.07	0.32	0.32
Clearance Time (s)	4.4	4.9	4.9	4.4	5.1		4.4	5.7	5.7	4.4	5.9	5.9
Vehicle Extension (s)	2.0	4.0	4.0	2.0	2.1		2.0	8.0	8.0	2.0	4.0	4.0
Lane Grp Cap (vph)	308	843	377	409	927		594	2143	667	245	1619	504
v/s Ratio Prot	0.06	0.16		c0.11	c0.21		c0.15	0.17		0.04	c0.22	
v/s Ratio Perm			0.11						0.11			0.02
v/c Ratio	0.64	0.68	0.46	0.91	0.78		0.85	0.40	0.27	0.55	0.70	0.06
Uniform Delay, d1	57.1	45.0	42.3	56.5	44.2		52.2	26.1	24.6	58.3	38.9	30.8
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.07	0.35	0.21	1.18	0.73	0.97
Incremental Delay, d2	3.4	2.4	1.2	22.8	4.0		10.3	0.5	0.9	1.5	2.5	0.2
Delay (s)	60.6	47.4	43.6	79.3	48.2		66.0	9.8	6.1	70.3	31.1	29.9
Level of Service	E	D	D	E	D		E	A	A	E	C	C
Approach Delay (s)		48.4			58.7			25.7			34.9	
Approach LOS		D			E			C			C	

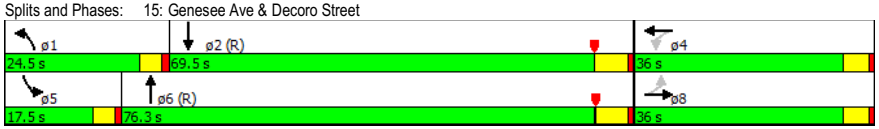
Intersection Summary			
HCM 2000 Control Delay	39.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	19.8
Intersection Capacity Utilization	72.5%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	26	4	5	3	6	1351	139	1458
Future Volume (vph)	26	4	5	3	6	1351	139	1458
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		8		4	1	6	5	2
Permitted Phases	8		4					
Detector Phase	8	8	4	4	1	6	5	2
Switch Phase								
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	10.0	4.0	10.0
Minimum Split (s)	8.9	8.9	8.9	8.9	8.4	15.7	8.4	15.9
Total Split (s)	36.0	36.0	36.0	36.0	24.5	76.3	17.5	69.5
Total Split (%)	27.7%	27.7%	27.7%	27.7%	18.8%	58.7%	13.5%	53.5%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.4	4.7	3.4	4.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.9		4.9	4.4	5.7	4.4	5.9
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	None	C-Max

Intersection Summary
Cycle Length: 130
Actuated Cycle Length: 130
Offset: 97 (75%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow
Natural Cycle: 50
Control Type: Actuated-Coordinated

Splits and Phases: 15: Genesee Ave & Decoro Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	26	4	4	5	3	159	6	1351	10	139	1458	36
Future Volume (vph)	26	4	4	5	3	159	6	1351	10	139	1458	36
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9			4.9		4.4	5.7		4.4	5.9	
Lane Util. Factor		1.00			1.00		1.00	0.91		1.00	0.91	
Frt		0.99			0.87		1.00	1.00		1.00	1.00	
Flt Protected		0.96			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1766			1621		1770	5080		1770	5067	
Flt Permitted		0.40			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		735			1607		1770	5080		1770	5067	
Peak-hour factor, PHF	0.73	0.73	0.73	0.88	0.88	0.88	0.91	0.91	0.91	0.96	0.96	0.96
Adj. Flow (vph)	36	5	5	6	3	181	7	1485	11	145	1519	38
RTOR Reduction (vph)	0	4	0	0	169	0	0	0	0	0	1	0
Lane Group Flow (vph)	0	42	0	0	21	0	7	1496	0	145	1556	0
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		8			4		1	6		5	2	
Permitted Phases	8			4								
Actuated Green, G (s)		8.9			8.9		1.3	90.3		15.8	104.6	
Effective Green, g (s)		8.9			8.9		1.3	90.3		15.8	104.6	
Actuated g/C Ratio		0.07			0.07		0.01	0.69		0.12	0.80	
Clearance Time (s)		4.9			4.9		4.4	5.7		4.4	5.9	
Vehicle Extension (s)		2.0			2.0		2.0	4.3		2.0	3.7	
Lane Grp Cap (vph)		50			110		17	3528		215	4076	
v/s Ratio Prot							0.00	c0.29		c0.08	0.31	
v/s Ratio Perm		c0.06			0.01							
v/c Ratio		0.85			0.19		0.41	0.42		0.67	0.38	
Uniform Delay, d1		59.9			57.2		64.0	8.6		54.6	3.6	
Progression Factor		1.00			1.00		0.87	2.13		0.75	1.07	
Incremental Delay, d2		69.9			0.3		5.6	0.4		4.4	0.2	
Delay (s)		129.8			57.5		61.2	18.6		45.5	4.0	
Level of Service		F			E		E	B		D	A	
Approach Delay (s)		129.8			57.5			18.8			7.6	
Approach LOS		F			E			B			A	

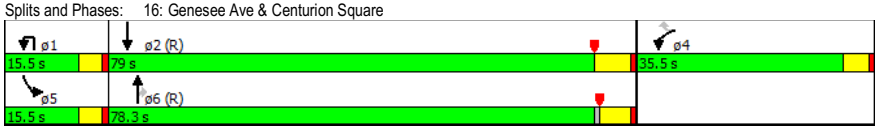
Intersection Summary			
HCM 2000 Control Delay	16.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	15.2
Intersection Capacity Utilization	62.3%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	90	28	2	1172	66	66	1353
Future Volume (vph)	90	28	2	1172	66	66	1353
Turn Type	Prot	Perm	Prot	NA	Perm	Prot	NA
Protected Phases	4		1	6		5	2
Permitted Phases		4			6		
Detector Phase	4	4	1	6	6	5	2
Switch Phase							
Minimum Initial (s)	7.0	7.0	4.0	10.0	10.0	4.0	10.0
Minimum Split (s)	11.9	11.9	8.4	15.7	15.7	8.4	16.4
Total Split (s)	35.5	35.5	15.5	78.3	78.3	15.5	79.0
Total Split (%)	27.3%	27.3%	11.9%	60.2%	60.2%	11.9%	60.8%
Yellow Time (s)	3.9	3.9	3.4	4.7	4.7	3.4	5.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	4.4	5.7	5.7	4.4	6.4
Lead/Lag			Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?			Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	C-Max	C-Max	None	C-Max

Intersection Summary
Cycle Length: 130
Actuated Cycle Length: 130
Offset: 37 (28%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow
Natural Cycle: 45
Control Type: Actuated-Coordinated

Splits and Phases: 16: Genesee Ave & Centurion Square



Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	90	28	2	1172	66	66	1353
Future Volume (vph)	90	28	2	1172	66	66	1353
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9	4.4	5.7	5.7	4.4	6.4
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	0.97	0.91
Frt	1.00	0.85	1.00	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	1770	5085	1583	3433	5085
Flt Permitted	0.95	1.00	0.95	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	1770	5085	1583	3433	5085
Peak-hour factor, PHF	0.66	0.66	0.92	0.90	0.90	0.94	0.94
Adj. Flow (vph)	136	42	2	1302	73	70	1439
RTOR Reduction (vph)	0	37	0	0	20	0	0
Lane Group Flow (vph)	136	5	2	1302	53	70	1439
Turn Type	Prot	Perm	Prot	NA	Perm	Prot	NA
Protected Phases	4		1	6		5	2
Permitted Phases		4			6		
Actuated Green, G (s)	14.4	14.4	1.1	94.5	94.5	6.1	98.8
Effective Green, g (s)	14.4	14.4	1.1	94.5	94.5	6.1	98.8
Actuated g/C Ratio	0.11	0.11	0.01	0.73	0.73	0.05	0.76
Clearance Time (s)	4.9	4.9	4.4	5.7	5.7	4.4	6.4
Vehicle Extension (s)	2.0	2.0	2.0	4.2	4.2	2.0	3.4
Lane Grp Cap (vph)	196	175	14	3696	1150	161	3864
v/s Ratio Prot	c0.08		0.00	0.26		c0.02	c0.28
v/s Ratio Perm		0.00			0.03		
v/c Ratio	0.69	0.03	0.14	0.35	0.05	0.43	0.37
Uniform Delay, d1	55.7	51.5	64.0	6.5	5.0	60.3	5.2
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.30	0.32
Incremental Delay, d2	8.3	0.0	1.7	0.3	0.1	0.7	0.3
Delay (s)	64.0	51.6	65.7	6.8	5.1	79.3	1.9
Level of Service	E	D	E	A	A	E	A
Approach Delay (s)	61.0			6.8			5.5
Approach LOS	E			A			A

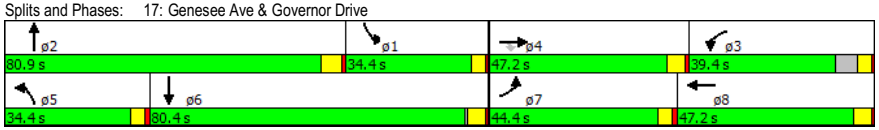
Intersection Summary			
HCM 2000 Control Delay	9.3	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.42		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	15.7
Intersection Capacity Utilization	43.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	278	274	116	222	253	140	659	344	690
Future Volume (vph)	278	274	116	222	253	140	659	344	690
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Prot	NA
Protected Phases	7	4		3	8	5	2	1	6
Permitted Phases			4						
Detector Phase	7	4	4	3	8	5	2	1	6
Switch Phase									
Minimum Initial (s)	4.0	8.0	8.0	4.0	8.0	4.0	8.0	4.0	8.0
Minimum Split (s)	8.4	13.2	13.2	8.4	13.2	8.4	13.9	8.4	13.4
Total Split (s)	44.4	47.2	47.2	39.4	47.2	34.4	80.9	34.4	80.4
Total Split (%)	21.5%	22.8%	22.8%	19.0%	22.8%	16.6%	39.1%	16.6%	38.9%
Yellow Time (s)	3.4	4.2	4.2	3.4	4.2	3.4	4.9	3.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.2	5.2	4.4	5.2	4.4	5.9	4.4	5.4
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	None	Min

Intersection Summary
Cycle Length: 206.9
Actuated Cycle Length: 115.9
Natural Cycle: 60
Control Type: Actuated-Uncoordinated

Splits and Phases: 17: Genesee Ave & Governor Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	278	274	116	222	253	216	140	659	161	344	690	219
Future Volume (vph)	278	274	116	222	253	216	140	659	161	344	690	219
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	16	12	12	12	12	12	12	12
Total Lost time (s)	4.4	5.2	5.2	4.4	5.2		4.4	5.9		4.4	5.4	
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95		1.00	0.91		0.97	0.91	
Frt	1.00	1.00	0.85	1.00	0.93		1.00	0.97		1.00	0.96	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	3433	3539	1583	3433	3734		1770	4936		3433	4901	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	3433	3539	1583	3433	3734		1770	4936		3433	4901	
Peak-hour factor, PHF	0.94	0.94	0.94	0.83	0.83	0.83	0.93	0.93	0.93	0.83	0.83	0.83
Adj. Flow (vph)	296	291	123	267	305	260	151	709	173	414	831	264
RTOR Reduction (vph)	0	0	81	0	73	0	0	23	0	0	29	0
Lane Group Flow (vph)	296	291	42	267	492	0	151	859	0	414	1066	0
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4									
Actuated Green, G (s)	16.4	16.2	16.2	25.0	24.8		16.2	30.8		23.0	38.1	
Effective Green, g (s)	16.4	16.2	16.2	25.0	24.8		16.2	30.8		23.0	38.1	
Actuated g/C Ratio	0.14	0.14	0.14	0.22	0.22		0.14	0.27		0.20	0.33	
Clearance Time (s)	4.4	5.2	5.2	4.4	5.2		4.4	5.9		4.4	5.4	
Vehicle Extension (s)	2.0	2.3	2.3	2.0	3.8		2.0	2.9		2.0	3.5	
Lane Grp Cap (vph)	490	498	223	746	805		249	1323		687	1625	
v/s Ratio Prot	c0.09	0.08		0.08	c0.13		0.09	c0.17		0.12	c0.22	
v/s Ratio Perm			0.03									
v/c Ratio	0.60	0.58	0.19	0.36	0.61		0.61	0.65		0.60	0.66	
Uniform Delay, d1	46.2	46.2	43.6	38.1	40.7		46.4	37.3		41.8	32.8	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.4	1.3	0.2	0.1	1.5		2.9	1.1		1.0	1.0	
Delay (s)	47.6	47.5	43.8	38.2	42.2		49.2	38.4		42.8	33.8	
Level of Service	D	D	D	D	D		D	D		D	C	
Approach Delay (s)		46.9			40.9			39.9			36.3	
Approach LOS		D			D			D			D	

Intersection Summary				
HCM 2000 Control Delay	40.0	HCM 2000 Level of Service	D	
HCM 2000 Volume to Capacity ratio	0.65			
Actuated Cycle Length (s)	114.9	Sum of lost time (s)	19.9	
Intersection Capacity Utilization	64.6%	ICU Level of Service	C	
Analysis Period (min)	15			
c Critical Lane Group				

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	208	134	780	712	234
Future Volume (Veh/h)	0	208	134	780	712	234
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.87	0.87	0.83	0.83	0.87	0.87
Hourly flow rate (vph)	0	239	161	940	818	269
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1453	409	818			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1453	409	818			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	60	80			
cM capacity (veh/h)	97	592	806			

Direction, Lane #	EB 1	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3
Volume Total	239	161	313	313	313	409	409	269
Volume Left	0	161	0	0	0	0	0	0
Volume Right	239	0	0	0	0	0	0	269
cSH	592	806	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.40	0.20	0.18	0.18	0.18	0.24	0.24	0.16
Queue Length 95th (ft)	49	19	0	0	0	0	0	0
Control Delay (s)	15.1	10.6	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	C	B						
Approach Delay (s)	15.1	1.5				0.0		
Approach LOS	C							

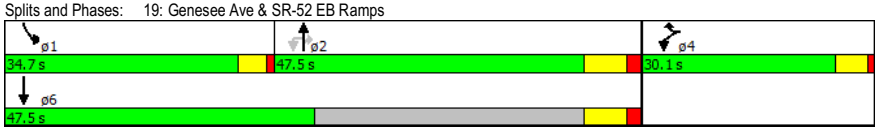
Intersection Summary			
Average Delay	2.2		
Intersection Capacity Utilization	39.2%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	169	149	2	819	273	541	360
Future Volume (vph)	169	149	2	819	273	541	360
Turn Type	Prot	Prot	Perm	NA	Perm	Prot	NA
Protected Phases	4	4		2		1	6
Permitted Phases			2		2		
Detector Phase	4	4	2	2	2	1	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	13.0	13.0	13.0	5.0	10.0
Minimum Split (s)	37.1	37.1	38.5	38.5	38.5	9.7	25.5
Total Split (s)	30.1	30.1	47.5	47.5	47.5	34.7	47.5
Total Split (%)	26.8%	26.8%	42.3%	42.3%	42.3%	30.9%	42.3%
Yellow Time (s)	4.1	4.1	5.5	5.5	5.5	3.7	5.5
All-Red Time (s)	1.0	1.0	2.0	2.0	2.0	1.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	5.1	5.1		7.5	7.5	4.7	7.5
Lead/Lag			Lag	Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	Yes	
Recall Mode	None	None	Min	Min	Min	None	Min

Intersection Summary

Cycle Length: 112.3
Actuated Cycle Length: 99
Natural Cycle: 140
Control Type: Actuated-Uncoordinated

Splits and Phases: 19: Genesee Ave & SR-52 EB Ramps



Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	169	149	2	819	273	541	360
Future Volume (vph)	169	149	2	819	273	541	360
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1		7.5	7.5	4.7	7.5
Lane Util. Factor	1.00	1.00		0.95	1.00	1.00	0.95
Frt	1.00	0.85		1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00		1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583		3539	1583	1770	3539
Flt Permitted	0.95	1.00		0.95	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583		3377	1583	1770	3539
Peak-hour factor, PHF	0.92	0.92	0.92	0.82	0.82	0.90	0.90
Adj. Flow (vph)	184	162	2	999	333	601	400
RTOR Reduction (vph)	0	136	0	0	121	0	0
Lane Group Flow (vph)	184	26	0	1001	212	601	400
Turn Type	Prot	Prot	Perm	NA	Perm	Prot	NA
Protected Phases	4	4		2		1	6
Permitted Phases			2		2		
Actuated Green, G (s)	15.7	15.7		35.7	35.7	30.3	70.7
Effective Green, g (s)	15.7	15.7		35.7	35.7	30.3	70.7
Actuated g/C Ratio	0.16	0.16		0.36	0.36	0.31	0.71
Clearance Time (s)	5.1	5.1		7.5	7.5	4.7	7.5
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	280	251		1217	570	541	2527
v/s Ratio Prot	c0.10	0.02				c0.34	0.11
v/s Ratio Perm				c0.30	0.13		
v/c Ratio	0.66	0.10		0.82	0.37	1.11	0.16
Uniform Delay, d1	39.1	35.6		28.8	23.4	34.4	4.6
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	5.5	0.2		4.6	0.4	72.8	0.0
Delay (s)	44.6	35.8		33.4	23.8	107.1	4.6
Level of Service	D	D		C	C	F	A
Approach Delay (s)	40.5			31.0			66.1
Approach LOS	D			C			E

Intersection Summary

HCM 2000 Control Delay	45.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	99.0	Sum of lost time (s)	17.3
Intersection Capacity Utilization	78.8%	ICU Level of Service	D
Analysis Period (min)	15		

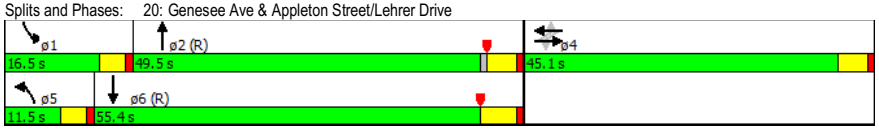
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	283	15	7	10	7	694	83	642
Future Volume (vph)	283	15	7	10	7	694	83	642
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		4	5	2	1	6
Permitted Phases	4		4					
Detector Phase	4	4	4	4	5	2	1	6
Switch Phase								
Minimum Initial (s)	6.0	6.0	6.0	6.0	4.0	10.0	4.0	10.0
Minimum Split (s)	10.9	10.9	10.9	10.9	8.4	14.9	8.4	15.8
Total Split (s)	45.1	45.1	45.1	45.1	11.5	49.5	16.5	55.4
Total Split (%)	40.3%	40.3%	40.3%	40.3%	10.3%	44.2%	14.7%	49.5%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.4	3.9	3.4	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.9		4.9	4.4	4.9	4.4	5.8
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	None	C-Max

Intersection Summary

Cycle Length: 112
Actuated Cycle Length: 112
Offset: 88 (79%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 60
Control Type: Actuated-Coordinated

Splits and Phases: 20: Genesee Ave & Appleton Street/Lehrer Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	283	15	10	7	10	141	7	694	8	83	642	131
Future Volume (vph)	283	15	10	7	10	141	7	694	8	83	642	131
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	16	12	12	16	12	12	12	12	12	12	12
Total Lost time (s)		4.9			4.9		4.4	4.9		4.4	5.8	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frt		1.00			0.88		1.00	1.00		1.00	0.97	
Flt Protected		0.96			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		2010			1853		1770	3533		1770	3449	
Flt Permitted		0.53			0.98		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1118			1816		1770	3533		1770	3449	
Peak-hour factor, PHF	0.75	0.75	0.75	0.73	0.73	0.73	0.90	0.90	0.90	0.91	0.91	0.91
Adj. Flow (vph)	377	20	13	10	14	193	8	771	9	91	705	144
RTOR Reduction (vph)	0	1	0	0	124	0	0	1	0	0	14	0
Lane Group Flow (vph)	0	409	0	0	93	0	8	779	0	91	835	0
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4			4								
Actuated Green, G (s)		40.2			40.2		1.4	48.7		8.9	55.3	
Effective Green, g (s)		40.2			40.2		1.4	48.7		8.9	55.3	
Actuated g/C Ratio		0.36			0.36		0.01	0.43		0.08	0.49	
Clearance Time (s)		4.9			4.9		4.4	4.9		4.4	5.8	
Vehicle Extension (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		401			651		22	1536		140	1702	
v/s Ratio Prot							0.00	c0.22		c0.05	0.24	
v/s Ratio Perm		c0.37			0.05							
v/c Ratio		1.02			0.14		0.36	0.51		0.65	0.49	
Uniform Delay, d1		35.9			24.3		54.9	23.0		50.0	18.9	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		49.9			0.1		9.9	1.2		10.3	1.0	
Delay (s)		85.8			24.4		64.8	24.2		60.3	20.0	
Level of Service		F			C		E	C		E	B	
Approach Delay (s)		85.8			24.4			24.6			23.9	
Approach LOS		F			C			C			C	

Intersection Summary

HCM 2000 Control Delay	34.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	112.0	Sum of lost time (s)	15.1
Intersection Capacity Utilization	68.6%	ICU Level of Service	C
Analysis Period (min)	15		

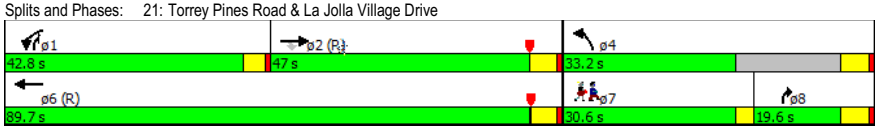
c Critical Lane Group

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	ø7	ø8
Lane Configurations								
Traffic Volume (vph)	796	162	777	724	139	740		
Future Volume (vph)	796	162	777	724	139	740		
Turn Type	NA	Perm	Prot	NA	Prot	pt+ov		
Protected Phases	2		1	6	4	8 1	7	8
Permitted Phases		2						
Detector Phase	2	2	1	6	4	8 1		
Switch Phase								
Minimum Initial (s)	10.0	10.0	4.0	10.0	4.0		4.0	4.0
Minimum Split (s)	15.4	15.4	8.4	15.3	9.6		8.0	9.6
Total Split (s)	47.0	47.0	42.8	89.7	33.2		30.6	19.6
Total Split (%)	33.6%	33.6%	30.6%	64.1%	23.7%		22%	14%
Yellow Time (s)	4.4	4.4	3.4	4.3	4.6		3.0	4.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		0.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0			
Total Lost Time (s)	5.4	5.4	4.4	5.3	5.6			
Lead/Lag	Lag	Lag	Lead				Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes				Yes	Yes
Recall Mode	C-Max	C-Max	None	C-Max	None		None	None

Intersection Summary

Cycle Length: 140
Actuated Cycle Length: 140
Offset: 15 (11%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 70
Control Type: Actuated-Coordinated

Splits and Phases: 21: Torrey Pines Road & La Jolla Village Drive



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	796	162	777	724	139	740
Future Volume (vph)	796	162	777	724	139	740
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.4	5.4	4.4	5.3	5.6	5.6
Lane Util. Factor	0.91	1.00	0.97	0.91	0.97	0.88
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	5085	1583	3433	5085	3433	2787
Flt Permitted	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (perm)	5085	1583	3433	5085	3433	2787
Peak-hour factor, PHF	0.76	0.76	0.91	0.91	0.82	0.82
Adj. Flow (vph)	1047	213	854	796	170	902
RTOR Reduction (vph)	0	128	0	0	0	0
Lane Group Flow (vph)	1047	85	854	796	170	902
Turn Type	NA	Perm	Prot	NA	Prot	pt+ov
Protected Phases	2		1	6	4	8 1
Permitted Phases		2				
Actuated Green, G (s)	53.5	53.5	38.4	96.4	32.7	76.7
Effective Green, g (s)	53.5	53.5	38.4	96.4	32.7	76.7
Actuated g/C Ratio	0.38	0.38	0.27	0.69	0.23	0.55
Clearance Time (s)	5.4	5.4	4.4	5.3	5.6	
Vehicle Extension (s)	5.5	5.5	2.0	8.0	2.0	
Lane Grp Cap (vph)	1943	604	941	3501	801	1526
v/s Ratio Prot	c0.21		c0.25	0.16	0.05	c0.32
v/s Ratio Perm		0.05				
v/c Ratio	0.54	0.14	0.91	0.23	0.21	0.59
Uniform Delay, d1	33.7	28.2	49.1	8.0	43.3	21.2
Progression Factor	1.00	1.00	0.93	0.87	1.00	1.00
Incremental Delay, d2	1.1	0.5	11.5	0.1	0.0	0.4
Delay (s)	34.7	28.7	57.1	7.1	43.3	21.6
Level of Service	C	C	E	A	D	C
Approach Delay (s)	33.7			33.0	25.0	
Approach LOS	C			C	C	

Intersection Summary

HCM 2000 Control Delay	31.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	18.4
Intersection Capacity Utilization	54.3%	ICU Level of Service	A
Analysis Period (min)	15		

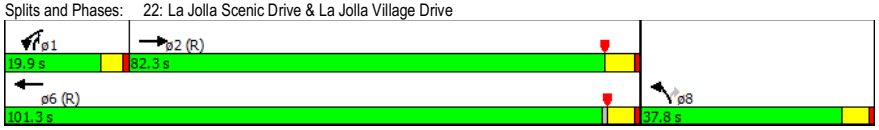
c Critical Lane Group

Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Configurations					
Traffic Volume (vph)	1418	212	1388	116	226
Future Volume (vph)	1418	212	1388	116	226
Turn Type	NA	Prot	NA	Prot	pm+ov
Protected Phases	2	1	6	8	1
Permitted Phases					8
Detector Phase	2	1	6	8	1
Switch Phase					
Minimum Initial (s)	10.0	4.0	10.0	4.0	4.0
Minimum Split (s)	15.7	8.4	15.3	9.5	8.4
Total Split (s)	82.3	19.9	101.3	37.8	19.9
Total Split (%)	58.8%	14.2%	72.4%	27.0%	14.2%
Yellow Time (s)	4.7	3.4	4.3	4.5	3.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.7	4.4	5.3	5.5	4.4
Lead/Lag	Lag	Lead			Lead
Lead-Lag Optimize?	Yes	Yes			Yes
Recall Mode	C-Max	None	C-Max	None	None

Intersection Summary

Cycle Length: 140
Actuated Cycle Length: 140
Offset: 12 (9%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 80
Control Type: Actuated-Coordinated

Splits and Phases: 22: La Jolla Scenic Drive & La Jolla Village Drive



Movement	EBU	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations							
Traffic Volume (vph)	1	1418	101	212	1388	116	226
Future Volume (vph)	1	1418	101	212	1388	116	226
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.7		4.4	5.3	5.5	4.4
Lane Util. Factor		0.91		0.97	0.91	1.00	0.88
Frt		0.99		1.00	1.00	1.00	0.85
Flt Protected		1.00		0.95	1.00	0.95	1.00
Satd. Flow (prot)		5035		3433	5085	1770	2787
Flt Permitted		0.94		0.95	1.00	0.95	1.00
Satd. Flow (perm)		4730		3433	5085	1770	2787
Peak-hour factor, PHF	0.92	0.95	0.95	0.92	0.92	0.88	0.88
Adj. Flow (vph)	1	1493	106	230	1509	132	257
RTOR Reduction (vph)	0	4	0	0	0	0	38
Lane Group Flow (vph)	0	1596	0	230	1509	132	219
Turn Type		NA		Prot	NA	Prot	pm+ov
Protected Phases		2		1	6	8	1
Permitted Phases							8
Actuated Green, G (s)		95.8		13.7	114.3	14.9	28.6
Effective Green, g (s)		95.8		13.7	114.3	14.9	28.6
Actuated g/C Ratio		0.68		0.10	0.82	0.11	0.20
Clearance Time (s)		5.7		4.4	5.3	5.5	4.4
Vehicle Extension (s)		4.0		2.0	5.9	2.0	2.0
Lane Grp Cap (vph)		3236		335	4151	188	569
v/s Ratio Prot				c0.07	0.30	c0.07	0.04
v/s Ratio Perm		c0.34					0.04
v/c Ratio		8.15dr		0.69	0.36	0.70	0.38
Uniform Delay, d1		10.5		61.1	3.4	60.4	48.1
Progression Factor		1.03		1.00	1.00	1.00	1.00
Incremental Delay, d2		0.5		4.6	0.2	9.3	0.2
Delay (s)		11.3		65.7	3.6	69.7	48.3
Level of Service		B		E	A	E	D
Approach Delay (s)		11.3			11.8	55.5	
Approach LOS		B			B	E	

Intersection Summary

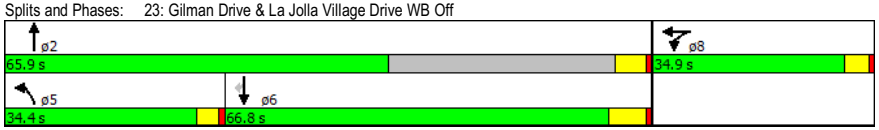
HCM 2000 Control Delay	16.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	15.6
Intersection Capacity Utilization	76.7%	ICU Level of Service	D
Analysis Period (min)	15		

dr Defacto Right Lane. Recode with 1 though lane as a right lane.
c Critical Lane Group

Lane Group	WBT	NBL	NBT	SBT	SBR
Lane Configurations					
Traffic Volume (vph)	0	187	228	255	100
Future Volume (vph)	0	187	228	255	100
Turn Type	NA	Prot	NA	NA	Perm
Protected Phases	8	5	2	6	
Permitted Phases					6
Detector Phase	8	5	2	6	6
Switch Phase					
Minimum Initial (s)	4.0	4.0	10.0	10.0	10.0
Minimum Split (s)	34.9	8.5	17.9	18.8	18.8
Total Split (s)	34.9	34.4	65.9	66.8	66.8
Total Split (%)	25.6%	25.3%	48.4%	49.1%	49.1%
Yellow Time (s)	3.9	3.4	4.9	5.8	5.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.4	5.9	6.8	6.8
Lead/Lag		Lead		Lag	Lag
Lead-Lag Optimize?		Yes		Yes	Yes
Recall Mode	None	None	Min	Min	Min

Intersection Summary
Cycle Length: 136.1
Actuated Cycle Length: 44.3
Natural Cycle: 65
Control Type: Actuated-Uncoordinated

Splits and Phases: 23: Gilman Drive & La Jolla Village Drive WB Off



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	8	0	133	187	228	0	0	255	100
Future Volume (vph)	0	0	0	8	0	133	187	228	0	0	255	100
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.9		4.4	5.9			6.8	6.8
Lane Util. Factor					1.00		1.00	0.95			0.95	1.00
Frt					0.87		1.00	1.00			1.00	0.85
Flt Protected					1.00		0.95	1.00			1.00	1.00
Satd. Flow (prot)					1621		1770	3539			3539	1583
Flt Permitted					1.00		0.95	1.00			1.00	1.00
Satd. Flow (perm)					1621		1770	3539			3539	1583
Peak-hour factor, PHF	0.25	0.25	0.25	0.84	0.84	0.84	0.96	0.96	0.96	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	10	0	158	195	238	0	0	283	111
RTOR Reduction (vph)	0	0	0	0	134	0	0	0	0	0	0	84
Lane Group Flow (vph)	0	0	0	0	34	0	195	238	0	0	283	27
Turn Type				Split	NA		Prot	NA			NA	Perm
Protected Phases				8	8		5	2			6	
Permitted Phases												6
Actuated Green, G (s)					6.7		10.5	26.7			10.9	10.9
Effective Green, g (s)					6.7		10.5	26.7			10.9	10.9
Actuated g/C Ratio					0.15		0.24	0.60			0.25	0.25
Clearance Time (s)					4.9		4.4	5.9			6.8	6.8
Vehicle Extension (s)					3.0		3.0	3.0			3.0	3.0
Lane Grp Cap (vph)					245		420	2137			872	390
v/s Ratio Prot					c0.02		c0.11	0.07			c0.08	
v/s Ratio Perm												0.02
v/c Ratio					0.14		0.46	0.11			0.32	0.07
Uniform Delay, d1					16.2		14.4	3.7			13.6	12.8
Progression Factor					1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2					0.3		0.8	0.0			0.2	0.1
Delay (s)					16.5		15.3	3.7			13.9	12.8
Level of Service					B		B	A			B	B
Approach Delay (s)		0.0			16.5			8.9			13.6	
Approach LOS		A			B			A			B	

Intersection Summary					
HCM 2000 Control Delay		12.0	HCM 2000 Level of Service		B
HCM 2000 Volume to Capacity ratio		0.33			
Actuated Cycle Length (s)		44.2	Sum of lost time (s)		16.1
Intersection Capacity Utilization		Err%	ICU Level of Service		H
Analysis Period (min)		15			

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (veh/h)	26	6	333	0	0	225	2	0	408	56	84	193
Future Volume (Veh/h)	26	6	333	0	0	225	2	0	408	56	84	193
Sign Control		Stop			Stop				Free			Free
Grade		0%			0%				0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	28	7	362	0	0	245	0	0	443	61	91	210
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)			13									
Median type									None			None
Median storage veh)												
Upstream signal (ft)												483
pX, platoon unblocked							0.00					
vC, conflicting volume	858	896	105	914	835	222	0	210			504	
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	858	896	105	914	835	222	0	210			504	
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	0.0	4.1			4.1	
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	0.0	2.2			2.2	
p0 queue free %	83	97	61	100	100	69	0	100			91	
cM capacity (veh/h)	161	254	929	127	276	782	0	1358			1057	

Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	390	222	222	61	91	105	105
Volume Left	28	0	0	0	91	0	0
Volume Right	362	0	0	61	0	0	0
cSH	1001	1700	1700	1700	1057	1700	1700
Volume to Capacity	0.39	0.13	0.13	0.04	0.09	0.06	0.06
Queue Length 95th (ft)	47	0	0	0	7	0	0
Control Delay (s)	12.8	0.0	0.0	0.0	8.7	0.0	0.0
Lane LOS	B				A		
Approach Delay (s)	Err	0.0			2.6		
Approach LOS	F						

Intersection Summary				
Average Delay	Err			
Intersection Capacity Utilization	Err%	ICU Level of Service	H	
Analysis Period (min)	15			

Movement	SBR
Lane Configurations	
Traffic Volume (veh/h)	0
Future Volume (Veh/h)	0
Sign Control	
Grade	
Peak Hour Factor	0.92
Hourly flow rate (vph)	0
Pedestrians	
Lane Width (ft)	
Walking Speed (ft/s)	
Percent Blockage	
Right turn flare (veh)	
Median type	
Median storage veh)	
Upstream signal (ft)	
pX, platoon unblocked	
vC, conflicting volume	
vC1, stage 1 conf vol	
vC2, stage 2 conf vol	
vCu, unblocked vol	
tC, single (s)	
tC, 2 stage (s)	
tF (s)	
p0 queue free %	
cM capacity (veh/h)	

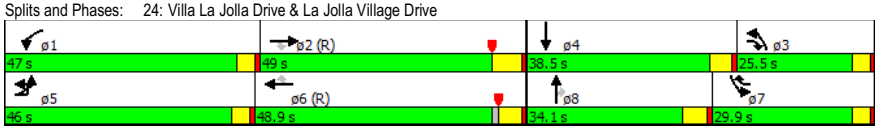
Direction, Lane #

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	69	1030	165	904	957	836	181	1111	639	701	295
Future Volume (vph)	69	1030	165	904	957	836	181	1111	639	701	295
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA
Protected Phases	5	2	3	1	6	7	3	8		7	4
Permitted Phases			2			6			8		
Detector Phase	5	2	3	1	6	7	3	8	8	7	4
Switch Phase											
Minimum Initial (s)	4.0	10.0	4.0	4.0	10.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.4	16.4	22.4	8.4	15.3	8.4	22.4	9.5	9.5	8.4	8.9
Total Split (s)	46.0	49.0	25.5	47.0	48.9	29.9	25.5	34.1	34.1	29.9	38.5
Total Split (%)	28.8%	30.6%	15.9%	29.4%	30.6%	18.7%	15.9%	21.3%	21.3%	18.7%	24.1%
Yellow Time (s)	3.4	5.4	3.4	3.4	4.3	3.4	3.4	4.5	4.5	3.4	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	6.4	4.4	4.4	5.3	4.4	4.4	5.5	5.5	4.4	4.9
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	C-Max	None	None	None	None	None	None

Intersection Summary

Cycle Length: 160
Actuated Cycle Length: 160
Offset: 4 (3%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 24: Villa La Jolla Drive & La Jolla Village Drive



Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	65	69	1030	165	904	957	836	181	1111	639	701	295
Future Volume (vph)	65	69	1030	165	904	957	836	181	1111	639	701	295
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.4	6.4	4.4	4.4	5.3	4.4	4.4	5.5	5.5	4.4	4.9
Lane Util. Factor		1.00	0.91	1.00	0.97	0.91	1.00	0.97	0.95	0.95	0.97	1.00
Frt		1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99	0.85	1.00	0.97
Flt Protected		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)		1770	5085	1583	3433	5085	1583	3433	1755	1504	3433	1811
Flt Permitted		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Satd. Flow (perm)		1770	5085	1583	3433	5085	1583	3433	1755	1504	3433	1811
Peak-hour factor, PHF	0.92	0.93	0.93	0.93	0.95	0.95	0.95	0.89	0.89	0.89	0.88	0.88
Adj. Flow (vph)	71	74	1108	177	952	1007	880	203	1248	718	797	335
RTOR Reduction (vph)	0	0	0	36	0	0	185	0	2	128	0	5
Lane Group Flow (vph)	0	145	1108	141	952	1007	695	203	1318	518	797	406
Turn Type	Prot	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA
Protected Phases	5	5	2	3	1	6	7	3	8		7	4
Permitted Phases				2			6			8		
Actuated Green, G (s)		17.6	42.6	63.7	42.6	68.7	94.2	21.1	28.6	28.6	25.5	33.6
Effective Green, g (s)		17.6	42.6	63.7	42.6	68.7	94.2	21.1	28.6	28.6	25.5	33.6
Actuated g/C Ratio		0.11	0.27	0.40	0.27	0.43	0.59	0.13	0.18	0.18	0.16	0.21
Clearance Time (s)		4.4	6.4	4.4	4.4	5.3	4.4	4.4	5.5	5.5	4.4	4.9
Vehicle Extension (s)		2.0	4.4	2.0	2.0	4.7	2.0	2.0	3.3	3.3	2.0	2.0
Lane Grp Cap (vph)		194	1353	630	914	2183	931	452	313	268	547	380
v/s Ratio Prot		0.08	c0.22	0.03	c0.28	0.20	0.12	0.06	c0.75		c0.23	0.22
v/s Ratio Perm				0.06			0.32			0.34		
v/c Ratio		0.75	0.82	0.22	1.04	0.46	0.75	0.45	4.21	1.93	1.46	1.07
Uniform Delay, d1		69.0	55.1	31.8	58.7	32.5	24.1	64.1	65.7	65.7	67.2	63.2
Progression Factor		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2		12.8	5.6	0.1	41.1	0.7	2.9	0.3	1452.9	433.1	215.7	65.8
Delay (s)		81.9	60.7	31.9	99.8	33.2	27.0	64.3	1518.6	498.8	282.9	129.0
Level of Service		F	E	C	F	C	C	E	F	F	F	F
Approach Delay (s)			59.3			53.6			1078.8			230.5
Approach LOS			E			D			F			F

Intersection Summary

HCM 2000 Control Delay	373.4	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.70		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	20.7
Intersection Capacity Utilization	154.3%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	67
Future Volume (vph)	67
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.88
Adj. Flow (vph)	76
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

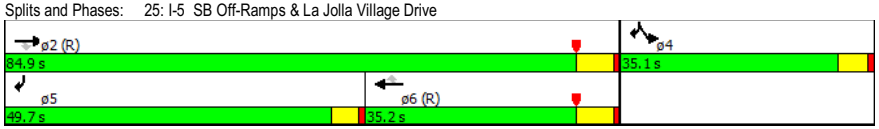
Intersection Summary

Lane Group	EBT	EBR	WBT	WBR	SBL	SBR	ø5
Lane Configurations							
Traffic Volume (vph)	1344	1189	1391	483	835	1184	
Future Volume (vph)	1344	1189	1391	483	835	1184	
Turn Type	NA	Perm	NA	Perm	Prot	custom	
Protected Phases	2		6		4	4 5	5
Permitted Phases		2		6			
Detector Phase	2	2	6	6	4	4 5	
Switch Phase							
Minimum Initial (s)	10.0	10.0	15.0	15.0	5.0		2.0
Minimum Split (s)	16.2	16.2	21.2	21.2	10.1		6.7
Total Split (s)	84.9	84.9	35.2	35.2	35.1		49.7
Total Split (%)	70.8%	70.8%	29.3%	29.3%	29.3%		41%
Yellow Time (s)	5.2	5.2	5.2	5.2	4.1		3.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	6.2	6.2	6.2	6.2	5.1		
Lead/Lag			Lag	Lag			Lead
Lead-Lag Optimize?			Yes	Yes			Yes
Recall Mode	C-Max	C-Max	C-Max	C-Max	Min		None

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 70 (58%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 70
Control Type: Actuated-Coordinated

Splits and Phases: 25: I-5 SB Off-Ramps & La Jolla Village Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1344	1189	0	1391	483	0	0	0	835	0	1184
Future Volume (vph)	0	1344	1189	0	1391	483	0	0	0	835	0	1184
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.2	6.2		6.2	6.2				5.1		5.1
Lane Util. Factor		0.86	1.00		0.91	1.00				0.97		0.88
Frt		1.00	0.85		1.00	0.85				1.00		0.85
Flt Protected		1.00	1.00		1.00	1.00				0.95		1.00
Satd. Flow (prot)		6408	1583		5085	1583				3433		2787
Flt Permitted		1.00	1.00		1.00	1.00				0.95		1.00
Satd. Flow (perm)		6408	1583		5085	1583				3433		2787
Peak-hour factor, PHF	0.92	0.92	0.92	0.80	0.80	0.80	0.25	0.25	0.25	0.88	0.88	0.88
Adj. Flow (vph)	0	1461	1292	0	1739	604	0	0	0	949	0	1345
RTOR Reduction (vph)	0	0	375	0	0	296	0	0	0	0	0	11
Lane Group Flow (vph)	0	1461	917	0	1739	308	0	0	0	949	0	1334
Turn Type		NA	Perm		NA	Perm				Prot		custom
Protected Phases		2			6					4		4 5
Permitted Phases			2			6						
Actuated Green, G (s)		78.7	78.7		34.0	34.0				30.0		75.1
Effective Green, g (s)		78.7	78.7		34.0	34.0				30.0		75.1
Actuated g/C Ratio		0.66	0.66		0.28	0.28				0.25		0.63
Clearance Time (s)		6.2	6.2		6.2	6.2				5.1		
Vehicle Extension (s)		2.0	2.0		2.0	2.0				2.0		
Lane Grp Cap (vph)		4202	1038		1440	448				858		1744
v/s Ratio Prot		0.23			c0.34					c0.28		0.48
v/s Ratio Perm			c0.58			0.19						
v/c Ratio		0.35	0.88		1.21	0.69				1.11		0.76
Uniform Delay, d1		9.2	16.9		43.0	38.3				45.0		16.1
Progression Factor		1.00	1.00		1.01	1.09				1.00		1.00
Incremental Delay, d2		0.2	10.8		99.7	7.7				64.0		1.8
Delay (s)		9.4	27.7		143.2	49.6				109.0		18.0
Level of Service		A	C		F	D				F		B
Approach Delay (s)		18.0			119.1			0.0			55.6	
Approach LOS		B			F			A			E	

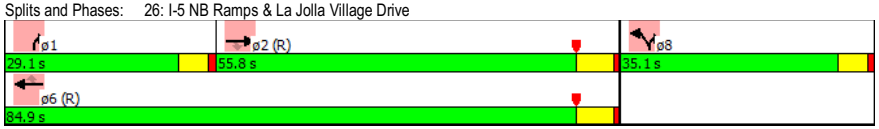
Intersection Summary				
HCM 2000 Control Delay	61.7	HCM 2000 Level of Service	E	
HCM 2000 Volume to Capacity ratio	1.07			
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0	
Intersection Capacity Utilization	78.8%	ICU Level of Service	D	
Analysis Period (min)	15			

c Critical Lane Group

Lane Group	EBT	EBR	WBT	WBR	NBL	NBR	ø1
Lane Configurations							
Traffic Volume (vph)	1312	982	1363	472	414	362	
Future Volume (vph)	1312	982	1363	472	414	362	
Turn Type	NA	Perm	NA	Perm	Prot	custom	
Protected Phases	2		6		8	1 8	1
Permitted Phases		2		6			
Detector Phase	2	2	6	6	8	1 8	
Switch Phase							
Minimum Initial (s)	16.0	16.0	16.0	16.0	5.0		2.0
Minimum Split (s)	36.2	36.2	22.2	22.2	10.1		7.1
Total Split (s)	55.8	55.8	84.9	84.9	35.1		29.1
Total Split (%)	46.5%	46.5%	70.8%	70.8%	29.3%		24%
Yellow Time (s)	5.2	5.2	5.2	5.2	4.1		4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	6.2	6.2	6.2	6.2	5.1		
Lead/Lag	Lag	Lag					Lead
Lead-Lag Optimize?	Yes	Yes					Yes
Recall Mode	C-Max	C-Max	C-Max	C-Max	Min		None

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 75 (63%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 65
Control Type: Actuated-Coordinated

Splits and Phases: 26: I-5 NB Ramps & La Jolla Village Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1312	982	0	1363	472	414	0	362	0	0	0
Future Volume (vph)	0	1312	982	0	1363	472	414	0	362	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.2	6.2		6.2	6.2	5.1		5.1			
Lane Util. Factor		0.91	1.00		0.91	1.00	0.97		0.88			
Frt		1.00	0.85		1.00	0.85	1.00		0.85			
Flt Protected		1.00	1.00		1.00	1.00	0.95		1.00			
Satd. Flow (prot)		5085	1583		5085	1583	3433		2787			
Flt Permitted		1.00	1.00		1.00	1.00	0.95		1.00			
Satd. Flow (perm)		5085	1583		5085	1583	3433		2787			
Peak-hour factor, PHF	0.84	0.84	0.84	0.83	0.83	0.83	0.83	0.83	0.83	0.25	0.25	0.25
Adj. Flow (vph)	0	1562	1169	0	1642	569	499	0	436	0	0	0
RTOR Reduction (vph)	0	0	398	0	0	158	0	0	21	0	0	0
Lane Group Flow (vph)	0	1562	771	0	1642	411	499	0	415	0	0	0
Turn Type		NA	Perm		NA	Perm	Prot		custom			
Protected Phases		2			6		8		1 8			
Permitted Phases			2			6						
Actuated Green, G (s)		76.2	76.2		86.6	86.6	22.1		32.5			
Effective Green, g (s)		76.2	76.2		86.6	86.6	22.1		32.5			
Actuated g/C Ratio		0.64	0.64		0.72	0.72	0.18		0.27			
Clearance Time (s)		6.2	6.2		6.2	6.2	5.1					
Vehicle Extension (s)		2.0	2.0		2.0	2.0	2.0					
Lane Grp Cap (vph)		3228	1005		3669	1142	632		754			
v/s Ratio Prot		0.31			0.32		c0.15		c0.15			
v/s Ratio Perm			c0.49			0.26						
v/c Ratio		0.48	0.77		0.45	0.36	0.79		0.55			
Uniform Delay, d1		11.5	15.6		6.9	6.3	46.7		37.5			
Progression Factor		1.12	5.07		1.00	1.00	1.00		1.00			
Incremental Delay, d2		0.4	4.7		0.4	0.9	6.0		0.5			
Delay (s)		13.3	83.7		7.3	7.2	52.8		38.0			
Level of Service		B	F		A	A	D		D			
Approach Delay (s)		43.5			7.2			45.9			0.0	
Approach LOS		D			A			D			A	

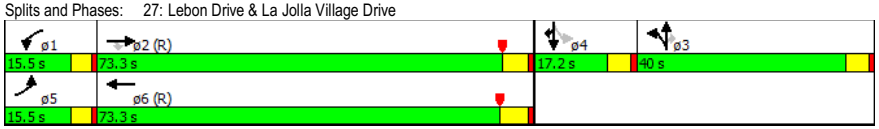
Intersection Summary			
HCM 2000 Control Delay	30.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.4
Intersection Capacity Utilization	66.0%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	4	1462	63	98	1643	164	9	121	7	2	13
Future Volume (vph)	4	1462	63	98	1643	164	9	121	7	2	13
Turn Type	Prot	NA	Perm	Prot	NA	Split	NA	Perm	Perm	NA	Prot
Protected Phases	5	2		1	6	3	3			4	4
Permitted Phases			2					3	4		
Detector Phase	5	2	2	1	6	3	3	3	4	4	4
Switch Phase											
Minimum Initial (s)	4.0	10.0	10.0	4.0	10.0	7.0	7.0	7.0	4.0	4.0	4.0
Minimum Split (s)	8.4	15.3	15.3	8.4	15.7	39.9	39.9	39.9	8.9	8.9	8.9
Total Split (s)	15.5	73.3	73.3	15.5	73.3	40.0	40.0	40.0	17.2	17.2	17.2
Total Split (%)	10.6%	50.2%	50.2%	10.6%	50.2%	27.4%	27.4%	27.4%	11.8%	11.8%	11.8%
Yellow Time (s)	3.4	4.3	4.3	3.4	4.7	3.9	3.9	3.9	3.9	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	4.4	5.3	5.3	4.4	5.7	4.9	4.9	4.9		4.9	4.9
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lag	Lag	Lead	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	None	None	None	None	None	None

Intersection Summary
Cycle Length: 146
Actuated Cycle Length: 146
Offset: 126 (86%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 100
Control Type: Actuated-Coordinated

Splits and Phases: 27: Lebon Drive & La Jolla Village Drive



Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	11	4	1462	63	98	1643	12	164	9	121	7	2
Future Volume (vph)	11	4	1462	63	98	1643	12	164	9	121	7	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.4	5.3	5.3	4.4	5.7		4.9	4.9	4.9		4.9
Lane Util. Factor		1.00	0.91	1.00	0.97	0.91		0.97	0.95	0.95		1.00
Frt		1.00	1.00	0.85	1.00	1.00		1.00	0.87	0.85		1.00
Flt Protected		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00		0.96
Satd. Flow (prot)		1770	5085	1583	3433	5080		3433	1541	1504		1791
Flt Permitted		0.12	1.00	1.00	0.95	1.00		0.95	1.00	1.00		0.57
Satd. Flow (perm)		229	5085	1583	3433	5080		3433	1541	1504		1064
Peak-hour factor, PHF	0.92	0.98	0.98	0.98	0.78	0.78	0.78	0.65	0.65	0.65	0.58	0.58
Adj. Flow (vph)	12	4	1492	64	126	2106	15	252	14	186	12	3
RTOR Reduction (vph)	0	0	0	25	0	1	0	0	74	84	0	0
Lane Group Flow (vph)	0	16	1492	39	126	2120	0	252	27	15	0	15
Turn Type		Prot	NA	Perm	Prot	NA		Split	NA	Perm	Perm	NA
Protected Phases		5	2		1	6		3	3			4
Permitted Phases				2						3	4	
Actuated Green, G (s)		32.5	88.9	88.9	9.7	65.7		21.6	21.6	21.6		6.3
Effective Green, g (s)		32.5	88.9	88.9	9.7	65.7		21.6	21.6	21.6		6.3
Actuated g/C Ratio		0.22	0.61	0.61	0.07	0.45		0.15	0.15	0.15		0.04
Clearance Time (s)		4.4	5.3	5.3	4.4	5.7		4.9	4.9	4.9		4.9
Vehicle Extension (s)		2.0	6.1	6.1	2.0	5.6		6.5	6.5	6.5		2.0
Lane Grp Cap (vph)		50	3096	963	228	2286		507	227	222		45
v/s Ratio Prot			c0.29		c0.04	c0.42		c0.07	0.02			
v/s Ratio Perm		0.07		0.02						0.01		c0.01
v/c Ratio		0.32	0.48	0.04	0.55	0.93		0.50	0.12	0.07		0.33
Uniform Delay, d1		47.5	15.8	11.4	66.0	37.9		57.2	53.9	53.5		67.8
Progression Factor		1.00	1.00	1.00	1.10	0.68		1.00	1.00	1.00		1.00
Incremental Delay, d2		1.3	0.5	0.1	1.2	6.2		2.4	0.7	0.4		1.6
Delay (s)		48.9	16.3	11.5	73.9	31.8		59.6	54.7	53.9		69.4
Level of Service		D	B	B	E	C		E	D	D		E
Approach Delay (s)			16.5			34.1			57.3			67.9
Approach LOS			B			C			E			E

Intersection Summary			
HCM 2000 Control Delay	30.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	146.0	Sum of lost time (s)	19.9
Intersection Capacity Utilization	61.1%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	13
Future Volume (vph)	13
Ideal Flow (vphpl)	1900
Total Lost time (s)	4.9
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1583
Flt Permitted	1.00
Satd. Flow (perm)	1583
Peak-hour factor, PHF	0.58
Adj. Flow (vph)	22
RTOR Reduction (vph)	21
Lane Group Flow (vph)	1
Turn Type	Prot
Protected Phases	4
Permitted Phases	
Actuated Green, G (s)	6.3
Effective Green, g (s)	6.3
Actuated g/C Ratio	0.04
Clearance Time (s)	4.9
Vehicle Extension (s)	2.0
Lane Grp Cap (vph)	68
v/s Ratio Prot	0.00
v/s Ratio Perm	
v/c Ratio	0.01
Uniform Delay, d1	66.9
Progression Factor	1.00
Incremental Delay, d2	0.0
Delay (s)	66.9
Level of Service	E
Approach Delay (s)	
Approach LOS	

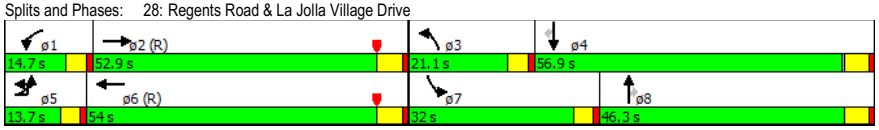
Intersection Summary

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	309	1166	236	971	284	221	131	147	260	333
Future Volume (vph)	309	1166	236	971	284	221	131	147	260	333
Turn Type	Prot	NA	Prot	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2	1	6	3	8		7	4	
Permitted Phases							8			4
Detector Phase	5	2	1	6	3	8	8	7	4	4
Switch Phase										
Minimum Initial (s)	4.0	10.0	4.0	10.0	4.0	10.0	10.0	4.0	10.0	10.0
Minimum Split (s)	8.4	41.3	8.4	35.4	8.4	41.3	41.3	8.4	35.3	35.3
Total Split (s)	13.7	52.9	14.7	54.0	21.1	46.3	46.3	32.0	56.9	56.9
Total Split (%)	9.4%	36.2%	10.1%	37.0%	14.5%	31.7%	31.7%	21.9%	39.0%	39.0%
Yellow Time (s)	3.4	4.3	3.4	4.4	3.4	4.3	4.3	3.4	4.3	4.3
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.3	4.4	5.4	4.4	5.3	5.3	4.4	5.3	5.3
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	None	None	None	None	None

Intersection Summary

Cycle Length: 146
Actuated Cycle Length: 146
Offset: 85 (58%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 110
Control Type: Actuated-Coordinated

Splits and Phases: 28: Regents Road & La Jolla Village Drive



Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	48	309	1166	67	236	971	97	284	221	131	147	260
Future Volume (vph)	48	309	1166	67	236	971	97	284	221	131	147	260
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.4	5.3		4.4	5.4		4.4	5.3	5.3	4.4	5.3
Lane Util. Factor		0.97	0.91		0.97	0.91		0.97	0.95	1.00	1.00	0.95
Frt		1.00	0.99		1.00	0.99		1.00	1.00	0.85	1.00	1.00
Flt Protected		0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)		3433	5044		3433	5016		3433	3539	1583	1770	3539
Flt Permitted		0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (perm)		3433	5044		3433	5016		3433	3539	1583	1770	3539
Peak-hour factor, PHF	0.92	0.98	0.98	0.98	0.82	0.82	0.82	0.88	0.88	0.88	0.77	0.77
Adj. Flow (vph)	52	315	1190	68	288	1184	118	323	251	149	191	338
RTOR Reduction (vph)	0	0	4	0	0	8	0	0	0	113	0	0
Lane Group Flow (vph)	0	367	1254	0	288	1294	0	323	251	36	191	338
Turn Type	Prot	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA
Protected Phases	5	5	2		1	6		3	8		7	4
Permitted Phases										8		
Actuated Green, G (s)		21.3	51.2		18.8	48.6		16.3	35.7	35.7	20.9	40.3
Effective Green, g (s)		21.3	51.2		18.8	48.6		16.3	35.7	35.7	20.9	40.3
Actuated g/C Ratio		0.15	0.35		0.13	0.33		0.11	0.24	0.24	0.14	0.28
Clearance Time (s)		4.4	5.3		4.4	5.4		4.4	5.3	5.3	4.4	5.3
Vehicle Extension (s)		3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)		500	1768		442	1669		383	865	387	253	976
v/s Ratio Prot		c0.11	0.25		0.08	c0.26		c0.09	0.07		c0.11	0.10
v/s Ratio Perm										0.02		
v/c Ratio		0.73	0.71		0.65	0.78		0.84	0.29	0.09	0.75	0.35
Uniform Delay, d1		59.6	41.0		60.5	43.8		63.6	44.8	42.6	60.1	42.3
Progression Factor		1.13	1.20		0.99	0.63		1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2		5.1	2.2		3.0	3.1		15.4	0.2	0.1	12.1	0.2
Delay (s)		72.3	51.6		62.7	30.8		79.0	45.0	42.8	72.1	42.5
Level of Service		E	D		E	C		E	D	D	E	D
Approach Delay (s)			56.2			36.6			59.8			58.4
Approach LOS			E			D			E			E

Intersection Summary

HCM 2000 Control Delay	50.8	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	146.0	Sum of lost time (s)	19.5
Intersection Capacity Utilization	76.1%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	333
Future Volume (vph)	333
Ideal Flow (vphpl)	1900
Total Lost time (s)	5.3
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1583
Flt Permitted	1.00
Satd. Flow (perm)	1583
Peak-hour factor, PHF	0.77
Adj. Flow (vph)	432
RTOR Reduction (vph)	61
Lane Group Flow (vph)	371
Turn Type	Perm
Protected Phases	
Permitted Phases	4
Actuated Green, G (s)	40.3
Effective Green, g (s)	40.3
Actuated g/C Ratio	0.28
Clearance Time (s)	5.3
Vehicle Extension (s)	3.0
Lane Grp Cap (vph)	436
v/s Ratio Prot	
v/s Ratio Perm	c0.23
v/c Ratio	0.85
Uniform Delay, d1	50.0
Progression Factor	1.00
Incremental Delay, d2	14.7
Delay (s)	64.7
Level of Service	E
Approach Delay (s)	
Approach LOS	

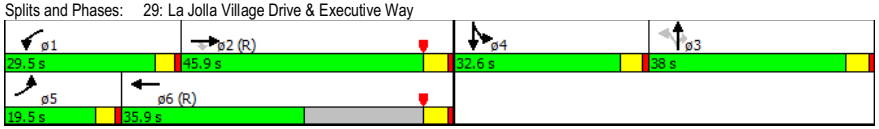
Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	67	584	625	790	606	388	173	604	142	183
Future Volume (vph)	67	584	625	790	606	388	173	604	142	183
Turn Type	Prot	NA	Perm	Prot	NA	Perm	NA	Perm	Split	NA
Protected Phases	5	2		1	6		3		4	4
Permitted Phases			2			3		3		
Detector Phase	5	2	2	1	6	3	3	3	4	4
Switch Phase										
Minimum Initial (s)	4.0	10.0	10.0	4.0	10.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.4	15.3	15.3	8.4	15.3	45.9	45.9	45.9	8.9	8.9
Total Split (s)	19.5	45.9	45.9	29.5	35.9	38.0	38.0	38.0	32.6	32.6
Total Split (%)	13.4%	31.4%	31.4%	20.2%	24.6%	26.0%	26.0%	26.0%	22.3%	22.3%
Yellow Time (s)	3.4	4.3	4.3	3.4	4.3	3.9	3.9	3.9	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.3	5.3	4.4	5.3	4.9	4.9	4.9	4.9	4.9
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lag	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	None	None	None	None	None

Intersection Summary

Cycle Length: 146
Actuated Cycle Length: 146
Offset: 28 (19%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 29: La Jolla Village Drive & Executive Way



Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	4	67	584	625	15	790	606	107	388	173	604	142
Future Volume (vph)	4	67	584	625	15	790	606	107	388	173	604	142
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.4	5.3	5.3		4.4	5.3		4.9	4.9	4.9	4.9
Lane Util. Factor		1.00	0.91	1.00		0.97	0.91		0.95	0.95	1.00	1.00
Frt		1.00	1.00	0.85		1.00	0.98		1.00	1.00	0.85	1.00
Flt Protected		0.95	1.00	1.00		0.95	1.00		0.95	0.98	1.00	0.95
Satd. Flow (prot)		1770	5085	1583		3433	4971		1681	1732	1583	1770
Flt Permitted		0.26	1.00	1.00		0.16	1.00		0.56	0.71	1.00	0.95
Satd. Flow (perm)		493	5085	1583		576	4971		983	1249	1583	1770
Peak-hour factor, PHF	0.92	0.95	0.95	0.95	0.92	0.84	0.84	0.84	0.88	0.88	0.88	0.80
Adj. Flow (vph)	4	71	615	658	16	940	721	127	441	197	686	178
RTOR Reduction (vph)	0	0	0	475	0	0	17	0	0	0	283	0
Lane Group Flow (vph)	0	75	615	183	0	956	831	0	291	347	403	178
Turn Type		Prot	NA	Perm		Prot	NA		Perm	NA	Perm	Split
Protected Phases		5	2			1	6			3		4
Permitted Phases				2					3		3	
Actuated Green, G (s)		15.1	40.6	40.6		25.1	50.6		37.1	37.1	37.1	23.7
Effective Green, g (s)		15.1	40.6	40.6		25.1	50.6		37.1	37.1	37.1	23.7
Actuated g/C Ratio		0.10	0.28	0.28		0.17	0.35		0.25	0.25	0.25	0.16
Clearance Time (s)		4.4	5.3	5.3		4.4	5.3		4.9	4.9	4.9	4.9
Vehicle Extension (s)		2.0	5.8	5.8		2.0	5.5		2.0	2.0	2.0	6.1
Lane Grp Cap (vph)		50	1414	440		99	1722		249	317	402	287
v/s Ratio Prot			0.12				c0.17					c0.10
v/s Ratio Perm		0.15		0.12		c1.66			c0.30	0.28	0.25	
v/c Ratio		1.50	0.43	0.42		9.66	0.48		1.17	1.09	1.00	0.62
Uniform Delay, d1		65.5	43.3	43.0		60.5	37.4		54.5	54.5	54.5	57.0
Progression Factor		1.00	0.63	5.67		1.00	0.72		1.00	1.00	1.00	1.00
Incremental Delay, d2		292.9	0.8	2.4		3913.5	0.9		110.4	78.3	45.2	7.0
Delay (s)		358.3	28.0	246.2		3974.0	27.6		164.8	132.8	99.7	64.0
Level of Service		F	C	F		F	C		F	F	F	E
Approach Delay (s)			152.9				2118.9			122.7		
Approach LOS			F				F			F		

Intersection Summary			
HCM 2000 Control Delay	847.8	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	2.54		
Actuated Cycle Length (s)	146.0	Sum of lost time (s)	19.5
Intersection Capacity Utilization	95.8%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	183	77
Future Volume (vph)	183	77
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	4.9	
Lane Util. Factor	0.95	
Frt	0.96	
Flt Protected	1.00	
Satd. Flow (prot)	3382	
Flt Permitted	1.00	
Satd. Flow (perm)	3382	
Peak-hour factor, PHF	0.80	0.80
Adj. Flow (vph)	229	96
RTOR Reduction (vph)	33	0
Lane Group Flow (vph)	292	0
Turn Type	NA	
Protected Phases	4	
Permitted Phases		
Actuated Green, G (s)	23.7	
Effective Green, g (s)	23.7	
Actuated g/C Ratio	0.16	
Clearance Time (s)	4.9	
Vehicle Extension (s)	6.1	
Lane Grp Cap (vph)	548	
v/s Ratio Prot	0.09	
v/s Ratio Perm		
v/c Ratio	0.53	
Uniform Delay, d1	56.1	
Progression Factor	1.00	
Incremental Delay, d2	2.4	
Delay (s)	58.5	
Level of Service	E	
Approach Delay (s)	60.4	
Approach LOS	E	

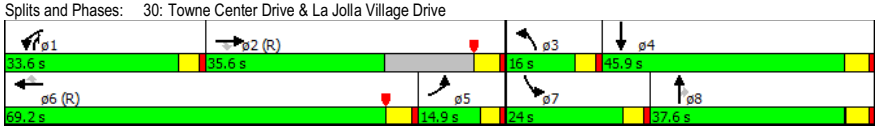
Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	35	1281	84	282	1325	121	98	40	424	542	138
Future Volume (vph)	35	1281	84	282	1325	121	98	40	424	542	138
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA
Protected Phases	5	2		1	6		3	8	1	7	4
Permitted Phases			2			6			8		
Detector Phase	5	2	2	1	6	6	3	8	1	7	4
Switch Phase											
Minimum Initial (s)	4.0	10.0	10.0	4.0	10.0	10.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.4	15.5	15.5	8.4	15.3	15.3	8.4	9.0	8.4	8.4	9.3
Total Split (s)	14.9	35.6	35.6	33.6	69.2	69.2	16.0	37.6	33.6	24.0	45.9
Total Split (%)	10.2%	24.4%	24.4%	23.0%	47.4%	47.4%	11.0%	25.8%	23.0%	16.4%	31.4%
Yellow Time (s)	3.4	4.5	4.5	3.4	4.3	4.3	3.4	4.0	3.4	3.4	4.3
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.5	5.5	4.4	5.3	5.3	4.4	5.0	4.4	4.4	5.3
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lead	Lead	Lag	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	None	None	None	None

Intersection Summary

Cycle Length: 146
Actuated Cycle Length: 146
Offset: 17 (12%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 65
Control Type: Actuated-Coordinated

Splits and Phases: 30: Towne Center Drive & La Jolla Village Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	35	1281	84	282	1325	121	98	40	424	542	138	43
Future Volume (vph)	35	1281	84	282	1325	121	98	40	424	542	138	43
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.5	5.5	4.4	5.3	5.3	4.4	5.0	4.4	4.4	5.3	
Lane Util. Factor	0.97	0.91	1.00	0.97	0.86	0.86	0.97	1.00	0.88	0.97	0.95	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.96	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	3433	5085	1583	3433	4799	1362	3433	1863	2787	3433	3413	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	3433	5085	1583	3433	4799	1362	3433	1863	2787	3433	3413	
Peak-hour factor, PHF	0.96	0.96	0.96	0.85	0.85	0.85	0.90	0.90	0.90	0.92	0.92	0.92
Adj. Flow (vph)	36	1334	88	332	1559	142	109	44	471	589	150	47
RTOR Reduction (vph)	0	0	41	0	0	47	0	0	100	0	25	0
Lane Group Flow (vph)	36	1334	47	332	1573	81	109	44	371	589	172	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	
Protected Phases	5	2		1	6		3	8	1	7	4	
Permitted Phases			2			6			8			
Actuated Green, G (s)	8.4	78.5	78.5	20.6	90.9	90.9	9.8	7.7	28.3	19.9	17.5	
Effective Green, g (s)	8.4	78.5	78.5	20.6	90.9	90.9	9.8	7.7	28.3	19.9	17.5	
Actuated g/C Ratio	0.06	0.54	0.54	0.14	0.62	0.62	0.07	0.05	0.19	0.14	0.12	
Clearance Time (s)	4.4	5.5	5.5	4.4	5.3	5.3	4.4	5.0	4.4	4.4	5.3	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	197	2734	851	484	2987	847	230	98	540	467	409	
v/s Ratio Prot	0.01	c0.26		0.10	c0.33		0.03	0.02	c0.10	c0.17	0.05	
v/s Ratio Perm			0.03			0.06			0.04			
v/c Ratio	0.18	0.49	0.06	0.69	0.53	0.10	0.47	0.45	0.69	1.26	0.42	
Uniform Delay, d1	65.5	21.2	16.1	59.6	15.5	11.1	65.6	67.1	54.7	63.1	59.6	
Progression Factor	0.83	0.75	0.60	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.3	0.4	0.1	4.0	0.7	0.2	1.5	3.2	3.6	133.9	0.7	
Delay (s)	55.0	16.2	9.7	63.6	16.1	11.3	67.2	70.3	58.4	196.9	60.3	
Level of Service	D	B	A	E	B	B	E	E	E	F	E	
Approach Delay (s)		16.8			23.6			60.7			162.7	
Approach LOS		B			C			E			F	

Intersection Summary

HCM 2000 Control Delay	48.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	146.0	Sum of lost time (s)	19.6
Intersection Capacity Utilization	67.7%	ICU Level of Service	C
Analysis Period (min)	15		

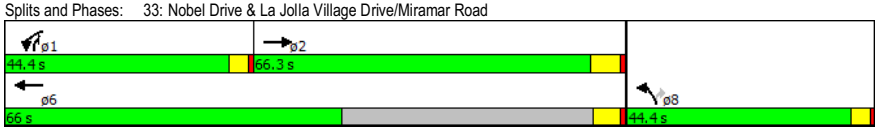
c Critical Lane Group

Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Configurations					
Traffic Volume (vph)	1215	335	1615	110	895
Future Volume (vph)	1215	335	1615	110	895
Turn Type	NA	Prot	NA	Prot	pm+ov
Protected Phases	2	1	6	8	1
Permitted Phases					8
Detector Phase	2	1	6	8	1
Switch Phase					
Minimum Initial (s)	10.0	4.0	10.0	7.0	4.0
Minimum Split (s)	16.3	8.4	16.0	11.4	8.4
Total Split (s)	66.3	44.4	66.0	44.4	44.4
Total Split (%)	42.7%	28.6%	42.6%	28.6%	28.6%
Yellow Time (s)	5.3	3.4	5.0	3.4	3.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.3	4.4	6.0	4.4	4.4
Lead/Lag	Lag	Lead			Lead
Lead-Lag Optimize?	Yes	Yes			Yes
Recall Mode	Min	None	Min	None	None

Intersection Summary

Cycle Length: 155.1
Actuated Cycle Length: 93.3
Natural Cycle: 55
Control Type: Actuated-Uncoordinated

Splits and Phases: 33: Nobel Drive & La Jolla Village Drive/Miramar Road



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1215	94	335	1615	110	895
Future Volume (vph)	1215	94	335	1615	110	895
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.3		4.4	6.0	4.4	4.4
Lane Util. Factor	0.86		0.97	0.86	1.00	0.88
Frt	0.99		1.00	1.00	1.00	0.85
Flt Protected	1.00		0.95	1.00	0.95	1.00
Satd. Flow (prot)	6339		3433	6408	1770	2787
Flt Permitted	1.00		0.95	1.00	0.95	1.00
Satd. Flow (perm)	6339		3433	6408	1770	2787
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.96	0.96
Adj. Flow (vph)	1293	100	356	1718	115	932
RTOR Reduction (vph)	7	0	0	0	0	11
Lane Group Flow (vph)	1386	0	356	1718	115	921
Turn Type	NA		Prot	NA	Prot	pm+ov
Protected Phases	2		1	6	8	1
Permitted Phases						8
Actuated Green, G (s)	39.2		27.6	71.5	10.9	38.5
Effective Green, g (s)	39.2		27.6	71.5	10.9	38.5
Actuated g/C Ratio	0.42		0.30	0.77	0.12	0.41
Clearance Time (s)	6.3		4.4	6.0	4.4	4.4
Vehicle Extension (s)	5.0		2.0	5.4	2.0	2.0
Lane Grp Cap (vph)	2677		1021	4937	207	1288
v/s Ratio Prot	c0.22		0.10	0.27	0.06	c0.21
v/s Ratio Perm						0.12
v/c Ratio	0.52		0.35	0.35	0.56	0.71
Uniform Delay, d1	19.8		25.6	3.3	38.7	22.6
Progression Factor	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	0.3		0.1	0.1	1.8	1.6
Delay (s)	20.2		25.6	3.4	40.5	24.2
Level of Service	C		C	A	D	C
Approach Delay (s)	20.2			7.3	26.0	
Approach LOS	C			A	C	

Intersection Summary

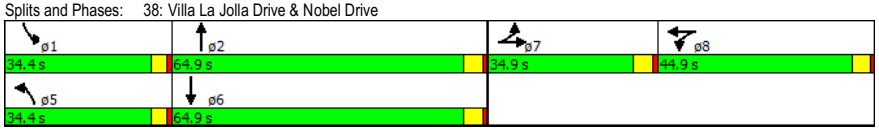
HCM 2000 Control Delay	15.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	92.8	Sum of lost time (s)	15.1
Intersection Capacity Utilization	59.4%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	5	90	2	8	584	373	585
Future Volume (vph)	5	90	2	8	584	373	585
Turn Type	NA	Split	NA	Prot	NA	Prot	NA
Protected Phases	7	8	8	5	2	1	6
Permitted Phases							
Detector Phase	7	8	8	5	2	1	6
Switch Phase							
Minimum Initial (s)	6.0	6.0	6.0	4.0	7.0	6.0	10.0
Minimum Split (s)	10.9	10.9	10.9	8.4	11.9	10.4	14.9
Total Split (s)	34.9	44.9	44.9	34.4	64.9	34.4	64.9
Total Split (%)	19.5%	25.1%	25.1%	19.2%	36.2%	19.2%	36.2%
Yellow Time (s)	3.9	3.9	3.9	3.4	3.9	3.4	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	4.9	4.4	4.9	4.4	4.9
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	Min	None	Min

Intersection Summary
Cycle Length: 179.1
Actuated Cycle Length: 77.6
Natural Cycle: 60
Control Type: Actuated-Uncoordinated

Splits and Phases: 38: Villa La Jolla Drive & Nobel Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	5	7	90	2	374	8	584	159	373	585	11
Future Volume (vph)	11	5	7	90	2	374	8	584	159	373	585	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9		4.9	4.9		4.4	4.9		4.4	4.9	
Lane Util. Factor		1.00		0.97	1.00		1.00	0.95		0.97	0.95	
Frt		0.96		1.00	0.85		1.00	0.97		1.00	1.00	
Flt Protected		0.98		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1744		3433	1585		1770	3426		3433	3529	
Flt Permitted		0.98		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1744		3433	1585		1770	3426		3433	3529	
Peak-hour factor, PHF	0.68	0.68	0.68	0.92	0.92	0.92	0.93	0.93	0.93	0.91	0.91	0.91
Adj. Flow (vph)	16	7	10	98	2	407	9	628	171	410	643	12
RTOR Reduction (vph)	0	10	0	0	361	0	0	12	0	0	0	0
Lane Group Flow (vph)	0	23	0	98	48	0	9	787	0	410	655	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	7	7		8	8		5	2		1	6	
Permitted Phases												
Actuated Green, G (s)		3.6		9.3	9.3		0.9	34.4		16.5	50.0	
Effective Green, g (s)		3.6		9.3	9.3		0.9	34.4		16.5	50.0	
Actuated g/C Ratio		0.04		0.11	0.11		0.01	0.41		0.20	0.60	
Clearance Time (s)		4.9		4.9	4.9		4.4	4.9		4.4	4.9	
Vehicle Extension (s)		2.0		2.0	2.0		2.0	4.3		2.0	3.7	
Lane Grp Cap (vph)		75		385	177		19	1421		683	2128	
v/s Ratio Prot		c0.01		0.03	c0.03		0.01	c0.23		c0.12	0.19	
v/s Ratio Perm												
v/c Ratio		0.31		0.25	0.27		0.47	0.55		0.60	0.31	
Uniform Delay, d1		38.4		33.6	33.7		40.8	18.4		30.2	8.0	
Progression Factor		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.9		0.1	0.3		6.6	0.6		1.0	0.1	
Delay (s)		39.3		33.8	34.0		47.4	19.1		31.2	8.1	
Level of Service		D		C	C		D	B		C	A	
Approach Delay (s)		39.3			33.9			19.4			17.0	
Approach LOS		D			C			B			B	

Intersection Summary				
HCM 2000 Control Delay	21.7	HCM 2000 Level of Service	C	
HCM 2000 Volume to Capacity ratio	0.51			
Actuated Cycle Length (s)	82.9	Sum of lost time (s)	19.1	
Intersection Capacity Utilization	67.0%	ICU Level of Service	C	
Analysis Period (min)	15			

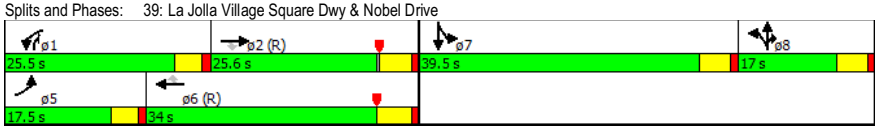
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	35	180	334	1210	150	259	254	159	948	290	168
Future Volume (vph)	35	180	334	1210	150	259	254	159	948	290	168
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Split	NA	pt+ov	Split	NA
Protected Phases	5	2		1	6		8	8	8 1	7	7
Permitted Phases			2			6					
Detector Phase	5	2	2	1	6	6	8	8	8 1	7	7
Switch Phase											
Minimum Initial (s)	4.0	7.0	7.0	4.0	7.0	7.0	8.0	8.0		8.0	8.0
Minimum Split (s)	9.4	12.0	12.0	8.4	12.4	12.4	12.9	12.9		38.9	38.9
Total Split (s)	17.5	25.6	25.6	25.5	34.0	34.0	17.0	17.0		39.5	39.5
Total Split (%)	16.2%	23.7%	23.7%	23.6%	31.5%	31.5%	15.7%	15.7%		36.6%	36.6%
Yellow Time (s)	3.4	4.0	4.0	3.4	4.4	4.4	3.9	3.9		3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	4.4	5.0	5.0	4.4	5.4	5.4	4.9	4.9		4.9	4.9
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lag	Lag		Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	None		None	None

Intersection Summary

Cycle Length: 108
Actuated Cycle Length: 108
Offset: 41 (38%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 39: La Jolla Village Square Dwy & Nobel Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	35	180	334	1210	150	259	254	159	948	290	168	26
Future Volume (vph)	35	180	334	1210	150	259	254	159	948	290	168	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.0	5.0	4.4	5.4	5.4	4.9	4.9	4.9	4.9	4.9	
Lane Util. Factor	1.00	0.95	1.00	0.97	0.95	1.00	0.95	0.95	1.00	0.95	0.95	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.99	1.00	0.95	0.99	
Satd. Flow (prot)	1770	3539	1583	3433	3539	1583	1681	1748	1583	1681	1724	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.99	1.00	0.95	0.99	
Satd. Flow (perm)	1770	3539	1583	3433	3539	1583	1681	1748	1583	1681	1724	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.86	0.86	0.86	0.92	0.92	0.92
Adj. Flow (vph)	37	191	355	1287	160	276	295	185	1102	315	183	28
RTOR Reduction (vph)	0	0	286	0	0	182	0	0	167	0	5	0
Lane Group Flow (vph)	37	191	69	1287	160	94	236	244	935	261	260	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Split	NA	pt+ov	Split	NA	
Protected Phases	5	2		1	6		8	8	8 1	7	7	
Permitted Phases			2			6						
Actuated Green, G (s)	4.8	21.0	21.0	21.1	36.9	36.9	22.6	22.6	48.6	24.1	24.1	
Effective Green, g (s)	4.8	21.0	21.0	21.1	36.9	36.9	22.6	22.6	48.6	24.1	24.1	
Actuated g/C Ratio	0.04	0.19	0.19	0.20	0.34	0.34	0.21	0.21	0.45	0.22	0.22	
Clearance Time (s)	4.4	5.0	5.0	4.4	5.4	5.4	4.9	4.9		4.9	4.9	
Vehicle Extension (s)	2.0	4.1	4.1	2.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)	78	688	307	670	1209	540	351	365	712	375	384	
v/s Ratio Prot	0.02	c0.05		c0.37	0.05		0.14	0.14	c0.59	c0.16	0.15	
v/s Ratio Perm			0.04			0.06						
v/c Ratio	0.47	0.28	0.22	1.92	0.13	0.17	0.67	0.67	1.31	0.70	0.68	
Uniform Delay, d1	50.4	37.0	36.6	43.5	24.5	24.9	39.3	39.3	29.7	38.6	38.4	
Progression Factor	1.00	1.00	1.00	1.13	1.17	2.73	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	1.7	1.0	1.7	419.4	0.2	0.6	5.5	5.0	150.7	6.0	5.1	
Delay (s)	52.0	38.0	38.3	468.6	28.8	68.6	44.8	44.3	180.4	44.5	43.5	
Level of Service	D	D	D	F	C	E	D	D	F	D	D	
Approach Delay (s)		39.1			363.7			139.2			44.0	
Approach LOS		D			F			F			D	

Intersection Summary

HCM 2000 Control Delay	202.3	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.08		
Actuated Cycle Length (s)	108.0	Sum of lost time (s)	19.6
Intersection Capacity Utilization	90.1%	ICU Level of Service	E
Analysis Period (min)	15		

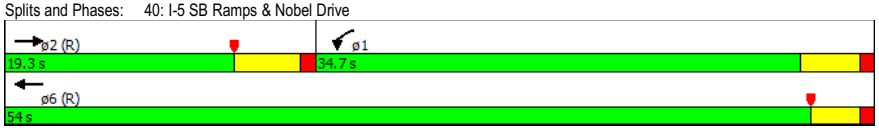
c Critical Lane Group

Lane Group	EBT	WBL	WBT
Lane Configurations			
Traffic Volume (vph)	807	181	1640
Future Volume (vph)	807	181	1640
Turn Type	NA	Prot	NA
Protected Phases	2	1	6
Permitted Phases			
Detector Phase	2	1	6
Switch Phase			
Minimum Initial (s)	13.0	5.0	1.0
Minimum Split (s)	18.1	9.7	22.0
Total Split (s)	19.3	34.7	54.0
Total Split (%)	35.7%	64.3%	100.0%
Yellow Time (s)	4.1	3.7	3.0
All-Red Time (s)	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0
Total Lost Time (s)	5.1	4.7	4.0
Lead/Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	
Recall Mode	C-Max	None	C-Max

Intersection Summary

Cycle Length: 54
Actuated Cycle Length: 54
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 40
Control Type: Actuated-Coordinated

Splits and Phases: 40: I-5 SB Ramps & Nobel Drive



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	807	579	181	1640	0	0
Future Volume (vph)	807	579	181	1640	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1		4.7	4.0		
Lane Util. Factor	0.95		0.97	0.95		
Frt	0.94		1.00	1.00		
Flt Protected	1.00		0.95	1.00		
Satd. Flow (prot)	3317		3433	3539		
Flt Permitted	1.00		0.95	1.00		
Satd. Flow (perm)	3317		3433	3539		
Peak-hour factor, PHF	0.89	0.89	0.98	0.98	0.25	0.25
Adj. Flow (vph)	907	651	185	1673	0	0
RTOR Reduction (vph)	203	0	0	0	0	0
Lane Group Flow (vph)	1355	0	185	1673	0	0
Turn Type	NA		Prot	NA		
Protected Phases	2		1	6		
Permitted Phases						
Actuated Green, G (s)	20.2		24.0	54.0		
Effective Green, g (s)	20.2		24.0	54.0		
Actuated g/C Ratio	0.37		0.44	1.00		
Clearance Time (s)	5.1		4.7	4.0		
Vehicle Extension (s)	3.0		3.0	3.0		
Lane Grp Cap (vph)	1240		1525	3539		
v/s Ratio Prot	c0.41		0.05	c0.47		
v/s Ratio Perm						
v/c Ratio	1.09		0.12	0.47		
Uniform Delay, d1	16.9		8.8	0.0		
Progression Factor	1.31		1.12	1.00		
Incremental Delay, d2	45.3		0.0	0.4		
Delay (s)	67.4		9.9	0.4		
Level of Service	E		A	A		
Approach Delay (s)	67.4			1.4	0.0	
Approach LOS	E			A	A	

Intersection Summary

HCM 2000 Control Delay	31.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	54.0	Sum of lost time (s)	9.8
Intersection Capacity Utilization	54.2%	ICU Level of Service	A
Analysis Period (min)	15		

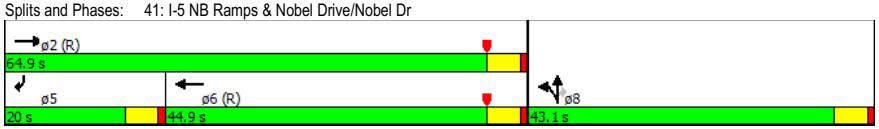
c Critical Lane Group

Lane Group	EBT	WBT	NBL	NBT	NBR	SBR
Lane Configurations						
Traffic Volume (vph)	829	1121	412	50	148	187
Future Volume (vph)	829	1121	412	50	148	187
Turn Type	NA	NA	Split	NA	Perm	Prot
Protected Phases	2	6	8	8		5
Permitted Phases					8	
Detector Phase	2	6	8	8	8	5
Switch Phase						
Minimum Initial (s)	11.0	13.0	5.0	5.0	5.0	5.0
Minimum Split (s)	16.1	18.1	10.1	10.1	10.1	10.0
Total Split (s)	64.9	44.9	43.1	43.1	43.1	20.0
Total Split (%)	60.1%	41.6%	39.9%	39.9%	39.9%	18.5%
Yellow Time (s)	4.1	4.1	4.1	4.1	4.1	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.1	5.1	5.1	5.1	5.1	5.0
Lead/Lag		Lag				Lead
Lead-Lag Optimize?		Yes				Yes
Recall Mode	C-Max	C-Max	Min	Min	Min	None

Intersection Summary

Cycle Length: 108
Actuated Cycle Length: 108
Offset: 67 (62%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 65
Control Type: Actuated-Coordinated

Splits and Phases: 41: I-5 NB Ramps & Nobel Drive/Nobel Dr



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	829	0	0	1121	41	412	50	148	0	0	187
Future Volume (vph)	11	829	0	0	1121	41	412	50	148	0	0	187
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.1			5.1		5.1	5.1	5.1			5.0
Lane Util. Factor		0.95			0.91		0.95	0.95	1.00			1.00
Frt		1.00			0.99		1.00	1.00	0.85			0.86
Flt Protected		1.00			1.00		0.95	0.96	1.00			1.00
Satd. Flow (prot)		3537			5058		1681	1703	1583			1611
Flt Permitted		0.93			1.00		0.95	0.96	1.00			1.00
Satd. Flow (perm)		3295			5058		1681	1703	1583			1611
Peak-hour factor, PHF	0.91	0.91	0.91	0.94	0.94	0.94	0.96	0.96	0.96	0.79	0.79	0.79
Adj. Flow (vph)	12	911	0	0	1193	44	429	52	154	0	0	237
RTOR Reduction (vph)	0	0	0	0	3	0	0	0	100	0	0	101
Lane Group Flow (vph)	0	923	0	0	1234	0	240	241	54	0	0	136
Turn Type		NA			NA		Split	NA	Perm			Prot
Protected Phases		2			6		8	8				5
Permitted Phases									8			
Actuated Green, G (s)		77.1			58.6		20.7	20.7	20.7			13.5
Effective Green, g (s)		77.1			58.6		20.7	20.7	20.7			13.5
Actuated g/C Ratio		0.71			0.54		0.19	0.19	0.19			0.12
Clearance Time (s)		5.1			5.1		5.1	5.1	5.1			5.0
Vehicle Extension (s)		2.0			2.0		2.0	2.0	2.0			2.0
Lane Grp Cap (vph)		2352			2744		322	326	303			201
v/s Ratio Prot					c0.24		c0.14	0.14				c0.08
v/s Ratio Perm		0.28							0.03			
v/c Ratio		0.39			0.45		0.75	0.74	0.18			0.68
Uniform Delay, d1		6.1			14.9		41.2	41.1	36.5			45.2
Progression Factor		1.22			1.02		1.00	1.00	1.00			1.00
Incremental Delay, d2		0.1			0.5		8.0	7.4	0.1			7.0
Delay (s)		7.6			15.8		49.1	48.5	36.6			52.1
Level of Service		A			B		D	D	D			D
Approach Delay (s)		7.6			15.8			45.8			52.1	
Approach LOS		A			B			D			D	

Intersection Summary

HCM 2000 Control Delay	22.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.55		
Actuated Cycle Length (s)	108.0	Sum of lost time (s)	15.2
Intersection Capacity Utilization	59.5%	ICU Level of Service	B
Analysis Period (min)	15		

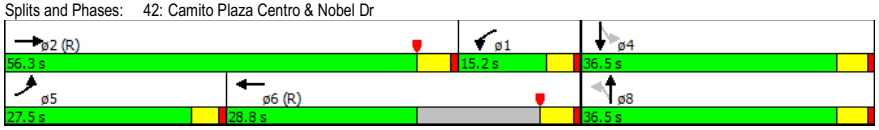
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	104	892	44	971	60	2	17	3
Future Volume (vph)	104	892	44	971	60	2	17	3
Turn Type	Prot	NA	Prot	NA	Perm	NA	Perm	NA
Protected Phases	5	2	1	6		8		4
Permitted Phases					8		4	
Detector Phase	5	2	1	6	8	8	4	4
Switch Phase								
Minimum Initial (s)	4.0	10.0	4.0	10.0	6.0	6.0	6.0	6.0
Minimum Split (s)	9.5	25.2	9.5	25.2	36.5	36.5	36.5	36.5
Total Split (s)	27.5	56.3	15.2	28.8	36.5	36.5	36.5	36.5
Total Split (%)	25.5%	52.1%	14.1%	26.7%	33.8%	33.8%	33.8%	33.8%
Yellow Time (s)	3.4	4.2	3.4	4.2	3.9	3.9	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	4.4	5.2	4.4	5.2		4.9		4.9
Lead/Lag	Lead	Lead	Lag	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes				
Recall Mode	None	C-Max	None	C-Max	None	None	None	None

Intersection Summary

Cycle Length: 108
Actuated Cycle Length: 108
Offset: 22 (20%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 75
Control Type: Actuated-Coordinated

Splits and Phases: 42: Camito Plaza Centro & Nobel Dr



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	104	892	55	44	971	23	60	2	35	17	3	51
Future Volume (vph)	104	892	55	44	971	23	60	2	35	17	3	51
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.2		4.4	5.2			4.9			4.9	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Frt	1.00	0.99		1.00	1.00			0.95			0.90	
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.99	
Satd. Flow (prot)	1770	5041		1770	5067			1718			1663	
Flt Permitted	0.95	1.00		0.95	1.00			0.75			0.92	
Satd. Flow (perm)	1770	5041		1770	5067			1323			1548	
Peak-hour factor, PHF	0.94	0.94	0.94	0.93	0.93	0.93	0.83	0.83	0.83	0.83	0.83	0.83
Adj. Flow (vph)	111	949	59	47	1044	25	72	2	42	20	4	61
RTOR Reduction (vph)	0	4	0	0	2	0	0	23	0	0	53	0
Lane Group Flow (vph)	111	1004	0	47	1067	0	0	93	0	0	32	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8			4		
Actuated Green, G (s)	12.1	70.2		8.6	66.7			14.7			14.7	
Effective Green, g (s)	12.1	70.2		8.6	66.7			14.7			14.7	
Actuated g/C Ratio	0.11	0.65		0.08	0.62			0.14			0.14	
Clearance Time (s)	4.4	5.2		4.4	5.2			4.9			4.9	
Vehicle Extension (s)	3.0	5.0		3.0	4.5			2.5			2.0	
Lane Grp Cap (vph)	198	3276		140	3129			180			210	
v/s Ratio Prot	c0.06	0.20		0.03	c0.21							
v/s Ratio Perm								c0.07			0.02	
v/c Ratio	0.56	0.31		0.34	0.34			0.51			0.15	
Uniform Delay, d1	45.4	8.3		47.0	10.0			43.3			41.2	
Progression Factor	0.87	1.40		1.00	1.00			1.00			1.00	
Incremental Delay, d2	2.4	0.2		1.4	0.3			1.9			0.1	
Delay (s)	42.1	11.7		48.4	10.3			45.2			41.3	
Level of Service	D	B		D	B			D			D	
Approach Delay (s)		14.7			11.9			45.2			41.3	
Approach LOS		B			B			D			D	

Intersection Summary

HCM 2000 Control Delay	15.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.40		
Actuated Cycle Length (s)	108.0	Sum of lost time (s)	14.5
Intersection Capacity Utilization	49.4%	ICU Level of Service	A
Analysis Period (min)	15		

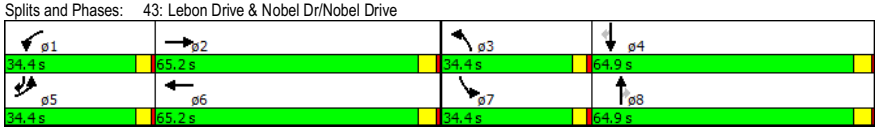
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	62	802	32	811	132	142	84	69	86	77
Future Volume (vph)	62	802	32	811	132	142	84	69	86	77
Turn Type	Prot	NA	Prot	NA	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	5	2	1	6	3	8		7	4	5
Permitted Phases							8			4
Detector Phase	5	2	1	6	3	8	8	7	4	5
Switch Phase										
Minimum Initial (s)	4.0	10.0	4.0	10.0	4.0	8.0	8.0	10.0	10.0	4.0
Minimum Split (s)	8.4	15.2	8.4	15.2	8.4	12.9	12.9	14.4	14.9	8.4
Total Split (s)	34.4	65.2	34.4	65.2	34.4	64.9	64.9	34.4	64.9	34.4
Total Split (%)	17.3%	32.8%	17.3%	32.8%	17.3%	32.6%	32.6%	17.3%	32.6%	17.3%
Yellow Time (s)	3.4	4.2	3.4	4.2	3.4	3.9	3.9	3.4	3.9	3.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.2	4.4	5.2	4.4	4.9	4.9	4.4	4.9	4.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 198.9
Actuated Cycle Length: 76.7
Natural Cycle: 55
Control Type: Actuated-Uncoordinated

Splits and Phases: 43: Lebon Drive & Nobel Dr/Nobel Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	62	802	84	32	811	68	132	142	84	69	86	77
Future Volume (vph)	62	802	84	32	811	68	132	142	84	69	86	77
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.2		4.4	5.2		4.4	4.9	4.9	4.4	4.9	4.4
Lane Util. Factor	0.97	0.91		1.00	0.91		0.97	0.95	1.00	0.97	0.95	1.00
Frt	1.00	0.99		1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5013		1770	5027		3433	3539	1583	3433	3539	1583
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5013		1770	5027		3433	3539	1583	3433	3539	1583
Peak-hour factor, PHF	0.91	0.91	0.91	0.89	0.89	0.89	0.94	0.94	0.94	0.79	0.79	0.79
Adj. Flow (vph)	68	881	92	36	911	76	140	151	89	87	109	97
RTOR Reduction (vph)	0	5	0	0	4	0	0	0	74	0	0	71
Lane Group Flow (vph)	68	968	0	36	983	0	140	151	15	87	109	26
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	5	2		1	6		3	8		7	4	5
Permitted Phases									8			4
Actuated Green, G (s)	6.4	32.0		4.2	29.8		8.4	13.3	13.3	10.1	15.0	21.4
Effective Green, g (s)	6.4	32.0		4.2	29.8		8.4	13.3	13.3	10.1	15.0	21.4
Actuated g/C Ratio	0.08	0.41		0.05	0.38		0.11	0.17	0.17	0.13	0.19	0.27
Clearance Time (s)	4.4	5.2		4.4	5.2		4.4	4.9	4.9	4.4	4.9	4.4
Vehicle Extension (s)	2.0	4.5		2.0	4.5		2.0	6.4	6.4	2.0	5.5	2.0
Lane Grp Cap (vph)	279	2043		94	1908		367	599	268	441	676	431
v/s Ratio Prot	0.02	0.19		c0.02	c0.20		c0.04	c0.04		0.03	0.03	0.00
v/s Ratio Perm									0.01			0.01
v/c Ratio	0.24	0.47		0.38	0.52		0.38	0.25	0.06	0.20	0.16	0.06
Uniform Delay, d1	33.8	17.1		35.9	18.8		32.6	28.3	27.3	30.6	26.5	21.1
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2	0.3		0.9	0.4		0.2	0.7	0.3	0.1	0.3	0.0
Delay (s)	33.9	17.4		36.8	19.2		32.9	29.0	27.6	30.7	26.8	21.1
Level of Service	C	B		D	B		C	C	C	C	C	C
Approach Delay (s)		18.5			19.8			30.1			26.1	
Approach LOS		B			B			C			C	

Intersection Summary

HCM 2000 Control Delay	21.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.39		
Actuated Cycle Length (s)	78.5	Sum of lost time (s)	18.9
Intersection Capacity Utilization	51.4%	ICU Level of Service	A
Analysis Period (min)	15		

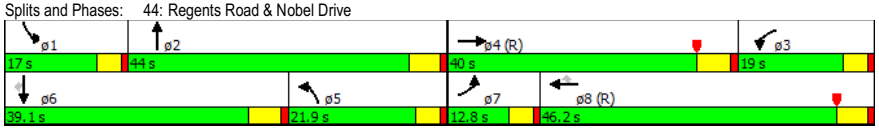
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	103	773	152	776	167	43	176	147	202	173
Future Volume (vph)	103	773	152	776	167	43	176	147	202	173
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Prot	NA	Perm
Protected Phases	7	4	3	8		5	2	1	6	
Permitted Phases					8					6
Detector Phase	7	4	3	8	8	5	2	1	6	6
Switch Phase										
Minimum Initial (s)	4.0	10.0	4.0	10.0	10.0	4.0	10.0	4.0	10.0	10.0
Minimum Split (s)	8.4	37.7	8.4	37.3	37.3	8.4	41.2	8.4	35.5	35.5
Total Split (s)	12.8	40.0	19.0	46.2	46.2	21.9	44.0	17.0	39.1	39.1
Total Split (%)	10.7%	33.3%	15.8%	38.5%	38.5%	18.3%	36.7%	14.2%	32.6%	32.6%
Yellow Time (s)	3.4	4.7	3.4	4.3	4.3	3.4	4.2	3.4	4.5	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.7	4.4	5.3	5.3	4.4	5.2	4.4	5.5	5.5
Lead/Lag	Lead	Lead	Lag	Lag	Lag	Lag	Lag	Lead	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	C-Max	None	Min	None	Min	Min

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 4:EBT and 8:WBT, Start of Yellow
Natural Cycle: 100
Control Type: Actuated-Coordinated

Splits and Phases: 44: Regents Road & Nobel Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	103	773	43	152	776	167	43	176	239	147	202	173
Future Volume (vph)	103	773	43	152	776	167	43	176	239	147	202	173
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.7		4.4	5.3	5.3	4.4	5.2		4.4	5.5	5.5
Lane Util. Factor	0.97	0.91		0.97	0.95	1.00	1.00	0.91		1.00	0.95	1.00
Frt	1.00	0.99		1.00	1.00	0.85	1.00	0.91		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3433	5045		3433	3539	1583	1770	4646		1770	3539	1583
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	3433	5045		3433	3539	1583	1770	4646		1770	3539	1583
Peak-hour factor, PHF	0.91	0.91	0.91	0.94	0.94	0.94	0.74	0.74	0.74	0.95	0.95	0.95
Adj. Flow (vph)	113	849	47	162	826	178	58	238	323	155	213	182
RTOR Reduction (vph)	0	4	0	0	0	87	0	258	0	0	0	152
Lane Group Flow (vph)	113	892	0	162	826	91	58	303	0	155	213	30
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA		Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8						6
Actuated Green, G (s)	8.3	54.9		14.6	61.6	61.6	10.9	18.6		12.2	19.6	19.6
Effective Green, g (s)	8.3	54.9		14.6	61.6	61.6	10.9	18.6		12.2	19.6	19.6
Actuated g/C Ratio	0.07	0.46		0.12	0.51	0.51	0.09	0.16		0.10	0.16	0.16
Clearance Time (s)	4.4	5.7		4.4	5.3	5.3	4.4	5.2		4.4	5.5	5.5
Vehicle Extension (s)	2.0	4.4		2.0	6.1	6.1	2.0	5.7		2.0	6.2	6.2
Lane Grp Cap (vph)	237	2308		417	1816	812	160	720		179	578	258
v/s Ratio Prot	c0.03	0.18		0.05	c0.23		0.03	c0.07		c0.09	0.06	
v/s Ratio Perm						0.06						0.02
v/c Ratio	0.48	0.39		0.39	0.45	0.11	0.36	0.42		0.87	0.37	0.12
Uniform Delay, d1	53.8	21.5		48.6	18.5	15.1	51.3	45.8		53.1	44.7	42.8
Progression Factor	1.00	1.00		0.54	0.59	0.52	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	0.6	0.5		0.2	0.6	0.2	0.5	1.0		31.8	1.2	0.6
Delay (s)	54.3	21.9		26.6	11.5	8.0	51.8	46.9		84.9	45.9	43.4
Level of Service	D	C		C	B	A	D	D		F	D	D
Approach Delay (s)		25.6			13.1			47.3			56.1	
Approach LOS		C			B			D			E	

Intersection Summary

HCM 2000 Control Delay	30.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	57.8%	ICU Level of Service	B
Analysis Period (min)	15		

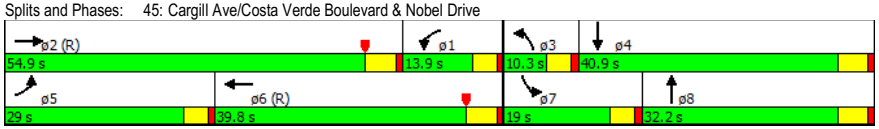
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	356	763	53	831	36	59	174	35
Future Volume (vph)	356	763	53	831	36	59	174	35
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	5	2	1	6	3	8	7	4
Permitted Phases								
Detector Phase	5	2	1	6	3	8	7	4
Switch Phase								
Minimum Initial (s)	4.0	25.0	4.0	25.0	4.0	25.0	4.0	25.0
Minimum Split (s)	8.4	32.2	8.4	39.2	8.4	32.2	8.4	39.2
Total Split (s)	29.0	54.9	13.9	39.8	10.3	32.2	19.0	40.9
Total Split (%)	24.2%	45.8%	11.6%	33.2%	8.6%	26.8%	15.8%	34.1%
Yellow Time (s)	3.4	4.2	3.4	4.2	3.4	4.2	3.4	4.2
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.2	4.4	5.2	4.4	5.2	4.4	5.2
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	Max	None	Max

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 120
Control Type: Actuated-Coordinated

Splits and Phases: 45: Cargill Ave/Costa Verde Boulevard & Nobel Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	356	763	53	53	831	156	36	59	44	174	35	213
Future Volume (vph)	356	763	53	53	831	156	36	59	44	174	35	213
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.2		4.4	5.2		4.4	5.2		4.4	5.2	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	1.00		1.00	1.00	
Frt	1.00	0.99		1.00	0.98		1.00	0.94		1.00	0.87	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	5036		1770	4964		1770	1744		1770	1623	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	5036		1770	4964		1770	1744		1770	1623	
Peak-hour factor, PHF	0.91	0.91	0.91	0.92	0.92	0.92	0.73	0.73	0.73	0.81	0.81	0.81
Adj. Flow (vph)	391	838	58	58	903	170	49	81	60	215	43	263
RTOR Reduction (vph)	0	6	0	0	23	0	0	22	0	0	179	0
Lane Group Flow (vph)	391	890	0	58	1050	0	49	119	0	215	127	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases												
Actuated Green, G (s)	24.6	50.7		7.6	33.7		4.7	27.9		14.6	37.8	
Effective Green, g (s)	24.6	50.7		7.6	33.7		4.7	27.9		14.6	37.8	
Actuated g/C Ratio	0.21	0.42		0.06	0.28		0.04	0.23		0.12	0.31	
Clearance Time (s)	4.4	5.2		4.4	5.2		4.4	5.2		4.4	5.2	
Vehicle Extension (s)	2.0	4.5		2.0	4.5		2.0	4.5		2.0	4.5	
Lane Grp Cap (vph)	362	2127		112	1394		69	405		215	511	
v/s Ratio Prot	c0.22	0.18		0.03	c0.21		0.03	c0.07		c0.12	0.08	
v/s Ratio Perm												
v/c Ratio	1.08	0.42		0.52	0.75		0.71	0.29		1.00	0.25	
Uniform Delay, d1	47.7	24.3		54.4	39.4		57.0	37.9		52.7	30.5	
Progression Factor	0.84	0.53		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	68.6	0.6		1.7	3.8		24.7	1.8		61.4	1.2	
Delay (s)	108.8	13.5		56.1	43.2		81.7	39.8		114.1	31.7	
Level of Service	F	B		E	D		F	D		F	C	
Approach Delay (s)		42.4			43.8			50.6			65.7	
Approach LOS		D			D			D			E	

Intersection Summary

HCM 2000 Control Delay	47.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	19.2
Intersection Capacity Utilization	82.8%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	314	893	11	778	7	0	143	2
Future Volume (vph)	314	893	11	778	7	0	143	2
Turn Type	Prot	NA	Prot	NA	Perm	NA	Perm	NA
Protected Phases	5	2	1	6		8		4
Permitted Phases					8		4	
Detector Phase	5	2	1	6	8	8	4	4
Switch Phase								
Minimum Initial (s)	4.0	7.0	4.0	7.0	4.0	4.0	4.0	4.0
Minimum Split (s)	9.5	19.0	9.5	28.9	32.9	32.9	32.9	32.9
Total Split (s)	34.4	65.0	34.4	64.9	44.9	44.9	44.9	44.9
Total Split (%)	23.8%	45.0%	23.8%	45.0%	31.1%	31.1%	31.1%	31.1%
Yellow Time (s)	3.4	4.0	3.4	3.9	3.9	3.9	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.4	5.0	4.4	4.9		4.9	4.9	4.9
Lead/Lag	Lead	Lag	Lead	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes				
Recall Mode	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 144.3
Actuated Cycle Length: 101.9
Natural Cycle: 90
Control Type: Actuated-Uncoordinated

Splits and Phases: 46: Lombard Place & Nobel Drive

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	314	893	13	11	778	154	7	0	10	143	2	249
Future Volume (vph)	314	893	13	11	778	154	7	0	10	143	2	249
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.0		4.4	4.9			4.9		4.9	4.9	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00		1.00	1.00	
Frt	1.00	1.00		1.00	0.98			0.92		1.00	0.85	
Flt Protected	0.95	1.00		0.95	1.00			0.98		0.95	1.00	
Satd. Flow (prot)	1770	3531		1770	3451			1680		1770	1586	
Flt Permitted	0.95	1.00		0.95	1.00			0.64		0.74	1.00	
Satd. Flow (perm)	1770	3531		1770	3451			1101		1384	1586	
Peak-hour factor, PHF	0.95	0.95	0.95	0.93	0.93	0.93	0.75	0.75	0.75	0.76	0.76	0.76
Adj. Flow (vph)	331	940	14	12	837	166	9	0	13	188	3	328
RTOR Reduction (vph)	0	0	0	0	11	0	0	18	0	0	266	0
Lane Group Flow (vph)	331	954	0	12	992	0	0	4	0	188	65	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8			4		
Actuated Green, G (s)	26.0	69.8		1.2	45.1			19.8		19.8	19.8	
Effective Green, g (s)	26.0	69.8		1.2	45.1			19.8		19.8	19.8	
Actuated g/C Ratio	0.25	0.66		0.01	0.43			0.19		0.19	0.19	
Clearance Time (s)	4.4	5.0		4.4	4.9			4.9		4.9	4.9	
Vehicle Extension (s)	3.0	3.7		3.0	4.4			2.0		2.0	2.0	
Lane Grp Cap (vph)	437	2345		20	1480			207		260	298	
v/s Ratio Prot	c0.19	0.27		0.01	c0.29						0.04	
v/s Ratio Perm								0.00		c0.14		
v/c Ratio	0.76	0.41		0.60	0.67			0.02		0.72	0.22	
Uniform Delay, d1	36.6	8.1		51.7	24.0			34.7		40.1	36.1	
Progression Factor	1.00	1.00		1.00	1.00			1.00		1.00	1.00	
Incremental Delay, d2	7.4	0.1		40.2	1.4			0.0		8.1	0.1	
Delay (s)	44.0	8.3		91.9	25.4			34.8		48.2	36.2	
Level of Service	D	A		F	C			C		D	D	
Approach Delay (s)		17.5			26.2			34.8			40.6	
Approach LOS		B			C			C			D	

Intersection Summary

HCM 2000 Control Delay	24.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	105.1	Sum of lost time (s)	14.3
Intersection Capacity Utilization	71.2%	ICU Level of Service	C
Analysis Period (min)	15		

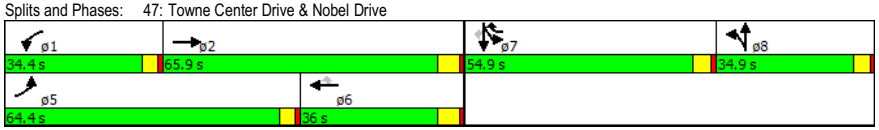
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	400	533	23	555	96	50	44	63	403
Future Volume (vph)	400	533	23	555	96	50	44	63	403
Turn Type	Prot	NA	Prot	NA	pm+ov	NA	Split	NA	Perm
Protected Phases	5	2	1	6	7	8	7	7	
Permitted Phases					6				7
Detector Phase	5	2	1	6	7	8	7	7	7
Switch Phase									
Minimum Initial (s)	4.0	7.0	4.0	7.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.4	12.9	8.4	13.0	8.9	8.9	8.9	8.9	8.9
Total Split (s)	64.4	65.9	34.4	36.0	54.9	34.9	54.9	54.9	54.9
Total Split (%)	33.9%	34.6%	18.1%	18.9%	28.9%	18.3%	28.9%	28.9%	28.9%
Yellow Time (s)	3.4	4.9	3.4	5.0	3.9	3.9	3.9	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.9	4.4	6.0	4.9	4.9	4.9	4.9	4.9
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 190.2
Actuated Cycle Length: 74.4
Natural Cycle: 55
Control Type: Actuated-Uncoordinated

Splits and Phases: 47: Towne Center Drive & Nobel Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	400	533	44	23	555	96	30	50	42	44	63	403
Future Volume (vph)	400	533	44	23	555	96	30	50	42	44	63	403
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.9		4.4	6.0	4.9		4.9		4.9	4.9	4.9
Lane Util. Factor	0.97	0.95		1.00	0.91	1.00		0.95		1.00	1.00	1.00
Frt	1.00	0.99		1.00	1.00	0.85		0.95		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.99		0.95	1.00	1.00
Satd. Flow (prot)	3433	3499		1770	5085	1583		3315		1770	1863	1583
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.99		0.95	1.00	1.00
Satd. Flow (perm)	3433	3499		1770	5085	1583		3315		1770	1863	1583
Peak-hour factor, PHF	0.96	0.96	0.96	0.85	0.85	0.85	0.78	0.78	0.78	0.91	0.91	0.91
Adj. Flow (vph)	417	555	46	27	653	113	38	64	54	48	69	443
RTOR Reduction (vph)	0	3	0	0	0	48	0	39	0	0	0	370
Lane Group Flow (vph)	417	598	0	27	653	65	0	117	0	48	69	73
Turn Type	Prot	NA		Prot	NA	pm+ov	Split	NA		Split	NA	Perm
Protected Phases	5	2		1	6	7	8	8		7	7	
Permitted Phases						6						7
Actuated Green, G (s)	15.3	33.8		2.5	20.9	33.5		7.8		12.6	12.6	12.6
Effective Green, g (s)	15.3	33.8		2.5	20.9	33.5		7.8		12.6	12.6	12.6
Actuated g/C Ratio	0.20	0.44		0.03	0.27	0.44		0.10		0.16	0.16	0.16
Clearance Time (s)	4.4	5.9		4.4	6.0	4.9		4.9		4.9	4.9	4.9
Vehicle Extension (s)	2.0	4.9		2.0	3.3	4.0		2.0		4.0	4.0	4.0
Lane Grp Cap (vph)	683	1539		57	1383	690		336		290	305	259
v/s Ratio Prot	c0.12	0.17		0.02	c0.13	0.02		c0.04		0.03	0.04	
v/s Ratio Perm						0.03						c0.05
v/c Ratio	0.61	0.39		0.47	0.47	0.09		0.35		0.17	0.23	0.28
Uniform Delay, d1	28.0	14.5		36.5	23.3	12.7		32.1		27.6	27.9	28.1
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00
Incremental Delay, d2	1.1	0.3		2.3	0.3	0.1		0.2		0.4	0.5	0.8
Delay (s)	29.2	14.9		38.8	23.6	12.8		32.4		28.0	28.4	28.9
Level of Service	C	B		D	C	B		C		C	C	C
Approach Delay (s)		20.7			22.6			32.4			28.8	
Approach LOS		C			C			C			C	

Intersection Summary

HCM 2000 Control Delay	23.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.45		
Actuated Cycle Length (s)	76.8	Sum of lost time (s)	20.2
Intersection Capacity Utilization	52.4%	ICU Level of Service	A
Analysis Period (min)	15		

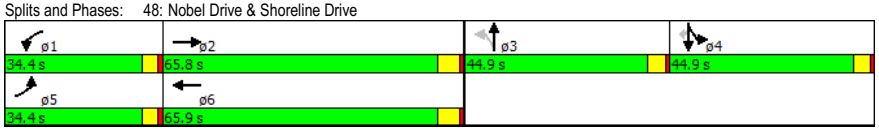
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	37	563	15	622	17	4	95	3	32
Future Volume (vph)	37	563	15	622	17	4	95	3	32
Turn Type	Prot	NA	Prot	NA	Perm	NA	Split	NA	Perm
Protected Phases	5	2	1	6		3	4	4	
Permitted Phases					3				4
Detector Phase	5	2	1	6	3	3	4	4	4
Switch Phase									
Minimum Initial (s)	4.0	10.0	4.0	10.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.4	15.8	8.4	30.9	8.9	8.9	33.9	33.9	33.9
Total Split (s)	34.4	65.8	34.4	65.9	44.9	44.9	44.9	44.9	44.9
Total Split (%)	18.1%	34.6%	18.1%	34.7%	23.6%	23.6%	23.6%	23.6%	23.6%
Yellow Time (s)	3.4	4.8	3.4	4.9	3.9	3.9	3.9	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.8	4.4	5.9		4.9	4.9	4.9	4.9
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 190.1
Actuated Cycle Length: 75.6
Natural Cycle: 85
Control Type: Actuated-Uncoordinated

Splits and Phases: 48: Nobel Drive & Shoreline Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	37	563	18	15	622	81	17	4	22	95	3	32
Future Volume (vph)	37	563	18	15	622	81	17	4	22	95	3	32
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.8		4.4	5.9			4.9		4.9	4.9	4.9
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00		1.00	1.00	0.88
Frt	1.00	1.00		1.00	0.98			0.93		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.98		0.95	1.00	1.00
Satd. Flow (prot)	1770	5062		1770	4997			1700		1770	1863	2787
Flt Permitted	0.95	1.00		0.95	1.00			0.22		0.95	1.00	1.00
Satd. Flow (perm)	1770	5062		1770	4997			390		1770	1863	2787
Peak-hour factor, PHF	0.93	0.93	0.93	0.87	0.87	0.87	0.62	0.62	0.62	0.93	0.93	0.93
Adj. Flow (vph)	40	605	19	17	715	93	27	6	35	102	3	34
RTOR Reduction (vph)	0	2	0	0	9	0	0	20	0	0	0	29
Lane Group Flow (vph)	40	622	0	17	799	0	0	48	0	102	3	5
Turn Type	Prot	NA		Prot	NA		Perm	NA		Split	NA	Perm
Protected Phases	5	2		1	6			3		4	4	
Permitted Phases							3					4
Actuated Green, G (s)	3.9	28.8		1.9	26.7			15.4		11.2	11.2	11.2
Effective Green, g (s)	3.9	28.8		1.9	26.7			15.4		11.2	11.2	11.2
Actuated g/C Ratio	0.05	0.37		0.02	0.35			0.20		0.14	0.14	0.14
Clearance Time (s)	4.4	5.8		4.4	5.9			4.9		4.9	4.9	4.9
Vehicle Extension (s)	2.0	4.6		2.0	4.4			2.0		2.0	2.0	2.0
Lane Grp Cap (vph)	89	1885		43	1726			77		256	269	403
v/s Ratio Prot	c0.02	0.12		0.01	c0.16					c0.06	0.00	
v/s Ratio Perm								c0.12				0.00
v/c Ratio	0.45	0.33		0.40	0.46			0.62		0.40	0.01	0.01
Uniform Delay, d1	35.7	17.3		37.1	19.7			28.3		30.0	28.3	28.3
Progression Factor	1.00	1.00		1.00	1.00			1.00		1.00	1.00	1.00
Incremental Delay, d2	1.3	0.2		2.2	0.3			10.8		0.4	0.0	0.0
Delay (s)	37.0	17.5		39.3	20.0			39.1		30.4	28.3	28.3
Level of Service	D	B		D	C			D		C	C	C
Approach Delay (s)		18.7			20.4			39.1			29.8	
Approach LOS		B			C			D			C	

Intersection Summary

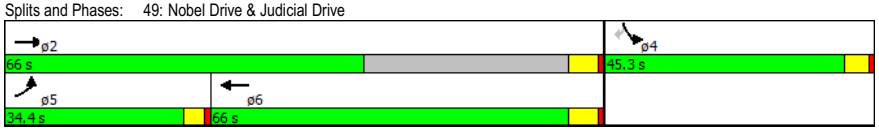
HCM 2000 Control Delay	21.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	77.3	Sum of lost time (s)	20.1
Intersection Capacity Utilization	41.2%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBT	SBL	SBR
Lane Configurations					
Traffic Volume (vph)	46	741	630	375	32
Future Volume (vph)	46	741	630	375	32
Turn Type	Prot	NA	NA	Prot	Perm
Protected Phases	5	2	6	4	
Permitted Phases					4
Detector Phase	5	2	6	4	4
Switch Phase					
Minimum Initial (s)	4.0	10.0	10.0	7.0	7.0
Minimum Split (s)	8.4	16.0	36.0	39.3	39.3
Total Split (s)	34.4	66.0	66.0	45.3	45.3
Total Split (%)	23.6%	45.3%	45.3%	31.1%	31.1%
Yellow Time (s)	3.4	5.0	5.0	4.3	4.3
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	6.0	6.0	5.3	5.3
Lead/Lag	Lead		Lag		
Lead-Lag Optimize?	Yes		Yes		
Recall Mode	None	Min	Min	None	None

Intersection Summary
Cycle Length: 145.7
Actuated Cycle Length: 75.2
Natural Cycle: 85
Control Type: Actuated-Uncoordinated

Splits and Phases: 49: Nobel Drive & Judicial Drive



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	46	741	630	401	375	32
Future Volume (vph)	46	741	630	401	375	32
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	6.0	6.0		5.3	5.3
Lane Util. Factor	0.97	0.91	0.91		0.97	1.00
Frt	1.00	1.00	0.94		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	3433	5085	4788		3433	1583
Flt Permitted	0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)	3433	5085	4788		3433	1583
Peak-hour factor, PHF	0.90	0.90	0.85	0.85	0.87	0.87
Adj. Flow (vph)	51	823	741	472	431	37
RTOR Reduction (vph)	0	0	68	0	0	28
Lane Group Flow (vph)	51	823	1145	0	431	9
Turn Type	Prot	NA	NA		Prot	Perm
Protected Phases	5	2	6		4	
Permitted Phases						4
Actuated Green, G (s)	4.6	46.2	37.2		18.0	18.0
Effective Green, g (s)	4.6	46.2	37.2		18.0	18.0
Actuated g/C Ratio	0.06	0.61	0.49		0.24	0.24
Clearance Time (s)	4.4	6.0	6.0		5.3	5.3
Vehicle Extension (s)	2.0	5.4	5.4		4.4	4.4
Lane Grp Cap (vph)	209	3111	2359		818	377
v/s Ratio Prot	0.01	c0.16	c0.24		c0.13	
v/s Ratio Perm						0.01
v/c Ratio	0.24	0.26	0.49		0.53	0.02
Uniform Delay, d1	33.8	6.8	12.8		25.0	22.0
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	0.2	0.1	0.4		0.9	0.0
Delay (s)	34.0	6.9	13.1		26.0	22.1
Level of Service	C	A	B		C	C
Approach Delay (s)		8.5	13.1		25.7	
Approach LOS		A	B		C	

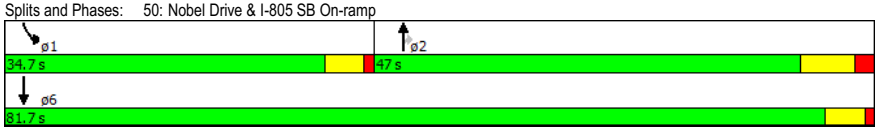
Intersection Summary			
HCM 2000 Control Delay	13.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	75.5	Sum of lost time (s)	15.7
Intersection Capacity Utilization	41.3%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	NBT	NBR	SBL	SBT
Lane Configurations				
Traffic Volume (vph)	364	662	67	1144
Future Volume (vph)	364	662	67	1144
Turn Type	NA	Perm	Prot	NA
Protected Phases	2		1	6
Permitted Phases		2		
Detector Phase	2	2	1	6
Switch Phase				
Minimum Initial (s)	12.0	12.0	5.0	5.0
Minimum Split (s)	39.0	39.0	9.7	9.7
Total Split (s)	47.0	47.0	34.7	81.7
Total Split (%)	57.5%	57.5%	42.5%	100.0%
Yellow Time (s)	5.0	5.0	3.7	3.7
All-Red Time (s)	2.0	2.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	4.7	4.7
Lead/Lag	Lag	Lag	Lead	
Lead-Lag Optimize?	Yes	Yes	Yes	
Recall Mode	Min	Min	None	None

Intersection Summary
Cycle Length: 81.7
Actuated Cycle Length: 82.1
Natural Cycle: 150
Control Type: Actuated-Uncoordinated

Splits and Phases: 50: Nobel Drive & I-805 SB On-ramp



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	364	662	67	1144
Future Volume (vph)	0	0	364	662	67	1144
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)			7.0	7.0	4.7	4.7
Lane Util. Factor			0.95	0.88	0.97	0.91
Frt			1.00	0.85	1.00	1.00
Flt Protected			1.00	1.00	0.95	1.00
Satd. Flow (prot)			3539	2787	3433	5085
Flt Permitted			1.00	1.00	0.95	1.00
Satd. Flow (perm)			3539	2787	3433	5085
Peak-hour factor, PHF	0.94	0.94	0.25	0.25	0.25	0.25
Adj. Flow (vph)	0	0	1456	2648	268	4576
RTOR Reduction (vph)	0	0	0	214	0	0
Lane Group Flow (vph)	0	0	1456	2434	268	4576
Turn Type			NA	Perm	Prot	NA
Protected Phases			2		1	6
Permitted Phases				2		
Actuated Green, G (s)			58.7	58.7	11.8	82.2
Effective Green, g (s)			58.7	58.7	11.8	82.2
Actuated g/C Ratio			0.71	0.71	0.14	1.00
Clearance Time (s)			7.0	7.0	4.7	4.7
Vehicle Extension (s)			3.0	3.0	3.0	3.0
Lane Grp Cap (vph)			2527	1990	492	5085
v/s Ratio Prot			0.41		0.08	c0.90
v/s Ratio Perm				c0.87		
v/c Ratio			0.58	1.22	0.54	0.90
Uniform Delay, d1			5.7	11.8	32.7	0.0
Progression Factor			1.00	1.00	1.00	1.00
Incremental Delay, d2			0.3	105.1	1.2	2.5
Delay (s)			6.0	116.9	33.9	2.5
Level of Service			A	F	C	A
Approach Delay (s)	0.0		77.5			4.2
Approach LOS	A		E			A

Intersection Summary			
HCM 2000 Control Delay	37.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.23		
Actuated Cycle Length (s)	82.2	Sum of lost time (s)	11.7
Intersection Capacity Utilization	45.2%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	WBL	WBR	NBT	SBT	ø5
Lane Configurations					
Traffic Volume (vph)	577	632	327	495	
Future Volume (vph)	577	632	327	495	
Turn Type	Prot	Prot	NA	NA	
Protected Phases	8	1	2	6	5
Permitted Phases					
Detector Phase	8	1	2	6	
Switch Phase					
Minimum Initial (s)	5.0	5.0	16.0	11.0	5.0
Minimum Split (s)	11.1	11.1	23.0	18.0	9.7
Total Split (s)	36.1	19.7	47.0	47.0	24.7
Total Split (%)	33.5%	18.3%	43.6%	43.6%	23%
Yellow Time (s)	4.1	3.7	5.0	5.0	3.7
All-Red Time (s)	2.0	1.0	2.0	2.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.1	4.7	7.0	7.0	
Lead/Lag		Lead	Lag	Lag	Lead
Lead-Lag Optimize?		Yes	Yes	Yes	Yes
Recall Mode	None	None	Min	Min	None

Intersection Summary
Cycle Length: 107.8
Actuated Cycle Length: 71.2
Natural Cycle: 65
Control Type: Actuated-Uncoordinated

Splits and Phases: 51: Nobel Drive & I-805 N Off-ramps

Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	577	632	0	327	0	0	495
Future Volume (vph)	577	632	0	327	0	0	495
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.1	4.7		7.0			7.0
Lane Util. Factor	0.97	0.88		0.95			0.91
Frt	1.00	0.85		1.00			1.00
Flt Protected	0.95	1.00		1.00			1.00
Satd. Flow (prot)	3433	2787		3539			5085
Flt Permitted	0.95	1.00		1.00			1.00
Satd. Flow (perm)	3433	2787		3539			5085
Peak-hour factor, PHF	0.86	0.86	0.92	0.93	0.93	0.25	0.25
Adj. Flow (vph)	671	735	0	352	0	0	1980
RTOR Reduction (vph)	0	665	0	0	0	0	0
Lane Group Flow (vph)	671	70	0	352	0	0	1980
Turn Type	Prot	Prot	Prot	NA			NA
Protected Phases	8	1	5	2			6
Permitted Phases							
Actuated Green, G (s)	18.0	6.8		28.6			40.1
Effective Green, g (s)	18.0	6.8		28.6			40.1
Actuated g/C Ratio	0.25	0.10		0.40			0.56
Clearance Time (s)	6.1	4.7		7.0			7.0
Vehicle Extension (s)	2.0	2.0		2.0			2.0
Lane Grp Cap (vph)	867	266		1421			2863
v/s Ratio Prot	c0.20	0.03		0.10			c0.39
v/s Ratio Perm							
v/c Ratio	0.77	0.26		0.25			0.69
Uniform Delay, d1	24.7	29.9		14.2			11.1
Progression Factor	1.00	1.00		1.00			1.00
Incremental Delay, d2	4.0	0.2		0.0			0.6
Delay (s)	28.7	30.1		14.2			11.7
Level of Service	C	C		B			B
Approach Delay (s)	29.4			14.2			11.7
Approach LOS	C			B			B

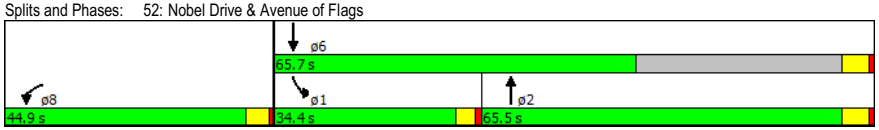
Intersection Summary			
HCM 2000 Control Delay	18.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	71.2	Sum of lost time (s)	17.8
Intersection Capacity Utilization	45.2%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	WBL	NBT	SBL	SBT
Lane Configurations				
Traffic Volume (vph)	42	994	43	402
Future Volume (vph)	42	994	43	402
Turn Type	Prot	NA	Prot	NA
Protected Phases	8	2	1	6
Permitted Phases				
Detector Phase	8	2	1	6
Switch Phase				
Minimum Initial (s)	4.0	7.0	4.0	7.0
Minimum Split (s)	28.9	26.5	9.5	12.7
Total Split (s)	44.9	65.5	34.4	65.7
Total Split (%)	31.0%	45.2%	23.8%	45.4%
Yellow Time (s)	3.9	4.5	3.4	4.7
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	5.5	4.4	5.7
Lead/Lag		Lag	Lead	
Lead-Lag Optimize?		Yes	Yes	
Recall Mode	None	Min	None	Min

Intersection Summary
Cycle Length: 144.8
Actuated Cycle Length: 68.6
Natural Cycle: 70
Control Type: Actuated-Uncoordinated

Splits and Phases: 52: Nobel Drive & Avenue of Flags



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	42	31	994	67	43	402
Future Volume (vph)	42	31	994	67	43	402
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9		5.5		4.4	5.7
Lane Util. Factor	1.00		0.95		1.00	0.95
Frt	0.94		0.99		1.00	1.00
Flt Protected	0.97		1.00		0.95	1.00
Satd. Flow (prot)	1707		3506		1770	3539
Flt Permitted	0.97		1.00		0.95	1.00
Satd. Flow (perm)	1707		3506		1770	3539
Peak-hour factor, PHF	0.75	0.75	0.91	0.91	0.89	0.89
Adj. Flow (vph)	56	41	1092	74	48	452
RTOR Reduction (vph)	23	0	2	0	0	0
Lane Group Flow (vph)	74	0	1164	0	48	452
Turn Type	Prot		NA		Prot	NA
Protected Phases	8		2		1	6
Permitted Phases						
Actuated Green, G (s)	6.7		42.9		6.2	53.3
Effective Green, g (s)	6.7		42.9		6.2	53.3
Actuated g/C Ratio	0.09		0.61		0.09	0.75
Clearance Time (s)	4.9		5.5		4.4	5.7
Vehicle Extension (s)	2.0		5.2		3.0	4.9
Lane Grp Cap (vph)	161		2130		155	2671
v/s Ratio Prot	c0.04		c0.33		c0.03	0.13
v/s Ratio Perm						
v/c Ratio	0.46		0.55		0.31	0.17
Uniform Delay, d1	30.2		8.1		30.2	2.4
Progression Factor	1.00		1.00		1.00	1.00
Incremental Delay, d2	0.8		0.5		1.1	0.1
Delay (s)	31.0		8.7		31.3	2.5
Level of Service	C		A		C	A
Approach Delay (s)	31.0		8.7			5.3
Approach LOS	C		A			A

Intersection Summary			
HCM 2000 Control Delay	8.9	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	70.6	Sum of lost time (s)	14.8
Intersection Capacity Utilization	48.8%	ICU Level of Service	A
Analysis Period (min)	15		

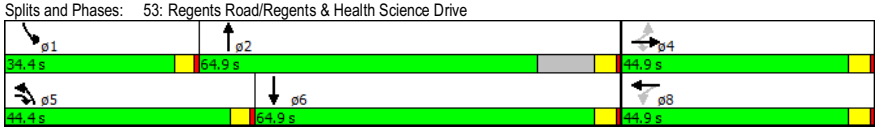
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBT	ø1
Lane Configurations									
Traffic Volume (vph)	76	0	434	2	2	379	139	113	
Future Volume (vph)	76	0	434	2	2	379	139	113	
Turn Type	Perm	NA	pm+ov	Perm	NA	Prot	NA	NA	
Protected Phases		4	5		8	5	2	6	1
Permitted Phases	4		4	8					
Detector Phase	4	4	5	8	8	5	2	6	
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	10.0	10.0	4.0
Minimum Split (s)	8.9	8.9	8.4	22.9	22.9	8.4	14.9	14.9	8.4
Total Split (s)	44.9	44.9	44.4	44.9	44.9	44.4	64.9	64.9	34.4
Total Split (%)	29.1%	29.1%	28.8%	29.1%	29.1%	28.8%	42.1%	42.1%	22%
Yellow Time (s)	3.9	3.9	3.4	3.9	3.9	3.4	3.9	3.9	3.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	
Total Lost Time (s)		4.9	4.4		4.9	4.4	4.9	4.9	
Lead/Lag			Lead			Lead	Lag	Lag	Lead
Lead-Lag Optimize?			Yes			Yes	Yes	Yes	Yes
Recall Mode	None	None	Min	None	None	Min	None	None	None

Intersection Summary

Cycle Length: 154.2
Actuated Cycle Length: 52.5
Natural Cycle: 60
Control Type: Actuated-Uncoordinated

Splits and Phases: 53: Regents Road/Regents & Health Science Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	76	0	434	2	2	0	379	139	2	0	113	91
Future Volume (vph)	76	0	434	2	2	0	379	139	2	0	113	91
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9	4.4		4.9		4.4	4.9			4.9	
Lane Util. Factor		1.00	1.00		1.00		1.00	0.95			0.95	
Frt		1.00	0.85		1.00		1.00	1.00			0.93	
Flt Protected		0.95	1.00		0.98		0.95	1.00			1.00	
Satd. Flow (prot)		1770	1583		1817		1770	3532			3303	
Flt Permitted		0.75	1.00		0.84		0.95	1.00			1.00	
Satd. Flow (perm)		1402	1583		1561		1770	3532			3303	
Peak-hour factor, PHF	0.78	0.78	0.78	0.50	0.50	0.50	0.92	0.92	0.92	0.81	0.81	0.81
Adj. Flow (vph)	97	0	556	4	4	0	412	151	2	0	140	112
RTOR Reduction (vph)	0	0	264	0	0	0	0	0	0	0	89	0
Lane Group Flow (vph)	0	97	292	0	8	0	412	153	0	0	163	0
Turn Type	Perm	NA	pm+ov	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4	5		8		5	2		1	6	
Permitted Phases	4		4	8								
Actuated Green, G (s)		7.6	28.0		7.6		20.4	35.9			11.1	
Effective Green, g (s)		7.6	28.0		7.6		20.4	35.9			11.1	
Actuated g/C Ratio		0.14	0.53		0.14		0.38	0.67			0.21	
Clearance Time (s)		4.9	4.4		4.9		4.4	4.9			4.9	
Vehicle Extension (s)		2.0	2.0		2.0		2.0	3.8			3.8	
Lane Grp Cap (vph)		199	831		222		677	2378			687	
v/s Ratio Prot			0.13				c0.23	0.04			c0.05	
v/s Ratio Perm		c0.07	0.05		0.01							
v/c Ratio		0.49	0.35		0.04		0.61	0.06			0.24	
Uniform Delay, d1		21.1	7.4		19.7		13.2	3.0			17.6	
Progression Factor		1.00	1.00		1.00		1.00	1.00			1.00	
Incremental Delay, d2		0.7	0.1		0.0		1.1	0.0			0.2	
Delay (s)		21.7	7.5		19.7		14.3	3.0			17.8	
Level of Service		C	A		B		B	A			B	
Approach Delay (s)		9.6			19.7			11.2			17.8	
Approach LOS		A			B			B			B	

Intersection Summary

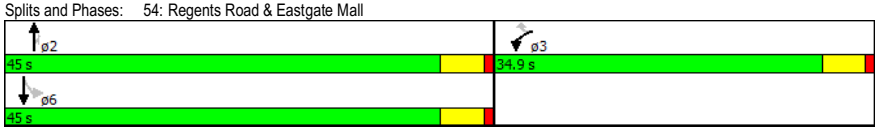
HCM 2000 Control Delay	11.7	HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio	0.48			
Actuated Cycle Length (s)	53.3	Sum of lost time (s)	14.2	
Intersection Capacity Utilization	50.4%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	144	115	410	134	114	434
Future Volume (vph)	144	115	410	134	114	434
Turn Type	Prot	Perm	NA	Perm	Perm	NA
Protected Phases	3		2			6
Permitted Phases		3		2	6	
Detector Phase	3	3	2	2	6	6
Switch Phase						
Minimum Initial (s)	4.0	4.0	7.0	7.0	7.0	7.0
Minimum Split (s)	8.9	8.9	12.0	12.0	12.0	12.0
Total Split (s)	34.9	34.9	45.0	45.0	45.0	45.0
Total Split (%)	43.7%	43.7%	56.3%	56.3%	56.3%	56.3%
Yellow Time (s)	3.9	3.9	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	5.0	5.0	5.0	5.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None	None	Min	Min	Min	Min

Intersection Summary
Cycle Length: 79.9
Actuated Cycle Length: 33.4
Natural Cycle: 40
Control Type: Actuated-Uncoordinated

Splits and Phases: 54: Regents Road & Eastgate Mall



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	144	115	410	134	114	434
Future Volume (vph)	144	115	410	134	114	434
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9	5.0	5.0	5.0	5.0
Lane Util. Factor	1.00	1.00	0.91	0.91	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3374	1441	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.48	1.00
Satd. Flow (perm)	1770	1583	3374	1441	899	3539
Peak-hour factor, PHF	0.95	0.95	0.94	0.94	0.85	0.85
Adj. Flow (vph)	152	121	436	143	134	511
RTOR Reduction (vph)	0	93	3	68	0	0
Lane Group Flow (vph)	152	28	447	61	134	511
Turn Type	Prot	Perm	NA	Perm	Perm	NA
Protected Phases	3		2			6
Permitted Phases		3		2	6	
Actuated Green, G (s)	7.7	7.7	15.6	15.6	15.6	15.6
Effective Green, g (s)	7.7	7.7	15.6	15.6	15.6	15.6
Actuated g/C Ratio	0.23	0.23	0.47	0.47	0.47	0.47
Clearance Time (s)	4.9	4.9	5.0	5.0	5.0	5.0
Vehicle Extension (s)	2.0	2.0	3.4	3.4	3.5	3.5
Lane Grp Cap (vph)	410	367	1585	677	422	1662
v/s Ratio Prot	c0.09		0.13			0.14
v/s Ratio Perm		0.02		0.04	c0.15	
v/c Ratio	0.37	0.08	0.28	0.09	0.32	0.31
Uniform Delay, d1	10.7	10.0	5.4	4.9	5.5	5.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2	0.0	0.1	0.1	0.5	0.1
Delay (s)	10.9	10.0	5.5	4.9	6.0	5.6
Level of Service	B	B	A	A	A	A
Approach Delay (s)	10.5		5.4			5.7
Approach LOS	B		A			A

Intersection Summary			
HCM 2000 Control Delay	6.4	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.33		
Actuated Cycle Length (s)	33.2	Sum of lost time (s)	9.9
Intersection Capacity Utilization	39.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	10	8	42	7	98	6	419	91	419
Future Volume (vph)	10	8	42	7	98	6	419	91	419
Turn Type	Perm	NA	Perm	NA	Perm	Prot	NA	Prot	NA
Protected Phases		4		8		5	2	1	6
Permitted Phases	4		8		8				
Detector Phase	4	4	8	8	8	5	2	1	6
Switch Phase									
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	4.0	10.0	4.0	10.0
Minimum Split (s)	11.9	11.9	11.9	11.9	11.9	8.4	14.9	8.4	14.9
Total Split (s)	34.9	34.9	44.9	44.9	44.9	34.4	64.9	34.4	64.9
Total Split (%)	24.2%	24.2%	31.1%	31.1%	31.1%	23.9%	45.0%	23.9%	45.0%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.9	3.4	3.9	3.4	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.9		4.9	4.9	4.4	4.9	4.4	4.9
Lead/Lag						Lead	Lag	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	None	Min

Intersection Summary

Cycle Length: 144.2
Actuated Cycle Length: 40.6
Natural Cycle: 40
Control Type: Actuated-Uncoordinated

Splits and Phases: 55: Regents Road & Executive Drive

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	8	7	42	7	98	6	419	35	91	419	23
Future Volume (vph)	10	8	7	42	7	98	6	419	35	91	419	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9			4.9	4.9	4.4	4.9		4.4	4.9	
Lane Util. Factor		1.00			1.00	1.00	1.00	0.95		1.00	0.95	
Frt		0.96			1.00	0.85	1.00	0.99		1.00	0.99	
Flt Protected		0.98			0.96	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1757			1786	1583	1770	3498		1770	3511	
Flt Permitted		0.85			0.74	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1515			1377	1583	1770	3498		1770	3511	
Peak-hour factor, PHF	0.96	0.96	0.96	0.90	0.90	0.90	0.95	0.95	0.95	0.93	0.93	0.93
Adj. Flow (vph)	10	8	7	47	8	109	6	441	37	98	451	25
RTOR Reduction (vph)	0	6	0	0	0	94	0	4	0	0	2	0
Lane Group Flow (vph)	0	19	0	0	55	15	6	474	0	98	474	0
Turn Type	Perm	NA		Perm	NA	Perm	Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8		8						
Actuated Green, G (s)		6.1			6.1	6.1	0.8	19.0		5.9	24.1	
Effective Green, g (s)		6.1			6.1	6.1	0.8	19.0		5.9	24.1	
Actuated g/C Ratio		0.13			0.13	0.13	0.02	0.42		0.13	0.53	
Clearance Time (s)		4.9			4.9	4.9	4.4	4.9		4.4	4.9	
Vehicle Extension (s)		2.0			3.1	3.1	2.0	3.1		2.0	3.1	
Lane Grp Cap (vph)		204			185	213	31	1470		231	1872	
v/s Ratio Prot							0.00	c0.14		c0.06	0.13	
v/s Ratio Perm		0.01			c0.04	0.01						
v/c Ratio		0.09			0.30	0.07	0.19	0.32		0.42	0.25	
Uniform Delay, d1		17.1			17.6	17.1	21.9	8.8		18.1	5.7	
Progression Factor		1.00			1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.1			0.9	0.1	1.1	0.1		0.5	0.1	
Delay (s)		17.2			18.6	17.2	23.0	8.9		18.5	5.8	
Level of Service		B			B	B	C	A		B	A	
Approach Delay (s)		17.2			17.7			9.1			7.9	
Approach LOS		B			B			A			A	

Intersection Summary

HCM 2000 Control Delay	9.9	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.34		
Actuated Cycle Length (s)	45.2	Sum of lost time (s)	14.2
Intersection Capacity Utilization	37.6%	ICU Level of Service	A
Analysis Period (min)	15		

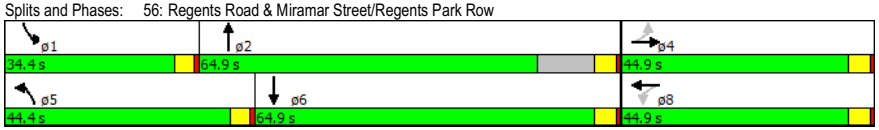
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	46	11	121	14	75	358	86	370
Future Volume (vph)	46	11	121	14	75	358	86	370
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	7.0	4.0	7.0
Minimum Split (s)	8.9	8.9	8.9	8.9	8.4	11.9	8.4	11.9
Total Split (s)	44.9	44.9	44.9	44.9	44.4	64.9	34.4	64.9
Total Split (%)	29.1%	29.1%	29.1%	29.1%	28.8%	42.1%	22.3%	42.1%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.4	3.9	3.4	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	4.9	4.9	4.4	4.9	4.4	4.9
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 154.2
Actuated Cycle Length: 49.1
Natural Cycle: 40
Control Type: Actuated-Uncoordinated

Splits and Phases: 56: Regents Road & Miramar Street/Regents Park Row



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	46	11	97	121	14	108	75	358	106	86	370	63
Future Volume (vph)	46	11	97	121	14	108	75	358	106	86	370	63
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9		4.9	4.9		4.4	4.9		4.4	4.9	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frt	1.00	0.87		1.00	0.87		1.00	0.97		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1612		1770	1616		1770	3418		1770	3462	
Flt Permitted	0.67	1.00		0.67	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1256	1612		1239	1616		1770	3418		1770	3462	
Peak-hour factor, PHF	0.75	0.75	0.75	0.95	0.95	0.95	0.86	0.86	0.86	0.91	0.91	0.91
Adj. Flow (vph)	61	15	129	127	15	114	87	416	123	95	407	69
RTOR Reduction (vph)	0	98	0	0	86	0	0	22	0	0	9	0
Lane Group Flow (vph)	61	46	0	127	43	0	87	517	0	95	467	0
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8								
Actuated Green, G (s)	12.0	12.0		12.0	12.0		6.2	16.7		6.4	16.9	
Effective Green, g (s)	12.0	12.0		12.0	12.0		6.2	16.7		6.4	16.9	
Actuated g/C Ratio	0.24	0.24		0.24	0.24		0.13	0.34		0.13	0.34	
Clearance Time (s)	4.9	4.9		4.9	4.9		4.4	4.9		4.4	4.9	
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	3.8		2.0	3.8	
Lane Grp Cap (vph)	305	392		301	393		222	1157		229	1186	
v/s Ratio Prot		0.03			0.03		0.05	c0.15		c0.05	0.13	
v/s Ratio Perm	0.05			c0.10								
v/c Ratio	0.20	0.12		0.42	0.11		0.39	0.45		0.41	0.39	
Uniform Delay, d1	14.8	14.5		15.7	14.5		19.8	12.7		19.7	12.3	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.1	0.0		0.3	0.0		0.4	0.4		0.4	0.3	
Delay (s)	15.0	14.6		16.1	14.5		20.2	13.1		20.2	12.6	
Level of Service	B	B		B	B		C	B		C	B	
Approach Delay (s)		14.7			15.3			14.1			13.8	
Approach LOS		B			B			B			B	

Intersection Summary

HCM 2000 Control Delay	14.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.43		
Actuated Cycle Length (s)	49.3	Sum of lost time (s)	14.2
Intersection Capacity Utilization	47.2%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	27	5	46	20	146	15	410	64	455
Future Volume (vph)	27	5	46	20	146	15	410	64	455
Turn Type	Perm	NA	Perm	NA	pm+ov	Prot	NA	Prot	NA
Protected Phases		4		8	1	5	2	1	6
Permitted Phases	4		8		8				
Detector Phase	4	4	8	8	1	5	2	1	6
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	10.0	4.0	10.0
Minimum Split (s)	8.9	8.9	8.9	8.9	8.4	8.4	15.2	8.4	15.3
Total Split (s)	44.9	44.9	44.9	44.9	34.4	34.4	65.2	34.4	65.3
Total Split (%)	31.1%	31.1%	31.1%	31.1%	23.8%	23.8%	45.1%	23.8%	45.2%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.4	3.4	4.2	3.4	4.3
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.9		4.9	4.4	4.4	5.2	4.4	5.3
Lead/Lag					Lead	Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 144.6
Actuated Cycle Length: 34.4
Natural Cycle: 40
Control Type: Actuated-Uncoordinated

Splits and Phases: 57: Regents Road & Plaza De Palmas

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	27	5	6	46	20	146	15	410	46	64	455	23
Future Volume (vph)	27	5	6	46	20	146	15	410	46	64	455	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9			4.9	4.4	4.4	5.2		4.4	5.3	
Lane Util. Factor		1.00			1.00	1.00	1.00	0.91		1.00	0.95	
Frt		0.98			1.00	0.85	1.00	0.98		1.00	0.99	
Flt Protected		0.97			0.97	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1759			1800	1583	1770	5009		1770	3514	
Flt Permitted		0.93			0.92	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1688			1712	1583	1770	5009		1770	3514	
Peak-hour factor, PHF	0.77	0.77	0.77	0.94	0.94	0.94	0.90	0.90	0.90	0.89	0.89	0.89
Adj. Flow (vph)	35	6	8	49	21	155	17	456	51	72	511	26
RTOR Reduction (vph)	0	6	0	0	0	121	0	9	0	0	2	0
Lane Group Flow (vph)	0	43	0	0	70	34	17	498	0	72	535	0
Turn Type	Perm	NA		Perm	NA	pm+ov	Prot	NA		Prot	NA	
Protected Phases		4			8	1	5	2		1	6	
Permitted Phases	4			8		8						
Actuated Green, G (s)		3.7			3.7	8.7	0.9	16.6		5.0	20.6	
Effective Green, g (s)		3.7			3.7	8.7	0.9	16.6		5.0	20.6	
Actuated g/C Ratio		0.09			0.09	0.22	0.02	0.42		0.13	0.52	
Clearance Time (s)		4.9			4.9	4.4	4.4	5.2		4.4	5.3	
Vehicle Extension (s)		2.0			2.0	2.0	2.0	4.5		2.0	4.2	
Lane Grp Cap (vph)		156			159	346	40	2089		222	1818	
v/s Ratio Prot						0.01	0.01	0.10		c0.04	c0.15	
v/s Ratio Perm		0.03			c0.04	0.01						
v/c Ratio		0.27			0.44	0.10	0.42	0.24		0.32	0.29	
Uniform Delay, d1		16.8			17.1	12.4	19.2	7.5		15.9	5.5	
Progression Factor		1.00			1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.3			0.7	0.0	2.6	0.1		0.3	0.1	
Delay (s)		17.1			17.8	12.5	21.8	7.6		16.2	5.6	
Level of Service		B			B	B	C	A		B	A	
Approach Delay (s)		17.1			14.1			8.1			6.9	
Approach LOS		B			B			A			A	

Intersection Summary

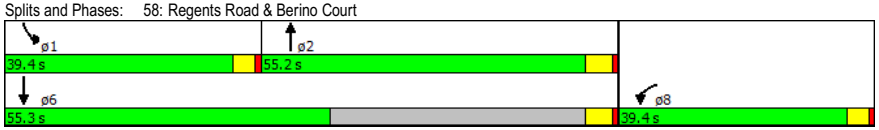
HCM 2000 Control Delay	8.8	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.34		
Actuated Cycle Length (s)	39.8	Sum of lost time (s)	14.6
Intersection Capacity Utilization	37.6%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	WBL	NBT	SBL	SBT
Lane Configurations				
Traffic Volume (vph)	17	155	108	269
Future Volume (vph)	17	155	108	269
Turn Type	Prot	NA	Prot	NA
Protected Phases	8	2	1	6
Permitted Phases				
Detector Phase	8	2	1	6
Switch Phase				
Minimum Initial (s)	4.0	7.0	4.0	7.0
Minimum Split (s)	8.4	12.2	8.4	12.3
Total Split (s)	39.4	55.2	39.4	55.3
Total Split (%)	29.4%	41.2%	29.4%	41.3%
Yellow Time (s)	3.4	4.2	3.4	4.3
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.2	4.4	5.3
Lead/Lag		Lag	Lead	
Lead-Lag Optimize?		Yes	Yes	
Recall Mode	None	None	None	None

Intersection Summary
Cycle Length: 134
Actuated Cycle Length: 22.8
Natural Cycle: 40
Control Type: Actuated-Uncoordinated

Splits and Phases: 58: Regents Road & Berino Court



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	17	4	155	12	108	269
Future Volume (vph)	17	4	155	12	108	269
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4		5.2		4.4	5.3
Lane Util. Factor	1.00		0.95		1.00	0.95
Frt	0.97		0.99		1.00	1.00
Flt Protected	0.96		1.00		0.95	1.00
Satd. Flow (prot)	1744		3500		1770	3539
Flt Permitted	0.96		1.00		0.95	1.00
Satd. Flow (perm)	1744		3500		1770	3539
Peak-hour factor, PHF	0.81	0.81	0.88	0.88	0.91	0.91
Adj. Flow (vph)	21	5	176	14	119	296
RTOR Reduction (vph)	5	0	5	0	0	0
Lane Group Flow (vph)	21	0	185	0	119	296
Turn Type	Prot		NA		Prot	NA
Protected Phases	8		2		1	6
Permitted Phases						
Actuated Green, G (s)	0.7		6.5		3.7	14.5
Effective Green, g (s)	0.7		6.5		3.7	14.5
Actuated g/C Ratio	0.03		0.26		0.15	0.58
Clearance Time (s)	4.4		5.2		4.4	5.3
Vehicle Extension (s)	2.0		3.9		2.0	3.7
Lane Grp Cap (vph)	49		913		263	2060
v/s Ratio Prot	c0.01		c0.05		c0.07	0.08
v/s Ratio Perm						
v/c Ratio	0.43		0.20		0.45	0.14
Uniform Delay, d1	11.9		7.2		9.7	2.4
Progression Factor	1.00		1.00		1.00	1.00
Incremental Delay, d2	2.2		0.1		0.5	0.0
Delay (s)	14.1		7.3		10.1	2.4
Level of Service	B		A		B	A
Approach Delay (s)	14.1		7.3			4.6
Approach LOS	B		A			A

Intersection Summary			
HCM 2000 Control Delay	5.8	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.30		
Actuated Cycle Length (s)	24.9	Sum of lost time (s)	14.0
Intersection Capacity Utilization	26.8%	ICU Level of Service	A
Analysis Period (min)	15		

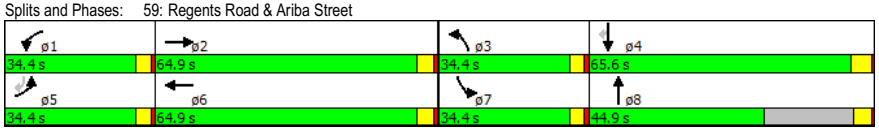
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	55	111	6	100	9	10	132	28	76
Future Volume (vph)	55	111	6	100	9	10	132	28	76
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA	custom
Protected Phases	5	2	1	6	3	8	7	4	
Permitted Phases									5 4
Detector Phase	5	2	1	6	3	8	7	4	5 4
Switch Phase									
Minimum Initial (s)	4.0	7.0	4.0	7.0	4.0	7.0	4.0	7.0	
Minimum Split (s)	8.4	11.9	8.4	11.9	8.4	11.9	8.4	12.6	
Total Split (s)	34.4	64.9	34.4	64.9	34.4	44.9	34.4	65.6	
Total Split (%)	17.3%	32.6%	17.3%	32.6%	17.3%	22.5%	17.3%	32.9%	
Yellow Time (s)	3.4	3.9	3.4	3.9	3.4	3.9	3.4	4.6	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.4	4.9	4.4	4.9	4.4	4.9	4.4	5.6	
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	None	None	None	None	None	

Intersection Summary

Cycle Length: 199.3
Actuated Cycle Length: 45.3
Natural Cycle: 45
Control Type: Actuated-Uncoordinated

Splits and Phases: 59: Regents Road & Ariba Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	55	111	22	6	100	27	9	10	15	132	28	76
Future Volume (vph)	55	111	22	6	100	27	9	10	15	132	28	76
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	4.9		4.4	4.9		4.4	5.6	4.4
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	1.00
Frt	1.00	0.98		1.00	0.97		1.00	0.91		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	3451		1770	3427		1770	3217		1770	3539	1583
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1770	3451		1770	3427		1770	3217		1770	3539	1583
Peak-hour factor, PHF	0.85	0.85	0.85	0.71	0.71	0.71	0.88	0.88	0.88	0.87	0.87	0.87
Adj. Flow (vph)	65	131	26	8	141	38	10	11	17	152	32	87
RTOR Reduction (vph)	0	8	0	0	13	0	0	16	0	0	0	58
Lane Group Flow (vph)	65	149	0	8	166	0	10	12	0	152	32	29
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	custom
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases												5 4
Actuated Green, G (s)	5.5	16.9		0.8	12.2		0.8	2.4		10.0	10.9	22.0
Effective Green, g (s)	5.5	16.9		0.8	12.2		0.8	2.4		10.0	10.9	16.4
Actuated g/C Ratio	0.11	0.35		0.02	0.25		0.02	0.05		0.21	0.22	0.34
Clearance Time (s)	4.4	4.9		4.4	4.9		4.4	4.9		4.4	5.6	
Vehicle Extension (s)	2.0	6.3		2.0	5.9		2.0	4.8		2.0	4.4	
Lane Grp Cap (vph)	199	1197		29	858		29	158		363	792	533
v/s Ratio Prot	c0.04	0.04		0.00	c0.05		0.01	0.00		c0.09	0.01	
v/s Ratio Perm												c0.02
v/c Ratio	0.33	0.12		0.28	0.19		0.34	0.07		0.42	0.04	0.05
Uniform Delay, d1	19.9	10.9		23.7	14.4		23.7	22.1		16.8	14.8	10.9
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	0.4	0.1		1.9	0.3		2.6	0.4		0.3	0.0	0.0
Delay (s)	20.2	11.0		25.5	14.7		26.3	22.5		17.1	14.8	10.9
Level of Service	C	B		C	B		C	C		B	B	B
Approach Delay (s)		13.7			15.1			23.5			14.9	
Approach LOS		B			B			C			B	

Intersection Summary

HCM 2000 Control Delay	15.0	HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio	0.29			
Actuated Cycle Length (s)	48.7	Sum of lost time (s)	19.3	
Intersection Capacity Utilization	35.6%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	7	111	305	149	32	57	252	20	20
Future Volume (vph)	7	111	305	149	32	57	252	20	20
Turn Type	Prot	NA	Prot	NA	Perm	NA	Perm	Perm	NA
Protected Phases	5	2	1	6		8			4
Permitted Phases					8		8	4	
Detector Phase	5	2	1	6	8	8	8	4	4
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	7.0	7.0	7.0	7.0	4.0	4.0
Minimum Split (s)	8.4	8.9	8.4	11.9	12.8	12.8	12.8	9.5	9.5
Total Split (s)	34.4	64.9	34.4	64.9	45.8	45.8	45.8	45.5	45.5
Total Split (%)	23.7%	44.7%	23.7%	44.7%	31.6%	31.6%	31.6%	31.4%	31.4%
Yellow Time (s)	3.4	3.9	3.4	3.9	4.8	4.8	4.8	4.5	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	4.9	4.4	4.9	5.8	5.8	5.8	5.5	5.5
Lead/Lag	Lead	Lag	Lead	Lag					
Lead-Lag Optimize?	Yes	Yes	Yes	Yes					
Recall Mode	None	Min	None	Min	None	None	None	None	None

Intersection Summary

Cycle Length: 145.1
Actuated Cycle Length: 54.3
Natural Cycle: 45
Control Type: Actuated-Uncoordinated

Splits and Phases: 60: Regents Road & Governor Drive

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	7	111	29	305	149	19	32	57	252	20	20	5
Future Volume (vph)	7	111	29	305	149	19	32	57	252	20	20	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	4.9		5.8	5.8	5.8	5.5	5.5	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00	1.00	1.00	0.95	
Frt	1.00	0.97		1.00	0.98		1.00	1.00	0.85	1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3430		1770	3479		1770	1863	1583	1770	3433	
Flt Permitted	0.95	1.00		0.95	1.00		0.74	1.00	1.00	0.71	1.00	
Satd. Flow (perm)	1770	3430		1770	3479		1372	1863	1583	1328	3433	
Peak-hour factor, PHF	0.90	0.90	0.90	0.86	0.86	0.86	0.84	0.84	0.84	0.83	0.83	0.83
Adj. Flow (vph)	8	123	32	355	173	22	38	68	300	24	24	6
RTOR Reduction (vph)	0	21	0	0	5	0	0	0	248	0	5	0
Lane Group Flow (vph)	8	134	0	355	190	0	38	68	52	24	25	0
Turn Type	Prot	NA		Prot	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8		8	4		
Actuated Green, G (s)	0.9	13.0		19.7	31.8		10.1	10.1	10.1	10.4	10.4	
Effective Green, g (s)	0.9	13.0		19.7	31.8		10.1	10.1	10.1	10.4	10.4	
Actuated g/C Ratio	0.02	0.22		0.34	0.55		0.17	0.17	0.17	0.18	0.18	
Clearance Time (s)	4.4	4.9		4.4	4.9		5.8	5.8	5.8	5.5	5.5	
Vehicle Extension (s)	2.0	4.5		2.0	5.0		4.6	4.6	4.6	2.0	2.0	
Lane Grp Cap (vph)	27	770		602	1910		239	324	276	238	616	
v/s Ratio Prot	0.00	c0.04		c0.20	0.05			c0.04			0.01	
v/s Ratio Perm							0.03		0.03	0.02		
v/c Ratio	0.30	0.17		0.59	0.10		0.16	0.21	0.19	0.10	0.04	
Uniform Delay, d1	28.2	18.1		15.8	6.2		20.3	20.5	20.4	19.8	19.6	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	2.2	0.2		1.0	0.0		0.6	0.6	0.6	0.1	0.0	
Delay (s)	30.4	18.3		16.7	6.3		20.9	21.1	21.0	19.9	19.6	
Level of Service	C	B		B	A		C	C	C	B	B	
Approach Delay (s)		18.9			13.0			21.0			19.8	
Approach LOS		B			B			C			B	

Intersection Summary

HCM 2000 Control Delay	16.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.37		
Actuated Cycle Length (s)	57.9	Sum of lost time (s)	15.1
Intersection Capacity Utilization	41.9%	ICU Level of Service	A
Analysis Period (min)	15		

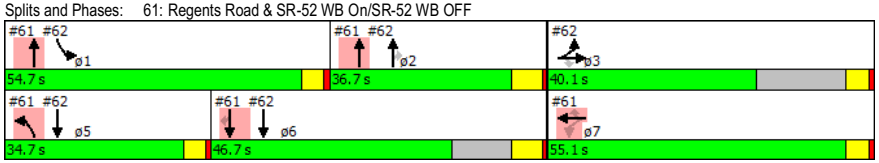
c Critical Lane Group

Lane Group	WBT	WBR	NBL	NBT	SBT	SBR	ø1	ø2	ø3
Lane Configurations									
Traffic Volume (vph)	2	125	351	428	369	182			
Future Volume (vph)	2	125	351	428	369	182			
Turn Type	NA	Perm	Prot	NA	NA	Perm			
Protected Phases	7		5	1 2	6		1	2	3
Permitted Phases		7				6			
Detector Phase	7	7	5	1 2	6	6			
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0		13.0	13.0	5.0	13.0	5.0
Minimum Split (s)	10.1	10.1	9.7		19.2	19.2	9.7	19.2	10.1
Total Split (s)	55.1	55.1	34.7		46.7	46.7	54.7	36.7	40.1
Total Split (%)	37.6%	37.6%	23.7%		31.9%	31.9%	37%	25%	27%
Yellow Time (s)	4.1	4.1	3.7		5.2	5.2	3.7	5.2	4.1
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0			
Total Lost Time (s)	5.1	5.1	4.7		6.2	6.2			
Lead/Lag			Lead		Lag	Lag	Lead	Lag	
Lead-Lag Optimize?			Yes		Yes	Yes	Yes	Yes	
Recall Mode	None	None	None		Max	Max	None	Max	None

Intersection Summary

Cycle Length: 146.5
Actuated Cycle Length: 102.5
Natural Cycle: 55
Control Type: Actuated-Uncoordinated

Splits and Phases: 61: Regents Road & SR-52 WB On/SR-52 WB OFF



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	329	2	125	351	428	0	0	369	182
Future Volume (vph)	0	0	0	329	2	125	351	428	0	0	369	182
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					5.1	5.1	4.7	4.7			6.2	6.2
Lane Util. Factor					1.00	1.00	0.97	0.95			0.95	1.00
Frt					1.00	0.85	1.00	1.00			1.00	0.85
Flt Protected					0.95	1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)					1775	1583	3433	3539			3539	1583
Flt Permitted					0.95	1.00	0.95	1.00			1.00	1.00
Satd. Flow (perm)					1775	1583	3433	3539			3539	1583
Peak-hour factor, PHF	0.25	0.25	0.25	0.93	0.93	0.93	0.85	0.85	0.85	0.87	0.87	0.87
Adj. Flow (vph)	0	0	0	354	2	134	413	504	0	0	424	209
RTOR Reduction (vph)	0	0	0	0	0	101	0	0	0	0	0	125
Lane Group Flow (vph)	0	0	0	0	356	33	413	504	0	0	424	84
Turn Type				Perm	NA	Perm	Prot	NA			NA	Perm
Protected Phases					7		5	1 2			6	
Permitted Phases				7		7						6
Actuated Green, G (s)					25.5	25.5	19.5	65.4			41.2	41.2
Effective Green, g (s)					25.5	25.5	19.5	65.4			41.2	41.2
Actuated g/C Ratio					0.25	0.25	0.19	0.64			0.40	0.40
Clearance Time (s)					5.1	5.1	4.7				6.2	6.2
Vehicle Extension (s)					2.0	2.0	2.0				2.0	2.0
Lane Grp Cap (vph)					442	394	655	2264			1426	638
v/s Ratio Prot							c0.12	0.14			c0.12	
v/s Ratio Perm					0.20	0.02						0.05
v/c Ratio					0.81	0.08	0.63	0.22			0.30	0.13
Uniform Delay, d1					36.0	29.4	38.0	7.7			20.7	19.2
Progression Factor					1.00	1.00	1.44	0.90			1.00	1.00
Incremental Delay, d2					9.7	0.0	1.4	0.0			0.5	0.4
Delay (s)					45.7	29.4	56.1	6.9			21.2	19.7
Level of Service					D	C	E	A			C	B
Approach Delay (s)		0.0			41.3			29.1			20.7	
Approach LOS		A			D			C			C	

Intersection Summary

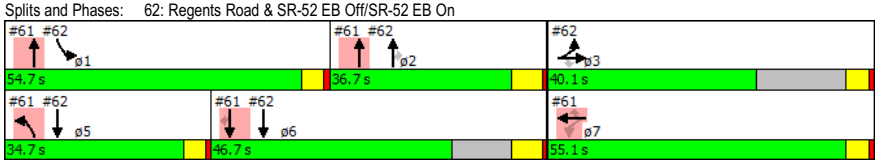
HCM 2000 Control Delay	29.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	102.2	Sum of lost time (s)	16.0
Intersection Capacity Utilization	52.9%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	EBR	NBT	NBR	SBL	SBT	ø5	ø6	ø7
Lane Configurations										
Traffic Volume (vph)	226	3	336	571	353	114	571			
Future Volume (vph)	226	3	336	571	353	114	571			
Turn Type	Split	NA	Perm	NA	Perm	Prot	NA			
Protected Phases	3	3		2		1	5 6	5	6	7
Permitted Phases			3		2					
Detector Phase	3	3	3	2	2	1	5 6			
Switch Phase										
Minimum Initial (s)	5.0	5.0	5.0	13.0	13.0	5.0		5.0	13.0	5.0
Minimum Split (s)	10.1	10.1	10.1	19.2	19.2	9.7		9.7	19.2	10.1
Total Split (s)	40.1	40.1	40.1	36.7	36.7	54.7		34.7	46.7	55.1
Total Split (%)	27.4%	27.4%	27.4%	25.1%	25.1%	37.3%		24%	32%	38%
Yellow Time (s)	4.1	4.1	4.1	5.2	5.2	3.7		3.7	5.2	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0				
Total Lost Time (s)	5.1	5.1	5.1	6.2	6.2	4.7				
Lead/Lag				Lag	Lag	Lead		Lead	Lag	
Lead-Lag Optimize?				Yes	Yes	Yes		Yes	Yes	
Recall Mode	None	None	None	Max	Max	None		None	Max	None

Intersection Summary
Cycle Length: 146.5
Actuated Cycle Length: 102.5
Natural Cycle: 55
Control Type: Actuated-Uncoordinated

Splits and Phases: 62: Regents Road & SR-52 EB Off/SR-52 EB On



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	226	3	336	0	0	0	0	571	353	114	571	0
Future Volume (vph)	226	3	336	0	0	0	0	571	353	114	571	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1	5.1					6.2	6.2	4.7	4.7	
Lane Util. Factor	0.95	0.95	1.00					0.95	1.00	1.00	0.95	
Frt	1.00	1.00	0.85					1.00	0.85	1.00	1.00	
Flt Protected	0.95	0.95	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1681	1687	1583					3539	1583	1770	3539	
Flt Permitted	0.95	0.95	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1681	1687	1583					3539	1583	1770	3539	
Peak-hour factor, PHF	0.96	0.96	0.96	0.25	0.25	0.25	0.86	0.86	0.86	0.89	0.89	0.89
Adj. Flow (vph)	235	3	350	0	0	0	0	664	410	128	642	0
RTOR Reduction (vph)	0	0	200	0	0	0	0	0	58	0	0	0
Lane Group Flow (vph)	120	118	150	0	0	0	0	664	352	128	642	0
Turn Type	Split	NA	Perm					NA	Perm	Prot	NA	
Protected Phases	3	3						2		1	5 6	
Permitted Phases			3						2			
Actuated Green, G (s)	25.5	25.5	25.5					47.7	47.7	13.0	65.4	
Effective Green, g (s)	25.5	25.5	25.5					47.7	47.7	13.0	65.4	
Actuated g/C Ratio	0.25	0.25	0.25					0.47	0.47	0.13	0.64	
Clearance Time (s)	5.1	5.1	5.1					6.2	6.2	4.7		
Vehicle Extension (s)	2.0	2.0	2.0					2.0	2.0	2.0		
Lane Grp Cap (vph)	419	420	394					1651	738	225	2264	
v/s Ratio Prot	0.07	0.07						0.19		c0.07	0.18	
v/s Ratio Perm			c0.09						c0.22			
v/c Ratio	0.29	0.28	0.38					0.40	0.48	0.57	0.28	
Uniform Delay, d1	31.0	31.0	31.8					17.9	18.7	42.0	8.1	
Progression Factor	1.00	1.00	1.00					1.00	1.00	0.97	1.06	
Incremental Delay, d2	0.1	0.1	0.2					0.7	2.2	1.9	0.0	
Delay (s)	31.1	31.1	32.0					18.6	20.9	42.7	8.6	
Level of Service	C	C	C					B	C	D	A	
Approach Delay (s)		31.7			0.0			19.5			14.3	
Approach LOS		C			A			B			B	

Intersection Summary				
HCM 2000 Control Delay	20.8	HCM 2000 Level of Service	C	
HCM 2000 Volume to Capacity ratio	0.46			
Actuated Cycle Length (s)	102.2	Sum of lost time (s)	16.0	
Intersection Capacity Utilization	52.9%	ICU Level of Service	A	
Analysis Period (min)	15			

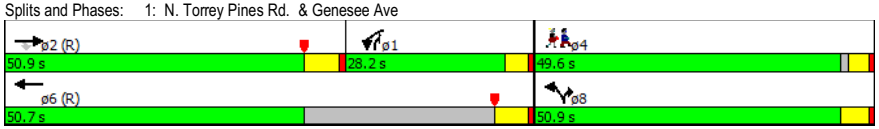
c Critical Lane Group

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	ø4
Lane Configurations							
Traffic Volume (vph)	1007	1091	365	347	739	246	
Future Volume (vph)	1007	1091	365	347	739	246	
Turn Type	NA	Perm	Prot	NA	Prot	pt+ov	
Protected Phases	2		1	6	8	8 1	4
Permitted Phases		2					
Detector Phase	2	2	1	6	8	8 1	
Switch Phase							
Minimum Initial (s)	10.0	10.0	7.0	10.0	10.0		4.0
Minimum Split (s)	43.2	43.2	11.4	24.9	23.3		41.0
Total Split (s)	50.9	50.9	28.2	50.7	50.9		49.6
Total Split (%)	39.2%	39.2%	21.7%	39.0%	39.2%		38%
Yellow Time (s)	5.2	5.2	3.4	5.0	4.3		3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	6.2	6.2	4.4	6.0	5.3		
Lead/Lag	Lead	Lead	Lag				
Lead-Lag Optimize?							
Recall Mode	C-Max	C-Max	None	C-Max	None		None

Intersection Summary

Cycle Length: 130
Actuated Cycle Length: 130
Offset: 7 (5%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 110
Control Type: Actuated-Coordinated

Splits and Phases: 1: N. Torrey Pines Rd. & Genesee Ave



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1007	1091	365	347	739	246
Future Volume (vph)	1007	1091	365	347	739	246
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.2	6.2	4.4	6.0	5.3	5.3
Lane Util. Factor	0.91	1.00	0.97	0.91	0.97	0.88
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	5085	1583	3433	5085	3433	2787
Flt Permitted	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (perm)	5085	1583	3433	5085	3433	2787
Peak-hour factor, PHF	0.95	0.95	0.80	0.80	0.90	0.90
Adj. Flow (vph)	1060	1148	456	434	821	273
RTOR Reduction (vph)	0	451	0	0	0	14
Lane Group Flow (vph)	1060	697	456	434	821	259
Turn Type	NA	Perm	Prot	NA	Prot	pt+ov
Protected Phases	2		1	6	8	8 1
Permitted Phases		2				
Actuated Green, G (s)	51.4	51.4	23.8	79.8	38.9	67.1
Effective Green, g (s)	51.4	51.4	23.8	79.8	38.9	62.7
Actuated g/C Ratio	0.40	0.40	0.18	0.61	0.30	0.48
Clearance Time (s)	6.2	6.2	4.4	6.0	5.3	
Vehicle Extension (s)	4.0	4.0	2.0	3.7	3.8	
Lane Grp Cap (vph)	2010	625	628	3121	1027	1344
v/s Ratio Prot	0.21		c0.13	0.09	c0.24	0.09
v/s Ratio Perm		c0.44				
v/c Ratio	0.53	1.12	0.73	0.14	0.80	0.19
Uniform Delay, d1	30.0	39.3	50.0	10.6	42.0	19.2
Progression Factor	1.00	1.00	0.50	0.32	0.70	0.63
Incremental Delay, d2	1.0	71.9	3.4	0.1	4.4	0.1
Delay (s)	31.0	111.2	28.3	3.5	33.9	12.2
Level of Service	C	F	C	A	C	B
Approach Delay (s)	72.7			16.2	28.5	
Approach LOS	E			B	C	

Intersection Summary

HCM 2000 Control Delay	49.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.93		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	15.9
Intersection Capacity Utilization	86.8%	ICU Level of Service	E
Analysis Period (min)	15		

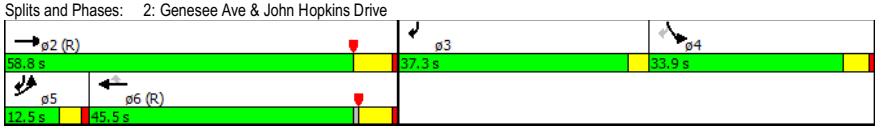
c Critical Lane Group

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	ø3
Lane Configurations							
Traffic Volume (vph)	40	1313	722	199	980	116	
Future Volume (vph)	40	1313	722	199	980	116	
Turn Type	Prot	NA	NA	Perm	Prot	pt+ov	
Protected Phases	5	2	6		4	3 5	3
Permitted Phases				6		4	
Detector Phase	5	2	6	6	4	3 5	
Switch Phase							
Minimum Initial (s)	4.0	10.0	10.0	10.0	7.0		4.0
Minimum Split (s)	9.5	16.7	15.9	15.9	11.9		7.0
Total Split (s)	12.5	58.8	45.5	45.5	33.9		37.3
Total Split (%)	9.6%	45.2%	35.0%	35.0%	26.1%		29%
Yellow Time (s)	3.4	5.7	4.9	4.9	3.9		3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		0.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	4.4	6.7	5.9	5.9	4.9		
Lead/Lag	Lead		Lag	Lag	Lag		Lead
Lead-Lag Optimize?	Yes		Yes	Yes	Yes		Yes
Recall Mode	None	C-Max	C-Max	C-Max	None		None

Intersection Summary

Cycle Length: 130
Actuated Cycle Length: 130
Offset: 22 (17%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 70
Control Type: Actuated-Coordinated

Splits and Phases: 2: Genesee Ave & John Hopkins Drive



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	40	1313	722	199	980	116
Future Volume (vph)	40	1313	722	199	980	116
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	6.7	5.9	5.9	4.9	3.0
Lane Util. Factor	1.00	0.91	0.81	1.00	0.97	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	5085	7544	1583	3433	1583
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	5085	7544	1583	3433	1583
Peak-hour factor, PHF	0.92	0.92	0.80	0.80	0.80	0.80
Adj. Flow (vph)	43	1427	902	249	1225	145
RTOR Reduction (vph)	0	0	0	169	0	10
Lane Group Flow (vph)	43	1427	903	80	1225	135
Turn Type	Prot	NA	NA	Perm	Prot	pt+ov
Protected Phases	5	2	6		4	3 5
Permitted Phases				6		4
Actuated Green, G (s)	6.9	52.1	41.6	41.6	46.2	70.2
Effective Green, g (s)	6.9	52.1	41.6	41.6	46.2	70.2
Actuated g/C Ratio	0.05	0.40	0.32	0.32	0.36	0.54
Clearance Time (s)	4.4	6.7	5.9	5.9	4.9	
Vehicle Extension (s)	2.0	4.0	3.9	3.9	5.0	
Lane Grp Cap (vph)	93	2037	2414	506	1220	891
v/s Ratio Prot	0.02	c0.28	0.12		c0.36	c0.03
v/s Ratio Perm				0.05		0.06
v/c Ratio	0.46	0.70	0.37	0.16	1.00	0.15
Uniform Delay, d1	59.7	32.5	34.1	31.7	41.9	15.0
Progression Factor	1.06	0.56	0.92	1.33	1.00	1.00
Incremental Delay, d2	1.2	1.9	0.4	0.6	26.8	0.0
Delay (s)	64.5	20.1	31.9	42.8	68.7	15.0
Level of Service	E	C	C	D	E	B
Approach Delay (s)		21.4	34.3		63.0	
Approach LOS		C	C		E	

Intersection Summary

HCM 2000 Control Delay	39.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	18.2
Intersection Capacity Utilization	63.0%	ICU Level of Service	B
Analysis Period (min)	15		

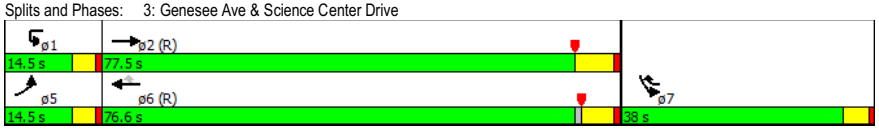
c Critical Lane Group

Lane Group	EBL	EBT	WBU	WBT	WBR	SBL
Lane Configurations						
Traffic Volume (vph)	92	2168	12	840	365	341
Future Volume (vph)	92	2168	12	840	365	341
Turn Type	Prot	NA	Prot	NA	pm+ov	Prot
Protected Phases	5	2	1	6	7	7
Permitted Phases					6	
Detector Phase	5	2	1	6	7	7
Switch Phase						
Minimum Initial (s)	4.0	10.0	4.0	10.0	4.0	4.0
Minimum Split (s)	9.5	22.5	9.5	16.0	8.9	8.9
Total Split (s)	14.5	77.5	14.5	76.6	38.0	38.0
Total Split (%)	11.2%	59.6%	11.2%	58.9%	29.2%	29.2%
Yellow Time (s)	3.4	5.9	3.4	5.0	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	6.9	4.4	6.0	4.9	4.9
Lead/Lag	Lead	Lag	Lead	Lag		
Lead-Lag Optimize?	Yes	Yes	Yes	Yes		
Recall Mode	None	C-Max	None	C-Max	None	None

Intersection Summary

Cycle Length: 130
Actuated Cycle Length: 130
Offset: 55 (42%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 60
Control Type: Actuated-Coordinated

Splits and Phases: 3: Genesee Ave & Science Center Drive



Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Traffic Volume (vph)	92	2168	12	840	365	341	81
Future Volume (vph)	92	2168	12	840	365	341	81
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	6.9	4.4	6.0	4.9	4.9	
Lane Util. Factor	1.00	0.91	1.00	0.91	1.00	0.97	
Frt	1.00	1.00	1.00	1.00	0.85	0.97	
Flt Protected	0.95	1.00	0.95	1.00	1.00	0.96	
Satd. Flow (prot)	1770	5085	1770	5085	1583	3373	
Flt Permitted	0.95	1.00	0.95	1.00	1.00	0.96	
Satd. Flow (perm)	1770	5085	1770	5085	1583	3373	
Peak-hour factor, PHF	0.97	0.97	0.92	0.83	0.83	0.90	0.90
Adj. Flow (vph)	95	2235	13	1012	440	379	90
RTOR Reduction (vph)	0	0	0	0	46	18	0
Lane Group Flow (vph)	95	2235	13	1012	394	451	0
Turn Type	Prot	NA	Prot	NA	pm+ov	Prot	
Protected Phases	5	2	1	6	7	7	
Permitted Phases					6		
Actuated Green, G (s)	11.9	87.2	3.0	79.2	102.8	23.6	
Effective Green, g (s)	11.9	87.2	3.0	79.2	102.8	23.6	
Actuated g/C Ratio	0.09	0.67	0.02	0.61	0.79	0.18	
Clearance Time (s)	4.4	6.9	4.4	6.0	4.9	4.9	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	162	3410	40	3097	1251	612	
v/s Ratio Prot	c0.05	c0.44	0.01	0.20	0.06	c0.13	
v/s Ratio Perm					0.19		
v/c Ratio	0.59	0.66	0.33	0.33	0.31	0.74	
Uniform Delay, d1	56.7	12.6	62.5	12.4	3.8	50.3	
Progression Factor	1.10	0.65	1.00	1.00	1.00	1.00	
Incremental Delay, d2	2.8	0.5	4.7	0.3	0.1	4.6	
Delay (s)	64.9	8.7	67.2	12.7	3.9	54.9	
Level of Service	E	A	E	B	A	D	
Approach Delay (s)		11.0		10.5		54.9	
Approach LOS		B		B		D	

Intersection Summary

HCM 2000 Control Delay	15.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	16.2
Intersection Capacity Utilization	71.0%	ICU Level of Service	C
Analysis Period (min)	15		

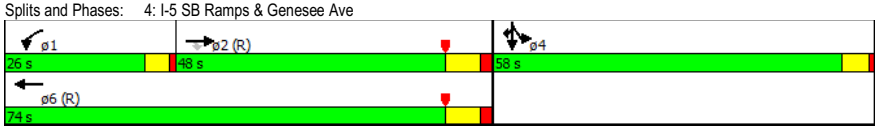
c Critical Lane Group

Lane Group	EBT	EBR	WBL	WBT	SBL	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	1842	766	344	787	833	3	344
Future Volume (vph)	1842	766	344	787	833	3	344
Turn Type	NA	Perm	Prot	NA	Split	NA	Prot
Protected Phases	2		1	6	4	4	4
Permitted Phases		2					
Detector Phase	2	2	1	6	4	4	4
Switch Phase							
Minimum Initial (s)	10.0	10.0	5.0	10.0	13.0	13.0	13.0
Minimum Split (s)	25.2	25.2	9.7	28.2	18.1	18.1	18.1
Total Split (s)	48.0	48.0	26.0	74.0	58.0	58.0	58.0
Total Split (%)	36.4%	36.4%	19.7%	56.1%	43.9%	43.9%	43.9%
Yellow Time (s)	5.2	5.2	3.7	5.2	4.1	4.1	4.1
All-Red Time (s)	2.0	2.0	1.0	2.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.2	7.2	4.7	7.2	5.1	5.1	5.1
Lead/Lag	Lag	Lag	Lead				
Lead-Lag Optimize?	Yes	Yes	Yes				
Recall Mode	C-Max	C-Max	Max	C-Max	Min	Min	Min

Intersection Summary

Cycle Length: 132
Actuated Cycle Length: 132
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 70
Control Type: Actuated-Coordinated

Splits and Phases: 4: I-5 SB Ramps & Genesee Ave



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1842	766	344	787	0	0	0	0	833	3	344
Future Volume (vph)	0	1842	766	344	787	0	0	0	0	833	3	344
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		7.2	7.2	4.7	7.2					5.1	5.1	5.1
Lane Util. Factor		0.81	0.88	0.97	0.91					0.95	0.95	0.88
Frt		1.00	0.85	1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	0.95	1.00
Satd. Flow (prot)		7544	2787	3433	5085					1681	1686	2787
Flt Permitted		1.00	1.00	0.95	1.00					0.95	0.95	1.00
Satd. Flow (perm)		7544	2787	3433	5085					1681	1686	2787
Peak-hour factor, PHF	0.95	0.95	0.95	0.89	0.89	0.89	0.25	0.25	0.25	0.90	0.90	0.90
Adj. Flow (vph)	0	1939	806	387	884	0	0	0	0	926	3	382
RTOR Reduction (vph)	0	0	557	0	0	0	0	0	0	0	0	126
Lane Group Flow (vph)	0	1939	249	387	884	0	0	0	0	463	466	256
Turn Type		NA	Perm	Prot	NA					Split	NA	Prot
Protected Phases		2		1	6					4	4	4
Permitted Phases			2									
Actuated Green, G (s)		40.8	40.8	30.0	75.5					44.2	44.2	44.2
Effective Green, g (s)		40.8	40.8	30.0	75.5					44.2	44.2	44.2
Actuated g/C Ratio		0.31	0.31	0.23	0.57					0.33	0.33	0.33
Clearance Time (s)		7.2	7.2	4.7	7.2					5.1	5.1	5.1
Vehicle Extension (s)		2.0	2.0	2.0	2.0					2.0	2.0	2.0
Lane Grp Cap (vph)		2331	861	780	2908					562	564	933
v/s Ratio Prot		c0.26		c0.11	0.17					0.28	c0.28	0.09
v/s Ratio Perm			0.09									
v/c Ratio		0.83	0.29	0.50	0.30					0.82	0.83	0.27
Uniform Delay, d1		42.4	34.6	44.4	14.6					40.3	40.4	32.1
Progression Factor		1.00	1.00	0.38	0.32					1.00	1.00	1.00
Incremental Delay, d2		3.6	0.8	2.0	0.2					9.1	9.2	0.1
Delay (s)		46.1	35.4	19.0	4.9					49.4	49.5	32.2
Level of Service		D	D	B	A					D	D	C
Approach Delay (s)		42.9			9.2			0.0			44.4	
Approach LOS		D			A			A			D	

Intersection Summary

HCM 2000 Control Delay	35.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	132.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	87.4%	ICU Level of Service	E
Analysis Period (min)	15		

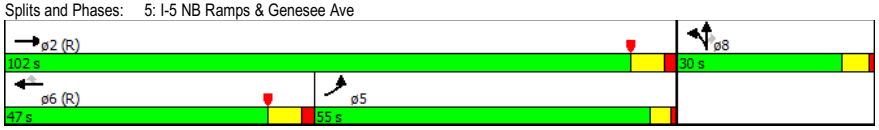
c Critical Lane Group

Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Configurations							
Traffic Volume (vph)	1060	1560	746	912	409	5	89
Future Volume (vph)	1060	1560	746	912	409	5	89
Turn Type	Prot	NA	NA	Perm	Split	NA	Perm
Protected Phases	5	2	6		8	8	
Permitted Phases				6			8
Detector Phase	5	2	6	6	8	8	8
Switch Phase							
Minimum Initial (s)	11.0	10.0	10.0	10.0	5.0	5.0	5.0
Minimum Split (s)	15.2	28.2	25.2	25.2	10.1	10.1	10.1
Total Split (s)	55.0	102.0	47.0	47.0	30.0	30.0	30.0
Total Split (%)	41.7%	77.3%	35.6%	35.6%	22.7%	22.7%	22.7%
Yellow Time (s)	3.2	5.2	5.2	5.2	4.1	4.1	4.1
All-Red Time (s)	1.0	2.0	2.0	2.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.2	7.2	7.2	7.2	5.1	5.1	5.1
Lead/Lag	Lag		Lead	Lead			
Lead-Lag Optimize?	Yes		Yes	Yes			
Recall Mode	Max	C-Max	C-Max	C-Max	Min	Min	Min

Intersection Summary

Cycle Length: 132
Actuated Cycle Length: 132
Offset: 102 (77%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 80
Control Type: Actuated-Coordinated

Splits and Phases: 5: I-5 NB Ramps & Genesee Ave



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1060	1560	0	0	746	912	409	5	89	0	0	0
Future Volume (vph)	1060	1560	0	0	746	912	409	5	89	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	7.2			7.2	7.2	5.1	5.1	5.1			
Lane Util. Factor	0.97	0.91			0.86	0.88	0.95	0.95	0.88			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.95	1.00			
Satd. Flow (prot)	3433	5085			6408	2787	1681	1687	2787			
Flt Permitted	0.95	1.00			1.00	1.00	0.95	0.95	1.00			
Satd. Flow (perm)	3433	5085			6408	2787	1681	1687	2787			
Peak-hour factor, PHF	0.95	0.95	0.95	0.90	0.90	0.90	0.91	0.91	0.91	0.25	0.25	0.25
Adj. Flow (vph)	1116	1642	0	0	829	1013	449	5	98	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	443	0	0	79	0	0	0
Lane Group Flow (vph)	1116	1642	0	0	829	570	229	225	19	0	0	0
Turn Type	Prot	NA			NA	Perm	Split	NA	Perm			
Protected Phases	5	2			6		8	8				
Permitted Phases						6			8			
Actuated Green, G (s)	50.8	98.4			43.4	43.4	21.3	21.3	21.3			
Effective Green, g (s)	50.8	98.4			43.4	43.4	21.3	21.3	21.3			
Actuated g/C Ratio	0.38	0.75			0.33	0.33	0.16	0.16	0.16			
Clearance Time (s)	4.2	7.2			7.2	7.2	5.1	5.1	5.1			
Vehicle Extension (s)	2.0	2.0			2.0	2.0	2.0	2.0	2.0			
Lane Grp Cap (vph)	1321	3790			2106	916	271	272	449			
v/s Ratio Prot	c0.33	0.32			0.13		c0.14	0.13				
v/s Ratio Perm						c0.20			0.01			
v/c Ratio	0.84	0.43			0.39	0.62	0.85	0.83	0.04			
Uniform Delay, d1	37.0	6.3			34.2	37.4	53.7	53.6	46.7			
Progression Factor	0.70	0.87			0.89	1.10	1.00	1.00	1.00			
Incremental Delay, d2	4.2	0.2			0.5	2.7	20.0	17.5	0.0			
Delay (s)	30.2	5.7			30.8	43.8	73.8	71.1	46.8			
Level of Service	C	A			C	D	E	E	D			
Approach Delay (s)		15.6			38.0			67.9			0.0	
Approach LOS		B			D			E			A	

Intersection Summary

HCM 2000 Control Delay	29.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	132.0	Sum of lost time (s)	16.5
Intersection Capacity Utilization	87.4%	ICU Level of Service	E
Analysis Period (min)	15		

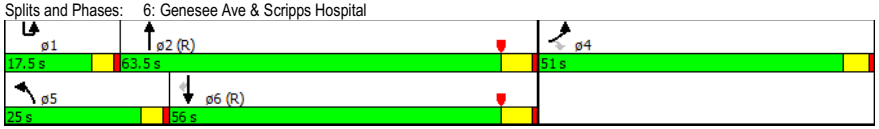
c Critical Lane Group

Lane Group	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	742	857	311	1092	8	1552	174
Future Volume (vph)	742	857	311	1092	8	1552	174
Turn Type	Prot	Perm	Prot	NA	Prot	NA	Perm
Protected Phases	4		5	2	1	6	
Permitted Phases		4					6
Detector Phase	4	4	5	2	1	6	6
Switch Phase							
Minimum Initial (s)	7.0	7.0	4.0	10.0	4.0	10.0	10.0
Minimum Split (s)	11.9	11.9	9.5	22.5	9.5	30.5	30.5
Total Split (s)	51.0	51.0	25.0	63.5	17.5	56.0	56.0
Total Split (%)	38.6%	38.6%	18.9%	48.1%	13.3%	42.4%	42.4%
Yellow Time (s)	3.9	3.9	3.4	4.7	3.4	4.7	4.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	4.4	5.7	4.4	5.7	5.7
Lead/Lag			Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?			Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	C-Max	None	C-Max	C-Max

Intersection Summary

Cycle Length: 132
Actuated Cycle Length: 132
Offset: 34 (26%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 130
Control Type: Actuated-Coordinated

Splits and Phases: 6: Genesee Ave & Scripps Hospital



Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	742	857	311	1092	8	1552	174
Future Volume (vph)	742	857	311	1092	8	1552	174
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9	4.4	5.7	4.4	5.7	5.7
Lane Util. Factor	0.97	1.00	1.00	0.91	1.00	0.91	1.00
Frt	1.00	0.85	1.00	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	1583	1770	5085	1770	5085	1583
Flt Permitted	0.95	1.00	0.95	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	1583	1770	5085	1770	5085	1583
Peak-hour factor, PHF	0.90	0.90	0.90	0.86	0.92	0.89	0.90
Adj. Flow (vph)	824	952	346	1270	9	1744	193
RTOR Reduction (vph)	0	174	0	0	0	0	61
Lane Group Flow (vph)	824	778	346	1270	9	1744	132
Turn Type	Prot	Perm	Prot	NA	Prot	NA	Perm
Protected Phases	4		5	2	1	6	
Permitted Phases		4					6
Actuated Green, G (s)	46.1	46.1	20.6	69.6	1.3	50.3	50.3
Effective Green, g (s)	46.1	46.1	20.6	69.6	1.3	50.3	50.3
Actuated g/C Ratio	0.35	0.35	0.16	0.53	0.01	0.38	0.38
Clearance Time (s)	4.9	4.9	4.4	5.7	4.4	5.7	5.7
Vehicle Extension (s)	2.0	2.0	2.0	5.2	2.0	4.0	4.0
Lane Grp Cap (vph)	1198	552	276	2681	17	1937	603
v/s Ratio Prot	0.24		c0.20	0.25	0.01	c0.34	
v/s Ratio Perm		c0.49					0.08
v/c Ratio	0.69	1.41	1.25	0.47	0.53	0.90	0.22
Uniform Delay, d1	36.8	43.0	55.7	19.7	65.0	38.5	27.6
Progression Factor	1.00	1.00	1.19	0.29	1.09	0.54	0.34
Incremental Delay, d2	1.3	195.0	138.3	0.5	12.3	6.9	0.8
Delay (s)	38.1	238.0	204.6	6.3	83.0	27.5	10.1
Level of Service	D	F	F	A	F	C	B
Approach Delay (s)	145.3			48.7		26.0	
Approach LOS	F			D		C	

Intersection Summary

HCM 2000 Control Delay	72.6	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.16		
Actuated Cycle Length (s)	132.0	Sum of lost time (s)	15.0
Intersection Capacity Utilization	91.9%	ICU Level of Service	F
Analysis Period (min)	15		

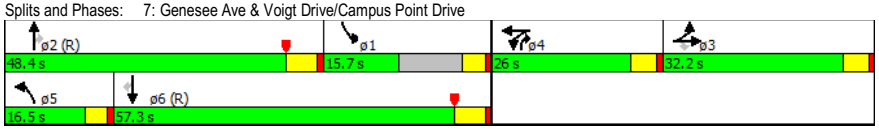
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	308	12	408	517	22	212	832	58	57	2173	119
Future Volume (vph)	308	12	408	517	22	212	832	58	57	2173	119
Turn Type	Split	NA	Perm	Split	NA	Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	3	3		4	4	5	2	4	1	6	
Permitted Phases			3					2			6
Detector Phase	3	3	3	4	4	5	2	4	1	6	6
Switch Phase											
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	4.0	10.0	7.0	4.0	10.0	10.0
Minimum Split (s)	11.9	11.9	11.9	22.5	22.5	8.4	37.7	22.5	8.4	33.7	33.7
Total Split (s)	32.2	32.2	32.2	26.0	26.0	16.5	48.4	26.0	15.7	57.3	57.3
Total Split (%)	24.4%	24.4%	24.4%	19.7%	19.7%	12.5%	36.7%	19.7%	11.9%	43.4%	43.4%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.9	3.4	4.7	3.9	3.4	4.7	4.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	4.9	4.9	4.9	4.4	5.7	4.9	4.4	5.7	5.7
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lead	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	None	None	C-Max	C-Max

Intersection Summary

Cycle Length: 132
Actuated Cycle Length: 132
Offset: 25 (19%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 115
Control Type: Actuated-Coordinated

Splits and Phases: 7: Genesee Ave & Voigt Drive/Campus Point Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	308	12	408	517	22	304	212	832	58	57	2173	119
Future Volume (vph)	308	12	408	517	22	304	212	832	58	57	2173	119
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9	4.9	4.9	4.9		4.4	5.7	4.9	4.4	5.7	5.7
Lane Util. Factor	0.97	1.00	0.88	0.97	0.95		0.97	0.91	1.00	0.97	0.91	1.00
Frt	1.00	1.00	0.85	1.00	0.86		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	1863	2787	3433	3044		3433	5085	1583	3433	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	1863	2787	3433	3044		3433	5085	1583	3433	5085	1583
Peak-hour factor, PHF	0.90	0.90	0.90	0.87	0.87	0.87	0.92	0.92	0.92	0.94	0.94	0.94
Adj. Flow (vph)	342	13	453	594	25	349	230	904	63	61	2312	127
RTOR Reduction (vph)	0	0	251	0	254	0	0	0	27	0	0	52
Lane Group Flow (vph)	342	13	202	594	120	0	230	904	36	61	2312	75
Turn Type	Split	NA	Perm	Split	NA		Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	3	3		4	4		5	2	4	1	6	
Permitted Phases			3						2			6
Actuated Green, G (s)	20.6	20.6	20.6	21.1	21.1		11.7	53.6	74.7	16.8	58.7	58.7
Effective Green, g (s)	20.6	20.6	20.6	21.1	21.1		11.7	53.6	74.7	16.8	58.7	58.7
Actuated g/C Ratio	0.16	0.16	0.16	0.16	0.16		0.09	0.41	0.57	0.13	0.44	0.44
Clearance Time (s)	4.9	4.9	4.9	4.9	4.9		4.4	5.7	4.9	4.4	5.7	5.7
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0		2.0	3.7	2.0	2.0	4.0	4.0
Lane Grp Cap (vph)	535	290	434	548	486		304	2064	895	436	2261	703
v/s Ratio Prot	c0.10	0.01		c0.17	0.04		c0.07	0.18	0.01	0.02	c0.45	
v/s Ratio Perm			0.07						0.02			0.05
v/c Ratio	0.64	0.04	0.47	1.08	0.25		0.76	0.44	0.04	0.14	1.02	0.11
Uniform Delay, d1	52.2	47.3	50.7	55.5	48.5		58.8	28.3	12.7	51.2	36.6	21.4
Progression Factor	1.00	1.00	1.00	1.00	1.00		0.66	0.72	1.15	0.66	0.53	0.25
Incremental Delay, d2	1.9	0.0	0.3	63.1	0.1		8.9	0.7	0.0	0.0	12.7	0.0
Delay (s)	54.1	47.4	51.0	118.6	48.6		47.8	20.9	14.6	33.9	32.2	5.3
Level of Service	D	D	D	F	D		D	C	B	C	C	A
Approach Delay (s)		52.2			91.6			25.8			30.9	
Approach LOS		D			F			C			C	

Intersection Summary

HCM 2000 Control Delay	43.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	132.0	Sum of lost time (s)	19.9
Intersection Capacity Utilization	85.2%	ICU Level of Service	E
Analysis Period (min)	15		

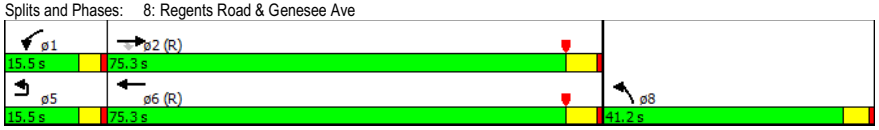
c Critical Lane Group

Lane Group	EBU	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations							
Traffic Volume (vph)	48	2178	840	22	900	162	41
Future Volume (vph)	48	2178	840	22	900	162	41
Turn Type	Prot	NA	Perm	Prot	NA	Prot	custom
Protected Phases	5	2		1	6	8	
Permitted Phases			2				
Detector Phase	5	2	2	1	6	8	
Switch Phase							
Minimum Initial (s)	4.0	10.0	10.0	4.0	10.0	7.0	
Minimum Split (s)	9.5	22.7	22.7	9.5	22.5	37.9	
Total Split (s)	15.5	75.3	75.3	15.5	75.3	41.2	
Total Split (%)	11.7%	57.0%	57.0%	11.7%	57.0%	31.2%	
Yellow Time (s)	3.4	4.7	4.7	3.4	4.7	3.9	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.4	5.7	5.7	4.4	5.7	4.9	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		
Recall Mode	None	C-Max	C-Max	None	C-Max	None	

Intersection Summary

Cycle Length: 132
Actuated Cycle Length: 132
Offset: 29 (22%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 8: Regents Road & Genesee Ave



Movement	EBU	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations							
Traffic Volume (vph)	48	2178	840	22	900	162	41
Future Volume (vph)	48	2178	840	22	900	162	41
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	12	16	12
Total Lost time (s)	4.4	5.7	5.7	4.4	5.7	4.9	4.0
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	1770	5085	1583	1770	5085	2006	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (perm)	1770	5085	1583	1770	5085	2006	1583
Peak-hour factor, PHF	0.92	0.96	0.96	0.94	0.94	0.88	0.88
Adj. Flow (vph)	52	2269	875	23	957	184	47
RTOR Reduction (vph)	0	0	163	0	0	0	47
Lane Group Flow (vph)	52	2269	712	23	957	184	0
Turn Type	Prot	NA	Perm	Prot	NA	Prot	custom
Protected Phases	5	2		1	6	8	
Permitted Phases			2				
Actuated Green, G (s)	7.3	84.2	84.2	4.3	81.2	28.5	0.0
Effective Green, g (s)	7.3	84.2	84.2	4.3	81.2	28.5	0.0
Actuated g/C Ratio	0.06	0.64	0.64	0.03	0.62	0.22	0.00
Clearance Time (s)	4.4	5.7	5.7	4.4	5.7	4.9	
Vehicle Extension (s)	2.0	5.0	5.0	2.0	3.9	2.0	
Lane Grp Cap (vph)	97	3243	1009	57	3128	433	0
v/s Ratio Prot	c0.03	0.45		0.01	0.19	c0.09	
v/s Ratio Perm			c0.45				
v/c Ratio	0.54	0.70	0.71	0.40	0.31	0.42	0.00
Uniform Delay, d1	60.7	15.6	15.7	62.6	12.0	44.7	66.0
Progression Factor	0.78	1.52	2.22	0.82	1.14	1.00	1.00
Incremental Delay, d2	0.8	0.4	1.2	1.5	0.2	0.2	0.0
Delay (s)	48.1	24.1	36.2	53.2	13.9	44.9	66.0
Level of Service	D	C	D	D	B	D	E
Approach Delay (s)		27.8			14.8	49.2	
Approach LOS		C			B	D	

Intersection Summary

HCM 2000 Control Delay	26.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	132.0	Sum of lost time (s)	15.0
Intersection Capacity Utilization	63.8%	ICU Level of Service	B
Analysis Period (min)	15		

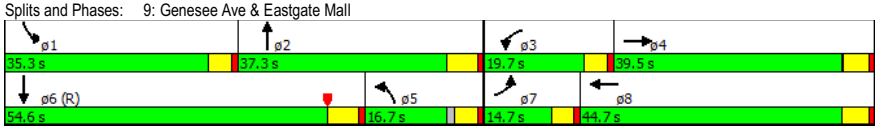
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	82	246	225	329	67	622	475	1323
Future Volume (vph)	82	246	225	329	67	622	475	1323
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	7	4	3	8	5	2	1	6
Permitted Phases								
Detector Phase	7	4	3	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	4.0	7.0	4.0	7.0	4.0	10.0	4.0	10.0
Minimum Split (s)	8.4	38.9	9.5	39.1	9.5	31.7	9.5	32.7
Total Split (s)	14.7	39.5	19.7	44.7	16.7	37.3	35.3	54.6
Total Split (%)	11.1%	29.9%	14.9%	33.9%	12.7%	28.3%	26.7%	41.4%
Yellow Time (s)	3.4	3.9	3.4	4.1	3.4	4.7	3.4	4.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	4.9	4.4	5.1	4.4	5.7	4.4	5.7
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max

Intersection Summary

Cycle Length: 132
Actuated Cycle Length: 132
Offset: 58 (44%), Referenced to phase 6:SBT, Start of Yellow
Natural Cycle: 115
Control Type: Actuated-Coordinated

Splits and Phases: 9: Genesee Ave & Eastgate Mall



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	82	246	133	225	329	169	67	622	125	475	1323	116
Future Volume (vph)	82	246	133	225	329	169	67	622	125	475	1323	116
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	5.1		4.4	5.7		4.4	5.7	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.91		0.97	0.91	
Frt	1.00	0.95		1.00	0.95		1.00	0.97		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3352		1770	3359		1770	4958		3433	5024	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	3352		1770	3359		1770	4958		3433	5024	
Peak-hour factor, PHF	0.92	0.92	0.92	0.82	0.82	0.82	0.96	0.96	0.96	0.95	0.95	0.95
Adj. Flow (vph)	89	267	145	274	401	206	70	648	130	500	1393	122
RTOR Reduction (vph)	0	62	0	0	53	0	0	20	0	0	6	0
Lane Group Flow (vph)	89	350	0	274	554	0	70	758	0	500	1509	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Actuated Green, G (s)	10.0	22.6		20.4	32.8		8.5	46.0		23.6	61.1	
Effective Green, g (s)	10.0	22.6		20.4	32.8		8.5	46.0		23.6	61.1	
Actuated g/C Ratio	0.08	0.17		0.15	0.25		0.06	0.35		0.18	0.46	
Clearance Time (s)	4.4	4.9		4.4	5.1		4.4	5.7		4.4	5.7	
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	4.2		2.0	4.3	
Lane Grp Cap (vph)	134	573		273	834		113	1727		613	2325	
v/s Ratio Prot	0.05	0.10		c0.15	c0.16		c0.04	0.15		c0.15	c0.30	
v/s Ratio Perm												
v/c Ratio	0.66	0.61		1.00	0.66		0.62	0.44		0.82	0.65	
Uniform Delay, d1	59.4	50.6		55.8	44.6		60.2	33.1		52.1	27.2	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		0.76	0.43	
Incremental Delay, d2	9.2	1.4		55.4	1.6		6.9	0.3		5.7	1.0	
Delay (s)	68.6	52.0		111.2	46.2		67.1	33.3		45.3	12.7	
Level of Service	E	D		F	D		E	C		D	B	
Approach Delay (s)		54.9			66.4			36.1			20.8	
Approach LOS		D			E			D			C	

Intersection Summary

HCM 2000 Control Delay	37.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	132.0	Sum of lost time (s)	19.6
Intersection Capacity Utilization	71.5%	ICU Level of Service	C
Analysis Period (min)	15		

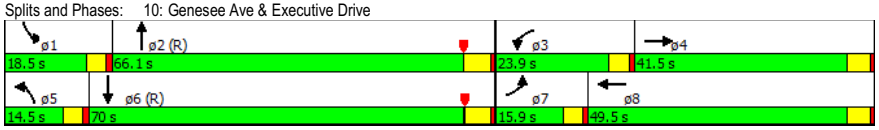
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	14	96	315	201	109	531	106	1986
Future Volume (vph)	14	96	315	201	109	531	106	1986
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	7	4	3	8	5	2	1	6
Permitted Phases								
Detector Phase	7	4	3	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	10.0	4.0	10.0
Minimum Split (s)	8.4	8.9	8.4	8.9	8.4	15.5	9.5	15.4
Total Split (s)	15.9	41.5	23.9	49.5	14.5	66.1	18.5	70.0
Total Split (%)	10.6%	27.7%	15.9%	33.0%	9.7%	44.1%	12.3%	46.7%
Yellow Time (s)	3.4	3.9	3.4	3.9	3.4	4.5	3.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	4.9	4.4	4.9	4.4	5.5	4.4	5.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	None	C-Max

Intersection Summary

Cycle Length: 150
Actuated Cycle Length: 150
Offset: 100 (67%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 80
Control Type: Actuated-Coordinated

Splits and Phases: 10: Genesee Ave & Executive Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	14	96	98	315	201	93	109	531	176	106	1986	28
Future Volume (vph)	14	96	98	315	201	93	109	531	176	106	1986	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	4.9		4.4	5.5		4.4	5.4	
Lane Util. Factor	1.00	0.95		0.97	0.95		1.00	0.91		1.00	0.91	
Frt	1.00	0.92		1.00	0.95		1.00	0.96		1.00	1.00	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3270		3433	3371		1770	4896		1770	5075	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	3270		3433	3371		1770	4896		1770	5075	
Peak-hour factor, PHF	0.80	0.80	0.80	0.92	0.92	0.92	0.91	0.91	0.91	0.90	0.90	0.90
Adj. Flow (vph)	18	120	122	342	218	101	120	584	193	118	2207	31
RTOR Reduction (vph)	0	107	0	0	39	0	0	32	0	0	1	0
Lane Group Flow (vph)	18	136	0	342	280	0	120	745	0	118	2237	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Actuated Green, G (s)	4.2	20.1		18.0	33.9		14.8	78.8		13.9	78.0	
Effective Green, g (s)	4.2	20.1		18.0	33.9		14.8	78.8		13.9	78.0	
Actuated g/C Ratio	0.03	0.13		0.12	0.23		0.10	0.53		0.09	0.52	
Clearance Time (s)	4.4	4.9		4.4	4.9		4.4	5.5		4.4	5.4	
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	3.6		2.0	3.8	
Lane Grp Cap (vph)	49	438		411	761		174	2572		164	2639	
v/s Ratio Prot	0.01	0.04		c0.10	c0.08		c0.07	0.15		0.07	c0.44	
v/s Ratio Perm												
v/c Ratio	0.37	0.31		0.83	0.37		0.69	0.29		0.72	0.85	
Uniform Delay, d1	71.6	58.7		64.5	49.0		65.4	19.9		66.2	30.9	
Progression Factor	1.00	1.00		1.00	1.00		1.45	0.43		1.00	1.00	
Incremental Delay, d2	1.7	0.1		12.9	0.1		8.6	0.3		11.8	3.6	
Delay (s)	73.3	58.8		77.4	49.1		103.6	8.8		78.0	34.5	
Level of Service	E	E		E	D		F	A		E	C	
Approach Delay (s)		59.8			63.7			21.5			36.7	
Approach LOS		E			E			C			D	

Intersection Summary

HCM 2000 Control Delay	39.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	19.2
Intersection Capacity Utilization	75.7%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	50	3	160	10	29	31	718	11	2429
Future Volume (vph)	50	3	160	10	29	31	718	11	2429
Turn Type	Split	NA	Prot	NA	NA	Prot	NA	Prot	NA
Protected Phases	4	4	4	3		5	2	1	6
Permitted Phases									
Detector Phase	4	4	4	3		5	2	1	6
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	4.0		4.0	10.0	4.0	10.0
Minimum Split (s)	8.9	8.9	8.9	8.9		8.4	15.7	8.4	15.7
Total Split (s)	15.0	15.0	15.0	13.2		13.5	33.3	13.5	33.3
Total Split (%)	20.0%	20.0%	20.0%	17.6%		18.0%	44.4%	18.0%	44.4%
Yellow Time (s)	3.9	3.9	3.9	3.9		3.4	4.7	3.4	4.7
All-Red Time (s)	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	4.9	4.9		4.4	5.7	4.4	5.7
Lead/Lag	Lag	Lag	Lag	Lead		Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None		None	C-Max	None	C-Max

Intersection Summary

Cycle Length: 75
Actuated Cycle Length: 75
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 11: Genesee Ave & Executive Square

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	50	3	160	121	10	29	31	718	7	11	2429	23
Future Volume (vph)	50	3	160	121	10	29	31	718	7	11	2429	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9	4.9		4.9	4.0	4.4	5.7		4.4	5.7	
Lane Util. Factor	0.95	0.91	0.95		0.95	0.95	1.00	0.91		1.00	0.91	
Frt	1.00	0.86	0.85		1.00	0.85	1.00	1.00		1.00	1.00	
Flt Protected	0.95	1.00	1.00		0.96	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1461	1504		1687	1504	1770	5078		1770	5078	
Flt Permitted	0.95	1.00	1.00		0.96	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1681	1461	1504		1687	1504	1770	5078		1770	5078	
Peak-hour factor, PHF	0.80	0.80	0.80	0.80	0.80	0.80	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	62	4	200	151	12	36	34	789	8	12	2669	25
RTOR Reduction (vph)	0	88	96	0	1	32	0	1	0	0	1	0
Lane Group Flow (vph)	57	18	8	0	167	0	34	796	0	12	2693	0
Turn Type	Split	NA	Prot	Split	NA	NA	Prot	NA		Prot	NA	
Protected Phases	4	4	4	3	3		5	2		1	6	
Permitted Phases												
Actuated Green, G (s)	6.1	6.1	6.1		8.3	0.0	2.9	39.5		1.2	37.8	
Effective Green, g (s)	6.1	6.1	6.1		8.3	0.0	2.9	39.5		1.2	37.8	
Actuated g/C Ratio	0.08	0.08	0.08		0.11	0.00	0.04	0.53		0.02	0.50	
Clearance Time (s)	4.9	4.9	4.9		4.9		4.4	5.7		4.4	5.7	
Vehicle Extension (s)	2.0	2.0	2.0		2.0		2.0	3.9		2.0	2.2	
Lane Grp Cap (vph)	136	118	122		186	0	68	2674		28	2559	
v/s Ratio Prot	c0.03	0.01	0.01		c0.10		c0.02	0.16		0.01	c0.53	
v/s Ratio Perm												
v/c Ratio	0.42	0.15	0.07		0.90	0.00	0.50	0.30		0.43	1.05	
Uniform Delay, d1	32.8	32.0	31.8		32.9	37.5	35.3	10.0		36.6	18.6	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.12	0.83		1.20	1.22	
Incremental Delay, d2	0.8	0.2	0.1		37.6	0.0	1.8	0.2		2.3	30.1	
Delay (s)	33.5	32.3	31.9		70.6	37.5	41.4	8.5		46.1	52.8	
Level of Service	C	C	C		E	D	D	A		D	D	
Approach Delay (s)		32.4			65.3			9.9			52.8	
Approach LOS		C			E			A			D	

Intersection Summary

HCM 2000 Control Delay	43.1	HCM 2000 Level of Service	D	
HCM 2000 Volume to Capacity ratio	0.93			
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	19.9	
Intersection Capacity Utilization	74.8%	ICU Level of Service	D	
Analysis Period (min)	15			

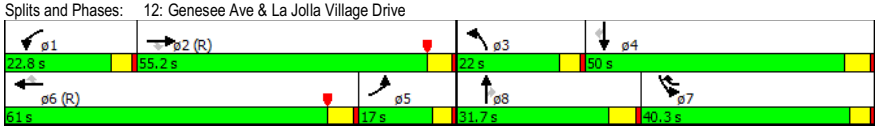
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	201	1246	382	396	1462	116	422	410	81	541	1591	441
Future Volume (vph)	201	1246	382	396	1462	116	422	410	81	541	1591	441
Turn Type	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6	7	3	8		7	4	
Permitted Phases			2			6			8			4
Detector Phase	5	2	2	1	6	7	3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	4.0	10.0	10.0	4.0	10.0	4.0	4.0	10.0	10.0	4.0	10.0	10.0
Minimum Split (s)	8.4	15.3	15.3	8.4	15.5	8.4	8.4	15.7	15.7	8.4	15.4	15.4
Total Split (s)	17.0	55.2	55.2	22.8	61.0	40.3	22.0	31.7	31.7	40.3	50.0	50.0
Total Split (%)	11.3%	36.8%	36.8%	15.2%	40.7%	26.9%	14.7%	21.1%	21.1%	26.9%	33.3%	33.3%
Yellow Time (s)	3.4	4.3	4.3	3.4	4.5	3.4	3.4	4.7	4.7	3.4	4.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.3	5.3	4.4	5.5	4.4	4.4	5.7	5.7	4.4	5.4	5.4
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lag	Lead	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 150
Actuated Cycle Length: 150
Offset: 6 (4%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 130
Control Type: Actuated-Coordinated

Splits and Phases: 12: Genesee Ave & La Jolla Village Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	201	1246	382	396	1462	116	422	410	81	541	1591	441
Future Volume (vph)	201	1246	382	396	1462	116	422	410	81	541	1591	441
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.3	5.3	4.4	5.5	4.4	4.4	5.7	5.7	4.4	5.4	5.4
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.91	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5085	1583	3433	5085	1583	3433	5085	1583	3433	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5085	1583	3433	5085	1583	3433	5085	1583	3433	5085	1583
Peak-hour factor, PHF	0.80	0.80	0.80	0.80	0.80	0.80	0.91	0.91	0.91	0.93	0.93	0.93
Adj. Flow (vph)	251	1558	478	495	1828	145	464	451	89	582	1711	474
RTOR Reduction (vph)	0	0	172	0	0	31	0	0	77	0	0	109
Lane Group Flow (vph)	251	1558	306	495	1828	114	464	451	12	582	1711	365
Turn Type	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6	7	3	8		7	4	
Permitted Phases			2			6			8			4
Actuated Green, G (s)	12.6	49.9	49.9	18.4	55.5	97.7	17.6	19.7	19.7	42.2	44.6	44.6
Effective Green, g (s)	12.6	49.9	49.9	18.4	55.5	97.7	17.6	19.7	19.7	42.2	44.6	44.6
Actuated g/C Ratio	0.08	0.33	0.33	0.12	0.37	0.65	0.12	0.13	0.13	0.28	0.30	0.30
Clearance Time (s)	4.4	5.3	5.3	4.4	5.5	4.4	4.4	5.7	5.7	4.4	5.4	5.4
Vehicle Extension (s)	2.0	6.0	6.0	2.0	5.8	2.0	2.0	3.5	3.5	2.0	4.1	4.1
Lane Grp Cap (vph)	288	1691	526	421	1881	1077	402	667	207	965	1511	470
v/s Ratio Prot	0.07	c0.31		c0.14	c0.36	0.03	c0.14	0.09		0.17	c0.34	
v/s Ratio Perm			0.19			0.04			0.01			0.23
v/c Ratio	0.87	0.92	0.58	1.18	0.97	0.11	1.15	0.68	0.06	0.60	1.13	0.78
Uniform Delay, d1	67.9	48.2	41.4	65.8	46.5	9.8	66.2	62.1	57.0	46.7	52.7	48.2
Progression Factor	0.49	0.32	0.06	0.72	0.80	0.16	0.93	0.92	1.75	0.84	0.86	0.87
Incremental Delay, d2	2.8	1.1	0.4	81.6	2.5	0.0	79.9	1.0	0.0	0.3	63.3	3.4
Delay (s)	35.9	16.5	2.9	128.8	39.9	1.6	141.3	57.9	100.0	39.3	108.4	45.5
Level of Service	D	B	A	F	D	A	F	E	F	D	F	D
Approach Delay (s)		15.8			55.5			100.2			83.1	
Approach LOS		B			E			F			F	

Intersection Summary

HCM 2000 Control Delay	59.0	HCM 2000 Level of Service		E	
HCM 2000 Volume to Capacity ratio	1.07				
Actuated Cycle Length (s)	150.0	Sum of lost time (s)		20.0	
Intersection Capacity Utilization	94.4%	ICU Level of Service		F	
Analysis Period (min)	15				

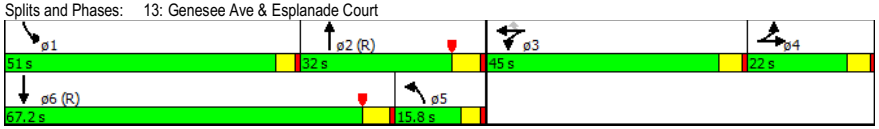
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	231	110	353	135	894	57	392	1141	988
Future Volume (vph)	231	110	353	135	894	57	392	1141	988
Turn Type	Split	NA	Split	NA	Perm	Prot	NA	Prot	NA
Protected Phases	4	4	3	3		5	2	1	6
Permitted Phases					3				
Detector Phase	4	4	3	3	3	5	2	1	6
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	10.0	4.0	10.0
Minimum Split (s)	8.9	8.9	8.9	8.9	8.9	8.4	16.0	8.4	15.7
Total Split (s)	22.0	22.0	45.0	45.0	45.0	15.8	32.0	51.0	67.2
Total Split (%)	14.7%	14.7%	30.0%	30.0%	30.0%	10.5%	21.3%	34.0%	44.8%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.9	3.4	5.0	3.4	4.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	4.9	4.9	4.9	4.4	6.0	4.4	5.7
Lead/Lag	Lag	Lag	Lead	Lead	Lead	Lag	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	None	C-Max

Intersection Summary

Cycle Length: 150
Actuated Cycle Length: 150
Offset: 125 (83%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 120
Control Type: Actuated-Coordinated

Splits and Phases: 13: Genesee Ave & Esplanade Court



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	231	110	64	353	135	894	57	392	302	1141	988	265
Future Volume (vph)	231	110	64	353	135	894	57	392	302	1141	988	265
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9		4.9	4.9	4.9	4.4	6.0		4.4	5.7	
Lane Util. Factor	0.97	1.00		0.97	0.95	0.95	1.00	0.91		0.97	0.91	
Frt	1.00	0.94		1.00	0.89	0.85	1.00	0.93		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	3433	1760		3433	1572	1504	1770	4753		3433	4924	
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	3433	1760		3433	1572	1504	1770	4753		3433	4924	
Peak-hour factor, PHF	0.80	0.80	0.80	0.83	0.83	0.83	0.80	0.80	0.80	0.80	0.80	0.80
Adj. Flow (vph)	289	138	80	425	163	1077	71	490	378	1426	1235	331
RTOR Reduction (vph)	0	14	0	0	70	442	0	93	0	0	32	0
Lane Group Flow (vph)	289	204	0	425	567	161	71	775	0	1426	1534	0
Turn Type	Split	NA		Split	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	4	4		3	3		5	2		1	6	
Permitted Phases						3						
Actuated Green, G (s)	17.1	17.1		40.1	40.1	40.1	11.4	26.0		46.6	61.5	
Effective Green, g (s)	17.1	17.1		40.1	40.1	40.1	11.4	26.0		46.6	61.5	
Actuated g/C Ratio	0.11	0.11		0.27	0.27	0.27	0.08	0.17		0.31	0.41	
Clearance Time (s)	4.9	4.9		4.9	4.9	4.9	4.4	6.0		4.4	5.7	
Vehicle Extension (s)	2.0	2.0		2.0	2.0	2.0	2.0	3.7		2.0	4.1	
Lane Grp Cap (vph)	391	200		917	420	402	134	823		1066	2018	
v/s Ratio Prot	0.08	c0.12		0.12	c0.36		0.04	c0.16		c0.42	0.31	
v/s Ratio Perm						0.11						
v/c Ratio	0.74	1.02		0.46	1.35	0.40	0.53	1.03dr		1.34	0.76	
Uniform Delay, d1	64.3	66.5		46.0	54.9	45.1	66.7	61.3		51.7	37.9	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.07	1.12		0.66	0.54	
Incremental Delay, d2	6.2	68.7		0.1	173.0	0.2	1.6	18.6		154.1	0.9	
Delay (s)	70.5	135.1		46.1	227.9	45.3	72.8	87.3		188.4	21.4	
Level of Service	E	F		D	F	D	E	F		F	C	
Approach Delay (s)		98.3			115.4			86.2			101.0	
Approach LOS		F			F			F			F	

Intersection Summary

HCM 2000 Control Delay	102.4	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.22		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	20.2
Intersection Capacity Utilization	95.7%	ICU Level of Service	F
Analysis Period (min)	15		

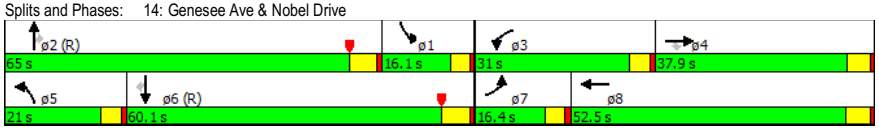
dr Defacto Right Lane. Recode with 1 though lane as a right lane.
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	169	433	498	683	688	438	688	297	94	1805	92
Future Volume (vph)	169	433	498	683	688	438	688	297	94	1805	92
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8	5	2		1	6	
Permitted Phases			4					2			6
Detector Phase	7	4	4	3	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	4.0	10.0	10.0	4.0	10.0	4.0	10.0	10.0	4.0	10.0	10.0
Minimum Split (s)	8.4	37.9	37.9	8.4	40.1	8.4	35.7	35.7	8.4	38.9	38.9
Total Split (s)	16.4	37.9	37.9	31.0	52.5	21.0	65.0	65.0	16.1	60.1	60.1
Total Split (%)	10.9%	25.3%	25.3%	20.7%	35.0%	14.0%	43.3%	43.3%	10.7%	40.1%	40.1%
Yellow Time (s)	3.4	3.9	3.9	3.4	4.1	3.4	4.7	4.7	3.4	4.9	4.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	4.9	4.9	4.4	5.1	4.4	5.7	5.7	4.4	5.9	5.9
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max

Intersection Summary

Cycle Length: 150
Actuated Cycle Length: 150
Offset: 20 (13%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 14: Genesee Ave & Nobel Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	169	433	498	683	688	56	438	688	297	94	1805	92
Future Volume (vph)	169	433	498	683	688	56	438	688	297	94	1805	92
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9	4.9	4.4	5.1		4.4	5.7	5.7	4.4	5.9	5.9
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95		0.97	0.91	1.00	0.97	0.91	1.00
Frt	1.00	1.00	0.85	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	3539	1583	3433	3499		3433	5085	1583	3433	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3539	1583	3433	3499		3433	5085	1583	3433	5085	1583
Peak-hour factor, PHF	0.91	0.91	0.91	0.84	0.84	0.84	0.87	0.87	0.87	0.84	0.84	0.84
Adj. Flow (vph)	186	476	547	813	819	67	503	791	341	112	2149	110
RTOR Reduction (vph)	0	0	162	0	4	0	0	0	175	0	0	70
Lane Group Flow (vph)	186	476	385	813	882	0	503	791	166	112	2149	40
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4						2			6
Actuated Green, G (s)	11.2	33.0	33.0	26.6	48.2		16.6	59.3	59.3	11.7	54.2	54.2
Effective Green, g (s)	11.2	33.0	33.0	26.6	48.2		16.6	59.3	59.3	11.7	54.2	54.2
Actuated g/C Ratio	0.07	0.22	0.22	0.18	0.32		0.11	0.40	0.40	0.08	0.36	0.36
Clearance Time (s)	4.4	4.9	4.9	4.4	5.1		4.4	5.7	5.7	4.4	5.9	5.9
Vehicle Extension (s)	2.0	4.0	4.0	2.0	2.1		2.0	8.0	8.0	2.0	4.0	4.0
Lane Grp Cap (vph)	256	778	348	608	1124		379	2010	625	267	1837	571
v/s Ratio Prot	0.05	0.13		c0.24	0.25		c0.15	0.16		0.03	c0.42	
v/s Ratio Perm			c0.24						0.11			0.03
v/c Ratio	0.73	0.61	1.11	1.34	0.78		1.33	0.39	0.27	0.42	1.17	0.07
Uniform Delay, d1	67.9	52.7	58.5	61.7	46.2		66.7	32.5	30.6	65.9	47.9	31.4
Progression Factor	0.86	1.24	1.39	1.00	1.00		1.16	0.24	0.03	0.95	0.92	1.50
Incremental Delay, d2	7.3	1.4	76.6	162.7	3.4		161.4	0.5	0.8	0.3	81.9	0.2
Delay (s)	65.9	66.6	158.1	224.4	49.6		238.7	8.1	1.8	63.0	126.0	47.3
Level of Service	E	E	F	F	D		F	A	A	E	F	D
Approach Delay (s)		107.9			133.2			77.7			119.3	
Approach LOS		F			F			E			F	

Intersection Summary

HCM 2000 Control Delay	110.9	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.21		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	19.8
Intersection Capacity Utilization	97.9%	ICU Level of Service	F
Analysis Period (min)	15		

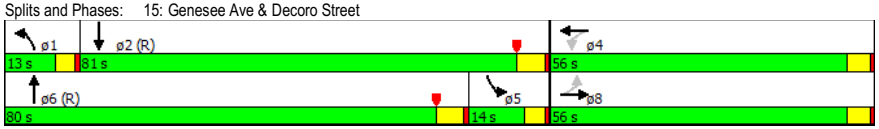
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	42	21	239	36	164	1311	26	3295
Future Volume (vph)	42	21	239	36	164	1311	26	3295
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		8		4	1	6	5	2
Permitted Phases	8		4					
Detector Phase	8	8	4	4	1	6	5	2
Switch Phase								
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	10.0	4.0	10.0
Minimum Split (s)	33.9	33.9	33.9	33.9	8.4	15.7	8.4	15.9
Total Split (s)	56.0	56.0	56.0	56.0	13.0	80.0	14.0	81.0
Total Split (%)	37.3%	37.3%	37.3%	37.3%	8.7%	53.3%	9.3%	54.0%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.4	4.7	3.4	4.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.9		4.9	4.4	5.7	4.4	5.9
Lead/Lag					Lead	Lead	Lag	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	None	C-Max

Intersection Summary

Cycle Length: 150
Actuated Cycle Length: 150
Offset: 21 (14%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 15: Genesee Ave & Decoro Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	42	21	201	239	36	33	164	1311	26	26	3295	82
Future Volume (vph)	42	21	201	239	36	33	164	1311	26	26	3295	82
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9			4.9		4.4	5.7		4.4	5.9	
Lane Util. Factor		1.00			1.00		1.00	0.91		1.00	0.91	
Frt		0.90			0.99		1.00	1.00		1.00	1.00	
Flt Protected		0.99			0.96		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1658			1767		1770	5070		1770	5067	
Flt Permitted		0.91			0.47		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1515			867		1770	5070		1770	5067	
Peak-hour factor, PHF	0.85	0.85	0.85	0.80	0.80	0.80	0.85	0.85	0.85	0.90	0.90	0.90
Adj. Flow (vph)	49	25	236	299	45	41	193	1542	31	29	3661	91
RTOR Reduction (vph)	0	76	0	0	3	0	0	1	0	0	1	0
Lane Group Flow (vph)	0	234	0	0	382	0	193	1572	0	29	3751	0
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		8			4		1	6		5	2	
Permitted Phases	8			4								
Actuated Green, G (s)		51.1			51.1		8.6	78.1		5.8	75.1	
Effective Green, g (s)		51.1			51.1		8.6	78.1		5.8	75.1	
Actuated g/C Ratio		0.34			0.34		0.06	0.52		0.04	0.50	
Clearance Time (s)		4.9			4.9		4.4	5.7		4.4	5.9	
Vehicle Extension (s)		2.0			2.0		2.0	4.3		2.0	3.7	
Lane Grp Cap (vph)		516			295		101	2639		68	2536	
v/s Ratio Prot							c0.11	0.31		0.02	c0.74	
v/s Ratio Perm		0.15			c0.44							
v/c Ratio		0.45			1.30		1.91	0.60		0.43	1.48	
Uniform Delay, d1		38.5			49.5		70.7	25.0		70.5	37.5	
Progression Factor		1.00			1.00		1.22	0.24		0.97	0.95	
Incremental Delay, d2		0.2			156.1		442.4	0.9		0.1	215.7	
Delay (s)		38.8			205.5		529.0	6.9		68.4	251.4	
Level of Service		D			F		F	A		E	F	
Approach Delay (s)		38.8			205.5			63.9			250.0	
Approach LOS		D			F			E			F	

Intersection Summary

HCM 2000 Control Delay	184.1	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.44		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	15.2
Intersection Capacity Utilization	124.3%	ICU Level of Service	H
Analysis Period (min)	15		

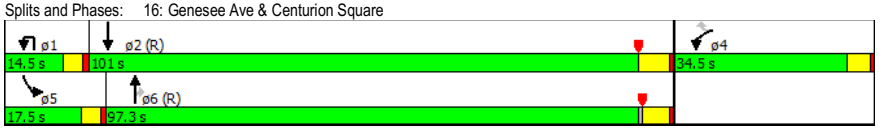
c Critical Lane Group

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	ø1
Lane Configurations							
Traffic Volume (vph)	89	23	1459	46	46	3653	
Future Volume (vph)	89	23	1459	46	46	3653	
Turn Type	Prot	Perm	NA	Perm	Prot	NA	
Protected Phases	4		6		5	2	1
Permitted Phases		4		6			
Detector Phase	4	4	6	6	5	2	
Switch Phase							
Minimum Initial (s)	7.0	7.0	10.0	10.0	4.0	10.0	4.0
Minimum Split (s)	11.9	11.9	15.7	15.7	8.4	16.4	8.4
Total Split (s)	34.5	34.5	97.3	97.3	17.5	101.0	14.5
Total Split (%)	23.0%	23.0%	64.9%	64.9%	11.7%	67.3%	10%
Yellow Time (s)	3.9	3.9	4.7	4.7	3.4	5.4	3.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.9	4.9	5.7	5.7	4.4	6.4	
Lead/Lag			Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?			Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	C-Max	C-Max	None	C-Max	None

Intersection Summary

Cycle Length: 150
Actuated Cycle Length: 150
Offset: 33 (22%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow
Natural Cycle: 120
Control Type: Actuated-Coordinated

Splits and Phases: 16: Genesee Ave & Centurion Square



Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	89	23	0	1459	46	46	3653
Future Volume (vph)	89	23	0	1459	46	46	3653
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9		5.7	5.7	4.4	6.4
Lane Util. Factor	1.00	1.00		0.91	1.00	0.97	0.91
Frt	1.00	0.85		1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00		1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583		5085	1583	3433	5085
Flt Permitted	0.95	1.00		1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583		5085	1583	3433	5085
Peak-hour factor, PHF	0.80	0.80	0.92	0.89	0.89	0.94	0.94
Adj. Flow (vph)	111	29	0	1639	52	49	3886
RTOR Reduction (vph)	0	26	0	0	11	0	0
Lane Group Flow (vph)	111	3	0	1639	41	49	3886
Turn Type	Prot	Perm	Prot	NA	Perm	Prot	NA
Protected Phases	4		1	6		5	2
Permitted Phases		4			6		
Actuated Green, G (s)	13.8	13.8		115.6	115.6	5.6	124.9
Effective Green, g (s)	13.8	13.8		115.6	115.6	5.6	124.9
Actuated g/C Ratio	0.09	0.09		0.77	0.77	0.04	0.83
Clearance Time (s)	4.9	4.9		5.7	5.7	4.4	6.4
Vehicle Extension (s)	2.0	2.0		4.2	4.2	2.0	3.4
Lane Grp Cap (vph)	162	145		3918	1219	128	4234
v/s Ratio Prot	c0.06			0.32		0.01	c0.76
v/s Ratio Perm		0.00			0.03		
v/c Ratio	0.69	0.02		0.42	0.03	0.38	0.92
Uniform Delay, d1	66.0	61.9		5.8	4.0	70.5	8.9
Progression Factor	1.00	1.00		1.07	2.04	0.72	2.69
Incremental Delay, d2	9.2	0.0		0.2	0.0	0.1	0.4
Delay (s)	75.2	62.0		6.4	8.3	50.7	24.4
Level of Service	E	E		A	A	D	C
Approach Delay (s)	72.4			6.5			24.7
Approach LOS	E			A			C

Intersection Summary

HCM 2000 Control Delay	20.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.92		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	15.7
Intersection Capacity Utilization	85.8%	ICU Level of Service	E
Analysis Period (min)	15		

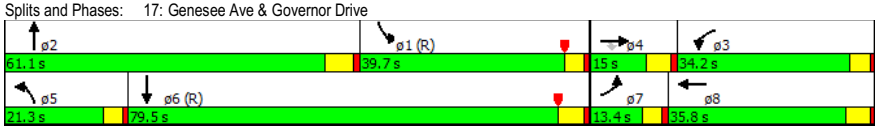
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	350	297	128	314	372	205	807	602	2076
Future Volume (vph)	350	297	128	314	372	205	807	602	2076
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Prot	NA
Protected Phases	7	4		3	8	5	2	1	6
Permitted Phases			4						
Detector Phase	7	4	4	3	8	5	2	1	6
Switch Phase									
Minimum Initial (s)	4.0	8.0	8.0	4.0	8.0	4.0	8.0	4.0	8.0
Minimum Split (s)	8.4	13.2	13.2	8.4	13.2	8.4	13.9	8.4	13.4
Total Split (s)	13.4	15.0	15.0	34.2	35.8	21.3	61.1	39.7	79.5
Total Split (%)	8.9%	10.0%	10.0%	22.8%	23.9%	14.2%	40.7%	26.5%	53.0%
Yellow Time (s)	3.4	4.2	4.2	3.4	4.2	3.4	4.9	3.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.2	5.2	4.4	5.2	4.4	5.9	4.4	5.4
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	C-Max	C-Max

Intersection Summary

Cycle Length: 150
Actuated Cycle Length: 150
Offset: 0 (0%), Referenced to phase 1:SBL and 6:SBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 17: Genesee Ave & Governor Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	350	297	128	314	372	191	205	807	237	602	2076	790
Future Volume (vph)	350	297	128	314	372	191	205	807	237	602	2076	790
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	16	12	12	12	12	12	12	12
Total Lost time (s)	4.4	5.2	5.2	4.4	5.2		4.4	5.9		4.4	5.4	
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95		1.00	0.91		0.97	0.91	
Frt	1.00	1.00	0.85	1.00	0.95		1.00	0.97		1.00	0.96	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	3433	3539	1583	3433	3807		1770	4912		3433	4875	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	3433	3539	1583	3433	3807		1770	4912		3433	4875	
Peak-hour factor, PHF	0.95	0.95	0.95	0.87	0.87	0.87	0.92	0.92	0.92	0.89	0.89	0.89
Adj. Flow (vph)	368	313	135	361	428	220	223	877	258	676	2333	888
RTOR Reduction (vph)	0	0	122	0	44	0	0	40	0	0	46	0
Lane Group Flow (vph)	368	313	13	361	604	0	223	1095	0	676	3175	0
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4									
Actuated Green, G (s)	9.0	9.8	9.8	27.9	28.7		18.8	42.2		50.2	74.1	
Effective Green, g (s)	9.0	9.8	9.8	27.9	28.7		18.8	42.2		50.2	74.1	
Actuated g/C Ratio	0.06	0.07	0.07	0.19	0.19		0.13	0.28		0.33	0.49	
Clearance Time (s)	4.4	5.2	5.2	4.4	5.2		4.4	5.9		4.4	5.4	
Vehicle Extension (s)	2.0	2.3	2.3	2.0	3.8		2.0	2.9		2.0	3.5	
Lane Grp Cap (vph)	205	231	103	638	728		221	1381		1148	2408	
v/s Ratio Prot	c0.11	0.09		0.11	c0.16		c0.13	0.22		0.20	c0.65	
v/s Ratio Perm			0.01									
v/c Ratio	1.80	1.35	0.13	0.57	0.83		1.01	0.79		0.59	1.32	
Uniform Delay, d1	70.5	70.1	66.1	55.5	58.3		65.6	49.9		41.3	38.0	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		0.97	0.92	
Incremental Delay, d2	376.6	185.4	0.3	0.7	8.0		62.9	3.2		0.9	144.7	
Delay (s)	447.1	255.5	66.4	56.2	66.3		128.5	53.0		41.1	179.6	
Level of Service	F	F	E	E	E		F	D		D	F	
Approach Delay (s)		310.6			62.7			65.4			155.6	
Approach LOS		F			E			E			F	

Intersection Summary

HCM 2000 Control Delay	142.9	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.20		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	19.9
Intersection Capacity Utilization	111.7%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	415	299	612	2008	400
Future Volume (Veh/h)	0	415	299	612	2008	400
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.81	0.81	0.91	0.91	0.91	0.91
Hourly flow rate (vph)	0	512	329	673	2207	440
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	3089	1104	2207			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	3089	1104	2207			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	0	0	0			
cM capacity (veh/h)	0	206	235			

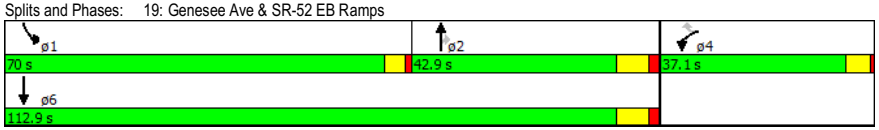
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3
Volume Total	512	329	224	224	224	1104	1104	440
Volume Left	0	329	0	0	0	0	0	0
Volume Right	512	0	0	0	0	0	0	440
cSH	206	235	1700	1700	1700	1700	1700	1700
Volume to Capacity	2.49	1.40	0.13	0.13	0.13	0.65	0.65	0.26
Queue Length 95th (ft)	1069	462	0	0	0	0	0	0
Control Delay (s)	719.4	244.8	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	F	F						
Approach Delay (s)	719.4	80.4				0.0		
Approach LOS	F							

Intersection Summary			
Average Delay	107.9		
Intersection Capacity Utilization	87.9%	ICU Level of Service	E
Analysis Period (min)	15		

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	323	205	767	286	714	1657
Future Volume (vph)	323	205	767	286	714	1657
Turn Type	Prot	Perm	NA	Perm	Prot	NA
Protected Phases	4		2		1	6
Permitted Phases		4		2		
Detector Phase	4	4	2	2	1	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	13.0	13.0	5.0	10.0
Minimum Split (s)	37.1	37.1	38.5	38.5	10.7	17.5
Total Split (s)	37.1	37.1	42.9	42.9	70.0	112.9
Total Split (%)	24.7%	24.7%	28.6%	28.6%	46.7%	75.3%
Yellow Time (s)	4.1	4.1	5.5	5.5	3.7	5.5
All-Red Time (s)	1.0	1.0	2.0	2.0	1.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.1	5.1	7.5	7.5	4.7	7.5
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	None	None	Min	Min	None	Min

Intersection Summary
Cycle Length: 150
Actuated Cycle Length: 150
Natural Cycle: 150
Control Type: Actuated-Uncoordinated

Splits and Phases: 19: Genesee Ave & SR-52 EB Ramps



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	323	205	767	286	714	1657
Future Volume (vph)	323	205	767	286	714	1657
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1	7.5	7.5	4.7	7.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.86	0.86	0.91	0.91	0.92	0.92
Adj. Flow (vph)	376	238	843	314	776	1801
RTOR Reduction (vph)	0	167	0	102	0	0
Lane Group Flow (vph)	376	71	843	212	776	1801
Turn Type	Prot	Perm	NA	Perm	Prot	NA
Protected Phases	4		2		1	6
Permitted Phases		4		2		
Actuated Green, G (s)	32.0	32.0	35.4	35.4	65.3	105.4
Effective Green, g (s)	32.0	32.0	35.4	35.4	65.3	105.4
Actuated g/C Ratio	0.21	0.21	0.24	0.24	0.44	0.70
Clearance Time (s)	5.1	5.1	7.5	7.5	4.7	7.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	377	337	835	373	770	2486
v/s Ratio Prot	c0.21		c0.24		c0.44	0.51
v/s Ratio Perm		0.04		0.13		
v/c Ratio	1.00	0.21	1.01	0.57	1.01	0.72
Uniform Delay, d1	59.0	48.6	57.3	50.6	42.4	13.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	45.3	0.3	33.5	2.0	34.4	1.1
Delay (s)	104.3	48.9	90.8	52.6	76.7	14.6
Level of Service	F	D	F	D	E	B
Approach Delay (s)	82.8		80.4			33.3
Approach LOS	F		F			C

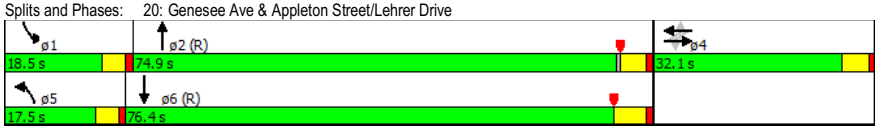
Intersection Summary			
HCM 2000 Control Delay	52.8	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.00		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	17.3
Intersection Capacity Utilization	93.1%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	277	37	12	17	17	704	215	1310
Future Volume (vph)	277	37	12	17	17	704	215	1310
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		4	5	2	1	6
Permitted Phases	4		4					
Detector Phase	4	4	4	4	5	2	1	6
Switch Phase								
Minimum Initial (s)	6.0	6.0	6.0	6.0	4.0	10.0	4.0	10.0
Minimum Split (s)	10.9	10.9	10.9	10.9	8.4	14.9	8.4	15.8
Total Split (s)	32.1	32.1	32.1	32.1	17.5	74.9	18.5	76.4
Total Split (%)	25.5%	25.5%	25.5%	25.5%	13.9%	59.4%	14.7%	60.6%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.4	3.9	3.4	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.9		4.9	4.4	4.9	4.4	5.8
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	None	C-Max

Intersection Summary
Cycle Length: 126
Actuated Cycle Length: 126
Offset: 107 (85%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 110
Control Type: Actuated-Coordinated

Splits and Phases: 20: Genesee Ave & Appleton Street/Lehrer Drive



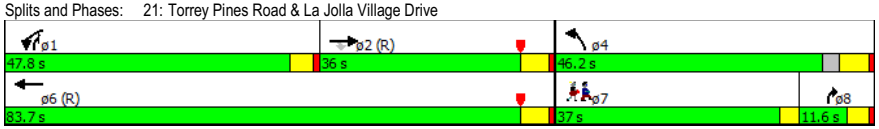
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	277	37	16	12	17	106	17	704	11	215	1310	328
Future Volume (vph)	277	37	16	12	17	106	17	704	11	215	1310	328
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	16	12	12	16	12	12	12	12	12	12	12
Total Lost time (s)		4.9			4.9		4.4	4.9		4.4	5.8	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frt		0.99			0.89		1.00	1.00		1.00	0.97	
Flt Protected		0.96			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		2013			1878		1770	3531		1770	3433	
Flt Permitted		0.53			0.98		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1110			1847		1770	3531		1770	3433	
Peak-hour factor, PHF	0.86	0.86	0.86	0.84	0.84	0.84	0.82	0.82	0.82	0.93	0.93	0.93
Adj. Flow (vph)	322	43	19	14	20	126	21	859	13	231	1409	353
RTOR Reduction (vph)	0	2	0	0	99	0	0	1	0	0	15	0
Lane Group Flow (vph)	0	382	0	0	61	0	21	871	0	231	1747	0
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4			4								
Actuated Green, G (s)		27.2			27.2		4.8	70.5		14.1	78.9	
Effective Green, g (s)		27.2			27.2		4.8	70.5		14.1	78.9	
Actuated g/C Ratio		0.22			0.22		0.04	0.56		0.11	0.63	
Clearance Time (s)		4.9			4.9		4.4	4.9		4.4	5.8	
Vehicle Extension (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		239			398		67	1975		198	2149	
v/s Ratio Prot							0.01	0.25		c0.13	c0.51	
v/s Ratio Perm		c0.34			0.03							
v/c Ratio		1.60			0.15		0.31	0.44		1.17	0.81	
Uniform Delay, d1		49.4			40.1		59.0	16.2		56.0	17.9	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		288.8			0.2		2.7	0.7		116.1	3.5	
Delay (s)		338.2			40.2		61.7	16.9		172.1	21.4	
Level of Service		F			D		E	B		F	C	
Approach Delay (s)		338.2			40.2			18.0			38.9	
Approach LOS		F			D			B			D	

Intersection Summary			
HCM 2000 Control Delay	67.0	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.07		
Actuated Cycle Length (s)	126.0	Sum of lost time (s)	15.1
Intersection Capacity Utilization	93.0%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	ø7	ø8
Lane Configurations								
Traffic Volume (vph)	1744	337	1437	775	125	1066		
Future Volume (vph)	1744	337	1437	775	125	1066		
Turn Type	NA	Perm	Prot	NA	Prot	pt+ov		
Protected Phases	2		1	6	4	8 1	7	8
Permitted Phases		2						
Detector Phase	2	2	1	6	4	8 1		
Switch Phase								
Minimum Initial (s)	10.0	10.0	4.0	10.0	4.0		4.0	4.0
Minimum Split (s)	15.4	15.4	8.4	15.3	9.6		37.0	9.6
Total Split (s)	36.0	36.0	47.8	83.7	46.2		37.0	11.6
Total Split (%)	27.2%	27.2%	36.1%	63.2%	34.9%		28%	9%
Yellow Time (s)	4.4	4.4	3.4	4.3	4.6		3.0	3.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		0.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0			
Total Lost Time (s)	5.4	5.4	4.4	5.3	5.6			
Lead/Lag	Lag	Lag	Lead				Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes				Yes	Yes
Recall Mode	C-Max	C-Max	None	C-Max	None		None	None

Intersection Summary
Cycle Length: 132.4
Actuated Cycle Length: 132.4
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 21: Torrey Pines Road & La Jolla Village Drive



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1744	337	1437	775	125	1066
Future Volume (vph)	1744	337	1437	775	125	1066
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.4	5.4	4.4	5.3	5.6	4.4
Lane Util. Factor	0.91	1.00	0.97	0.91	0.97	0.88
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	5085	1583	3433	5085	3433	2787
Flt Permitted	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (perm)	5085	1583	3433	5085	3433	2787
Peak-hour factor, PHF	0.90	0.90	0.89	0.89	0.91	0.91
Adj. Flow (vph)	1938	374	1615	871	137	1171
RTOR Reduction (vph)	0	146	0	0	0	0
Lane Group Flow (vph)	1938	228	1615	871	137	1171
Turn Type	NA	Perm	Prot	NA	Prot	pt+ov
Protected Phases	2		1	6	4	8 1
Permitted Phases		2				
Actuated Green, G (s)	30.6	30.6	43.4	78.5	43.0	92.0
Effective Green, g (s)	30.6	30.6	43.4	78.5	43.0	92.0
Actuated g/C Ratio	0.23	0.23	0.33	0.59	0.32	0.69
Clearance Time (s)	5.4	5.4	4.4	5.3	5.6	
Vehicle Extension (s)	5.5	5.5	2.0	8.0	2.0	
Lane Grp Cap (vph)	1175	365	1125	3014	1114	1936
v/s Ratio Prot	c0.38		c0.47	0.17	0.04	c0.42
v/s Ratio Perm		0.14				
v/c Ratio	1.65	0.62	1.44	0.29	0.12	0.60
Uniform Delay, d1	50.9	45.7	44.5	13.2	31.4	10.6
Progression Factor	0.66	0.43	1.00	1.00	1.00	1.00
Incremental Delay, d2	293.3	2.2	201.1	0.2	0.0	0.4
Delay (s)	326.9	22.1	245.6	13.5	31.5	11.0
Level of Service	F	C	F	B	C	B
Approach Delay (s)	277.6			164.3	13.1	
Approach LOS	F			F	B	

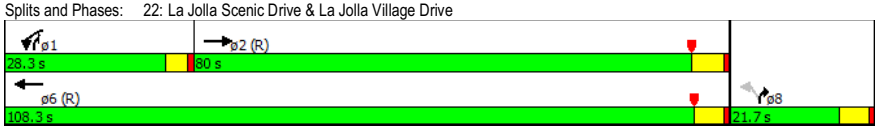
Intersection Summary			
HCM 2000 Control Delay	174.8	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.22		
Actuated Cycle Length (s)	132.4	Sum of lost time (s)	17.2
Intersection Capacity Utilization	91.1%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Configurations					
Traffic Volume (vph)	2644	569	2018	173	371
Future Volume (vph)	2644	569	2018	173	371
Turn Type	NA	Prot	NA	Perm	pt+ov
Protected Phases	2	1	6		8 1
Permitted Phases				8	
Detector Phase	2	1	6	8	8 1
Switch Phase					
Minimum Initial (s)	10.0	4.0	10.0	4.0	
Minimum Split (s)	15.7	8.4	15.3	9.5	
Total Split (s)	80.0	28.3	108.3	21.7	
Total Split (%)	61.5%	21.8%	83.3%	16.7%	
Yellow Time (s)	4.7	3.4	4.3	4.5	
All-Red Time (s)	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.7	4.4	5.3	5.5	
Lead/Lag	Lag	Lead			
Lead-Lag Optimize?	Yes	Yes			
Recall Mode	C-Max	None	C-Max	None	

Intersection Summary
Cycle Length: 130
Actuated Cycle Length: 130
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 22: La Jolla Scenic Drive & La Jolla Village Drive



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	2644	158	569	2018	173	371
Future Volume (vph)	2644	158	569	2018	173	371
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.7		4.4	5.3	5.5	5.5
Lane Util. Factor	0.91		0.97	0.91	1.00	0.88
Frt	0.99		1.00	1.00	1.00	0.85
Flt Protected	1.00		0.95	1.00	0.95	1.00
Satd. Flow (prot)	5042		3433	5085	1770	2787
Flt Permitted	1.00		0.95	1.00	0.95	1.00
Satd. Flow (perm)	5042		3433	5085	1770	2787
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.83	0.83
Adj. Flow (vph)	2874	172	618	2193	208	447
RTOR Reduction (vph)	5	0	0	0	0	1
Lane Group Flow (vph)	3041	0	618	2193	208	446
Turn Type	NA		Prot	NA	Perm	pt+ov
Protected Phases	2		1	6		8 1
Permitted Phases					8	
Actuated Green, G (s)	74.3		23.9	103.0	16.2	45.6
Effective Green, g (s)	74.3		23.9	103.0	16.2	45.6
Actuated g/C Ratio	0.57		0.18	0.79	0.12	0.35
Clearance Time (s)	5.7		4.4	5.3	5.5	
Vehicle Extension (s)	4.0		2.0	5.9	2.0	
Lane Grp Cap (vph)	2881		631	4028	220	977
v/s Ratio Prot	c0.60		c0.18	0.43		0.16
v/s Ratio Perm					c0.12	
v/c Ratio	1.06		0.98	0.54	0.95	0.46
Uniform Delay, d1	27.9		52.8	4.9	56.5	32.6
Progression Factor	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	33.8		30.2	0.5	44.8	0.1
Delay (s)	61.6		83.0	5.5	101.2	32.7
Level of Service	E		F	A	F	C
Approach Delay (s)	61.6			22.5	54.5	
Approach LOS	E			C	D	

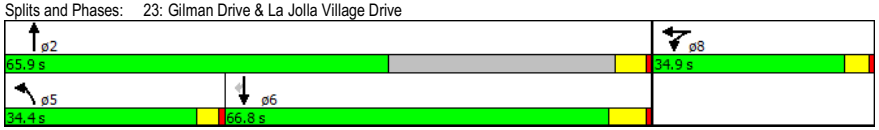
Intersection Summary			
HCM 2000 Control Delay	44.0	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.02		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	15.6
Intersection Capacity Utilization	93.4%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	WBT	NBL	NBT	SBT	SBR
Lane Configurations					
Traffic Volume (vph)	0	211	214	1077	155
Future Volume (vph)	0	211	214	1077	155
Turn Type	NA	Prot	NA	NA	Perm
Protected Phases	8	5	2	6	
Permitted Phases					6
Detector Phase	8	5	2	6	6
Switch Phase					
Minimum Initial (s)	4.0	4.0	10.0	10.0	10.0
Minimum Split (s)	8.9	8.4	15.9	16.8	16.8
Total Split (s)	34.9	34.4	65.9	66.8	66.8
Total Split (%)	25.6%	25.3%	48.4%	49.1%	49.1%
Yellow Time (s)	3.9	3.4	4.9	5.8	5.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.4	5.9	6.8	6.8
Lead/Lag		Lead		Lag	Lag
Lead-Lag Optimize?		Yes		Yes	Yes
Recall Mode	None	None	Min	Min	Min

Intersection Summary
Cycle Length: 136.1
Actuated Cycle Length: 83.5
Natural Cycle: 60
Control Type: Actuated-Uncoordinated

Splits and Phases: 23: Gilman Drive & La Jolla Village Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	32	0	154	211	214	0	0	1077	155
Future Volume (vph)	0	0	0	32	0	154	211	214	0	0	1077	155
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.9		4.4	5.9			6.8	6.8
Lane Util. Factor					1.00		1.00	0.95			0.95	1.00
Frt					0.89		1.00	1.00			1.00	0.85
Flt Protected					0.99		0.95	1.00			1.00	1.00
Satd. Flow (prot)					1641		1770	3539			3539	1583
Flt Permitted					0.99		0.95	1.00			1.00	1.00
Satd. Flow (perm)					1641		1770	3539			3539	1583
Peak-hour factor, PHF	0.25	0.25	0.25	0.83	0.83	0.83	0.83	0.83	0.83	0.97	0.97	0.97
Adj. Flow (vph)	0	0	0	39	0	186	254	258	0	0	1110	160
RTOR Reduction (vph)	0	0	0	0	142	0	0	0	0	0	0	44
Lane Group Flow (vph)	0	0	0	0	83	0	254	258	0	0	1110	116
Turn Type				Split	NA		Prot	NA			NA	Perm
Protected Phases				8	8		5	2			6	
Permitted Phases												6
Actuated Green, G (s)					10.2		19.0	61.6			37.3	37.3
Effective Green, g (s)					10.2		19.0	61.6			37.3	37.3
Actuated g/C Ratio					0.12		0.23	0.75			0.45	0.45
Clearance Time (s)					4.9		4.4	5.9			6.8	6.8
Vehicle Extension (s)					3.0		3.0	3.0			3.0	3.0
Lane Grp Cap (vph)					202		407	2639			1598	714
v/s Ratio Prot					c0.05		c0.14	0.07			c0.31	
v/s Ratio Perm												0.07
v/c Ratio					0.41		0.62	0.10			0.69	0.16
Uniform Delay, d1					33.4		28.6	2.9			18.1	13.4
Progression Factor					1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2					1.4		3.0	0.0			1.3	0.1
Delay (s)					34.8		31.6	2.9			19.4	13.5
Level of Service					C		C	A			B	B
Approach Delay (s)		0.0			34.8			17.1			18.7	
Approach LOS		A			C			B			B	

Intersection Summary				
HCM 2000 Control Delay	20.1	HCM 2000 Level of Service	C	
HCM 2000 Volume to Capacity ratio	0.63			
Actuated Cycle Length (s)	82.6	Sum of lost time (s)	16.1	
Intersection Capacity Utilization	Err%	ICU Level of Service	H	
Analysis Period (min)	15			

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	11	6	1047	0	0	0	0	415	100	192	913	0
Future Volume (Veh/h)	11	6	1047	0	0	0	0	415	100	192	913	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.97	0.97	0.97	0.25	0.25	0.25	0.83	0.83	0.83	0.96	0.96	0.96
Hourly flow rate (vph)	11	6	1079	0	0	0	0	500	120	200	951	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)											483	
pX, platoon unblocked	0.76	0.76	0.76	0.76	0.76		0.76					
vC, conflicting volume	1601	1971	476	2458	1851	250	951			620		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1170	1654	0	2291	1497	250	320			620		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	88	90	0	0	100	100	100			79		
cM capacity (veh/h)	95	59	829	0	73	750	945			956		

Direction, Lane #	EB 1	EB 2	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	11	1085	250	250	120	200	476	476
Volume Left	11	0	0	0	0	200	0	0
Volume Right	0	1079	0	0	120	0	0	0
cSH	95	773	1700	1700	1700	956	1700	1700
Volume to Capacity	0.12	1.40	0.15	0.15	0.07	0.21	0.28	0.28
Queue Length 95th (ft)	9	1188	0	0	0	20	0	0
Control Delay (s)	47.8	206.1	0.0	0.0	0.0	9.8	0.0	0.0
Lane LOS	E	F				A		
Approach Delay (s)	204.5		0.0			1.7		
Approach LOS	F							

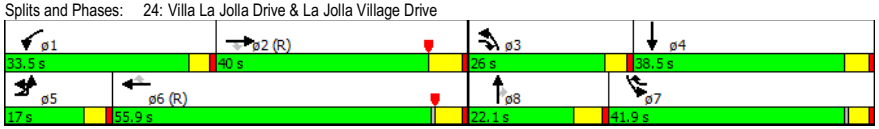
Intersection Summary				
Average Delay	78.9			
Intersection Capacity Utilization	Err%	ICU Level of Service	H	
Analysis Period (min)	15			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	61	1898	66	592	1128	393	448	236	649	1223	717
Future Volume (vph)	61	1898	66	592	1128	393	448	236	649	1223	717
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA
Protected Phases	5	2	3	1	6	7	3	8		7	4
Permitted Phases			2			6			8		
Detector Phase	5	2	3	1	6	7	3	8	8	7	4
Switch Phase											
Minimum Initial (s)	4.0	10.0	4.0	4.0	10.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.4	16.4	22.4	8.4	15.3	8.4	22.4	9.5	9.5	8.4	8.9
Total Split (s)	17.0	40.0	26.0	33.5	55.9	41.9	26.0	22.1	22.1	41.9	38.5
Total Split (%)	12.3%	29.0%	18.8%	24.3%	40.5%	30.4%	18.8%	16.0%	16.0%	30.4%	27.9%
Yellow Time (s)	3.4	5.4	3.4	3.4	4.3	3.4	3.4	4.5	4.5	3.4	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	6.4	4.4	4.4	5.3	4.4	4.4	5.5	5.5	4.4	4.9
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	C-Max	None	None	None	None	None	None

Intersection Summary

Cycle Length: 138
Actuated Cycle Length: 138
Offset: 44 (32%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 24: Villa La Jolla Drive & La Jolla Village Drive



Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	54	61	1898	66	592	1128	393	448	236	649	1223	717
Future Volume (vph)	54	61	1898	66	592	1128	393	448	236	649	1223	717
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.4	6.4	4.4	4.4	5.3	4.4	4.4	5.5	5.5	4.4	4.9
Lane Util. Factor		1.00	0.91	1.00	0.97	0.91	1.00	0.97	0.95	0.95	0.97	1.00
Frt		1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.93	0.85	1.00	0.98
Flt Protected		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)		1770	5085	1583	3433	5085	1583	3433	1639	1504	3433	1823
Flt Permitted		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Satd. Flow (perm)		1770	5085	1583	3433	5085	1583	3433	1639	1504	3433	1823
Peak-hour factor, PHF	0.92	0.80	0.80	0.80	0.85	0.85	0.85	0.82	0.82	0.82	0.82	0.82
Adj. Flow (vph)	59	76	2372	82	696	1327	462	546	288	791	1491	874
RTOR Reduction (vph)	0	0	0	50	0	0	65	0	26	258	0	5
Lane Group Flow (vph)	0	135	2373	33	696	1327	397	546	539	256	1491	1012
Turn Type	Prot	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA
Protected Phases	5	5	2	3	1	6	7	3	8		7	4
Permitted Phases				2			6			8		
Actuated Green, G (s)		12.2	33.7	55.3	29.0	51.6	89.6	21.6	16.6	16.6	38.0	33.6
Effective Green, g (s)		12.2	33.7	55.3	29.0	51.6	89.6	21.6	16.6	16.6	38.0	33.6
Actuated g/C Ratio		0.09	0.24	0.40	0.21	0.37	0.65	0.16	0.12	0.12	0.28	0.24
Clearance Time (s)		4.4	6.4	4.4	4.4	5.3	4.4	4.4	5.5	5.5	4.4	4.9
Vehicle Extension (s)		2.0	4.4	2.0	2.0	4.7	2.0	2.0	3.3	3.3	2.0	2.0
Lane Grp Cap (vph)		156	1241	634	721	1901	1027	537	197	180	945	443
v/s Ratio Prot		0.08	c0.47	0.01	c0.20	0.26	0.11	0.16	c0.33		c0.43	c0.56
v/s Ratio Perm				0.01			0.14			0.17		
v/c Ratio		0.87	1.91	0.05	0.97	0.70	0.39	1.02	2.74	1.42	1.58	2.29
Uniform Delay, d1		62.1	52.1	25.3	54.0	36.6	11.3	58.2	60.7	60.7	50.0	52.2
Progression Factor		1.00	1.00	1.00	1.15	0.71	0.29	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2		35.1	413.5	0.0	22.8	1.9	0.1	43.1	796.5	219.8	265.1	585.6
Delay (s)		97.2	465.6	25.3	85.1	27.8	3.4	101.3	857.2	280.5	315.1	637.8
Level of Service		F	F	C	F	C	A	F	F	F	F	F
Approach Delay (s)			432.3			39.3			420.8			446.0
Approach LOS			F			D			F			F

Intersection Summary

HCM 2000 Control Delay	328.0	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.85		
Actuated Cycle Length (s)	138.0	Sum of lost time (s)	20.7
Intersection Capacity Utilization	131.3%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

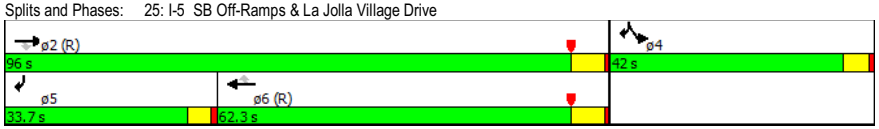
Movement	SBR
Lane Configurations	
Traffic Volume (vph)	117
Future Volume (vph)	117
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.82
Adj. Flow (vph)	143
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

Intersection Summary

Lane Group	EBT	EBR	WBT	WBR	SBL	SBR	ø5
Lane Configurations							
Traffic Volume (vph)	2154	1421	1522	1191	887	589	
Future Volume (vph)	2154	1421	1522	1191	887	589	
Turn Type	NA	Perm	NA	Perm	Prot	custom	
Protected Phases	2		6		4	4 5	5
Permitted Phases		2		6			
Detector Phase	2	2	6	6	4	4 5	
Switch Phase							
Minimum Initial (s)	10.0	10.0	15.0	15.0	5.0		2.0
Minimum Split (s)	16.2	16.2	21.2	21.2	10.1		6.7
Total Split (s)	96.0	96.0	62.3	62.3	42.0		33.7
Total Split (%)	69.6%	69.6%	45.1%	45.1%	30.4%		24%
Yellow Time (s)	5.2	5.2	5.2	5.2	4.1		3.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	6.2	6.2	6.2	6.2	5.1		
Lead/Lag			Lag	Lag			Lead
Lead-Lag Optimize?			Yes	Yes			Yes
Recall Mode	C-Max	C-Max	C-Max	C-Max	Min		None

Intersection Summary
Cycle Length: 138
Actuated Cycle Length: 138
Offset: 59 (43%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 100
Control Type: Actuated-Coordinated

Splits and Phases: 25: I-5 SB Off-Ramps & La Jolla Village Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	2154	1421	0	1522	1191	0	0	0	887	0	589
Future Volume (vph)	0	2154	1421	0	1522	1191	0	0	0	887	0	589
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.2	6.2		6.2	6.2				5.1		5.1
Lane Util. Factor		0.86	1.00		0.91	1.00				0.97		0.88
Frt		1.00	0.85		1.00	0.85				1.00		0.85
Flt Protected		1.00	1.00		1.00	1.00				0.95		1.00
Satd. Flow (prot)		6408	1583		5085	1583				3433		2787
Flt Permitted		1.00	1.00		1.00	1.00				0.95		1.00
Satd. Flow (perm)		6408	1583		5085	1583				3433		2787
Peak-hour factor, PHF	0.93	0.93	0.93	0.94	0.94	0.94	0.25	0.25	0.25	0.84	0.84	0.84
Adj. Flow (vph)	0	2316	1528	0	1619	1267	0	0	0	1056	0	701
RTOR Reduction (vph)	0	0	381	0	0	457	0	0	0	0	0	16
Lane Group Flow (vph)	0	2316	1147	0	1619	810	0	0	0	1056	0	685
Turn Type		NA	Perm		NA	Perm				Prot		custom
Protected Phases		2			6					4		4 5
Permitted Phases			2			6						
Actuated Green, G (s)		89.8	89.8		77.0	77.0				36.9		50.1
Effective Green, g (s)		89.8	89.8		77.0	77.0				36.9		50.1
Actuated g/C Ratio		0.65	0.65		0.56	0.56				0.27		0.36
Clearance Time (s)		6.2	6.2		6.2	6.2				5.1		
Vehicle Extension (s)		2.0	2.0		2.0	2.0				2.0		
Lane Grp Cap (vph)		4169	1030		2837	883				917		1011
v/s Ratio Prot		0.36			0.32					c0.31		0.25
v/s Ratio Perm			c0.72			0.51						
v/c Ratio		0.56	1.11		0.57	0.92				1.15		0.68
Uniform Delay, d1		13.2	24.1		19.8	27.6				50.6		37.1
Progression Factor		0.67	5.12		0.81	1.84				1.00		1.00
Incremental Delay, d2		0.0	52.6		0.7	13.1				80.8		1.4
Delay (s)		8.9	176.0		16.6	63.8				131.4		38.6
Level of Service		A	F		B	E				F		D
Approach Delay (s)		75.3			37.3			0.0			94.3	
Approach LOS		E			D			A			F	

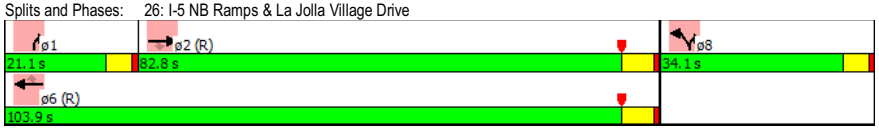
Intersection Summary			
HCM 2000 Control Delay	66.3	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.17		
Actuated Cycle Length (s)	138.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	93.2%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBT	EBR	WBT	WBR	NBL	NBR	ø1
Lane Configurations							
Traffic Volume (vph)	1719	1459	2341	720	304	344	
Future Volume (vph)	1719	1459	2341	720	304	344	
Turn Type	NA	Perm	NA	Perm	Prot	custom	
Protected Phases	2		6		8	1 8	1
Permitted Phases		2		6			
Detector Phase	2	2	6	6	8	1 8	
Switch Phase							
Minimum Initial (s)	16.0	16.0	16.0	16.0	5.0		2.0
Minimum Split (s)	36.2	36.2	22.2	22.2	10.1		7.1
Total Split (s)	82.8	82.8	103.9	103.9	34.1		21.1
Total Split (%)	60.0%	60.0%	75.3%	75.3%	24.7%		15%
Yellow Time (s)	5.2	5.2	5.2	5.2	4.1		4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	6.2	6.2	6.2	6.2	5.1		
Lead/Lag	Lag	Lag					Lead
Lead-Lag Optimize?	Yes	Yes					Yes
Recall Mode	C-Max	C-Max	C-Max	C-Max	Min		None

Intersection Summary
Cycle Length: 138
Actuated Cycle Length: 138
Offset: 65 (47%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 120
Control Type: Actuated-Coordinated

Splits and Phases: 26: I-5 NB Ramps & La Jolla Village Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1719	1459	0	2341	720	304	0	344	0	0	0
Future Volume (vph)	0	1719	1459	0	2341	720	304	0	344	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.2	6.2		6.2	6.2	5.1		5.1			
Lane Util. Factor		0.91	1.00		0.91	1.00	0.97		0.88			
Frt		1.00	0.85		1.00	0.85	1.00		0.85			
Flt Protected		1.00	1.00		1.00	1.00	0.95		1.00			
Satd. Flow (prot)		5085	1583		5085	1583	3433		2787			
Flt Permitted		1.00	1.00		1.00	1.00	0.95		1.00			
Satd. Flow (perm)		5085	1583		5085	1583	3433		2787			
Peak-hour factor, PHF	0.98	0.98	0.98	0.92	0.92	0.92	0.92	0.92	0.92	0.25	0.25	0.25
Adj. Flow (vph)	0	1754	1489	0	2545	783	330	0	374	0	0	0
RTOR Reduction (vph)	0	0	333	0	0	142	0	0	19	0	0	0
Lane Group Flow (vph)	0	1754	1156	0	2545	641	330	0	355	0	0	0
Turn Type		NA	Perm		NA	Perm	Prot		custom			
Protected Phases		2			6		8		1 8			
Permitted Phases			2			6						
Actuated Green, G (s)		95.9	95.9		106.2	106.2	20.5		30.8			
Effective Green, g (s)		95.9	95.9		106.2	106.2	20.5		30.8			
Actuated g/C Ratio		0.69	0.69		0.77	0.77	0.15		0.22			
Clearance Time (s)		6.2	6.2		6.2	6.2	5.1					
Vehicle Extension (s)		2.0	2.0		2.0	2.0	2.0					
Lane Grp Cap (vph)		3533	1100		3913	1218	509		622			
v/s Ratio Prot		0.34			c0.50		c0.10		0.13			
v/s Ratio Perm			c0.73			0.41						
v/c Ratio		0.50	1.05		0.65	0.53	0.65		0.57			
Uniform Delay, d1		9.8	21.0		7.3	6.2	55.4		47.7			
Progression Factor		1.10	3.56		1.00	1.00	1.00		1.00			
Incremental Delay, d2		0.3	36.7		0.9	1.6	2.1		0.8			
Delay (s)		11.1	111.6		8.2	7.8	57.5		48.5			
Level of Service		B	F		A	A	E		D			
Approach Delay (s)		57.3			8.1			52.7			0.0	
Approach LOS		E			A			D			A	

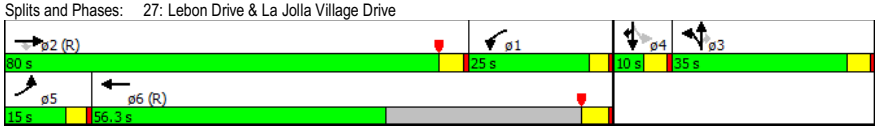
Intersection Summary			
HCM 2000 Control Delay	34.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.98		
Actuated Cycle Length (s)	138.0	Sum of lost time (s)	16.4
Intersection Capacity Utilization	95.5%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	10	2518	283	396	2187	542	9	169	9	2	6
Future Volume (vph)	10	2518	283	396	2187	542	9	169	9	2	6
Turn Type	Prot	NA	Perm	Prot	NA	Split	NA	Perm	Perm	NA	Prot
Protected Phases	5	2		1	6	3	3			4	4
Permitted Phases			2					3	4		
Detector Phase	5	2	2	1	6	3	3	3	4	4	4
Switch Phase											
Minimum Initial (s)	4.0	10.0	10.0	4.0	10.0	7.0	7.0	7.0	4.0	4.0	4.0
Minimum Split (s)	8.4	15.3	15.3	8.4	15.7	11.9	11.9	11.9	8.9	8.9	8.9
Total Split (s)	15.0	80.0	80.0	25.0	56.3	35.0	35.0	35.0	10.0	10.0	10.0
Total Split (%)	10.0%	53.3%	53.3%	16.7%	37.5%	23.3%	23.3%	23.3%	6.7%	6.7%	6.7%
Yellow Time (s)	3.4	4.3	4.3	3.4	4.7	3.9	3.9	3.9	3.9	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	4.4	5.3	5.3	4.4	5.7	4.9	4.9	4.9		4.9	4.9
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lag	Lag	Lag	Lead	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	None	None	None	None	None	None

Intersection Summary
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 3 (2%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 27: Lebon Drive & La Jolla Village Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	2518	283	396	2187	10	542	9	169	9	2	6
Future Volume (vph)	10	2518	283	396	2187	10	542	9	169	9	2	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.3	5.3	4.4	5.7		4.9	4.9	4.9		4.9	4.9
Lane Util. Factor	1.00	0.91	1.00	0.97	0.91		0.97	0.95	0.95		1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00		1.00	0.87	0.85		1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00		0.96	1.00
Satd. Flow (prot)	1770	5085	1583	3433	5082		3433	1531	1504		1792	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00		0.89	1.00
Satd. Flow (perm)	1770	5085	1583	3433	5082		3433	1531	1504		1663	1583
Peak-hour factor, PHF	0.94	0.94	0.94	0.85	0.85	0.85	0.83	0.83	0.83	0.80	0.80	0.80
Adj. Flow (vph)	11	2679	301	466	2573	12	653	11	204	11	2	8
RTOR Reduction (vph)	0	0	122	0	0	0	0	78	84	0	0	8
Lane Group Flow (vph)	11	2679	179	466	2585	0	653	31	22	0	14	0
Turn Type	Prot	NA	Perm	Prot	NA		Split	NA	Perm	Perm	NA	Prot
Protected Phases	5	2		1	6		3	3			4	4
Permitted Phases			2						3	4		
Actuated Green, G (s)	2.6	72.1	72.1	23.2	92.3		31.2	31.2	31.2		4.0	4.0
Effective Green, g (s)	2.6	72.1	72.1	23.2	92.3		31.2	31.2	31.2		4.0	4.0
Actuated g/C Ratio	0.02	0.48	0.48	0.15	0.62		0.21	0.21	0.21		0.03	0.03
Clearance Time (s)	4.4	5.3	5.3	4.4	5.7		4.9	4.9	4.9		4.9	4.9
Vehicle Extension (s)	2.0	6.1	6.1	2.0	5.6		6.5	6.5	6.5		2.0	2.0
Lane Grp Cap (vph)	30	2444	760	530	3127		714	318	312		44	42
v/s Ratio Prot	0.01	c0.53		c0.14	0.51		c0.19	0.02				0.00
v/s Ratio Perm			0.11						0.01		c0.01	
v/c Ratio	0.37	1.10	0.24	0.88	0.83		0.91	0.10	0.07		0.32	0.01
Uniform Delay, d1	72.9	39.0	22.8	62.0	22.6		58.1	48.0	47.7		71.7	71.1
Progression Factor	1.00	1.00	1.00	0.81	0.69		1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	2.8	50.5	0.7	1.7	0.2		17.8	0.4	0.3		1.5	0.0
Delay (s)	75.6	89.4	23.5	51.9	15.9		75.9	48.5	48.1		73.2	71.1
Level of Service	E	F	C	D	B		E	D	D		E	E
Approach Delay (s)		82.7			21.4			69.0			72.4	
Approach LOS		F			C			E			E	

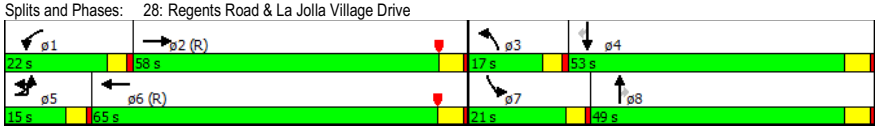
Intersection Summary				
HCM 2000 Control Delay	54.0	HCM 2000 Level of Service	D	
HCM 2000 Volume to Capacity ratio	0.99			
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	19.9	
Intersection Capacity Utilization	94.2%	ICU Level of Service	F	
Analysis Period (min)	15			

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	428	1988	455	2084	414	223	76	174	753	820
Future Volume (vph)	428	1988	455	2084	414	223	76	174	753	820
Turn Type	Prot	NA	Prot	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2	1	6	3	8		7	4	
Permitted Phases							8			4
Detector Phase	5	2	1	6	3	8	8	7	4	4
Switch Phase										
Minimum Initial (s)	4.0	10.0	4.0	10.0	4.0	10.0	10.0	4.0	10.0	10.0
Minimum Split (s)	8.4	41.3	8.4	35.4	8.4	41.3	41.3	8.4	35.3	35.3
Total Split (s)	15.0	58.0	22.0	65.0	17.0	49.0	49.0	21.0	53.0	53.0
Total Split (%)	10.0%	38.7%	14.7%	43.3%	11.3%	32.7%	32.7%	14.0%	35.3%	35.3%
Yellow Time (s)	3.4	4.3	3.4	4.4	3.4	4.3	4.3	3.4	4.3	4.3
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.3	4.4	5.4	4.4	5.3	5.3	4.4	5.3	5.3
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	None	None	None	None	None

Intersection Summary
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 5 (3%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 28: Regents Road & La Jolla Village Drive



Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	35	428	1988	161	455	2084	63	414	223	76	174	753
Future Volume (vph)	35	428	1988	161	455	2084	63	414	223	76	174	753
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.4	5.3		4.4	5.4		4.4	5.3	5.3	4.4	5.3
Lane Util. Factor		0.97	0.91		0.97	0.91		0.97	0.95	1.00	1.00	0.95
Frt		1.00	0.99		1.00	1.00		1.00	1.00	0.85	1.00	1.00
Flt Protected		0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)		3433	5028		3433	5063		3433	3539	1583	1770	3539
Flt Permitted		0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (perm)		3433	5028		3433	5063		3433	3539	1583	1770	3539
Peak-hour factor, PHF	0.92	0.96	0.96	0.96	0.90	0.90	0.90	0.82	0.82	0.82	0.89	0.89
Adj. Flow (vph)	38	446	2071	168	506	2316	70	505	272	93	196	846
RTOR Reduction (vph)	0	0	6	0	0	2	0	0	0	66	0	0
Lane Group Flow (vph)	0	484	2233	0	506	2384	0	505	272	27	196	846
Turn Type	Prot	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA
Protected Phases	5	5	2		1	6		3	8		7	4
Permitted Phases										8		
Actuated Green, G (s)		10.6	52.7		17.6	59.6		12.6	43.7	43.7	16.6	47.7
Effective Green, g (s)		10.6	52.7		17.6	59.6		12.6	43.7	43.7	16.6	47.7
Actuated g/C Ratio		0.07	0.35		0.12	0.40		0.08	0.29	0.29	0.11	0.32
Clearance Time (s)		4.4	5.3		4.4	5.4		4.4	5.3	5.3	4.4	5.3
Vehicle Extension (s)		3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)		242	1766		402	2011		288	1031	461	195	1125
v/s Ratio Prot		c0.14	c0.44		c0.15	0.47		c0.15	0.08		0.11	0.24
v/s Ratio Perm										0.02		
v/c Ratio		2.00	1.26		1.26	1.19		1.75	0.26	0.06	1.01	0.75
Uniform Delay, d1		69.7	48.6		66.2	45.2		68.7	40.8	38.3	66.7	45.8
Progression Factor		1.33	0.70		1.11	0.85		0.94	0.98	2.17	1.00	1.00
Incremental Delay, d2		453.7	120.1		123.7	85.5		353.0	0.1	0.1	65.8	2.9
Delay (s)		546.5	154.4		197.0	124.0		417.3	40.2	83.1	132.5	48.7
Level of Service		F	F		F	F		F	D	F	F	D
Approach Delay (s)			224.1			136.8			263.7			205.4
Approach LOS			F			F			F			F

Intersection Summary			
HCM 2000 Control Delay	193.9	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.50		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	19.5
Intersection Capacity Utilization	133.7%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	820
Future Volume (vph)	820
Ideal Flow (vphpl)	1900
Total Lost time (s)	5.3
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1583
Flt Permitted	1.00
Satd. Flow (perm)	1583
Peak-hour factor, PHF	0.89
Adj. Flow (vph)	921
RTOR Reduction (vph)	77
Lane Group Flow (vph)	844
Turn Type	Perm
Protected Phases	
Permitted Phases	4
Actuated Green, G (s)	47.7
Effective Green, g (s)	47.7
Actuated g/C Ratio	0.32
Clearance Time (s)	5.3
Vehicle Extension (s)	3.0
Lane Grp Cap (vph)	503
v/s Ratio Prot	
v/s Ratio Perm	c0.53
v/c Ratio	1.68
Uniform Delay, d1	51.1
Progression Factor	1.00
Incremental Delay, d2	313.6
Delay (s)	364.8
Level of Service	F
Approach Delay (s)	
Approach LOS	

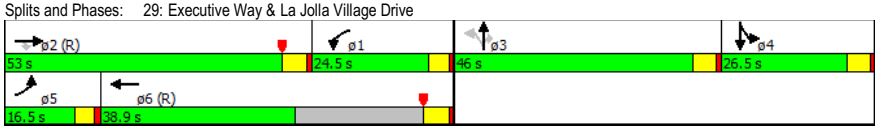
Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	83	1473	429	590	1436	354	70	547	412	229
Future Volume (vph)	83	1473	429	590	1436	354	70	547	412	229
Turn Type	Prot	NA	Perm	Prot	NA	Perm	NA	Perm	Split	NA
Protected Phases	5	2		1	6		3		4	4
Permitted Phases			2			3		3		
Detector Phase	5	2	2	1	6	3	3	3	4	4
Switch Phase										
Minimum Initial (s)	4.0	10.0	10.0	4.0	10.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.4	15.3	15.3	8.4	15.3	45.9	45.9	45.9	8.9	8.9
Total Split (s)	16.5	53.0	53.0	24.5	38.9	46.0	46.0	46.0	26.5	26.5
Total Split (%)	11.0%	35.3%	35.3%	16.3%	25.9%	30.7%	30.7%	30.7%	17.7%	17.7%
Yellow Time (s)	3.4	4.3	4.3	3.4	4.3	3.9	3.9	3.9	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.3	5.3	4.4	5.3	4.9	4.9	4.9	4.9	4.9
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lead	Lead	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	None	None	None	None	None

Intersection Summary

Cycle Length: 150
Actuated Cycle Length: 150
Offset: 81 (54%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 140
Control Type: Actuated-Coordinated

Splits and Phases: 29: Executive Way & La Jolla Village Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	83	1473	429	590	1436	112	354	70	547	412	229	280
Future Volume (vph)	83	1473	429	590	1436	112	354	70	547	412	229	280
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.3	5.3	4.4	5.3		4.9	4.9	4.9	4.9	4.9	
Lane Util. Factor	1.00	0.91	1.00	0.97	0.91		0.95	0.95	1.00	1.00	0.95	
Frt	1.00	1.00	0.85	1.00	0.99		1.00	1.00	0.85	1.00	0.92	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	0.97	1.00	0.95	1.00	
Satd. Flow (prot)	1770	5085	1583	3433	5030		1681	1711	1583	1770	3247	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.10	0.08	1.00	0.95	1.00	
Satd. Flow (perm)	1770	5085	1583	3433	5030		172	145	1583	1770	3247	
Peak-hour factor, PHF	0.83	0.83	0.83	0.80	0.80	0.80	0.89	0.89	0.89	0.84	0.84	0.84
Adj. Flow (vph)	100	1775	517	738	1795	140	398	79	615	490	273	333
RTOR Reduction (vph)	0	0	271	0	6	0	0	0	183	0	148	0
Lane Group Flow (vph)	100	1775	246	738	1929	0	227	250	432	490	458	0
Turn Type	Prot	NA	Perm	Prot	NA		Perm	NA	Perm	Split	NA	
Protected Phases	5	2		1	6			3		4	4	
Permitted Phases			2				3		3			
Actuated Green, G (s)	11.1	47.7	47.7	20.1	56.7		41.1	41.1	41.1	21.6	21.6	
Effective Green, g (s)	11.1	47.7	47.7	20.1	56.7		41.1	41.1	41.1	21.6	21.6	
Actuated g/C Ratio	0.07	0.32	0.32	0.13	0.38		0.27	0.27	0.27	0.14	0.14	
Clearance Time (s)	4.4	5.3	5.3	4.4	5.3		4.9	4.9	4.9	4.9	4.9	
Vehicle Extension (s)	2.0	5.8	5.8	2.0	5.5		2.0	2.0	2.0	6.1	6.1	
Lane Grp Cap (vph)	130	1617	503	460	1901		47	39	433	254	467	
v/s Ratio Prot	0.06	c0.35		c0.21	0.38					c0.28	0.14	
v/s Ratio Perm			0.16				1.32	c1.72	0.27			
v/c Ratio	0.77	1.10	0.49	1.60	1.01		4.83	6.41	1.00	1.93	0.98	
Uniform Delay, d1	68.2	51.1	41.3	65.0	46.6		54.4	54.4	54.4	64.2	64.0	
Progression Factor	0.66	0.97	1.55	0.62	0.43		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	14.4	50.8	2.2	274.5	14.2		1770.4	2488.1	42.3	432.3	36.9	
Delay (s)	59.2	100.7	66.3	314.8	34.3		1824.9	2542.6	96.7	496.5	100.9	
Level of Service	E	F	E	F	C		F	F	F	F	F	
Approach Delay (s)		91.5			111.8			1015.9			277.8	
Approach LOS		F			F			F			F	

Intersection Summary

HCM 2000 Control Delay	266.3	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	2.95		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	19.5
Intersection Capacity Utilization	97.7%	ICU Level of Service	F
Analysis Period (min)	15		

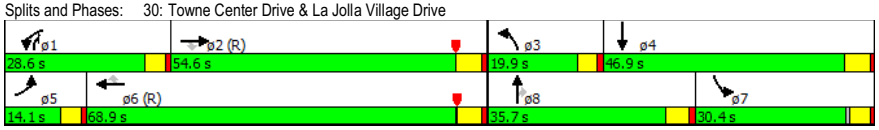
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	40	2279	153	493	1827	181	189	75	730	777	426
Future Volume (vph)	40	2279	153	493	1827	181	189	75	730	777	426
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA
Protected Phases	5	2		1	6		3	8	1	7	4
Permitted Phases			2			6			8		
Detector Phase	5	2	2	1	6	6	3	8	1	7	4
Switch Phase											
Minimum Initial (s)	4.0	10.0	10.0	4.0	10.0	10.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.4	33.5	33.5	8.4	15.3	15.3	8.4	9.0	8.4	8.4	9.3
Total Split (s)	14.1	54.6	54.6	28.6	68.9	68.9	19.9	35.7	28.6	30.4	46.9
Total Split (%)	9.4%	36.4%	36.4%	19.1%	45.9%	45.9%	13.3%	23.8%	19.1%	20.3%	31.3%
Yellow Time (s)	3.4	4.5	4.5	3.4	4.3	4.3	3.4	4.0	3.4	3.4	4.3
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.5	5.5	4.4	5.3	5.3	4.4	5.0	4.4	4.4	5.3
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lead	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	Max	None	None	None

Intersection Summary

Cycle Length: 150
Actuated Cycle Length: 150
Offset: 93 (62%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 30: Towne Center Drive & La Jolla Village Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	40	2279	153	493	1827	181	189	75	730	777	426	98
Future Volume (vph)	40	2279	153	493	1827	181	189	75	730	777	426	98
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.5	5.5	4.4	5.3	5.3	4.4	5.0	4.4	4.4	5.3	
Lane Util. Factor	0.97	0.91	1.00	0.97	0.86	0.86	0.97	1.00	0.88	0.97	0.95	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.97	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	3433	5085	1583	3433	4799	1362	3433	1863	2787	3433	3440	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	3433	5085	1583	3433	4799	1362	3433	1863	2787	3433	3440	
Peak-hour factor, PHF	0.84	0.84	0.84	0.80	0.80	0.80	0.80	0.80	0.80	0.87	0.87	0.87
Adj. Flow (vph)	48	2713	182	616	2284	226	236	94	912	893	490	113
RTOR Reduction (vph)	0	0	100	0	1	65	0	0	36	0	13	0
Lane Group Flow (vph)	48	2713	82	616	2306	138	236	94	877	893	590	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	
Protected Phases	5	2		1	6		3	8	1	7	4	
Permitted Phases			2			6			8			
Actuated Green, G (s)	6.4	49.1	49.1	24.2	67.1	67.1	14.4	30.7	54.9	26.7	42.7	
Effective Green, g (s)	6.4	49.1	49.1	24.2	67.1	67.1	14.4	30.7	54.9	26.7	42.7	
Actuated g/C Ratio	0.04	0.33	0.33	0.16	0.45	0.45	0.10	0.20	0.37	0.18	0.28	
Clearance Time (s)	4.4	5.5	5.5	4.4	5.3	5.3	4.4	5.0	4.4	4.4	5.3	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	146	1664	518	553	2146	609	329	381	1020	611	979	
v/s Ratio Prot	0.01	c0.53		c0.18	0.48		0.07	0.05	c0.14	c0.26	0.17	
v/s Ratio Perm			0.05			0.10			0.18			
v/c Ratio	0.33	1.63	0.16	1.11	1.07	0.23	0.72	0.25	0.86	1.46	0.60	
Uniform Delay, d1	69.7	50.5	35.8	62.9	41.5	25.5	65.8	50.0	44.0	61.6	46.3	
Progression Factor	1.28	0.43	0.12	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.1	283.9	0.1	73.5	43.1	0.9	7.3	1.5	7.4	216.6	1.1	
Delay (s)	89.6	305.7	4.5	136.4	84.5	26.4	73.1	51.5	51.3	278.3	47.4	
Level of Service	F	F	A	F	F	C	E	D	D	F	D	
Approach Delay (s)		283.5			91.0			55.5			185.2	
Approach LOS		F			F			E			F	

Intersection Summary

HCM 2000 Control Delay	166.3	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.32		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	19.6
Intersection Capacity Utilization	103.7%	ICU Level of Service	G
Analysis Period (min)	15		

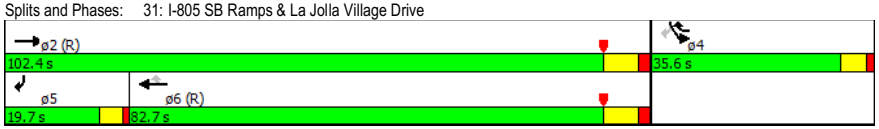
c Critical Lane Group

Lane Group	EBT	WBT	WBR	SBL	SBR
Lane Configurations					
Traffic Volume (vph)	2443	1861	658	97	595
Future Volume (vph)	2443	1861	658	97	595
Turn Type	NA	NA	pm+ov	Prot	custom
Protected Phases	2	6	4	4	5
Permitted Phases			6		4
Detector Phase	2	6	4	4	5
Switch Phase					
Minimum Initial (s)	15.0	15.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	10.6	10.6	9.7
Total Split (s)	102.4	82.7	35.6	35.6	19.7
Total Split (%)	74.2%	59.9%	25.8%	25.8%	14.3%
Yellow Time (s)	5.5	5.5	4.1	4.1	3.7
All-Red Time (s)	2.0	2.0	1.5	1.5	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.5	7.5	5.6	5.6	4.7
Lead/Lag		Lag			Lead
Lead-Lag Optimize?		Yes			Yes
Recall Mode	C-Max	C-Max	None	None	None

Intersection Summary

Cycle Length: 138
Actuated Cycle Length: 138
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 140
Control Type: Actuated-Coordinated

Splits and Phases: 31: I-805 SB Ramps & La Jolla Village Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	2443	1295	0	1861	658	0	0	0	97	0	595
Future Volume (vph)	0	2443	1295	0	1861	658	0	0	0	97	0	595
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		7.5			7.5	5.6				5.6		4.7
Lane Util. Factor		0.91			0.91	1.00				0.97		0.88
Frt		0.95			1.00	0.85				1.00		0.85
Flt Protected		1.00			1.00	1.00				0.95		1.00
Satd. Flow (prot)		4821			5085	1583				3433		2787
Flt Permitted		1.00			1.00	1.00				0.95		1.00
Satd. Flow (perm)		4821			5085	1583				3433		2787
Peak-hour factor, PHF	0.92	0.92	0.92	0.83	0.83	0.83	0.25	0.25	0.25	0.85	0.85	0.85
Adj. Flow (vph)	0	2655	1408	0	2242	793	0	0	0	114	0	700
RTOR Reduction (vph)	0	36	0	0	0	261	0	0	0	0	0	26
Lane Group Flow (vph)	0	4027	0	0	2242	532	0	0	0	114	0	674
Turn Type		NA			NA	pm+ov				Prot		custom
Protected Phases		2			6	4				4		5
Permitted Phases						6						4
Actuated Green, G (s)		115.5			83.2	92.6				9.4		37.0
Effective Green, g (s)		115.5			83.2	92.6				9.4		37.0
Actuated g/C Ratio		0.84			0.60	0.67				0.07		0.27
Clearance Time (s)		7.5			7.5	5.6				5.6		4.7
Vehicle Extension (s)		2.0			2.0	2.0				2.0		2.0
Lane Grp Cap (vph)		4034			3065	1062				233		747
v/s Ratio Prot		c0.84			0.44	0.03				0.03		c0.18
v/s Ratio Perm						0.30						0.06
v/c Ratio		1.00			0.73	0.50				0.49		0.90
Uniform Delay, d1		11.2			19.5	11.3				62.0		48.7
Progression Factor		1.00			0.60	0.81				1.00		1.00
Incremental Delay, d2		13.8			1.2	0.1				0.6		13.8
Delay (s)		24.9			13.0	9.2				62.6		62.6
Level of Service		C			B	A				E		E
Approach Delay (s)		24.9			12.0			0.0			62.6	
Approach LOS		C			B			A			E	

Intersection Summary

HCM 2000 Control Delay	23.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	1.03		
Actuated Cycle Length (s)	138.0	Sum of lost time (s)	17.8
Intersection Capacity Utilization	89.1%	ICU Level of Service	E
Analysis Period (min)	15		

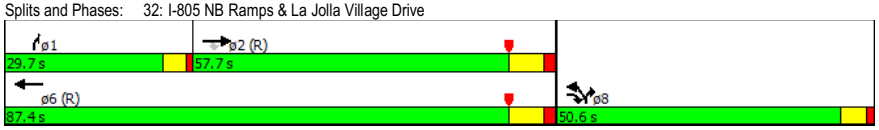
c Critical Lane Group

Lane Group	EBT	EBR	WBT	NBL	NBR	ø1
Lane Configurations						
Traffic Volume (vph)	1077	1414	1865	468	244	
Future Volume (vph)	1077	1414	1865	468	244	
Turn Type	NA	pm+ov	NA	Prot	custom	
Protected Phases	2	8	6	8	1 8	1
Permitted Phases		2				
Detector Phase	2	8	6	8	1 8	
Switch Phase						
Minimum Initial (s)	16.0	5.0	15.0	5.0		5.0
Minimum Split (s)	23.5	10.6	24.5	10.6		10.2
Total Split (s)	57.7	50.6	87.4	50.6		29.7
Total Split (%)	41.8%	36.7%	63.3%	36.7%		22%
Yellow Time (s)	5.5	4.1	5.5	4.1		3.7
All-Red Time (s)	2.0	1.5	2.0	1.5		1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		
Total Lost Time (s)	7.5	5.6	7.5	5.6		
Lead/Lag	Lag					Lead
Lead-Lag Optimize?	Yes					Yes
Recall Mode	C-Max	None	C-Max	None		None

Intersection Summary

Cycle Length: 138
Actuated Cycle Length: 138
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 50
Control Type: Actuated-Coordinated

Splits and Phases: 32: I-805 NB Ramps & La Jolla Village Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1077	1414	0	1865	456	468	0	244	0	0	0
Future Volume (vph)	0	1077	1414	0	1865	456	468	0	244	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		7.5	5.6		7.5		5.6		4.7			
Lane Util. Factor		0.91	1.00		0.86		0.97		0.88			
Frt		1.00	0.85		0.97		1.00		0.85			
Flt Protected		1.00	1.00		1.00		0.95		1.00			
Satd. Flow (prot)		5085	1583		6219		3433		2787			
Flt Permitted		1.00	1.00		1.00		0.95		1.00			
Satd. Flow (perm)		5085	1583		6219		3433		2787			
Peak-hour factor, PHF	0.91	0.91	0.91	0.85	0.85	0.85	0.85	0.85	0.85	0.25	0.25	0.25
Adj. Flow (vph)	0	1184	1554	0	2194	536	551	0	287	0	0	0
RTOR Reduction (vph)	0	0	180	0	32	0	0	0	23	0	0	0
Lane Group Flow (vph)	0	1184	1374	0	2698	0	551	0	264	0	0	0
Turn Type		NA	pm+ov		NA		Prot		custom			
Protected Phases		2	8		6		8		1 8			
Permitted Phases			2									
Actuated Green, G (s)		70.2	115.2		79.9		45.0		55.6			
Effective Green, g (s)		70.2	115.2		79.9		45.0		50.0			
Actuated g/C Ratio		0.51	0.83		0.58		0.33		0.36			
Clearance Time (s)		7.5	5.6		7.5		5.6					
Vehicle Extension (s)		2.0	2.0		2.0		2.0					
Lane Grp Cap (vph)		2586	1321		3600		1119		1009			
v/s Ratio Prot		0.23	c0.34		c0.43		0.16		0.09			
v/s Ratio Perm			0.53									
v/c Ratio		0.46	1.04		0.75		0.49		0.26			
Uniform Delay, d1		21.7	11.4		21.6		37.3		31.0			
Progression Factor		0.79	5.49		1.00		1.00		1.00			
Incremental Delay, d2		0.2	25.4		1.5		0.1		0.1			
Delay (s)		17.3	88.1		23.1		37.5		31.0			
Level of Service		B	F		C		D		C			
Approach Delay (s)		57.5			23.1			35.3			0.0	
Approach LOS		E			C			D			A	

Intersection Summary

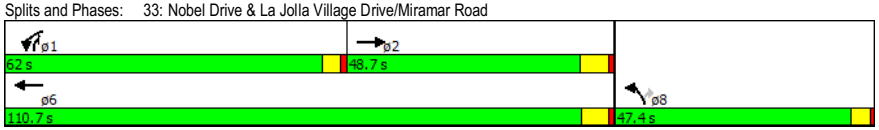
HCM 2000 Control Delay	39.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.04		
Actuated Cycle Length (s)	138.0	Sum of lost time (s)	17.8
Intersection Capacity Utilization	92.2%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Configurations					
Traffic Volume (vph)	1444	1153	1640	229	581
Future Volume (vph)	1444	1153	1640	229	581
Turn Type	NA	Prot	NA	Prot	pm+ov
Protected Phases	2	1	6	8	1
Permitted Phases					8
Detector Phase	2	1	6	8	1
Switch Phase					
Minimum Initial (s)	10.0	4.0	10.0	7.0	4.0
Minimum Split (s)	31.3	8.4	16.0	47.4	8.4
Total Split (s)	48.7	62.0	110.7	47.4	62.0
Total Split (%)	30.8%	39.2%	70.0%	30.0%	39.2%
Yellow Time (s)	5.3	3.4	5.0	3.4	3.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.3	4.4	6.0	4.4	4.4
Lead/Lag	Lag	Lead			Lead
Lead-Lag Optimize?	Yes	Yes			Yes
Recall Mode	Min	None	Min	None	None

Intersection Summary
Cycle Length: 158.1
Actuated Cycle Length: 140.9
Natural Cycle: 150
Control Type: Actuated-Uncoordinated

Splits and Phases: 33: Nobel Drive & La Jolla Village Drive/Miramar Road



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1444	60	1153	1640	229	581
Future Volume (vph)	1444	60	1153	1640	229	581
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.3		4.4	6.0	4.4	4.4
Lane Util. Factor	0.86		0.97	0.86	1.00	0.88
Frt	0.99		1.00	1.00	1.00	0.85
Flt Protected	1.00		0.95	1.00	0.95	1.00
Satd. Flow (prot)	6369		3433	6408	1770	2787
Flt Permitted	1.00		0.95	1.00	0.95	1.00
Satd. Flow (perm)	6369		3433	6408	1770	2787
Peak-hour factor, PHF	0.80	0.80	0.80	0.80	0.85	0.85
Adj. Flow (vph)	1805	75	1441	2050	269	684
RTOR Reduction (vph)	3	0	0	0	0	0
Lane Group Flow (vph)	1877	0	1441	2050	269	684
Turn Type	NA		Prot	NA	Prot	pm+ov
Protected Phases	2		1	6	8	1
Permitted Phases						8
Actuated Green, G (s)	42.5		57.7	104.9	25.6	83.3
Effective Green, g (s)	42.5		57.7	104.9	25.6	83.3
Actuated g/C Ratio	0.30		0.41	0.74	0.18	0.59
Clearance Time (s)	6.3		4.4	6.0	4.4	4.4
Vehicle Extension (s)	5.0		2.0	5.4	2.0	2.0
Lane Grp Cap (vph)	1921		1405	4770	321	1734
v/s Ratio Prot	c0.29		c0.42	0.32	c0.15	0.16
v/s Ratio Perm						0.08
v/c Ratio	0.98		1.03	0.43	0.84	0.39
Uniform Delay, d1	48.7		41.6	6.8	55.6	15.4
Progression Factor	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	15.4		30.8	0.1	16.4	0.1
Delay (s)	64.2		72.4	6.9	72.1	15.4
Level of Service	E		E	A	E	B
Approach Delay (s)	64.2			33.9	31.4	
Approach LOS	E			C	C	

Intersection Summary			
HCM 2000 Control Delay	42.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.97		
Actuated Cycle Length (s)	140.9	Sum of lost time (s)	15.1
Intersection Capacity Utilization	80.1%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBU	WBT	WBR	SBL
Lane Configurations						
Traffic Volume (vph)	383	1457	9	2416	381	721
Future Volume (vph)	383	1457	9	2416	381	721
Turn Type	Prot	NA	Prot	NA	Perm	Prot
Protected Phases	5	2	1	6		7
Permitted Phases					6	
Detector Phase	5	2	1	6	6	7
Switch Phase						
Minimum Initial (s)	4.0	10.0	4.0	10.0	10.0	10.0
Minimum Split (s)	8.4	16.3	8.4	29.4	29.4	38.4
Total Split (s)	34.4	66.3	24.4	65.4	65.4	44.4
Total Split (%)	23.9%	46.0%	16.9%	45.4%	45.4%	30.8%
Yellow Time (s)	3.4	5.3	3.4	4.4	4.4	3.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	6.3	4.4	5.4	5.4	4.4
Lead/Lag	Lead	Lag	Lead	Lag	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	Min	None	Min	Min	None

Intersection Summary

Cycle Length: 144.2
Actuated Cycle Length: 138.5
Natural Cycle: 140
Control Type: Actuated-Uncoordinated

Splits and Phases: 34: Miramar Road & Eastgate Mall

Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Traffic Volume (vph)	383	1457	9	2416	381	721	549
Future Volume (vph)	383	1457	9	2416	381	721	549
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	6.3	4.4	5.4	5.4	4.4	
Lane Util. Factor	0.97	0.91	1.00	0.86	1.00	0.97	
Frt	1.00	1.00	1.00	1.00	0.85	0.94	
Flt Protected	0.95	1.00	0.95	1.00	1.00	0.97	
Satd. Flow (prot)	3433	5085	1770	6408	1583	3286	
Flt Permitted	0.95	1.00	0.95	1.00	1.00	0.97	
Satd. Flow (perm)	3433	5085	1770	6408	1583	3286	
Peak-hour factor, PHF	0.80	0.80	0.92	0.86	0.86	0.80	0.80
Adj. Flow (vph)	479	1821	10	2809	443	901	686
RTOR Reduction (vph)	0	0	0	0	245	95	0
Lane Group Flow (vph)	479	1821	10	2809	198	1492	0
Turn Type	Prot	NA	Prot	NA	Perm	Prot	
Protected Phases	5	2	1	6		7	
Permitted Phases					6		
Actuated Green, G (s)	24.2	85.4	1.5	63.6	63.6	40.0	
Effective Green, g (s)	24.2	85.4	1.5	63.6	63.6	40.0	
Actuated g/C Ratio	0.17	0.60	0.01	0.45	0.45	0.28	
Clearance Time (s)	4.4	6.3	4.4	5.4	5.4	4.4	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	585	3058	18	2870	709	925	
v/s Ratio Prot	c0.14	0.36	0.01	c0.44		c0.45	
v/s Ratio Perm					0.13		
v/c Ratio	0.82	0.60	0.56	0.98	0.28	1.61	
Uniform Delay, d1	56.8	17.6	69.9	38.5	24.7	51.0	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	8.7	0.3	32.3	12.1	0.2	281.0	
Delay (s)	65.5	17.9	102.2	50.7	25.0	332.0	
Level of Service	E	B	F	D	C	F	
Approach Delay (s)		27.8		47.3		332.0	
Approach LOS		C		D		F	

Intersection Summary

HCM 2000 Control Delay	104.2	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.15		
Actuated Cycle Length (s)	142.0	Sum of lost time (s)	15.1
Intersection Capacity Utilization	95.7%	ICU Level of Service	F
Analysis Period (min)	15		

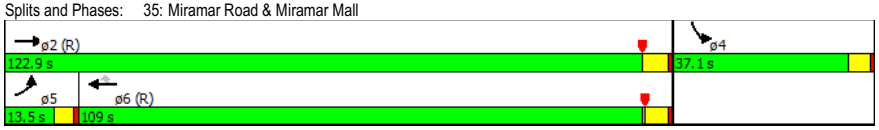
c Critical Lane Group

Lane Group	EBL	EBT	WBT	WBR	SBL
Lane Configurations					
Traffic Volume (vph)	36	2293	2930	127	145
Future Volume (vph)	36	2293	2930	127	145
Turn Type	Prot	NA	NA	Perm	Prot
Protected Phases	5	2	6		4
Permitted Phases				6	
Detector Phase	5	2	6	6	4
Switch Phase					
Minimum Initial (s)	4.0	10.0	10.0	10.0	4.0
Minimum Split (s)	8.4	15.8	15.4	15.4	8.9
Total Split (s)	13.5	122.9	109.0	109.0	37.1
Total Split (%)	8.4%	76.8%	68.1%	68.1%	23.2%
Yellow Time (s)	3.4	4.8	4.4	4.4	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.8	5.4	5.4	4.9
Lead/Lag	Lead		Lag	Lag	
Lead-Lag Optimize?	Yes		Yes	Yes	
Recall Mode	None	C-Max	C-Max	C-Max	None

Intersection Summary

Cycle Length: 160
Actuated Cycle Length: 160
Offset: 91 (57%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 100
Control Type: Actuated-Coordinated

Splits and Phases: 35: Miramar Road & Miramar Mall



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	36	2293	2930	127	145	104
Future Volume (vph)	36	2293	2930	127	145	104
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.8	5.4	5.4	4.9	
Lane Util. Factor	1.00	0.91	0.91	1.00	1.00	
Frt	1.00	1.00	1.00	0.85	0.94	
Flt Protected	0.95	1.00	1.00	1.00	0.97	
Satd. Flow (prot)	1770	5085	5085	1583	1708	
Flt Permitted	0.95	1.00	1.00	1.00	0.97	
Satd. Flow (perm)	1770	5085	5085	1583	1708	
Peak-hour factor, PHF	0.89	0.89	0.87	0.87	0.93	0.93
Adj. Flow (vph)	40	2576	3368	146	156	112
RTOR Reduction (vph)	0	0	0	33	17	0
Lane Group Flow (vph)	40	2576	3368	113	251	0
Turn Type	Prot	NA	NA	Perm	Prot	
Protected Phases	5	2	6		4	
Permitted Phases				6		
Actuated Green, G (s)	6.6	122.4	111.8	111.8	26.9	
Effective Green, g (s)	6.6	122.4	111.8	111.8	26.9	
Actuated g/C Ratio	0.04	0.77	0.70	0.70	0.17	
Clearance Time (s)	4.4	5.8	5.4	5.4	4.9	
Vehicle Extension (s)	2.0	4.6	5.2	5.2	2.0	
Lane Grp Cap (vph)	73	3890	3553	1106	287	
v/s Ratio Prot	0.02	c0.51	c0.66		c0.15	
v/s Ratio Perm				0.07		
v/c Ratio	0.55	0.66	0.95	0.10	0.88	
Uniform Delay, d1	75.2	9.0	21.5	7.8	64.9	
Progression Factor	1.00	1.00	0.93	0.58	1.00	
Incremental Delay, d2	4.4	0.9	4.7	0.1	23.8	
Delay (s)	79.7	9.9	24.7	4.6	88.7	
Level of Service	E	A	C	A	F	
Approach Delay (s)		10.9	23.8		88.7	
Approach LOS		B	C		F	

Intersection Summary

HCM 2000 Control Delay	21.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.93		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	14.7
Intersection Capacity Utilization	79.6%	ICU Level of Service	D
Analysis Period (min)	15		

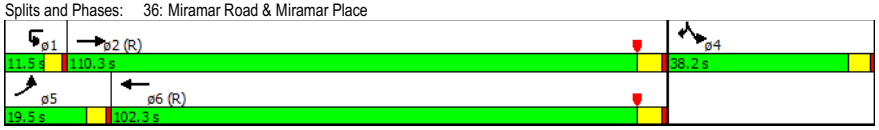
c Critical Lane Group

Lane Group	EBL	EBT	WBU	WBT	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	33	2334	9	3039	181	63
Future Volume (vph)	33	2334	9	3039	181	63
Turn Type	Prot	NA	Prot	NA	Prot	Prot
Protected Phases	5	2	1	6	4	4
Permitted Phases						
Detector Phase	5	2	1	6	4	4
Switch Phase						
Minimum Initial (s)	4.0	10.0	4.0	10.0	4.0	4.0
Minimum Split (s)	8.4	15.7	8.4	28.7	37.9	37.9
Total Split (s)	19.5	110.3	11.5	102.3	38.2	38.2
Total Split (%)	12.2%	68.9%	7.2%	63.9%	23.9%	23.9%
Yellow Time (s)	3.4	4.7	3.4	4.7	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.7	4.4	5.7	4.9	4.9
Lead/Lag	Lead	Lag	Lead	Lag		
Lead-Lag Optimize?	Yes	Yes	Yes	Yes		
Recall Mode	None	C-Max	None	C-Max	None	None

Intersection Summary

Cycle Length: 160
Actuated Cycle Length: 160
Offset: 54 (34%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 140
Control Type: Actuated-Coordinated

Splits and Phases: 36: Miramar Road & Miramar Place



Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Traffic Volume (vph)	33	2334	9	3039	83	181	63
Future Volume (vph)	33	2334	9	3039	83	181	63
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.7	4.4	5.7		4.9	4.9
Lane Util. Factor	1.00	0.91	1.00	0.91		0.97	0.91
Frt	1.00	1.00	1.00	1.00		0.99	0.85
Flt Protected	0.95	1.00	0.95	1.00		0.95	1.00
Satd. Flow (prot)	1770	5085	1770	5065		3429	1441
Flt Permitted	0.95	1.00	0.95	1.00		0.95	1.00
Satd. Flow (perm)	1770	5085	1770	5065		3429	1441
Peak-hour factor, PHF	0.89	0.89	0.92	0.96	0.96	0.82	0.82
Adj. Flow (vph)	37	2622	10	3166	86	221	77
RTOR Reduction (vph)	0	0	0	1	0	2	61
Lane Group Flow (vph)	37	2622	10	3251	0	227	8
Turn Type	Prot	NA	Prot	NA		Prot	Prot
Protected Phases	5	2	1	6		4	4
Permitted Phases							
Actuated Green, G (s)	7.6	123.9	2.6	118.9		18.5	18.5
Effective Green, g (s)	7.6	123.9	2.6	118.9		18.5	18.5
Actuated g/C Ratio	0.05	0.77	0.02	0.74		0.12	0.12
Clearance Time (s)	4.4	5.7	4.4	5.7		4.9	4.9
Vehicle Extension (s)	3.0	4.8	2.0	5.4		3.0	3.0
Lane Grp Cap (vph)	84	3937	28	3763		396	166
v/s Ratio Prot	c0.02	c0.52	0.01	c0.64		c0.07	0.01
v/s Ratio Perm							
v/c Ratio	0.44	0.67	0.36	0.86		0.57	0.05
Uniform Delay, d1	74.1	8.4	77.9	14.7		67.0	62.9
Progression Factor	0.90	0.74	0.94	0.69		1.00	1.00
Incremental Delay, d2	2.7	0.7	0.3	0.3		2.0	0.1
Delay (s)	69.5	6.9	73.8	10.4		69.0	63.0
Level of Service	E	A	E	B		E	E
Approach Delay (s)		7.8		10.6		67.6	
Approach LOS		A		B		E	

Intersection Summary

HCM 2000 Control Delay	12.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	15.0
Intersection Capacity Utilization	75.2%	ICU Level of Service	D
Analysis Period (min)	15		

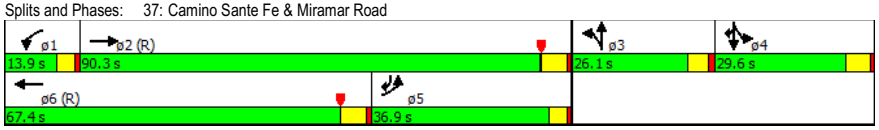
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	906	1732	59	1407	119	60	265	17	1616
Future Volume (vph)	906	1732	59	1407	119	60	265	17	1616
Turn Type	Prot	NA	Prot	NA	Split	NA	Split	NA	pt+ov
Protected Phases	5	2	1	6	3	3	4	4	4 5
Permitted Phases									
Detector Phase	5	2	1	6	3	3	4	4	4 5
Switch Phase									
Minimum Initial (s)	12.0	10.0	4.0	10.0	4.0	4.0	4.0	4.0	
Minimum Split (s)	16.4	15.8	8.4	15.7	8.9	8.9	9.5	9.5	
Total Split (s)	36.9	90.3	13.9	67.4	26.1	26.1	29.6	29.6	
Total Split (%)	23.1%	56.4%	8.7%	42.1%	16.3%	16.3%	18.5%	18.5%	
Yellow Time (s)	3.4	4.8	3.4	4.7	3.9	3.9	4.5	4.5	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.4	5.8	4.4	5.7	4.9	4.9	5.5	5.5	
Lead/Lag	Lag	Lag	Lead	Lead	Lead	Lead	Lag	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	C-Max	None	C-Max	None	None	None	None	

Intersection Summary

Cycle Length: 160
Actuated Cycle Length: 160
Offset: 41 (26%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 140
Control Type: Actuated-Coordinated

Splits and Phases: 37: Camino Sante Fe & Miramar Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	906	1732	119	59	1407	109	119	60	30	265	17	1616
Future Volume (vph)	906	1732	119	59	1407	109	119	60	30	265	17	1616
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.8		4.4	5.7		4.9	4.9		5.5	5.5	5.5
Lane Util. Factor	0.97	0.91		0.97	0.91		1.00	1.00		0.95	0.95	0.88
Frt	1.00	0.99		1.00	0.99		1.00	0.95		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	0.96	1.00
Satd. Flow (prot)	3433	5036		3433	5030		1770	1769		1681	1695	2787
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	0.96	1.00
Satd. Flow (perm)	3433	5036		3433	5030		1770	1769		1681	1695	2787
Peak-hour factor, PHF	0.94	0.94	0.94	0.91	0.91	0.91	0.80	0.80	0.80	0.95	0.95	0.95
Adj. Flow (vph)	964	1843	127	65	1546	120	149	75	38	279	18	1701
RTOR Reduction (vph)	0	5	0	0	6	0	0	12	0	0	0	77
Lane Group Flow (vph)	964	1965	0	65	1660	0	149	101	0	148	149	1624
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	pt+ov
Protected Phases	5	2		1	6		3	3		4	4	4 5
Permitted Phases												
Actuated Green, G (s)	33.4	87.7		6.4	60.8		17.1	17.1		28.2	28.2	61.6
Effective Green, g (s)	33.4	87.7		6.4	60.8		17.1	17.1		28.2	28.2	61.6
Actuated g/C Ratio	0.21	0.55		0.04	0.38		0.11	0.11		0.18	0.18	0.39
Clearance Time (s)	4.4	5.8		4.4	5.7		4.9	4.9		5.5	5.5	
Vehicle Extension (s)	2.0	4.8		2.0	5.4		2.0	2.0		2.8	2.8	
Lane Grp Cap (vph)	716	2760		137	1911		189	189		296	298	1072
v/s Ratio Prot	0.28	0.39		0.02	c0.33		c0.08	0.06		0.09	0.09	c0.58
v/s Ratio Perm												
v/c Ratio	1.35	0.71		0.47	0.87		0.79	0.54		0.50	0.50	1.52
Uniform Delay, d1	63.3	26.8		75.2	45.9		69.7	67.7		59.5	59.5	49.2
Progression Factor	0.88	0.67		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	163.3	1.3		0.9	5.7		17.9	1.5		1.2	1.2	236.6
Delay (s)	218.9	19.3		76.1	51.6		87.6	69.2		60.7	60.7	285.8
Level of Service	F	B		E	D		F	E		E	E	F
Approach Delay (s)		84.9			52.5			79.6			252.3	
Approach LOS		F			D			E			F	

Intersection Summary

HCM 2000 Control Delay	124.9	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.14		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	20.6
Intersection Capacity Utilization	106.2%	ICU Level of Service	G
Analysis Period (min)	15		

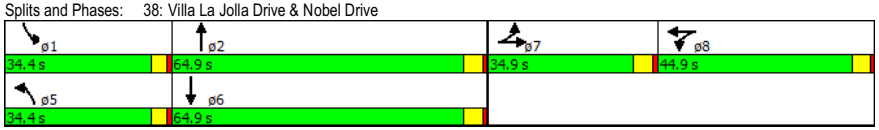
c Critical Lane Group

Lane Group	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	5	189	11	4	646	513	818
Future Volume (vph)	5	189	11	4	646	513	818
Turn Type	NA	Split	NA	Prot	NA	Prot	NA
Protected Phases	7	8	8	5	2	1	6
Permitted Phases							
Detector Phase	7	8	8	5	2	1	6
Switch Phase							
Minimum Initial (s)	6.0	6.0	6.0	4.0	7.0	6.0	10.0
Minimum Split (s)	10.9	10.9	10.9	8.4	11.9	10.4	14.9
Total Split (s)	34.9	44.9	44.9	34.4	64.9	34.4	64.9
Total Split (%)	19.5%	25.1%	25.1%	19.2%	36.2%	19.2%	36.2%
Yellow Time (s)	3.9	3.9	3.9	3.4	3.9	3.4	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	4.9	4.4	4.9	4.4	4.9
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	Min	None	Min

Intersection Summary

Cycle Length: 179.1
Actuated Cycle Length: 134.7
Natural Cycle: 75
Control Type: Actuated-Uncoordinated

Splits and Phases: 38: Villa La Jolla Drive & Nobel Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	24	5	2	189	11	353	4	646	262	513	818	16
Future Volume (vph)	24	5	2	189	11	353	4	646	262	513	818	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9		4.9	4.9		4.4	4.9		4.4	4.9	
Lane Util. Factor		1.00		0.97	1.00		1.00	0.95		0.97	0.95	
Frt		0.99		1.00	0.85		1.00	0.96		1.00	1.00	
Flt Protected		0.96		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1775		3433	1592		1770	3386		3433	3529	
Flt Permitted		0.96		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1775		3433	1592		1770	3386		3433	3529	
Peak-hour factor, PHF	0.80	0.80	0.80	0.94	0.94	0.94	0.86	0.86	0.86	0.95	0.95	0.95
Adj. Flow (vph)	30	6	2	201	12	376	5	751	305	540	861	17
RTOR Reduction (vph)	0	2	0	0	324	0	0	22	0	0	0	0
Lane Group Flow (vph)	0	37	0	201	64	0	5	1034	0	540	878	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	7	7		8	8		5	2		1	6	
Permitted Phases												
Actuated Green, G (s)		14.8		19.2	19.2		1.0	57.5		27.9	84.4	
Effective Green, g (s)		14.8		19.2	19.2		1.0	57.5		27.9	84.4	
Actuated g/C Ratio		0.11		0.14	0.14		0.01	0.42		0.20	0.61	
Clearance Time (s)		4.9		4.9	4.9		4.4	4.9		4.4	4.9	
Vehicle Extension (s)		2.0		2.0	2.0		2.0	4.3		2.0	3.7	
Lane Grp Cap (vph)		189		475	220		12	1405		691	2150	
v/s Ratio Prot		c0.02		c0.06	0.04		0.00	c0.31		c0.16	0.25	
v/s Ratio Perm												
v/c Ratio		0.20		0.42	0.29		0.42	0.74		0.78	0.41	
Uniform Delay, d1		56.4		54.6	53.5		68.5	34.1		52.4	14.1	
Progression Factor		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.2		0.2	0.3		8.3	2.3		5.3	0.2	
Delay (s)		56.6		54.8	53.8		76.8	36.4		57.7	14.2	
Level of Service		E		D	D		E	D		E	B	
Approach Delay (s)		56.6			54.2			36.6			30.8	
Approach LOS		E			D			D			C	

Intersection Summary

HCM 2000 Control Delay	37.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	138.5	Sum of lost time (s)	19.1
Intersection Capacity Utilization	75.1%	ICU Level of Service	D
Analysis Period (min)	15		

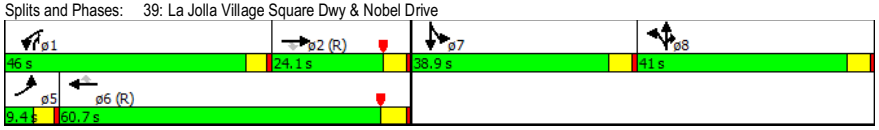
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	8	451	152	1197	338	364	110	95	1035	310	113
Future Volume (vph)	8	451	152	1197	338	364	110	95	1035	310	113
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Split	NA	pt+ov	Split	NA
Protected Phases	5	2		1	6		8	8	8 1	7	7
Permitted Phases			2			6					
Detector Phase	5	2	2	1	6	6	8	8	8 1	7	7
Switch Phase											
Minimum Initial (s)	4.0	7.0	7.0	4.0	7.0	7.0	8.0	8.0		8.0	8.0
Minimum Split (s)	9.4	12.0	12.0	8.4	12.4	12.4	12.9	12.9		38.9	38.9
Total Split (s)	9.4	24.1	24.1	46.0	60.7	60.7	41.0	41.0		38.9	38.9
Total Split (%)	6.3%	16.1%	16.1%	30.7%	40.5%	40.5%	27.3%	27.3%		25.9%	25.9%
Yellow Time (s)	3.4	4.0	4.0	3.4	4.4	4.4	3.9	3.9		3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	4.4	5.0	5.0	4.4	5.4	5.4	4.9	4.9		4.9	4.9
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lag	Lag		Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	None		None	None

Intersection Summary

Cycle Length: 150
Actuated Cycle Length: 150
Offset: 75 (50%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 39: La Jolla Village Square Dwy & Nobel Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	451	152	1197	338	364	110	95	1035	310	113	2
Future Volume (vph)	8	451	152	1197	338	364	110	95	1035	310	113	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.0	5.0	4.4	5.4	5.4	4.9	4.9	4.9	4.9	4.9	
Lane Util. Factor	1.00	0.95	1.00	0.97	0.95	1.00	0.95	0.95	1.00	0.95	0.95	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.99	1.00	0.95	0.98	
Satd. Flow (prot)	1770	3539	1583	3433	3539	1583	1681	1760	1583	1681	1727	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.99	1.00	0.95	0.98	
Satd. Flow (perm)	1770	3539	1583	3433	3539	1583	1681	1760	1583	1681	1727	
Peak-hour factor, PHF	0.80	0.80	0.80	0.90	0.90	0.90	0.88	0.88	0.88	0.86	0.86	0.86
Adj. Flow (vph)	10	564	190	1330	376	404	125	108	1176	360	131	2
RTOR Reduction (vph)	0	0	123	0	0	247	0	0	39	0	0	0
Lane Group Flow (vph)	10	564	67	1330	376	157	112	121	1137	245	248	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Split	NA	pt+ov	Split	NA	
Protected Phases	5	2		1	6		8	8	8 1	7	7	
Permitted Phases			2			6						
Actuated Green, G (s)	2.0	19.1	19.1	41.6	58.3	58.3	36.1	36.1	82.6	34.0	34.0	
Effective Green, g (s)	2.0	19.1	19.1	41.6	58.3	58.3	36.1	36.1	82.6	34.0	34.0	
Actuated g/C Ratio	0.01	0.13	0.13	0.28	0.39	0.39	0.24	0.24	0.55	0.23	0.23	
Clearance Time (s)	4.4	5.0	5.0	4.4	5.4	5.4	4.9	4.9		4.9	4.9	
Vehicle Extension (s)	2.0	4.1	4.1	2.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)	23	450	201	952	1375	615	404	423	871	381	391	
v/s Ratio Prot	0.01	c0.16		c0.39	0.11		0.07	0.07	c0.72	c0.15	0.14	
v/s Ratio Perm			0.04			0.10						
v/c Ratio	0.43	1.25	0.33	1.40	0.27	0.26	0.28	0.29	1.31	0.64	0.63	
Uniform Delay, d1	73.4	65.5	59.6	54.2	31.4	31.1	46.3	46.4	33.7	52.5	52.4	
Progression Factor	1.00	1.00	1.00	0.86	0.71	0.46	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	4.7	131.2	4.4	184.2	0.4	0.9	0.5	0.5	145.7	4.1	3.8	
Delay (s)	78.2	196.6	64.1	231.0	22.6	15.1	46.8	47.0	179.4	56.6	56.1	
Level of Service	E	F	E	F	C	B	D	D	F	E	E	
Approach Delay (s)		162.1			152.5			157.5			56.4	
Approach LOS		F			F			F			E	

Intersection Summary

HCM 2000 Control Delay	145.6	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.20		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	19.6
Intersection Capacity Utilization	100.5%	ICU Level of Service	G
Analysis Period (min)	15		

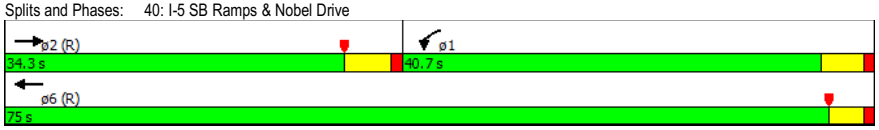
c Critical Lane Group

Lane Group	EBT	WBL	WBT
Lane Configurations			
Traffic Volume (vph)	1060	905	1901
Future Volume (vph)	1060	905	1901
Turn Type	NA	Prot	NA
Protected Phases	2	1	6
Permitted Phases			
Detector Phase	2	1	6
Switch Phase			
Minimum Initial (s)	13.0	5.0	1.0
Minimum Split (s)	18.1	9.7	5.5
Total Split (s)	34.3	40.7	75.0
Total Split (%)	45.7%	54.3%	100.0%
Yellow Time (s)	4.1	3.7	3.0
All-Red Time (s)	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0
Total Lost Time (s)	5.1	4.7	4.0
Lead/Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	
Recall Mode	C-Max	None	C-Max

Intersection Summary

Cycle Length: 75
Actuated Cycle Length: 75
Offset: 61 (81%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 110
Control Type: Actuated-Coordinated

Splits and Phases: 40: I-5 SB Ramps & Nobel Drive



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1060	897	905	1901	0	0
Future Volume (vph)	1060	897	905	1901	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1		4.7	4.0		
Lane Util. Factor	0.95		0.97	0.95		
Frt	0.93		1.00	1.00		
Flt Protected	1.00		0.95	1.00		
Satd. Flow (prot)	3296		3433	3539		
Flt Permitted	1.00		0.95	1.00		
Satd. Flow (perm)	3296		3433	3539		
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.25	0.25
Adj. Flow (vph)	1116	944	953	2001	0	0
RTOR Reduction (vph)	47	0	0	0	0	0
Lane Group Flow (vph)	2013	0	953	2001	0	0
Turn Type	NA		Prot	NA		
Protected Phases	2		1	6		
Permitted Phases						
Actuated Green, G (s)	29.2		36.0	75.0		
Effective Green, g (s)	29.2		36.0	75.0		
Actuated g/C Ratio	0.39		0.48	1.00		
Clearance Time (s)	5.1		4.7	4.0		
Vehicle Extension (s)	3.0		3.0	3.0		
Lane Grp Cap (vph)	1283		1647	3539		
v/s Ratio Prot	c0.61		0.28	c0.57		
v/s Ratio Perm						
v/c Ratio	1.57		0.58	0.57		
Uniform Delay, d1	22.9		14.0	0.0		
Progression Factor	1.38		1.15	1.00		
Incremental Delay, d2	256.4		0.3	0.4		
Delay (s)	288.0		16.5	0.4		
Level of Service	F		B	A		
Approach Delay (s)	288.0			5.6	0.0	
Approach LOS	F			A	A	

Intersection Summary

HCM 2000 Control Delay	121.6	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.06		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	9.8
Intersection Capacity Utilization	92.1%	ICU Level of Service	F
Analysis Period (min)	15		

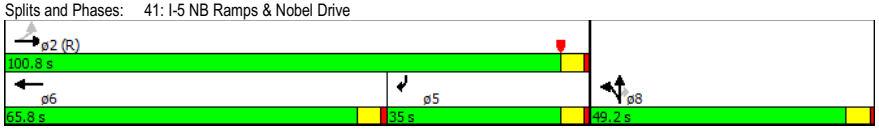
c Critical Lane Group

Lane Group	EBL	EBT	WBT	NBL	NBT	NBR	SBR
Lane Configurations							
Traffic Volume (vph)	12	1137	1985	411	49	277	320
Future Volume (vph)	12	1137	1985	411	49	277	320
Turn Type	Perm	NA	NA	Split	NA	Perm	Prot
Protected Phases		2	6	8	8		5
Permitted Phases	2					8	
Detector Phase	2	2	6	8	8	8	5
Switch Phase							
Minimum Initial (s)	11.0	11.0	13.0	5.0	5.0	5.0	5.0
Minimum Split (s)	29.1	29.1	32.1	49.1	49.1	49.1	10.0
Total Split (s)	100.8	100.8	65.8	49.2	49.2	49.2	35.0
Total Split (%)	67.2%	67.2%	43.9%	32.8%	32.8%	32.8%	23.3%
Yellow Time (s)	4.1	4.1	4.1	4.1	4.1	4.1	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.1	5.1	5.1	5.1	5.1	5.0
Lead/Lag			Lead				Lag
Lead-Lag Optimize?			Yes				Yes
Recall Mode	C-Max	C-Max	None	Min	Min	Min	None

Intersection Summary

Cycle Length: 150
Actuated Cycle Length: 150
Offset: 93 (62%), Referenced to phase 2:EBTL, Start of Yellow
Natural Cycle: 145
Control Type: Actuated-Coordinated

Splits and Phases: 41: I-5 NB Ramps & Nobel Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	12	1137	0	0	1985	12	411	49	277	0	0	320
Future Volume (vph)	12	1137	0	0	1985	12	411	49	277	0	0	320
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.1			5.1		5.1	5.1	5.1			5.0
Lane Util. Factor		0.95			0.91		0.95	0.95	1.00			1.00
Frt		1.00			1.00		1.00	1.00	0.85			0.86
Flt Protected		1.00			1.00		0.95	0.96	1.00			1.00
Satd. Flow (prot)		3537			5081		1681	1703	1583			1611
Flt Permitted		0.89			1.00		0.95	0.96	1.00			1.00
Satd. Flow (perm)		3166			5081		1681	1703	1583			1611
Peak-hour factor, PHF	0.93	0.93	0.93	0.95	0.95	0.95	0.87	0.87	0.87	0.84	0.84	0.84
Adj. Flow (vph)	13	1223	0	0	2089	13	472	56	318	0	0	381
RTOR Reduction (vph)	0	0	0	0	1	0	0	0	68	0	0	45
Lane Group Flow (vph)	0	1236	0	0	2101	0	264	264	250	0	0	336
Turn Type	Perm	NA			NA		Split	NA	Perm			Prot
Protected Phases		2			6		8	8				5
Permitted Phases	2								8			
Actuated Green, G (s)		109.2			74.2		30.6	30.6	30.6			30.0
Effective Green, g (s)		109.2			74.2		30.6	30.6	30.6			30.0
Actuated g/C Ratio		0.73			0.49		0.20	0.20	0.20			0.20
Clearance Time (s)		5.1			5.1		5.1	5.1	5.1			5.0
Vehicle Extension (s)		2.0			2.0		2.0	2.0	2.0			2.0
Lane Grp Cap (vph)		2304			2513		342	347	322			322
v/s Ratio Prot					c0.41		0.16	0.16				c0.21
v/s Ratio Perm		0.39							c0.16			
v/c Ratio		0.54			0.84		0.77	0.76	0.78			1.04
Uniform Delay, d1		9.1			32.7		56.4	56.3	56.5			60.0
Progression Factor		1.01			0.81		1.00	1.00	1.00			1.00
Incremental Delay, d2		0.1			2.1		9.5	8.6	10.3			62.1
Delay (s)		9.2			28.6		65.9	64.8	66.8			122.1
Level of Service		A			C		E	E	E			F
Approach Delay (s)		9.2			28.6			65.9			122.1	
Approach LOS		A			C			E			F	

Intersection Summary

HCM 2000 Control Delay	38.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	15.2
Intersection Capacity Utilization	83.8%	ICU Level of Service	E
Analysis Period (min)	15		

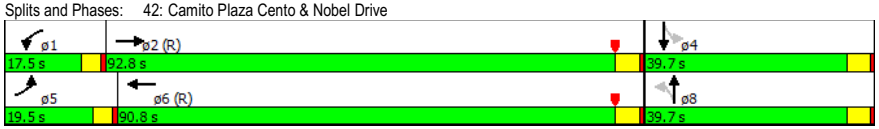
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	91	1377	26	1654	117	10	9	3
Future Volume (vph)	91	1377	26	1654	117	10	9	3
Turn Type	Prot	NA	Prot	NA	Perm	NA	Perm	NA
Protected Phases	5	2	1	6		8		4
Permitted Phases					8		4	
Detector Phase	5	2	1	6	8	8	4	4
Switch Phase								
Minimum Initial (s)	4.0	10.0	4.0	10.0	6.0	6.0	6.0	6.0
Minimum Split (s)	9.5	25.2	9.5	25.2	37.9	37.9	37.9	37.9
Total Split (s)	19.5	92.8	17.5	90.8	39.7	39.7	39.7	39.7
Total Split (%)	13.0%	61.9%	11.7%	60.5%	26.5%	26.5%	26.5%	26.5%
Yellow Time (s)	3.4	4.2	3.4	4.2	3.9	3.9	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	4.4	5.2	4.4	5.2		4.9		4.9
Lead/Lag	Lead	Lag	Lead	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes				
Recall Mode	None	C-Max	None	C-Max	None	None	None	None

Intersection Summary

Cycle Length: 150
Actuated Cycle Length: 150
Offset: 101 (67%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 42: Camito Plaza Cento & Nobel Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	91	1377	56	26	1654	33	117	10	71	9	3	54
Future Volume (vph)	91	1377	56	26	1654	33	117	10	71	9	3	54
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.2		4.4	5.2			4.9			4.9	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Frt	1.00	0.99		1.00	1.00			0.95			0.89	
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.99	
Satd. Flow (prot)	1770	5056		1770	5070			1721			1646	
Flt Permitted	0.95	1.00		0.95	1.00			0.73			0.95	
Satd. Flow (perm)	1770	5056		1770	5070			1300			1576	
Peak-hour factor, PHF	0.96	0.96	0.96	0.95	0.95	0.95	0.82	0.82	0.82	0.80	0.80	0.80
Adj. Flow (vph)	95	1434	58	27	1741	35	143	12	87	11	4	68
RTOR Reduction (vph)	0	2	0	0	1	0	0	14	0	0	55	0
Lane Group Flow (vph)	95	1490	0	27	1775	0	0	228	0	0	28	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8			4		
Actuated Green, G (s)	12.6	100.7		5.4	93.5			29.4			29.4	
Effective Green, g (s)	12.6	100.7		5.4	93.5			29.4			29.4	
Actuated g/C Ratio	0.08	0.67		0.04	0.62			0.20			0.20	
Clearance Time (s)	4.4	5.2		4.4	5.2			4.9			4.9	
Vehicle Extension (s)	3.0	5.0		3.0	4.5			2.5			2.0	
Lane Grp Cap (vph)	148	3394		63	3160			254			308	
v/s Ratio Prot	c0.05	0.29		0.02	c0.35							
v/s Ratio Perm								c0.17			0.02	
v/c Ratio	0.64	0.44		0.43	0.56			0.90			0.09	
Uniform Delay, d1	66.5	11.5		70.8	16.4			58.8			49.4	
Progression Factor	1.17	0.68		1.00	1.00			1.00			1.00	
Incremental Delay, d2	7.9	0.4		4.6	0.7			30.4			0.0	
Delay (s)	85.6	8.1		75.4	17.1			89.2			49.4	
Level of Service	F	A		E	B			F			D	
Approach Delay (s)		12.8			18.0			89.2			49.4	
Approach LOS		B			B			F			D	

Intersection Summary

HCM 2000 Control Delay	21.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	14.5
Intersection Capacity Utilization	67.8%	ICU Level of Service	C
Analysis Period (min)	15		

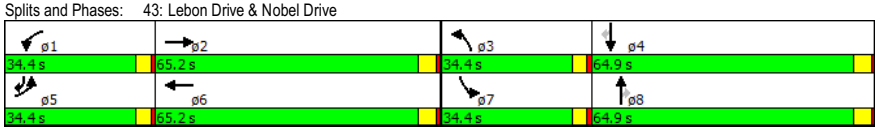
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	86	967	159	1132	137	147	81	136	240	203
Future Volume (vph)	86	967	159	1132	137	147	81	136	240	203
Turn Type	Prot	NA	Prot	NA	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	5	2	1	6	3	8		7	4	5
Permitted Phases							8			4
Detector Phase	5	2	1	6	3	8	8	7	4	5
Switch Phase										
Minimum Initial (s)	4.0	10.0	4.0	10.0	4.0	8.0	8.0	10.0	10.0	4.0
Minimum Split (s)	8.4	15.2	8.4	15.2	8.4	12.9	12.9	14.4	14.9	8.4
Total Split (s)	34.4	65.2	34.4	65.2	34.4	64.9	64.9	34.4	64.9	34.4
Total Split (%)	17.3%	32.8%	17.3%	32.8%	17.3%	32.6%	32.6%	17.3%	32.6%	17.3%
Yellow Time (s)	3.4	4.2	3.4	4.2	3.4	3.9	3.9	3.4	3.9	3.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.2	4.4	5.2	4.4	4.9	4.9	4.4	4.9	4.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 198.9
Actuated Cycle Length: 129.5
Natural Cycle: 65
Control Type: Actuated-Uncoordinated

Splits and Phases: 43: Lebon Drive & Nobel Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	86	967	149	159	1132	87	137	147	81	136	240	203
Future Volume (vph)	86	967	149	159	1132	87	137	147	81	136	240	203
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.2		4.4	5.2		4.4	4.9	4.9	4.4	4.9	4.4
Lane Util. Factor	0.97	0.91		1.00	0.91		0.97	0.95	1.00	0.97	0.95	1.00
Frt	1.00	0.98		1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	4984		1770	5031		3433	3539	1583	3433	3539	1583
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	4984		1770	5031		3433	3539	1583	3433	3539	1583
Peak-hour factor, PHF	0.88	0.88	0.88	0.91	0.91	0.91	0.96	0.96	0.96	0.80	0.80	0.80
Adj. Flow (vph)	98	1099	169	175	1244	96	143	153	84	170	300	254
RTOR Reduction (vph)	0	9	0	0	3	0	0	0	65	0	0	75
Lane Group Flow (vph)	98	1259	0	175	1337	0	143	153	19	170	300	179
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	5	2		1	6		3	8		7	4	5
Permitted Phases									8			4
Actuated Green, G (s)	8.7	50.0		18.2	59.5		10.5	29.3	29.3	12.3	31.1	39.8
Effective Green, g (s)	8.7	50.0		18.2	59.5		10.5	29.3	29.3	12.3	31.1	39.8
Actuated g/C Ratio	0.07	0.39		0.14	0.46		0.08	0.23	0.23	0.10	0.24	0.31
Clearance Time (s)	4.4	5.2		4.4	5.2		4.4	4.9	4.9	4.4	4.9	4.4
Vehicle Extension (s)	2.0	4.5		2.0	4.5		2.0	6.4	6.4	2.0	5.5	2.0
Lane Grp Cap (vph)	232	1936		250	2325		280	805	360	328	855	489
v/s Ratio Prot	0.03	c0.25		c0.10	0.27		0.04	0.04		c0.05	0.08	c0.02
v/s Ratio Perm									0.01			0.09
v/c Ratio	0.42	0.65		0.70	0.57		0.51	0.19	0.05	0.52	0.35	0.37
Uniform Delay, d1	57.6	32.2		52.6	25.3		56.6	40.1	38.9	55.4	40.4	34.6
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.5	1.0		6.8	0.5		0.7	0.4	0.2	0.6	0.6	0.2
Delay (s)	58.0	33.2		59.4	25.8		57.3	40.5	39.0	56.0	41.0	34.8
Level of Service	E	C		E	C		E	D	D	E	D	C
Approach Delay (s)		34.9			29.7			46.5			42.4	
Approach LOS		C			C			D			D	

Intersection Summary

HCM 2000 Control Delay	35.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	128.7	Sum of lost time (s)	18.9
Intersection Capacity Utilization	61.6%	ICU Level of Service	B
Analysis Period (min)	15		

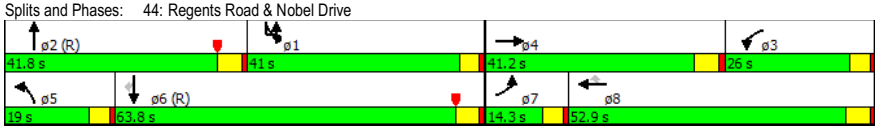
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	202	1017	272	1237	132	78	116	414	477	293
Future Volume (vph)	202	1017	272	1237	132	78	116	414	477	293
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Prot	NA	Perm
Protected Phases	7	4	3	8		5	2	1	6	
Permitted Phases					8					6
Detector Phase	7	4	3	8	8	5	2	1	6	6
Switch Phase										
Minimum Initial (s)	4.0	10.0	4.0	10.0	10.0	4.0	10.0	4.0	10.0	10.0
Minimum Split (s)	8.4	41.2	8.4	41.2	41.2	8.4	41.2	8.4	41.2	41.2
Total Split (s)	14.3	41.2	26.0	52.9	52.9	19.0	41.8	41.0	63.8	63.8
Total Split (%)	9.5%	27.5%	17.3%	35.3%	35.3%	12.7%	27.9%	27.3%	42.5%	42.5%
Yellow Time (s)	3.4	4.2	3.4	4.2	4.2	3.4	4.2	3.4	4.2	4.2
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.2	4.4	5.2	5.2	4.4	5.2	4.4	5.2	5.2
Lead/Lag	Lead	Lead	Lag	Lag	Lag	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Min	None	Min	Min	None	C-Max	None	C-Max	C-Max

Intersection Summary

Cycle Length: 150
Actuated Cycle Length: 150
Offset: 49 (33%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 44: Regents Road & Nobel Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	202	1017	69	272	1237	132	78	116	132	23	414	477
Future Volume (vph)	202	1017	69	272	1237	132	78	116	132	23	414	477
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.2		4.4	5.2	5.2	4.4	5.2			4.4	5.2
Lane Util. Factor	0.97	0.91		0.97	0.95	1.00	1.00	0.91			1.00	0.95
Frt	1.00	0.99		1.00	1.00	0.85	1.00	0.92			1.00	1.00
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00			0.95	1.00
Satd. Flow (prot)	3433	5037		3433	3539	1583	1770	4679			1770	3539
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00			0.95	1.00
Satd. Flow (perm)	3433	5037		3433	3539	1583	1770	4679			1770	3539
Peak-hour factor, PHF	0.94	0.94	0.94	0.91	0.91	0.91	0.95	0.95	0.95	0.92	0.82	0.82
Adj. Flow (vph)	215	1082	73	299	1359	145	82	122	139	25	505	582
RTOR Reduction (vph)	0	5	0	0	0	80	0	105	0	0	0	0
Lane Group Flow (vph)	215	1150	0	299	1359	65	82	156	0	0	530	582
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA		Prot	Prot	NA
Protected Phases	7	4		3	8		5	2		1	1	6
Permitted Phases						8						
Actuated Green, G (s)	9.9	36.0		21.6	47.7	47.7	11.8	36.6			36.6	61.4
Effective Green, g (s)	9.9	36.0		21.6	47.7	47.7	11.8	36.6			36.6	61.4
Actuated g/C Ratio	0.07	0.24		0.14	0.32	0.32	0.08	0.24			0.24	0.41
Clearance Time (s)	4.4	5.2		4.4	5.2	5.2	4.4	5.2			4.4	5.2
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0			3.0	3.0
Lane Grp Cap (vph)	226	1208		494	1125	503	139	1141			431	1448
v/s Ratio Prot	0.06	c0.23		0.09	c0.38		c0.05	0.03			c0.30	c0.16
v/s Ratio Perm						0.04						
v/c Ratio	0.95	0.95		0.61	1.21	0.13	0.59	0.14			1.23	0.40
Uniform Delay, d1	69.8	56.1		60.2	51.1	36.4	66.8	44.3			56.7	31.3
Progression Factor	1.00	1.00		0.70	0.66	0.18	1.00	1.00			0.74	0.72
Incremental Delay, d2	46.1	15.7		1.7	100.5	0.1	6.3	0.2			117.3	0.6
Delay (s)	115.9	71.8		43.7	134.0	6.8	73.0	44.6			159.1	23.0
Level of Service	F	E		D	F	A	E	D			F	C
Approach Delay (s)		78.8			108.8			51.4				74.8
Approach LOS		E			F			D				E

Intersection Summary

HCM 2000 Control Delay	86.6	HCM 2000 Level of Service	F	
HCM 2000 Volume to Capacity ratio	0.99			
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	19.2	
Intersection Capacity Utilization	88.5%	ICU Level of Service	E	
Analysis Period (min)	15			

c Critical Lane Group

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	293
Future Volume (vph)	293
Ideal Flow (vphpl)	1900
Total Lost time (s)	5.2
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1583
Flt Permitted	1.00
Satd. Flow (perm)	1583
Peak-hour factor, PHF	0.82
Adj. Flow (vph)	357
RTOR Reduction (vph)	136
Lane Group Flow (vph)	221
Turn Type	Perm
Protected Phases	
Permitted Phases	6
Actuated Green, G (s)	61.4
Effective Green, g (s)	61.4
Actuated g/C Ratio	0.41
Clearance Time (s)	5.2
Vehicle Extension (s)	3.0
Lane Grp Cap (vph)	647
v/s Ratio Prot	
v/s Ratio Perm	0.14
v/c Ratio	0.34
Uniform Delay, d1	30.4
Progression Factor	1.09
Incremental Delay, d2	1.0
Delay (s)	34.1
Level of Service	C
Approach Delay (s)	
Approach LOS	

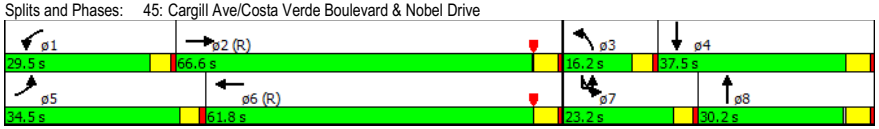
Intersection Summary

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	382	884	90	1038	64	56	192	69
Future Volume (vph)	382	884	90	1038	64	56	192	69
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	5	2	1	6	3	8	7	4
Permitted Phases								
Detector Phase	5	2	1	6	3	8	7	4
Switch Phase								
Minimum Initial (s)	4.0	25.0	4.0	25.0	4.0	25.0	4.0	25.0
Minimum Split (s)	8.4	30.2	8.4	30.2	8.4	30.2	8.4	30.2
Total Split (s)	34.5	66.6	29.5	61.8	16.2	30.2	23.2	37.5
Total Split (%)	23.0%	44.4%	19.7%	41.2%	10.8%	20.1%	15.5%	25.0%
Yellow Time (s)	3.4	4.2	3.4	4.2	3.4	4.2	3.4	4.2
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.2	4.4	5.2	4.4	5.2	4.4	5.2
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	Max	None	Max

Intersection Summary

Cycle Length: 150
Actuated Cycle Length: 150
Offset: 145 (97%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 120
Control Type: Actuated-Coordinated

Splits and Phases: 45: Cargill Ave/Costa Verde Boulevard & Nobel Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	382	884	73	90	1038	149	64	56	49	4	192	69
Future Volume (vph)	382	884	73	90	1038	149	64	56	49	4	192	69
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.2		4.4	5.2		4.4	5.2			4.4	5.2
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	1.00			1.00	1.00
Frt	1.00	0.99		1.00	0.98		1.00	0.93			1.00	0.88
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			0.95	1.00
Satd. Flow (prot)	1770	5027		1770	4990		1770	1732			1770	1645
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00			0.95	1.00
Satd. Flow (perm)	1770	5027		1770	4990		1770	1732			1770	1645
Peak-hour factor, PHF	0.95	0.95	0.95	0.88	0.88	0.88	0.83	0.83	0.83	0.92	0.87	0.87
Adj. Flow (vph)	402	931	77	102	1180	169	77	67	59	4	221	79
RTOR Reduction (vph)	0	6	0	0	12	0	0	21	0	0	0	83
Lane Group Flow (vph)	402	1002	0	102	1337	0	77	105	0	0	225	274
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	Prot	NA
Protected Phases	5	2		1	6		3	8		7	7	4
Permitted Phases												
Actuated Green, G (s)	30.1	73.7		13.0	56.6		10.0	25.3			18.8	34.1
Effective Green, g (s)	30.1	73.7		13.0	56.6		10.0	25.3			18.8	34.1
Actuated g/C Ratio	0.20	0.49		0.09	0.38		0.07	0.17			0.13	0.23
Clearance Time (s)	4.4	5.2		4.4	5.2		4.4	5.2			4.4	5.2
Vehicle Extension (s)	2.0	4.5		2.0	4.5		2.0	4.5			2.0	4.5
Lane Grp Cap (vph)	355	2469		153	1882		118	292			221	373
v/s Ratio Prot	c0.23	0.20		0.06	c0.27		0.04	0.06			c0.13	c0.17
v/s Ratio Perm												
v/c Ratio	1.13	0.41		0.67	0.71		0.65	0.36			1.02	0.73
Uniform Delay, d1	59.9	24.2		66.4	39.7		68.3	55.2			65.6	53.7
Progression Factor	1.38	0.23		1.44	0.19		1.00	1.00			1.00	1.00
Incremental Delay, d2	69.9	0.1		3.3	0.9		9.5	3.4			65.3	12.1
Delay (s)	153.0	5.6		99.1	8.5		77.8	58.6			130.9	65.8
Level of Service	F	A		F	A		E	E			F	E
Approach Delay (s)		47.6			14.9			65.9				91.0
Approach LOS		D			B			E				F

Intersection Summary			
HCM 2000 Control Delay	42.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	19.2
Intersection Capacity Utilization	92.2%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	242
Future Volume (vph)	242
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.87
Adj. Flow (vph)	278
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

Intersection Summary

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	309	749	24	1737	24	6	93	0
Future Volume (vph)	309	749	24	1737	24	6	93	0
Turn Type	Prot	NA	Prot	NA	Perm	NA	Perm	NA
Protected Phases	5	2	1	6		8		4
Permitted Phases					8		4	
Detector Phase	5	2	1	6	8	8	4	4
Switch Phase								
Minimum Initial (s)	4.0	7.0	4.0	7.0	4.0	4.0	4.0	4.0
Minimum Split (s)	9.5	19.0	9.5	28.9	32.9	32.9	32.9	32.9
Total Split (s)	31.2	100.3	11.0	80.1	33.0	33.0	33.0	33.0
Total Split (%)	21.6%	69.5%	7.6%	55.5%	22.9%	22.9%	22.9%	22.9%
Yellow Time (s)	3.4	4.0	3.4	3.9	3.9	3.9	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.4	5.0	4.4	4.9		4.9	4.9	4.9
Lead/Lag	Lead	Lag	Lead	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes				
Recall Mode	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 144.3
Actuated Cycle Length: 134.7
Natural Cycle: 150
Control Type: Actuated-Uncoordinated

Splits and Phases: 46: Lombard Place & Nobel Drive

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	309	749	32	24	1737	110	24	6	8	93	0	287
Future Volume (vph)	309	749	32	24	1737	110	24	6	8	93	0	287
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.0		4.4	4.9			4.9		4.9	4.9	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00		1.00	1.00	
Frt	1.00	0.99		1.00	0.99			0.97		1.00	0.85	
Flt Protected	0.95	1.00		0.95	1.00			0.97		0.95	1.00	
Satd. Flow (prot)	1770	3517		1770	3508			1755		1770	1583	
Flt Permitted	0.95	1.00		0.95	1.00			0.18		0.76	1.00	
Satd. Flow (perm)	1770	3517		1770	3508			327		1415	1583	
Peak-hour factor, PHF	0.89	0.89	0.89	0.90	0.90	0.90	0.80	0.80	0.80	0.80	0.80	0.80
Adj. Flow (vph)	347	842	36	27	1930	122	30	8	10	116	0	359
RTOR Reduction (vph)	0	2	0	0	3	0	0	7	0	0	222	0
Lane Group Flow (vph)	347	876	0	27	2049	0	0	41	0	116	137	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8			4		
Actuated Green, G (s)	26.9	100.4		3.8	77.4			18.0		18.0	18.0	
Effective Green, g (s)	26.9	100.4		3.8	77.4			18.0		18.0	18.0	
Actuated g/C Ratio	0.20	0.74		0.03	0.57			0.13		0.13	0.13	
Clearance Time (s)	4.4	5.0		4.4	4.9			4.9		4.9	4.9	
Vehicle Extension (s)	2.0	3.7		2.0	4.4			2.0		2.0	2.0	
Lane Grp Cap (vph)	348	2586		49	1989			43		186	208	
v/s Ratio Prot	c0.20	0.25		0.02	c0.58						0.09	
v/s Ratio Perm								c0.13		0.08		
v/c Ratio	1.00	0.34		0.55	1.03			0.95		0.62	0.66	
Uniform Delay, d1	54.8	6.4		65.5	29.5			58.8		56.0	56.3	
Progression Factor	1.00	1.00		1.00	1.00			1.00		1.00	1.00	
Incremental Delay, d2	47.1	0.1		7.4	28.4			118.2		4.6	5.6	
Delay (s)	101.9	6.5		72.9	57.9			177.0		60.7	61.9	
Level of Service	F	A		E	E			F		E	E	
Approach Delay (s)		33.5			58.1			177.0			61.6	
Approach LOS		C			E			F			E	

Intersection Summary

HCM 2000 Control Delay	52.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.01		
Actuated Cycle Length (s)	136.5	Sum of lost time (s)	14.3
Intersection Capacity Utilization	103.2%	ICU Level of Service	G
Analysis Period (min)	15		

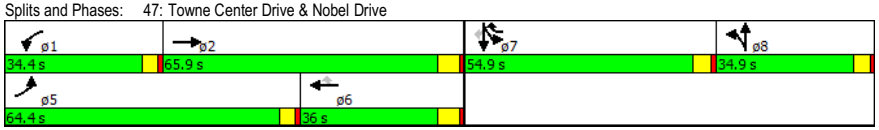
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	374	500	233	1127	39	31	50	263	697
Future Volume (vph)	374	500	233	1127	39	31	50	263	697
Turn Type	Prot	NA	Prot	NA	pm+ov	NA	Split	NA	Perm
Protected Phases	5	2	1	6	7	8	7	7	
Permitted Phases					6				7
Detector Phase	5	2	1	6	7	8	7	7	7
Switch Phase									
Minimum Initial (s)	4.0	7.0	4.0	7.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.4	12.9	8.4	13.0	8.9	8.9	8.9	8.9	8.9
Total Split (s)	64.4	65.9	34.4	36.0	54.9	34.9	54.9	54.9	54.9
Total Split (%)	33.9%	34.6%	18.1%	18.9%	28.9%	18.3%	28.9%	28.9%	28.9%
Yellow Time (s)	3.4	4.9	3.4	5.0	3.9	3.9	3.9	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.9	4.4	6.0	4.9	4.9	4.9	4.9	4.9
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 190.2
Actuated Cycle Length: 127.9
Natural Cycle: 90
Control Type: Actuated-Uncoordinated

Splits and Phases: 47: Towne Center Drive & Nobel Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	374	500	71	233	1127	39	50	31	24	50	263	697
Future Volume (vph)	374	500	71	233	1127	39	50	31	24	50	263	697
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.9		4.4	6.0	4.9		4.9		4.9	4.9	4.9
Lane Util. Factor	0.97	0.95		1.00	0.91	1.00		0.95		1.00	1.00	1.00
Frt	1.00	0.98		1.00	1.00	0.85		0.97		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.98		0.95	1.00	1.00
Satd. Flow (prot)	3433	3473		1770	5085	1583		3339		1770	1863	1583
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.98		0.95	1.00	1.00
Satd. Flow (perm)	3433	3473		1770	5085	1583		3339		1770	1863	1583
Peak-hour factor, PHF	0.90	0.90	0.90	0.87	0.87	0.87	0.80	0.80	0.80	0.86	0.86	0.86
Adj. Flow (vph)	416	556	79	268	1295	45	62	39	30	58	306	810
RTOR Reduction (vph)	0	7	0	0	0	18	0	16	0	0	0	498
Lane Group Flow (vph)	416	628	0	268	1295	27	0	116	0	58	306	312
Turn Type	Prot	NA		Prot	NA	pm+ov	Split	NA		Split	NA	Perm
Protected Phases	5	2		1	6	7	8	8		7	7	
Permitted Phases						6						7
Actuated Green, G (s)	21.4	34.1		27.4	40.0	76.1		9.4		36.1	36.1	36.1
Effective Green, g (s)	21.4	34.1		27.4	40.0	76.1		9.4		36.1	36.1	36.1
Actuated g/C Ratio	0.17	0.27		0.22	0.31	0.60		0.07		0.28	0.28	0.28
Clearance Time (s)	4.4	5.9		4.4	6.0	4.9		4.9		4.9	4.9	4.9
Vehicle Extension (s)	2.0	4.9		2.0	3.3	4.0		2.0		4.0	4.0	4.0
Lane Grp Cap (vph)	578	931		381	1600	947		246		502	529	449
v/s Ratio Prot	0.12	0.18		c0.15	c0.25	0.01		c0.03		0.03	0.16	
v/s Ratio Perm						0.01						c0.20
v/c Ratio	0.72	0.67		0.70	0.81	0.03		0.47		0.12	0.58	0.70
Uniform Delay, d1	50.0	41.5		46.1	40.0	10.4		56.5		33.7	39.0	40.6
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00
Incremental Delay, d2	3.6	2.5		4.8	3.2	0.0		0.5		0.1	1.8	5.0
Delay (s)	53.6	44.0		50.9	43.2	10.4		57.0		33.8	40.8	45.6
Level of Service	D	D		D	D	B		E		C	D	D
Approach Delay (s)		47.8			43.6			57.0			43.8	
Approach LOS		D			D			E			D	

Intersection Summary

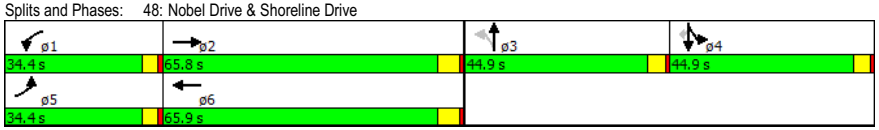
HCM 2000 Control Delay	45.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	127.1	Sum of lost time (s)	20.2
Intersection Capacity Utilization	81.4%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	74	425	47	1236	21	6	73	8	46
Future Volume (vph)	74	425	47	1236	21	6	73	8	46
Turn Type	Prot	NA	Prot	NA	Perm	NA	Split	NA	Perm
Protected Phases	5	2	1	6		3	4	4	
Permitted Phases					3				4
Detector Phase	5	2	1	6	3	3	4	4	4
Switch Phase									
Minimum Initial (s)	4.0	10.0	4.0	10.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.4	15.8	8.4	30.9	8.9	8.9	33.9	33.9	33.9
Total Split (s)	34.4	65.8	34.4	65.9	44.9	44.9	44.9	44.9	44.9
Total Split (%)	18.1%	34.6%	18.1%	34.7%	23.6%	23.6%	23.6%	23.6%	23.6%
Yellow Time (s)	3.4	4.8	3.4	4.9	3.9	3.9	3.9	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.8	4.4	5.9		4.9	4.9	4.9	4.9
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 190.1
Actuated Cycle Length: 145.3
Natural Cycle: 85
Control Type: Actuated-Uncoordinated

Splits and Phases: 48: Nobel Drive & Shoreline Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	74	425	48	47	1236	224	21	6	13	4	73	8
Future Volume (vph)	74	425	48	47	1236	224	21	6	13	4	73	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.8		4.4	5.9			4.9			4.9	4.9
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	1.00
Frt	1.00	0.98		1.00	0.98			0.96			1.00	1.00
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.95	1.00
Satd. Flow (prot)	1770	5008		1770	4968			1734			1770	1863
Flt Permitted	0.95	1.00		0.95	1.00			0.22			0.73	1.00
Satd. Flow (perm)	1770	5008		1770	4968			393			1358	1863
Peak-hour factor, PHF	0.91	0.91	0.91	0.88	0.88	0.88	0.93	0.93	0.93	0.92	0.80	0.80
Adj. Flow (vph)	81	467	53	53	1405	255	23	6	14	4	91	10
RTOR Reduction (vph)	0	6	0	0	12	0	0	11	0	0	0	0
Lane Group Flow (vph)	81	514	0	53	1648	0	0	32	0	0	95	10
Turn Type	Prot	NA		Prot	NA		Perm	NA			Split	NA
Protected Phases	5	2		1	6			3			4	4
Permitted Phases							3					
Actuated Green, G (s)	11.1	65.3		7.6	61.7			13.9			40.4	40.4
Effective Green, g (s)	11.1	65.3		7.6	61.7			13.9			40.4	40.4
Actuated g/C Ratio	0.08	0.44		0.05	0.42			0.09			0.27	0.27
Clearance Time (s)	4.4	5.8		4.4	5.9			4.9			4.9	4.9
Vehicle Extension (s)	2.0	4.6		2.0	4.4			2.0			2.0	2.0
Lane Grp Cap (vph)	133	2221		91	2082			37			372	511
v/s Ratio Prot	c0.05	c0.10		0.03	c0.33							0.01
v/s Ratio Perm								c0.08			c0.07	
v/c Ratio	0.61	0.23		0.58	0.79			0.87			0.26	0.02
Uniform Delay, d1	65.9	25.4		68.2	37.2			65.7			41.7	39.0
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	1.00
Incremental Delay, d2	5.3	0.1		6.0	2.4			93.3			0.1	0.0
Delay (s)	71.3	25.5		74.2	39.5			159.0			41.8	39.0
Level of Service	E	C		E	D			F			D	D
Approach Delay (s)		31.7			40.6			159.0				40.6
Approach LOS		C			D			F				D

Intersection Summary				
HCM 2000 Control Delay	40.5	HCM 2000 Level of Service	D	
HCM 2000 Volume to Capacity ratio	0.61			
Actuated Cycle Length (s)	147.2	Sum of lost time (s)	20.1	
Intersection Capacity Utilization	54.6%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

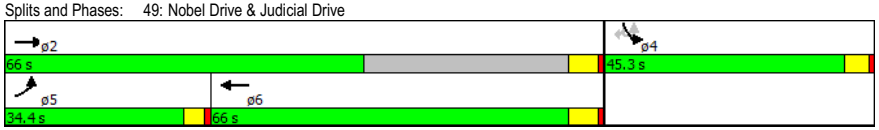
Movement	SBR
Lane Configurations	
Traffic Volume (vph)	46
Future Volume (vph)	46
Ideal Flow (vphpl)	1900
Total Lost time (s)	4.9
Lane Util. Factor	0.88
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	2787
Flt Permitted	1.00
Satd. Flow (perm)	2787
Peak-hour factor, PHF	0.80
Adj. Flow (vph)	58
RTOR Reduction (vph)	42
Lane Group Flow (vph)	16
Turn Type	Perm
Protected Phases	
Permitted Phases	4
Actuated Green, G (s)	40.4
Effective Green, g (s)	40.4
Actuated g/C Ratio	0.27
Clearance Time (s)	4.9
Vehicle Extension (s)	2.0
Lane Grp Cap (vph)	764
v/s Ratio Prot	
v/s Ratio Perm	0.01
v/c Ratio	0.02
Uniform Delay, d1	39.0
Progression Factor	1.00
Incremental Delay, d2	0.0
Delay (s)	39.0
Level of Service	D
Approach Delay (s)	
Approach LOS	

Intersection Summary

Lane Group	EBL	EBT	WBT	SBL	SBR
Lane Configurations					
Traffic Volume (vph)	25	512	1428	819	127
Future Volume (vph)	25	512	1428	819	127
Turn Type	Prot	NA	NA	Prot	Perm
Protected Phases	5	2	6	4	
Permitted Phases					4
Detector Phase	5	2	6	4	4
Switch Phase					
Minimum Initial (s)	4.0	10.0	10.0	7.0	7.0
Minimum Split (s)	11.4	16.0	16.0	12.3	12.3
Total Split (s)	34.4	66.0	66.0	45.3	45.3
Total Split (%)	23.6%	45.3%	45.3%	31.1%	31.1%
Yellow Time (s)	3.4	5.0	5.0	4.3	4.3
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	6.0	6.0	5.3	5.3
Lead/Lag	Lead		Lag		
Lead-Lag Optimize?	Yes		Yes		
Recall Mode	None	Min	Min	None	None

Intersection Summary
Cycle Length: 145.7
Actuated Cycle Length: 117.5
Natural Cycle: 80
Control Type: Actuated-Uncoordinated

Splits and Phases: 49: Nobel Drive & Judicial Drive



Movement	EBL	EBT	WBT	WBR	SBU	SBL	SBR
Lane Configurations							
Traffic Volume (vph)	25	512	1428	331	4	819	127
Future Volume (vph)	25	512	1428	331	4	819	127
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	6.0	6.0			5.3	5.3
Lane Util. Factor	0.97	0.91	0.91			0.97	1.00
Frt	1.00	1.00	0.97			1.00	0.85
Flt Protected	0.95	1.00	1.00			0.95	1.00
Satd. Flow (prot)	3433	5085	4942			3433	1583
Flt Permitted	0.95	1.00	1.00			0.95	1.00
Satd. Flow (perm)	3433	5085	4942			3433	1583
Peak-hour factor, PHF	0.94	0.94	0.92	0.92	0.92	0.84	0.84
Adj. Flow (vph)	27	545	1552	360	4	975	151
RTOR Reduction (vph)	0	0	22	0	0	0	74
Lane Group Flow (vph)	27	545	1890	0	0	979	77
Turn Type	Prot	NA	NA		Perm	Prot	Perm
Protected Phases	5	2	6			4	
Permitted Phases					4		4
Actuated Green, G (s)	3.5	68.0	60.1			40.1	40.1
Effective Green, g (s)	3.5	68.0	60.1			40.1	40.1
Actuated g/C Ratio	0.03	0.57	0.50			0.34	0.34
Clearance Time (s)	4.4	6.0	6.0			5.3	5.3
Vehicle Extension (s)	2.0	5.4	5.4			4.4	4.4
Lane Grp Cap (vph)	100	2895	2487			1152	531
v/s Ratio Prot	0.01	c0.11	c0.38				
v/s Ratio Perm						0.29	0.05
v/c Ratio	0.27	0.19	0.76			0.85	0.14
Uniform Delay, d1	56.7	12.4	23.8			36.9	27.7
Progression Factor	1.00	1.00	1.00			1.00	1.00
Incremental Delay, d2	0.5	0.1	1.7			6.5	0.2
Delay (s)	57.2	12.5	25.6			43.3	27.9
Level of Service	E	B	C			D	C
Approach Delay (s)		14.6	25.6			41.3	
Approach LOS		B	C			D	

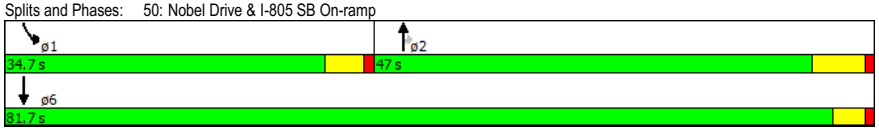
Intersection Summary			
HCM 2000 Control Delay	28.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	119.4	Sum of lost time (s)	15.7
Intersection Capacity Utilization	67.9%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	NBT	NBR	SBL	SBT
Lane Configurations				
Traffic Volume (vph)	630	569	178	1761
Future Volume (vph)	630	569	178	1761
Turn Type	NA	Perm	Prot	NA
Protected Phases	2		1	6
Permitted Phases		2		
Detector Phase	2	2	1	6
Switch Phase				
Minimum Initial (s)	12.0	12.0	5.0	1.0
Minimum Split (s)	19.0	19.0	9.7	5.5
Total Split (s)	47.0	47.0	34.7	81.7
Total Split (%)	57.5%	57.5%	42.5%	100.0%
Yellow Time (s)	5.0	5.0	3.7	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	4.7	4.0
Lead/Lag	Lag	Lag	Lead	
Lead-Lag Optimize?	Yes	Yes	Yes	
Recall Mode	Min	Min	None	Min

Intersection Summary
Cycle Length: 81.7
Actuated Cycle Length: 64.4
Natural Cycle: 40
Control Type: Actuated-Uncoordinated

Splits and Phases: 50: Nobel Drive & I-805 SB On-ramp



Movement	WBL	WBR	NBT	NBR	SBU	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	0	0	630	569	4	178	1761
Future Volume (vph)	0	0	630	569	4	178	1761
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			6.0	6.0		4.7	4.0
Lane Util. Factor			0.95	0.88		0.97	0.91
Frt			1.00	0.85		1.00	1.00
Flt Protected			1.00	1.00		0.95	1.00
Satd. Flow (prot)			3539	2787		3433	5085
Flt Permitted			1.00	1.00		0.13	1.00
Satd. Flow (perm)			3539	2787		479	5085
Peak-hour factor, PHF	0.25	0.25	0.97	0.97	0.92	0.93	0.93
Adj. Flow (vph)	0	0	649	587	4	191	1894
RTOR Reduction (vph)	0	0	0	373	0	0	0
Lane Group Flow (vph)	0	0	649	214	0	195	1894
Turn Type			NA	Perm		Prot	NA
Protected Phases			2			1	6
Permitted Phases				2			
Actuated Green, G (s)			23.5	23.5		30.2	64.4
Effective Green, g (s)			23.5	23.5		30.2	64.4
Actuated g/C Ratio			0.36	0.36		0.47	1.00
Clearance Time (s)			6.0	6.0		4.7	4.0
Vehicle Extension (s)			3.0	3.0		3.0	3.0
Lane Grp Cap (vph)			1291	1016		224	5085
v/s Ratio Prot			c0.18				0.37
v/s Ratio Perm				0.08		c0.41	
v/c Ratio			0.50	0.21		0.87	0.37
Uniform Delay, d1			15.9	14.1		15.3	0.0
Progression Factor			1.00	1.00		1.00	1.00
Incremental Delay, d2			0.3	0.1		28.7	0.0
Delay (s)			16.2	14.2		44.0	0.0
Level of Service			B	B		D	A
Approach Delay (s)	0.0		15.2				4.2
Approach LOS	A		B				A

Intersection Summary			
HCM 2000 Control Delay	8.3	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	64.4	Sum of lost time (s)	10.7
Intersection Capacity Utilization	50.8%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	WBL	WBR	NBT	SBT	ø5
Lane Configurations					
Traffic Volume (vph)	715	374	594	1006	
Future Volume (vph)	715	374	594	1006	
Turn Type	Prot	Prot	NA	NA	
Protected Phases	8	1	2	6	5
Permitted Phases					
Detector Phase	8	1	2	6	
Switch Phase					
Minimum Initial (s)	5.0	5.0	16.0	11.0	5.0
Minimum Split (s)	11.1	11.1	23.0	18.0	9.7
Total Split (s)	36.1	19.7	47.0	47.0	24.7
Total Split (%)	33.5%	18.3%	43.6%	43.6%	23%
Yellow Time (s)	4.1	3.7	5.0	5.0	3.7
All-Red Time (s)	2.0	1.0	2.0	2.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.1	4.7	7.0	7.0	
Lead/Lag		Lead	Lag	Lag	Lead
Lead-Lag Optimize?		Yes	Yes	Yes	Yes
Recall Mode	None	None	Min	Min	None

Intersection Summary
Cycle Length: 107.8
Actuated Cycle Length: 75.3
Natural Cycle: 80
Control Type: Actuated-Uncoordinated

Splits and Phases: 51: Nobel Drive & I-805 N Off-ramps

Movement	WBL	WBR	NBU	NBT	NBR	SBU	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	715	374	0	594	0	4	0	1006
Future Volume (vph)	715	374	0	594	0	4	0	1006
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.1	4.7		7.0				7.0
Lane Util. Factor	0.97	0.88		0.95				0.91
Frt	1.00	0.85		1.00				1.00
Flt Protected	0.95	1.00		1.00				1.00
Satd. Flow (prot)	3433	2787		3539				5084
Flt Permitted	0.95	1.00		1.00				0.94
Satd. Flow (perm)	3433	2787		3539				4770
Peak-hour factor, PHF	0.86	0.86	0.92	0.95	0.95	0.92	0.91	0.91
Adj. Flow (vph)	831	435	0	625	0	4	0	1105
RTOR Reduction (vph)	0	398	0	0	0	0	0	0
Lane Group Flow (vph)	831	37	0	625	0	0	0	1109
Turn Type	Prot	Prot	Prot	NA				NA
Protected Phases	8	1	5	2				6
Permitted Phases								
Actuated Green, G (s)	23.2	6.2		28.0				38.9
Effective Green, g (s)	23.2	6.2		28.0				38.9
Actuated g/C Ratio	0.31	0.08		0.37				0.52
Clearance Time (s)	6.1	4.7		7.0				7.0
Vehicle Extension (s)	2.0	2.0		2.0				2.0
Lane Grp Cap (vph)	1059	229		1317				2467
v/s Ratio Prot	c0.24	0.01		0.18				
v/s Ratio Perm								c0.23
v/c Ratio	0.78	0.16		0.47				0.45
Uniform Delay, d1	23.7	32.1		18.0				11.4
Progression Factor	1.00	1.00		1.00				1.00
Incremental Delay, d2	3.6	0.1		0.1				0.0
Delay (s)	27.3	32.2		18.1				11.5
Level of Service	C	C		B				B
Approach Delay (s)	29.0			18.1				11.5
Approach LOS	C			B				B

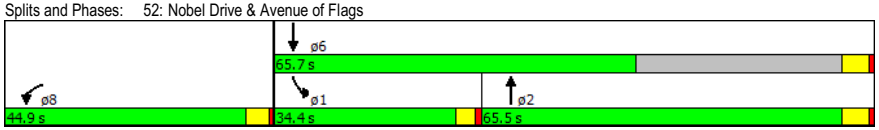
Intersection Summary			
HCM 2000 Control Delay	20.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	75.2	Sum of lost time (s)	17.8
Intersection Capacity Utilization	50.8%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	WBL	NBT	SBL	SBT
Lane Configurations				
Traffic Volume (vph)	10	1170	12	962
Future Volume (vph)	10	1170	12	962
Turn Type	Prot	NA	Prot	NA
Protected Phases	8	2	1	6
Permitted Phases				
Detector Phase	8	2	1	6
Switch Phase				
Minimum Initial (s)	4.0	7.0	4.0	7.0
Minimum Split (s)	28.9	26.5	9.5	12.7
Total Split (s)	44.9	65.5	34.4	65.7
Total Split (%)	31.0%	45.2%	23.8%	45.4%
Yellow Time (s)	3.9	4.5	3.4	4.7
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	5.5	4.4	5.7
Lead/Lag		Lag	Lead	
Lead-Lag Optimize?		Yes	Yes	
Recall Mode	None	Min	None	Min

Intersection Summary
Cycle Length: 144.8
Actuated Cycle Length: 62.7
Natural Cycle: 75
Control Type: Actuated-Uncoordinated

Splits and Phases: 52: Nobel Drive & Avenue of Flags



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	10	8	1170	8	12	962
Future Volume (vph)	10	8	1170	8	12	962
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9		5.5		4.4	5.7
Lane Util. Factor	1.00		0.95		1.00	0.95
Frt	0.94		1.00		1.00	1.00
Flt Protected	0.97		1.00		0.95	1.00
Satd. Flow (prot)	1705		3536		1770	3539
Flt Permitted	0.97		1.00		0.95	1.00
Satd. Flow (perm)	1705		3536		1770	3539
Peak-hour factor, PHF	0.80	0.80	0.91	0.91	0.94	0.94
Adj. Flow (vph)	12	10	1286	9	13	1023
RTOR Reduction (vph)	10	0	0	0	0	0
Lane Group Flow (vph)	13	0	1295	0	13	1023
Turn Type	Prot		NA		Prot	NA
Protected Phases	8		2		1	6
Permitted Phases						
Actuated Green, G (s)	1.9		51.8		1.0	57.0
Effective Green, g (s)	1.9		51.8		1.0	57.0
Actuated g/C Ratio	0.03		0.75		0.01	0.82
Clearance Time (s)	4.9		5.5		4.4	5.7
Vehicle Extension (s)	2.0		5.2		3.0	4.9
Lane Grp Cap (vph)	46		2635		25	2902
v/s Ratio Prot	c0.01		c0.37		0.01	c0.29
v/s Ratio Perm						
v/c Ratio	0.29		0.49		0.52	0.35
Uniform Delay, d1	33.1		3.6		34.0	1.6
Progression Factor	1.00		1.00		1.00	1.00
Incremental Delay, d2	1.3		0.3		18.1	0.1
Delay (s)	34.4		3.9		52.1	1.7
Level of Service	C		A		D	A
Approach Delay (s)	34.4		3.9			2.4
Approach LOS	C		A			A

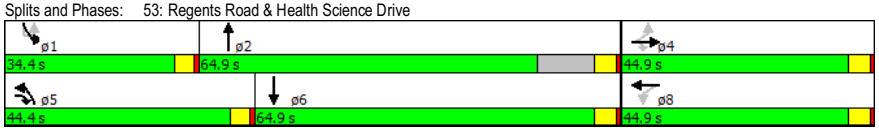
Intersection Summary			
HCM 2000 Control Delay	3.5	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	69.5	Sum of lost time (s)	14.8
Intersection Capacity Utilization	44.6%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBU	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	59	4	474	8	0	274	135	4	8	837
Future Volume (vph)	59	4	474	8	0	274	135	4	8	837
Turn Type	Perm	NA	pm+ov	Perm	NA	Prot	NA	custom	Prot	NA
Protected Phases		4	5		8	5	2		1	6
Permitted Phases	4		4	8				1		
Detector Phase	4	4	5	8	8	5	2	1	1	6
Switch Phase										
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	10.0	4.0	4.0	10.0
Minimum Split (s)	8.9	8.9	8.4	22.9	22.9	8.4	14.9	8.4	8.4	14.9
Total Split (s)	44.9	44.9	44.4	44.9	44.9	44.4	64.9	34.4	34.4	64.9
Total Split (%)	29.1%	29.1%	28.8%	29.1%	29.1%	28.8%	42.1%	22.3%	22.3%	42.1%
Yellow Time (s)	3.9	3.9	3.4	3.9	3.9	3.4	3.9	3.4	3.4	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)		4.9	4.4		4.9	4.4	4.9		4.4	4.9
Lead/Lag			Lead			Lead	Lag	Lead	Lead	Lag
Lead-Lag Optimize?			Yes			Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	Min	None	None	Min	None	None	None	None

Intersection Summary
Cycle Length: 154.2
Actuated Cycle Length: 93.2
Natural Cycle: 75
Control Type: Actuated-Uncoordinated

Splits and Phases: 53: Regents Road & Health Science Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	59	4	474	8	0	4	274	135	15	4	8	837
Future Volume (vph)	59	4	474	8	0	4	274	135	15	4	8	837
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9	4.4		4.9		4.4	4.9			4.4	4.9
Lane Util. Factor		1.00	1.00		1.00		1.00	0.95			1.00	0.95
Frt		1.00	0.85		0.95		1.00	0.98			1.00	1.00
Flt Protected		0.96	1.00		0.97		0.95	1.00			0.95	1.00
Satd. Flow (prot)		1779	1583		1722		1770	3486			1770	3525
Flt Permitted		0.73	1.00		0.78		0.95	1.00			0.67	1.00
Satd. Flow (perm)		1357	1583		1396		1770	3486			1242	3525
Peak-hour factor, PHF	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.92	0.82	0.82
Adj. Flow (vph)	74	5	592	10	0	5	342	169	19	4	10	1021
RTOR Reduction (vph)	0	0	18	0	14	0	0	3	0	0	0	1
Lane Group Flow (vph)	0	79	575	0	1	0	343	185	0	0	14	1049
Turn Type	Perm	NA	pm+ov	Perm	NA		Prot	NA		custom	Prot	NA
Protected Phases		4	5		8		5	2			1	6
Permitted Phases	4		4	8						1		
Actuated Green, G (s)		8.8	39.9		8.8		31.1	64.6			6.0	39.5
Effective Green, g (s)		8.8	39.9		8.8		31.1	64.6			6.0	39.5
Actuated g/C Ratio		0.09	0.43		0.09		0.33	0.69			0.06	0.42
Clearance Time (s)		4.9	4.4		4.9		4.4	4.9			4.4	4.9
Vehicle Extension (s)		2.0	2.0		2.0		2.0	3.8			2.0	3.8
Lane Grp Cap (vph)		127	674		131		588	2405			79	1487
v/s Ratio Prot			c0.28				0.19	0.05				c0.30
v/s Ratio Perm		0.06	0.08		0.00						0.01	
v/c Ratio		0.62	0.85		0.01		0.58	0.08			0.18	0.71
Uniform Delay, d1		40.8	24.2		38.5		25.9	4.7			41.5	22.3
Progression Factor		1.00	1.00		1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2		6.6	9.9		0.0		1.0	0.0			0.4	1.6
Delay (s)		47.4	34.1		38.5		26.8	4.8			41.9	23.9
Level of Service		D	C		D		C	A			D	C
Approach Delay (s)		35.7			38.5			19.0				24.1
Approach LOS		D			D			B				C

Intersection Summary				
HCM 2000 Control Delay	26.4	HCM 2000 Level of Service	C	
HCM 2000 Volume to Capacity ratio	0.78			
Actuated Cycle Length (s)	93.6	Sum of lost time (s)	14.2	
Intersection Capacity Utilization	68.4%	ICU Level of Service	C	
Analysis Period (min)	15			

c Critical Lane Group

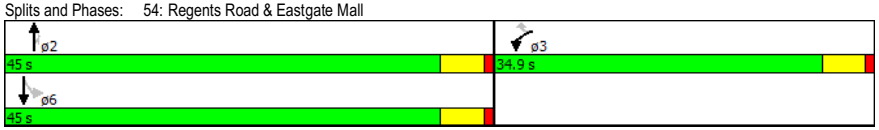
Movement	SBR
Lane Configurations	
Traffic Volume (vph)	24
Future Volume (vph)	24
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.82
Adj. Flow (vph)	29
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

Intersection Summary

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	446	101	329	143	242	1117
Future Volume (vph)	446	101	329	143	242	1117
Turn Type	Prot	Perm	NA	Perm	Perm	NA
Protected Phases	3		2			6
Permitted Phases		3		2	6	
Detector Phase	3	3	2	2	6	6
Switch Phase						
Minimum Initial (s)	4.0	4.0	7.0	7.0	7.0	7.0
Minimum Split (s)	8.9	8.9	12.0	12.0	12.0	12.0
Total Split (s)	34.9	34.9	45.0	45.0	45.0	45.0
Total Split (%)	43.7%	43.7%	56.3%	56.3%	56.3%	56.3%
Yellow Time (s)	3.9	3.9	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	5.0	5.0	5.0	5.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None	None	Min	Min	Min	Min

Intersection Summary
Cycle Length: 79.9
Actuated Cycle Length: 69.2
Natural Cycle: 60
Control Type: Actuated-Uncoordinated

Splits and Phases: 54: Regents Road & Eastgate Mall



Movement	WBL	WBR	NBT	NBR	SBU	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	446	101	329	143	4	242	1117
Future Volume (vph)	446	101	329	143	4	242	1117
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9	5.0	5.0		5.0	5.0
Lane Util. Factor	1.00	1.00	0.95	1.00		1.00	0.95
Frt	1.00	0.85	1.00	0.85		1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583		1770	3539
Flt Permitted	0.95	1.00	1.00	1.00		0.51	1.00
Satd. Flow (perm)	1770	1583	3539	1583		952	3539
Peak-hour factor, PHF	0.87	0.87	0.80	0.80	0.92	0.88	0.88
Adj. Flow (vph)	513	116	411	179	4	275	1269
RTOR Reduction (vph)	0	76	0	88	0	0	0
Lane Group Flow (vph)	513	40	411	91	0	279	1269
Turn Type	Prot	Perm	NA	Perm		Perm	NA
Protected Phases	3		2				6
Permitted Phases		3		2		6	
Actuated Green, G (s)	23.9	23.9	34.9	34.9		34.9	34.9
Effective Green, g (s)	23.9	23.9	34.9	34.9		34.9	34.9
Actuated g/C Ratio	0.35	0.35	0.51	0.51		0.51	0.51
Clearance Time (s)	4.9	4.9	5.0	5.0		5.0	5.0
Vehicle Extension (s)	2.0	2.0	3.4	3.4		3.5	3.5
Lane Grp Cap (vph)	615	550	1797	804		483	1797
v/s Ratio Prot	c0.29		0.12				c0.36
v/s Ratio Perm		0.03		0.06		0.29	
v/c Ratio	0.83	0.07	0.23	0.11		0.58	0.71
Uniform Delay, d1	20.6	15.0	9.4	8.8		11.8	13.0
Progression Factor	1.00	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	9.1	0.0	0.1	0.1		1.8	1.3
Delay (s)	29.7	15.0	9.5	8.9		13.6	14.3
Level of Service	C	B	A	A		B	B
Approach Delay (s)	27.0		9.3				14.2
Approach LOS	C		A				B

Intersection Summary			
HCM 2000 Control Delay	16.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	68.7	Sum of lost time (s)	9.9
Intersection Capacity Utilization	63.8%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBU	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	26	6	117	9	172	4	339	4	102	1311
Future Volume (vph)	26	6	117	9	172	4	339	4	102	1311
Turn Type	Perm	NA	Perm	NA	Perm	Prot	NA	custom	Prot	NA
Protected Phases		4		8		5	2		1	6
Permitted Phases	4		8		8			1		
Detector Phase	4	4	8	8	8	5	2	1	1	6
Switch Phase										
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	4.0	10.0	4.0	4.0	10.0
Minimum Split (s)	11.9	11.9	11.9	11.9	11.9	8.4	14.9	8.4	8.4	14.9
Total Split (s)	34.9	34.9	44.9	44.9	44.9	34.4	64.9	34.4	34.4	64.9
Total Split (%)	24.2%	24.2%	31.1%	31.1%	31.1%	23.9%	45.0%	23.9%	23.9%	45.0%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.9	3.4	3.9	3.4	3.4	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)		4.9		4.9	4.9	4.4	4.9		4.4	4.9
Lead/Lag						Lead	Lag	Lead	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	None	None	Min

Intersection Summary

Cycle Length: 144.2
Actuated Cycle Length: 78.8
Natural Cycle: 55
Control Type: Actuated-Uncoordinated

Splits and Phases: 55: Regents Road & Executive Drive

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	26	6	6	117	9	172	4	339	25	4	102	1311
Future Volume (vph)	26	6	6	117	9	172	4	339	25	4	102	1311
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9			4.9	4.9	4.4	4.9			4.4	4.9
Lane Util. Factor		1.00			1.00	1.00	1.00	0.95			1.00	0.95
Frt		0.98			1.00	0.85	1.00	0.99			1.00	1.00
Flt Protected		0.97			0.96	1.00	0.95	1.00			0.95	1.00
Satd. Flow (prot)		1762			1780	1583	1770	3503			1770	3522
Flt Permitted		0.75			0.71	1.00	0.95	1.00			0.13	1.00
Satd. Flow (perm)		1375			1314	1583	1770	3503			242	3522
Peak-hour factor, PHF	0.80	0.80	0.80	0.81	0.81	0.81	0.80	0.80	0.80	0.92	0.96	0.96
Adj. Flow (vph)	32	8	8	144	11	212	5	424	31	4	106	1366
RTOR Reduction (vph)	0	6	0	0	0	172	0	4	0	0	0	1
Lane Group Flow (vph)	0	43	0	0	155	40	5	451	0	0	110	1412
Turn Type	Perm	NA		Perm	NA	Perm	Prot	NA		custom	Prot	NA
Protected Phases		4			8		5	2			1	6
Permitted Phases	4			8		8				1		
Actuated Green, G (s)		15.4			15.4	15.4	0.8	21.8			30.8	51.8
Effective Green, g (s)		15.4			15.4	15.4	0.8	21.8			30.8	51.8
Actuated g/C Ratio		0.19			0.19	0.19	0.01	0.27			0.37	0.63
Clearance Time (s)		4.9			4.9	4.9	4.4	4.9			4.4	4.9
Vehicle Extension (s)		2.0			3.1	3.1	2.0	3.1			2.0	3.1
Lane Grp Cap (vph)		257			246	296	17	929			90	2219
v/s Ratio Prot							0.00	0.13				c0.40
v/s Ratio Perm		0.03			c0.12	0.03					c0.45	
v/c Ratio		0.17			0.63	0.13	0.29	0.49			1.22	0.64
Uniform Delay, d1		28.0			30.8	27.8	40.4	25.5			25.7	9.4
Progression Factor		1.00			1.00	1.00	1.00	1.00			1.00	1.00
Incremental Delay, d2		0.1			5.2	0.2	3.5	0.4			166.2	0.6
Delay (s)		28.1			36.0	28.1	43.9	25.9			191.9	10.0
Level of Service		C			D	C	D	C			F	A
Approach Delay (s)		28.1			31.4			26.1				23.1
Approach LOS		C			C			C				C

Intersection Summary

HCM 2000 Control Delay	25.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.92		
Actuated Cycle Length (s)	82.2	Sum of lost time (s)	14.2
Intersection Capacity Utilization	61.8%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

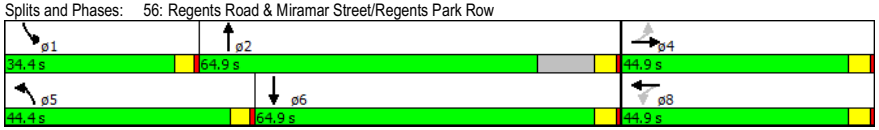
Movement	SBR
Lane Configurations	
Traffic Volume (vph)	45
Future Volume (vph)	45
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.96
Adj. Flow (vph)	47
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

Intersection Summary

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	47	11	98	11	147	336	53	1226
Future Volume (vph)	47	11	98	11	147	336	53	1226
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	7.0	4.0	7.0
Minimum Split (s)	8.9	8.9	8.9	8.9	8.4	11.9	8.4	11.9
Total Split (s)	44.9	44.9	44.9	44.9	44.4	64.9	34.4	64.9
Total Split (%)	29.1%	29.1%	29.1%	29.1%	28.8%	42.1%	22.3%	42.1%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.4	3.9	3.4	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	4.9	4.9	4.4	4.9	4.4	4.9
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 154.2
Actuated Cycle Length: 117.1
Natural Cycle: 65
Control Type: Actuated-Uncoordinated

Splits and Phases: 56: Regents Road & Miramar Street/Regents Park Row



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	47	11	223	98	11	72	147	336	57	4	53	1226
Future Volume (vph)	47	11	223	98	11	72	147	336	57	4	53	1226
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9		4.9	4.9		4.4	4.9			4.4	4.9
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95			1.00	0.95
Frt	1.00	0.86		1.00	0.87		1.00	0.98			1.00	0.99
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			0.95	1.00
Satd. Flow (prot)	1770	1597		1770	1621		1770	3462			1770	3507
Flt Permitted	0.67	1.00		0.33	1.00		0.95	1.00			0.13	1.00
Satd. Flow (perm)	1249	1597		622	1621		1770	3462			244	3507
Peak-hour factor, PHF	0.87	0.87	0.87	0.80	0.80	0.80	0.84	0.84	0.84	0.92	0.89	0.89
Adj. Flow (vph)	54	13	256	122	14	90	175	400	68	4	60	1378
RTOR Reduction (vph)	0	200	0	0	70	0	0	10	0	0	0	2
Lane Group Flow (vph)	54	69	0	123	34	0	175	458	0	0	64	1466
Turn Type	Perm	NA		Perm	NA		Prot	NA			Prot	NA
Protected Phases		4			8		5	2			1	6
Permitted Phases	4			8								
Actuated Green, G (s)	25.5	25.5		25.5	25.5		16.3	46.7			30.5	60.9
Effective Green, g (s)	25.5	25.5		25.5	25.5		16.3	46.7			30.5	60.9
Actuated g/C Ratio	0.22	0.22		0.22	0.22		0.14	0.40			0.26	0.52
Clearance Time (s)	4.9	4.9		4.9	4.9		4.4	4.9			4.4	4.9
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	3.8			2.0	3.8
Lane Grp Cap (vph)	272	348		135	353		246	1383			63	1827
v/s Ratio Prot		0.04			0.02		0.10	0.13				c0.42
v/s Ratio Perm	0.04			c0.20							c0.26	
v/c Ratio	0.20	0.20		0.91	0.10		0.71	0.33			1.02	0.80
Uniform Delay, d1	37.3	37.3		44.6	36.5		48.1	24.3			43.2	23.0
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2	0.1	0.1		50.6	0.0		7.8	0.2			117.9	2.8
Delay (s)	37.5	37.4		95.2	36.5		55.9	24.5			161.1	25.8
Level of Service	D	D		F	D		E	C			F	C
Approach Delay (s)		37.5			68.3			33.0				31.5
Approach LOS		D			E			C				C

Intersection Summary			
HCM 2000 Control Delay	35.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.91		
Actuated Cycle Length (s)	116.9	Sum of lost time (s)	14.2
Intersection Capacity Utilization	80.3%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	80
Future Volume (vph)	80
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.89
Adj. Flow (vph)	90
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

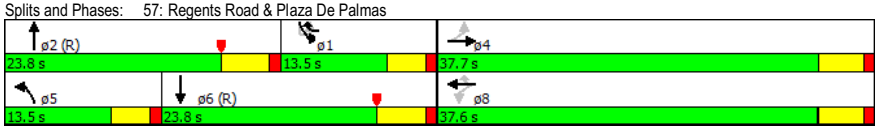
Intersection Summary

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBU	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	26	15	42	16	71	33	328	4	94	1310
Future Volume (vph)	26	15	42	16	71	33	328	4	94	1310
Turn Type	Perm	NA	Perm	NA	pm+ov	Prot	NA	custom	Prot	NA
Protected Phases		4		8	1!	5	2		1	6
Permitted Phases	4		8		8			1!		
Detector Phase	4	4	8	8	1	5	2	1	1	6
Switch Phase										
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	10.0	4.0	4.0	10.0
Minimum Split (s)	8.9	8.9	8.9	8.9	8.4	8.4	15.2	8.4	8.4	15.3
Total Split (s)	37.7	37.7	37.6	37.6	13.5	13.5	23.8	13.5	13.5	23.8
Total Split (%)	50.3%	50.3%	50.1%	50.1%	18.0%	18.0%	31.7%	18.0%	18.0%	31.7%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.4	3.4	4.2	3.4	3.4	4.3
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)		4.9		4.9	4.4	4.4	5.2		4.4	5.3
Lead/Lag					Lag	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	None	None	C-Max

Intersection Summary

Cycle Length: 75
Actuated Cycle Length: 75
Offset: 64 (85%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 60
Control Type: Actuated-Coordinated
! Phase conflict between lane groups.

Splits and Phases: 57: Regents Road & Plaza De Palmas



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	26	15	10	42	16	71	33	328	11	4	94	1310
Future Volume (vph)	26	15	10	42	16	71	33	328	11	4	94	1310
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9			4.9	4.4	4.4	5.2			4.4	5.3
Lane Util. Factor		1.00			1.00	1.00	1.00	0.91			1.00	0.95
Frt		0.97			1.00	0.85	1.00	1.00			1.00	0.99
Flt Protected		0.97			0.96	1.00	0.95	1.00			0.95	1.00
Satd. Flow (prot)		1768			1797	1583	1770	5060			1770	3512
Flt Permitted		0.84			0.77	1.00	0.95	1.00			0.50	1.00
Satd. Flow (perm)		1525			1434	1583	1770	5060			923	3512
Peak-hour factor, PHF	0.82	0.82	0.82	0.80	0.80	0.80	0.80	0.80	0.80	0.92	0.93	0.93
Adj. Flow (vph)	32	18	12	52	20	89	41	410	14	4	101	1409
RTOR Reduction (vph)	0	9	0	0	0	57	0	3	0	0	0	3
Lane Group Flow (vph)	0	53	0	0	73	32	41	421	0	0	105	1483
Turn Type	Perm	NA		Perm	NA	pm+ov	Prot	NA		custom	Prot	NA
Protected Phases		4			8	1!	5	2			1	6
Permitted Phases	4			8		8				1!		
Actuated Green, G (s)		16.0			16.0	26.8	4.3	33.7			10.8	40.1
Effective Green, g (s)		16.0			16.0	26.8	4.3	33.7			10.8	40.1
Actuated g/C Ratio		0.21			0.21	0.36	0.06	0.45			0.14	0.53
Clearance Time (s)		4.9			4.9	4.4	4.4	5.2			4.4	5.3
Vehicle Extension (s)		2.0			2.0	2.0	2.0	4.5			2.0	4.2
Lane Grp Cap (vph)		325			305	658	101	2273			132	1877
v/s Ratio Prot						0.01	c0.02	0.08				c0.42
v/s Ratio Perm		0.03			c0.05	0.01					0.11	
v/c Ratio		0.16			0.24	0.05	0.41	0.19			0.80	0.79
Uniform Delay, d1		24.0			24.5	15.8	34.1	12.4			31.0	14.1
Progression Factor		1.00			1.00	1.00	0.91	0.67			0.98	0.95
Incremental Delay, d2		0.1			0.1	0.0	0.8	0.1			10.5	1.3
Delay (s)		24.1			24.6	15.8	31.9	8.5			41.0	14.6
Level of Service		C			C	B	C	A			D	B
Approach Delay (s)		24.1			19.8			10.6				16.3
Approach LOS		C			B			B				B

Intersection Summary

HCM 2000 Control Delay	15.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	14.6
Intersection Capacity Utilization	63.5%	ICU Level of Service	B
Analysis Period (min)	15		

! Phase conflict between lane groups.
c Critical Lane Group

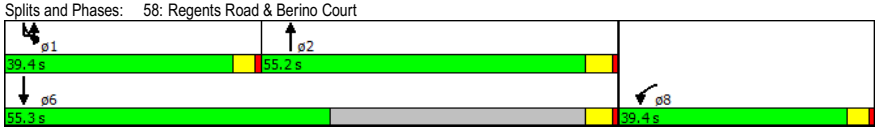
Movement	SBR
Lane Configurations	
Traffic Volume (vph)	72
Future Volume (vph)	72
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.93
Adj. Flow (vph)	77
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

Intersection Summary

Lane Group	WBL	NBT	SBL	SBT
Lane Configurations				
Traffic Volume (vph)	44	194	82	576
Future Volume (vph)	44	194	82	576
Turn Type	Prot	NA	Prot	NA
Protected Phases	8	2	1	6
Permitted Phases				
Detector Phase	8	2	1	6
Switch Phase				
Minimum Initial (s)	4.0	7.0	4.0	7.0
Minimum Split (s)	8.4	12.2	8.4	12.3
Total Split (s)	39.4	55.2	39.4	55.3
Total Split (%)	29.4%	41.2%	29.4%	41.3%
Yellow Time (s)	3.4	4.2	3.4	4.3
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.2	4.4	5.3
Lead/Lag		Lag	Lead	
Lead-Lag Optimize?		Yes	Yes	
Recall Mode	None	None	None	None

Intersection Summary
Cycle Length: 134
Actuated Cycle Length: 55.7
Natural Cycle: 40
Control Type: Actuated-Uncoordinated

Splits and Phases: 58: Regents Road & Berino Court



Movement	WBL	WBR	NBT	NBR	SBU	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	44	22	194	39	105	82	576
Future Volume (vph)	44	22	194	39	105	82	576
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4		5.2			4.4	5.3
Lane Util. Factor	1.00		0.95			1.00	0.95
Frt	0.95		0.98			1.00	1.00
Flt Protected	0.97		1.00			0.95	1.00
Satd. Flow (prot)	1721		3451			1770	3539
Flt Permitted	0.97		1.00			0.95	1.00
Satd. Flow (perm)	1721		3451			1770	3539
Peak-hour factor, PHF	0.80	0.80	0.84	0.84	0.92	0.93	0.93
Adj. Flow (vph)	55	28	231	46	114	88	619
RTOR Reduction (vph)	14	0	15	0	0	0	0
Lane Group Flow (vph)	69	0	262	0	0	202	619
Turn Type	Prot		NA		Prot	Prot	NA
Protected Phases	8		2		1	1	6
Permitted Phases							
Actuated Green, G (s)	15.1		13.9			12.6	30.8
Effective Green, g (s)	15.1		13.9			12.6	30.8
Actuated g/C Ratio	0.27		0.25			0.23	0.55
Clearance Time (s)	4.4		5.2			4.4	5.3
Vehicle Extension (s)	2.0		3.9			2.0	3.7
Lane Grp Cap (vph)	467		862			401	1960
v/s Ratio Prot	c0.04		0.08			c0.11	c0.17
v/s Ratio Perm							
v/c Ratio	0.15		0.30			0.50	0.32
Uniform Delay, d1	15.4		16.9			18.8	6.7
Progression Factor	1.00		1.00			1.00	1.00
Incremental Delay, d2	0.1		0.3			0.4	0.1
Delay (s)	15.4		17.2			19.1	6.8
Level of Service	B		B			B	A
Approach Delay (s)	15.4		17.2				9.9
Approach LOS	B		B				A

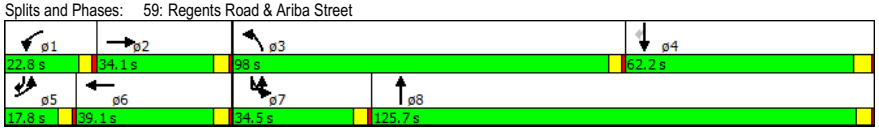
Intersection Summary			
HCM 2000 Control Delay	12.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.33		
Actuated Cycle Length (s)	55.6	Sum of lost time (s)	14.0
Intersection Capacity Utilization	32.4%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	65	184	19	163	26	20	166	50	341
Future Volume (vph)	65	184	19	163	26	20	166	50	341
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA	pm+ov
Protected Phases	5	2	1	6	3	8	7	4	5
Permitted Phases									4
Detector Phase	5	2	1	6	3	8	7	4	5
Switch Phase									
Minimum Initial (s)	4.0	7.0	4.0	7.0	4.0	7.0	4.0	7.0	4.0
Minimum Split (s)	8.4	32.9	8.4	36.9	8.4	28.9	8.4	37.6	8.4
Total Split (s)	17.8	34.1	22.8	39.1	98.0	125.7	34.5	62.2	17.8
Total Split (%)	8.2%	15.7%	10.5%	18.0%	45.1%	57.9%	15.9%	28.7%	8.2%
Yellow Time (s)	3.4	3.9	3.4	3.9	3.4	3.9	3.4	4.6	3.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	4.9	4.4	4.9	4.4	4.9	4.4	5.6	4.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 217.1
Actuated Cycle Length: 96.3
Natural Cycle: 95
Control Type: Actuated-Uncoordinated

Splits and Phases: 59: Regents Road & Ariba Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	65	184	31	19	163	31	26	20	33	86	166	50
Future Volume (vph)	65	184	31	19	163	31	26	20	33	86	166	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	4.9		4.4	4.9			4.4	5.6
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95			1.00	0.95
Frt	1.00	0.98		1.00	0.98		1.00	0.91			1.00	1.00
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			0.95	1.00
Satd. Flow (prot)	1770	3463		1770	3454		1770	3210			1770	3539
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00			0.95	1.00
Satd. Flow (perm)	1770	3463		1770	3454		1770	3210			1770	3539
Peak-hour factor, PHF	0.90	0.90	0.90	0.84	0.84	0.84	0.91	0.91	0.91	0.92	0.91	0.91
Adj. Flow (vph)	72	204	34	23	194	37	29	22	36	93	182	55
RTOR Reduction (vph)	0	4	0	0	6	0	0	32	0	0	0	0
Lane Group Flow (vph)	72	234	0	23	225	0	29	26	0	0	275	55
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	Prot	NA
Protected Phases	5	2		1	6		3	8		7	7	4
Permitted Phases												
Actuated Green, G (s)	8.9	36.6		2.4	30.1		3.8	11.9			30.4	37.8
Effective Green, g (s)	8.9	36.6		2.4	30.1		3.8	11.9			30.4	37.8
Actuated g/C Ratio	0.09	0.37		0.02	0.30		0.04	0.12			0.30	0.38
Clearance Time (s)	4.4	4.9		4.4	4.9		4.4	4.9			4.4	5.6
Vehicle Extension (s)	2.0	6.3		2.0	5.9		2.0	4.8			2.0	4.4
Lane Grp Cap (vph)	157	1268		42	1040		67	382			538	1339
v/s Ratio Prot	c0.04	0.07		0.01	c0.07		0.02	0.01			c0.16	0.02
v/s Ratio Perm												
v/c Ratio	0.46	0.18		0.55	0.22		0.43	0.07			0.51	0.04
Uniform Delay, d1	43.2	21.5		48.2	26.1		47.0	39.1			28.6	19.6
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2	0.8	0.2		7.6	0.3		1.6	0.1			0.3	0.0
Delay (s)	44.0	21.7		55.8	26.4		48.6	39.2			29.0	19.6
Level of Service	D	C		E	C		D	D			C	B
Approach Delay (s)		26.9			29.0			42.4				21.3
Approach LOS		C			C			D				C

Intersection Summary			
HCM 2000 Control Delay	25.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.36		
Actuated Cycle Length (s)	99.9	Sum of lost time (s)	19.3
Intersection Capacity Utilization	42.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	341
Future Volume (vph)	341
Ideal Flow (vphpl)	1900
Total Lost time (s)	4.4
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1583
Flt Permitted	1.00
Satd. Flow (perm)	1583
Peak-hour factor, PHF	0.91
Adj. Flow (vph)	375
RTOR Reduction (vph)	200
Lane Group Flow (vph)	175
Turn Type	pm+ov
Protected Phases	5
Permitted Phases	4
Actuated Green, G (s)	46.7
Effective Green, g (s)	46.7
Actuated g/C Ratio	0.47
Clearance Time (s)	4.4
Vehicle Extension (s)	2.0
Lane Grp Cap (vph)	740
v/s Ratio Prot	c0.02
v/s Ratio Perm	0.09
v/c Ratio	0.24
Uniform Delay, d1	15.9
Progression Factor	1.00
Incremental Delay, d2	0.1
Delay (s)	16.0
Level of Service	B
Approach Delay (s)	
Approach LOS	

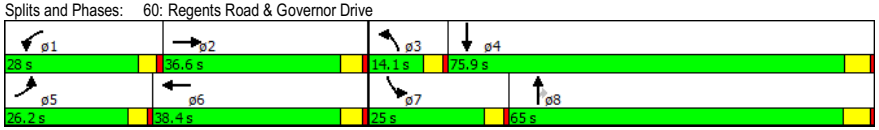
Intersection Summary

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	10	168	476	252	46	58	444	19	26
Future Volume (vph)	10	168	476	252	46	58	444	19	26
Turn Type	Prot	NA	Prot	NA	Prot	NA	Perm	Prot	NA
Protected Phases	5	2	1	6	3	8		7	4
Permitted Phases							8		
Detector Phase	5	2	1	6	3	8	8	7	4
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	7.0	5.0	7.0	7.0	5.0	4.0
Minimum Split (s)	8.4	32.9	8.4	33.9	9.5	34.8	34.8	9.5	35.5
Total Split (s)	26.2	36.6	28.0	38.4	14.1	65.0	65.0	25.0	75.9
Total Split (%)	16.9%	23.7%	18.1%	24.8%	9.1%	42.0%	42.0%	16.2%	49.1%
Yellow Time (s)	3.4	3.9	3.4	3.9	3.5	4.8	4.8	3.5	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	4.9	4.4	4.9	4.5	5.8	5.8	4.5	5.5
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Min	None	Min	None	None	None	None	None

Intersection Summary

Cycle Length: 154.6
Actuated Cycle Length: 72.3
Natural Cycle: 110
Control Type: Actuated-Uncoordinated

Splits and Phases: 60: Regents Road & Governor Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	168	29	476	252	15	46	58	444	19	26	3
Future Volume (vph)	10	168	29	476	252	15	46	58	444	19	26	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	4.9		4.5	5.8	5.8	4.5	5.5	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00	1.00	1.00	0.95	
Frt	1.00	0.98		1.00	0.99		1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3462		1770	3509		1770	1863	1583	1770	3489	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	3462		1770	3509		1770	1863	1583	1770	3489	
Peak-hour factor, PHF	0.80	0.80	0.80	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	12	210	36	529	280	17	51	64	493	21	29	3
RTOR Reduction (vph)	0	9	0	0	2	0	0	0	407	0	3	0
Lane Group Flow (vph)	13	237	0	529	295	0	51	64	86	21	29	0
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases									8			
Actuated Green, G (s)	0.9	17.8		25.2	42.1		5.9	13.8	13.8	2.4	10.6	
Effective Green, g (s)	0.9	17.8		25.2	42.1		5.9	13.8	13.8	2.4	10.6	
Actuated g/C Ratio	0.01	0.23		0.32	0.53		0.07	0.18	0.18	0.03	0.13	
Clearance Time (s)	4.4	4.9		4.4	4.9		4.5	5.8	5.8	4.5	5.5	
Vehicle Extension (s)	2.0	4.5		2.0	5.0		3.0	4.6	4.6	3.0	2.0	
Lane Grp Cap (vph)	20	782		566	1874		132	326	277	53	469	
v/s Ratio Prot	0.01	c0.07		c0.30	0.08		c0.03	0.03		0.01	0.01	
v/s Ratio Perm									c0.05			
v/c Ratio	0.65	0.30		0.93	0.16		0.39	0.20	0.31	0.40	0.06	
Uniform Delay, d1	38.8	25.3		26.0	9.3		34.7	27.8	28.4	37.5	29.8	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	45.4	0.4		22.5	0.1		1.9	0.5	1.2	4.8	0.0	
Delay (s)	84.2	25.7		48.5	9.4		36.6	28.3	29.5	42.3	29.8	
Level of Service	F	C		D	A		D	C	C	D	C	
Approach Delay (s)		28.7			34.5			30.0			34.7	
Approach LOS		C			C			C			C	

Intersection Summary

HCM 2000 Control Delay	32.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	78.8	Sum of lost time (s)	19.6
Intersection Capacity Utilization	53.7%	ICU Level of Service	A
Analysis Period (min)	15		

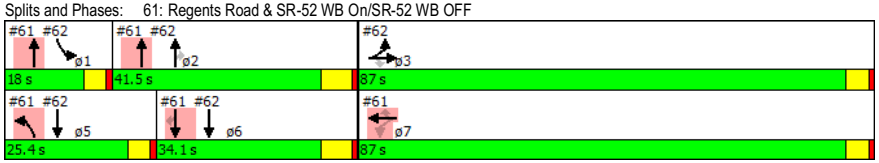
c Critical Lane Group

Lane Group	WBT	WBR	NBL	NBT	SBT	SBR	ø1	ø2	ø3
Lane Configurations									
Traffic Volume (vph)	1	224	336	528	464	293			
Future Volume (vph)	1	224	336	528	464	293			
Turn Type	NA	Perm	Prot	NA	NA	Perm			
Protected Phases	7		5	1 2	6		1	2	3
Permitted Phases		7				6			
Detector Phase	7	7	5	1 2	6	6			
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0		13.0	13.0	5.0	13.0	5.0
Minimum Split (s)	10.1	10.1	9.7		19.2	19.2	9.7	19.2	10.1
Total Split (s)	87.0	87.0	25.4		34.1	34.1	18.0	41.5	87.0
Total Split (%)	59.4%	59.4%	17.3%		23.3%	23.3%	12%	28%	59%
Yellow Time (s)	4.1	4.1	3.7		5.2	5.2	3.7	5.2	4.1
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0			
Total Lost Time (s)	5.1	5.1	4.7		6.2	6.2			
Lead/Lag			Lead		Lag	Lag	Lead	Lag	
Lead-Lag Optimize?			Yes		Yes	Yes	Yes	Yes	
Recall Mode	None	None	None		Max	Max	None	Max	None

Intersection Summary

Cycle Length: 146.5
Actuated Cycle Length: 138.8
Natural Cycle: 75
Control Type: Actuated-Uncoordinated

Splits and Phases: 61: Regents Road & SR-52 WB On/SR-52 WB OFF



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	559	1	224	336	528	0	0	464	293
Future Volume (vph)	0	0	0	559	1	224	336	528	0	0	464	293
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					5.1	5.1	4.7	4.7			6.2	6.2
Lane Util. Factor					1.00	1.00	0.97	0.95			0.95	1.00
Frt					1.00	0.85	1.00	1.00			1.00	0.85
Flt Protected					0.95	1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)					1774	1583	3433	3539			3539	1583
Flt Permitted					0.95	1.00	0.95	1.00			1.00	1.00
Satd. Flow (perm)					1774	1583	3433	3539			3539	1583
Peak-hour factor, PHF	0.25	0.25	0.25	0.92	0.92	0.92	0.88	0.88	0.88	0.86	0.86	0.86
Adj. Flow (vph)	0	0	0	608	1	243	382	600	0	0	540	341
RTOR Reduction (vph)	0	0	0	0	0	61	0	0	0	0	0	272
Lane Group Flow (vph)	0	0	0	0	609	182	382	600	0	0	540	69
Turn Type				Perm	NA	Perm	Prot	NA			NA	Perm
Protected Phases					7		5	1 2			6	
Permitted Phases				7		7						6
Actuated Green, G (s)					73.8	73.8	20.8	53.6			28.1	28.1
Effective Green, g (s)					73.8	73.8	20.8	53.6			28.1	28.1
Actuated g/C Ratio					0.53	0.53	0.15	0.39			0.20	0.20
Clearance Time (s)					5.1	5.1	4.7				6.2	6.2
Vehicle Extension (s)					2.0	2.0	2.0				2.0	2.0
Lane Grp Cap (vph)					943	842	514	1367			716	320
v/s Ratio Prot							c0.11	0.17			c0.15	
v/s Ratio Perm					0.34	0.11						0.04
v/c Ratio					0.65	0.22	0.74	0.44			0.75	0.22
Uniform Delay, d1					23.1	17.2	56.4	31.4			52.0	46.1
Progression Factor					1.00	1.00	1.52	0.82			1.00	1.00
Incremental Delay, d2					1.1	0.0	4.4	0.1			7.2	1.5
Delay (s)					24.3	17.2	90.1	25.9			59.3	47.7
Level of Service					C	B	F	C			E	D
Approach Delay (s)		0.0			22.3			50.9			54.8	
Approach LOS		A			C			D			D	

Intersection Summary

HCM 2000 Control Delay	43.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	138.7	Sum of lost time (s)	16.0
Intersection Capacity Utilization	82.3%	ICU Level of Service	E
Analysis Period (min)	15		

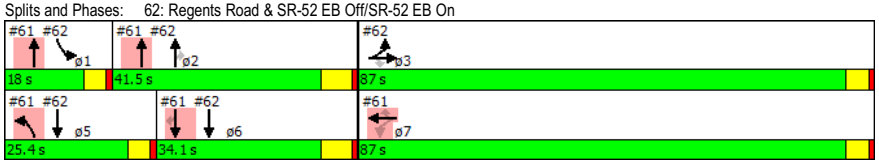
c Critical Lane Group

Lane Group	EBL	EBT	EBR	NBT	NBR	SBL	SBT	ø5	ø6	ø7
Lane Configurations										
Traffic Volume (vph)	328	5	758	570	211	105	983			
Future Volume (vph)	328	5	758	570	211	105	983			
Turn Type	Split	NA	Perm	NA	Perm	Prot	NA			
Protected Phases	3	3		2		1	5 6	5	6	7
Permitted Phases			3		2					
Detector Phase	3	3	3	2	2	1	5 6			
Switch Phase										
Minimum Initial (s)	5.0	5.0	5.0	13.0	13.0	5.0		5.0	13.0	5.0
Minimum Split (s)	10.1	10.1	10.1	19.2	19.2	9.7		9.7	19.2	10.1
Total Split (s)	87.0	87.0	87.0	41.5	41.5	18.0		25.4	34.1	87.0
Total Split (%)	59.4%	59.4%	59.4%	28.3%	28.3%	12.3%		17%	23%	59%
Yellow Time (s)	4.1	4.1	4.1	5.2	5.2	3.7		3.7	5.2	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0				
Total Lost Time (s)	5.1	5.1	5.1	6.2	6.2	4.7				
Lead/Lag				Lag	Lag	Lead		Lead	Lag	
Lead-Lag Optimize?				Yes	Yes	Yes		Yes	Yes	
Recall Mode	None	None	None	Max	Max	None		None	Max	None

Intersection Summary

Cycle Length: 146.5
Actuated Cycle Length: 138.8
Natural Cycle: 75
Control Type: Actuated-Uncoordinated

Splits and Phases: 62: Regents Road & SR-52 EB Off/SR-52 EB On



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	328	5	758	0	0	0	0	570	211	105	983	0
Future Volume (vph)	328	5	758	0	0	0	0	570	211	105	983	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1	5.1					6.2	6.2	4.7	4.7	
Lane Util. Factor	0.95	0.95	1.00					0.95	1.00	1.00	0.95	
Frt	1.00	1.00	0.85					1.00	0.85	1.00	1.00	
Flt Protected	0.95	0.95	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1681	1688	1583					3539	1583	1770	3539	
Flt Permitted	0.95	0.95	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1681	1688	1583					3539	1583	1770	3539	
Peak-hour factor, PHF	0.89	0.89	0.89	0.25	0.25	0.25	0.88	0.88	0.88	0.91	0.91	0.91
Adj. Flow (vph)	369	6	852	0	0	0	0	648	240	115	1080	0
RTOR Reduction (vph)	0	0	44	0	0	0	0	0	51	0	0	0
Lane Group Flow (vph)	188	187	808	0	0	0	0	648	189	115	1080	0
Turn Type	Split	NA	Perm					NA	Perm	Prot	NA	
Protected Phases	3	3						2		1	5 6	
Permitted Phases			3						2			
Actuated Green, G (s)	73.8	73.8	73.8					35.5	35.5	13.4	53.6	
Effective Green, g (s)	73.8	73.8	73.8					35.5	35.5	13.4	53.6	
Actuated g/C Ratio	0.53	0.53	0.53					0.26	0.26	0.10	0.39	
Clearance Time (s)	5.1	5.1	5.1					6.2	6.2	4.7		
Vehicle Extension (s)	2.0	2.0	2.0					2.0	2.0	2.0		
Lane Grp Cap (vph)	894	898	842					905	405	171	1367	
v/s Ratio Prot	0.11	0.11						0.18		0.06	c0.31	
v/s Ratio Perm			c0.51						0.12			
v/c Ratio	0.21	0.21	0.96					0.72	0.47	0.67	0.79	
Uniform Delay, d1	17.1	17.1	31.0					47.0	43.6	60.5	37.6	
Progression Factor	1.00	1.00	1.00					1.00	1.00	1.14	1.00	
Incremental Delay, d2	0.0	0.0	21.3					4.8	3.8	6.1	2.3	
Delay (s)	17.1	17.1	52.3					51.8	47.5	75.2	40.0	
Level of Service	B	B	D					D	D	E	D	
Approach Delay (s)		41.6			0.0			50.7			43.4	
Approach LOS		D			A			D			D	

Intersection Summary

HCM 2000 Control Delay	44.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.92		
Actuated Cycle Length (s)	138.7	Sum of lost time (s)	16.0
Intersection Capacity Utilization	82.3%	ICU Level of Service	E
Analysis Period (min)	15		

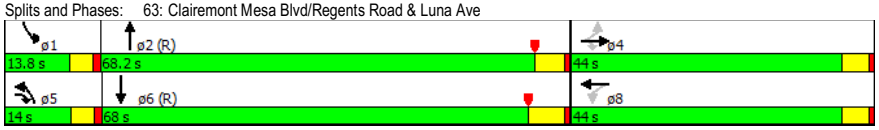
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	427	12	145	6	13	137	366	49	1075
Future Volume (vph)	427	12	145	6	13	137	366	49	1075
Turn Type	Perm	NA	pm+ov	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4	5		8	5	2	1	6
Permitted Phases	4		4	8					
Detector Phase	4	4	5	8	8	5	2	1	6
Switch Phase									
Minimum Initial (s)	10.0	10.0	4.0	1.0	1.0	4.0	10.0	4.0	4.0
Minimum Split (s)	36.9	36.9	8.4	33.9	33.9	8.4	22.3	8.4	23.2
Total Split (s)	44.0	44.0	14.0	44.0	44.0	14.0	68.2	13.8	68.0
Total Split (%)	34.9%	34.9%	11.1%	34.9%	34.9%	11.1%	54.1%	11.0%	54.0%
Yellow Time (s)	3.9	3.9	3.4	3.9	3.9	3.4	4.3	3.4	5.2
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.9	4.4		4.9	4.4	5.3	4.4	6.2
Lead/Lag			Lead			Lead	Lag	Lead	Lag
Lead-Lag Optimize?			Yes			Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	None	C-Max

Intersection Summary

Cycle Length: 126
Actuated Cycle Length: 126
Offset: 24 (19%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 140
Control Type: Actuated-Coordinated

Splits and Phases: 63: Clairemont Mesa Blvd/Regents Road & Luna Ave



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	427	12	145	6	13	23	137	366	5	49	1075	534
Future Volume (vph)	427	12	145	6	13	23	137	366	5	49	1075	534
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9	4.4		4.9		4.4	5.3		4.4	6.2	
Lane Util. Factor		1.00	1.00		1.00		1.00	0.95		1.00	0.95	
Frt		1.00	0.85		0.93		1.00	1.00		1.00	0.95	
Flt Protected		0.95	1.00		0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1776	1583		1713		1770	3532		1770	3363	
Flt Permitted		0.73	1.00		0.87		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1362	1583		1505		1770	3532		1770	3363	
Peak-hour factor, PHF	0.94	0.94	0.94	0.81	0.81	0.81	0.87	0.87	0.87	0.94	0.94	0.94
Adj. Flow (vph)	454	13	154	7	16	28	157	421	6	52	1144	568
RTOR Reduction (vph)	0	0	29	0	19	0	0	1	0	0	49	0
Lane Group Flow (vph)	0	467	125	0	32	0	157	426	0	52	1663	0
Turn Type	Perm	NA	pm+ov	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4	5		8		5	2		1	6	
Permitted Phases	4		4	8								
Actuated Green, G (s)		39.1	48.7		39.1		9.6	65.6		6.7	61.8	
Effective Green, g (s)		39.1	48.7		39.1		9.6	65.6		6.7	61.8	
Actuated g/C Ratio		0.31	0.39		0.31		0.08	0.52		0.05	0.49	
Clearance Time (s)		4.9	4.4		4.9		4.4	5.3		4.4	6.2	
Vehicle Extension (s)		4.0	2.0		2.0		2.0	4.4		2.0	3.2	
Lane Grp Cap (vph)		422	611		467		134	1838		94	1649	
v/s Ratio Prot			0.02				c0.09	c0.12		0.03	c0.49	
v/s Ratio Perm		c0.34	0.06		0.02							
v/c Ratio		1.11	0.20		0.07		1.17	0.23		0.55	1.01	
Uniform Delay, d1		43.5	25.7		30.6		58.2	16.5		58.2	32.1	
Progression Factor		1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		76.0	0.1		0.0		131.2	0.3		4.0	24.3	
Delay (s)		119.4	25.8		30.6		189.4	16.8		62.1	56.4	
Level of Service		F	C		C		F	B		E	E	
Approach Delay (s)		96.2			30.6			63.2			56.5	
Approach LOS		F			C			E			E	

Intersection Summary

HCM 2000 Control Delay	65.5	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.05		
Actuated Cycle Length (s)	126.0	Sum of lost time (s)	15.5
Intersection Capacity Utilization	98.3%	ICU Level of Service	F
Analysis Period (min)	15		

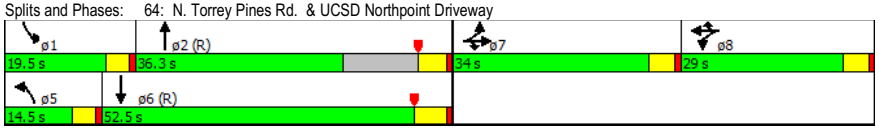
c Critical Lane Group

Lane Group	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	29	83	138	13	147	19	536	125	1536
Future Volume (vph)	29	83	138	13	147	19	536	125	1536
Turn Type	NA	Prot	Split	NA	Prot	Prot	NA	Prot	NA
Protected Phases	7	7	8	8	8	5	2	1	6
Permitted Phases									
Detector Phase	7	7	8	8	8	5	2	1	6
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	10.0	4.0	10.0
Minimum Split (s)	8.9	8.9	8.9	8.9	8.9	8.4	15.3	8.4	15.9
Total Split (s)	34.0	34.0	29.0	29.0	29.0	14.5	36.3	19.5	52.5
Total Split (%)	26.2%	26.2%	22.3%	22.3%	22.3%	11.2%	27.9%	15.0%	40.4%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.9	3.4	4.3	3.4	4.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	4.9	4.9	4.9	4.4	5.3	4.4	5.9
Lead/Lag	Lead	Lead	Lag	Lag	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	None	C-Max

Intersection Summary

Cycle Length: 130
Actuated Cycle Length: 130
Offset: 72 (55%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 64: N. Torrey Pines Rd. & UCSD Northpoint Driveway



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	55	29	83	138	13	147	19	536	84	125	1536	9
Future Volume (vph)	55	29	83	138	13	147	19	536	84	125	1536	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9	4.9	4.9	4.9	4.9	4.4	5.3		4.4	5.9	
Lane Util. Factor		1.00	1.00	1.00	1.00	1.00	1.00	0.95		0.97	0.95	
Frt		1.00	0.85	1.00	1.00	0.85	1.00	0.98		1.00	1.00	
Flt Protected		0.97	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1803	1583	1770	1863	1583	1770	3467		3433	3536	
Flt Permitted		0.97	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1803	1583	1770	1863	1583	1770	3467		3433	3536	
Peak-hour factor, PHF	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.92	0.92	0.92
Adj. Flow (vph)	69	36	104	172	16	184	24	670	105	136	1670	10
RTOR Reduction (vph)	0	0	87	0	0	160	0	7	0	0	0	0
Lane Group Flow (vph)	0	105	17	173	16	24	24	768	0	136	1680	0
Turn Type	Split	NA	Prot	Split	NA	Prot	Prot	NA		Prot	NA	
Protected Phases	7	7	7	8	8	8	5	2		1	6	
Permitted Phases												
Actuated Green, G (s)		20.9	20.9	17.1	17.1	17.1	4.4	63.0		9.5	67.5	
Effective Green, g (s)		20.9	20.9	17.1	17.1	17.1	4.4	63.0		9.5	67.5	
Actuated g/C Ratio		0.16	0.16	0.13	0.13	0.13	0.03	0.48		0.07	0.52	
Clearance Time (s)		4.9	4.9	4.9	4.9	4.9	4.4	5.3		4.4	5.9	
Vehicle Extension (s)		2.0	2.0	2.0	2.0	2.0	2.0	4.8		2.0	4.7	
Lane Grp Cap (vph)		289	254	232	245	208	59	1680		250	1836	
v/s Ratio Prot		c0.06	0.01	c0.10	0.01	0.02	0.01	0.22		c0.04	c0.48	
v/s Ratio Perm												
v/c Ratio		0.36	0.07	0.75	0.07	0.12	0.41	0.46		0.54	0.92	
Uniform Delay, d1		48.6	46.3	54.4	49.4	49.8	61.5	22.2		58.2	28.6	
Progression Factor		1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.09	0.77	
Incremental Delay, d2		0.3	0.0	10.8	0.0	0.1	1.7	0.9		0.6	4.6	
Delay (s)		48.9	46.3	65.2	49.5	49.9	63.2	23.1		63.8	26.7	
Level of Service		D	D	E	D	D	E	C		E	C	
Approach Delay (s)		47.6			57.0			24.3			29.5	
Approach LOS		D			E			C			C	

Intersection Summary

HCM 2000 Control Delay	32.6	HCM 2000 Level of Service	C	
HCM 2000 Volume to Capacity ratio	0.78			
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	20.1	
Intersection Capacity Utilization	73.1%	ICU Level of Service	D	
Analysis Period (min)	15			

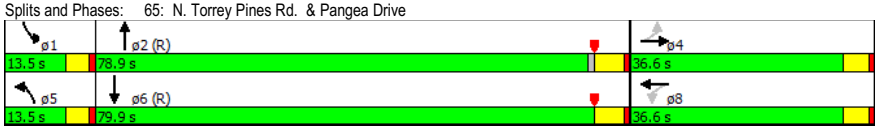
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	10	1	79	1	27	511	57	1887
Future Volume (vph)	10	1	79	1	27	511	57	1887
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	7.0	7.0	7.0	7.0	4.0	10.0	4.0	10.0
Minimum Split (s)	11.9	11.9	11.9	11.9	8.4	15.3	8.4	15.3
Total Split (s)	36.6	36.6	36.6	36.6	13.5	78.9	13.5	79.9
Total Split (%)	28.2%	28.2%	28.2%	28.2%	10.4%	60.7%	10.4%	61.5%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.4	4.3	3.4	4.3
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.9	4.9	4.9	4.4	5.3	4.4	5.3
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	None	C-Max

Intersection Summary

Cycle Length: 130
Actuated Cycle Length: 130
Offset: 103 (79%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 75
Control Type: Actuated-Coordinated

Splits and Phases: 65: N. Torrey Pines Rd. & Pangea Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	1	20	79	1	40	27	511	57	57	1887	28
Future Volume (vph)	10	1	20	79	1	40	27	511	57	57	1887	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9		4.9	4.9		4.4	5.3		4.4	5.3	
Lane Util. Factor		1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frt		0.91		1.00	0.85		1.00	0.98		1.00	1.00	
Flt Protected		0.98		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1674		1770	1589		1770	3486		1770	3531	
Flt Permitted		0.92		0.80	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1561		1484	1589		1770	3486		1770	3531	
Peak-hour factor, PHF	0.80	0.80	0.80	0.84	0.84	0.84	0.89	0.89	0.89	0.93	0.93	0.93
Adj. Flow (vph)	12	1	25	94	1	48	30	574	64	61	2029	30
RTOR Reduction (vph)	0	21	0	0	40	0	0	5	0	0	1	0
Lane Group Flow (vph)	0	18	0	94	9	0	30	633	0	61	2058	0
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8								
Actuated Green, G (s)		22.2		22.2	22.2		4.7	86.0		7.2	88.5	
Effective Green, g (s)		22.2		22.2	22.2		4.7	86.0		7.2	88.5	
Actuated g/C Ratio		0.17		0.17	0.17		0.04	0.66		0.06	0.68	
Clearance Time (s)		4.9		4.9	4.9		4.4	5.3		4.4	5.3	
Vehicle Extension (s)		2.0		2.0	2.0		2.0	5.7		2.0	5.5	
Lane Grp Cap (vph)		266		253	271		63	2306		98	2403	
v/s Ratio Prot					0.01		0.02	0.18		c0.03	c0.58	
v/s Ratio Perm		0.01		c0.06								
v/c Ratio		0.07		0.37	0.03		0.48	0.27		0.62	0.86	
Uniform Delay, d1		45.2		47.7	45.0		61.4	9.1		60.1	15.9	
Progression Factor		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.0		0.3	0.0		2.1	0.3		8.5	4.2	
Delay (s)		45.3		48.1	45.0		63.5	9.4		68.6	20.1	
Level of Service		D		D	D		E	A		E	C	
Approach Delay (s)		45.3			47.0			11.8			21.5	
Approach LOS		D			D			B			C	

Intersection Summary

HCM 2000 Control Delay	20.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	14.6
Intersection Capacity Utilization	72.6%	ICU Level of Service	C
Analysis Period (min)	15		

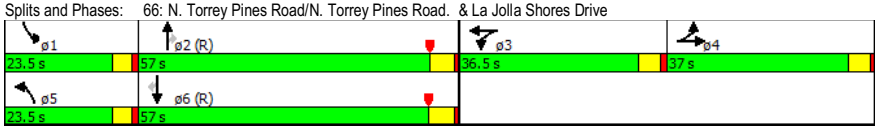
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	118	41	108	42	196	612	89	127	1853	227
Future Volume (vph)	118	41	108	42	196	612	89	127	1853	227
Turn Type	Split	NA	Split	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	4	4	3	3	5	2		1	6	
Permitted Phases							2			6
Detector Phase	4	4	3	3	5	2	2	1	6	6
Switch Phase										
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	10.0	10.0	4.0	10.0	10.0
Minimum Split (s)	8.9	8.9	8.9	8.9	8.4	15.4	15.4	8.4	15.5	15.5
Total Split (s)	37.0	37.0	36.5	36.5	23.5	57.0	57.0	23.5	57.0	57.0
Total Split (%)	24.0%	24.0%	23.7%	23.7%	15.3%	37.0%	37.0%	15.3%	37.0%	37.0%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.4	4.4	4.4	3.4	4.5	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	4.9	4.9	4.4	5.4	5.4	4.4	5.5	5.5
Lead/Lag	Lag	Lag	Lead	Lead	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max

Intersection Summary

Cycle Length: 154
Actuated Cycle Length: 154
Offset: 97 (63%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 120
Control Type: Actuated-Coordinated

Splits and Phases: 66: N. Torrey Pines Road/N. Torrey Pines Road. & La Jolla Shores Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	118	41	146	108	42	37	196	612	89	127	1853	227
Future Volume (vph)	118	41	146	108	42	37	196	612	89	127	1853	227
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9		4.9	4.9		4.4	5.4	5.4	4.4	5.5	5.5
Lane Util. Factor	0.95	0.95		0.97	1.00		1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	0.89		1.00	0.93		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1681	1570		3433	1732		1770	3539	1583	1770	3539	1583
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1681	1570		3433	1732		1770	3539	1583	1770	3539	1583
Peak-hour factor, PHF	0.80	0.80	0.80	0.83	0.83	0.83	0.80	0.80	0.80	0.91	0.91	0.91
Adj. Flow (vph)	148	51	182	130	51	45	245	765	111	140	2036	249
RTOR Reduction (vph)	0	70	0	0	21	0	0	0	43	0	0	0
Lane Group Flow (vph)	133	179	0	130	75	0	245	765	68	140	2036	249
Turn Type	Split	NA		Split	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	4	4		3	3		5	2		1	6	
Permitted Phases									2			6
Actuated Green, G (s)	21.7	21.7		26.7	26.7		27.9	70.2	70.2	15.8	58.0	58.0
Effective Green, g (s)	21.7	21.7		26.7	26.7		27.9	70.2	70.2	15.8	58.0	58.0
Actuated g/C Ratio	0.14	0.14		0.17	0.17		0.18	0.46	0.46	0.10	0.38	0.38
Clearance Time (s)	4.9	4.9		4.9	4.9		4.4	5.4	5.4	4.4	5.5	5.5
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	4.0	4.0	2.0	3.9	3.9
Lane Grp Cap (vph)	236	221		595	300		320	1613	721	181	1332	596
v/s Ratio Prot	0.08	c0.11		0.04	c0.04		c0.14	0.22		0.08	c0.58	
v/s Ratio Perm									0.04			0.16
v/c Ratio	0.56	0.81		0.22	0.25		0.77	0.47	0.09	0.77	1.53	0.42
Uniform Delay, d1	61.7	64.1		54.7	55.0		59.9	29.1	23.8	67.4	48.0	35.5
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.8	18.1		0.1	0.2		9.4	1.0	0.3	16.9	241.7	2.1
Delay (s)	63.6	82.3		54.8	55.1		69.4	30.1	24.1	84.3	289.7	37.7
Level of Service	E	F		D	E		E	C	C	F	F	D
Approach Delay (s)		75.7			54.9			38.1			251.9	
Approach LOS		E			D			D			F	

Intersection Summary

HCM 2000 Control Delay	167.3	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.00		
Actuated Cycle Length (s)	154.0	Sum of lost time (s)	19.7
Intersection Capacity Utilization	91.8%	ICU Level of Service	F
Analysis Period (min)	15		

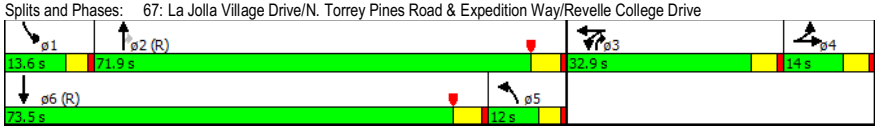
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	44	28	119	21	87	815	71	53	2007
Future Volume (vph)	44	28	119	21	87	815	71	53	2007
Turn Type	Split	NA	Split	NA	Prot	NA	pm+ov	Prot	NA
Protected Phases	4	4	3	3	5	2	3	1	6
Permitted Phases							2		
Detector Phase	4	4	3	3	5	2	3	1	6
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	10.0	4.0	4.0	10.0
Minimum Split (s)	8.9	8.9	32.9	32.9	8.4	37.6	32.9	8.4	29.4
Total Split (s)	14.0	14.0	32.9	32.9	12.0	71.9	32.9	13.6	73.5
Total Split (%)	10.6%	10.6%	24.8%	24.8%	9.1%	54.3%	24.8%	10.3%	55.5%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.4	4.6	3.9	3.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	4.9	4.9	4.4	5.6	4.9	4.4	5.4
Lead/Lag	Lag	Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	None	None	C-Max

Intersection Summary

Cycle Length: 132.4
Actuated Cycle Length: 132.4
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 67: La Jolla Village Drive/N. Torrey Pines Road & Expedition Way/Revelle College Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	44	28	167	119	21	42	87	815	71	53	2007	21
Future Volume (vph)	44	28	167	119	21	42	87	815	71	53	2007	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9		4.9	4.9		4.4	5.6	4.9	4.4	5.4	
Lane Util. Factor	0.95	0.95		0.97	1.00		1.00	0.95	1.00	1.00	0.95	
Frt	1.00	0.87		1.00	0.90		1.00	1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1681	1546		3433	1675		1770	3539	1583	1770	3534	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1681	1546		3433	1675		1770	3539	1583	1770	3534	
Peak-hour factor, PHF	0.81	0.81	0.81	0.94	0.94	0.94	0.80	0.80	0.80	0.97	0.97	0.97
Adj. Flow (vph)	54	35	206	127	22	45	109	1019	89	55	2069	22
RTOR Reduction (vph)	0	135	0	0	40	0	0	0	27	0	0	0
Lane Group Flow (vph)	49	111	0	127	27	0	109	1019	62	55	2091	0
Turn Type	Split	NA		Split	NA		Prot	NA	pm+ov	Prot	NA	
Protected Phases	4	4		3	3		5	2	3	1	6	
Permitted Phases									2			
Actuated Green, G (s)	13.5	13.5		16.0	16.0		8.5	76.3	92.3	6.8	74.8	
Effective Green, g (s)	13.5	13.5		16.0	16.0		8.5	76.3	92.3	6.8	74.8	
Actuated g/C Ratio	0.10	0.10		0.12	0.12		0.06	0.58	0.70	0.05	0.56	
Clearance Time (s)	4.9	4.9		4.9	4.9		4.4	5.6	4.9	4.4	5.4	
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	4.0	2.0	2.0	4.2	
Lane Grp Cap (vph)	171	157		414	202		113	2039	1103	90	1996	
v/s Ratio Prot	0.03	c0.07		c0.04	0.02		c0.06	0.29	0.01	0.03	c0.59	
v/s Ratio Perm									0.03			
v/c Ratio	0.29	0.71		0.31	0.14		0.96	0.50	0.06	0.61	1.05	
Uniform Delay, d1	55.0	57.5		53.1	52.0		61.8	16.7	6.3	61.5	28.8	
Progression Factor	1.00	1.00		1.00	1.00		0.99	0.91	3.01	1.00	1.00	
Incremental Delay, d2	0.3	11.3		0.2	0.1		72.0	0.9	0.0	8.3	33.9	
Delay (s)	55.3	68.9		53.3	52.1		133.3	16.1	19.0	69.8	62.7	
Level of Service	E	E		D	D		F	B	B	E	E	
Approach Delay (s)		66.6			52.9			26.8			62.9	
Approach LOS		E			D			C			E	

Intersection Summary

HCM 2000 Control Delay	51.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	132.4	Sum of lost time (s)	19.8
Intersection Capacity Utilization	88.1%	ICU Level of Service	E
Analysis Period (min)	15		

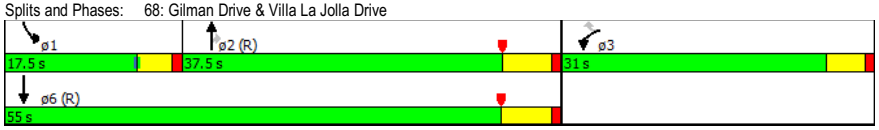
c Critical Lane Group

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	191	382	409	112	609	1652
Future Volume (vph)	191	382	409	112	609	1652
Turn Type	Prot	Perm	NA	Perm	Prot	NA
Protected Phases	3		2		1	6
Permitted Phases		3		2		
Detector Phase	3	3	2	2	1	6
Switch Phase						
Minimum Initial (s)	4.0	4.0	7.0	7.0	4.0	7.0
Minimum Split (s)	8.9	8.9	12.9	12.9	8.4	13.0
Total Split (s)	31.0	31.0	37.5	37.5	17.5	55.0
Total Split (%)	36.0%	36.0%	43.6%	43.6%	20.3%	64.0%
Yellow Time (s)	3.9	3.9	4.9	4.9	3.4	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	5.9	5.9	4.4	6.0
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	None	None	C-Max	C-Max	None	C-Max

Intersection Summary

Cycle Length: 86
Actuated Cycle Length: 86
Offset: 18 (21%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 65
Control Type: Actuated-Coordinated

Splits and Phases: 68: Gilman Drive & Villa La Jolla Drive



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	191	382	409	112	609	1652
Future Volume (vph)	191	382	409	112	609	1652
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9	5.9	5.9	4.4	6.0
Lane Util. Factor	0.97	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	3433	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	3433	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.86	0.86	0.93	0.93	0.88	0.88
Adj. Flow (vph)	222	444	440	120	692	1877
RTOR Reduction (vph)	0	374	0	76	0	0
Lane Group Flow (vph)	222	70	440	44	692	1877
Turn Type	Prot	Perm	NA	Perm	Prot	NA
Protected Phases	3		2		1	6
Permitted Phases		3		2		
Actuated Green, G (s)	13.5	13.5	31.6	31.6	25.7	61.6
Effective Green, g (s)	13.5	13.5	31.6	31.6	25.7	61.6
Actuated g/C Ratio	0.16	0.16	0.37	0.37	0.30	0.72
Clearance Time (s)	4.9	4.9	5.9	5.9	4.4	6.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	538	248	1300	581	528	2534
v/s Ratio Prot	c0.06		0.12		c0.39	c0.53
v/s Ratio Perm		0.04		0.03		
v/c Ratio	0.41	0.28	0.34	0.08	1.31	0.74
Uniform Delay, d1	32.7	32.0	19.6	17.7	30.2	7.4
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.5	0.6	0.7	0.3	152.9	2.0
Delay (s)	33.2	32.6	20.4	18.0	183.1	9.4
Level of Service	C	C	C	B	F	A
Approach Delay (s)	32.8		19.8			56.2
Approach LOS	C		B			E

Intersection Summary

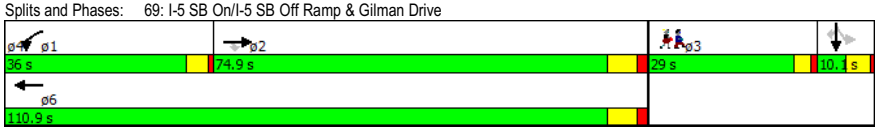
HCM 2000 Control Delay	46.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.91		
Actuated Cycle Length (s)	86.0	Sum of lost time (s)	15.2
Intersection Capacity Utilization	63.2%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBT	EBR	WBL	WBT	SBT	SBR	ø3
Lane Configurations							
Traffic Volume (vph)	357	1401	614	606	9	22	
Future Volume (vph)	357	1401	614	606	9	22	
Turn Type	NA	Perm	Prot	NA	NA	Perm	
Protected Phases	2		1	6	4		3
Permitted Phases		2				4	
Detector Phase	2	2	1	6	4	4	
Switch Phase							
Minimum Initial (s)	13.0	13.0	5.0	12.0	5.0	5.0	1.0
Minimum Split (s)	20.2	20.2	9.7	19.2	10.1	10.1	29.0
Total Split (s)	74.9	74.9	36.0	110.9	10.1	10.1	29.0
Total Split (%)	49.9%	49.9%	24.0%	73.9%	6.7%	6.7%	19%
Yellow Time (s)	5.2	5.2	3.7	5.2	4.1	4.1	3.0
All-Red Time (s)	2.0	2.0	1.0	2.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	7.2	7.2	4.7	7.2	5.1	5.1	
Lead/Lag	Lag	Lag	Lead		Lag	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes
Recall Mode	Min	Min	None	Min	None	None	None

Intersection Summary
Cycle Length: 150
Actuated Cycle Length: 121
Natural Cycle: 150
Control Type: Actuated-Uncoordinated

Splits and Phases: 69: I-5 SB On/I-5 SB Off Ramp & Gilman Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	357	1401	614	606	0	0	0	0	31	9	22
Future Volume (vph)	0	357	1401	614	606	0	0	0	0	31	9	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		7.2	7.2	4.7	7.2						5.1	5.1
Lane Util. Factor		1.00	0.88	1.00	0.95						1.00	1.00
Frt		1.00	0.85	1.00	1.00						1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00						0.96	1.00
Satd. Flow (prot)		1863	2787	1770	3539						1793	1583
Flt Permitted		1.00	1.00	0.95	1.00						0.96	1.00
Satd. Flow (perm)		1863	2787	1770	3539						1793	1583
Peak-hour factor, PHF	0.89	0.89	0.89	0.92	0.92	0.92	0.25	0.25	0.25	0.80	0.80	0.80
Adj. Flow (vph)	0	401	1574	667	659	0	0	0	0	39	11	28
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	27
Lane Group Flow (vph)	0	401	1574	667	659	0	0	0	0	0	50	1
Turn Type		NA	Perm	Prot	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases			2							4		4
Actuated Green, G (s)		67.7	67.7	31.3	103.7						5.0	5.0
Effective Green, g (s)		67.7	67.7	31.3	103.7						5.0	5.0
Actuated g/C Ratio		0.56	0.56	0.26	0.86						0.04	0.04
Clearance Time (s)		7.2	7.2	4.7	7.2						5.1	5.1
Vehicle Extension (s)		2.0	2.0	2.0	2.0						2.0	2.0
Lane Grp Cap (vph)		1042	1559	457	3033						74	65
v/s Ratio Prot		0.22		c0.38	0.19							
v/s Ratio Perm			c0.56								0.03	0.00
v/c Ratio		0.38	1.01	1.46	0.22						0.68	0.02
Uniform Delay, d1		15.0	26.6	44.9	1.5						57.2	55.6
Progression Factor		1.00	1.00	1.00	1.00						1.00	1.00
Incremental Delay, d2		0.1	25.2	218.6	0.0						17.5	0.0
Delay (s)		15.0	51.8	263.5	1.5						74.7	55.7
Level of Service		B	D	F	A						E	E
Approach Delay (s)		44.4			133.3			0.0			67.9	
Approach LOS		D			F			A			E	

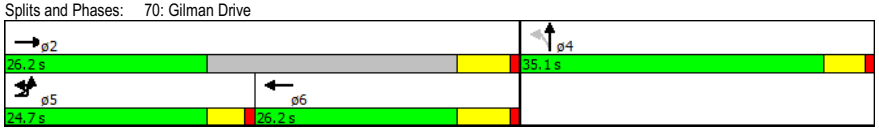
Intersection Summary				
HCM 2000 Control Delay	79.8	HCM 2000 Level of Service	E	
HCM 2000 Volume to Capacity ratio	1.17			
Actuated Cycle Length (s)	121.0	Sum of lost time (s)	21.0	
Intersection Capacity Utilization	103.3%	ICU Level of Service	G	
Analysis Period (min)	15			

c Critical Lane Group

Lane Group	EBL	EBT	WBT	NBL	NBT
Lane Configurations					
Traffic Volume (vph)	38	155	470	681	4
Future Volume (vph)	38	155	470	681	4
Turn Type	Prot	NA	NA	Perm	NA
Protected Phases	5	2	6		4
Permitted Phases				4	
Detector Phase	5	2	6	4	4
Switch Phase					
Minimum Initial (s)	5.0	12.0	12.0	5.0	5.0
Minimum Split (s)	9.7	18.2	18.2	10.1	10.1
Total Split (s)	24.7	26.2	26.2	35.1	35.1
Total Split (%)	28.7%	30.5%	30.5%	40.8%	40.8%
Yellow Time (s)	3.7	5.2	5.2	4.1	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.7	6.2	6.2	5.1	5.1
Lead/Lag	Lead		Lag		
Lead-Lag Optimize?	Yes		Yes		
Recall Mode	None	Min	Min	None	None

Intersection Summary
Cycle Length: 86
Actuated Cycle Length: 66
Natural Cycle: 60
Control Type: Actuated-Uncoordinated

Splits and Phases: 70: Gilman Drive



Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	88	38	155	0	0	470	4	681	4	223	0	0
Future Volume (vph)	88	38	155	0	0	470	4	681	4	223	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.7	6.2			6.2		5.1	5.1			
Lane Util. Factor		1.00	1.00			0.95		0.95	0.95			
Frt		1.00	1.00			1.00		1.00	0.92			
Flt Protected		0.95	1.00			1.00		0.95	0.98			
Satd. Flow (prot)		1770	1863			3535		1681	1596			
Flt Permitted		0.95	1.00			1.00		0.95	0.98			
Satd. Flow (perm)		1770	1863			3535		1681	1596			
Peak-hour factor, PHF	0.92	0.90	0.90	0.90	0.89	0.89	0.89	0.93	0.93	0.93	0.25	0.25
Adj. Flow (vph)	96	42	172	0	0	528	4	732	4	240	0	0
RTOR Reduction (vph)	0	0	0	0	0	1	0	0	40	0	0	0
Lane Group Flow (vph)	0	138	172	0	0	531	0	505	431	0	0	0
Turn Type	Prot	Prot	NA			NA		Perm	NA			
Protected Phases	5	5	2			6			4			
Permitted Phases								4				
Actuated Green, G (s)		8.2	28.6			15.7		26.5	26.5			
Effective Green, g (s)		8.2	28.6			15.7		26.5	26.5			
Actuated g/C Ratio		0.12	0.43			0.24		0.40	0.40			
Clearance Time (s)		4.7	6.2			6.2		5.1	5.1			
Vehicle Extension (s)		2.0	2.0			2.0		2.0	2.0			
Lane Grp Cap (vph)		218	802			835		670	636			
v/s Ratio Prot		c0.08	0.09			c0.15						
v/s Ratio Perm								c0.30	0.27			
v/c Ratio		0.63	0.21			0.64		0.75	0.68			
Uniform Delay, d1		27.7	11.9			22.8		17.1	16.4			
Progression Factor		1.00	1.00			1.00		1.00	1.00			
Incremental Delay, d2		4.4	0.0			1.2		4.3	2.3			
Delay (s)		32.0	11.9			24.0		21.4	18.7			
Level of Service		C	B			C		C	B			
Approach Delay (s)			20.9			24.0			20.1			0.0
Approach LOS			C			C			C			A

Intersection Summary			
HCM 2000 Control Delay	21.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	66.4	Sum of lost time (s)	16.0
Intersection Capacity Utilization	103.3%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

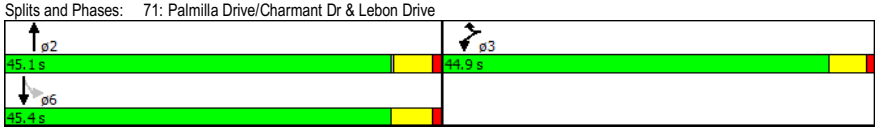
Movement	SBR
Lane Configurations	
Traffic Volume (vph)	0
Future Volume (vph)	0
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.25
Adj. Flow (vph)	0
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

Intersection Summary

Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Configurations					
Traffic Volume (vph)	175	91	53	80	36
Future Volume (vph)	175	91	53	80	36
Turn Type	Prot	Prot	NA	Perm	NA
Protected Phases	3	3	2		6
Permitted Phases				6	
Detector Phase	3	3	2	6	6
Switch Phase					
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	11.9	11.9	12.1	12.4	12.4
Total Split (s)	44.9	44.9	45.1	45.4	45.4
Total Split (%)	49.7%	49.7%	49.9%	50.3%	50.3%
Yellow Time (s)	3.9	3.9	4.1	4.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	5.1	5.4	5.4
Lead/Lag					
Lead-Lag Optimize?					
Recall Mode	Min	Min	None	None	None

Intersection Summary
Cycle Length: 90.3
Actuated Cycle Length: 33.1
Natural Cycle: 40
Control Type: Actuated-Uncoordinated

Splits and Phases: 71: Palmilla Drive/Charmant Dr & Lebon Drive



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	175	91	53	212	80	36
Future Volume (vph)	175	91	53	212	80	36
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9	5.1		5.4	5.4
Lane Util. Factor	0.97	0.91	0.95		1.00	0.95
Frt	0.99	0.85	0.88		1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	3423	1441	3114		1770	3539
Flt Permitted	0.95	1.00	1.00		0.56	1.00
Satd. Flow (perm)	3423	1441	3114		1048	3539
Peak-hour factor, PHF	0.87	0.87	0.85	0.85	0.80	0.80
Adj. Flow (vph)	201	105	62	249	100	45
RTOR Reduction (vph)	5	64	157	0	0	0
Lane Group Flow (vph)	207	30	154	0	100	45
Turn Type	Prot	Prot	NA		Perm	NA
Protected Phases	3	3	2			6
Permitted Phases					6	
Actuated Green, G (s)	9.9	9.9	11.6		11.3	11.3
Effective Green, g (s)	9.9	9.9	11.6		11.3	11.3
Actuated g/C Ratio	0.31	0.31	0.37		0.36	0.36
Clearance Time (s)	4.9	4.9	5.1		5.4	5.4
Vehicle Extension (s)	2.0	2.0	3.8		3.4	3.4
Lane Grp Cap (vph)	1075	452	1146		375	1269
v/s Ratio Prot	c0.06	0.02	0.05			0.01
v/s Ratio Perm					c0.10	
v/c Ratio	0.19	0.07	0.13		0.27	0.04
Uniform Delay, d1	7.9	7.6	6.6		7.2	6.6
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	0.0	0.0	0.1		0.4	0.0
Delay (s)	7.9	7.6	6.7		7.6	6.6
Level of Service	A	A	A		A	A
Approach Delay (s)	7.8		6.7			7.3
Approach LOS	A		A			A

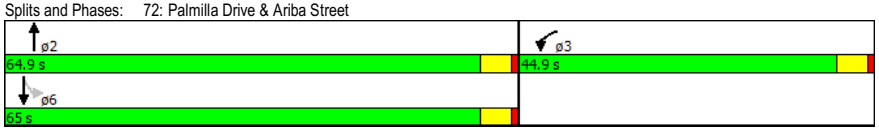
Intersection Summary			
HCM 2000 Control Delay	7.2	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.23		
Actuated Cycle Length (s)	31.5	Sum of lost time (s)	10.3
Intersection Capacity Utilization	32.9%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	WBL	NBT	SBL	SBT
Lane Configurations				
Traffic Volume (vph)	344	138	77	112
Future Volume (vph)	344	138	77	112
Turn Type	Prot	NA	Perm	NA
Protected Phases	3	2		6
Permitted Phases			6	
Detector Phase	3	2	6	6
Switch Phase				
Minimum Initial (s)	6.0	7.0	7.0	7.0
Minimum Split (s)	10.9	11.9	12.0	12.0
Total Split (s)	44.9	64.9	65.0	65.0
Total Split (%)	40.9%	59.1%	59.1%	59.1%
Yellow Time (s)	3.9	3.9	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	5.0	5.0
Lead/Lag				
Lead-Lag Optimize?				
Recall Mode	None	Min	Min	Min

Intersection Summary
Cycle Length: 109.9
Actuated Cycle Length: 34.2
Natural Cycle: 40
Control Type: Actuated-Uncoordinated

Splits and Phases: 72: Palmilla Drive & Ariba Street



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	344	160	138	132	77	112
Future Volume (vph)	344	160	138	132	77	112
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9		4.9		5.0	5.0
Lane Util. Factor	0.97		0.95		1.00	0.95
Frt	0.95		0.93		1.00	1.00
Flt Protected	0.97		1.00		0.95	1.00
Satd. Flow (prot)	3328		3280		1770	3539
Flt Permitted	0.97		1.00		0.56	1.00
Satd. Flow (perm)	3328		3280		1052	3539
Peak-hour factor, PHF	0.82	0.82	0.88	0.88	0.85	0.85
Adj. Flow (vph)	420	195	157	150	91	132
RTOR Reduction (vph)	54	0	95	0	0	0
Lane Group Flow (vph)	561	0	212	0	91	132
Turn Type	Prot		NA		Perm	NA
Protected Phases	3		2			6
Permitted Phases					6	
Actuated Green, G (s)	11.1		12.1		12.0	12.0
Effective Green, g (s)	11.1		12.1		12.0	12.0
Actuated g/C Ratio	0.34		0.37		0.36	0.36
Clearance Time (s)	4.9		4.9		5.0	5.0
Vehicle Extension (s)	2.0		4.0		3.8	3.8
Lane Grp Cap (vph)	1119		1202		382	1286
v/s Ratio Prot	c0.17		0.06			0.04
v/s Ratio Perm					c0.09	
v/c Ratio	0.50		0.18		0.24	0.10
Uniform Delay, d1	8.7		7.1		7.3	6.9
Progression Factor	1.00		1.00		1.00	1.00
Incremental Delay, d2	0.1		0.1		0.4	0.0
Delay (s)	8.9		7.2		7.7	7.0
Level of Service	A		A		A	A
Approach Delay (s)	8.9		7.2			7.3
Approach LOS	A		A			A

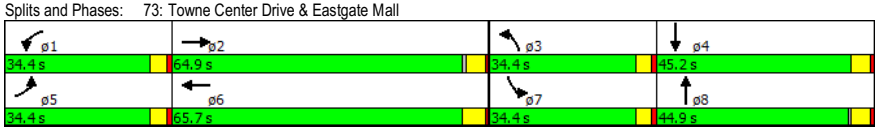
Intersection Summary			
HCM 2000 Control Delay	8.1	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.36		
Actuated Cycle Length (s)	33.0	Sum of lost time (s)	9.9
Intersection Capacity Utilization	41.1%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	19	443	298	243	154	77	200	664
Future Volume (vph)	19	443	298	243	154	77	200	664
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	5	2	1	6	3	8	7	4
Permitted Phases								
Detector Phase	5	2	1	6	3	8	7	4
Switch Phase								
Minimum Initial (s)	4.0	7.0	4.0	7.0	4.0	7.0	4.0	7.0
Minimum Split (s)	8.4	11.9	8.4	12.7	8.4	12.2	8.4	12.7
Total Split (s)	34.4	64.9	34.4	65.7	34.4	44.9	34.4	45.2
Total Split (%)	19.1%	36.1%	19.1%	36.6%	19.1%	25.0%	19.1%	25.2%
Yellow Time (s)	3.4	3.9	3.4	4.7	3.4	4.2	3.4	4.2
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	4.9	4.4	5.7	4.4	5.2	4.4	5.2
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 179.7
Actuated Cycle Length: 152.6
Natural Cycle: 90
Control Type: Actuated-Uncoordinated

Splits and Phases: 73: Towne Center Drive & Eastgate Mall



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	19	443	391	298	243	6	154	77	155	200	664	89
Future Volume (vph)	19	443	391	298	243	6	154	77	155	200	664	89
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	5.7		4.4	5.2		4.4	5.2	
Lane Util. Factor	0.97	0.95		1.00	0.95		0.97	0.95		0.97	0.95	
Frt	1.00	0.93		1.00	1.00		1.00	0.90		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	3433	3290		1770	3526		3433	3185		3433	3477	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	3433	3290		1770	3526		3433	3185		3433	3477	
Peak-hour factor, PHF	0.87	0.87	0.87	0.91	0.91	0.91	0.88	0.88	0.88	0.80	0.80	0.80
Adj. Flow (vph)	22	509	449	327	267	7	175	88	176	250	830	111
RTOR Reduction (vph)	0	89	0	0	1	0	0	134	0	0	5	0
Lane Group Flow (vph)	22	869	0	327	273	0	175	130	0	250	936	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases												
Actuated Green, G (s)	3.5	52.8		30.2	78.7		12.3	36.9		15.7	40.3	
Effective Green, g (s)	3.5	52.8		30.2	78.7		12.3	36.9		15.7	40.3	
Actuated g/C Ratio	0.02	0.34		0.20	0.51		0.08	0.24		0.10	0.26	
Clearance Time (s)	4.4	4.9		4.4	5.7		4.4	5.2		4.4	5.2	
Vehicle Extension (s)	2.0	5.1		2.0	4.8		2.0	5.1		2.0	4.8	
Lane Grp Cap (vph)	77	1124		345	1796		273	760		348	906	
v/s Ratio Prot	0.01	c0.26		c0.18	0.08		0.05	0.04		c0.07	c0.27	
v/s Ratio Perm												
v/c Ratio	0.29	0.77		0.95	0.15		0.64	0.17		0.72	1.03	
Uniform Delay, d1	74.3	45.5		61.4	20.2		69.0	46.7		67.3	57.1	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.7	4.0		34.3	0.1		3.8	0.2		5.8	38.7	
Delay (s)	75.0	49.5		95.7	20.2		72.8	46.9		73.1	95.8	
Level of Service	E	D		F	C		E	D		E	F	
Approach Delay (s)		50.0			61.3			57.2			91.0	
Approach LOS		D			E			E			F	

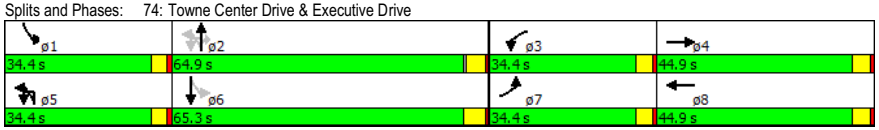
Intersection Summary				
HCM 2000 Control Delay	68.3	HCM 2000 Level of Service	E	
HCM 2000 Volume to Capacity ratio	0.90			
Actuated Cycle Length (s)	154.5	Sum of lost time (s)	19.7	
Intersection Capacity Utilization	82.6%	ICU Level of Service	E	
Analysis Period (min)	15			

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	67	140	307	442	52	125	121	76	34	1004
Future Volume (vph)	67	140	307	442	52	125	121	76	34	1004
Turn Type	Prot	NA	Prot	NA	pm+pt	pm+pt	NA	Perm	pm+pt	NA
Protected Phases	7	4	3	8	5	5	2		1	6
Permitted Phases					2	2		2	6	
Detector Phase	7	4	3	8	5	5	2	2	1	6
Switch Phase										
Minimum Initial (s)	4.0	4.0	4.0	7.0	4.0	4.0	7.0	7.0	4.0	7.0
Minimum Split (s)	8.4	8.9	8.4	11.9	8.4	8.4	11.9	11.9	8.4	12.3
Total Split (s)	34.4	44.9	34.4	44.9	34.4	34.4	64.9	64.9	34.4	65.3
Total Split (%)	19.2%	25.1%	19.2%	25.1%	19.2%	19.2%	36.3%	36.3%	19.2%	36.5%
Yellow Time (s)	3.4	3.9	3.4	3.9	3.4	3.4	3.9	3.9	3.4	4.3
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	4.9	4.4	4.9		4.4	4.9	4.9	4.4	5.3
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min

Intersection Summary
Cycle Length: 179
Actuated Cycle Length: 147.6
Natural Cycle: 80
Control Type: Actuated-Uncoordinated

Splits and Phases: 74: Towne Center Drive & Executive Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	67	140	149	307	442	38	52	125	121	76	34	1004
Future Volume (vph)	67	140	149	307	442	38	52	125	121	76	34	1004
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	4.9			4.4	4.9	4.9	4.4	5.3
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.92		1.00	0.99			1.00	1.00	0.85	1.00	0.98
Flt Protected	0.95	1.00		0.95	1.00			0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	3266		1770	3498			1770	3539	1583	1770	3485
Flt Permitted	0.95	1.00		0.95	1.00			0.06	1.00	1.00	0.67	1.00
Satd. Flow (perm)	1770	3266		1770	3498			113	3539	1583	1242	3485
Peak-hour factor, PHF	0.86	0.86	0.86	0.94	0.94	0.94	0.92	0.90	0.90	0.90	0.89	0.89
Adj. Flow (vph)	78	163	173	327	470	40	57	139	134	84	38	1128
RTOR Reduction (vph)	0	123	0	0	4	0	0	0	0	40	0	4
Lane Group Flow (vph)	78	213	0	327	506	0	0	196	134	44	38	1253
Turn Type	Prot	NA		Prot	NA		pm+pt	pm+pt	NA	Perm	pm+pt	NA
Protected Phases	7	4		3	8		5	5	2		1	6
Permitted Phases							2	2		2	6	
Actuated Green, G (s)	10.8	17.7		30.2	37.1			86.3	77.1	77.1	66.0	61.2
Effective Green, g (s)	10.8	17.7		30.2	37.1			86.3	77.1	77.1	66.0	61.2
Actuated g/C Ratio	0.07	0.12		0.20	0.25			0.58	0.52	0.52	0.44	0.41
Clearance Time (s)	4.4	4.9		4.4	4.9			4.4	4.9	4.9	4.4	5.3
Vehicle Extension (s)	2.0	5.3		2.0	5.4			2.0	3.8	3.8	2.0	3.8
Lane Grp Cap (vph)	128	389		360	874			292	1838	822	569	1437
v/s Ratio Prot	0.04	0.07		c0.18	c0.14			c0.09	0.04		0.00	c0.36
v/s Ratio Perm								0.30		0.03	0.03	
v/c Ratio	0.61	0.55		0.91	0.58			0.67	0.07	0.05	0.07	0.87
Uniform Delay, d1	66.8	61.6		57.7	48.8			40.7	17.8	17.6	23.4	40.0
Progression Factor	1.00	1.00		1.00	1.00			1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	5.5	3.0		25.2	1.6			4.7	0.0	0.0	0.0	6.3
Delay (s)	72.3	64.6		83.0	50.4			45.4	17.8	17.6	23.4	46.3
Level of Service	E	E		F	D			D	B	B	C	D
Approach Delay (s)		66.0			63.1				30.9			45.6
Approach LOS		E			E				C			D

Intersection Summary			
HCM 2000 Control Delay	51.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	148.4	Sum of lost time (s)	19.0
Intersection Capacity Utilization	82.7%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

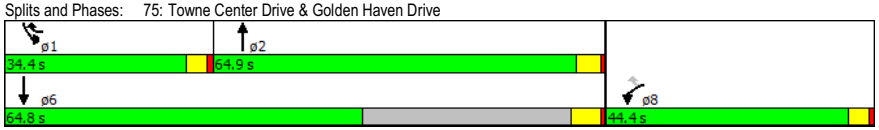
Movement	SBR
Lane Configurations	
Traffic Volume (vph)	115
Future Volume (vph)	115
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.89
Adj. Flow (vph)	129
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

Intersection Summary

Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Configurations					
Traffic Volume (vph)	397	310	214	164	649
Future Volume (vph)	397	310	214	164	649
Turn Type	Prot	pm+ov	NA	Prot	NA
Protected Phases	8	1	2	1	6
Permitted Phases		8			
Detector Phase	8	1	2	1	6
Switch Phase					
Minimum Initial (s)	4.0	4.0	10.0	4.0	10.0
Minimum Split (s)	8.4	8.4	14.9	8.4	15.8
Total Split (s)	44.4	34.4	64.9	34.4	64.8
Total Split (%)	30.9%	23.9%	45.2%	23.9%	45.1%
Yellow Time (s)	3.4	3.4	3.9	3.4	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	4.4	4.9	4.4	5.8
Lead/Lag		Lead	Lag	Lead	
Lead-Lag Optimize?		Yes	Yes	Yes	
Recall Mode	None	None	None	None	None

Intersection Summary
Cycle Length: 143.7
Actuated Cycle Length: 68.8
Natural Cycle: 55
Control Type: Actuated-Uncoordinated

Splits and Phases: 75: Towne Center Drive & Golden Haven Drive



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	397	310	214	196	164	649
Future Volume (vph)	397	310	214	196	164	649
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	0%		0%			-7%
Total Lost time (s)	4.4	4.4	4.9		4.4	5.8
Lane Util. Factor	1.00	1.00	0.95		1.00	0.95
Frt	1.00	0.85	0.93		1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1770	1583	3285		1832	3663
Flt Permitted	0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)	1770	1583	3285		1832	3663
Peak-hour factor, PHF	0.90	0.90	0.85	0.85	0.93	0.93
Adj. Flow (vph)	441	344	252	231	176	698
RTOR Reduction (vph)	0	156	149	0	0	0
Lane Group Flow (vph)	441	188	334	0	176	698
Turn Type	Prot	pm+ov	NA		Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8				
Actuated Green, G (s)	24.9	37.3	17.2		12.4	33.1
Effective Green, g (s)	24.9	37.3	17.2		12.4	33.1
Actuated g/C Ratio	0.37	0.55	0.25		0.18	0.49
Clearance Time (s)	4.4	4.4	4.9		4.4	5.8
Vehicle Extension (s)	2.0	2.0	5.0		2.0	5.0
Lane Grp Cap (vph)	646	967	828		333	1777
v/s Ratio Prot	c0.25	0.04	0.10		c0.10	c0.19
v/s Ratio Perm		0.08				
v/c Ratio	0.68	0.19	0.40		0.53	0.39
Uniform Delay, d1	18.3	7.8	21.2		25.3	11.2
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	2.4	0.0	0.7		0.7	0.3
Delay (s)	20.7	7.9	21.9		26.0	11.5
Level of Service	C	A	C		C	B
Approach Delay (s)	15.1		21.9			14.4
Approach LOS	B		C			B

Intersection Summary			
HCM 2000 Control Delay	16.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	68.2	Sum of lost time (s)	13.7
Intersection Capacity Utilization	54.7%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	23	316	420	389	93	42	63	17	100
Future Volume (vph)	23	316	420	389	93	42	63	17	100
Turn Type	Perm	NA	Perm	NA	pm+pt	NA	Perm	pm+pt	NA
Protected Phases		4		8	5	2		1	6
Permitted Phases	4		8		2		2	6	
Detector Phase	4	4	8	8	5	2	2	1	6
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	7.0	7.0	4.0	7.0
Minimum Split (s)	8.9	8.9	8.4	8.4	8.4	11.9	11.9	8.4	11.9
Total Split (s)	44.9	44.9	44.4	44.4	34.4	64.9	64.9	34.4	64.9
Total Split (%)	31.1%	31.1%	30.8%	30.8%	23.9%	45.0%	45.0%	23.9%	45.0%
Yellow Time (s)	3.9	3.9	3.4	3.4	3.4	3.9	3.9	3.4	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	4.4	4.4	4.4	4.9	4.9	4.4	4.9
Lead/Lag					Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Min	Min	None	Min

Intersection Summary

Cycle Length: 144.2
Actuated Cycle Length: 77.7
Natural Cycle: 150
Control Type: Actuated-Uncoordinated

Splits and Phases: 76: Executive Way & Executive Drive

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	23	316	767	420	389	10	93	42	63	17	100	71
Future Volume (vph)	23	316	767	420	389	10	93	42	63	17	100	71
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9		4.4	4.4		4.4	4.9	4.9	4.4	4.9	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.89		1.00	1.00		1.00	1.00	0.85	1.00	0.94	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3163		1770	3526		1770	1863	1583	1770	1747	
Flt Permitted	0.47	1.00		0.10	1.00		0.39	1.00	1.00	0.72	1.00	
Satd. Flow (perm)	870	3163		183	3526		728	1863	1583	1346	1747	
Peak-hour factor, PHF	0.80	0.80	0.80	0.87	0.87	0.87	0.80	0.80	0.80	0.80	0.80	0.80
Adj. Flow (vph)	29	395	959	483	447	11	116	52	79	21	125	89
RTOR Reduction (vph)	0	209	0	0	1	0	0	0	56	0	24	0
Lane Group Flow (vph)	29	1145	0	483	457	0	116	53	23	21	190	0
Turn Type	Perm	NA		Perm	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2		2	6		
Actuated Green, G (s)	40.3	40.3		40.8	40.8		30.3	23.8	23.8	19.2	17.1	
Effective Green, g (s)	40.3	40.3		40.8	40.8		30.3	23.8	23.8	19.2	17.1	
Actuated g/C Ratio	0.50	0.50		0.51	0.51		0.38	0.30	0.30	0.24	0.21	
Clearance Time (s)	4.9	4.9		4.4	4.4		4.4	4.9	4.9	4.4	4.9	
Vehicle Extension (s)	2.0	2.0		2.3	2.3		2.0	2.9	2.9	2.0	2.6	
Lane Grp Cap (vph)	436	1585		92	1789		388	551	468	332	371	
v/s Ratio Prot		0.36			0.13		c0.03	0.03		0.00	c0.11	
v/s Ratio Perm	0.03			c2.64			0.08		0.01	0.01		
v/c Ratio	0.07	0.94dr		5.25	0.26		0.30	0.10	0.05	0.06	0.51	
Uniform Delay, d1	10.3	15.7		19.8	11.2		17.2	20.5	20.2	23.6	28.0	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.0	1.4		1936.4	0.0		0.2	0.1	0.0	0.0	1.0	
Delay (s)	10.4	17.1		1956.2	11.2		17.3	20.6	20.3	23.6	28.9	
Level of Service	B	B		F	B		B	C	C	C	C	
Approach Delay (s)		16.9			1009.5			18.9			28.5	
Approach LOS		B			F			B			C	

Intersection Summary

HCM 2000 Control Delay	350.8	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	3.38		
Actuated Cycle Length (s)	80.4	Sum of lost time (s)	14.2
Intersection Capacity Utilization	87.0%	ICU Level of Service	E
Analysis Period (min)	15		

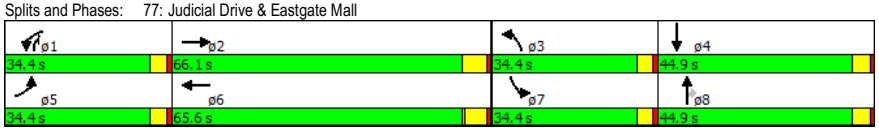
dr Defacto Right Lane. Recode with 1 though lane as a right lane.
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	14	703	261	253	162	11	523	125	158
Future Volume (vph)	14	703	261	253	162	11	523	125	158
Turn Type	Prot	NA	Prot	NA	Prot	NA	pm+ov	Prot	NA
Protected Phases	5	2	1	6	3	8	1	7	4
Permitted Phases							8		
Detector Phase	5	2	1	6	3	8	1	7	4
Switch Phase									
Minimum Initial (s)	4.0	7.0	4.0	2.8	4.0	4.0	4.0	4.0	3.5
Minimum Split (s)	8.4	13.1	8.4	12.6	8.4	8.9	8.4	8.4	8.9
Total Split (s)	34.4	66.1	34.4	65.6	34.4	44.9	34.4	34.4	44.9
Total Split (%)	19.1%	36.8%	19.1%	36.5%	19.1%	25.0%	19.1%	19.1%	25.0%
Yellow Time (s)	3.4	5.1	3.4	4.6	3.4	3.9	3.4	3.4	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	6.1	4.4	5.6	4.4	4.9	4.4	4.4	4.9
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 179.8
Actuated Cycle Length: 147.8
Natural Cycle: 90
Control Type: Actuated-Uncoordinated

Splits and Phases: 77: Judicial Drive & Eastgate Mall



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	14	703	172	261	253	12	162	11	523	125	158	95
Future Volume (vph)	14	703	172	261	253	12	162	11	523	125	158	95
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	6.1		4.4	5.6		4.4	4.9	4.4	4.4	4.9	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.97		1.00	0.99		1.00	1.00	0.85	1.00	0.94	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3435		1770	3516		1770	1863	1583	1770	1758	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	3435		1770	3516		1770	1863	1583	1770	1758	
Peak-hour factor, PHF	0.89	0.89	0.89	0.97	0.97	0.97	0.85	0.85	0.85	0.87	0.87	0.87
Adj. Flow (vph)	16	790	193	269	261	12	191	13	615	144	182	109
RTOR Reduction (vph)	0	12	0	0	1	0	0	0	105	0	12	0
Lane Group Flow (vph)	16	971	0	269	272	0	191	13	510	144	279	0
Turn Type	Prot	NA		Prot	NA		Prot	NA	pm+ov	Prot	NA	
Protected Phases	5	2		1	6		3	8	1	7	4	
Permitted Phases									8			
Actuated Green, G (s)	2.6	50.6		31.0	79.5		20.7	14.2	45.2	38.1	31.6	
Effective Green, g (s)	2.6	50.6		31.0	79.5		20.7	14.2	45.2	38.1	31.6	
Actuated g/C Ratio	0.02	0.33		0.20	0.52		0.13	0.09	0.29	0.25	0.21	
Clearance Time (s)	4.4	6.1		4.4	5.6		4.4	4.9	4.4	4.4	4.9	
Vehicle Extension (s)	2.0	2.7		2.0	3.0		2.0	2.0	2.0	2.0	2.0	
Lane Grp Cap (vph)	29	1130		356	1818		238	172	465	438	361	
v/s Ratio Prot	0.01	c0.28		0.15	0.08		c0.11	0.01	c0.22	0.08	c0.16	
v/s Ratio Perm									0.10			
v/c Ratio	0.55	0.86		0.76	0.15		0.80	0.08	1.10	0.33	0.77	
Uniform Delay, d1	75.0	48.2		57.8	19.4		64.5	63.8	54.2	47.3	57.7	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	12.2	6.6		7.9	0.0		16.6	0.1	70.5	0.2	9.1	
Delay (s)	87.2	54.9		65.7	19.4		81.1	63.8	124.7	47.5	66.7	
Level of Service	F	D		E	B		F	E	F	D	E	
Approach Delay (s)		55.4			42.4			113.6			60.4	
Approach LOS		E			D			F			E	

Intersection Summary

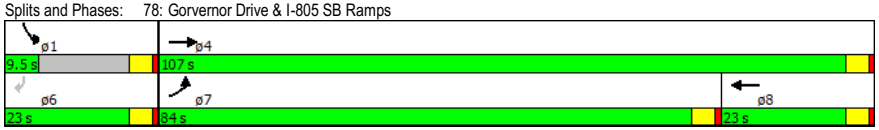
HCM 2000 Control Delay	70.7	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	153.7	Sum of lost time (s)	19.8
Intersection Capacity Utilization	79.0%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBT	SBL	SBR
Lane Configurations					
Traffic Volume (vph)	889	309	359	17	198
Future Volume (vph)	889	309	359	17	198
Turn Type	Prot	NA	NA	Prot	Perm
Protected Phases	7	4	8	1	
Permitted Phases					6
Detector Phase	7	4	8	1	6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5
Total Split (s)	84.0	107.0	23.0	9.5	23.0
Total Split (%)	64.6%	82.3%	17.7%	7.3%	17.7%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead		Lag		
Lead-Lag Optimize?	Yes		Yes		
Recall Mode	None	None	None	None	Min

Intersection Summary
Cycle Length: 130
Actuated Cycle Length: 60.4
Natural Cycle: 70
Control Type: Actuated-Uncoordinated

Splits and Phases: 78: Gorvernor Drive & I-805 SB Ramps



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	889	309	359	38	17	198
Future Volume (vph)	889	309	359	38	17	198
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5		4.5	4.5
Lane Util. Factor	0.97	1.00	0.95		1.00	1.00
Frt	1.00	1.00	0.99		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	3433	1863	3488		1770	1583
Flt Permitted	0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)	3433	1863	3488		1770	1583
Peak-hour factor, PHF	0.95	0.95	0.80	0.80	0.88	0.88
Adj. Flow (vph)	936	325	449	48	19	225
RTOR Reduction (vph)	0	0	5	0	0	200
Lane Group Flow (vph)	936	325	492	0	19	25
Turn Type	Prot	NA	NA		Prot	Perm
Protected Phases	7	4	8		1	
Permitted Phases						6
Actuated Green, G (s)	22.7	44.4	17.2		6.8	6.8
Effective Green, g (s)	22.7	44.4	17.2		6.8	6.8
Actuated g/C Ratio	0.38	0.74	0.29		0.11	0.11
Clearance Time (s)	4.5	4.5	4.5		4.5	4.5
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	1294	1374	996		199	178
v/s Ratio Prot	c0.27	0.17	c0.14		0.01	
v/s Ratio Perm						c0.02
v/c Ratio	0.72	0.24	0.49		0.10	0.14
Uniform Delay, d1	16.1	2.5	17.9		23.9	24.1
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	2.0	0.1	0.4		0.2	0.4
Delay (s)	18.1	2.6	18.3		24.2	24.4
Level of Service	B	A	B		C	C
Approach Delay (s)		14.1	18.3		24.4	
Approach LOS		B	B		C	

Intersection Summary			
HCM 2000 Control Delay	16.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.55		
Actuated Cycle Length (s)	60.2	Sum of lost time (s)	13.5
Intersection Capacity Utilization	51.9%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	325	0	0	0	23	5	437	9	3	0	0	0
Future Volume (Veh/h)	325	0	0	0	23	5	437	9	3	0	0	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.94	0.94	0.94	0.25	0.25	0.25
Hourly flow rate (vph)	406	0	0	0	29	6	465	10	3	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	962	943	0	942	942	12	0			13		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	962	943	0	942	942	12	0			13		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	0	100	100	100	85	99	71			100		
cM capacity (veh/h)	162	187	1085	189	188	1069	1623			1606		

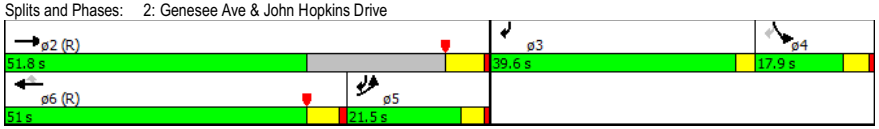
Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	406	35	478
Volume Left	406	0	465
Volume Right	0	6	3
cSH	162	219	1623
Volume to Capacity	2.51	0.16	0.29
Queue Length 95th (ft)	872	14	30
Control Delay (s)	742.0	24.6	7.9
Lane LOS	F	C	A
Approach Delay (s)	742.0	24.6	7.9
Approach LOS	F	C	

Intersection Summary				
Average Delay	332.9			
Intersection Capacity Utilization	56.2%	ICU Level of Service	B	
Analysis Period (min)	15			

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	ø3
Lane Configurations							
Traffic Volume (vph)	82	734	1510	1415	154	22	
Future Volume (vph)	82	734	1510	1415	154	22	
Turn Type	Prot	NA	NA	Perm	Prot	pt+ov	
Protected Phases	5	2	6		4	3 5	3
Permitted Phases				6		4	
Detector Phase	5	2	6	6	4	3 5	
Switch Phase							
Minimum Initial (s)	4.0	10.0	10.0	10.0	7.0		4.0
Minimum Split (s)	9.5	16.7	15.9	15.9	11.9		7.0
Total Split (s)	21.5	51.8	51.0	51.0	17.9		39.6
Total Split (%)	16.5%	39.8%	39.2%	39.2%	13.8%		30%
Yellow Time (s)	3.4	5.7	4.9	4.9	3.9		3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		0.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	4.4	6.7	5.9	5.9	4.9		
Lead/Lag	Lag		Lead	Lead	Lag		Lead
Lead-Lag Optimize?	Yes		Yes	Yes	Yes		Yes
Recall Mode	None	C-Min	C-Min	C-Min	None		None

Intersection Summary
Cycle Length: 130
Actuated Cycle Length: 130
Offset: 16 (12%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 2: Genesee Ave & John Hopkins Drive



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	82	734	1510	1415	154	22
Future Volume (vph)	82	734	1510	1415	154	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	6.7	5.9	5.9	4.9	3.0
Lane Util. Factor	1.00	0.91	0.86	0.88	0.97	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	5085	6408	2787	3433	1583
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	5085	6408	2787	3433	1583
Peak-hour factor, PHF	0.89	0.89	0.94	0.94	0.80	0.80
Adj. Flow (vph)	92	825	1606	1505	192	28
RTOR Reduction (vph)	0	0	0	0	0	1
Lane Group Flow (vph)	92	825	1606	1505	193	27
Turn Type	Prot	NA	NA	Perm	Prot	pt+ov
Protected Phases	5	2	6		4	3 5
Permitted Phases				6		4
Actuated Green, G (s)	11.1	92.7	78.0	78.0	13.5	38.2
Effective Green, g (s)	11.1	92.7	78.0	78.0	13.5	33.8
Actuated g/C Ratio	0.09	0.71	0.60	0.60	0.10	0.26
Clearance Time (s)	4.4	6.7	5.9	5.9	4.9	
Vehicle Extension (s)	2.0	4.0	3.9	3.9	5.0	
Lane Grp Cap (vph)	151	3625	3844	1672	356	448
v/s Ratio Prot	c0.05	0.16	0.25		c0.06	c0.01
v/s Ratio Perm				c0.54		0.01
v/c Ratio	0.61	0.23	0.42	0.90	0.54	0.06
Uniform Delay, d1	57.4	6.4	13.9	22.6	55.3	36.2
Progression Factor	0.82	0.55	1.16	1.03	1.00	1.00
Incremental Delay, d2	4.7	0.1	0.2	4.7	3.0	0.0
Delay (s)	51.6	3.6	16.3	27.9	58.3	36.2
Level of Service	D	A	B	C	E	D
Approach Delay (s)		8.4	21.9		55.5	
Approach LOS		A	C		E	

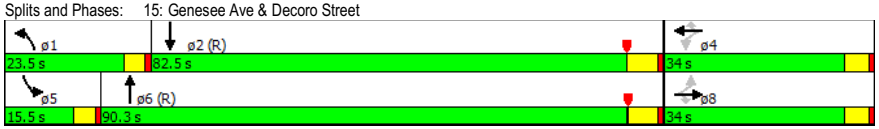
Intersection Summary			
HCM 2000 Control Delay	20.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	18.2
Intersection Capacity Utilization	62.6%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	42	29	170	51	22	36	132	3007	19	953
Future Volume (vph)	42	29	170	51	22	36	132	3007	19	953
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA	Prot	NA
Protected Phases		8			4		1	6	5	2
Permitted Phases	8		8	4		4				
Detector Phase	8	8	8	4	4	4	1	6	5	2
Switch Phase										
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	10.0	4.0	10.0
Minimum Split (s)	8.9	8.9	8.9	8.9	8.9	8.9	8.4	15.7	8.4	15.9
Total Split (s)	34.0	34.0	34.0	34.0	34.0	34.0	23.5	90.3	15.5	82.5
Total Split (%)	24.3%	24.3%	24.3%	24.3%	24.3%	24.3%	16.8%	64.5%	11.1%	58.9%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.9	3.9	3.4	4.7	3.4	4.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.9	4.9		4.9	4.9	4.4	5.7	4.4	5.9
Lead/Lag							Lead	Lag	Lead	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	None	C-Max

Intersection Summary
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 44 (31%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 15: Genesee Ave & Decoro Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	42	29	170	51	22	36	132	3007	114	19	953	66
Future Volume (vph)	42	29	170	51	22	36	132	3007	114	19	953	66
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9	4.9		4.9	4.9	4.4	5.7		4.4	5.9	
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.91		1.00	0.91	
Frt		1.00	0.85		1.00	0.85	1.00	0.99		1.00	0.99	
Flt Protected		0.97	1.00		0.97	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1810	1583		1800	1583	1770	5057		1770	5036	
Flt Permitted		0.72	1.00		0.69	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1334	1583		1287	1583	1770	5057		1770	5036	
Peak-hour factor, PHF	0.84	0.84	0.84	0.85	0.85	0.85	0.93	0.93	0.93	0.80	0.80	0.80
Adj. Flow (vph)	50	35	202	60	26	42	142	3233	123	24	1191	82
RTOR Reduction (vph)	0	0	176	0	0	37	0	2	0	0	4	0
Lane Group Flow (vph)	0	85	26	0	86	5	142	3354	0	24	1270	0
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA		Prot	NA	
Protected Phases		8			4		1	6		5	2	
Permitted Phases	8		8	4		4						
Actuated Green, G (s)		17.7	17.7		17.7	17.7	15.1	102.8		4.5	92.0	
Effective Green, g (s)		17.7	17.7		17.7	17.7	15.1	102.8		4.5	92.0	
Actuated g/C Ratio		0.13	0.13		0.13	0.13	0.11	0.73		0.03	0.66	
Clearance Time (s)		4.9	4.9		4.9	4.9	4.4	5.7		4.4	5.9	
Vehicle Extension (s)		2.0	2.0		2.0	2.0	2.0	4.3		2.0	3.7	
Lane Grp Cap (vph)		168	200		162	200	190	3713		56	3309	
v/s Ratio Prot							c0.08	c0.66		0.01	0.25	
v/s Ratio Perm		0.06	0.02		c0.07	0.00						
v/c Ratio		0.51	0.13		0.53	0.03	0.75	0.90		0.43	0.38	
Uniform Delay, d1		57.1	54.3		57.3	53.6	60.6	14.7		66.5	11.0	
Progression Factor		1.00	1.00		1.00	1.00	0.88	1.18		1.02	1.53	
Incremental Delay, d2		0.9	0.1		1.7	0.0	1.3	0.4		1.9	0.3	
Delay (s)		57.9	54.4		58.9	53.6	54.8	17.8		69.8	17.2	
Level of Service		E	D		E	D	D	B		E	B	
Approach Delay (s)		55.5			57.2			19.3			18.2	
Approach LOS		E			E			B			B	

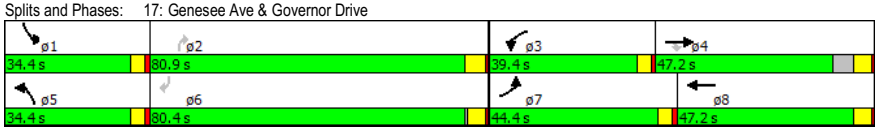
Intersection Summary			
HCM 2000 Control Delay	21.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.86		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	15.2
Intersection Capacity Utilization	87.1%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBR	SBL	SBR
Lane Configurations									
Traffic Volume (vph)	783	317	144	236	240	67	204	302	433
Future Volume (vph)	783	317	144	236	240	67	204	302	433
Turn Type	Prot	NA	Perm	Prot	NA	Prot	Perm	Prot	Perm
Protected Phases	7	4		3	8	5		1	
Permitted Phases			4				2		6
Detector Phase	7	4	4	3	8	5	2	1	6
Switch Phase									
Minimum Initial (s)	4.0	8.0	8.0	4.0	8.0	4.0	8.0	4.0	8.0
Minimum Split (s)	8.4	13.2	13.2	8.4	13.2	8.4	13.9	8.4	13.4
Total Split (s)	44.4	47.2	47.2	39.4	47.2	34.4	80.9	34.4	80.4
Total Split (%)	21.5%	22.8%	22.8%	19.0%	22.8%	16.6%	39.1%	16.6%	38.9%
Yellow Time (s)	3.4	4.2	4.2	3.4	4.2	3.4	4.9	3.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.2	5.2	4.4	5.2	4.4	5.9	4.4	5.4
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	None	Min

Intersection Summary
Cycle Length: 206.9
Actuated Cycle Length: 137.7
Natural Cycle: 80
Control Type: Actuated-Uncoordinated

Splits and Phases: 17: Genesee Ave & Governor Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	783	317	144	236	240	410	67	0	204	302	0	433
Future Volume (vph)	783	317	144	236	240	410	67	0	204	302	0	433
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	16	12	12	12	12	12	12	12
Total Lost time (s)	4.4	5.2	5.2	4.4	5.2		4.4		5.9	4.4		5.4
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95		1.00		0.88	0.97		1.00
Frt	1.00	1.00	0.85	1.00	0.91		1.00		0.85	1.00		0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95		1.00	0.95		1.00
Satd. Flow (prot)	3433	3539	1583	3433	3631		1770		2787	3433		1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95		1.00	0.95		1.00
Satd. Flow (perm)	3433	3539	1583	3433	3631		1770		2787	3433		1583
Peak-hour factor, PHF	0.80	0.80	0.80	0.80	0.80	0.80	0.90	0.90	0.90	0.85	0.85	0.85
Adj. Flow (vph)	979	396	180	295	300	512	74	0	227	355	0	509
RTOR Reduction (vph)	0	0	51	0	139	0	0	0	191	0	0	260
Lane Group Flow (vph)	979	396	129	295	674	0	74	0	36	355	0	249
Turn Type	Prot	NA	Perm	Prot	NA		Prot		Perm	Prot		Perm
Protected Phases	7	4		3	8		5			1		
Permitted Phases			4						2			6
Actuated Green, G (s)	41.1	59.8	59.8	16.8	35.5		10.6		21.5	19.2		30.6
Effective Green, g (s)	41.1	59.8	59.8	16.8	35.5		10.6		21.5	19.2		30.6
Actuated g/C Ratio	0.30	0.44	0.44	0.12	0.26		0.08		0.16	0.14		0.22
Clearance Time (s)	4.4	5.2	5.2	4.4	5.2		4.4		5.9	4.4		5.4
Vehicle Extension (s)	2.0	2.3	2.3	2.0	3.8		2.0		2.9	2.0		3.5
Lane Grp Cap (vph)	1028	1542	689	420	939		136		436	480		353
v/s Ratio Prot	c0.29	0.11		0.09	c0.19		0.04			c0.10		
v/s Ratio Perm			0.08						0.01			c0.16
v/c Ratio	0.95	0.26	0.19	0.70	0.85dr		0.54		0.08	0.74		0.70
Uniform Delay, d1	47.1	24.6	23.8	57.8	46.3		61.0		49.4	56.6		49.1
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00		1.00	1.00		1.00
Incremental Delay, d2	17.5	0.1	0.1	4.3	2.8		2.4		0.1	5.1		6.5
Delay (s)	64.6	24.6	23.9	62.1	49.1		63.3		49.5	61.7		55.6
Level of Service	E	C	C	E	D		E		D	E		E
Approach Delay (s)		49.7			52.6			52.9			58.1	
Approach LOS		D			D			D			E	

Intersection Summary				
HCM 2000 Control Delay	52.7	HCM 2000 Level of Service	D	
HCM 2000 Volume to Capacity ratio	0.82			
Actuated Cycle Length (s)	137.2	Sum of lost time (s)	19.9	
Intersection Capacity Utilization	62.5%	ICU Level of Service	B	
Analysis Period (min)	15			

dr Defacto Right Lane. Recode with 1 though lane as a right lane.
c Critical Lane Group

Lane Group	EBR	NBL	NBT	SBT	SBR
Lane Configurations					
Traffic Volume (vph)	129	368	1247	1098	180
Future Volume (vph)	129	368	1247	1098	180
Turn Type	Perm	Prot	NA	NA	Perm
Protected Phases		5	2	6	
Permitted Phases	4				6
Detector Phase	4	5	2	6	6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	36.5	9.5	9.5	32.5	32.5
Total Split (s)	36.5	55.0	127.5	72.5	72.5
Total Split (%)	22.3%	33.5%	77.7%	44.2%	44.2%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5
Lead/Lag		Lead		Lag	Lag
Lead-Lag Optimize?		Yes		Yes	Yes
Recall Mode	None	None	Min	Min	Min

Intersection Summary
Cycle Length: 164
Actuated Cycle Length: 108.7
Natural Cycle: 120
Control Type: Actuated-Uncoordinated

Splits and Phases: 18: Genesee Ave & SR-52 Ramp

18: Genesee Ave & SR-52 Ramp

Timing Plan: Morning Peak

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	129	368	1247	1098	180
Future Volume (vph)	0	129	368	1247	1098	180
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5	4.5	4.5	4.5	4.5
Lane Util. Factor		0.88	1.00	0.91	0.95	1.00
Frt		0.85	1.00	1.00	1.00	0.85
Flt Protected		1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)		2787	1770	5085	3539	1583
Flt Permitted		1.00	0.95	1.00	1.00	1.00
Satd. Flow (perm)		2787	1770	5085	3539	1583
Peak-hour factor, PHF	0.80	0.80	0.83	0.83	0.83	0.83
Adj. Flow (vph)	0	161	443	1502	1323	217
RTOR Reduction (vph)	0	153	0	0	0	44
Lane Group Flow (vph)	0	8	443	1502	1323	173
Turn Type		Perm	Prot	NA	NA	Perm
Protected Phases			5	2	6	
Permitted Phases		4				6
Actuated Green, G (s)		5.7	35.5	93.6	53.6	53.6
Effective Green, g (s)		5.7	35.5	93.6	53.6	53.6
Actuated g/C Ratio		0.05	0.33	0.86	0.49	0.49
Clearance Time (s)		4.5	4.5	4.5	4.5	4.5
Vehicle Extension (s)		3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)		146	580	4394	1751	783
v/s Ratio Prot			c0.25	0.30	c0.37	
v/s Ratio Perm		c0.00				0.11
v/c Ratio		0.06	0.76	0.34	0.76	0.22
Uniform Delay, d1		48.7	32.6	1.4	22.1	15.5
Progression Factor		1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2		0.2	5.9	0.0	1.9	0.1
Delay (s)		48.9	38.6	1.5	24.0	15.7
Level of Service		D	D	A	C	B
Approach Delay (s)	48.9			9.9	22.8	
Approach LOS	D			A	C	

Intersection Summary			
HCM 2000 Control Delay	17.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	108.3	Sum of lost time (s)	13.5
Intersection Capacity Utilization	58.2%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

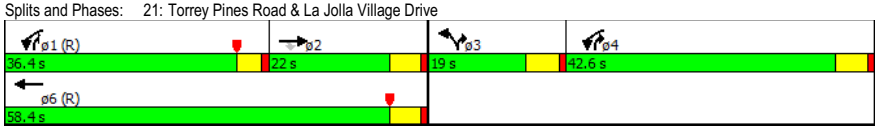
21: Torrey Pines Road & La Jolla Village Drive

Timing Plan: Morning Peak

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	ø1	ø4
Lane Configurations								
Traffic Volume (vph)	390	62	1324	1738	273	1294		
Future Volume (vph)	390	62	1324	1738	273	1294		
Turn Type	NA	Perm	Prot	NA	Prot	custom		
Protected Phases	2		1 4	6	3	1 3 4	1	4
Permitted Phases		2						
Detector Phase	2	2	1 4	6	3	1 3 4		
Switch Phase								
Minimum Initial (s)	10.0	10.0		10.0	4.0		4.0	4.0
Minimum Split (s)	15.4	15.4		15.3	9.6		8.4	42.6
Total Split (s)	22.0	22.0		58.4	19.0		36.4	42.6
Total Split (%)	18.3%	18.3%		48.7%	15.8%		30%	36%
Yellow Time (s)	4.4	4.4		4.3	4.6		3.4	4.6
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			
Total Lost Time (s)	5.4	5.4		5.3	5.6			
Lead/Lag	Lag	Lag			Lead		Lead	Lag
Lead-Lag Optimize?	Yes	Yes			Yes		Yes	Yes
Recall Mode	None	None		C-Max	None		C-Max	None

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 117 (98%), Referenced to phase 1:WBL and 6:WBT, Start of Yellow
Natural Cycle: 100
Control Type: Actuated-Coordinated

Splits and Phases: 21: Torrey Pines Road & La Jolla Village Drive



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	390	62	1324	1738	273	1294
Future Volume (vph)	390	62	1324	1738	273	1294
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.4	5.4	4.4	5.3	5.6	4.4
Lane Util. Factor	0.91	1.00	0.97	0.91	0.97	0.88
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	5085	1583	3433	5085	3433	2787
Flt Permitted	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (perm)	5085	1583	3433	5085	3433	2787
Peak-hour factor, PHF	0.83	0.83	0.93	0.93	0.84	0.84
Adj. Flow (vph)	470	75	1424	1869	325	1540
RTOR Reduction (vph)	0	65	0	0	0	0
Lane Group Flow (vph)	470	10	1424	1869	325	1540
Turn Type	NA	Perm	Prot	NA	Prot	custom
Protected Phases	2		1 4	6	3	1 3 4
Permitted Phases		2				
Actuated Green, G (s)	16.6	16.6	74.6	54.2	13.4	93.6
Effective Green, g (s)	16.6	16.6	69.0	54.2	13.4	82.4
Actuated g/C Ratio	0.14	0.14	0.58	0.45	0.11	0.69
Clearance Time (s)	5.4	5.4		5.3	5.6	
Vehicle Extension (s)	5.5	5.5		8.0	2.0	
Lane Grp Cap (vph)	703	218	1973	2296	383	1913
v/s Ratio Prot	0.09		0.41	c0.37	c0.09	c0.55
v/s Ratio Perm		0.01				
v/c Ratio	0.67	0.05	0.72	0.81	0.85	0.81
Uniform Delay, d1	49.1	44.8	18.5	28.5	52.3	13.2
Progression Factor	0.69	0.66	1.13	0.64	1.00	1.00
Incremental Delay, d2	3.4	0.2	0.3	0.8	15.3	2.4
Delay (s)	37.4	29.9	21.1	18.9	67.6	15.6
Level of Service	D	C	C	B	E	B
Approach Delay (s)	36.4			19.9	24.7	
Approach LOS	D			B	C	

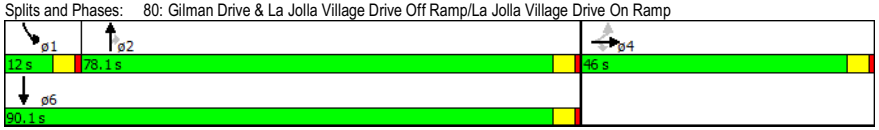
Intersection Summary			
HCM 2000 Control Delay	23.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	21.0
Intersection Capacity Utilization	66.7%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBT	EBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	4	431	1159	129	37	148
Future Volume (vph)	4	431	1159	129	37	148
Turn Type	NA	Perm	NA	Perm	Prot	NA
Protected Phases	4		2		1	6
Permitted Phases		4		2		
Detector Phase	4	4	2	2	1	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	40.5	40.5	9.5	9.5	9.5	24.5
Total Split (s)	46.0	46.0	78.1	78.1	12.0	90.1
Total Split (%)	33.8%	33.8%	57.4%	57.4%	8.8%	66.2%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	None	None	Min	Min	None	Min

Intersection Summary
Cycle Length: 136.1
Actuated Cycle Length: 81.2
Natural Cycle: 90
Control Type: Actuated-Uncoordinated

Splits and Phases: 80: Gilman Drive & La Jolla Village Drive Off Ramp/La Jolla Village Drive On Ramp



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	42	4	431	0	0	0	0	1159	129	37	148	0
Future Volume (vph)	42	4	431	0	0	0	0	1159	129	37	148	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5	4.5					4.5	4.5	4.5	4.5	
Lane Util. Factor		0.95	0.95					0.95	1.00	1.00	0.95	
Frt		0.88	0.85					1.00	0.85	1.00	1.00	
Flt Protected		0.99	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1542	1504					3539	1583	1770	3539	
Flt Permitted		0.99	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		1542	1504					3539	1583	1770	3539	
Peak-hour factor, PHF	0.64	0.64	0.64	0.25	0.25	0.25	0.92	0.92	0.92	1.00	1.00	1.00
Adj. Flow (vph)	66	6	673	0	0	0	0	1260	140	37	148	0
RTOR Reduction (vph)	0	116	269	0	0	0	0	0	29	0	0	0
Lane Group Flow (vph)	0	259	101	0	0	0	0	1260	111	37	148	0
Turn Type	Perm	NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2			
Actuated Green, G (s)		22.4	22.4					42.3	42.3	3.6	50.4	
Effective Green, g (s)		22.4	22.4					42.3	42.3	3.6	50.4	
Actuated g/C Ratio		0.27	0.27					0.52	0.52	0.04	0.62	
Clearance Time (s)		4.5	4.5					4.5	4.5	4.5	4.5	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		422	411					1830	818	77	2180	
v/s Ratio Prot								c0.36		c0.02	0.04	
v/s Ratio Perm		0.17	0.07						0.07			
v/c Ratio		0.61	0.25					0.69	0.14	0.48	0.07	
Uniform Delay, d1		25.9	23.1					14.8	10.3	38.2	6.3	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		2.6	0.3					1.1	0.1	4.7	0.0	
Delay (s)		28.6	23.4					15.9	10.3	42.9	6.3	
Level of Service		C	C					B	B	D	A	
Approach Delay (s)		26.0			0.0			15.3			13.6	
Approach LOS		C			A			B			B	

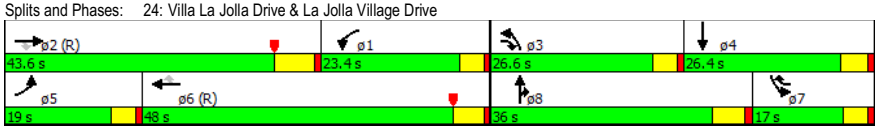
Intersection Summary			
HCM 2000 Control Delay	18.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	81.8	Sum of lost time (s)	13.5
Intersection Capacity Utilization	72.5%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	219	1196	34	465	1807	752	359	344	454	459	102
Future Volume (vph)	219	1196	34	465	1807	752	359	344	454	459	102
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	Prot	Prot	NA
Protected Phases	5	2	3	1	6	7	3	8	8	7	4
Permitted Phases			2			6					
Detector Phase	5	2	3	1	6	7	3	8	8	7	4
Switch Phase											
Minimum Initial (s)	4.0	10.0	4.0	4.0	10.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.4	16.4	8.4	8.4	15.3	8.4	8.4	9.5	9.5	8.4	8.9
Total Split (s)	19.0	43.6	26.6	23.4	48.0	17.0	26.6	36.0	36.0	17.0	26.4
Total Split (%)	15.8%	36.3%	22.2%	19.5%	40.0%	14.2%	22.2%	30.0%	30.0%	14.2%	22.0%
Yellow Time (s)	3.4	5.4	3.4	3.4	4.3	3.4	3.4	4.5	4.5	3.4	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	6.4	4.4	4.4	5.3	4.4	4.4	5.5	5.5	4.4	4.9
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lag	Lead	Lead	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	C-Max	None	None	None	None	None	None

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 52 (43%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 140
Control Type: Actuated-Coordinated

Splits and Phases: 24: Villa La Jolla Drive & La Jolla Village Drive



24: Villa La Jolla Drive & La Jolla Village Drive

Timing Plan: Morning Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	219	1196	34	465	1807	752	359	344	454	459	102	38
Future Volume (vph)	219	1196	34	465	1807	752	359	344	454	459	102	38
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	6.4	4.4	4.4	5.3	4.4	4.4	5.5	5.5	4.4	4.9	
Lane Util. Factor	1.00	0.91	1.00	0.97	0.91	0.88	0.97	0.95	0.95	0.97	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.97	0.85	1.00	0.96	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	5085	1583	3433	5085	2787	3433	1719	1504	3433	1787	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	5085	1583	3433	5085	2787	3433	1719	1504	3433	1787	
Peak-hour factor, PHF	0.87	0.87	0.87	0.91	0.91	0.91	0.80	0.80	0.80	0.80	0.80	0.80
Adj. Flow (vph)	252	1375	39	511	1986	826	449	430	568	574	128	48
RTOR Reduction (vph)	0	0	21	0	0	94	0	7	235	0	11	0
Lane Group Flow (vph)	252	1375	18	511	1986	732	449	525	231	574	165	0
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	Prot	Prot	NA	
Protected Phases	5	2	3	1	6	7	3	8	8	7	4	
Permitted Phases			2			6						
Actuated Green, G (s)	14.6	37.2	56.6	19.0	42.7	55.3	19.4	30.5	30.5	12.6	24.3	
Effective Green, g (s)	14.6	37.2	56.6	19.0	42.7	55.3	19.4	30.5	30.5	12.6	24.3	
Actuated g/C Ratio	0.12	0.31	0.47	0.16	0.36	0.46	0.16	0.25	0.25	0.10	0.20	
Clearance Time (s)	4.4	6.4	4.4	4.4	5.3	4.4	4.4	5.5	5.5	4.4	4.9	
Vehicle Extension (s)	2.0	4.4	2.0	2.0	4.7	2.0	2.0	3.3	3.3	2.0	2.0	
Lane Grp Cap (vph)	215	1576	746	543	1809	1284	555	436	382	360	361	
v/s Ratio Prot	c0.14	0.27	0.00	0.15	c0.39	0.06	0.13	c0.31	0.15	c0.17	0.09	
v/s Ratio Perm			0.01			0.20						
v/c Ratio	1.17	0.87	0.02	0.94	1.10	0.57	0.81	1.20	0.60	1.59	0.46	
Uniform Delay, d1	52.7	39.2	16.9	49.9	38.6	23.7	48.5	44.8	39.4	53.7	42.0	
Progression Factor	1.26	0.75	1.00	0.85	0.82	0.71	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	102.1	4.2	0.0	3.7	45.0	0.0	8.0	111.4	2.8	280.3	0.3	
Delay (s)	168.3	33.7	16.9	46.3	76.7	16.7	56.6	156.2	42.2	334.0	42.4	
Level of Service	F	C	B	D	E	B	E	F	D	F	D	
Approach Delay (s)		53.6			57.2			88.6			265.6	
Approach LOS		D			E			F			F	

Intersection Summary				
HCM 2000 Control Delay	84.4	HCM 2000 Level of Service	F	
HCM 2000 Volume to Capacity ratio	1.21			
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	20.7	
Intersection Capacity Utilization	103.8%	ICU Level of Service	G	
Analysis Period (min)	15			

c Critical Lane Group

34: Miramar Road & Eastgate Mall

Timing Plan: Morning Peak

Lane Group	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Traffic Volume (vph)	582	2255	3	2202	815	158	209
Future Volume (vph)	582	2255	3	2202	815	158	209
Turn Type	Prot	NA	Prot	NA	Perm	Prot	Perm
Protected Phases	5	2	1	6		7	
Permitted Phases					6		7
Detector Phase	5	2	1	6	6	7	7
Switch Phase							
Minimum Initial (s)	4.0	10.0	4.0	10.0	10.0	10.0	10.0
Minimum Split (s)	8.4	16.3	8.4	15.4	15.4	14.4	14.4
Total Split (s)	34.4	66.3	24.4	65.4	65.4	44.4	44.4
Total Split (%)	23.9%	46.0%	16.9%	45.4%	45.4%	30.8%	30.8%
Yellow Time (s)	3.4	5.3	3.4	4.4	4.4	3.4	3.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	6.3	4.4	5.4	5.4	4.4	4.4
Lead/Lag	Lead	Lag	Lead	Lag	Lag		
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		
Recall Mode	None	Min	None	Min	Min	None	None

Intersection Summary
Cycle Length: 144.2
Actuated Cycle Length: 115.4
Natural Cycle: 90
Control Type: Actuated-Uncoordinated

Splits and Phases: 34: Miramar Road & Eastgate Mall

34: Miramar Road & Eastgate Mall

Timing Plan: Morning Peak

Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Traffic Volume (vph)	582	2255	3	2202	815	158	209
Future Volume (vph)	582	2255	3	2202	815	158	209
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	6.3	4.4	5.4	5.4	4.4	4.4
Lane Util. Factor	0.97	0.91	1.00	0.86	1.00	0.97	1.00
Frt	1.00	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)	3433	5085	1770	6408	1583	3433	1583
Flt Permitted	0.95	1.00	0.95	1.00	1.00	0.95	1.00
Satd. Flow (perm)	3433	5085	1770	6408	1583	3433	1583
Peak-hour factor, PHF	0.87	0.87	0.92	0.92	0.92	0.80	0.80
Adj. Flow (vph)	669	2592	3	2393	886	198	261
RTOR Reduction (vph)	0	0	0	0	311	0	231
Lane Group Flow (vph)	669	2592	3	2393	575	198	30
Turn Type	Prot	NA	Prot	NA	Perm	Prot	Perm
Protected Phases	5	2	1	6		7	
Permitted Phases					6		7
Actuated Green, G (s)	27.2	89.0	1.0	63.7	63.7	13.8	13.8
Effective Green, g (s)	27.2	89.0	1.0	63.7	63.7	13.8	13.8
Actuated g/C Ratio	0.23	0.75	0.01	0.54	0.54	0.12	0.12
Clearance Time (s)	4.4	6.3	4.4	5.4	5.4	4.4	4.4
Vehicle Extension (s)	2.0	5.0	2.0	6.1	6.1	4.5	4.5
Lane Grp Cap (vph)	785	3806	14	3433	848	398	183
v/s Ratio Prot	c0.19	c0.51	0.00	0.37		c0.06	
v/s Ratio Perm					0.36		0.02
v/c Ratio	0.85	0.68	0.21	0.70	0.68	0.50	0.17
Uniform Delay, d1	43.9	7.7	58.6	20.5	20.1	49.3	47.4
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	8.6	0.7	2.8	1.0	3.4	1.7	0.7
Delay (s)	52.5	8.3	61.3	21.4	23.5	51.0	48.1
Level of Service	D	A	E	C	C	D	D
Approach Delay (s)		17.4		22.0		49.3	
Approach LOS		B		C		D	

Intersection Summary			
HCM 2000 Control Delay	21.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	118.9	Sum of lost time (s)	15.1
Intersection Capacity Utilization	75.2%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

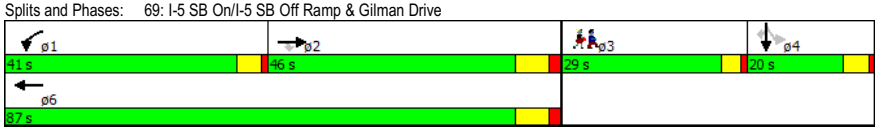
69: I-5 SB On/I-5 SB Off Ramp & Gilman Drive

Timing Plan: Morning Peak

Lane Group	EBT	EBR	WBL	WBT	SBT	SBR	ø3
Lane Configurations							
Traffic Volume (vph)	97	555	347	970	0	48	
Future Volume (vph)	97	555	347	970	0	48	
Turn Type	NA	Perm	Prot	NA	NA	Perm	
Protected Phases	2		1	6	4		3
Permitted Phases		2				4	
Detector Phase	2	2	1	6	4	4	
Switch Phase							
Minimum Initial (s)	13.0	13.0	5.0	12.0	5.0	5.0	1.0
Minimum Split (s)	20.2	20.2	9.7	19.2	17.1	17.1	29.0
Total Split (s)	46.0	46.0	41.0	87.0	20.0	20.0	29.0
Total Split (%)	33.8%	33.8%	30.1%	64.0%	14.7%	14.7%	21%
Yellow Time (s)	5.2	5.2	3.7	5.2	4.1	4.1	3.0
All-Red Time (s)	2.0	2.0	1.0	2.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	7.2	7.2	4.7	7.2	5.1	5.1	
Lead/Lag	Lag	Lag	Lead		Lag	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes
Recall Mode	Min	Min	None	Min	None	None	None

Intersection Summary
Cycle Length: 136
Actuated Cycle Length: 55.7
Natural Cycle: 120
Control Type: Actuated-Uncoordinated

Splits and Phases: 69: I-5 SB On/I-5 SB Off Ramp & Gilman Drive



69: I-5 SB On/I-5 SB Off Ramp & Gilman Drive

Timing Plan: Morning Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	97	555	347	970	0	0	0	0	12	0	48
Future Volume (vph)	0	97	555	347	970	0	0	0	0	12	0	48
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		7.2	7.2	4.7	7.2						5.1	5.1
Lane Util. Factor		1.00	0.88	0.97	1.00						1.00	1.00
Frt		1.00	0.85	1.00	1.00						1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00						0.95	1.00
Satd. Flow (prot)		1863	2787	3433	1863						1770	1583
Flt Permitted		1.00	1.00	0.95	1.00						0.95	1.00
Satd. Flow (perm)		1863	2787	3433	1863						1770	1583
Peak-hour factor, PHF	0.84	0.84	0.84	0.94	0.94	0.94	0.25	0.25	0.25	0.80	0.80	0.80
Adj. Flow (vph)	0	115	661	369	1032	0	0	0	0	15	0	60
RTOR Reduction (vph)	0	0	411	0	0	0	0	0	0	0	0	56
Lane Group Flow (vph)	0	115	250	369	1032	0	0	0	0	0	15	4
Turn Type		NA	Perm	Prot	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases			2							4		4
Actuated Green, G (s)		21.4	21.4	14.0	40.1						4.2	4.2
Effective Green, g (s)		21.4	21.4	14.0	40.1						4.2	4.2
Actuated g/C Ratio		0.38	0.38	0.25	0.71						0.07	0.07
Clearance Time (s)		7.2	7.2	4.7	7.2						5.1	5.1
Vehicle Extension (s)		2.0	2.0	2.0	2.0						2.0	2.0
Lane Grp Cap (vph)		704	1053	849	1319						131	117
v/s Ratio Prot		0.06		0.11	c0.55							
v/s Ratio Perm			0.09								0.01	0.00
v/c Ratio		0.16	0.24	0.43	0.78						0.11	0.04
Uniform Delay, d1		11.7	12.0	18.0	5.4						24.5	24.3
Progression Factor		1.00	1.00	1.00	1.00						1.00	1.00
Incremental Delay, d2		0.0	0.0	0.1	2.9						0.1	0.0
Delay (s)		11.7	12.1	18.1	8.3						24.6	24.4
Level of Service		B	B	B	A						C	C
Approach Delay (s)		12.0			10.8			0.0			24.4	
Approach LOS		B			B			A			C	

Intersection Summary			
HCM 2000 Control Delay	11.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	56.6	Sum of lost time (s)	21.0
Intersection Capacity Utilization	77.5%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

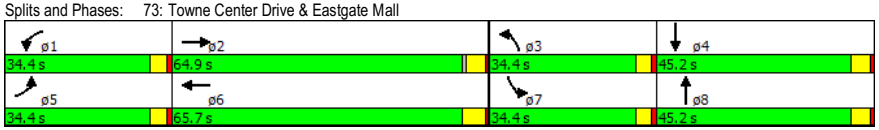
73: Towne Center Drive & Eastgate Mall

Timing Plan: Morning Peak

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	99	243	99	535	263	604	11	49
Future Volume (vph)	99	243	99	535	263	604	11	49
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	5	2	1	6	3	8	7	4
Permitted Phases								
Detector Phase	5	2	1	6	3	8	7	4
Switch Phase								
Minimum Initial (s)	4.0	7.0	4.0	7.0	4.0	7.0	4.0	7.0
Minimum Split (s)	8.4	11.9	8.4	12.7	8.4	12.2	8.4	12.7
Total Split (s)	34.4	64.9	34.4	65.7	34.4	45.2	34.4	45.2
Total Split (%)	19.1%	36.1%	19.1%	36.6%	19.1%	25.2%	19.1%	25.2%
Yellow Time (s)	3.4	3.9	3.4	4.7	3.4	4.2	3.4	4.2
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	4.9	4.4	5.7	4.4	5.2	4.4	5.2
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 179.7
Actuated Cycle Length: 95.3
Natural Cycle: 65
Control Type: Actuated-Uncoordinated

Splits and Phases: 73: Towne Center Drive & Eastgate Mall



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	99	243	155	99	535	109	263	604	330	11	49	8
Future Volume (vph)	99	243	155	99	535	109	263	604	330	11	49	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	5.7		4.4	5.2		4.4	5.2	
Lane Util. Factor	0.97	0.95		0.97	0.95		0.97	0.95		0.97	0.95	
Frt	1.00	0.94		1.00	0.97		1.00	0.95		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	3433	3333		3433	3449		3433	3352		3433	3464	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	3433	3333		3433	3449		3433	3352		3433	3464	
Peak-hour factor, PHF	0.94	0.94	0.94	0.96	0.96	0.96	0.86	0.86	0.86	0.80	0.80	0.80
Adj. Flow (vph)	105	259	165	103	557	114	306	702	384	14	61	10
RTOR Reduction (vph)	0	61	0	0	10	0	0	31	0	0	8	0
Lane Group Flow (vph)	105	363	0	103	661	0	306	1055	0	14	63	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases												
Actuated Green, G (s)	7.8	28.8		7.7	27.9		20.9	40.7		1.9	21.7	
Effective Green, g (s)	7.8	28.8		7.7	27.9		20.9	40.7		1.9	21.7	
Actuated g/C Ratio	0.08	0.29		0.08	0.28		0.21	0.42		0.02	0.22	
Clearance Time (s)	4.4	4.9		4.4	5.7		4.4	5.2		4.4	5.2	
Vehicle Extension (s)	2.0	5.1		2.0	4.8		2.0	5.1		2.0	4.8	
Lane Grp Cap (vph)	273	979		269	981		732	1392		66	767	
v/s Ratio Prot	c0.03	0.11		0.03	c0.19		c0.09	c0.31		0.00	0.02	
v/s Ratio Perm												
v/c Ratio	0.38	0.37		0.38	0.67		0.42	0.76		0.21	0.08	
Uniform Delay, d1	42.8	27.4		42.9	31.0		33.3	24.4		47.3	30.3	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.3	0.5		0.3	2.3		0.1	2.9		0.6	0.1	
Delay (s)	43.2	27.9		43.2	33.3		33.4	27.4		47.9	30.3	
Level of Service	D	C		D	C		C	C		D	C	
Approach Delay (s)		31.0			34.7			28.7			33.2	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM 2000 Control Delay	30.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	98.0	Sum of lost time (s)	19.7
Intersection Capacity Utilization	61.6%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	91	363	59	360	386	121	146	21	37
Future Volume (vph)	91	363	59	360	386	121	146	21	37
Turn Type	pm+pt	NA	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA
Protected Phases	7	4	3	8	5	2		1	6
Permitted Phases	4		8		2		2	6	
Detector Phase	7	4	3	8	5	2	2	1	6
Switch Phase									
Minimum Initial (s)	5.0	4.0	5.0	4.0	4.0	7.0	7.0	4.0	7.0
Minimum Split (s)	9.5	8.9	9.5	8.4	8.4	11.9	11.9	8.4	11.9
Total Split (s)	9.5	44.9	9.5	44.4	34.4	64.9	64.9	34.4	64.9
Total Split (%)	6.2%	29.2%	6.2%	28.9%	22.4%	42.2%	42.2%	22.4%	42.2%
Yellow Time (s)	3.5	3.9	3.5	3.4	3.4	3.9	3.9	3.4	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.9	4.5	4.4	4.4	4.9	4.9	4.4	4.9
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Min	Min	None	Min

Intersection Summary
Cycle Length: 153.7
Actuated Cycle Length: 76.3
Natural Cycle: 55
Control Type: Actuated-Uncoordinated

Splits and Phases: 76: Executive Way & Executive Drive

76: Executive Way & Executive Drive

Timing Plan: Morning Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	91	363	81	59	360	45	386	121	146	21	37	43
Future Volume (vph)	91	363	81	59	360	45	386	121	146	21	37	43
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.9		4.5	4.4		4.4	4.9	4.9	4.4	4.9	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.97		1.00	0.98		1.00	1.00	0.85	1.00	0.92	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3443		1770	3480		1770	1863	1583	1770	1712	
Flt Permitted	0.33	1.00		0.34	1.00		0.52	1.00	1.00	0.67	1.00	
Satd. Flow (perm)	609	3443		634	3480		976	1863	1583	1239	1712	
Peak-hour factor, PHF	0.85	0.85	0.85	0.90	0.90	0.90	0.84	0.84	0.84	0.80	0.80	0.80
Adj. Flow (vph)	107	427	95	66	400	50	460	144	174	26	46	54
RTOR Reduction (vph)	0	13	0	0	7	0	0	0	95	0	37	0
Lane Group Flow (vph)	107	509	0	66	443	0	460	144	79	26	63	0
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		
Actuated Green, G (s)	24.2	18.9		21.9	18.0		42.6	36.3	36.3	15.6	13.7	
Effective Green, g (s)	24.2	18.9		21.9	18.0		42.6	36.3	36.3	15.6	13.7	
Actuated g/C Ratio	0.30	0.24		0.27	0.23		0.53	0.46	0.46	0.20	0.17	
Clearance Time (s)	4.5	4.9		4.5	4.4		4.4	4.9	4.9	4.4	4.9	
Vehicle Extension (s)	3.0	2.0		3.0	2.3		2.0	2.9	2.9	2.0	2.6	
Lane Grp Cap (vph)	262	816		229	785		765	848	720	255	294	
v/s Ratio Prot	c0.03	c0.15		0.01	0.13		c0.18	0.08		0.00	0.04	
v/s Ratio Perm	0.10			0.06			c0.14		0.05	0.02		
v/c Ratio	0.41	0.62		0.29	0.56		0.60	0.17	0.11	0.10	0.21	
Uniform Delay, d1	20.9	27.2		21.9	27.4		11.9	12.8	12.4	26.2	28.4	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	1.0	1.1		0.7	0.7		0.9	0.1	0.1	0.1	0.3	
Delay (s)	21.9	28.3		22.6	28.0		12.8	12.9	12.5	26.2	28.7	
Level of Service	C	C		C	C		B	B	B	C	C	
Approach Delay (s)		27.2			27.4			12.7			28.2	
Approach LOS		C			C			B			C	

Intersection Summary			
HCM 2000 Control Delay	21.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	79.7	Sum of lost time (s)	18.7
Intersection Capacity Utilization	56.8%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

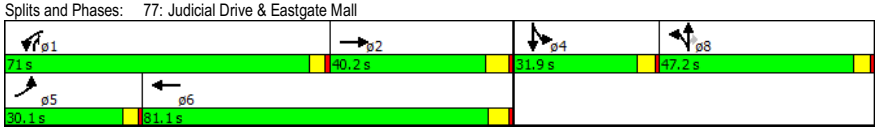
77: Judicial Drive & Eastgate Mall

Timing Plan: Morning Peak

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	136	335	435	584	236	232	281	4	16
Future Volume (vph)	136	335	435	584	236	232	281	4	16
Turn Type	Prot	NA	Prot	NA	Split	NA	pm+ov	Split	NA
Protected Phases	5	2	1	6	8	8	1	4	4
Permitted Phases							8		
Detector Phase	5	2	1	6	8	8	1	4	4
Switch Phase									
Minimum Initial (s)	4.0	7.0	4.0	7.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.4	38.1	8.4	24.6	31.9	31.9	8.4	31.9	31.9
Total Split (s)	30.1	40.2	71.0	81.1	47.2	47.2	71.0	31.9	31.9
Total Split (%)	15.8%	21.1%	37.3%	42.6%	24.8%	24.8%	37.3%	16.8%	16.8%
Yellow Time (s)	3.4	5.1	3.4	4.6	3.9	3.9	3.4	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	6.1	4.4	5.6	4.9	4.9	4.4	4.9	4.9
Lead/Lag	Lead	Lag	Lead	Lag			Lead		
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes		
Recall Mode	None	None	None	None	None	None	None	None	None

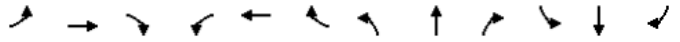
Intersection Summary
Cycle Length: 190.3
Actuated Cycle Length: 133.6
Natural Cycle: 145
Control Type: Actuated-Uncoordinated

Splits and Phases: 77: Judicial Drive & Eastgate Mall



77: Judicial Drive & Eastgate Mall

Timing Plan: Morning Peak



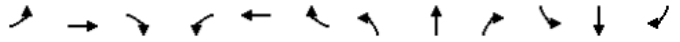
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	136	335	53	435	584	85	236	232	281	4	16	13
Future Volume (vph)	136	335	53	435	584	85	236	232	281	4	16	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	6.1		4.4	5.6		4.9	4.9	4.4	4.9	4.9	
Lane Util. Factor	1.00	0.95		1.00	0.95		0.95	0.91	0.95	1.00	1.00	
Frt	1.00	0.98		1.00	0.98		1.00	0.98	0.85	1.00	0.93	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3467		1770	3472		1681	1661	1504	1770	1739	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	3467		1770	3472		1681	1661	1504	1770	1739	
Peak-hour factor, PHF	0.93	0.93	0.93	0.84	0.84	0.84	0.94	0.94	0.94	0.80	0.80	0.80
Adj. Flow (vph)	146	360	57	518	695	101	251	247	299	5	20	16
RTOR Reduction (vph)	0	7	0	0	6	0	0	2	109	0	15	0
Lane Group Flow (vph)	146	410	0	518	790	0	226	303	157	5	21	0
Turn Type	Prot	NA		Prot	NA		Split	NA	pm+ov	Split	NA	
Protected Phases	5	2		1	6		8	8	1	4	4	
Permitted Phases									8			
Actuated Green, G (s)	17.2	23.6		46.7	53.6		31.6	31.6	78.3	10.4	10.4	
Effective Green, g (s)	17.2	23.6		46.7	53.6		31.6	31.6	78.3	10.4	10.4	
Actuated g/C Ratio	0.13	0.18		0.35	0.40		0.24	0.24	0.59	0.08	0.08	
Clearance Time (s)	4.4	6.1		4.4	5.6		4.9	4.9	4.4	4.9	4.9	
Vehicle Extension (s)	2.0	2.7		2.0	3.0		2.0	2.0	2.0	2.0	2.0	
Lane Grp Cap (vph)	229	617		623	1403		400	395	888	138	136	
v/s Ratio Prot	0.08	c0.12		c0.29	0.23		0.13	c0.18	0.06	0.00	c0.01	
v/s Ratio Perm									0.04			
v/c Ratio	0.64	0.67		0.83	0.56		0.56	0.77	0.18	0.04	0.16	
Uniform Delay, d1	54.7	50.8		39.3	30.5		44.5	47.1	12.4	56.5	57.0	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	4.2	2.5		8.9	0.5		1.1	7.8	0.0	0.0	0.2	
Delay (s)	59.0	53.4		48.2	31.0		45.5	54.9	12.4	56.5	57.2	
Level of Service	E	D		D	C		D	D	B	E	E	
Approach Delay (s)		54.8			37.8			38.1			57.1	
Approach LOS		D			D			D			E	

Intersection Summary				
HCM 2000 Control Delay	41.7	HCM 2000 Level of Service	D	
HCM 2000 Volume to Capacity ratio	0.71			
Actuated Cycle Length (s)	132.6	Sum of lost time (s)	20.3	
Intersection Capacity Utilization	70.0%	ICU Level of Service	C	
Analysis Period (min)	15			

c Critical Lane Group

79: I-805 NB Ramps/I-805 SB Ramps & Gorvernor Drive

Timing Plan: Morning Peak



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Right Turn Channelized												
Traffic Volume (veh/h)	372	22	0	0	33	15	442	16	22	0	0	0
Future Volume (veh/h)	372	22	0	0	33	15	442	16	22	0	0	0
Peak Hour Factor	0.96	0.96	0.96	0.55	0.55	0.55	0.95	0.95	0.95	1.00	1.00	1.00
Hourly flow rate (vph)	388	23	0	0	60	27	465	17	23	0	0	0
Approach Volume (veh/h)		411			87			505			0	
Crossing Volume (veh/h)		0			870			411			525	
High Capacity (veh/h)		1385			692			1002			915	
High v/c (veh/h)		0.30			0.13			0.50			0.00	
Low Capacity (veh/h)		1161			543			816			738	
Low v/c (veh/h)		0.35			0.16			0.62			0.00	

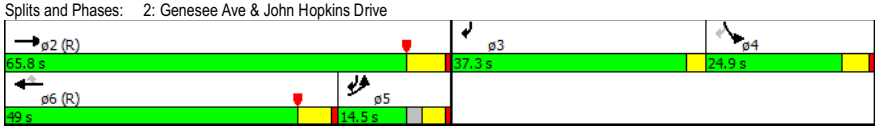
Intersection Summary				
Maximum v/c High	0.50			
Maximum v/c Low	0.62			
Intersection Capacity Utilization	61.8%	ICU Level of Service	B	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	ø3
Lane Configurations							
Traffic Volume (vph)	131	380	1627	472	486	50	
Future Volume (vph)	131	380	1627	472	486	50	
Turn Type	Prot	NA	NA	Perm	Prot	pt+ov	
Protected Phases	5	2	6		4	3 5	3
Permitted Phases				6		4	
Detector Phase	5	2	6	6	4	3 5	
Switch Phase							
Minimum Initial (s)	4.0	10.0	10.0	10.0	7.0		4.0
Minimum Split (s)	9.5	16.7	15.9	15.9	11.9		7.0
Total Split (s)	14.5	65.8	49.0	49.0	24.9		37.3
Total Split (%)	11.3%	51.4%	38.3%	38.3%	19.5%		29%
Yellow Time (s)	3.4	5.7	4.9	4.9	3.9		3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		0.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	4.4	6.7	5.9	5.9	4.9		
Lead/Lag	Lag		Lead	Lead	Lag		Lead
Lead-Lag Optimize?	Yes		Yes	Yes	Yes		Yes
Recall Mode	None	C-Max	C-Max	C-Max	None		None

Intersection Summary

Cycle Length: 128
Actuated Cycle Length: 128
Offset: 58 (45%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 65
Control Type: Actuated-Coordinated

Splits and Phases: 2: Genesee Ave & John Hopkins Drive



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	131	380	1627	472	486	50
Future Volume (vph)	131	380	1627	472	486	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	6.7	5.9	5.9	4.9	3.0
Lane Util. Factor	1.00	0.91	0.86	0.88	0.97	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	5085	6408	2787	3433	1583
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	5085	6408	2787	3433	1583
Peak-hour factor, PHF	0.80	0.80	0.90	0.90	0.79	0.79
Adj. Flow (vph)	164	475	1808	524	615	63
RTOR Reduction (vph)	0	0	0	209	0	1
Lane Group Flow (vph)	164	475	1808	315	615	62
Turn Type	Prot	NA	NA	Perm	Prot	pt+ov
Protected Phases	5	2	6		4	3 5
Permitted Phases				6		4
Actuated Green, G (s)	12.4	73.6	57.6	57.6	36.6	56.6
Effective Green, g (s)	12.4	73.6	57.6	57.6	36.6	52.2
Actuated g/C Ratio	0.10	0.57	0.45	0.45	0.29	0.41
Clearance Time (s)	4.4	6.7	5.9	5.9	4.9	
Vehicle Extension (s)	2.0	4.0	3.9	3.9	5.0	
Lane Grp Cap (vph)	171	2923	2883	1254	981	682
v/s Ratio Prot	c0.09	0.09	c0.28		c0.18	c0.01
v/s Ratio Perm				0.11		0.03
v/c Ratio	0.96	0.16	0.63	0.25	0.63	0.09
Uniform Delay, d1	57.5	12.8	27.0	21.8	39.8	23.3
Progression Factor	0.95	0.76	1.42	2.47	1.00	1.00
Incremental Delay, d2	55.7	0.1	0.8	0.4	1.8	0.0
Delay (s)	110.1	9.8	39.2	54.2	41.5	23.3
Level of Service	F	A	D	D	D	C
Approach Delay (s)		35.6	42.5		39.8	
Approach LOS		D	D		D	

Intersection Summary

HCM 2000 Control Delay	40.8	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	128.0	Sum of lost time (s)	18.2
Intersection Capacity Utilization	57.4%	ICU Level of Service	B
Analysis Period (min)	15		

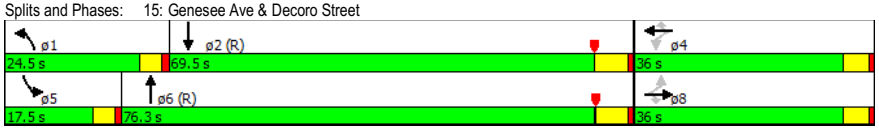
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	26	4	4	5	3	159	6	1351	139	1458
Future Volume (vph)	26	4	4	5	3	159	6	1351	139	1458
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA	Prot	NA
Protected Phases		8			4		1	6	5	2
Permitted Phases	8		8	4		4				
Detector Phase	8	8	8	4	4	4	1	6	5	2
Switch Phase										
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	10.0	4.0	10.0
Minimum Split (s)	8.9	8.9	8.9	8.9	8.9	8.9	8.4	15.7	8.4	15.9
Total Split (s)	36.0	36.0	36.0	36.0	36.0	36.0	24.5	76.3	17.5	69.5
Total Split (%)	27.7%	27.7%	27.7%	27.7%	27.7%	27.7%	18.8%	58.7%	13.5%	53.5%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.9	3.9	3.4	4.7	3.4	4.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.9	4.9		4.9	4.9	4.4	5.7	4.4	5.9
Lead/Lag							Lead	Lag	Lead	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	None	C-Max

Intersection Summary

Cycle Length: 130
Actuated Cycle Length: 130
Offset: 97 (75%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow
Natural Cycle: 55
Control Type: Actuated-Coordinated

Splits and Phases: 15: Genesee Ave & Decoro Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	26	4	4	5	3	159	6	1351	10	139	1458	36
Future Volume (vph)	26	4	4	5	3	159	6	1351	10	139	1458	36
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9	4.9		4.9	4.9	4.4	5.7		4.4	5.9	
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.91		1.00	0.91	
Frt		1.00	0.85		1.00	0.85	1.00	1.00		1.00	1.00	
Flt Protected		0.96	1.00		0.97	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1784	1583		1803	1583	1770	5080		1770	5067	
Flt Permitted		0.75	1.00		0.80	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1389	1583		1497	1583	1770	5080		1770	5067	
Peak-hour factor, PHF	0.73	0.73	0.73	0.88	0.88	0.88	0.91	0.91	0.91	0.96	0.96	0.96
Adj. Flow (vph)	36	5	5	6	3	181	7	1485	11	145	1519	38
RTOR Reduction (vph)	0	0	5	0	0	169	0	0	0	0	1	0
Lane Group Flow (vph)	0	41	0	0	9	12	7	1496	0	145	1556	0
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA		Prot	NA	
Protected Phases		8			4		1	6		5	2	
Permitted Phases	8		8	4		4						
Actuated Green, G (s)		8.3	8.3		8.3	8.3	1.3	90.9		15.8	105.2	
Effective Green, g (s)		8.3	8.3		8.3	8.3	1.3	90.9		15.8	105.2	
Actuated g/C Ratio		0.06	0.06		0.06	0.06	0.01	0.70		0.12	0.81	
Clearance Time (s)		4.9	4.9		4.9	4.9	4.4	5.7		4.4	5.9	
Vehicle Extension (s)		2.0	2.0		2.0	2.0	2.0	4.3		2.0	3.7	
Lane Grp Cap (vph)		88	101		95	101	17	3552		215	4100	
v/s Ratio Prot							0.00	c0.29		c0.08	0.31	
v/s Ratio Perm		c0.03	0.00		0.01	0.01						
v/c Ratio		0.47	0.00		0.09	0.11	0.41	0.42		0.67	0.38	
Uniform Delay, d1		58.7	57.0		57.3	57.4	64.0	8.3		54.6	3.4	
Progression Factor		1.00	1.00		1.00	1.00	0.87	2.14		0.75	1.08	
Incremental Delay, d2		1.4	0.0		0.2	0.2	5.6	0.4		4.4	0.2	
Delay (s)		60.1	57.0		57.5	57.6	61.2	18.2		45.3	3.9	
Level of Service		E	E		E	E	E	B		D	A	
Approach Delay (s)		59.8			57.6			18.4			7.4	
Approach LOS		E			E			B			A	

Intersection Summary

HCM 2000 Control Delay	15.7	HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio	0.46			
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	15.2	
Intersection Capacity Utilization	54.8%	ICU Level of Service	A	
Analysis Period (min)	15			

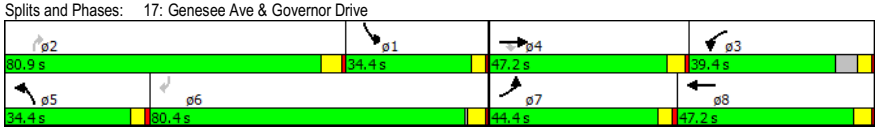
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBR	SBL	SBR
Lane Configurations									
Traffic Volume (vph)	278	274	116	222	253	140	161	344	219
Future Volume (vph)	278	274	116	222	253	140	161	344	219
Turn Type	Prot	NA	Perm	Prot	NA	Prot	Perm	Prot	Perm
Protected Phases	7	4		3	8	5		1	
Permitted Phases			4				2		6
Detector Phase	7	4	4	3	8	5	2	1	6
Switch Phase									
Minimum Initial (s)	4.0	8.0	8.0	4.0	8.0	4.0	8.0	4.0	8.0
Minimum Split (s)	8.4	13.2	13.2	8.4	13.2	8.4	13.9	8.4	13.4
Total Split (s)	44.4	47.2	47.2	39.4	47.2	34.4	80.9	34.4	80.4
Total Split (%)	21.5%	22.8%	22.8%	19.0%	22.8%	16.6%	39.1%	16.6%	38.9%
Yellow Time (s)	3.4	4.2	4.2	3.4	4.2	3.4	4.9	3.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.2	5.2	4.4	5.2	4.4	5.9	4.4	5.4
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	None	Min

Intersection Summary

Cycle Length: 206.9
Actuated Cycle Length: 84.1
Natural Cycle: 55
Control Type: Actuated-Uncoordinated

Splits and Phases: 17: Genesee Ave & Governor Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	278	274	116	222	253	216	140	0	161	344	0	219
Future Volume (vph)	278	274	116	222	253	216	140	0	161	344	0	219
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	16	12	12	12	12	12	12	12
Total Lost time (s)	4.4	5.2	5.2	4.4	5.2		4.4		5.9	4.4		5.4
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95		1.00		0.88	0.97		1.00
Frt	1.00	1.00	0.85	1.00	0.93		1.00		0.85	1.00		0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95		1.00	0.95		1.00
Satd. Flow (prot)	3433	3539	1583	3433	3734		1770		2787	3433		1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95		1.00	0.95		1.00
Satd. Flow (perm)	3433	3539	1583	3433	3734		1770		2787	3433		1583
Peak-hour factor, PHF	0.94	0.94	0.94	0.83	0.83	0.83	0.93	0.93	0.93	0.83	0.83	0.83
Adj. Flow (vph)	296	291	123	267	305	260	151	0	173	414	0	264
RTOR Reduction (vph)	0	0	79	0	70	0	0	0	155	0	0	120
Lane Group Flow (vph)	296	291	44	267	495	0	151	0	18	414	0	144
Turn Type	Prot	NA	Perm	Prot	NA		Prot		Perm	Prot		Perm
Protected Phases	7	4		3	8		5			1		
Permitted Phases			4						2			6
Actuated Green, G (s)	13.8	13.7	13.7	20.6	20.5		13.6		8.5	20.6		16.0
Effective Green, g (s)	13.8	13.7	13.7	20.6	20.5		13.6		8.5	20.6		16.0
Actuated g/C Ratio	0.17	0.16	0.16	0.25	0.25		0.16		0.10	0.25		0.19
Clearance Time (s)	4.4	5.2	5.2	4.4	5.2		4.4		5.9	4.4		5.4
Vehicle Extension (s)	2.0	2.3	2.3	2.0	3.8		2.0		2.9	2.0		3.5
Lane Grp Cap (vph)	568	582	260	848	918		288		284	848		304
v/s Ratio Prot	c0.09	0.08		0.08	c0.13		c0.09			c0.12		
v/s Ratio Perm			0.03						0.01			0.09
v/c Ratio	0.52	0.50	0.17	0.31	0.54		0.52		0.06	0.49		0.47
Uniform Delay, d1	31.7	31.7	29.9	25.6	27.3		31.9		33.8	26.8		29.9
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00		1.00	1.00		1.00
Incremental Delay, d2	0.4	0.4	0.2	0.1	0.7		0.8		0.1	0.2		1.4
Delay (s)	32.1	32.1	30.1	25.7	28.0		32.7		33.9	27.0		31.3
Level of Service	C	C	C	C	C		C		C	C		C
Approach Delay (s)		31.8			27.3			33.3			28.7	
Approach LOS		C			C			C			C	

Intersection Summary

HCM 2000 Control Delay	29.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	83.3	Sum of lost time (s)	19.9
Intersection Capacity Utilization	47.4%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBR	NBL	NBT	SBT	SBR
Lane Configurations					
Traffic Volume (vph)	208	134	780	712	234
Future Volume (vph)	208	134	780	712	234
Turn Type	Perm	Prot	NA	NA	Perm
Protected Phases		5	2	6	
Permitted Phases	4				6
Detector Phase	4	5	2	6	6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	36.5	9.5	9.5	32.5	32.5
Total Split (s)	38.0	26.0	74.3	48.3	48.3
Total Split (%)	33.8%	23.2%	66.2%	43.0%	43.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5
Lead/Lag		Lead		Lag	Lag
Lead-Lag Optimize?		Yes		Yes	Yes
Recall Mode	None	None	Min	Min	Min

Intersection Summary
Cycle Length: 112.3
Actuated Cycle Length: 51.1
Natural Cycle: 80
Control Type: Actuated-Uncoordinated

Splits and Phases: 18: Genesee Ave & SR-52 Ramp

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	208	134	780	712	234
Future Volume (vph)	0	208	134	780	712	234
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5	4.5	4.5	4.5	4.5
Lane Util. Factor		0.88	1.00	0.91	0.95	1.00
Frt		0.85	1.00	1.00	1.00	0.85
Flt Protected		1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)		2787	1770	5085	3539	1583
Flt Permitted		1.00	0.95	1.00	1.00	1.00
Satd. Flow (perm)		2787	1770	5085	3539	1583
Peak-hour factor, PHF	0.87	0.87	0.83	0.83	0.87	0.87
Adj. Flow (vph)	0	239	161	940	818	269
RTOR Reduction (vph)	0	212	0	0	0	144
Lane Group Flow (vph)	0	27	161	940	818	125
Turn Type		Perm	Prot	NA	NA	Perm
Protected Phases			5	2	6	
Permitted Phases		4				6
Actuated Green, G (s)		5.7	10.9	36.2	20.8	20.8
Effective Green, g (s)		5.7	10.9	36.2	20.8	20.8
Actuated g/C Ratio		0.11	0.21	0.71	0.41	0.41
Clearance Time (s)		4.5	4.5	4.5	4.5	4.5
Vehicle Extension (s)		3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)		312	379	3616	1446	646
v/s Ratio Prot			c0.09	0.18	c0.23	
v/s Ratio Perm		c0.01				0.08
v/c Ratio		0.09	0.42	0.26	0.57	0.19
Uniform Delay, d1		20.3	17.3	2.6	11.6	9.7
Progression Factor		1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2		0.1	0.8	0.0	0.5	0.1
Delay (s)		20.4	18.1	2.6	12.1	9.8
Level of Service		C	B	A	B	A
Approach Delay (s)	20.4			4.9	11.5	
Approach LOS	C			A	B	

Intersection Summary			
HCM 2000 Control Delay	9.4	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.45		
Actuated Cycle Length (s)	50.9	Sum of lost time (s)	13.5
Intersection Capacity Utilization	34.6%	ICU Level of Service	A
Analysis Period (min)	15		

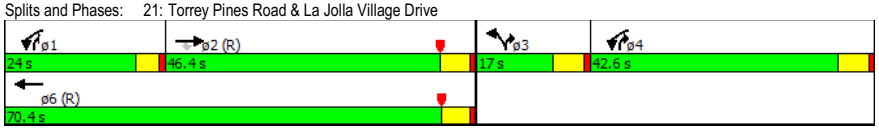
c Critical Lane Group

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	ø1	ø4
Lane Configurations								
Traffic Volume (vph)	796	162	777	724	139	740		
Future Volume (vph)	796	162	777	724	139	740		
Turn Type	NA	Perm	Prot	NA	Prot	custom		
Protected Phases	2		1 4	6	3	1 3 4	1	4
Permitted Phases		2						
Detector Phase	2	2	1 4	6	3	1 3 4		
Switch Phase								
Minimum Initial (s)	10.0	10.0		10.0	4.0		4.0	4.0
Minimum Split (s)	15.4	15.4		15.3	9.6		8.4	42.6
Total Split (s)	46.4	46.4		70.4	17.0		24.0	42.6
Total Split (%)	35.7%	35.7%		54.2%	13.1%		18%	33%
Yellow Time (s)	4.4	4.4		4.3	4.6		3.4	4.6
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			
Total Lost Time (s)	5.4	5.4		5.3	5.6			
Lead/Lag	Lag	Lag			Lead		Lead	Lag
Lead-Lag Optimize?	Yes	Yes			Yes		Yes	Yes
Recall Mode	C-Max	C-Max		C-Max	None		None	None

Intersection Summary

Cycle Length: 130
Actuated Cycle Length: 130
Offset: 15 (12%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 21: Torrey Pines Road & La Jolla Village Drive



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	796	162	777	724	139	740
Future Volume (vph)	796	162	777	724	139	740
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.4	5.4	4.4	5.3	5.6	4.4
Lane Util. Factor	0.91	1.00	0.97	0.91	0.97	0.88
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	5085	1583	3433	5085	3433	2787
Flt Permitted	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (perm)	5085	1583	3433	5085	3433	2787
Peak-hour factor, PHF	0.76	0.76	0.91	0.91	0.82	0.82
Adj. Flow (vph)	1047	213	854	796	170	902
RTOR Reduction (vph)	0	123	0	0	0	0
Lane Group Flow (vph)	1047	90	854	796	170	902
Turn Type	NA	Perm	Prot	NA	Prot	custom
Protected Phases	2		1 4	6	3	1 3 4
Permitted Phases		2				
Actuated Green, G (s)	54.7	54.7	48.5	67.8	11.4	65.5
Effective Green, g (s)	54.7	54.7	42.9	67.8	11.4	54.3
Actuated g/C Ratio	0.42	0.42	0.33	0.52	0.09	0.42
Clearance Time (s)	5.4	5.4		5.3	5.6	
Vehicle Extension (s)	5.5	5.5		8.0	2.0	
Lane Grp Cap (vph)	2139	666	1132	2652	301	1164
v/s Ratio Prot	c0.21		0.25	0.16	0.05	c0.32
v/s Ratio Perm		0.06				
v/c Ratio	0.49	0.13	0.75	0.30	0.56	0.77
Uniform Delay, d1	27.5	23.1	38.9	17.6	56.9	32.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.8	0.4	2.6	0.3	1.4	3.0
Delay (s)	28.3	23.5	41.4	17.9	58.4	35.6
Level of Service	C	C	D	B	E	D
Approach Delay (s)	27.5			30.1	39.2	
Approach LOS	C			C	D	

Intersection Summary

HCM 2000 Control Delay	31.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	21.0
Intersection Capacity Utilization	54.3%	ICU Level of Service	A
Analysis Period (min)	15		

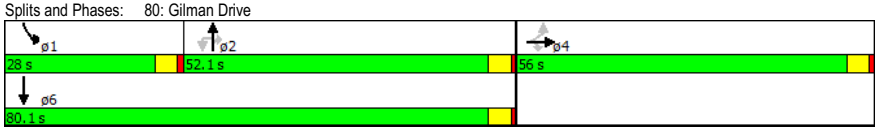
c Critical Lane Group

Lane Group	EBT	EBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	6	333	2	408	56	84	193
Future Volume (vph)	6	333	2	408	56	84	193
Turn Type	NA	Perm	Perm	NA	Perm	Prot	NA
Protected Phases	4			2		1	6
Permitted Phases		4	2		2		
Detector Phase	4	4	2	2	2	1	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	40.5	40.5	9.5	9.5	9.5	9.5	24.5
Total Split (s)	56.0	56.0	52.1	52.1	52.1	28.0	80.1
Total Split (%)	41.1%	41.1%	38.3%	38.3%	38.3%	20.6%	58.9%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5		4.5	4.5	4.5	4.5
Lead/Lag			Lag	Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	Yes	
Recall Mode	None	None	Min	Min	Min	None	Min

Intersection Summary

Cycle Length: 136.1
Actuated Cycle Length: 37.2
Natural Cycle: 65
Control Type: Actuated-Uncoordinated

Splits and Phases: 80: Gilman Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	26	6	333	0	0	0	2	0	408	56	84	193
Future Volume (vph)	26	6	333	0	0	0	2	0	408	56	84	193
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5	4.5						4.5	4.5	4.5	4.5
Lane Util. Factor		0.95	0.95						0.95	1.00	1.00	0.95
Frt		0.88	0.85						1.00	0.85	1.00	1.00
Flt Protected		0.99	1.00						1.00	1.00	0.95	1.00
Satd. Flow (prot)		1539	1504						3538	1583	1770	3539
Flt Permitted		0.99	1.00						0.95	1.00	0.95	1.00
Satd. Flow (perm)		1539	1504						3375	1583	1770	3539
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	28	7	362	0	0	0	2	0	443	61	91	210
RTOR Reduction (vph)	0	132	154	0	0	0	0	0	0	36	0	0
Lane Group Flow (vph)	0	70	41	0	0	0	0	0	445	25	91	210
Turn Type	Perm	NA	Perm				Perm		NA	Perm	Prot	NA
Protected Phases		4							2		1	6
Permitted Phases	4		4				2			2		
Actuated Green, G (s)		8.0	8.0						12.3	12.3	4.5	21.3
Effective Green, g (s)		8.0	8.0						12.3	12.3	4.5	21.3
Actuated g/C Ratio		0.21	0.21						0.32	0.32	0.12	0.56
Clearance Time (s)		4.5	4.5						4.5	4.5	4.5	4.5
Vehicle Extension (s)		3.0	3.0						3.0	3.0	3.0	3.0
Lane Grp Cap (vph)		321	314						1083	508	207	1968
v/s Ratio Prot											c0.05	0.06
v/s Ratio Perm		0.05	0.03						c0.13	0.02		
v/c Ratio		0.22	0.13						0.41	0.05	0.44	0.11
Uniform Delay, d1		12.6	12.3						10.2	9.0	15.7	4.0
Progression Factor		1.00	1.00						1.00	1.00	1.00	1.00
Incremental Delay, d2		0.3	0.2						0.3	0.0	1.5	0.0
Delay (s)		12.9	12.5						10.4	9.0	17.2	4.0
Level of Service		B	B						B	A	B	A
Approach Delay (s)		12.7			0.0				10.3			8.0
Approach LOS		B			A				B			A

Intersection Summary

HCM 2000 Control Delay	10.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.35		
Actuated Cycle Length (s)	38.3	Sum of lost time (s)	13.5
Intersection Capacity Utilization	40.8%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

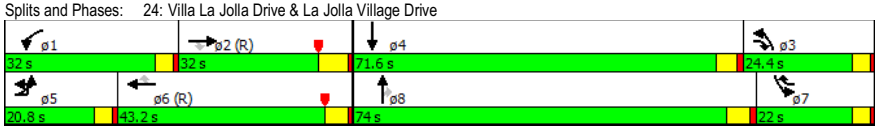
Movement	SBR
Lane Configurations	
Traffic Volume (vph)	0
Future Volume (vph)	0
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.92
Adj. Flow (vph)	0
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	69	1030	165	904	957	836	181	1111	639	701	295
Future Volume (vph)	69	1030	165	904	957	836	181	1111	639	701	295
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA
Protected Phases	5	2	3	1	6	7	3	8		7	4
Permitted Phases			2			6			8		
Detector Phase	5	2	3	1	6	7	3	8	8	7	4
Switch Phase											
Minimum Initial (s)	4.0	10.0	4.0	4.0	10.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.4	16.4	22.4	8.4	15.3	8.4	22.4	9.5	9.5	8.4	8.9
Total Split (s)	20.8	32.0	24.4	32.0	43.2	22.0	24.4	74.0	74.0	22.0	71.6
Total Split (%)	13.0%	20.0%	15.3%	20.0%	27.0%	13.8%	15.3%	46.3%	46.3%	13.8%	44.8%
Yellow Time (s)	3.4	5.4	3.4	3.4	4.3	3.4	3.4	4.5	4.5	3.4	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	6.4	4.4	4.4	5.3	4.4	4.4	5.5	5.5	4.4	4.9
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	C-Max	None	None	None	None	None	None

Intersection Summary
Cycle Length: 160
Actuated Cycle Length: 160
Offset: 4 (3%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 24: Villa La Jolla Drive & La Jolla Village Drive



Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	65	69	1030	165	904	957	836	181	1111	639	701	295
Future Volume (vph)	65	69	1030	165	904	957	836	181	1111	639	701	295
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.4	6.4	4.4	4.4	5.3	4.4	4.4	5.5	5.5	4.4	4.9
Lane Util. Factor		1.00	0.91	1.00	0.97	0.91	0.88	0.97	0.95	0.95	0.97	1.00
Frt		1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99	0.85	1.00	0.97
Flt Protected		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)		1770	5085	1583	3433	5085	2787	3433	1755	1504	3433	1811
Flt Permitted		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Satd. Flow (perm)		1770	5085	1583	3433	5085	2787	3433	1755	1504	3433	1811
Peak-hour factor, PHF	0.92	0.93	0.93	0.93	0.95	0.95	0.95	0.89	0.89	0.89	0.88	0.88
Adj. Flow (vph)	71	74	1108	177	952	1007	880	203	1248	718	797	335
RTOR Reduction (vph)	0	0	0	86	0	0	115	0	1	128	0	7
Lane Group Flow (vph)	0	145	1108	91	952	1007	765	203	1319	518	797	404
Turn Type	Prot	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA
Protected Phases	5	5	2	3	1	6	7	3	8		7	4
Permitted Phases				2			6			8		
Actuated Green, G (s)		15.3	25.6	70.5	27.6	39.0	56.6	44.9	68.5	68.5	17.6	41.8
Effective Green, g (s)		15.3	25.6	70.5	27.6	39.0	56.6	44.9	68.5	68.5	17.6	41.8
Actuated g/C Ratio		0.10	0.16	0.44	0.17	0.24	0.35	0.28	0.43	0.43	0.11	0.26
Clearance Time (s)		4.4	6.4	4.4	4.4	5.3	4.4	4.4	5.5	5.5	4.4	4.9
Vehicle Extension (s)		2.0	4.4	2.0	2.0	4.7	2.0	2.0	3.3	3.3	2.0	2.0
Lane Grp Cap (vph)		169	813	697	592	1239	985	963	751	643	377	473
v/s Ratio Prot		0.08	c0.22	0.04	c0.28	0.20	0.09	0.06	c0.75		c0.23	0.22
v/s Ratio Perm				0.02			0.19			0.34		
v/c Ratio		0.86	1.36	0.13	1.61	0.81	0.78	0.21	1.76	0.81	2.11	0.85
Uniform Delay, d1		71.3	67.2	26.6	66.2	57.1	46.1	44.0	45.8	39.9	71.2	56.2
Progression Factor		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2		31.5	171.2	0.0	281.5	5.9	3.6	0.0	345.7	7.4	510.2	13.6
Delay (s)		102.8	238.4	26.6	347.7	63.0	49.6	44.0	391.5	47.3	581.4	69.8
Level of Service		F	F	C	F	E	D	D	F	D	F	E
Approach Delay (s)			198.4			154.3			256.5			407.3
Approach LOS			F			F			F			F

Intersection Summary			
HCM 2000 Control Delay	231.5	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.70		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	20.7
Intersection Capacity Utilization	154.3%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	67
Future Volume (vph)	67
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.88
Adj. Flow (vph)	76
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

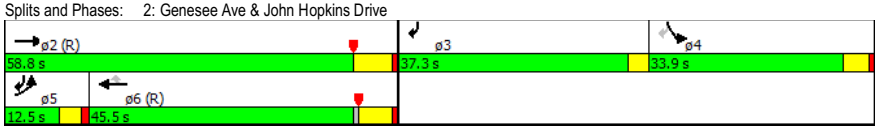
Intersection Summary

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	ø3
Lane Configurations							
Traffic Volume (vph)	40	1313	722	199	980	116	
Future Volume (vph)	40	1313	722	199	980	116	
Turn Type	Prot	NA	NA	Perm	Prot	pt+ov	
Protected Phases	5	2	6		4	3 5	3
Permitted Phases				6		4	
Detector Phase	5	2	6	6	4	3 5	
Switch Phase							
Minimum Initial (s)	4.0	10.0	10.0	10.0	7.0		4.0
Minimum Split (s)	9.5	16.7	15.9	15.9	11.9		7.0
Total Split (s)	12.5	58.8	45.5	45.5	33.9		37.3
Total Split (%)	9.6%	45.2%	35.0%	35.0%	26.1%		29%
Yellow Time (s)	3.4	5.7	4.9	4.9	3.9		3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		0.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	4.4	6.7	5.9	5.9	4.9		
Lead/Lag	Lead		Lag	Lag	Lag		Lead
Lead-Lag Optimize?	Yes		Yes	Yes	Yes		Yes
Recall Mode	None	C-Max	C-Max	C-Max	None		None

Intersection Summary

Cycle Length: 130
Actuated Cycle Length: 130
Offset: 22 (17%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 70
Control Type: Actuated-Coordinated

Splits and Phases: 2: Genesee Ave & John Hopkins Drive



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	40	1313	722	199	980	116
Future Volume (vph)	40	1313	722	199	980	116
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	6.7	5.9	5.9	4.9	3.0
Lane Util. Factor	1.00	0.91	0.86	0.88	0.97	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	5085	6408	2787	3433	1583
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	5085	6408	2787	3433	1583
Peak-hour factor, PHF	0.92	0.92	0.80	0.80	0.80	0.80
Adj. Flow (vph)	43	1427	902	249	1225	145
RTOR Reduction (vph)	0	0	0	169	0	10
Lane Group Flow (vph)	43	1427	903	80	1225	135
Turn Type	Prot	NA	NA	Perm	Prot	pt+ov
Protected Phases	5	2	6		4	3 5
Permitted Phases				6		4
Actuated Green, G (s)	6.9	52.1	41.6	41.6	46.2	70.2
Effective Green, g (s)	6.9	52.1	41.6	41.6	46.2	70.2
Actuated g/C Ratio	0.05	0.40	0.32	0.32	0.36	0.54
Clearance Time (s)	4.4	6.7	5.9	5.9	4.9	
Vehicle Extension (s)	2.0	4.0	3.9	3.9	5.0	
Lane Grp Cap (vph)	93	2037	2050	891	1220	891
v/s Ratio Prot	0.02	c0.28	0.14		c0.36	c0.03
v/s Ratio Perm				0.03		0.06
v/c Ratio	0.46	0.70	0.44	0.09	1.00	0.15
Uniform Delay, d1	59.7	32.5	35.0	30.9	41.9	15.0
Progression Factor	1.06	0.56	0.91	1.37	1.00	1.00
Incremental Delay, d2	1.2	1.9	0.7	0.2	26.8	0.0
Delay (s)	64.5	20.1	32.6	42.4	68.7	15.0
Level of Service	E	C	C	D	E	B
Approach Delay (s)		21.4	34.7		63.0	
Approach LOS		C	C		E	

Intersection Summary

HCM 2000 Control Delay	39.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	18.2
Intersection Capacity Utilization	63.0%	ICU Level of Service	B
Analysis Period (min)	15		

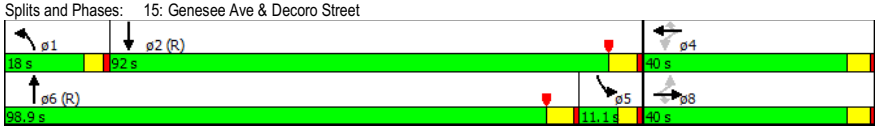
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	42	21	201	239	36	33	164	1311	26	3295
Future Volume (vph)	42	21	201	239	36	33	164	1311	26	3295
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA	Prot	NA
Protected Phases		8			4		1	6	5	2
Permitted Phases	8		8	4		4				
Detector Phase	8	8	8	4	4	4	1	6	5	2
Switch Phase										
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	10.0	4.0	10.0
Minimum Split (s)	33.9	33.9	33.9	33.9	33.9	33.9	8.4	15.7	8.4	15.9
Total Split (s)	40.0	40.0	40.0	40.0	40.0	40.0	18.0	98.9	11.1	92.0
Total Split (%)	26.7%	26.7%	26.7%	26.7%	26.7%	26.7%	12.0%	65.9%	7.4%	61.3%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.9	3.9	3.4	4.7	3.4	4.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.9	4.9		4.9	4.9	4.4	5.7	4.4	5.9
Lead/Lag							Lead	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	None	C-Max

Intersection Summary

Cycle Length: 150
Actuated Cycle Length: 150
Offset: 21 (14%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 15: Genesee Ave & Decoro Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	42	21	201	239	36	33	164	1311	26	26	3295	82
Future Volume (vph)	42	21	201	239	36	33	164	1311	26	26	3295	82
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9	4.9		4.9	4.9	4.4	5.7		4.4	5.9	
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.91		1.00	0.91	
Frt		1.00	0.85		1.00	0.85	1.00	1.00		1.00	1.00	
Flt Protected		0.97	1.00		0.96	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1803	1583		1785	1583	1770	5070		1770	5067	
Flt Permitted		0.34	1.00		0.70	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)		640	1583		1307	1583	1770	5070		1770	5067	
Peak-hour factor, PHF	0.85	0.85	0.85	0.80	0.80	0.80	0.85	0.85	0.85	0.90	0.90	0.90
Adj. Flow (vph)	49	25	236	299	45	41	193	1542	31	29	3661	91
RTOR Reduction (vph)	0	0	121	0	0	31	0	1	0	0	2	0
Lane Group Flow (vph)	0	74	115	0	344	10	193	1572	0	29	3750	0
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA		Prot	NA	
Protected Phases		8			4		1	6		5	2	
Permitted Phases	8		8	4		4						
Actuated Green, G (s)		35.1	35.1		35.1	35.1	13.6	95.9		4.0	86.1	
Effective Green, g (s)		35.1	35.1		35.1	35.1	13.6	95.9		4.0	86.1	
Actuated g/C Ratio		0.23	0.23		0.23	0.23	0.09	0.64		0.03	0.57	
Clearance Time (s)		4.9	4.9		4.9	4.9	4.4	5.7		4.4	5.9	
Vehicle Extension (s)		2.0	2.0		2.0	2.0	2.0	4.3		2.0	3.7	
Lane Grp Cap (vph)		149	370		305	370	160	3241		47	2908	
v/s Ratio Prot							c0.11	0.31		0.02	c0.74	
v/s Ratio Perm		0.12	0.07		c0.26	0.01						
v/c Ratio		0.50	0.31		1.13	0.03	1.21	0.48		0.62	1.29	
Uniform Delay, d1		49.8	47.5		57.5	44.3	68.2	14.1		72.2	32.0	
Progression Factor		1.00	1.00		1.00	1.00	1.30	0.70		1.00	1.01	
Incremental Delay, d2		0.9	0.2		90.6	0.0	135.2	0.5		1.5	130.6	
Delay (s)		50.7	47.6		148.1	44.3	223.9	10.4		73.5	162.8	
Level of Service		D	D		F	D	F	B		E	F	
Approach Delay (s)		48.4			137.0			33.7			162.1	
Approach LOS		D			F			C			F	

Intersection Summary

HCM 2000 Control Delay	118.6	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.24		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	15.2
Intersection Capacity Utilization	109.0%	ICU Level of Service	H
Analysis Period (min)	15		

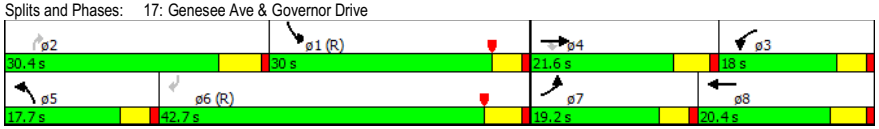
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBR	SBL	SBR
Lane Configurations									
Traffic Volume (vph)	350	297	128	314	372	205	237	602	790
Future Volume (vph)	350	297	128	314	372	205	237	602	790
Turn Type	Prot	NA	Perm	Prot	NA	Prot	Perm	Prot	Perm
Protected Phases	7	4		3	8	5		1	
Permitted Phases			4				2		6
Detector Phase	7	4	4	3	8	5	2	1	6
Switch Phase									
Minimum Initial (s)	4.0	8.0	8.0	4.0	8.0	4.0	8.0	4.0	8.0
Minimum Split (s)	8.4	13.2	13.2	8.4	13.2	8.4	13.9	8.4	13.4
Total Split (s)	19.2	21.6	21.6	18.0	20.4	17.7	30.4	30.0	42.7
Total Split (%)	19.2%	21.6%	21.6%	18.0%	20.4%	17.7%	30.4%	30.0%	42.7%
Yellow Time (s)	3.4	4.2	4.2	3.4	4.2	3.4	4.9	3.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.2	5.2	4.4	5.2	4.4	5.9	4.4	5.4
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	C-Max	C-Max

Intersection Summary

Cycle Length: 100
Actuated Cycle Length: 100
Offset: 0 (0%), Referenced to phase 1:SBL and 6:SBR, Start of Yellow
Natural Cycle: 100
Control Type: Actuated-Coordinated

Splits and Phases: 17: Genesee Ave & Governor Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	350	297	128	314	372	191	205	0	237	602	0	790
Future Volume (vph)	350	297	128	314	372	191	205	0	237	602	0	790
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	16	12	12	12	12	12	12	12
Total Lost time (s)	4.4	5.2	5.2	4.4	5.2		4.4		5.9	4.4		5.4
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95		1.00		0.88	0.97		1.00
Frt	1.00	1.00	0.85	1.00	0.95		1.00		0.85	1.00		0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95		1.00	0.95		1.00
Satd. Flow (prot)	3433	3539	1583	3433	3807		1770		2787	3433		1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95		1.00	0.95		1.00
Satd. Flow (perm)	3433	3539	1583	3433	3807		1770		2787	3433		1583
Peak-hour factor, PHF	0.95	0.95	0.95	0.87	0.87	0.87	0.92	0.92	0.92	0.89	0.89	0.89
Adj. Flow (vph)	368	313	135	361	428	220	223	0	258	676	0	888
RTOR Reduction (vph)	0	0	117	0	64	0	0	0	229	0	0	277
Lane Group Flow (vph)	368	313	18	361	584	0	223	0	29	676	0	611
Turn Type	Prot	NA	Perm	Prot	NA		Prot		Perm	Prot		Perm
Protected Phases	7	4		3	8		5			1		
Permitted Phases			4						2			6
Actuated Green, G (s)	13.7	13.6	13.6	16.4	16.3		13.3		11.3	38.8		37.3
Effective Green, g (s)	13.7	13.6	13.6	16.4	16.3		13.3		11.3	38.8		37.3
Actuated g/C Ratio	0.14	0.14	0.14	0.16	0.16		0.13		0.11	0.39		0.37
Clearance Time (s)	4.4	5.2	5.2	4.4	5.2		4.4		5.9	4.4		5.4
Vehicle Extension (s)	2.0	2.3	2.3	2.0	3.8		2.0		2.9	2.0		3.5
Lane Grp Cap (vph)	470	481	215	563	620		235		314	1332		590
v/s Ratio Prot	c0.11	0.09		0.11	c0.15		c0.13			0.20		
v/s Ratio Perm			0.01						0.01			c0.39
v/c Ratio	0.78	0.65	0.09	0.64	0.94		0.95		0.09	0.51		1.04
Uniform Delay, d1	41.7	40.9	37.8	39.1	41.4		43.0		39.8	23.3		31.4
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00		1.00	1.00		1.00
Incremental Delay, d2	7.7	2.6	0.1	1.9	22.8		43.7		0.1	1.4		46.8
Delay (s)	49.4	43.6	37.9	40.9	64.2		86.7		39.9	24.7		78.1
Level of Service	D	D	D	D	E		F		D	C		E
Approach Delay (s)		45.3			55.9			61.6			55.0	
Approach LOS		D			E			E			E	

Intersection Summary

HCM 2000 Control Delay	54.0	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.96		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	19.9
Intersection Capacity Utilization	88.8%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBR	NBL	NBT	SBT	SBR
Lane Configurations					
Traffic Volume (vph)	415	299	612	2008	400
Future Volume (vph)	415	299	612	2008	400
Turn Type	Perm	Prot	NA	NA	Perm
Protected Phases		5	2	6	
Permitted Phases	4				6
Detector Phase	4	5	2	6	6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	36.5	9.5	22.5	32.5	32.5
Total Split (s)	36.5	27.5	113.5	86.0	86.0
Total Split (%)	24.3%	18.3%	75.7%	57.3%	57.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5
Lead/Lag		Lead		Lag	Lag
Lead-Lag Optimize?		Yes		Yes	Yes
Recall Mode	None	None	Min	Min	Min

Intersection Summary
Cycle Length: 150
Actuated Cycle Length: 128.7
Natural Cycle: 150
Control Type: Actuated-Uncoordinated

Splits and Phases: 18: Genesee Ave & SR-52 Ramp

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	415	299	612	2008	400
Future Volume (vph)	0	415	299	612	2008	400
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5	4.5	4.5	4.5	4.5
Lane Util. Factor		0.88	1.00	0.91	0.95	1.00
Frt		0.85	1.00	1.00	1.00	0.85
Flt Protected		1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)		2787	1770	5085	3539	1583
Flt Permitted		1.00	0.95	1.00	1.00	1.00
Satd. Flow (perm)		2787	1770	5085	3539	1583
Peak-hour factor, PHF	0.81	0.81	0.91	0.91	0.91	0.91
Adj. Flow (vph)	0	512	329	673	2207	440
RTOR Reduction (vph)	0	393	0	0	0	54
Lane Group Flow (vph)	0	119	329	673	2207	386
Turn Type		Perm	Prot	NA	NA	Perm
Protected Phases			5	2	6	
Permitted Phases		4				6
Actuated Green, G (s)		10.6	23.0	109.1	81.6	81.6
Effective Green, g (s)		10.6	23.0	109.1	81.6	81.6
Actuated g/C Ratio		0.08	0.18	0.85	0.63	0.63
Clearance Time (s)		4.5	4.5	4.5	4.5	4.5
Vehicle Extension (s)		3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)		229	316	4310	2243	1003
v/s Ratio Prot			c0.19	0.13	c0.62	
v/s Ratio Perm		c0.04				0.24
v/c Ratio		0.52	1.04	0.16	0.98	0.39
Uniform Delay, d1		56.6	52.8	1.7	22.9	11.4
Progression Factor		1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2		2.1	61.7	0.0	15.3	0.2
Delay (s)		58.7	114.6	1.7	38.2	11.6
Level of Service		E	F	A	D	B
Approach Delay (s)	58.7			38.8	33.8	
Approach LOS	E			D	C	

Intersection Summary			
HCM 2000 Control Delay	38.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.95		
Actuated Cycle Length (s)	128.7	Sum of lost time (s)	13.5
Intersection Capacity Utilization	79.6%	ICU Level of Service	D
Analysis Period (min)	15		

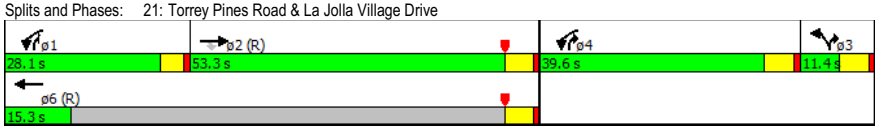
c Critical Lane Group

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	ø1	ø4
Lane Configurations								
Traffic Volume (vph)	1744	337	1437	775	125	1066		
Future Volume (vph)	1744	337	1437	775	125	1066		
Turn Type	NA	Perm	Prot	NA	Prot	custom		
Protected Phases	2		1 4	6	3	1 3 4	1	4
Permitted Phases		2						
Detector Phase	2	2	1 4	6	3	1 3 4		
Switch Phase								
Minimum Initial (s)	10.0	10.0		10.0	4.0		4.0	4.0
Minimum Split (s)	15.4	15.4		15.3	9.6		8.4	39.6
Total Split (s)	53.3	53.3		15.3	11.4		28.1	39.6
Total Split (%)	40.3%	40.3%		11.6%	8.6%		21%	30%
Yellow Time (s)	4.4	4.4		4.3	4.6		3.4	4.6
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			
Total Lost Time (s)	5.4	5.4		5.3	5.6			
Lead/Lag	Lag	Lag			Lag		Lead	Lead
Lead-Lag Optimize?					Yes			Yes
Recall Mode	C-Max	C-Max		C-Max	None		None	None

Intersection Summary

Cycle Length: 132.4
Actuated Cycle Length: 132.4
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 21: Torrey Pines Road & La Jolla Village Drive



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1744	337	1437	775	125	1066
Future Volume (vph)	1744	337	1437	775	125	1066
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.4	5.4	4.4	5.3	5.6	4.4
Lane Util. Factor	0.91	1.00	0.97	0.91	0.97	0.88
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	5085	1583	3433	5085	3433	2787
Flt Permitted	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (perm)	5085	1583	3433	5085	3433	2787
Peak-hour factor, PHF	0.90	0.90	0.89	0.89	0.91	0.91
Adj. Flow (vph)	1938	374	1615	871	137	1171
RTOR Reduction (vph)	0	68	0	0	0	0
Lane Group Flow (vph)	1938	306	1615	871	137	1171
Turn Type	NA	Perm	Prot	NA	Prot	custom
Protected Phases	2		1 4	6	3	1 3 4
Permitted Phases		2				
Actuated Green, G (s)	47.9	47.9	57.7	76.1	5.8	74.7
Effective Green, g (s)	47.9	47.9	57.7	76.1	5.8	63.5
Actuated g/C Ratio	0.36	0.36	0.44	0.57	0.04	0.48
Clearance Time (s)	5.4	5.4		5.3	5.6	
Vehicle Extension (s)	5.5	5.5		8.0	2.0	
Lane Grp Cap (vph)	1839	572	1496	2922	150	1336
v/s Ratio Prot	c0.38		c0.47	0.17	c0.04	0.42
v/s Ratio Perm		0.19				
v/c Ratio	1.05	0.54	1.08	0.30	0.91	0.88
Uniform Delay, d1	42.2	33.4	37.4	14.4	63.0	30.9
Progression Factor	0.58	0.34	1.00	1.00	1.00	1.00
Incremental Delay, d2	28.7	1.0	48.0	0.3	47.7	6.6
Delay (s)	53.3	12.4	85.3	14.7	110.7	37.5
Level of Service	D	B	F	B	F	D
Approach Delay (s)	46.7			60.6	45.2	
Approach LOS	D			E	D	

Intersection Summary

HCM 2000 Control Delay	52.0	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.06		
Actuated Cycle Length (s)	132.4	Sum of lost time (s)	21.0
Intersection Capacity Utilization	91.1%	ICU Level of Service	F
Analysis Period (min)	15		

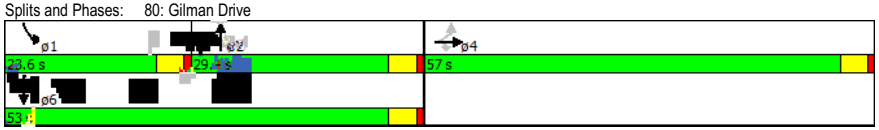
c Critical Lane Group

Lane Group	EBT	EBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	6	1047	415	100	192	913
Future Volume (vph)	6	1047	415	100	192	913
Turn Type	NA	Perm	NA	Perm	Prot	NA
Protected Phases	4		2		1	6
Permitted Phases		4		2		
Detector Phase	4	4	2	2	1	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	40.5	40.5	22.5	22.5	9.5	24.5
Total Split (s)	57.0	57.0	29.4	29.4	23.6	53.0
Total Split (%)	51.8%	51.8%	26.7%	26.7%	21.5%	48.2%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	None	None	Min	Min	None	Min

Intersection Summary

Cycle Length: 110
Actuated Cycle Length: 85.2
Natural Cycle: 75
Control Type: Actuated-Uncoordinated

Splits and Phases: 80: Gilman Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	6	1047	0	0	0	0	415	100	192	913	0
Future Volume (vph)	11	6	1047	0	0	0	0	415	100	192	913	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5	4.5					4.5	4.5	4.5	4.5	
Lane Util. Factor		0.95	0.95					0.95	1.00	1.00	0.95	
Frt		0.85	0.85					1.00	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1511	1504					3539	1583	1770	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		1511	1504					3539	1583	1770	3539	
Peak-hour factor, PHF	0.97	0.97	0.97	0.25	0.25	0.25	0.83	0.83	0.83	0.96	0.96	0.96
Adj. Flow (vph)	11	6	1079	0	0	0	0	500	120	200	951	0
RTOR Reduction (vph)	0	34	34	0	0	0	0	0	75	0	0	0
Lane Group Flow (vph)	0	512	516	0	0	0	0	500	45	200	951	0
Turn Type	Perm	NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2			
Actuated Green, G (s)		37.2	37.2					19.0	19.0	14.8	38.3	
Effective Green, g (s)		37.2	37.2					19.0	19.0	14.8	38.3	
Actuated g/C Ratio		0.44	0.44					0.22	0.22	0.18	0.45	
Clearance Time (s)		4.5	4.5					4.5	4.5	4.5	4.5	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		665	662					795	355	310	1604	
v/s Ratio Prot								0.14		0.11	c0.27	
v/s Ratio Perm		0.34	c0.34						0.03			
v/c Ratio		0.77	0.78					0.63	0.13	0.65	0.59	
Uniform Delay, d1		20.0	20.2					29.6	26.1	32.4	17.3	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		5.4	5.8					1.6	0.2	4.6	0.6	
Delay (s)		25.4	25.9					31.1	26.3	37.0	17.9	
Level of Service		C	C					C	C	D	B	
Approach Delay (s)		25.7			0.0			30.2			21.2	
Approach LOS		C			A			C			C	

Intersection Summary

HCM 2000 Control Delay	24.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	84.5	Sum of lost time (s)	13.5
Intersection Capacity Utilization	76.0%	ICU Level of Service	D
Analysis Period (min)	15		

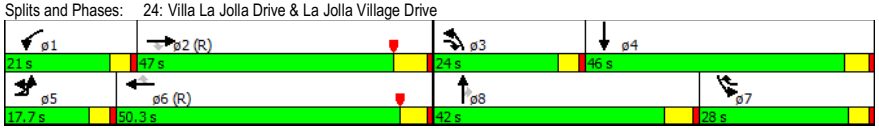
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	61	1898	66	592	1128	393	448	236	649	1223	717
Future Volume (vph)	61	1898	66	592	1128	393	448	236	649	1223	717
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA
Protected Phases	5	2	3	1	6	7	3	8		7	4
Permitted Phases			2			6			8		
Detector Phase	5	2	3	1	6	7	3	8	8	7	4
Switch Phase											
Minimum Initial (s)	4.0	10.0	4.0	4.0	10.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.4	16.4	22.4	8.4	15.3	8.4	22.4	9.5	9.5	8.4	8.9
Total Split (s)	17.7	47.0	24.0	21.0	50.3	28.0	24.0	42.0	42.0	28.0	46.0
Total Split (%)	12.8%	34.1%	17.4%	15.2%	36.4%	20.3%	17.4%	30.4%	30.4%	20.3%	33.3%
Yellow Time (s)	3.4	5.4	3.4	3.4	4.3	3.4	3.4	4.5	4.5	3.4	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	6.4	4.4	4.4	5.3	4.4	4.4	5.5	5.5	4.4	4.9
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	C-Max	None	None	None	None	None	None

Intersection Summary

Cycle Length: 138
Actuated Cycle Length: 138
Offset: 44 (32%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 24: Villa La Jolla Drive & La Jolla Village Drive



Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	54	61	1898	66	592	1128	393	448	236	649	1223	717
Future Volume (vph)	54	61	1898	66	592	1128	393	448	236	649	1223	717
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.4	6.4	4.4	4.4	5.3	4.4	4.4	5.5	5.5	4.4	4.9
Lane Util. Factor		1.00	0.91	1.00	0.97	0.91	0.88	0.97	0.95	0.95	0.97	1.00
Frt		1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.93	0.85	1.00	0.98
Flt Protected		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)		1770	5085	1583	3433	5085	2787	3433	1639	1504	3433	1823
Flt Permitted		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Satd. Flow (perm)		1770	5085	1583	3433	5085	2787	3433	1639	1504	3433	1823
Peak-hour factor, PHF	0.92	0.80	0.80	0.80	0.85	0.85	0.85	0.82	0.82	0.82	0.82	0.82
Adj. Flow (vph)	59	76	2372	82	696	1327	462	546	288	791	1491	874
RTOR Reduction (vph)	0	0	0	47	0	0	230	0	25	138	0	4
Lane Group Flow (vph)	0	135	2373	36	696	1327	232	546	540	376	1491	1013
Turn Type	Prot	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA
Protected Phases	5	5	2	3	1	6	7	3	8		7	4
Permitted Phases				2			6			8		
Actuated Green, G (s)		12.6	40.6	60.2	16.6	45.7	69.3	19.6	36.5	36.5	23.6	41.1
Effective Green, g (s)		12.6	40.6	60.2	16.6	45.7	69.3	19.6	36.5	36.5	23.6	41.1
Actuated g/C Ratio		0.09	0.29	0.44	0.12	0.33	0.50	0.14	0.26	0.26	0.17	0.30
Clearance Time (s)		4.4	6.4	4.4	4.4	5.3	4.4	4.4	5.5	5.5	4.4	4.9
Vehicle Extension (s)		2.0	4.4	2.0	2.0	4.7	2.0	2.0	3.3	3.3	2.0	2.0
Lane Grp Cap (vph)		161	1496	690	412	1683	1399	487	433	397	587	542
v/s Ratio Prot		0.08	c0.47	0.01	c0.20	c0.26	0.03	0.16	c0.33		c0.43	c0.56
v/s Ratio Perm				0.02			0.05			0.25		
v/c Ratio		0.84	1.59	0.05	1.69	0.79	0.17	1.12	1.25	0.95	2.54	1.87
Uniform Delay, d1		61.7	48.7	22.4	60.7	41.8	18.7	59.2	50.8	49.8	57.2	48.5
Progression Factor		1.00	1.00	1.00	1.25	0.75	0.19	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2		28.8	267.0	0.0	319.3	3.4	0.0	78.3	129.2	31.6	698.0	397.9
Delay (s)		90.5	315.7	22.5	395.2	34.7	3.5	137.5	180.0	81.4	755.2	446.3
Level of Service		F	F	C	F	C	A	F	F	F	F	F
Approach Delay (s)			294.6			129.8			134.5			630.0
Approach LOS			F			F			F			F

Intersection Summary

HCM 2000 Control Delay	313.2	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.75		
Actuated Cycle Length (s)	138.0	Sum of lost time (s)	20.7
Intersection Capacity Utilization	131.3%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	117
Future Volume (vph)	117
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.82
Adj. Flow (vph)	143
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

Intersection Summary

Lane Group	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Traffic Volume (vph)	383	1457	9	2416	381	721	549
Future Volume (vph)	383	1457	9	2416	381	721	549
Turn Type	Prot	NA	Prot	NA	Perm	Prot	Perm
Protected Phases	5	2	1	6		7	
Permitted Phases					6		7
Detector Phase	5	2	1	6	6	7	7
Switch Phase							
Minimum Initial (s)	4.0	10.0	4.0	10.0	10.0	10.0	10.0
Minimum Split (s)	8.4	16.3	8.4	29.4	29.4	38.4	38.4
Total Split (s)	34.4	66.3	24.4	65.4	65.4	44.4	44.4
Total Split (%)	23.9%	46.0%	16.9%	45.4%	45.4%	30.8%	30.8%
Yellow Time (s)	3.4	5.3	3.4	4.4	4.4	3.4	3.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	6.3	4.4	5.4	5.4	4.4	4.4
Lead/Lag	Lead	Lag	Lead	Lag	Lag		
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		
Recall Mode	None	Min	None	Min	Min	None	None

Intersection Summary
Cycle Length: 144.2
Actuated Cycle Length: 138.5
Natural Cycle: 120
Control Type: Actuated-Uncoordinated

Splits and Phases: 34: Miramar Road & Eastgate Mall

Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Traffic Volume (vph)	383	1457	9	2416	381	721	549
Future Volume (vph)	383	1457	9	2416	381	721	549
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	6.3	4.4	5.4	5.4	4.4	4.4
Lane Util. Factor	0.97	0.91	1.00	0.86	1.00	0.97	1.00
Frt	1.00	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)	3433	5085	1770	6408	1583	3433	1583
Flt Permitted	0.95	1.00	0.95	1.00	1.00	0.95	1.00
Satd. Flow (perm)	3433	5085	1770	6408	1583	3433	1583
Peak-hour factor, PHF	0.80	0.80	0.92	0.86	0.86	0.80	0.80
Adj. Flow (vph)	479	1821	10	2809	443	901	686
RTOR Reduction (vph)	0	0	0	0	245	0	237
Lane Group Flow (vph)	479	1821	10	2809	198	901	449
Turn Type	Prot	NA	Prot	NA	Perm	Prot	Perm
Protected Phases	5	2	1	6		7	
Permitted Phases					6		7
Actuated Green, G (s)	24.2	85.4	1.5	63.6	63.6	40.0	40.0
Effective Green, g (s)	24.2	85.4	1.5	63.6	63.6	40.0	40.0
Actuated g/C Ratio	0.17	0.60	0.01	0.45	0.45	0.28	0.28
Clearance Time (s)	4.4	6.3	4.4	5.4	5.4	4.4	4.4
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	585	3058	18	2870	709	967	445
v/s Ratio Prot	c0.14	0.36	0.01	c0.44		0.26	
v/s Ratio Perm					0.13		c0.28
v/c Ratio	0.82	0.60	0.56	0.98	0.28	0.93	1.01
Uniform Delay, d1	56.8	17.6	69.9	38.5	24.7	49.7	51.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	8.7	0.3	32.3	12.1	0.2	15.1	44.9
Delay (s)	65.5	17.9	102.2	50.7	25.0	64.8	95.9
Level of Service	E	B	F	D	C	E	F
Approach Delay (s)		27.8		47.3		78.2	
Approach LOS		C		D		E	

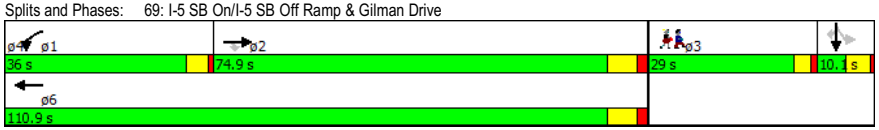
Intersection Summary			
HCM 2000 Control Delay	47.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.96		
Actuated Cycle Length (s)	142.0	Sum of lost time (s)	15.1
Intersection Capacity Utilization	78.3%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBT	EBR	WBL	WBT	SBT	SBR	ø3
Lane Configurations							
Traffic Volume (vph)	357	1401	614	606	9	22	
Future Volume (vph)	357	1401	614	606	9	22	
Turn Type	NA	Perm	Prot	NA	NA	Perm	
Protected Phases	2		1	6	4		3
Permitted Phases		2				4	
Detector Phase	2	2	1	6	4	4	
Switch Phase							
Minimum Initial (s)	13.0	13.0	5.0	12.0	5.0	5.0	1.0
Minimum Split (s)	20.2	20.2	9.7	19.2	10.1	10.1	29.0
Total Split (s)	74.9	74.9	36.0	110.9	10.1	10.1	29.0
Total Split (%)	49.9%	49.9%	24.0%	73.9%	6.7%	6.7%	19%
Yellow Time (s)	5.2	5.2	3.7	5.2	4.1	4.1	3.0
All-Red Time (s)	2.0	2.0	1.0	2.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	7.2	7.2	4.7	7.2	5.1	5.1	
Lead/Lag	Lag	Lag	Lead		Lag	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes
Recall Mode	Min	Min	None	Min	None	None	None

Intersection Summary
Cycle Length: 150
Actuated Cycle Length: 117.8
Natural Cycle: 150
Control Type: Actuated-Uncoordinated

Splits and Phases: 69: I-5 SB On/I-5 SB Off Ramp & Gilman Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	357	1401	614	606	0	0	0	0	31	9	22
Future Volume (vph)	0	357	1401	614	606	0	0	0	0	31	9	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		7.2	7.2	4.7	7.2						5.1	5.1
Lane Util. Factor		1.00	0.88	0.97	1.00						1.00	1.00
Frt		1.00	0.85	1.00	1.00						1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00						0.96	1.00
Satd. Flow (prot)		1863	2787	3433	1863						1793	1583
Flt Permitted		1.00	1.00	0.95	1.00						0.96	1.00
Satd. Flow (perm)		1863	2787	3433	1863						1793	1583
Peak-hour factor, PHF	0.89	0.89	0.89	0.92	0.92	0.92	0.25	0.25	0.25	0.80	0.80	0.80
Adj. Flow (vph)	0	401	1574	667	659	0	0	0	0	39	11	28
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	27
Lane Group Flow (vph)	0	401	1574	667	659	0	0	0	0	0	50	1
Turn Type		NA	Perm	Prot	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases			2							4		4
Actuated Green, G (s)		67.8	67.8	28.0	100.5						5.0	5.0
Effective Green, g (s)		67.8	67.8	28.0	100.5						5.0	5.0
Actuated g/C Ratio		0.58	0.58	0.24	0.85						0.04	0.04
Clearance Time (s)		7.2	7.2	4.7	7.2						5.1	5.1
Vehicle Extension (s)		2.0	2.0	2.0	2.0						2.0	2.0
Lane Grp Cap (vph)		1072	1604	815	1589						76	67
v/s Ratio Prot		0.22		c0.19	0.35							
v/s Ratio Perm			c0.56								0.03	0.00
v/c Ratio		0.37	0.98	0.82	0.41						0.66	0.02
Uniform Delay, d1		13.5	24.4	42.5	2.0						55.6	54.0
Progression Factor		1.00	1.00	1.00	1.00						1.00	1.00
Incremental Delay, d2		0.1	18.0	6.1	0.1						14.6	0.0
Delay (s)		13.6	42.4	48.6	2.0						70.1	54.1
Level of Service		B	D	D	A						E	D
Approach Delay (s)		36.6			25.4			0.0			64.4	
Approach LOS		D			C			A			E	

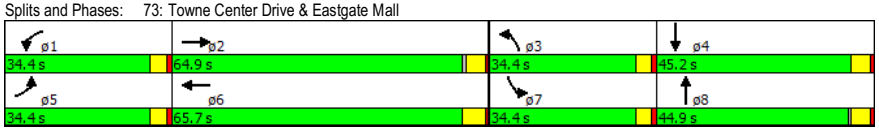
Intersection Summary			
HCM 2000 Control Delay	32.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.96		
Actuated Cycle Length (s)	117.8	Sum of lost time (s)	21.0
Intersection Capacity Utilization	103.3%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	19	443	298	243	154	77	200	664
Future Volume (vph)	19	443	298	243	154	77	200	664
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	5	2	1	6	3	8	7	4
Permitted Phases								
Detector Phase	5	2	1	6	3	8	7	4
Switch Phase								
Minimum Initial (s)	4.0	7.0	4.0	7.0	4.0	7.0	4.0	7.0
Minimum Split (s)	8.4	11.9	8.4	12.7	8.4	12.2	8.4	12.7
Total Split (s)	34.4	64.9	34.4	65.7	34.4	44.9	34.4	45.2
Total Split (%)	19.1%	36.1%	19.1%	36.6%	19.1%	25.0%	19.1%	25.2%
Yellow Time (s)	3.4	3.9	3.4	4.7	3.4	4.2	3.4	4.2
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	4.9	4.4	5.7	4.4	5.2	4.4	5.2
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 179.7
Actuated Cycle Length: 137.8
Natural Cycle: 80
Control Type: Actuated-Uncoordinated

Splits and Phases: 73: Towne Center Drive & Eastgate Mall



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	19	443	391	298	243	6	154	77	155	200	664	89
Future Volume (vph)	19	443	391	298	243	6	154	77	155	200	664	89
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	5.7		4.4	5.2		4.4	5.2	
Lane Util. Factor	0.97	0.95		0.97	0.95		0.97	0.95		0.97	0.95	
Frt	1.00	0.93		1.00	1.00		1.00	0.90		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	3433	3290		3433	3526		3433	3185		3433	3477	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	3433	3290		3433	3526		3433	3185		3433	3477	
Peak-hour factor, PHF	0.87	0.87	0.87	0.91	0.91	0.91	0.88	0.88	0.88	0.80	0.80	0.80
Adj. Flow (vph)	22	509	449	327	267	7	175	88	176	250	830	111
RTOR Reduction (vph)	0	87	0	0	1	0	0	129	0	0	5	0
Lane Group Flow (vph)	22	871	0	327	273	0	175	135	0	250	936	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases												
Actuated Green, G (s)	3.3	50.1		18.1	64.1		11.8	37.4		15.0	40.6	
Effective Green, g (s)	3.3	50.1		18.1	64.1		11.8	37.4		15.0	40.6	
Actuated g/C Ratio	0.02	0.36		0.13	0.46		0.08	0.27		0.11	0.29	
Clearance Time (s)	4.4	4.9		4.4	5.7		4.4	5.2		4.4	5.2	
Vehicle Extension (s)	2.0	5.1		2.0	4.8		2.0	5.1		2.0	4.8	
Lane Grp Cap (vph)	81	1181		445	1620		290	853		369	1011	
v/s Ratio Prot	0.01	c0.26		c0.10	0.08		0.05	0.04		c0.07	c0.27	
v/s Ratio Perm												
v/c Ratio	0.27	0.74		0.73	0.17		0.60	0.16		0.68	0.93	
Uniform Delay, d1	66.9	39.0		58.4	22.1		61.6	39.0		59.9	48.0	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.7	3.0		5.4	0.1		2.4	0.2		3.9	14.2	
Delay (s)	67.6	42.0		63.8	22.2		64.0	39.2		63.8	62.2	
Level of Service	E	D		E	C		E	D		E	E	
Approach Delay (s)		42.6			44.8			49.1			62.6	
Approach LOS		D			D			D			E	

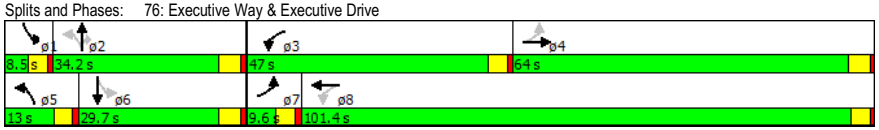
Intersection Summary				
HCM 2000 Control Delay	51.3	HCM 2000 Level of Service	D	
HCM 2000 Volume to Capacity ratio	0.81			
Actuated Cycle Length (s)	139.5	Sum of lost time (s)	19.7	
Intersection Capacity Utilization	74.6%	ICU Level of Service	D	
Analysis Period (min)	15			

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	23	316	420	389	93	42	63	17	100
Future Volume (vph)	23	316	420	389	93	42	63	17	100
Turn Type	pm+pt	NA	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA
Protected Phases	7	4	3	8	5	2		1	6
Permitted Phases	4		8		2		2	6	
Detector Phase	7	4	3	8	5	2	2	1	6
Switch Phase									
Minimum Initial (s)	5.0	4.0	5.0	4.0	4.0	7.0	7.0	4.0	7.0
Minimum Split (s)	9.5	8.9	9.5	8.4	8.4	11.9	11.9	8.4	11.9
Total Split (s)	9.6	64.0	47.0	101.4	13.0	34.2	34.2	8.5	29.7
Total Split (%)	6.2%	41.6%	30.6%	66.0%	8.5%	22.3%	22.3%	5.5%	19.3%
Yellow Time (s)	3.5	3.9	3.5	3.4	3.4	3.9	3.9	3.4	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.9	4.5	4.4	4.4	4.9	4.9	4.4	4.9
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Min	Min	None	Min

Intersection Summary
Cycle Length: 153.7
Actuated Cycle Length: 143
Natural Cycle: 90
Control Type: Actuated-Uncoordinated

Splits and Phases: 76: Executive Way & Executive Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	23	316	767	420	389	10	93	42	63	17	100	71
Future Volume (vph)	23	316	767	420	389	10	93	42	63	17	100	71
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.9		4.5	4.4		4.4	4.9	4.9	4.4	4.9	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.89		1.00	1.00		1.00	1.00	0.85	1.00	0.94	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3163		1770	3526		1770	1863	1583	1770	1747	
Flt Permitted	0.49	1.00		0.06	1.00		0.25	1.00	1.00	0.72	1.00	
Satd. Flow (perm)	909	3163		117	3526		472	1863	1583	1346	1747	
Peak-hour factor, PHF	0.80	0.80	0.80	0.87	0.87	0.87	0.80	0.80	0.80	0.80	0.80	0.80
Adj. Flow (vph)	29	395	959	483	447	11	116	52	79	21	125	89
RTOR Reduction (vph)	0	176	0	0	1	0	0	0	63	0	17	0
Lane Group Flow (vph)	29	1178	0	483	457	0	116	53	16	21	197	0
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		
Actuated Green, G (s)	61.4	58.6		101.7	94.4		35.8	29.1	29.1	25.2	22.9	
Effective Green, g (s)	61.4	58.6		101.7	94.4		35.8	29.1	29.1	25.2	22.9	
Actuated g/C Ratio	0.42	0.40		0.69	0.64		0.24	0.20	0.20	0.17	0.16	
Clearance Time (s)	4.5	4.9		4.5	4.4		4.4	4.9	4.9	4.4	4.9	
Vehicle Extension (s)	3.0	2.0		3.0	2.3		2.0	2.9	2.9	2.0	2.6	
Lane Grp Cap (vph)	396	1262		510	2267		190	369	313	237	272	
v/s Ratio Prot	0.00	0.37		c0.25	0.13		c0.04	0.03		0.00	c0.11	
v/s Ratio Perm	0.03			c0.41			0.11		0.01	0.01		
v/c Ratio	0.07	1.20dr		0.95	0.20		0.61	0.14	0.05	0.09	0.72	
Uniform Delay, d1	25.3	42.2		46.3	10.7		45.9	48.6	47.7	51.0	59.0	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.1	12.4		26.8	0.0		4.0	0.2	0.1	0.1	8.8	
Delay (s)	25.3	54.6		73.1	10.8		49.9	48.7	47.7	51.0	67.7	
Level of Service	C	D		E	B		D	D	D	D	E	
Approach Delay (s)		54.0			42.8			49.0			66.2	
Approach LOS		D			D			D			E	

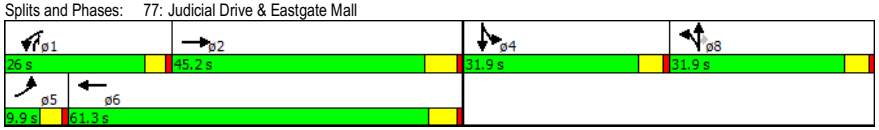
Intersection Summary			
HCM 2000 Control Delay	50.8	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.91		
Actuated Cycle Length (s)	146.8	Sum of lost time (s)	18.7
Intersection Capacity Utilization	87.0%	ICU Level of Service	E
Analysis Period (min)	15		

dr Defacto Right Lane. Recode with 1 though lane as a right lane.
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	14	703	261	253	162	11	523	125	158
Future Volume (vph)	14	703	261	253	162	11	523	125	158
Turn Type	Prot	NA	Prot	NA	Split	NA	pm+ov	Split	NA
Protected Phases	5	2	1	6	8	8	1	4	4
Permitted Phases							8		
Detector Phase	5	2	1	6	8	8	1	4	4
Switch Phase									
Minimum Initial (s)	4.0	7.0	4.0	7.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.4	38.1	8.4	24.6	31.9	31.9	8.4	31.9	31.9
Total Split (s)	9.9	45.2	26.0	61.3	31.9	31.9	26.0	31.9	31.9
Total Split (%)	7.3%	33.5%	19.3%	45.4%	23.6%	23.6%	19.3%	23.6%	23.6%
Yellow Time (s)	3.4	5.1	3.4	4.6	3.9	3.9	3.4	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	6.1	4.4	5.6	4.9	4.9	4.4	4.9	4.9
Lead/Lag	Lead	Lag	Lead	Lag			Lead		
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes		
Recall Mode	None	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 135
Actuated Cycle Length: 118.3
Natural Cycle: 125
Control Type: Actuated-Uncoordinated

Splits and Phases: 77: Judicial Drive & Eastgate Mall



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	14	703	172	261	253	12	162	11	523	125	158	95
Future Volume (vph)	14	703	172	261	253	12	162	11	523	125	158	95
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	6.1		4.4	5.6		4.9	4.9	4.4	4.9	4.9	
Lane Util. Factor	1.00	0.95		1.00	0.95		0.95	0.91	0.95	1.00	1.00	
Frt	1.00	0.97		1.00	0.99		1.00	0.86	0.85	1.00	0.94	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3435		1770	3516		1681	1461	1504	1770	1758	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	3435		1770	3516		1681	1461	1504	1770	1758	
Peak-hour factor, PHF	0.89	0.89	0.89	0.97	0.97	0.97	0.85	0.85	0.85	0.87	0.87	0.87
Adj. Flow (vph)	16	790	193	269	261	12	191	13	615	144	182	109
RTOR Reduction (vph)	0	15	0	0	2	0	0	254	132	0	16	0
Lane Group Flow (vph)	16	968	0	269	271	0	172	73	188	144	275	0
Turn Type	Prot	NA		Prot	NA		Split	NA	pm+ov	Split	NA	
Protected Phases	5	2		1	6		8	8	1	4	4	
Permitted Phases									8			
Actuated Green, G (s)	2.0	40.6		21.0	60.1		16.8	16.8	37.8	22.2	22.2	
Effective Green, g (s)	2.0	40.6		21.0	60.1		16.8	16.8	37.8	22.2	22.2	
Actuated g/C Ratio	0.02	0.34		0.17	0.50		0.14	0.14	0.31	0.18	0.18	
Clearance Time (s)	4.4	6.1		4.4	5.6		4.9	4.9	4.4	4.9	4.9	
Vehicle Extension (s)	2.0	2.7		2.0	3.0		2.0	2.0	2.0	2.0	2.0	
Lane Grp Cap (vph)	29	1153		307	1747		233	203	470	325	322	
v/s Ratio Prot	0.01	c0.28		c0.15	0.08		c0.10	0.05	0.07	0.08	c0.16	
v/s Ratio Perm									0.06			
v/c Ratio	0.55	0.84		0.88	0.16		0.74	0.36	0.40	0.44	0.85	
Uniform Delay, d1	59.0	37.1		48.7	16.6		49.9	47.2	32.6	43.9	47.8	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	12.2	5.5		22.6	0.0		10.0	0.4	0.2	0.4	18.5	
Delay (s)	71.2	42.6		71.3	16.6		60.0	47.6	32.8	44.2	66.3	
Level of Service	E	D		E	B		E	D	C	D	E	
Approach Delay (s)		43.1			43.7			44.4			59.0	
Approach LOS		D			D			D			E	

Intersection Summary				
HCM 2000 Control Delay	46.1	HCM 2000 Level of Service	D	
HCM 2000 Volume to Capacity ratio	0.83			
Actuated Cycle Length (s)	120.9	Sum of lost time (s)	20.3	
Intersection Capacity Utilization	80.5%	ICU Level of Service	D	
Analysis Period (min)	15			

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Right Turn Channelized												
Traffic Volume (veh/h)	325	0	0	0	23	5	437	9	3	0	0	0
Future Volume (veh/h)	325	0	0	0	23	5	437	9	3	0	0	0
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.94	0.94	0.94	0.25	0.25	0.25
Hourly flow rate (vph)	406	0	0	0	29	6	465	10	3	0	0	0
Approach Volume (veh/h)		406			35			478			0	
Crossing Volume (veh/h)		0			881			406			494	
High Capacity (veh/h)		1385			686			1006			938	
High v/c (veh/h)		0.29			0.05			0.48			0.00	
Low Capacity (veh/h)		1161			538			819			758	
Low v/c (veh/h)		0.35			0.07			0.58			0.00	

Intersection Summary				
Maximum v/c High	0.48			
Maximum v/c Low	0.58			
Intersection Capacity Utilization	56.2%	ICU Level of Service	B	

AM Peak-Hour Arterial Segment Analysis Summary Genesee Avenue

ROADWAY SEGMENT	DIRECTION	URBAN STREET CLASS	EXISTING				HORIZON YEAR											
							Alt A Regents Bridge 6-lane Genesee			Alt B Regents Bridge 4-lane Genesee			Alt C No Bridge 6-lane Genesee			Alt D No Bridge 4-lane Genesee		
			TRAVEL TIME (S)		SIMULATION		SIMULATION			SIMULATION			SIMULATION			SIMULATION		
			FIELD	SIMULATION	SPEED (a)	LOS (b)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)
Genesee Ave																		
SR-52 EB Ramps to Governor Dr	NB	I	217	140	19.9	**E**	204.3	**F**		212.1	F		249.9	**F**		330.2	**F**	
	SB	I	68	67	41.4	B	66.9	B		66.9	B		67.0	B		67.6	B	
Governor Dr to Centurion Sq	NB	I	65	91	22.1	D	71.4	C		92.6	D		136.6	**F**		294.8	**F**	
	SB	I	99	82	24.6	D	80.5	D		80.5	D		89.4	D		88.0	D	
Centurion Sq to Decoro St	NB	I	58	42	25.3	D	41.7	D		61.4	E		51.1	**E**		168.1	**F**	
	SB	I	30	39	27.3	C	35.4	C		36.2	C		35.7	C		36.7	C	
Decoro St to Nobel Dr	NB	I	43	40	17.2	**E**	41.2	**E**		114.2	F		46.7	**F**		179.7	**F**	
	SB	I	59	37	18.7	**E**	39.7	**E**		42.5	E		42.6	**E**		46.6	**F**	
Nobel Dr to Esplanade Ct	NB	I	21	35	21.1	D	47.0	**F**		53.6	F		47.1	**F**		80.7	**F**	
	SB	I	40	41	18.0	**E**	58.6	**F**		57.5	F		60.0	**F**		62.1	**F**	
Esplanade Ct to La Jolla Village Dr	NB	I	29	45	15.0	**F**	216.2	**F**		214.0	F		273.0	**F**		273.4	**F**	
	SB	I	47	25	26.7	D	22.2	C		22.3	C		21.6	C		22.4	C	
La Jolla Village Dr to Executive Sq	NB	I	15	17	22.2	D	18.1	**E**		18.2	E		20.4	**F**		20.4	**F**	
	SB	I	17	45	8.2	**F**	70.5	**F**		70.5	F		70.3	**F**		70.4	**F**	
Executive Square to Executive Dr	NB	I	8	19	14.4	**F**	30.4	**F**		30.0	F		30.7	**F**		30.4	**F**	
	SB	I	6	11	25.2	D	13.1	D		13.3	D		13.2	D		13.3	D	
Executive Dr to Eastgate Mall	NB	I	57	42	14.0	**F**	55.8	**F**		53.4	F		56.1	**F**		57.5	**F**	
	SB	I	13	23	25.9	D	22.0	D		22.0	D		22.3	D		22.3	D	
Eastgate Mall to Regents Rd	NB	I	38	49	25.6	D	50.4	D		50.7	D		47.6	D		47.8	D	
	SB	I	30	57	22.1	D	81.9	**F**		80.9	F		84.8	**F**		85.2	**F**	
Regents Rd to Campus Point Dr	NB	I	13	32	17.6	**E**	47.4	**F**		47.3	F		48.3	**F**		48.1	**F**	
	SB	I	14	47	11.8	**F**	46.8	**F**		47.5	F		43.2	**F**		43.1	**F**	
Campus Point Dr to Scripps Hospital	NB	I	16	24	32.3	C	23.3	C		23.3	C		23.2	C		23.2	C	
	SB	I	56	32	24.0	D	57.0	**F**		56.7	F		55.3	**F**		55.6	**F**	
Scripps Hospital to I-5 NB Ramps	NB	I	140	61	19.3	**E**	69.2	**E**		69.4	E		68.7	**E**		68.8	**E**	
	SB	I	32	51	23.3	D	62.9	**E**		62.3	E		62.8	**E**		62.7	**E**	
I-5 NB Ramps to I-5 SB Ramps	NB	I	26	110	3.5	**F**	52.1	**F**		52.0	F		52.7	**F**		52.8	**F**	
	SB	I	39	28	14.0	**F**	67.6	**F**		71.6	F		68.5	**F**		67.3	**F**	
I-5 SB Ramps to Science Center Dr	NB	I	24	42	27.0	D	48.0	D		48.0	D		48.0	D		48.0	D	
	SB	I	38	59	19.3	**E**	54.8	**E**		55.0	E		55.0	**E**		55.3	**E**	
Science Center Dr to John Hopkins Dr	NB	I	38	46	28.5	C	51.4	D		51.4	D		51.3	D		51.2	D	
	SB	I	30	34	38.1	B	34.5	B		34.4	B		34.4	B		34.3	B	
John Hopkins Drive to N. Torrey Pines Rd	NB	I	13	11	29.1	C	13.5	D		13.5	D		13.9	D		14.0	D	
	SB	I	8	14	23.6	D	13.1	D		13.0	D		13.2	D		12.9	D	
Total	*NB*	*I*	*821*	*845*	*19.0*	**E**	*1081.4*	**F**	**No**	*1205.1*	*F*	**No**	*1265.3*	**F**	**No**	*1789.1*	**F**	**No**
	SB	*I*	*626*	*677*	*23.3*	*D*	*827.5*	**E**	**Yes**	*833.1*	*E*	**Yes**	*839.3*	**E**	**Yes**	*845.8*	**E**	**Yes**

Notes: (a) Travel time in miles per hour (mph).

(b) The arterial LOS is based on average through-vehicle travel speed for the segment or for the entire street under consideration and is influenced both by the number of signals per mile and by the intersection control delay.

(c) A significant impact resulted in a change from LOS D or better to LOS E or LOS F, or a decrease of speeds of more than 1.0 mph at LOS E and LOS F.

MID Peak-Hour Arterial Segment Analysis Summary Genesee Avenue

ROADWAY SEGMENT	DIRECTION	URBAN STREET CLASS	EXISTING				HORIZON YEAR											
							Alt A Regents Bridge 6-lane Genesee			Alt B Regents Bridge 4-lane Genesee			Alt C No Bridge 6-lane Genesee			Alt D No Bridge 4-lane Genesee		
			TRAVEL TIME (S)		SIMULATION		SIMULATION			SIMULATION			SIMULATION			SIMULATION		
			FIELD	SIMULATION	SPEED (a)	LOS (b)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)
Genesee Ave																		
SR-52 EB Ramps to Governor Dr	NB	I	85	93	30.0	C	92.2	C		93.6	C		102.5	C		103.0	C	
	SB	I	62	68	41.4	B	67.1	B		67.1	B		67.1	B		67.7	B	
Governor Dr to Centurion Sq	NB	I	52	55	36.8	B	60.0	C		51.9	B		51.9	A		53.3	A	
	SB	I	76	74	27.0	D	70.3	C		71.4	C		79.9	D		81.3	D	
Centurion Sq to Decoro St	NB	I	25	46	23.1	D	44.8	D		51.1	E		49.4	D		53.4	D	
	SB	I	40	33	32.3	C	32.1	C		30.3	B		31.0	B		33.5	C	
Decoro St to Nobel Dr	NB	I	57	29	23.5	D	30.8	D		34.9	E		31.1	C		34.0	D	
	SB	I	18	26	26.8	D	34.9	**E**		23.9	C		23.5	C		27.0	D	
Nobel Dr to Esplanade Ct	NB	I	26	42	17.4	**E**	84.6	**F**		83.5	F		69.7	**F**		120.5	**F**	
	SB	I	32	46	15.9	**F**	45.0	**E**		44.5	E		53.2	**F**		49.0	**F**	
Esplanade Ct to La Jolla Village Dr	NB	I	75	86	7.8	**F**	81.8	**F**		81.5	F		88.4	**F**		89.0	**F**	
	SB	I	48	37	18.0	**E**	43.9	**F**		43.5	F		44.2	**F**		46.3	**F**	
La Jolla Village Dr to Executive Sq	NB	I	12	20	18.9	**E**	29.4	**F**		29.3	F		32.1	**F**		30.6	**F**	
	SB	I	59	52	7.1	**F**	49.2	**F**		49.6	F		51.9	**F**		51.6	**F**	
Executive Square to Executive Dr	NB	I	43	15	18.0	**E**	16.8	**E**		16.8	E		17.4	**E**		17.3	**E**	
	SB	I	9	17	16.4	**E**	29.3	**F**		29.2	F		28.6	**F**		30.5	**F**	
Executive Dr to Eastgate Mall	NB	I	17	25	23.8	D	19.9	C		19.9	C		20.6	B		20.6	B	
	SB	I	16	20	29.3	C	21.2	C		21.3	C		21.5	C		21.5	C	
Eastgate Mall to Regents Rd	NB	I	34	48	26.0	D	48.3	D		48.3	D		45.4	C		45.8	C	
	SB	I	29	44	28.8	C	57.5	D		57.4	D		58.4	D		59.1	D	
Regents Rd to Campus Point Dr	NB	I	13	26	21.5	D	34.4	**E**		34.4	E		34.3	**E**		34.1	**E**	
	SB	I	13	21	26.8	D	22.4	D		22.4	D		21.7	D		21.3	D	
Campus Point Dr to Scripps Hospital	NB	I	16	34	22.9	D	46.9	**E**		46.8	E		47.6	**E**		47.6	**E**	
	SB	I	17	38	20.2	**E**	41.9	**E**		41.9	E		41.3	**E**		41.5	**E**	
Scripps Hospital to I-5 NB Ramps	NB	I	49	61	19.2	**E**	62.9	**E**		62.6	E		63.2	D		63.0	D	
	SB	I	40	46	25.6	D	64.6	**E**		64.7	E		64.8	**E**		65.0	**E**	
I-5 NB Ramps to I-5 SB Ramps	NB	I	26	26	15.0	**F**	12.8	C		13.2	C		12.9	B		13.2	B	
	SB	I	13	13	30.5	C	21.6	**E**		21.8	E		21.9	**E**		22.1	**E**	
I-5 SB Ramps to Science Center Dr	NB	I	29	37	30.7	C	37.2	C		37.3	C		37.2	B		37.1	B	
	SB	I	67	56	20.0	**E**	57.1	**E**		57.6	E		57.0	**E**		57.9	**E**	
Science Center Dr to John Hopkins Dr	NB	I	49	53	24.7	D	65.0	**E**		65.1	E		81.7	**E**		80.2	**E**	
	SB	I	28	39	32.9	C	39.4	C		39.4	C		40.3	C		40.2	C	
John Hopkins Drive to N. Torrey Pines Rd	NB	I	9	10	32.4	C	11.6	C		11.7	C		11.7	C		12.8	C	
	SB	I	12	15	21.6	D	18.9	**E**		18.7	E		18.4	**E**		17.1	**E**	
Total	*NB*	*I*	*617*	*705*	*22.8*	*D*	*779.4*	**E**	**Yes**	*781.9*	*E*	**Yes**	*797.1*	**E**	**Yes**	*855.5*	**E**	**Yes**
	SB	*I*	*579*	*630*	*24.9*	*D*	*716.4*	*D*	**No**	*704.7*	*D*	**No**	*724.7*	*D*	**No**	*732.6*	*D*	**No**

Notes: (a) Travel time in miles per hour (mph).

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PM Peak-Hour Arterial Segment Analysis Summary Genesee Avenue

ROADWAY SEGMENT	DIRECTION	URBAN STREET CLASS	EXISTING				HORIZON YEAR											
							Alt A Regents Bridge 6-lane Genesee			Alt B Regents Bridge 4-lane Genesee			Alt C No Bridge 6-lane Genesee			Alt D No Bridge 4-lane Genesee		
			TRAVEL TIME (S)		SIMULATION		SIMULATION			SIMULATION			SIMULATION			SIMULATION		
			FIELD	SIMULATION	SPEED (a)	LOS (b)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)
Genesee Ave																		
SR-52 EB Ramps to Governor Dr	NB	I	110	144	19.3	**E**	109.5	D		135.0	E		113.7	D		119.2	D	
	SB	I	60	80	35.0	B	76.5	B		76.2	B		77.7	B		76.5	B	
Governor Dr to Centurion Sq	NB	I	44	51	39.5	B	48.0	B		50.9	B		51.2	B		54.7	B	
	SB	I	214	106	18.8	**E**	80.1	D		152.5	F		216.6	**F**		167.3	**F**	
Centurion Sq to Decoro St	NB	I	43	44	24.2	D	36.3	C		50.7	E		35.9	C		39.4	D	
	SB	I	88	46	23.3	D	37.7	C		49.8	D		55.9	**E**		161.3	**F**	
Decoro St to Nobel Dr	NB	I	20	46	14.8	**F**	33.4	**E**		35.6	E		28.1	D		32.1	D	
	SB	I	70	142	4.9	**F**	99.4	**F**		253.4	F		265.0	**F**		483.0	**F**	
Nobel Dr to Esplanade Ct	NB	I	17	61	12.1	**F**	102.2	**F**		102.9	F		98.3	**F**		149.1	**F**	
	SB	I	100	37	19.9	**E**	75.4	**F**		71.0	F		142.7	**F**		121.1	**F**	
Esplanade Ct to La Jolla Village Dr	NB	I	86	76	8.8	**F**	78.2	**F**		78.2	F		77.9	**F**		76.6	**F**	
	SB	I	35	37	18.1	**E**	38.6	**E**		38.5	E		40.2	**E**		42.5	**F**	
La Jolla Village Dr to Executive Sq	NB	I	29	19	20.0	**E**	18.9	**E**		19.0	E		18.3	**E**		18.3	**E**	
	SB	I	88	51	7.3	**F**	78.4	**F**		76.6	F		115.3	**F**		117.2	**F**	
Executive Square to Executive Dr	NB	I	37	20	13.8	**F**	16.7	**E**		16.6	E		16.8	**E**		16.6	**E**	
	SB	I	71	25	11.0	**F**	53.7	**F**		51.0	F		37.8	**F**		37.9	**F**	
Executive Dr to Eastgate Mall	NB	I	15	49	12.2	**F**	51.4	**F**		51.4	F		50.9	**F**		51.4	**F**	
	SB	I	126	35	16.7	**E**	49.0	**F**		48.8	F		51.5	**F**		51.9	**F**	
Eastgate Mall to Regents Rd	NB	I	37	53	23.8	D	49.4	D		49.2	D		49.5	D		49.0	D	
	SB	I	42	42	30.2	C	46.5	C		46.5	C		46.8	D		46.7	D	
Regents Rd to Campus Point Dr	NB	I	15	27	20.8	**E**	39.4	**F**		39.6	F		38.4	**F**		38.3	**F**	
	SB	I	16	24	23.0	D	42.2	**F**		42.2	F		42.2	**F**		42.2	**F**	
Campus Point Dr to Scripps Hospital	NB	I	21	27	28.5	C	27.8	C		27.9	C		27.9	C		28.0	C	
	SB	I	45	58	13.1	**F**	62.5	**F**		61.8	F		57.6	**F**		56.2	**F**	
Scripps Hospital to I-5 NB Ramps	NB	I	77	61	19.1	**E**	63.3	**E**		63.2	E		63.6	**E**		63.5	**E**	
	SB	I	33	49	23.9	D	59.5	**E**		59.3	E		60.1	**E**		60.6	**E**	
I-5 NB Ramps to I-5 SB Ramps	NB	I	12	14	28.5	C	15.8	D		15.9	D		16.0	D		16.9	D	
	SB	I	13	11	34.2	B	16.7	D		16.8	D		16.8	D		17.1	D	
I-5 SB Ramps to Science Center Dr	NB	I	33	41	27.7	C	43.4	D		43.4	D		43.3	D		43.3	D	
	SB	I	137	95	11.9	**F**	76.2	**F**		76.1	F		76.0	**F**		75.3	**F**	
Science Center Dr to John Hopkins Dr	NB	I	50	55	23.6	D	65.0	**E**		65.0	E		64.9	**E**		64.9	**E**	
	SB	I	70	37	35.1	B	42.0	C		41.9	C		41.6	C		41.0	C	
John Hopkins Drive to N. Torrey Pines Rd	NB	I	9	13	25.1	D	12.7	D		12.7	D		12.7	D		12.4	D	
	SB	I	8	28	11.6	**F**	29.9	**F**		29.8	F		29.2	**F**		29.9	**F**	
Total	*NB*	*I*	*655*	*800*	*20.0*	**E**	*811.4*	**E**	**No**	*857.2*	*E*	**No**	*807.4*	**E**	**No**	*873.7*	**E**	**No**
	SB	*I*	*1216*	*875*	*17.9*	**E**	*964.3*	**E**	**No**	*1192.2*	*F*	**No**	*1373.0*	**F**	**No**	*1627.7*	**F**	**No**

Notes: (a) Travel time in miles per hour (mph).

(b) The arterial LOS is based on average through-vehicle travel speed for the segment or for the entire street under consideration and is influenced both by the number of signals per mile and by the intersection control delay.

(c) A significant impact resulted in a change from LOS D or better to LOS E or LOS F, or a decrease of speeds of more than 1.0 mph at LOS E and LOS F.

AM Peak-Hour Arterial Segment Analysis Summary Genesee Avenue

ROADWAY SEGMENT	DIRECTION	URBAN STREET CLASS	EXISTING				HORIZON YEAR WITH RECOMMENDED MITIGATIONS											
							Alt A Regents Bridge 6-lane Genesee			Alt B Regents Bridge 4-lane Genesee			Alt C No Bridge 6-lane Genesee			Alt D No Bridge 4-lane Genesee		
			TRAVEL TIME (S)		SIMULATION		SIMULATION			SIMULATION			SIMULATION			SIMULATION		
			FIELD	SIMULATION	SPEED (a)	LOS (b)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)
Genesee Ave																		
SR-52 EB Ramps to Governor Dr	NB	I	217	140	19.9	**E**	34.3	B		34.7	B		34.2	B		34.6	B	
	SB	I	68	67	41.4	B	37.5	C		37.5	C		37.6	C		38.2	C	
Governor Dr to Centurion Sq	NB	I	65	91	22.1	D	40.0	B		87.1	E		121.0	**F**		119.7	**F**	
	SB	I	99	82	24.6	D	63.7	D		68.5	D		66.2	D		70.2	D	
Centurion Sq to Decoro St	NB	I	58	42	25.3	D	71.4	C		92.6	D		136.6	**F**		294.8	**F**	
	SB	I	30	39	27.3	C	44.6	A		76.6	D		113.7	**E**		112.9	**E**	
Decoro St to Nobel Dr	NB	I	43	40	17.2	**E**	40.3	D		41.5	D		48.8	D		118.8	**F**	
	SB	I	59	37	18.7	**E**	35.7	C		37.3	C		35.7	C		36.7	C	
Nobel Dr to Esplanade Ct	NB	I	21	35	21.1	D	41.5	**E**		43.3	F		49.4	**F**		182.2	**F**	
	SB	I	40	41	18.0	**E**	37.3	**E**		34.3	E		39.6	**E**		39.5	**E**	
Esplanade Ct to La Jolla Village Dr	NB	I	29	45	15.0	**F**	47.0	**F**		57.8	F		47.1	**F**		80.8	**F**	
	SB	I	47	25	26.7	D	58.6	**F**		57.2	F		60.0	**F**		62.1	**F**	
La Jolla Village Dr to Executive Sq	NB	I	15	17	22.2	D	216.2	**F**		213.9	F		273.0	**F**		273.4	**F**	
	SB	I	17	45	8.2	**F**	22.2	C		22.3	C		21.6	C		22.4	C	
Executive Square to Executive Dr	NB	I	8	19	14.4	**F**	18.1	**E**		18.2	E		20.4	**F**		20.4	**F**	
	SB	I	6	11	25.2	D	70.5	**F**		70.5	F		70.3	**F**		70.4	**F**	
Executive Dr to Eastgate Mall	NB	I	57	42	14.0	**F**	30.4	**F**		30.0	F		30.7	**F**		30.4	**F**	
	SB	I	13	23	25.9	D	13.1	D		13.3	D		13.2	D		13.3	D	
Eastgate Mall to Regents Rd	NB	I	38	49	25.6	D	55.8	**F**		53.4	F		56.1	**F**		57.5	**F**	
	SB	I	30	57	22.1	D	22.0	D		22.0	D		22.3	D		22.3	D	
Regents Rd to Campus Point Dr	NB	I	13	32	17.6	**E**	50.4	D		50.7	D		47.6	D		47.8	D	
	SB	I	14	47	11.8	**F**	81.9	**F**		81.2	F		84.8	**F**		85.2	**F**	
Campus Point Dr to Scripps Hospital	NB	I	16	24	32.3	C	47.4	**F**		47.3	F		48.3	**F**		48.1	**F**	
	SB	I	56	32	24.0	D	46.8	**F**		47.4	F		43.2	**F**		43.1	**F**	
Scripps Hospital to I-5 NB Ramps	NB	I	140	61	19.3	**E**	23.3	C		23.3	C		23.2	C		23.2	C	
	SB	I	32	51	23.3	D	57.0	**F**		56.7	F		55.3	**F**		55.6	**F**	
I-5 NB Ramps to I-5 SB Ramps	NB	I	26	110	3.5	**F**	69.2	**E**		69.4	E		68.7	**E**		68.8	**E**	
	SB	I	39	28	14.0	**F**	62.9	**E**		62.3	E		62.8	**E**		62.7	**E**	
I-5 SB Ramps to Science Center Dr	NB	I	24	42	27.0	D	52.1	**F**		52.0	F		52.7	**F**		52.8	**F**	
	SB	I	38	59	19.3	**E**	67.6	**F**		71.6	F		68.5	**F**		67.3	**F**	
Science Center Dr to John Hopkins Dr	NB	I	38	46	28.5	C	48.0	D		48.0	D		48.0	D		48.0	D	
	SB	I	30	34	38.1	B	54.8	**E**		55.0	E		55.0	**E**		55.3	**E**	
John Hopkins Drive to N. Torrey Pines Rd	NB	I	13	11	29.1	C	52.2	D		52.2	D		52.1	D		52.0	D	
	SB	I	8	14	23.6	D	34.5	B		34.4	D		34.4	B		34.3	B	
Total	*NB*	*I*	*821*	*845*	*19.0*	**E**	*950.4*	**E**	**No**	*1028.2*	*F*	**No**	*1171.1*	**F**	**No**	*1566.5*	**F**	**No**
	SB	*I*	*626*	*677*	*23.3*	*D*	*823.8*	**E**	**Yes**	*861.1*	*E*	**Yes**	*897.4*	**E**	**Yes**	*904.4*	**E**	**Yes**

Notes: (a) Travel time in miles per hour (mph).

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(c) A significant impact resulted in a change from LOS D or better to LOS E or LOS F, or a decrease of speeds of more than 1.0 mph at LOS E and LOS F.

MID Peak-Hour Arterial Segment Analysis Summary Genesee Avenue

ROADWAY SEGMENT	DIRECTION	URBAN STREET CLASS	EXISTING				HORIZON YEAR WITH RECOMMENDED MITIGATIONS											
							Alt A Regents Bridge 6-lane Genesee			Alt B Regents Bridge 4-lane Genesee			Alt C No Bridge 6-lane Genesee			Alt D No Bridge 4-lane Genesee		
			TRAVEL TIME (S)		SIMULATION		SIMULATION			SIMULATION			SIMULATION			SIMULATION		
			FIELD	SIMULATION	SPEED (a)	LOS (b)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)
Genesee Ave																		
SR-52 EB Ramps to Governor Dr	NB	I	85	93	30.0	C	35.6	B		35.8	C		35.3	B		35.6	B	
	SB	I	62	68	41.4	B	37.7	C		37.7	C		37.7	C		38.3	C	
Governor Dr to Centurion Sq	NB	I	52	55	36.8	B	70.2	D		69.1	D		82.5	**E**		77.3	**E**	
	SB	I	76	74	27.0	D	51.8	C		54.0	C		53.6	C		54.7	C	
Centurion Sq to Decoro St	NB	I	25	46	23.1	D	60.0	C		51.9	B		51.9	B		53.3	B	
	SB	I	40	33	32.3	C	70.3	C		65.2	C		74.2	C		76.0	D	
Decoro St to Nobel Dr	NB	I	57	29	23.5	D	43.8	D		47.2	D		48.9	D		52.0	**E**	
	SB	I	18	26	26.8	D	32.1	C		30.3	B		30.8	B		32.8	C	
Nobel Dr to Esplanade Ct	NB	I	26	42	17.4	**E**	31.0	D		34.6	E		30.5	D		32.6	D	
	SB	I	32	46	15.9	**F**	34.9	**E**		22.4	C		23.4	C		26.3	D	
Esplanade Ct to La Jolla Village Dr	NB	I	75	86	7.8	**F**	84.5	**F**		82.8	F		68.4	**F**		119.2	**F**	
	SB	I	48	37	18.0	**E**	45.0	**E**		44.5	E		53.2	**F**		49.0	**F**	
La Jolla Village Dr to Executive Sq	NB	I	12	20	18.9	**E**	81.8	**F**		81.5	F		87.5	**F**		88.1	**F**	
	SB	I	59	52	7.1	**F**	43.9	**F**		43.5	F		44.2	**F**		46.3	**F**	
Executive Square to Executive Dr	NB	I	43	15	18.0	**E**	29.4	**F**		29.3	F		31.6	**F**		30.1	**F**	
	SB	I	9	17	16.4	**E**	49.2	**F**		49.6	F		51.9	**F**		51.6	**F**	
Executive Dr to Eastgate Mall	NB	I	17	25	23.8	D	16.8	**E**		16.8	E		17.0	**E**		16.9	**E**	
	SB	I	16	20	29.3	C	29.3	**F**		29.2	F		28.6	**F**		30.5	**F**	
Eastgate Mall to Regents Rd	NB	I	34	48	26.0	D	19.9	C		19.9	C		19.8	C		19.8	C	
	SB	I	29	44	28.8	C	21.2	C		21.3	C		21.5	C		21.5	C	
Regents Rd to Campus Point Dr	NB	I	13	26	21.5	D	48.3	D		48.3	D		45.8	C		46.2	C	
	SB	I	13	21	26.8	D	57.5	D		57.4	D		58.4	D		58.5	D	
Campus Point Dr to Scripps Hospital	NB	I	16	34	22.9	D	34.4	**E**		34.4	E		33.5	**E**		33.3	**E**	
	SB	I	17	38	20.2	**E**	22.4	D		22.4	D		21.7	D		21.8	D	
Scripps Hospital to I-5 NB Ramps	NB	I	49	61	19.2	**E**	46.9	**E**		46.8	E		46.6	**E**		46.6	**E**	
	SB	I	40	46	25.6	D	41.9	**E**		41.9	E		41.3	**E**		41.5	**E**	
I-5 NB Ramps to I-5 SB Ramps	NB	I	26	26	15.0	**F**	62.9	**E**		62.6	E		63.2	**E**		63.0	**E**	
	SB	I	13	13	30.5	C	64.6	**E**		64.7	E		64.8	**E**		65.0	**E**	
I-5 SB Ramps to Science Center Dr	NB	I	29	37	30.7	C	12.8	C		13.2	C		12.9	C		13.2	C	
	SB	I	67	56	20.0	**E**	21.6	**E**		21.8	E		22.0	**E**		22.1	**E**	
Science Center Dr to John Hopkins Dr	NB	I	49	53	24.7	D	37.2	C		37.3	C		37.2	C		37.1	C	
	SB	I	28	39	32.9	C	57.1	**E**		57.6	E		57.7	**E**		57.9	**E**	
John Hopkins Drive to N. Torrey Pines Rd	NB	I	9	10	32.4	C	67.0	**E**		67.1	E		65.4	**E**		64.4	**E**	
	SB	I	12	15	21.6	D	39.4	C		39.4	C		39.4	C		40.2	C	
Total	*NB*	*I*	*617*	*705*	*22.8*	*D*	*792.6*	**E**	**Yes**	*789.0*	*E*	**Yes**	*788.0*	**E**	**Yes**	*838.9*	**E**	**Yes**
	SB	*I*	*579*	*630*	*24.9*	*D*	*738.8*	*D*	**No**	*721.8*	*D*	**No**	*742.8*	*D*	**No**	*751.1*	*D*	**No**

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PM Peak-Hour Arterial Segment Analysis Summary Genesee Avenue

ROADWAY SEGMENT	DIRECTION	URBAN STREET CLASS	EXISTING				HORIZON YEAR WITH RECOMMENDED MITIGATIONS											
							Alt A Regents Bridge 6-lane Genesee			Alt B Regents Bridge 4-lane Genesee			Alt C No Bridge 6-lane Genesee			Alt D No Bridge 4-lane Genesee		
			TRAVEL TIME (S)		SIMULATION		SIMULATION			SIMULATION			SIMULATION			SIMULATION		
			FIELD	SIMULATION	SPEED (a)	LOS (b)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)
Genesee Ave																		
SR-52 EB Ramps to Governor Dr	NB	I	110	144	19.3	**E**	35.8	C		35.5	B		34.6	B		34.9	B	
	SB	I	60	80	35.0	B	47.1	D		46.8	D		48.3	D		47.1	D	
Governor Dr to Centurion Sq	NB	I	44	51	39.5	B	83.6	**E**		79.0	E		131.6	**F**		130.1	**F**	
	SB	I	214	106	18.8	**E**	76.6	**E**		69.4	D		79.2	**E**		69.2	D	
Centurion Sq to Decoro St	NB	I	43	44	24.2	D	50.0	B		50.9	B		50.9	B		54.7	B	
	SB	I	88	46	23.3	D	184.7	**F**		79.4	D		70.6	C		60.7	C	
Decoro St to Nobel Dr	NB	I	20	46	14.8	**F**	45.4	D		42.5	D		39.3	C		39.2	C	
	SB	I	70	142	4.9	**F**	38.0	C		49.1	D		48.2	D		159.2	**F**	
Nobel Dr to Esplanade Ct	NB	I	17	61	12.1	**F**	35.9	**E**		41.0	E		39.2	**E**		43.0	**F**	
	SB	I	100	37	19.9	**E**	84.6	**F**		69.1	F		180.4	**F**		428.3	**F**	
Esplanade Ct to La Jolla Village Dr	NB	I	86	76	8.8	**F**	98.7	**F**		126.6	F		81.2	**F**		143.5	**F**	
	SB	I	35	37	18.1	**E**	75.4	**F**		79.1	F		142.7	**F**		121.1	**F**	
La Jolla Village Dr to Executive Sq	NB	I	29	19	20.0	**E**	78.2	**F**		78.2	F		77.7	**F**		76.6	**F**	
	SB	I	88	51	7.3	**F**	38.6	**E**		38.5	E		40.2	**E**		42.5	**F**	
Executive Square to Executive Dr	NB	I	37	20	13.8	**F**	18.9	**E**		19.0	E		18.3	**E**		18.3	**E**	
	SB	I	71	25	11.0	**F**	78.4	**F**		76.6	F		115.3	**F**		117.2	**F**	
Executive Dr to Eastgate Mall	NB	I	15	49	12.2	**F**	16.7	**E**		16.6	E		16.8	**E**		16.6	**E**	
	SB	I	126	35	16.7	**E**	53.7	**F**		51.0	F		37.8	**F**		37.9	**F**	
Eastgate Mall to Regents Rd	NB	I	37	53	23.8	D	51.4	**F**		51.4	F		50.9	**F**		51.4	**F**	
	SB	I	42	42	30.2	C	49.0	**F**		48.8	F		51.5	**F**		51.9	**F**	
Regents Rd to Campus Point Dr	NB	I	15	27	20.8	**E**	49.4	D		49.2	D		49.5	D		49.0	D	
	SB	I	16	24	23.0	D	46.5	C		46.5	C		46.8	D		46.7	D	
Campus Point Dr to Scripps Hospital	NB	I	21	27	28.5	C	39.4	**F**		39.6	F		38.4	**F**		38.3	**F**	
	SB	I	45	58	13.1	**F**	42.2	**F**		42.2	F		42.2	**F**		42.2	**F**	
Scripps Hospital to I-5 NB Ramps	NB	I	77	61	19.1	**E**	27.8	C		27.9	C		27.9	C		28.0	C	
	SB	I	33	49	23.9	D	62.5	**F**		61.8	F		57.6	**F**		56.2	**F**	
I-5 NB Ramps to I-5 SB Ramps	NB	I	12	14	28.5	C	63.3	**E**		63.2	E		63.6	**E**		63.5	**E**	
	SB	I	13	11	34.2	B	59.5	**E**		59.3	E		60.1	**E**		60.6	**E**	
I-5 SB Ramps to Science Center Dr	NB	I	33	41	27.7	C	15.8	D		15.9	D		16.0	D		16.9	D	
	SB	I	137	95	11.9	**F**	16.7	D		16.8	D		16.8	D		17.1	D	
Science Center Dr to John Hopkins Dr	NB	I	50	55	23.6	D	43.4	D		43.4	D		43.3	D		43.3	D	
	SB	I	70	37	35.1	B	76.2	**F**		76.1	F		76.0	**F**		75.3	**F**	
John Hopkins Drive to N. Torrey Pines Rd	NB	I	9	13	25.1	D	65.7	**E**		65.7	E		65.6	**E**		65.6	**E**	
	SB	I	8	28	11.6	**F**	42.0	C		41.9	C		41.6	C		41.0	C	
Total	*NB*	*I*	*655*	*800*	*20.0*	**E**	*832.1*	*D*	**No**	*858.3*	*D*	**No**	*857.5*	*D*	**No**	*925.3*	*D*	**No**
	SB	*I*	*1216*	*875*	*17.9*	**E**	*1101.6*	*D*	**No**	*982.2*	*D*	**No**	*1184.5*	*D*	**No**	*1504.1*	*D*	**No**

Notes: (a) Travel time in miles per hour (mph).

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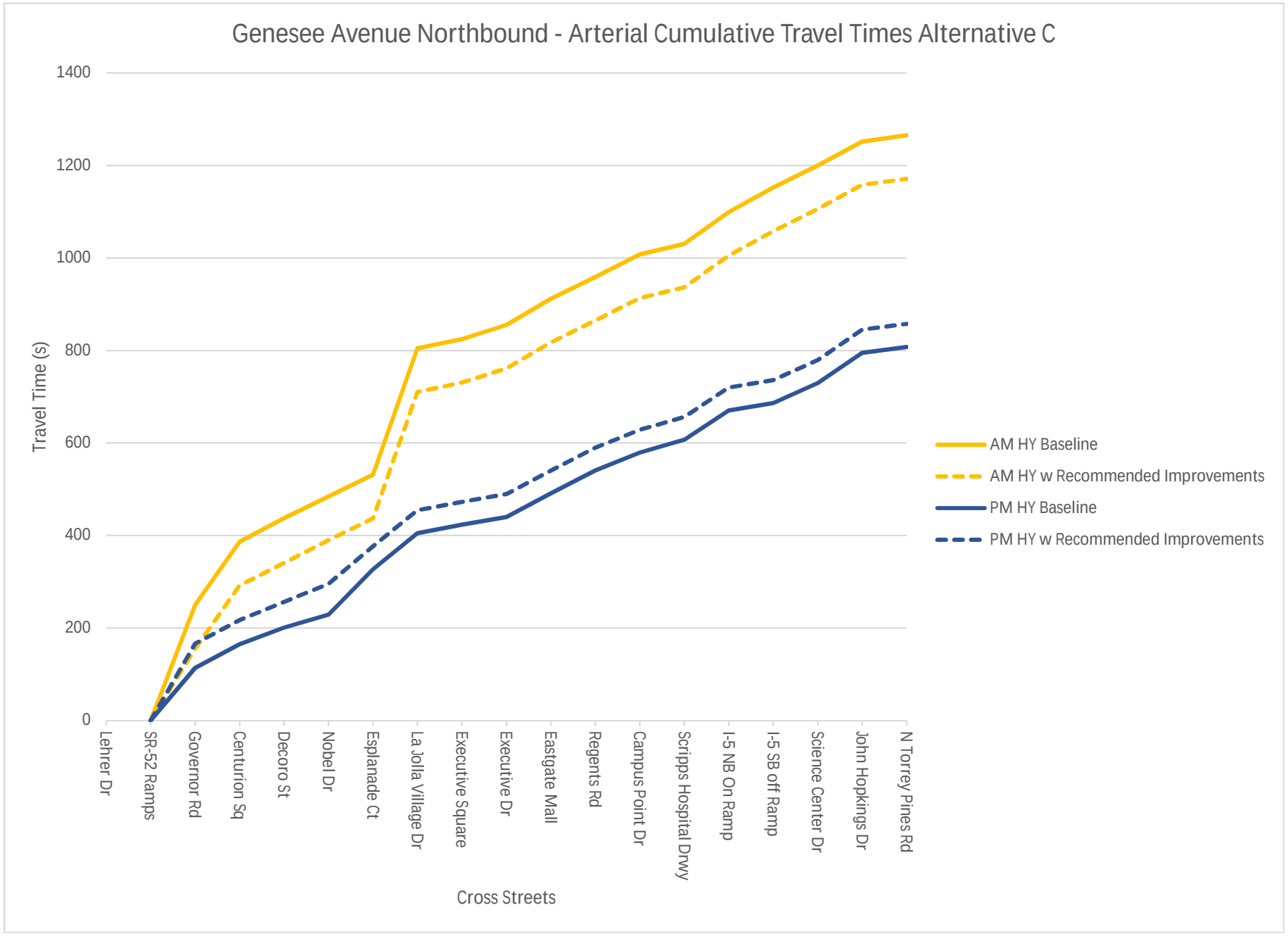
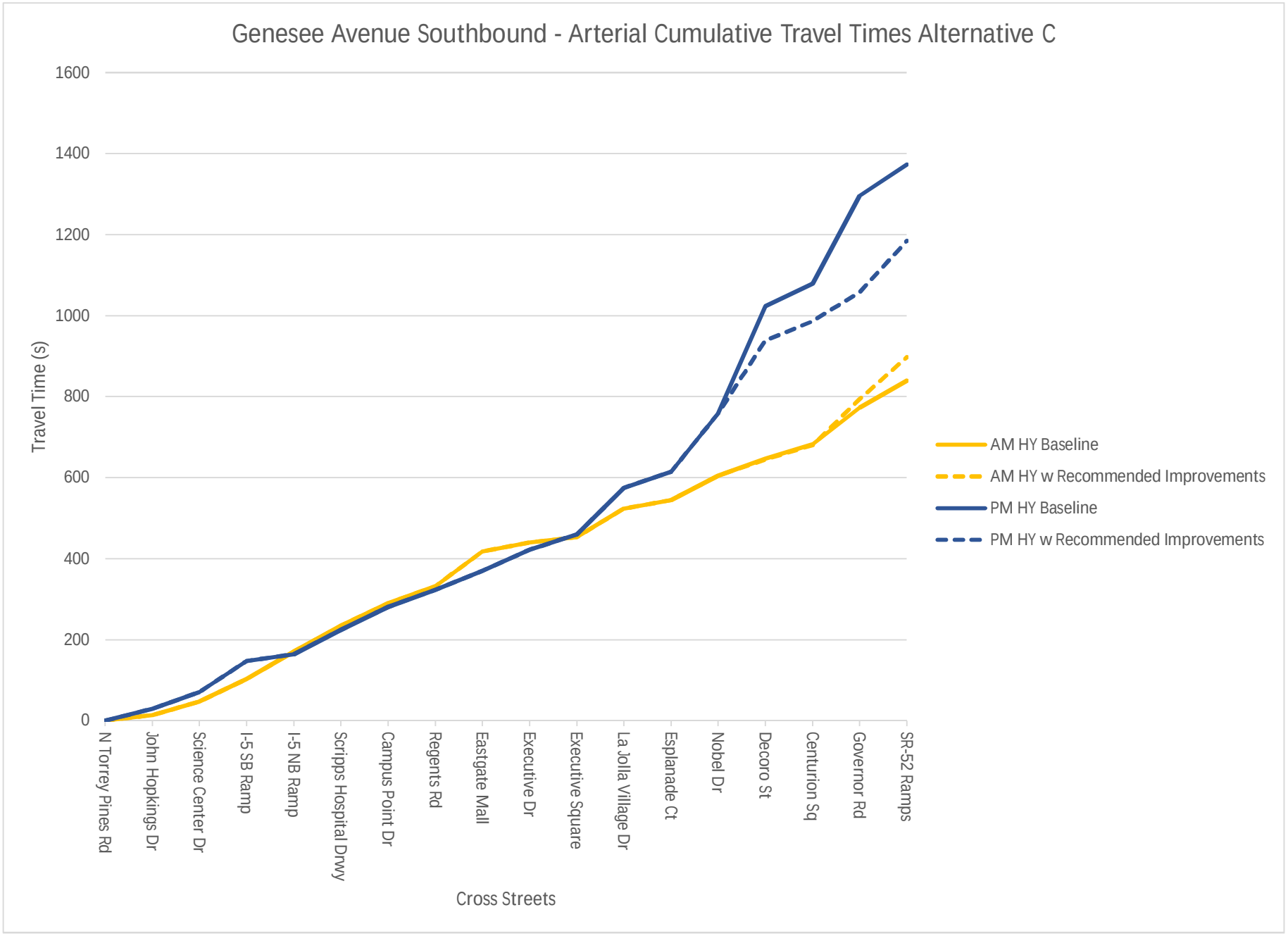
(c) A significant impact resulted in a change from LOS D or better to LOS E or LOS F, or a decrease of speeds of more than 1.0 mph at LOS E and LOS F.


Genesee Avenue Northbound - Arterial Cumulative Travel Times Alternative C
Travel Time (s)
1400
1200
1000
800
600
400
200
0
Lehrer Dr
SR-52 Ramps
Governor Rd
Centurion Sq
Decoro St
Nobel Dr
Esplanade Ct
La Jolla Village Dr
Executive Square
Executive Dr
Eastgate Mall
Regents Rd
Campus Point Dr
Scripps Hospital Drwy
I-5 NB On Ramp
I-5 SB off Ramp
Science Center Dr
John Hopkings Dr
N Torrey Pines Rd
Cross Streets
AM HY Baseline
AM HY w Recommended Improvements
PM HY Baseline
PM HY w Recommended Improvements


Genesee Avenue Southbound - Arterial Cumulative Travel Times Alternative C
Travel Time (s)
1600
1400
1200
1000
800
600
400
200
0
N Torrey Pines Rd
John Hopkings Dr
Science Center Dr
I-5 SB Ramp
I-5 NB Ramp
Scripps Hospital Drwy
Campus Point Dr
Regents Rd
Eastgate Mall
Executive Dr
Executive Square
La Jolla Village Dr
Esplanade Ct
Nobel Dr
Decoro St
Centurion Sq
Governor Rd
SR-52 Ramps
Cross Streets
AM HY Baseline
AM HY w Recommended Improvements
PM HY Baseline
PM HY w Recommended Improvements

AM Peak-Hour Arterial Segment Analysis Summary La Jolla Village Drive

ROADWAY SEGMENT	DIRECTION	URBAN STREET CLASS	EXISTING				HORIZON YEAR											
							Alt A Regents Bridge 6-lane Genesee			Alt B Regents Bridge 4-lane Genesee			Alt C No Bridge 6-lane Genesee			Alt D No Bridge 4-lane Genesee		
			TRAVEL TIME (S)		SIMULATION		SIMULATION			SIMULATION			SIMULATION			SIMULATION		
			FIELD	SIMULATION	SPEED (a)	LOS (b)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)
La Jolla Village Drive																		
Torrey Pines Rd to La Jolla Scenic Dr	EB	I	10	27	11.3	**F**	41.8	**F**		41.7	**F**		40.7	**F**		40.4	**F**	
	WB	I	9	14	22.0	D	16.8	**E**		16.9	**E**		15.8	**E**		15.6	**E**	
La Jolla Scenic Dr to Villa La Jolla Dr	EB	I	33	67	23.5	D	90.6	**E**		91.8	**E**		158.0	**F**		95.1	**E**	
	WB	I	47	60	26.4	D	65.2	D		65.3	D		51.8	C		61.9	D	
Villa La Jolla Dr to I-5 SB Off-Ramp	EB	I	28	25	26.6	D	26.8	D		26.8	D		19.9	C		26.6	D	
	WB	I	58	83	8.0	**F**	189.4	**F**		191.8	**F**		192.4	**F**		200.9	**F**	
I-5 SB Off-Ramp to I-5 NB Ramps	EB	I	35	44	14.8	**F**	54.3	**F**		55.0	**F**		46.4	**F**		57.1	**F**	
	WB	I	66	63	10.5	**F**	93.5	**F**		94.5	**F**		94.1	**F**		95.4	**F**	
I-5 NB Ramps to Lebon Dr	EB	I	53	56	17.4	**E**	62.4	**F**		62.7	**F**		63.1	**F**		63.3	**F**	
	WB	I	36	41	24.2	D	42.9	D		43.0	D		43.6	D		43.5	D	
Lebon Dr to Regents Rd	EB	I	29	74	16.1	**E**	92.4	**F**		92.5	**F**		81.4	**F**		82.5	**F**	
	WB	I	29	48	24.8	D	49.8	D		50.0	D		50.7	D		49.7	D	
Regents Rd to Genesee Ave	EB	I	58	89	10.4	**F**	78.0	**F**		78.1	**F**		70.5	**F**		70.8	**F**	
	WB	I	39	48	19.1	**E**	68.2	**F**		67.9	**F**		56.4	**E**		58.7	**F**	
Genesee Ave to Executive Way	EB	I	40	34	28.3	C	44.4	D		44.5	D		47.3	**E**		47.5	**E**	
	WB	I	68	160	6.0	**F**	156.0	**F**		156.8	**F**		132.6	**F**		134.3	**F**	
Executive Way to Towne Center Dr	EB	I	16	20	25.4	D	28.9	**E**		30.4	**E**		32.9	**F**		31.9	**F**	
	WB	I	33	35	14.4	**F**	153.9	**F**		149.5	**F**		139.3	**F**		138.5	**F**	
Towne Center Dr to I-805 SB Ramps	EB	I	62	52	26.9	D	44.5	C		46.9	C		49.8	C		47.3	C	
	WB	I	80	117	11.9	**F**	296.8	**F**		311.5	**F**		313.7	**F**		308.8	**F**	
I-805 SB Ramps to I-805 NB Ramps	EB	I	17	51	14.0	**F**	53.1	**F**		51.8	**F**		50.8	**F**		52.8	**F**	
	WB	I	54	183	3.9	**F**	192.3	**F**		209.1	**F**		239.2	**F**		209.9	**F**	
I-805 NB Ramps to Nobel Dr	EB	I	34	51	26.6	D	58.9	D		58.3	D		60.6	D		59.8	D	
	WB	I	45	50	27.5	C	49.6	C		49.7	C		49.9	C		50.2	C	
Miramar Road																		
Nobel Dr to Eastgate Mall	EB	I	25	35	28.8	C	35.7	C		35.3	C		35.7	C		35.7	C	
	WB	I	21	29	34.5	B	29.5	B		29.1	B		30.3	C		30.2	C	
Eastgate Mall to Miramar Mall	EB	I	16	28	27.2	C	30.9	D		30.3	D		30.8	D		30.8	D	
	WB	I	29	44	17.5	**E**	45.9	**E**		46.7	**E**		46.0	**E**		45.9	**E**	
Miramar Mall to Miramar Place	EB	I	34	34	27.0	C	34.2	D		33.9	D		34.2	D		34.2	D	
	WB	I	19	50	18.0	**E**	63.0	**F**		60.1	**F**		62.7	**F**		63.1	**F**	
Miramar Place to Camino Sante Fe	EB	I	36	41	30.3	C	42.3	C		42.3	C		42.5	C		42.5	C	
	WB	I	30	52	23.7	D	55.5	D		54.0	D		55.4	D		55.4	D	
Total	*EB*	*I*	*526*	*725*	*20.8*	**E**	*819.2*	**E**	**No**	*822.3*	**E**	**No**	*864.6*	**E**	**No**	*818.3*	**E**	**No**
	WB	*I*	*663*	*1074*	*14.0*	**F**	*1568.3*	**F**	**No**	*1595.9*	**F**	**No**	*1573.9*	**F**	**No**	*1562.0*	**F**	**No**

Notes:

Notes: (a) Travel time in miles per hour (mph).

(b) The arterial LOS is based on average through-vehicle travel speed for the segment or for the entire street under consideration and is influenced both by the number of signals per mile and by the intersection control delay.

(c) A significant impact resulted in a change from LOS D or better to LOS E or LOS F, or a decrease of speeds of more than 1.0 mph at LOS E and LOS F.

MID Peak-Hour Arterial Segment Analysis Summary La Jolla Village Drive

ROADWAY SEGMENT	DIRECTION	URBAN STREET CLASS	EXISTING				HORIZON YEAR											
							Alt A Regents Bridge 6-lane Genesee			Alt B Regents Bridge 4-lane Genesee			Alt C No Bridge 6-lane Genesee			Alt D No Bridge 4-lane Genesee		
			TRAVEL TIME (S)		SIMULATION		SIMULATION			SIMULATION			SIMULATION			SIMULATION		
			FIELD	SIMULATION	SPEED (a)	LOS (b)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)
La Jolla Village Drive																		
Torrey Pines Rd to La Jolla Scenic Dr	EB	I	10	15	19.6	**E**	27.8	**F**		27.6	**F**		29.2	**F**		29.1	**F**	
	WB	I	9	14	21.2	D	15.8	**E**		15.8	**E**		16.1	**E**		16.1	**E**	
La Jolla Scenic Dr to Villa La Jolla Dr	EB	I	33	92	15.0	**F**	96.5	**F**		96.5	**F**		97.0	**F**		97.1	**F**	
	WB	I	47	7	25.8	D	9.1	**E**		9.0	D		9.4	**E**		9.2	**E**	
Villa La Jolla Dr to I-5 SB Off-Ramp	EB	I	28	29	22.9	D	28.7	D		28.7	D		28.6	D		28.6	D	
	WB	I	58	51	13.0	**F**	52.9	**F**		52.9	**F**		53.0	**F**		53.2	**F**	
I-5 SB Off-Ramp to I-5 NB Ramps	EB	I	35	29	22.9	D	32.2	**E**		32.6	**E**		32.9	**E**		33.0	**E**	
	WB	I	66	66	10.0	**F**	152.0	**F**		147.5	**F**		156.8	**F**		154.7	**F**	
I-5 NB Ramps to Lebon Dr	EB	I	53	42	23.6	D	46.7	D		47.0	**E**		45.9	D		46.5	D	
	WB	I	36	34	29.1	C	36.2	C		36.3	C		36.1	C		36.1	C	
Lebon Dr to Regents Rd	EB	I	29	65	18.3	**E**	88.7	**F**		89.4	**F**		84.3	**F**		85.9	**F**	
	WB	I	29	38	31.1	C	59.1	**E**		59.7	**E**		61.2	**E**		61.1	**E**	
Regents Rd to Genesee Ave	EB	I	58	79	11.7	**F**	62.8	**F**		62.6	**F**		63.6	**F**		62.7	**F**	
	WB	I	39	48	19.2	**E**	58.2	**F**		58.1	**F**		57.3	**E**		57.5	**E**	
Genesee Ave to Executive Way	EB	I	40	48	19.8	**E**	55.0	**E**		54.9	**E**		55.5	**E**		55.3	**E**	
	WB	I	68	50	18.9	**E**	64.5	**F**		64.3	**F**		63.2	**F**		63.9	**F**	
Executive Way to Towne Center Dr	EB	I	16	23	21.8	D	29.0	**E**		29.6	**E**		31.2	**E**		30.7	**E**	
	WB	I	33	30	16.8	**E**	42.8	**F**		42.6	**F**		41.4	**F**		41.2	**F**	
Towne Center Dr to I-805 SB Ramps	EB	I	62	14	36.0	B	15.0	B		15.0	B		15.0	B		15.0	B	
	WB	I	80	39	22.2	D	41.6	**E**		41.7	**E**		41.6	**E**		41.6	**E**	
Total	*EB*	*I*	*364*	*435*	*18.4*	**E**	*482.4*	**E**	**No**	*483.9*	**E**	**No**	*483.2*	**E**	**No**	*483.9*	**E**	**No**
	WB	*I*	*465*	*377*	*19.0*	**E**	*537.0*	**F**	**No**	*1184.0*	**E**	**No**	*536.1*	**F**	**No**	*534.6*	**F**	**No**

Notes:

Notes: (a) Travel time in miles per hour (mph).

(b) The arterial LOS is based on average through-vehicle travel speed for the segment or for the entire street under consideration and is influenced both by the number of signals per mile and by the intersection control delay.

(c) A significant impact resulted in a change from LOS D or better to LOS E or LOS F, or a decrease of speeds of more than 1.0 mph at LOS E and LOS F.

PM Peak-Hour Arterial Segment Analysis Summary La Jolla Village Drive

ROADWAY SEGMENT	DIRECTION	URBAN STREET CLASS	EXISTING				HORIZON YEAR											
							Alt A Regents Bridge 6-lane Genesee			Alt B Regents Bridge 4-lane Genesee			Alt C No Bridge 6-lane Genesee			Alt D No Bridge 4-lane Genesee		
			TRAVEL TIME (S)		SIMULATION		SIMULATION			SIMULATION			SIMULATION			SIMULATION		
			FIELD	SIMULATION	SPEED (a)	LOS (b)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)
La Jolla Village Drive																		
Torrey Pines Rd to La Jolla Scenic Dr	EB	I	10	34	8.9	**F**	100.2	**F**		99.3	**F**		70.0	**F**		70.0	**F**	
	WB	I	11	21	14.7	**F**	22.2	**F**		22.2	**F**		22.3	**F**		22.3	**F**	
La Jolla Scenic Dr to Villa La Jolla Dr	EB	I	55	447	3.5	**F**	478.5	**F**		479.5	**F**		481.5	**F**		481.5	**F**	
	WB	I	39	46	34.3	B	47.3	C		47.4	C		45.2	B		45.2	B	
Villa La Jolla Dr to I-5 SB Off-Ramp	EB	I	25	24	28.0	C	28.2	D		28.7	D		28.0	D		28.0	D	
	WB	I	20	50	13.3	**F**	46.6	**F**		46.3	**F**		47.1	**F**		47.1	**F**	
I-5 SB Off-Ramp to I-5 NB Ramps	EB	I	13	28	23.9	D	29.0	D		29.0	D		30.6	D		30.6	D	
	WB	I	25	35	18.8	**E**	37.2	**E**		37.5	**E**		35.8	**E**		35.8	**E**	
I-5 NB Ramps to Lebon Dr	EB	I	42	68	14.4	**F**	93.0	**F**		90.4	**F**		95.7	**F**		95.7	**F**	
	WB	I	31	33	29.5	C	36.0	C		36.1	C		37.2	D		37.2	D	
Lebon Dr to Regents Rd	EB	I	73	79	15.0	**F**	174.1	**F**		174.7	**F**		182.7	**F**		182.7	**F**	
	WB	I	48	57	20.8	**E**	46.0	D		46.7	D		46.8	D		46.8	D	
Regents Rd to Genesee Ave	EB	I	27	50	18.5	**E**	51.8	**E**		51.8	**E**		43.7	D		43.7	D	
	WB	I	100	78	11.8	**F**	150.7	**F**		150.3	**F**		147.0	**F**		147.0	**F**	
Genesee Ave to Executive Way	EB	I	55	78	12.2	**F**	146.9	**F**		144.7	**F**		124.3	**F**		124.3	**F**	
	WB	I	38	48	20.0	**E**	79.7	**F**		79.6	**F**		67.5	**F**		67.5	**F**	
Executive Way to Towne Center Dr	EB	I	29	200	2.5	**F**	326.5	**F**		330.4	**F**		320.9	**F**		320.9	**F**	
	WB	I	15	58	8.6	**F**	71.7	**F**		67.2	**F**		50.3	**F**		50.3	**F**	
Towne Center Dr to I-805 SB Ramps	EB	I	29	47	29.2	C	49.5	C		51.0	C		61.0	D		61.0	D	
	WB	I	36	83	16.7	**E**	117.7	**F**		118.6	**F**		113.1	**F**		113.1	**F**	
I-805 SB Ramps to I-805 NB Ramps	EB	I	12	38	19.0	**E**	38.0	**E**		38.2	**E**		38.0	**E**		38.0	**E**	
	WB	I	16	29	24.7	D	34.7	**E**		35.6	**E**		34.2	**E**		34.2	**E**	
I-805 NB Ramps to Nobel Dr	EB	I	45	61	22.2	D	63.6	D		84.2	**E**		96.9	**F**		96.9	**F**	
	WB	I	38	54	25.1	D	54.6	D		54.6	D		55.2	D		55.2	D	
Miramar Road																		
Nobel Dr to Eastgate Mall	EB	I	22	47	21.2	D	43.7	D		43.8	D		43.7	D		43.7	D	
	WB	I	22	31	32.8	C	31.4	C		31.5	C		34.1	C		34.1	C	
Eastgate Mall to Miramar Mall	EB	I	15	27	28.0	C	31.6	D		30.5	D		31.6	D		31.6	D	
	WB	I	61	196	3.9	**F**	79.8	**F**		83.8	**F**		79.8	**F**		79.8	**F**	
Miramar Mall to Miramar Place	EB	I	25	31	29.3	C	32.6	C		32.4	C		32.6	C		32.6	C	
	WB	I	36	41	21.9	D	51.1	**E**		49.2	**E**		50.4	**E**		50.4	**E**	
Miramar Place to Camino Sante Fe	EB	I	69	54	23.0	D	49.8	D		49.7	D		50.4	D		50.4	D	
	WB	I	31	37	33.3	C	43.0	C		41.6	C		43.3	C		43.3	C	
Total	*EB*	*I*	*546*	*1313*	*11.5*	**F**	*1737.0*	**F**	**No**	*1758.3*	**F**	**No**	*1731.6*	**F**	**No**	*1731.6*	**F**	**No**
	WB	*I*	*567*	*897*	*16.8*	**E**	*949.7*	**F**	**No**	*948.2*	**F**	**No**	*909.3*	**E**	**No**	*909.3*	**E**	**No**

Notes:

Notes: (a) Travel time in miles per hour (mph).

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(c) A significant impact resulted in a change from LOS D or better to LOS E or LOS F, or a decrease of speeds of more than 1.0 mph at LOS E and LOS F.

AM Peak-Hour Arterial Segment Analysis Summary La Jolla Village Drive

ROADWAY SEGMENT	DIRECTION	URBAN STREET CLASS	EXISTING				HORIZON YEAR WITH RECOMMENDED MITIGATIONS											
							Alt A Regents Bridge 6-lane Genesee			Alt B Regents Bridge 4-lane Genesee			Alt C No Bridge 6-lane Genesee			Alt D No Bridge 4-lane Genesee		
			TRAVEL TIME (S)		SIMULATION		SIMULATION			SIMULATION			SIMULATION			SIMULATION		
			FIELD	SIMULATION	SPEED (a)	LOS (b)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)
La Jolla Village Drive																		
Torrey Pines Rd to La Jolla Scenic Dr	EB	I	10	27	11.3	**F**	56.1	**F**		55.9	**F**		62.0	**F**		61.7	**F**	
	WB	I	9	14	22.0	D	35.9	**F**		27.7	**F**		28.0	**F**		27.8	**F**	
La Jolla Scenic Dr to Villa La Jolla Dr	EB	I	33	67	23.5	D	89.8	**E**		66.6	D		73.7	D		68.0	D	
	WB	I	47	60	26.4	D	54.3	C		67.9	D		59.2	D		64.5	D	
Villa La Jolla Dr to I-5 SB Off-Ramp	EB	I	28	25	26.6	D	21.3	C		24.3	C		20.0	C		24.0	C	
	WB	I	58	83	8.0	**F**	96.0	**F**		97.7	**F**		95.5	**F**		103.3	**F**	
I-5 SB Off-Ramp to I-5 NB Ramps	EB	I	35	44	14.8	**F**	55.6	**F**		50.8	**F**		43.7	**F**		53.2	**F**	
	WB	I	66	63	10.5	**F**	93.5	**F**		94.5	**F**		94.1	**F**		95.4	**F**	
I-5 NB Ramps to Lebon Dr	EB	I	53	56	17.4	**E**	62.4	**F**		62.7	**F**		63.1	**F**		63.3	**F**	
	WB	I	36	41	24.2	D	42.9	D		43.0	D		43.6	D		43.5	D	
Lebon Dr to Regents Rd	EB	I	29	74	16.1	**E**	92.4	**F**		92.5	**F**		81.4	**F**		82.5	**F**	
	WB	I	29	48	24.8	D	49.8	D		50.0	D		50.7	D		49.7	D	
Regents Rd to Genesee Ave	EB	I	58	89	10.4	**F**	78.0	**F**		78.1	**F**		70.5	**F**		70.8	**F**	
	WB	I	39	48	19.1	**E**	68.2	**F**		67.9	**F**		56.4	**E**		58.7	**F**	
Genesee Ave to Executive Way	EB	I	40	34	28.3	C	44.4	D		44.5	D		47.3	**E**		47.5	**E**	
	WB	I	68	160	6.0	**F**	156.0	**F**		156.8	**F**		132.6	**F**		134.3	**F**	
Executive Way to Towne Center Dr	EB	I	16	20	25.4	D	28.9	**E**		30.4	**E**		32.9	**F**		31.9	**F**	
	WB	I	33	35	14.4	**F**	153.9	**F**		149.5	**F**		139.3	**F**		138.5	**F**	
Towne Center Dr to I-805 SB Ramps	EB	I	62	52	26.9	D	44.5	C		46.9	C		49.8	C		47.3	C	
	WB	I	80	117	11.9	**F**	296.8	**F**		311.5	**F**		313.7	**F**		308.8	**F**	
I-805 SB Ramps to I-805 NB Ramps	EB	I	17	51	14.0	**F**	53.1	**F**		51.8	**F**		50.8	**F**		52.8	**F**	
	WB	I	54	183	3.9	**F**	192.3	**F**		209.1	**F**		239.2	**F**		209.9	**F**	
I-805 NB Ramps to Nobel Dr	EB	I	34	51	26.6	D	58.9	D		58.3	D		60.6	D		59.8	D	
	WB	I	45	50	27.5	C	49.6	C		49.7	C		49.9	C		50.2	C	
Miramar Road																		
Nobel Dr to Eastgate Mall	EB	I	25	35	28.8	C	34.4	C		34.3	C		34.5	C		34.5	C	
	WB	I	21	29	34.5	B	29.5	B		29.1	B		30.3	C		30.2	C	
Eastgate Mall to Miramar Mall	EB	I	16	28	27.2	C	30.9	D		30.3	D		30.8	D		30.8	D	
	WB	I	29	44	17.5	**E**	44.3	**E**		45.4	**E**		44.4	**E**		44.3	**E**	
Miramar Mall to Miramar Place	EB	I	34	34	27.0	C	34.2	D		33.9	D		34.2	D		34.2	D	
	WB	I	19	50	18.0	**E**	63.0	**F**		60.1	**F**		62.7	**F**		63.1	**F**	
Miramar Place to Camino Sante Fe	EB	I	36	41	30.3	C	42.3	C		42.3	C		42.5	C		42.5	C	
	WB	I	30	52	23.7	D	55.5	D		54.0	D		55.4	D		55.4	D	
Total	*EB*	*I*	*526*	*725*	*20.8*	**E**	*827.2*	**E**	**No**	*803.6*	**E**	**No**	*797.8*	**E**	**No**	*804.8*	**E**	**No**
	WB	*I*	*663*	*1074*	*14.0*	**F**	*1481.5*	**F**	**No**	*1513.9*	**F**	**No**	*1495.0*	**F**	**No**	*1477.6*	**F**	**No**

Notes:

Notes: (a) Travel time in miles per hour (mph).

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(c) A significant impact resulted in a change from LOS D or better to LOS E or LOS F, or a decrease of speeds of more than 1.0 mph at LOS E and LOS F.

MID Peak-Hour Arterial Segment Analysis Summary La Jolla Village Drive

ROADWAY SEGMENT	DIRECTION	URBAN STREET CLASS	EXISTING				HORIZON YEAR WITH RECOMMENDED MITIGATIONS											
							Alt A Regents Bridge 6-lane Genesee			Alt B Regents Bridge 4-lane Genesee			Alt C No Bridge 6-lane Genesee			Alt D No Bridge 4-lane Genesee		
			TRAVEL TIME (S)		SIMULATION		SIMULATION			SIMULATION			SIMULATION			SIMULATION		
			FIELD	SIMULATION	SPEED (a)	LOS (b)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)
La Jolla Village Drive																		
Torrey Pines Rd to La Jolla Scenic Dr	EB	I	10	15	19.6	**E**	27.3	**F**		27.0	**F**		29.2	**F**		29.1	**F**	
	WB	I	9	14	21.2	D	26.9	**F**		26.8	**F**		27.1	**F**		27.1	**F**	
La Jolla Scenic Dr to Villa La Jolla Dr	EB	I	33	92	15.0	**F**	249.2	**F**		249.2	**F**		255.1	**F**		256.1	**F**	
	WB	I	47	7	25.8	D	9.1	**E**		9.0	D		9.4	**E**		9.2	**E**	
Villa La Jolla Dr to I-5 SB Off-Ramp	EB	I	28	29	22.9	D	28.7	D		28.7	D		28.6	D		28.6	D	
	WB	I	58	51	13.0	**F**	82.1	**F**		82.2	**F**		82.6	**F**		83.1	**F**	
I-5 SB Off-Ramp to I-5 NB Ramps	EB	I	35	29	22.9	D	32.2	**E**		32.6	**E**		32.9	**E**		33.0	**E**	
	WB	I	66	66	10.0	**F**	152.0	**F**		147.5	**F**		156.8	**F**		154.7	**F**	
I-5 NB Ramps to Lebon Dr	EB	I	53	42	23.6	D	46.7	D		47.0	**E**		45.9	D		46.5	D	
	WB	I	36	34	29.1	C	36.2	C		36.3	C		36.1	C		36.1	C	
Lebon Dr to Regents Rd	EB	I	29	65	18.3	**E**	88.7	**F**		89.4	**F**		84.3	**F**		85.9	**F**	
	WB	I	29	38	31.1	C	59.1	**E**		59.7	**E**		61.2	**E**		61.1	**E**	
Regents Rd to Genesee Ave	EB	I	58	79	11.7	**F**	62.8	**F**		62.6	**F**		63.6	**F**		62.7	**F**	
	WB	I	39	48	19.2	**E**	58.2	**F**		58.1	**F**		57.3	**E**		57.5	**E**	
Genesee Ave to Executive Way	EB	I	40	48	19.8	**E**	55.0	**E**		54.9	**E**		55.5	**E**		55.3	**E**	
	WB	I	68	50	18.9	**E**	64.5	**F**		64.3	**F**		63.2	**F**		63.9	**F**	
Executive Way to Towne Center Dr	EB	I	16	23	21.8	D	29.0	**E**		29.6	**E**		31.2	**E**		30.7	**E**	
	WB	I	33	30	16.8	**E**	42.8	**F**		42.6	**F**		41.4	**F**		41.2	**F**	
Towne Center Dr to I-805 SB Ramps	EB	I	62	14	36.0	B	15.0	B		15.0	B		15.0	B		15.0	B	
	WB	I	80	39	22.2	D	41.6	**E**		41.7	**E**		41.6	**E**		41.6	**E**	
Total	*EB*	*I*	*364*	*435*	*18.4*	**E**	*634.6*	**F**	**No**	*660.3*	**F**	**No**	*641.3*	**F**	**No**	*642.9*	**F**	**No**
	WB	*I*	*465*	*377*	*19.0*	**E**	*572.5*	**F**	**No**	*562.0*	**F**	**No**	*570.2*	**F**	**No**	*569.0*	**F**	**No**

Notes:

Notes: (a) Travel time in miles per hour (mph).

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PM Peak-Hour Arterial Segment Analysis Summary La Jolla Village Drive

ROADWAY SEGMENT	DIRECTION	URBAN STREET CLASS	EXISTING				HORIZON YEAR WITH RECOMMENDED MITIGATIONS											
							Alt A Regents Bridge 6-lane Genesee			Alt B Regents Bridge 4-lane Genesee			Alt C No Bridge 6-lane Genesee			Alt D No Bridge 4-lane Genesee		
			TRAVEL TIME (S)		SIMULATION		SIMULATION			SIMULATION			SIMULATION			SIMULATION		
			FIELD	SIMULATION	SPEED (a)	LOS (b)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)
La Jolla Village Drive																		
Torrey Pines Rd to La Jolla Scenic Dr	EB	I	10	34	8.9	**F**	100.2	**F**		99.3	**F**		70.0	**F**		70.0	**F**	
	WB	I	11	21	14.7	**F**	23.5	**F**		23.5	**F**		23.5	**F**		23.5	**F**	
La Jolla Scenic Dr to Villa La Jolla Dr	EB	I	55	447	3.5	**F**	335.2	**F**		336.0	**F**		340.0	**F**		340.0	**F**	
	WB	I	39	46	34.3	B	47.3	C		47.4	C		45.2	B		45.2	B	
Villa La Jolla Dr to I-5 SB Off-Ramp	EB	I	25	24	28.0	C	20.7	C		20.8	C		24.3	C		24.3	C	
	WB	I	20	50	13.3	**F**	55.5	**F**		55.2	**F**		54.1	**F**		54.1	**F**	
I-5 SB Off-Ramp to I-5 NB Ramps	EB	I	13	28	23.9	D	27.7	D		27.8	D		29.5	D		29.5	D	
	WB	I	25	35	18.8	**E**	37.2	**E**		37.5	**E**		35.8	**E**		35.8	**E**	
I-5 NB Ramps to Lebon Dr	EB	I	42	68	14.4	**F**	93.0	**F**		90.4	**F**		95.7	**F**		95.7	**F**	
	WB	I	31	33	29.5	C	36.0	C		36.1	C		37.2	D		37.2	D	
Lebon Dr to Regents Rd	EB	I	73	79	15.0	**F**	174.1	**F**		174.7	**F**		182.7	**F**		182.7	**F**	
	WB	I	48	57	20.8	**E**	46.0	D		46.7	D		46.8	D		46.8	D	
Regents Rd to Genesee Ave	EB	I	27	50	18.5	**E**	51.8	**E**		51.8	**E**		43.7	D		43.7	D	
	WB	I	100	78	11.8	**F**	150.7	**F**		150.3	**F**		147.0	**F**		147.0	**F**	
Genesee Ave to Executive Way	EB	I	55	78	12.2	**F**	146.9	**F**		144.7	**F**		124.3	**F**		124.3	**F**	
	WB	I	38	48	20.0	**E**	79.7	**F**		79.6	**F**		67.5	**F**		67.5	**F**	
Executive Way to Towne Center Dr	EB	I	29	200	2.5	**F**	326.5	**F**		330.4	**F**		320.9	**F**		320.9	**F**	
	WB	I	15	58	8.6	**F**	71.7	**F**		67.2	**F**		50.3	**F**		50.3	**F**	
Towne Center Dr to I-805 SB Ramps	EB	I	29	47	29.2	C	49.5	C		51.0	C		61.0	D		61.0	D	
	WB	I	36	83	16.7	**E**	117.7	**F**		118.6	**F**		113.1	**F**		113.1	**F**	
I-805 SB Ramps to I-805 NB Ramps	EB	I	12	38	19.0	**E**	38.0	**E**		38.2	**E**		38.0	**E**		38.0	**E**	
	WB	I	16	29	24.7	D	34.7	**E**		35.6	**E**		34.2	**E**		34.2	**E**	
I-805 NB Ramps to Nobel Dr	EB	I	45	61	22.2	D	63.6	D		84.2	**E**		96.9	**F**		96.9	**F**	
	WB	I	38	54	25.1	D	54.6	D		54.6	D		55.2	D		55.2	D	
Miramar Road																		
Nobel Dr to Eastgate Mall	EB	I	22	47	21.2	D	43.7	D		43.8	D		43.2	D		43.2	D	
	WB	I	22	31	32.8	C	31.4	C		31.5	C		34.1	C		34.1	C	
Eastgate Mall to Miramar Mall	EB	I	15	27	28.0	C	31.6	D		30.5	D		31.6	D		31.6	D	
	WB	I	61	196	3.9	**F**	79.8	**F**		83.8	**F**		76.4	**F**		76.4	**F**	
Miramar Mall to Miramar Place	EB	I	25	31	29.3	C	32.6	C		32.4	C		32.6	C		32.6	C	
	WB	I	36	41	21.9	D	51.1	**E**		49.2	**E**		50.4	**E**		50.4	**E**	
Miramar Place to Camino Sante Fe	EB	I	69	54	23.0	D	49.8	D		49.7	D		50.4	D		50.4	D	
	WB	I	31	37	33.3	C	43.0	C		41.6	C		43.3	C		43.3	C	
Total	*EB*	*I*	*546*	*1313*	*11.5*	**F**	*1584.9*	**F**	**No**	*1605.7*	**F**	**No**	*1584.8*	**F**	**No**	*1584.8*	**F**	**No**
	WB	*I*	*567*	*897*	*16.8*	**E**	*959.9*	**F**	**No**	*958.4*	**F**	**No**	*914.1*	**E**	**No**	*914.1*	**E**	**No**

Notes:

Notes: (a) Travel time in miles per hour (mph).

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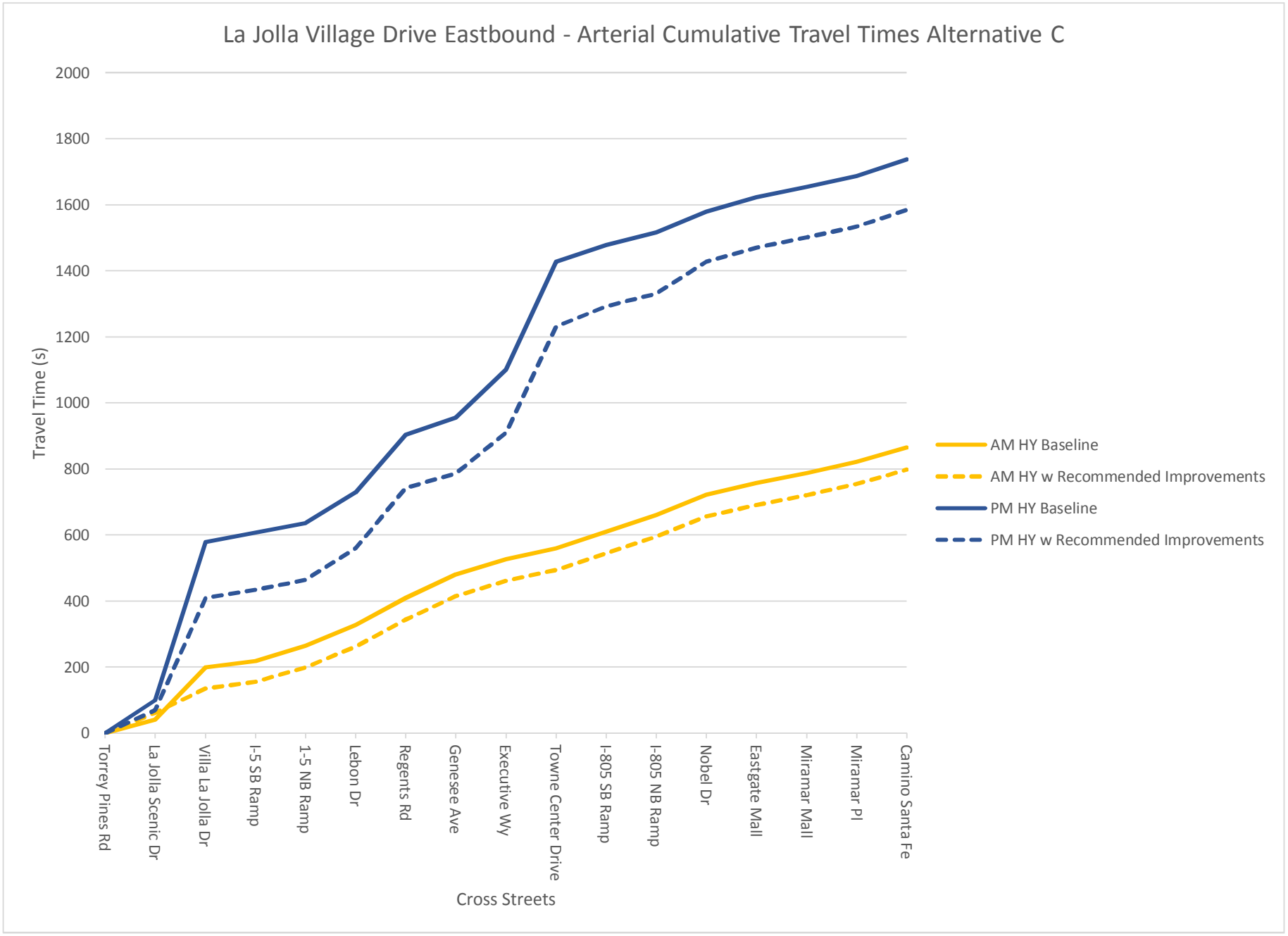
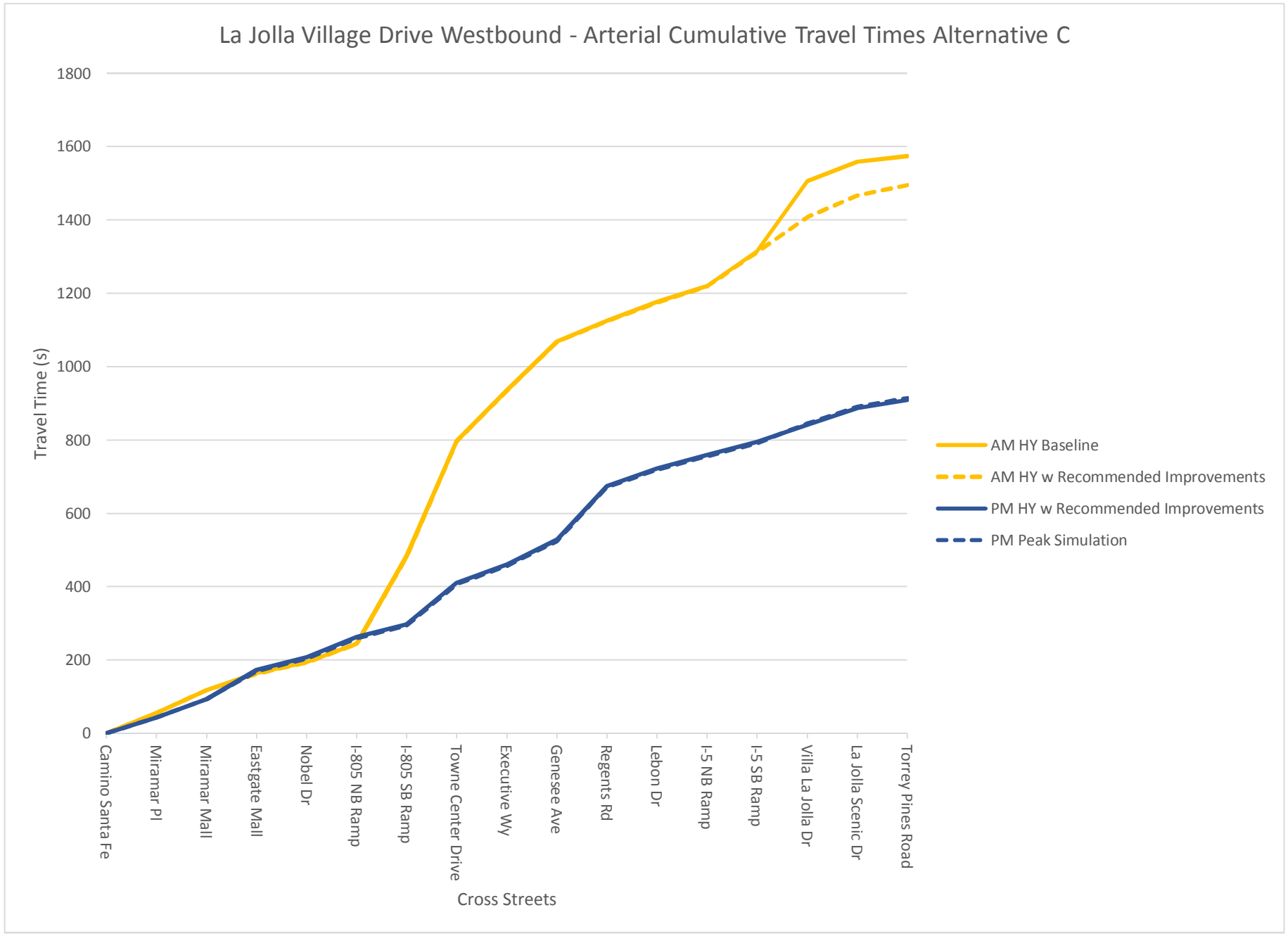

La Jolla Village Drive Eastbound - Arterial Cumulative Travel Times Alternative C
Travel Time (s)
2000
1800
1600
1400
1200
1000
800
600
400
200
0
Torrey Pines Rd
La Jolla Scenic Dr
Villa La Jolla Dr
I-5 SB Ramp
1-5 NB Ramp
Lebon Dr
Regents Rd
Genesee Ave
Executive Wy
Towne Center Drive
I-805 SB Ramp
I-805 NB Ramp
Nobel Dr
Eastgate Mall
Miramar Mall
Miramar Pl
Camino Santa Fe
Cross Streets
AM HY Baseline
AM HY w Recommended Improvements
PM HY Baseline
PM HY w Recommended Improvements


La Jolla Village Drive Westbound - Arterial Cumulative Travel Times Alternative C
1800
1600
1400
1200
1000
800
600
400
200
0
Travel Time (s)
Camino Santa Fe
Miramar Pl
Miramar Mall
Eastgate Mall
Nobel Dr
I-805 NB Ramp
I-805 SB Ramp
Towne Center Drive
Executive Wy
Genesee Ave
Regents Rd
Lebon Dr
I-5 NB Ramp
I-5 SB Ramp
Villa La Jolla Dr
La Jolla Scenic Dr
Torrey Pines Road
Cross Streets
AM HY Baseline
AM HY w Recommended Improvements
PM HY w Recommended Improvements
PM Peak Simulation

AM Peak-Hour Arterial Segment Analysis Summary Nobel Dr

ROADWAY SEGMENT	DIRECTION	URBAN STREET CLASS	EXISTING				HORIZON YEAR											
							Alt A Regents Bridge 6-lane Genesee			Alt B Regents Bridge 4-lane Genesee			Alt C No Bridge 6-lane Genesee			Alt D No Bridge 4-lane Genesee		
			TRAVEL TIME (S)		SIMULATION		SIMULATION			SIMULATION			SIMULATION			SIMULATION		
			FIELD	SIMULATION	SPEED (a)	LOS (b)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)
Nobel Drive																		
Villa La Jolla Dr to La Jolla Village Sq	EB		27.0	41.9	10.6	**F**	56.2	**F**		56.1	**F**		55.7	**F**		56.4	**F**	
	WB		35.0	25.2	17.6	D	28.8	**E**		28.7	**E**		28.7	**E**		28.7	**E**	
La Jolla Village Sq to I-5 SB On-Ramp	EB	II	11	11.7	18.8	D	11.9	D		11.9	D		11.9	D		12.2	D	
	WB	II	14	26.3	8.4	**F**	24.9	**F**		24.8	**F**		25.0	**F**		25.0	**F**	
I-5 SB On-Ramp to I-5 NB Off-Ramp	EB	II	11	16.8	15.7	**E**	17.2	**E**		17.5	**E**		18.1	**E**		19.2	**E**	
	WB	II	8	9.3	28.3	B	9.5	C		9.4	C		9.4	C		9.4	C	
I-5 NB Off-Ramp to Caminito Plaza Centro	EB	II	30	33.7	11.5	**F**	28.7	**E**		28.7	**E**		28.6	**E**		28.6	**E**	
	WB	II	14	28.4	13.7	**E**	31.6	**F**		30.7	**F**		33.2	**F**		35.2	**F**	
Caminito Plaza Centro to Lebon Dr	EB	II	42	43.6	11.0	**F**	46.7	**F**		46.7	**F**		46.5	**F**		46.6	**F**	
	WB	II	23	30.2	15.9	**E**	28.3	**E**		28.2	**E**		28.3	**E**		28.1	D	
Lebon Dr to Regents Rd	EB	II	52	54.8	22.6	C	65.6	D		65.7	D		64.0	D		64.2	D	
	WB	II	61	60.7	20.4	D	65.8	D		65.8	D		62.9	D		63.2	D	
Regents Rd to Costa Verde Blvd	EB	II	29	42.4	14.5	**E**	30.3	D		30.4	D		34.0	D		34.2	D	
	WB	II	49	54.9	11.2	**F**	34.3	D		34.4	D		33.5	D		33.5	D	
Coste Verde Blvd to Genesee Ave	EB	II	46	73.0	8.4	**F**	73.9	**F**		73.0	**F**		74.4	**F**		73.7	**F**	
	WB	II	23	46.0	13.4	**E**	59.6	**F**		59.9	**F**		59.1	**F**		59.5	**F**	
Genesee Ave to Lombard Pl	EB	II	24	24.3	17.0	D	25.3	**E**		25.3	**E**		25.3	**E**		25.3	**E**	
	WB	II	52	60.0	6.9	**F**	53.8	**F**		56.4	**F**		51.1	**F**		52.1	**F**	
Lombard Pl to Towne Center Dr	EB	II	32	45.5	17.8	D	51.3	**E**		51.3	**E**		51.3	**E**		51.3	**E**	
	WB	II	25	41.1	19.7	D	41.8	D		41.8	D		42.9	D		42.2	D	
Towne Center Dr to Shoreline Dr	EB	II	48	77.8	22.3	C	77.5	C		77.6	C		77.5	C		78.2	C	
	WB	II	72	70.0	24.8	C	75.5	C		75.4	C		75.6	C		74.8	C	
Shoreline Dr to Judicial Dr	EB	II	26	36.4	29.5	B	36.7	B		36.6	B		36.7	B		36.9	B	
	WB	II	34	58.0	18.5	D	59.8	D		59.7	D		59.8	D		60.4	D	
Judicial Dr to I-805 SB On-Ramp	EB	II	15	21.8	23.7	C	16.8	B		16.8	B		18.0	B		16.8	B	
	WB	II	19	21.8	23.7	C	24.4	D		24.8	D		24.9	D		25.1	D	
I-805 SB On-Ramp to I-805 NB Off-Ramp	EB	II	20	35.2	14.0	**E**	47.0	**F**		44.7	**F**		44.8	**F**		46.4	**F**	
	WB	II	17	15.1	32.7	B	15.2	B		15.2	B		15.2	B		15.2	B	
I-805 NB Off-Ramp to Avenue of Flags	EB	II	17	24.0	30.3	B	24.0	B		24.0	B		24.0	B		24.0	B	
	WB	II	30	31.4	23.2	C	36.3	D		35.8	D		35.8	D		36.6	D	
Avenue of Flags to Miramar Rd	EB	II	55	88.8	10.7	**F**	97.7	**F**		97.2	**F**		101.8	**F**		101.0	**F**	
	WB	II	25	28.1	33.8	B	28.0	B		28.0	B		28.0	B		28.0	B	
Total	*EB*	*II*	*458*	*671.7*	*16.6*	**E**	*706.8*	*B*	**No**	*703.5*	*B*	**No**	*712.6*	*B*	**No**	*715.0*	*B*	**No**
	WB	*II*	*466*	*606.5*	*17.2*	*D*	*617.6*	*B*	**No**	*619.0*	*B*	**No**	*613.4*	*B*	**No**	*617.0*	*B*	**No**

Notes: (a) Travel time in miles per hour (mph).

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MID Peak-Hour Arterial Segment Analysis Summary Nobel Dr

ROADWAY SEGMENT	DIRECTION	URBAN STREET CLASS	EXISTING				HORIZON YEAR											
							Alt A Regents Bridge 6-lane Genesee			Alt B Regents Bridge 4-lane Genesee			Alt C No Bridge 6-lane Genesee			Alt D No Bridge 4-lane Genesee		
			TRAVEL TIME (S)		SIMULATION		SIMULATION			SIMULATION			SIMULATION			SIMULATION		
			FIELD	SIMULATION	SPEED (a)	LOS (b)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)
Nobel Drive																		
Villa La Jolla Dr to La Jolla Village Sq	EB		24	44.4	10.0	**F**	53.1	**F**		53.1	**F**		53.7	**F**		53.7	**F**	
	WB		18	25.8	17.2	D	29.5	**E**		29.5	**E**		29.3	**E**		29.3	**E**	
La Jolla Village Sq to I-5 SB On-Ramp	EB	II	24	39.7	5.5	**F**	41.8	**F**		40.4	**F**		46.1	**F**		46.2	**F**	
	WB	II	18	23.8	9.3	**F**	35.8	**F**		35.6	**F**		37.1	**F**		38.7	**F**	
I-5 SB On-Ramp to I-5 NB Off-Ramp	EB	II	13	10.0	26.3	C	29.0	**F**		28.8	**F**		29.1	**F**		25.1	**F**	
	WB	II	9	9.5	27.7	C	11.3	C		11.3	C		11.1	C		11.0	C	
I-5 NB Off-Ramp to Caminito Plaza Centro	EB	II	12	16.9	22.4	C	28.5	**E**		28.2	**E**		28.8	**E**		29.2	**F**	
	WB	II	23	22.2	17.1	D	29.1	**E**		29.2	**F**		31.1	**F**		34.2	**F**	
Caminito Plaza Centro to Lebon Dr	EB	II	33	33.6	14.5	**E**	35.0	**E**		34.8	**E**		35.1	**E**		35.0	**E**	
	WB	II	23	26.0	18.8	D	30.5	**E**		30.2	**E**		30.6	**E**		30.2	**E**	
Lebon Dr to Regents Rd	EB	II	50	49.5	25.0	C	71.3	D		71.4	D		56.1	C		56.2	C	
	WB	II	54	54.9	22.6	C	58.9	D		58.8	D		57.8	D		57.9	D	
Regents Rd to Costa Verde Blvd	EB	II	31	51.1	12.0	**F**	32.7	D		32.8	D		34.3	D		34.3	D	
	WB	II	32	35.7	17.2	D	38.2	**E**		38.3	**E**		31.5	D		31.9	D	
Coste Verde Blvd to Genesee Ave	EB	II	50	63.7	9.7	**F**	65.4	**F**		62.3	**F**		68.4	**F**		68.6	**F**	
	WB	II	38	47.3	13.0	**E**	62.9	**F**		63.1	**F**		62.4	**F**		62.9	**F**	
Genesee Ave to Lombard Pl	EB	II	14	24.8	17.5	D	27.2	**E**		27.2	**E**		25.7	**E**		25.8	**E**	
	WB	II	52	74.4	5.8	**F**	70.5	**F**		70.5	**F**		63.8	**F**		68.0	**F**	
Lombard Pl to Towne Center Dr	EB	II	23	38.5	20.5	D	44.2	D		44.2	D		44.1	D		45.8	D	
	WB	II	39	47.8	16.5	**E**	56.1	**E**		56.0	**E**		56.4	**E**		56.8	**E**	
Towne Center Dr to Shoreline Dr	EB	II	44	52.9	32.8	B	62.4	C		62.5	C		63.1	C		63.1	C	
	WB	II	72	66.0	26.3	C	70.1	C		70.0	C		70.1	C		69.9	C	
Shoreline Dr to Judicial Dr	EB	II	33	35.4	30.4	B	36.9	B		36.8	B		36.8	B		36.8	B	
	WB	II	31	42.1	25.5	C	52.8	D		52.8	D		53.9	D		54.1	D	
Judicial Dr to I-805 SB On-Ramp	EB	II	19	22.1	23.4	C	21.5	C		21.5	C		22.8	C		19.8	C	
	WB	II	17	26.0	19.9	D	27.0	D		28.0	D		28.0	D		28.1	D	
I-805 SB On-Ramp to I-805 NB Off-Ramp	EB	II	28	30.1	16.4	**E**	32.2	**E**		31.2	**E**		31.2	**E**		31.6	**E**	
	WB	II	12	15.1	32.7	B	18.3	C		18.2	C		18.2	C		18.8	C	
I-805 NB Off-Ramp to Avenue of Flags	EB	II	20	28.3	25.8	C	31.6	C		31.5	C		32.5	C		32.6	C	
	WB	II	26	29.1	25.1	C	36.4	D		35.1	D		35.4	D		35.7	D	
Avenue of Flags to Miramar Rd	EB	II	46	73.6	12.8	**F**	77.7	**F**		77.5	**F**		81.7	**F**		81.6	**F**	
	WB	II	25	29.7	31.8	B	30.4	B		30.3	B		30.3	B		30.3	B	
Total	*EB*	*II*	*440*	*614.6*	*18.4*	*D*	*690.5*	*B*	**No**	*684.2*	*B*	**No**	*689.5*	*B*	**No**	*685.4*	*B*	**No**
	WB	*II*	*471*	*575.4*	*19.1*	*D*	*657.8*	*B*	**No**	*656.9*	*B*	**No**	*647.0*	*B*	**No**	*657.8*	*B*	**No**

Notes: (a) Travel time in miles per hour (mph).

(b) The arterial LOS is based on average through-vehicle travel speed for the segment or for the entire street under consideration and is influenced both by the number of signals per mile and by the intersection control delay.

(c) A significant impact resulted in a change from LOS D or better to LOS E or LOS F, or a decrease of speeds of more than 1.0 mph at LOS E and LOS F.

PM Peak-Hour Arterial Segment Analysis Summary Nobel Dr

ROADWAY SEGMENT	DIRECTION	URBAN STREET CLASS	EXISTING				HORIZON YEAR											
							Alt A Regents Bridge 6-lane Genesee			Alt B Regents Bridge 4-lane Genesee			Alt C No Bridge 6-lane Genesee			Alt D No Bridge 4-lane Genesee		
			TRAVEL TIME (S)		SIMULATION		SIMULATION			SIMULATION			SIMULATION			SIMULATION		
			FIELD	SIMULATION	SPEED (a)	LOS (b)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)
Nobel Drive																		
Villa La Jolla Dr to La Jolla Village Sq	EB		37	49.0	9.1	**F**	145.0	**F**		140.6	**F**		197.8	**F**		198.6	**F**	
	WB		34	27.1	16.4	**E**	29.8	**E**		29.7	**E**		29.7	**E**		29.6	**E**	
La Jolla Village Sq to I-5 SB On-Ramp	EB	II	37	31.1	7.1	**F**	265.1	**F**		264.0	**F**		281.6	**F**		293.0	**F**	
	WB	II	34	28.6	7.7	**F**	38.3	**F**		39.0	**F**		29.5	**F**		28.4	**F**	
I-5 SB On-Ramp to I-5 NB Off-Ramp	EB	II	9	10.5	25.1	C	11.3	C		23.6	**F**		19.7	**E**		21.2	**F**	
	WB	II	9	9.7	27.1	C	13.5	D		13.4	D		10.2	C		10.0	C	
I-5 NB Off-Ramp to Caminito Plaza Centro	EB	II	37	20.1	19.3	D	24.0	**E**		22.5	D		21.9	D		20.8	D	
	WB	II	26	36.0	10.8	**F**	94.1	**F**		106.1	**F**		44.3	**F**		44.5	**F**	
Caminito Plaza Centro to Lebon Dr	EB	II	42	47.5	10.1	**F**	51.8	**F**		52.0	**F**		52.1	**F**		52.0	**F**	
	WB	II	19	28.1	17.1	D	34.8	**E**		34.4	**E**		35.0	**E**		34.5	**E**	
Lebon Dr to Regents Rd	EB	II	85	81.3	15.2	**E**	100.4	**F**		100.6	**F**		106.2	**F**		111.3	**F**	
	WB	II	58	62.6	19.8	D	67.3	D		67.3	D		64.5	D		64.6	D	
Regents Rd to Costa Verde Blvd	EB	II	30	61.4	10.0	**F**	29.0	D		28.9	D		27.0	C		27.3	C	
	WB	II	52	81.0	7.6	**F**	82.0	**F**		83.6	**F**		151.6	**F**		163.1	**F**	
Coste Verde Blvd to Genesee Ave	EB	II	54	69.5	8.8	**F**	85.7	**F**		82.4	**F**		88.3	**F**		88.8	**F**	
	WB	II	18	69.1	8.9	**F**	31.5	D		33.5	D		29.9	D		30.6	D	
Genesee Ave to Lombard Pl	EB	II	26	24.0	17.6	D	24.3	D		24.3	D		24.2	D		24.0	D	
	WB	II	71	78.4	5.4	**F**	85.9	**F**		88.7	**F**		65.4	**F**		68.2	**F**	
Lombard Pl to Towne Center Dr	EB	II	48	57.6	13.9	**E**	73.5	**F**		81.7	**F**		73.9	**F**		74.7	**F**	
	WB	II	50	52.4	15.2	**E**	85.9	**F**		83.7	**F**		87.0	**F**		81.8	**F**	
Towne Center Dr to Shoreline Dr	EB	II	43	59.0	29.4	B	69.3	C		69.3	C		69.3	C		69.7	C	
	WB	II	72	73.9	23.5	C	88.6	D		99.7	D		89.7	D		89.2	D	
Shoreline Dr to Judicial Dr	EB	II	32	38.1	28.2	B	42.3	C		42.2	C		42.3	C		42.4	C	
	WB	II	39	51.2	21.0	D	71.4	**E**		71.2	**E**		71.4	**E**		73.9	**E**	
Judicial Dr to I-805 SB On-Ramp	EB	II	19	22.8	22.6	C	32.7	**E**		32.8	**E**		33.0	**E**		31.4	**E**	
	WB	II	23	31.6	16.3	**E**	40.5	**F**		40.4	**F**		40.7	**F**		41.6	**F**	
I-805 SB On-Ramp to I-805 NB Off-Ramp	EB	II	34	32.7	15.1	**E**	40.8	**F**		36.6	**E**		35.7	**E**		37.6	**E**	
	WB	II	12	15.1	32.7	B	15.2	B		15.2	B		15.2	B		15.2	B	
I-805 NB Off-Ramp to Avenue of Flags	EB	II	21	24.0	30.0	B	24.9	B		24.9	B		24.8	B		24.9	B	
	WB	II	23	30.9	23.3	C	45.0	**E**		40.6	D		40.0	D		41.5	D	
Avenue of Flags to Miramar Rd	EB	II	37	102.3	9.4	**F**	102.8	**F**		103.7	**F**		105.4	**F**		105.1	**F**	
	WB	II	25	28.4	33.7	B	29.1	B		29.1	B		29.1	B		29.1	B	
Total	*EB*	*II*	*554*	*730.9*	*15.4*	**E**	*1122.9*	*D*	**No**	*1130.1*	*D*	**No**	*1203.2*	*D*	**No**	*1222.8*	*D*	**No**
	WB	*II*	*531*	*704.1*	*14.8*	**E**	*852.9*	*C*	**No**	*875.6*	*C*	**No**	*833.2*	*C*	**No**	*845.8*	*C*	**No**

Notes: (a) Travel time in miles per hour (mph).

(b) The arterial LOS is based on average through-vehicle travel speed for the segment or for the entire street under consideration and is influenced both by the number of signals per mile and by the intersection control delay.

(c) A significant impact resulted in a change from LOS D or better to LOS E or LOS F, or a decrease of speeds of more than 1.0 mph at LOS E and LOS F.

AM Peak-Hour Arterial Segment Analysis Summary Nobel Dr

ROADWAY SEGMENT	DIRECTION	URBAN STREET CLASS	EXISTING				HORIZON YEAR WITH RECOMMENDED MITIGATIONS											
							Alt A Regents Bridge 6-lane Genesee			Alt B Regents Bridge 4-lane Genesee			Alt C No Bridge 6-lane Genesee			Alt D No Bridge 4-lane Genesee		
			TRAVEL TIME (S)		SIMULATION		SIMULATION			SIMULATION			SIMULATION			SIMULATION		
			FIELD	SIMULATION	SPEED (a)	LOS (b)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)
Nobel Drive																		
Villa La Jolla Dr to La Jolla Village Sq	EB		27.0	41.9	10.6	**F**	56.2	**F**		56.1	**F**		55.7	**F**		56.4	**F**	
	WB		35.0	25.2	17.6	D	28.8	**E**		28.7	**E**		28.7	**E**		28.7	**E**	
La Jolla Village Sq to I-5 SB On-Ramp	EB	II	11	11.7	18.8	D	11.9	D		11.9	D		11.9	D		12.2	D	
	WB	II	14	26.3	8.4	**F**	24.9	**F**		24.8	**F**		25.0	**F**		25.0	**F**	
I-5 SB On-Ramp to I-5 NB Off-Ramp	EB	II	11	16.8	15.7	**E**	17.2	**E**		17.5	**E**		18.1	**E**		19.2	**E**	
	WB	II	8	9.3	28.3	B	9.5	C		9.4	C		9.4	C		9.4	C	
I-5 NB Off-Ramp to Caminito Plaza Centro	EB	II	30	33.7	11.5	**F**	28.7	**E**		28.7	**E**		28.6	**E**		28.6	**E**	
	WB	II	14	28.4	13.7	**E**	31.6	**F**		30.7	**F**		33.2	**F**		35.2	**F**	
Caminito Plaza Centro to Lebon Dr	EB	II	42	43.6	11.0	**F**	46.7	**F**		46.7	**F**		46.5	**F**		46.6	**F**	
	WB	II	23	30.2	15.9	**E**	28.3	**E**		28.2	**E**		28.3	**E**		28.1	D	
Lebon Dr to Regents Rd	EB	II	52	54.8	22.6	C	65.6	D		65.7	D		64.0	D		64.2	D	
	WB	II	61	60.7	20.4	D	65.8	D		65.8	D		62.9	D		63.2	D	
Regents Rd to Costa Verde Blvd	EB	II	29	42.4	14.5	**E**	30.3	D		30.4	D		34.0	D		34.2	D	
	WB	II	49	54.9	11.2	**F**	34.3	D		34.4	D		33.5	D		33.5	D	
Coste Verde Blvd to Genesee Ave	EB	II	46	73.0	8.4	**F**	73.9	**F**		73.8	**F**		74.4	**F**		73.7	**F**	
	WB	II	23	46.0	13.4	**E**	59.6	**F**		59.9	**F**		59.1	**F**		59.5	**F**	
Genesee Ave to Lombard Pl	EB	II	24	24.3	17.0	D	25.3	**E**		25.3	**E**		25.3	**E**		25.3	**E**	
	WB	II	52	60.0	6.9	**F**	53.8	**F**		56.7	**F**		51.1	**F**		52.1	**F**	
Lombard Pl to Towne Center Dr	EB	II	32	45.5	17.8	D	51.3	**E**		51.3	**E**		51.3	**E**		51.3	**E**	
	WB	II	25	41.1	19.7	D	41.8	D		41.8	D		42.9	D		42.2	D	
Towne Center Dr to Shoreline Dr	EB	II	48	77.8	22.3	C	77.5	C		77.6	C		77.5	C		78.2	C	
	WB	II	72	70.0	24.8	C	75.5	C		75.4	C		75.6	C		74.8	C	
Shoreline Dr to Judicial Dr	EB	II	26	36.4	29.5	B	36.7	B		36.6	B		36.7	B		36.9	B	
	WB	II	34	58.0	18.5	D	59.8	D		59.7	D		59.8	D		60.4	D	
Judicial Dr to I-805 SB On-Ramp	EB	II	15	21.8	23.7	C	16.8	B		16.8	B		18.0	B		16.8	B	
	WB	II	19	21.8	23.7	C	24.4	D		24.8	D		24.9	D		25.1	D	
I-805 SB On-Ramp to I-805 NB Off-Ramp	EB	II	20	35.2	14.0	**E**	47.0	**F**		44.7	**F**		44.8	**F**		46.4	**F**	
	WB	II	17	15.1	32.7	B	15.2	B		15.2	B		15.2	B		15.2	B	
I-805 NB Off-Ramp to Avenue of Flags	EB	II	17	24.0	30.3	B	24.0	B		24.0	B		24.0	B		24.0	B	
	WB	II	30	31.4	23.2	C	36.3	D		35.8	D		35.8	D		36.6	D	
Avenue of Flags to Miramar Rd	EB	II	55	88.8	10.7	**F**	97.7	**F**		97.2	**F**		101.8	**F**		101.0	**F**	
	WB	II	25	28.1	33.8	B	28.0	B		28.0	B		28.0	B		28.0	B	
Total	*EB*	*II*	*458*	*671.7*	*16.6*	**E**	*650.6*	**E**	**No**	*704.3*	*B*	**No**	*712.6*	*B*	**No**	*715.0*	*B*	**No**
	WB	*II*	*466*	*606.5*	*17.2*	*D*	*589.6*	**E**	**Yes**	*619.3*	*B*	**No**	*613.4*	*B*	**No**	*617.0*	*B*	**No**

Notes: (a) Travel time in miles per hour (mph).

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(c) A significant impact resulted in a change from LOS D or better to LOS E or LOS F, or a decrease of speeds of more than 1.0 mph at LOS E and LOS F.

MID Peak-Hour Arterial Segment Analysis Summary Nobel Dr

ROADWAY SEGMENT	DIRECTION	URBAN STREET CLASS	EXISTING				HORIZON YEAR WITH RECOMMENDED MITIGATIONS											
							Alt A Regents Bridge 6-lane Genesee			Alt B Regents Bridge 4-lane Genesee			Alt C No Bridge 6-lane Genesee			Alt D No Bridge 4-lane Genesee		
			TRAVEL TIME (S)		SIMULATION		SIMULATION			SIMULATION			SIMULATION			SIMULATION		
			FIELD	SIMULATION	SPEED (a)	LOS (b)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)
Nobel Drive																		
Villa La Jolla Dr to La Jolla Village Sq	EB		24	44.4	10.0	**F**	53.1	**F**		53.1	**F**		53.7	**F**		53.7	**F**	
	WB		18	25.8	17.2	D	-	-		29.5	**E**		29.3	**E**		29.3	**E**	
La Jolla Village Sq to I-5 SB On-Ramp	EB	II	24	39.7	5.5	**F**	41.8	**F**		40.4	**F**		46.1	**F**		46.2	**F**	
	WB	II	18	23.8	9.3	**F**	35.8	**F**		35.6	**F**		37.1	**F**		38.7	**F**	
I-5 SB On-Ramp to I-5 NB Off-Ramp	EB	II	13	10.0	26.3	C	29.0	**F**		28.8	**F**		29.1	**F**		25.1	**F**	
	WB	II	9	9.5	27.7	C	11.3	C		11.3	C		11.1	C		11.0	C	
I-5 NB Off-Ramp to Caminito Plaza Centro	EB	II	12	16.9	22.4	C	26.7	**E**		26.4	**E**		28.8	**E**		29.2	**F**	
	WB	II	23	22.2	17.1	D	29.1	**E**		29.2	**F**		31.1	**F**		34.2	**F**	
Caminito Plaza Centro to Lebon Dr	EB	II	33	33.6	14.5	**E**	35.0	**E**		34.8	**E**		35.1	**E**		35.0	**E**	
	WB	II	23	26.0	18.8	D	29.3	**E**		29.0	**E**		30.6	**E**		30.2	**E**	
Lebon Dr to Regents Rd	EB	II	50	49.5	25.0	C	71.3	D		71.4	D		56.1	C		56.2	C	
	WB	II	54	54.9	22.6	C	58.9	D		58.8	D		57.8	D		57.9	D	
Regents Rd to Costa Verde Blvd	EB	II	31	51.1	12.0	**F**	32.7	D		32.8	D		34.3	D		34.3	D	
	WB	II	32	35.7	17.2	D	38.2	**E**		38.3	**E**		31.5	D		31.9	D	
Coste Verde Blvd to Genesee Ave	EB	II	50	63.7	9.7	**F**	65.4	**F**		62.3	**F**		68.4	**F**		68.6	**F**	
	WB	II	38	47.3	13.0	**E**	62.9	**F**		63.1	**F**		62.4	**F**		62.9	**F**	
Genesee Ave to Lombard Pl	EB	II	14	24.8	17.5	D	27.1	**E**		27.2	**E**		25.7	**E**		25.8	**E**	
	WB	II	52	74.4	5.8	**F**	70.5	**F**		70.5	**F**		63.8	**F**		68.0	**F**	
Lombard Pl to Towne Center Dr	EB	II	23	38.5	20.5	D	44.2	D		44.2	D		44.1	D		45.8	D	
	WB	II	39	47.8	16.5	**E**	56.1	**E**		56.0	**E**		56.4	**E**		56.8	**E**	
Towne Center Dr to Shoreline Dr	EB	II	44	52.9	32.8	B	62.4	C		62.5	C		63.1	C		63.1	C	
	WB	II	72	66.0	26.3	C	70.1	C		70.0	C		70.1	C		69.9	C	
Shoreline Dr to Judicial Dr	EB	II	33	35.4	30.4	B	36.9	B		36.8	B		36.8	B		36.8	B	
	WB	II	31	42.1	25.5	C	52.8	D		52.8	D		53.9	D		54.1	D	
Judicial Dr to I-805 SB On-Ramp	EB	II	19	22.1	23.4	C	21.5	C		21.5	C		22.8	C		19.8	C	
	WB	II	17	26.0	19.9	D	27.0	D		28.0	D		28.0	D		28.1	D	
I-805 SB On-Ramp to I-805 NB Off-Ramp	EB	II	28	30.1	16.4	**E**	32.2	**E**		31.2	**E**		31.2	**E**		31.6	**E**	
	WB	II	12	15.1	32.7	B	18.3	C		18.2	C		18.2	C		18.8	C	
I-805 NB Off-Ramp to Avenue of Flags	EB	II	20	28.3	25.8	C	31.6	C		31.5	C		32.5	C		32.6	C	
	WB	II	26	29.1	25.1	C	36.4	D		35.1	D		35.4	D		35.7	D	
Avenue of Flags to Miramar Rd	EB	II	46	73.6	12.8	**F**	77.7	**F**		77.5	**F**		81.7	**F**		81.6	**F**	
	WB	II	25	29.7	31.8	B	30.4	B		30.3	B		30.3	B		30.3	B	
Total	*EB*	*II*	*440*	*614.6*	*18.4*	*D*	*635.5*	**E**	**Yes**	*682.4*	*B*	**No**	*689.5*	*B*	**No**	*685.4*	*B*	**No**
	WB	*II*	*471*	*575.4*	*19.1*	*D*	*626.2*	**E**	**Yes**	*655.7*	*B*	**No**	*647.0*	*B*	**No**	*657.8*	*B*	**No**

Notes: (a) Travel time in miles per hour (mph).

(b) The arterial LOS is based on average through-vehicle travel speed for the segment or for the entire street under consideration and is influenced both by the number of signals per mile and by the intersection control delay.

(c) A significant impact resulted in a change from LOS D or better to LOS E or LOS F, or a decrease of speeds of more than 1.0 mph at LOS E and LOS F.

PM Peak-Hour Arterial Segment Analysis Summary Nobel Dr

ROADWAY SEGMENT	DIRECTION	URBAN STREET CLASS	EXISTING				HORIZON YEAR WITH RECOMMENDED MITIGATIONS											
							Alt A Regents Bridge 6-lane Genesee			Alt B Regents Bridge 4-lane Genesee			Alt C No Bridge 6-lane Genesee			Alt D No Bridge 4-lane Genesee		
			TRAVEL TIME (S)		SIMULATION		SIMULATION			SIMULATION			SIMULATION			SIMULATION		
			FIELD	SIMULATION	SPEED (a)	LOS (b)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)
Nobel Drive																		
Villa La Jolla Dr to La Jolla Village Sq	EB		37	49.0	9.1	**F**	145.0	**F**		140.6	**F**		197.8	**F**		198.6	**F**	
	WB		34	27.1	16.4	**E**	29.8	**E**		29.7	**E**		29.7	**E**		29.6	**E**	
La Jolla Village Sq to I-5 SB On-Ramp	EB	II	37	31.1	7.1	**F**	265.1	**F**		264.0	**F**		281.6	**F**		293.0	**F**	
	WB	II	34	28.6	7.7	**F**	38.3	**F**		38.4	**F**		29.5	**F**		28.4	**F**	
I-5 SB On-Ramp to I-5 NB Off-Ramp	EB	II	9	10.5	25.1	C	11.3	C		16.1	**E**		19.7	**E**		21.2	**F**	
	WB	II	9	9.7	27.1	C	13.5	D		13.5	D		10.2	C		10.0	C	
I-5 NB Off-Ramp to Caminito Plaza Centro	EB	II	37	20.1	19.3	D	24.0	**E**		23.9	**E**		21.9	D		20.8	D	
	WB	II	26	36.0	10.8	**F**	94.1	**F**		98.3	**F**		44.3	**F**		44.5	**F**	
Caminito Plaza Centro to Lebon Dr	EB	II	42	47.5	10.1	**F**	51.8	**F**		52.0	**F**		52.1	**F**		52.0	**F**	
	WB	II	19	28.1	17.1	D	34.8	**E**		34.4	**E**		35.0	**E**		34.5	**E**	
Lebon Dr to Regents Rd	EB	II	85	81.3	15.2	**E**	100.4	**F**		100.6	**F**		106.2	**F**		111.3	**F**	
	WB	II	58	62.6	19.8	D	67.3	D		67.3	D		64.5	D		64.6	D	
Regents Rd to Costa Verde Blvd	EB	II	30	61.4	10.0	**F**	29.0	D		28.9	D		27.0	C		27.3	C	
	WB	II	52	81.0	7.6	**F**	82.0	**F**		82.4	**F**		151.6	**F**		163.1	**F**	
Coste Verde Blvd to Genesee Ave	EB	II	54	69.5	8.8	**F**	85.7	**F**		85.6	**F**		88.3	**F**		88.8	**F**	
	WB	II	18	69.1	8.9	**F**	31.5	D		48.5	**F**		29.9	D		30.6	D	
Genesee Ave to Lombard Pl	EB	II	26	24.0	17.6	D	24.4	D		24.3	D		24.2	D		24.0	D	
	WB	II	71	78.4	5.4	**F**	85.9	**F**		88.7	**F**		65.4	**F**		68.2	**F**	
Lombard Pl to Towne Center Dr	EB	II	48	57.6	13.9	**E**	73.5	**F**		81.7	**F**		73.9	**F**		74.7	**F**	
	WB	II	50	52.4	15.2	**E**	89.7	**F**		83.7	**F**		87.0	**F**		81.8	**F**	
Towne Center Dr to Shoreline Dr	EB	II	43	59.0	29.4	B	69.3	C		69.3	C		69.3	C		69.7	C	
	WB	II	72	73.9	23.5	C	88.6	D		99.7	D		89.7	D		89.2	D	
Shoreline Dr to Judicial Dr	EB	II	32	38.1	28.2	B	42.3	C		42.2	C		42.3	C		42.4	C	
	WB	II	39	51.2	21.0	D	71.4	**E**		71.2	**E**		71.4	**E**		73.9	**E**	
Judicial Dr to I-805 SB On-Ramp	EB	II	19	22.8	22.6	C	32.7	**E**		32.8	**E**		33.0	**E**		31.4	**E**	
	WB	II	23	31.6	16.3	**E**	40.5	**F**		40.4	**F**		40.7	**F**		41.6	**F**	
I-805 SB On-Ramp to I-805 NB Off-Ramp	EB	II	34	32.7	15.1	**E**	40.8	**F**		36.6	**E**		35.7	**E**		37.6	**E**	
	WB	II	12	15.1	32.7	B	15.2	B		15.2	B		15.2	B		15.2	B	
I-805 NB Off-Ramp to Avenue of Flags	EB	II	21	24.0	30.0	B	24.9	B		24.9	B		24.8	B		24.9	B	
	WB	II	23	30.9	23.3	C	45.0	**E**		40.6	D		40.0	D		41.5	D	
Avenue of Flags to Miramar Rd	EB	II	37	102.3	9.4	**F**	102.8	**F**		103.7	**F**		105.4	**F**		105.1	**F**	
	WB	II	25	28.4	33.7	B	29.1	B		29.1	B		29.1	B		29.1	B	
Total	*EB*	*II*	*554*	*730.9*	*15.4*	**E**	*978.0*	**F**	**No**	*1127.2*	*D*	**No**	*1203.2*	*D*	**No**	*1222.8*	*D*	**No**
	WB	*II*	*531*	*704.1*	*14.8*	**E**	*827.6*	**F**	**No**	*881.1*	*C*	**No**	*833.2*	*C*	**No**	*845.8*	*C*	**No**

Notes: (a) Travel time in miles per hour (mph).

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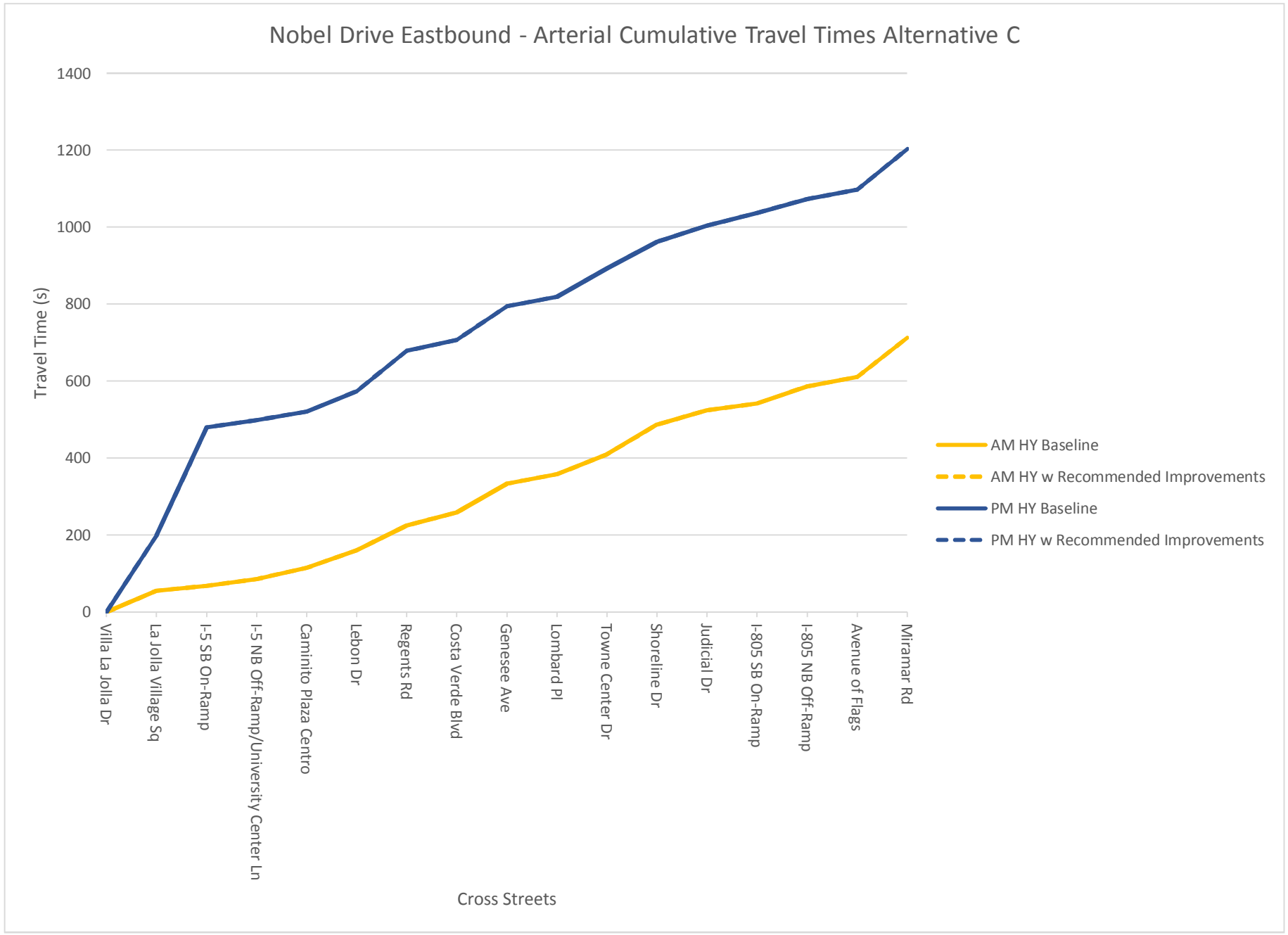
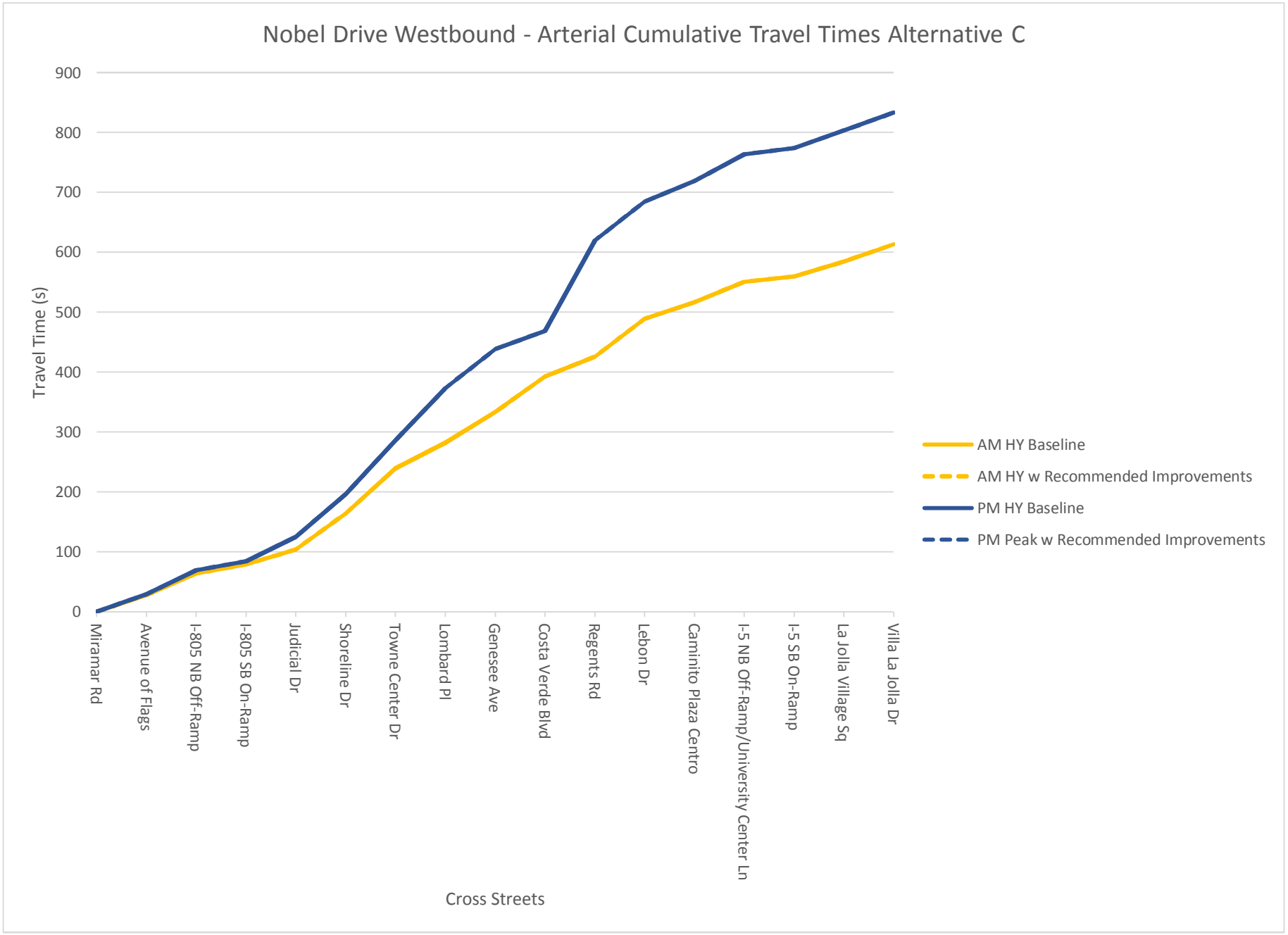
(c) A significant impact resulted in a change from LOS D or better to LOS E or LOS F, or a decrease of speeds of more than 1.0 mph at LOS E and LOS F.


Nobel Drive Eastbound - Arterial Cumulative Travel Times Alternative C
Travel Time (s)
1400
1200
1000
800
600
400
200
0
Villa La Jolla Dr
La Jolla Village Sq
I-5 SB On-Ramp
I-5 NB Off-Ramp/University Center Ln
Caminito Plaza Centro
Lebon Dr
Regents Rd
Costa Verde Blvd
Genesee Ave
Lombard Pl
Towne Center Dr
Shoreline Dr
Judicial Dr
I-805 SB On-Ramp
I-805 NB Off-Ramp
Avenue of Flags
Miramar Rd
Cross Streets
AM HY Baseline
AM HY w Recommended Improvements
PM HY Baseline
PM HY w Recommended Improvements


Nobel Drive Westbound - Arterial Cumulative Travel Times Alternative C
Travel Time (s)
900
800
700
600
500
400
300
200
100
0
Miramar Rd
Avenue of Flags
I-805 NB Off-Ramp
I-805 SB On-Ramp
Judicial Dr
Shoreline Dr
Towne Center Dr
Lombard Pl
Genesee Ave
Costa Verde Blvd
Regents Rd
Lebon Dr
Caminito Plaza Centro
I-5 NB Off-Ramp/University Center Ln
I-5 SB On-Ramp
La Jolla Village Sq
Villa La Jolla Dr
Cross Streets
AM HY Baseline
AM HY w Recommended Improvements
PM HY Baseline
PM Peak w Recommended Improvements

AM Peak-Hour Arterial Segment Analysis Summary Regents Road

ROADWAY SEGMENT	DIRECTION	URBAN STREET CLASS	EXISTING				HORIZON YEAR					
							Alt C No Bridge 6-lane Genesee			Alt D No Bridge 4-lane Genesee		
			TRAVEL TIME (S)		SIMULATION		SIMULATION			SIMULATION		
			FIELD	SIMULATION	SPEED (a)	LOS (b)	TIME (a)	LOS (b)	Impact?	TIME (a)	LOS (b)	Impact?
Regents Road (N)												
Arriba St to Berino Ct	NB	II	38	47	13	**E**	43.8	**E**		43.8	**E**	
	SB	II	30	42	15	**E**	44.7	**E**		44.8	**E**	
Berino Ct to Nobel Dr	NB	II	67	54	22	D	53	C		52.4	C	
	SB	II	33	43	28	C	41.9	B		41.9	B	
Nobel Dr to Mahaila Ave	NB	II	26	31	17	D	30.1	D		30.2	D	
	SB	II	39	49	11	**F**	49.3	**F**		50.6	**F**	
Mahaila Ave to La Jolla Village Dr	NB	II	75	72	6	**F**	71.6	**F**		71.9	**F**	
	SB	II	21	27	17	D	25.1	D		25.2	D	
La Jolla Village Dr to Regents Park Row	NB	II	31	32	10	**F**	32.1	**F**		30.9	**F**	
	SB	II	60	52	6	**F**	57.6	**F**		52.8	**F**	
Regents Park Row to Executive Dr	NB	II	73	31	20	D	37.4	**E**		37.5	**E**	
	SB	II	35	37	17	**E**	34.4	D		35.6	D	
Executive Dr to Eastgate Mall	NB	II	47	32	14	**E**	29.2	**E**		28.8	**E**	
	SB	II	20	21	21	D	19.5	C		19.5	C	
Eastgate Mall to Country Day Ln	NB	II	15	27	17	**E**	21.7	D		21.7	D	
	SB	II	17	23	20	D	25.6	D		25.3	D	
Country Day Ln to Genesee Ave	NB	II	44	82	7	**F**	85.4	**F**		85.4	**F**	
	SB	II	34	49	11	**F**	32.9	**E**		32.6	**E**	
Total	*NB*	*II*	*416*	*407*	*12*	**F**	*404.3*	**E**	**No**	*402.6*	**F**	**No**
	SB	*II*	*289*	*343*	*15*	**E**	*331.0*	**E**	**No**	*328.3*	**E**	**No**
Regents Road (S)												
Luna Ave to SR-52 WB Ramps	NB	II	38	232	11	**E**	119.2	C		122.2	D	
	SB	II	30	117	23	C	103.9	C		99	C	
SR-52 WB Ramps to SR-52 EB Ramps	NB	II	67	32	10	**E**	17.3	D		17.7	D	
	SB	II	33	28	12	**E**	21.5	**E**		21.7	**E**	
SR-52 EB Ramps to Governor Dr	NB	II	26	109	22	C	82.4	B		84.5	B	
	SB	II	39	111	21	C	79	B		79.7	B	
Total	*NB*	*II*	*131*	*373*	*14*	*D*	*218.9*	*C*	**No**	*224.4*	*C*	**No**
	SB	*II*	*102*	*256*	*21*	*D*	*204.4*	*C*	**No**	*200.4*	*C*	**No**

Notes: (a) Travel time in miles per hour (mph).

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(c) A significant impact resulted in a change from LOS D or better to LOS E or LOS F, or a decrease of speeds of more than 1.0 mph at LOS E and LOS F.

MID Peak-Hour Arterial Segment Analysis Summary Regents Road

ROADWAY SEGMENT	DIRECTION	URBAN STREET CLASS	EXISTING				HORIZON YEAR					
							Alt C No Bridge 6-lane Genesee			Alt D No Bridge 4-lane Genesee		
			TRAVEL TIME (S)		SIMULATION		SIMULATION			SIMULATION		
			FIELD	SIMULATION	SPEED (a)	LOS (b)	TIME (a)	LOS (b)	Impact?	TIME (a)	LOS (b)	Impact?
Regents Road (N)												
Arriba St to Berino Ct	NB	II	39	25	25.1	C	27.3	C		27.4	C	
	SB	II	28	35	17.7	D	35.0	D		34.9	D	
Berino Ct to Nobel Dr	NB	II	50	52	22.7	C	55.9	D		55.7	D	
	SB	II	36	35	34.1	B	34.3	B		34.3	B	
Nobel Dr to Mahaila Ave	NB	II	18	25	21.0	D	26.3	D		26.3	D	
	SB	II	34	59	8.8	**F**	63.7	**F**		63.7	**F**	
Mahaila Ave to La Jolla Village Dr	NB	II	57	65	7.2	**F**	59.8	**F**		59.4	**F**	
	SB	II	20	19	23.9	C	20.5	C		20.5	C	
La Jolla Village Dr to Regents Park Row	NB	II	23	25	12.3	**F**	25.4	**F**		26.0	**F**	
	SB	II	34	55	5.5	**F**	51.8	**F**		49.3	**F**	
Regents Park Row to Executive Dr	NB	II	26	31	19.6	D	33.3	D		33.3	D	
	SB	II	35	34	17.9	D	35.8	D		37.8	**E**	
Executive Dr to Eastgate Mall	NB	II	20	21	20.3	D	21.3	D		21.4	D	
	SB	II	25	23	18.8	D	21.0	D		21.0	D	
Eastgate Mall to Country Day Ln	NB	II	14	20	22.5	C	19.4	C		19.5	C	
	SB	II	16	22	20.5	D	21.8	D		21.9	D	
Country Day Ln to Genesee Ave	NB	II	44	87	6.4	**F**	87.8	**F**		87.6	**F**	
	SB	II	35	34	16.1	**E**	32.8	**E**		32.5	**E**	
Total	*NB*	*II*	*291*	*350*	*14.5*	**E**	*356.5*	**E**	**No**	*356.6*	**E**	**No**
	SB	*II*	*263*	*316*	*16.1*	**E**	*316.7*	**E**	**No**	*315.9*	**E**	**No**
Regents Road (S)												
Luna Ave to SR-52 WB Ramps	NB	II	39	539	4.9	**F**	91.8	B		93.8	B	
	SB	II	28	88	30.0	B	71.4	A		71.8	A	
SR-52 WB Ramps to SR-52 EB Ramps	NB	II	50	23	14.4	D	16.4	D		17.0	D	
	SB	II	36	21	15.8	D	19.2	**E**		19.6	**E**	
SR-52 EB Ramps to Governor Dr	NB	II	18	98	24.6	B	69.7	A		70.2	B	
	SB	II	34	99	24.3	B	72.0	B		72.8	B	
Total	*NB*	*II*	*107*	*659*	*21.0*	*C*	*177.9*	*B*	**No**	*181.0*	*B*	**No**
	SB	*II*	*98*	*208*	*16.3*	*D*	*138.8*	*C*	**No**	*139.6*	*C*	**No**

Notes: (a) Travel time in miles per hour (mph).

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PM Peak-Hour Arterial Segment Analysis Summary Regents Road

ROADWAY SEGMENT	DIRECTION	URBAN STREET CLASS	EXISTING				HORIZON YEAR					
							Alt C No Bridge 6-lane Genesee			Alt D No Bridge 4-lane Genesee		
			TRAVEL TIME (S)		SIMULATION		SIMULATION			SIMULATION		
			FIELD	SIMULATION	SPEED (a)	LOS (b)	TIME (a)	LOS (b)	Impact?	TIME (a)	LOS (b)	Impact?
Regents Road (N)												
Arriba St to Berino Ct	NB	II	24	40	15.3	**E**	41.7	**E**		41.9	**E**	
	SB	II	44	40	15.4	**E**	41.4	**E**		41.4	**E**	
Berino Ct to Nobel Dr	NB	II	76	58	20.3	D	53.8	C		53.3	C	
	SB	II	38	43	27.3	C	43.1	C		43.1	C	
Nobel Dr to Mahaila Ave	NB	II	25	34	15.4	**E**	26.4	D		26.6	D	
	SB	II	34	50	10.4	**F**	40.2	**F**		39.6	**E**	
Mahaila Ave to La Jolla Village Dr	NB	II	31	51	9.1	**F**	55.7	**F**		56.5	**F**	
	SB	II	20	34	13.5	**E**	36.2	**F**		36.1	**F**	
La Jolla Village Dr to Regents Park Row	NB	II	23	23	13.2	**E**	35.9	**F**		41.3	**F**	
	SB	II	44	54	5.7	**F**	60.7	**F**		62.9	**F**	
Regents Park Row to Executive Dr	NB	II	33	39	15.9	**E**	50.4	**F**		50.4	**F**	
	SB	II	86	53	11.7	**F**	51.3	**F**		74.3	**F**	
Executive Dr to Eastgate Mall	NB	II	16	23	18.6	D	25.6	**E**		25.7	**E**	
	SB	II	36	33	12.9	**F**	25.3	D		25.3	D	
Eastgate Mall to Country Day Ln	NB	II	32	21	21.1	D	23.0	D		21.3	D	
	SB	II	30	39	11.3	**F**	31.9	**E**		32.0	**E**	
Country Day Ln to Genesee Ave	NB	II	36	60	9.2	**F**	65.6	**F**		65.5	**F**	
	SB	II	53	43	12.8	**F**	46.2	**F**		45.6	**F**	
Total	*NB*	*II*	*296*	*349*	*14.5*	**E**	*378.1*	**E**	**No**	*382.5*	**E**	**No**
	SB	*II*	*385*	*390*	*13.0*	**F**	*376.3*	**E**	**No**	*400.3*	**F**	**No**
Regents Road (S)												
Luna Ave to SR-52 WB Ramps	NB	II	24	117	22.6	C	104.5	C		111.6	D	
	SB	II	44	161	16.4	D	125.9	D		126.6	D	
SR-52 WB Ramps to SR-52 EB Ramps	NB	II	76	29	11.1	**E**	25.5	**F**		34.9	**F**	
	SB	II	38	31	10.4	**E**	30.7	**F**		47.5	**F**	
SR-52 EB Ramps to Governor Dr	NB	II	25	107	22.3	C	76.3	B		77.6	C	
	SB	II	34	116	20.7	C	90.0	C		111.8	C	
Total	*NB*	*II*	*125*	*253*	*21.0*	*C*	*206.3*	*C*	**No**	*224.1*	*C*	**No**
	SB	*II*	*116*	*308*	*16.3*	*D*	*246.6*	*D*	**No**	*285.9*	*D*	**No**

Notes: (a) Travel time in miles per hour (mph).

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(c) A significant impact resulted in a change from LOS D or better to LOS E or LOS F, or a decrease of speeds of more than 1.0 mph at LOS E and LOS F.

AM Peak-Hour Arterial Segment Analysis Summary Regents Road

ROADWAY SEGMENT	DIRECTION	URBAN STREET CLASS	EXISTING				HORIZON YEAR WITH RECOMMENDED MITIGATIONS					
							Alt C No Bridge 6-lane Genesee			Alt D No Bridge 4-lane Genesee		
			TRAVEL TIME (S)		SIMULATION		SIMULATION			SIMULATION		
			FIELD	SIMULATION	SPEED (a)	LOS (b)	TIME (a)	LOS (b)	Impact?	TIME (a)	LOS (b)	Impact?
Regents Road (N)												
Arriba St to Berino Ct	NB	II	38	47	13	**E**	43.8	**E**		43.8	**E**	
	SB	II	30	42	15	**E**	44.7	**E**		44.8	**E**	
Berino Ct to Nobel Dr	NB	II	67	54	22	D	53	C		52.4	C	
	SB	II	33	43	28	C	41.9	B		41.9	B	
Nobel Dr to Mahaila Ave	NB	II	26	31	17	D	30.1	D		30.2	D	
	SB	II	39	49	11	**F**	49.3	**F**		50.6	**F**	
Mahaila Ave to La Jolla Village Dr	NB	II	75	72	6	**F**	71.6	**F**		71.9	**F**	
	SB	II	21	27	17	D	25.1	D		25.2	D	
La Jolla Village Dr to Regents Park Row	NB	II	31	32	10	**F**	32.1	**F**		30.9	**F**	
	SB	II	60	52	6	**F**	57.6	**F**		52.8	**F**	
Regents Park Row to Executive Dr	NB	II	73	31	20	D	37.4	**E**		37.5	**E**	
	SB	II	35	37	17	**E**	34.4	D		35.6	D	
Executive Dr to Eastgate Mall	NB	II	47	32	14	**E**	29.2	**E**		28.8	**E**	
	SB	II	20	21	21	D	19.5	C		19.5	C	
Eastgate Mall to Country Day Ln	NB	II	15	27	17	**E**	21.7	D		21.7	D	
	SB	II	17	23	20	D	25.6	D		25.3	D	
Country Day Ln to Genesee Ave	NB	II	44	82	7	**F**	85.4	**F**		85.4	**F**	
	SB	II	34	49	11	**F**	32.9	**E**		32.6	**E**	
Total	*NB*	*II*	*416*	*407*	*12*	**F**	*404.3*	**E**	**No**	*402.6*	**E**	**No**
	SB	*II*	*289*	*343*	*15*	**E**	*331.0*	**E**	**No**	*328.3*	**E**	**No**
Regents Road (S)												
Luna Ave to SR-52 WB Ramps	NB	II	38	232	11	**E**	100.7	D		103.6	D	
	SB	II	30	117	23	C	88	B		83	C	
SR-52 WB Ramps to SR-52 EB Ramps	NB	II	67	32	10	**E**	17.3	**E**		17.7	**E**	
	SB	II	33	28	12	**E**	21.5	**E**		21.7	**F**	
SR-52 EB Ramps to Governor Dr	NB	II	26	109	22	C	82.4	C		84.2	C	
	SB	II	39	111	21	C	84.6	B		79.4	C	
Total	*NB*	*II*	*131*	*373*	*14*	*D*	*200.4*	*C*	**No**	*205.5*	*C*	**No**
	SB	*II*	*102*	*256*	*21*	*D*	*194.1*	*B*	**No**	*184.1*	*B*	**No**

Notes: (a) Travel time in miles per hour (mph).

(b) The arterial LOS is based on average through-vehicle travel speed for the segment or for the entire street under consideration and is influenced both by the number of signals per mile and by the intersection control delay.

(c) A significant impact resulted in a change from LOS D or better to LOS E or LOS F, or a decrease of speeds of more than 1.0 mph at LOS E and LOS F.

MID Peak-Hour Arterial Segment Analysis Summary Regents Road

ROADWAY SEGMENT	DIRECTION	URBAN STREET CLASS	EXISTING				HORIZON YEAR WITH RECOMMENDED MITIGATIONS					
							Alt C No Bridge 6-lane Genesee			Alt D No Bridge 4-lane Genesee		
			TRAVEL TIME (S)		SIMULATION		SIMULATION			SIMULATION		
			FIELD	SIMULATION	SPEED (a)	LOS (b)	TIME (a)	LOS (b)	Impact?	TIME (a)	LOS (b)	Impact?
Regents Road (N)												
Arriba St to Berino Ct	NB	II	39	25	25.1	C	27.3	C		27.4	C	
	SB	II	28	35	17.7	D	35.0	D		34.9	D	
Berino Ct to Nobel Dr	NB	II	50	52	22.7	C	55.9	D		55.7	D	
	SB	II	36	35	34.1	B	34.3	B		34.3	B	
Nobel Dr to Mahaila Ave	NB	II	18	25	21.0	D	26.3	D		26.3	D	
	SB	II	34	59	8.8	**F**	63.7	**F**		63.7	**F**	
Mahaila Ave to La Jolla Village Dr	NB	II	57	65	7.2	**F**	59.8	**F**		59.4	**F**	
	SB	II	20	19	23.9	C	20.5	C		20.5	C	
La Jolla Village Dr to Regents Park Row	NB	II	23	25	12.3	**F**	25.4	**F**		26.0	**F**	
	SB	II	34	55	5.5	**F**	51.8	**F**		49.3	**F**	
Regents Park Row to Executive Dr	NB	II	26	31	19.6	D	33.3	D		33.3	D	
	SB	II	35	34	17.9	D	35.8	D		37.8	**E**	
Executive Dr to Eastgate Mall	NB	II	20	21	20.3	D	21.3	D		21.4	D	
	SB	II	25	23	18.8	D	21.0	D		21.0	D	
Eastgate Mall to Country Day Ln	NB	II	14	20	22.5	C	19.4	C		19.5	C	
	SB	II	16	22	20.5	D	21.8	D		21.9	D	
Country Day Ln to Genesee Ave	NB	II	44	87	6.4	**F**	87.8	**F**		87.6	**F**	
	SB	II	35	34	16.1	**E**	32.8	**E**		32.5	**E**	
Total	*NB*	*II*	*291*	*350*	*14.5*	**E**	*356.5*	**E**	**No**	*356.6*	**E**	**No**
	SB	*II*	*263*	*316*	*16.1*	**E**	*316.7*	**E**	**No**	*315.9*	**E**	**No**
Regents Road (S)												
Luna Ave to SR-52 WB Ramps	NB	II	39	539	4.9	**F**	73.5	B		75.1	B	
	SB	II	28	88	30.0	B	55.6	A		56.2	A	
SR-52 WB Ramps to SR-52 EB Ramps	NB	II	50	23	14.4	D	16.4	**E**		17.0	**E**	
	SB	II	36	21	15.8	D	19.2	**E**		19.6	**E**	
SR-52 EB Ramps to Governor Dr	NB	II	18	98	24.6	B	69.4	B		69.7	B	
	SB	II	34	99	24.3	B	71.7	C		77.9	B	
Total	*NB*	*II*	*107*	*659*	*21.0*	*C*	*159.3*	*C*	**No**	*161.8*	*C*	**No**
	SB	*II*	*98*	*208*	*16.3*	*D*	*146.5*	*C*	**No**	*153.7*	*B*	**No**

Notes: (a) Travel time in miles per hour (mph).

(b) The arterial LOS is based on average through-vehicle travel speed for the segment or for the entire street under consideration and is influenced both by the number of signals per mile and by the intersection control delay.

(c) A significant impact resulted in a change from LOS D or better to LOS E or LOS F, or a decrease of speeds of more than 1.0 mph at LOS E and LOS F.

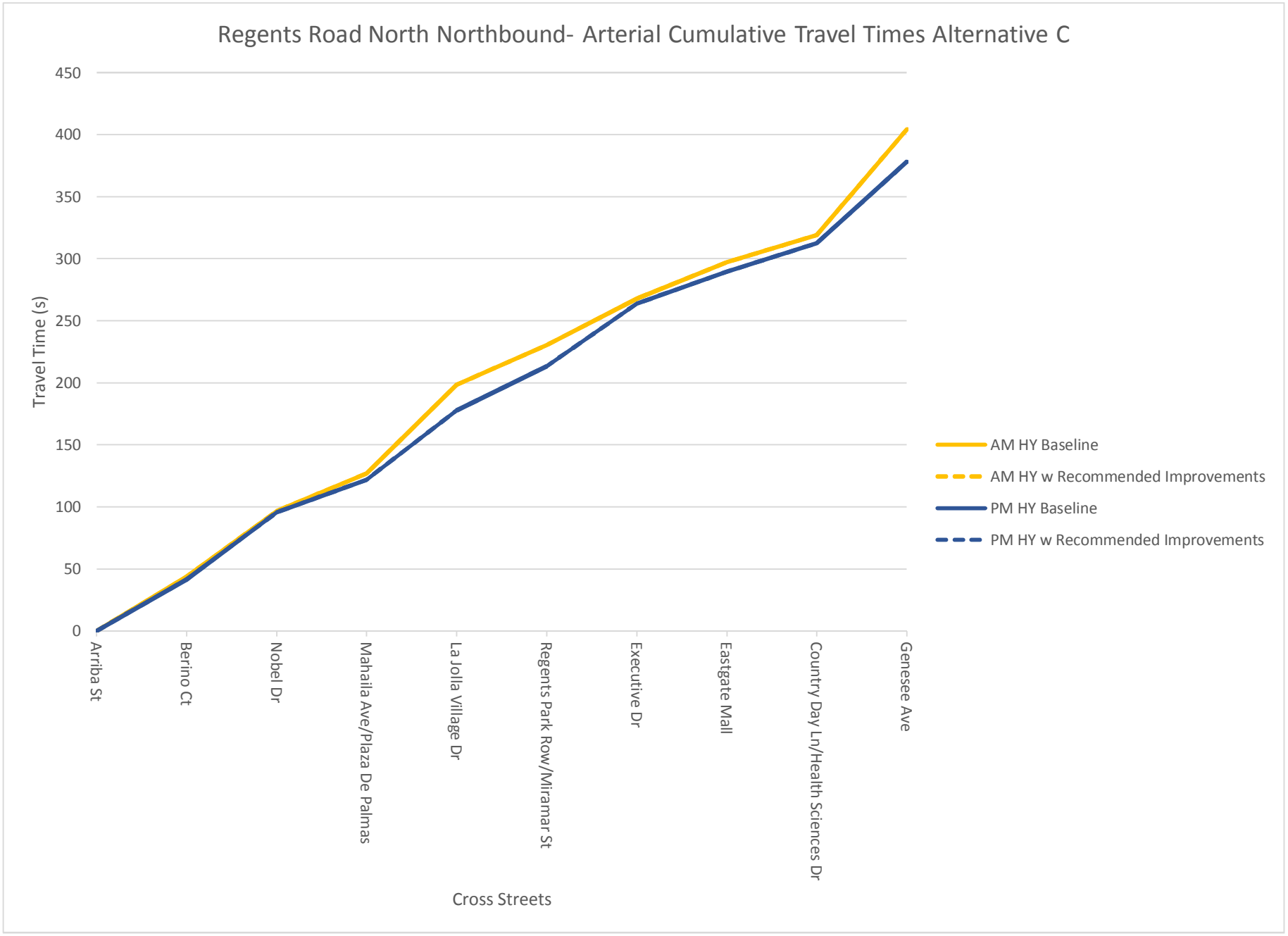
PM Peak-Hour Arterial Segment Analysis Summary Regents Road

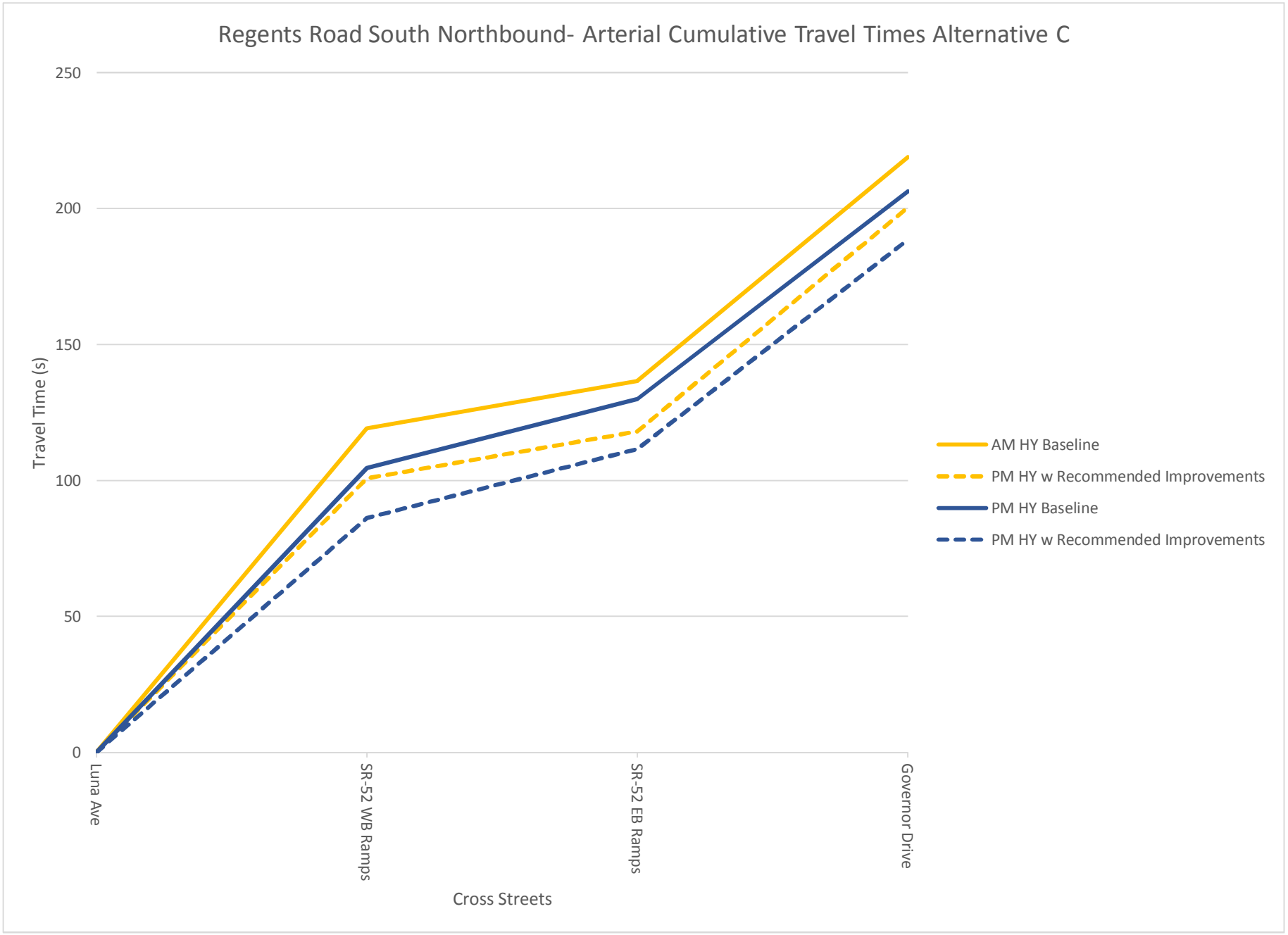
ROADWAY SEGMENT	DIRECTION	URBAN STREET CLASS	EXISTING				HORIZON YEAR WITH RECOMMENDED MITIGATIONS					
							Alt C No Bridge 6-lane Genesee			Alt D No Bridge 4-lane Genesee		
			TRAVEL TIME (S)		SIMULATION		SIMULATION			SIMULATION		
			FIELD	SIMULATION	SPEED (a)	LOS (b)	TIME (a)	LOS (b)	Impact?	TIME (a)	LOS (b)	Impact?
Regents Road (N)												
Arriba St to Berino Ct	NB	II	24	40	15.3	**E**	41.7	**E**		41.9	**E**	
	SB	II	44	40	15.4	**E**	41.4	**E**		41.4	**E**	
Berino Ct to Nobel Dr	NB	II	76	58	20.3	D	53.8	C		53.3	C	
	SB	II	38	43	27.3	C	43.1	C		43.1	C	
Nobel Dr to Mahaila Ave	NB	II	25	34	15.4	**E**	26.4	D		26.6	D	
	SB	II	34	50	10.4	**F**	40.2	**F**		39.6	**E**	
Mahaila Ave to La Jolla Village Dr	NB	II	31	51	9.1	**F**	55.7	**F**		56.5	**F**	
	SB	II	20	34	13.5	**E**	36.2	**F**		36.1	**F**	
La Jolla Village Dr to Regents Park Row	NB	II	23	23	13.2	**E**	35.9	**F**		41.3	**F**	
	SB	II	44	54	5.7	**F**	60.7	**F**		62.9	**F**	
Regents Park Row to Executive Dr	NB	II	33	39	15.9	**E**	50.4	**F**		50.4	**F**	
	SB	II	86	53	11.7	**F**	51.3	**F**		74.3	**F**	
Executive Dr to Eastgate Mall	NB	II	16	23	18.6	D	25.6	**E**		25.7	**E**	
	SB	II	36	33	12.9	**F**	25.3	D		25.3	D	
Eastgate Mall to Country Day Ln	NB	II	32	21	21.1	D	23.0	D		21.3	D	
	SB	II	30	39	11.3	**F**	31.9	**E**		32.0	**E**	
Country Day Ln to Genesee Ave	NB	II	36	60	9.2	**F**	65.6	**F**		65.5	**F**	
	SB	II	53	43	12.8	**F**	46.2	**F**		45.6	**F**	
Total	*NB*	*II*	*296*	*349*	*14.5*	**E**	*378.1*	**E**	**No**	*382.5*	**E**	**No**
	SB	*II*	*385*	*390*	*13.0*	**F**	*376.3*	**E**	**No**	*400.3*	**F**	**No**
Regents Road (S)												
Luna Ave to SR-52 WB Ramps	NB	II	24	117	22.6	C	86.1	C		108.9	D	
	SB	II	44	161	16.4	D	141.3	D		111.4	C	
SR-52 WB Ramps to SR-52 EB Ramps	NB	II	76	29	11.1	**E**	25.5	**F**		34.9	**F**	
	SB	II	38	31	10.4	**E**	30.7	**F**		47.5	**F**	
SR-52 EB Ramps to Governor Dr	NB	II	25	107	22.3	C	76.9	C		77.2	C	
	SB	II	34	116	20.7	C	96.1	C		117.0	D	
Total	*NB*	*II*	*125*	*253*	*21.0*	*C*	*188.5*	*D*	**No**	*221.0*	*D*	**No**
	SB	*II*	*116*	*308*	*16.3*	*D*	*268.1*	*D*	**No**	*275.9*	*D*	**No**

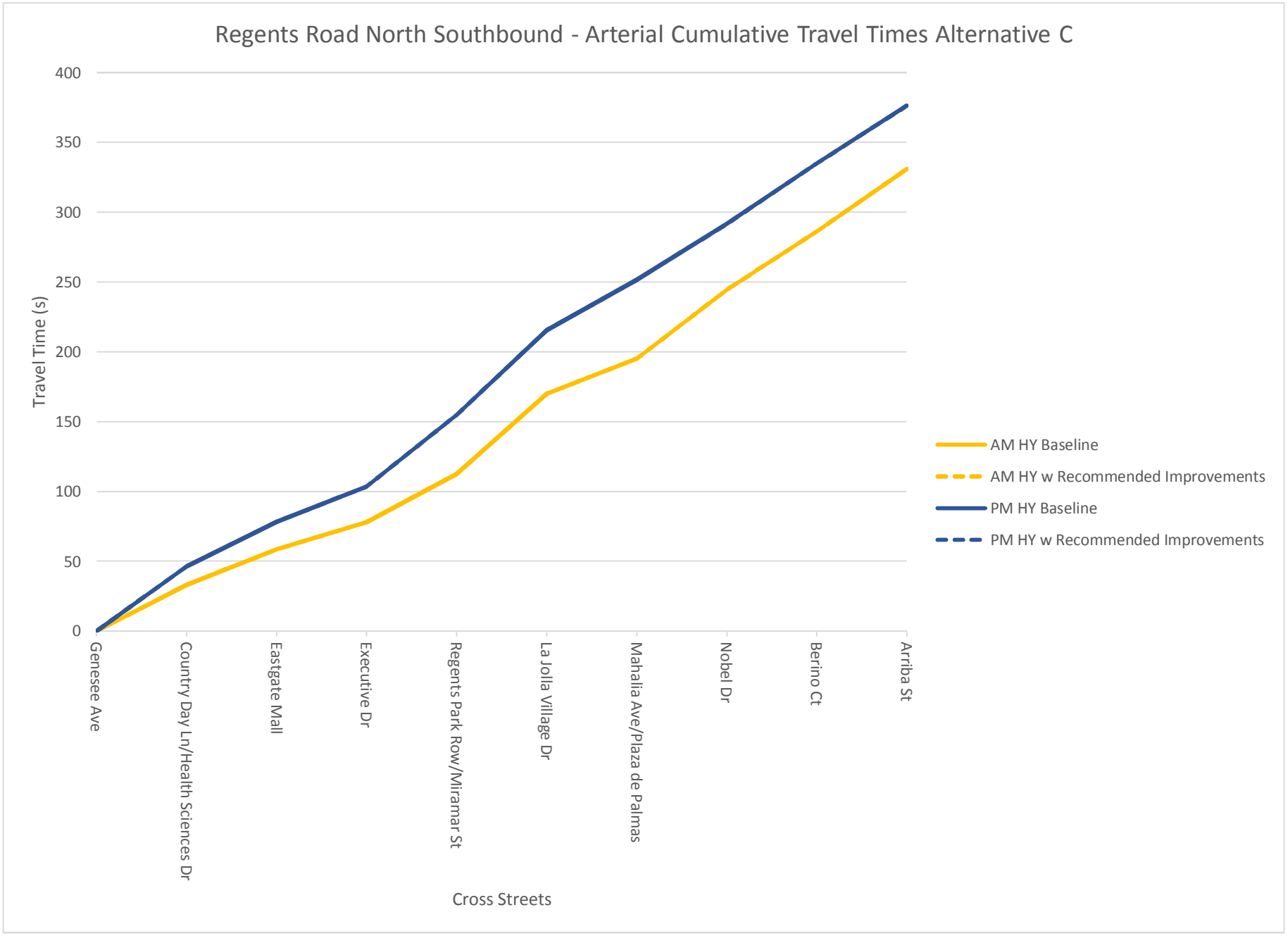
Notes: (a) Travel time in miles per hour (mph).

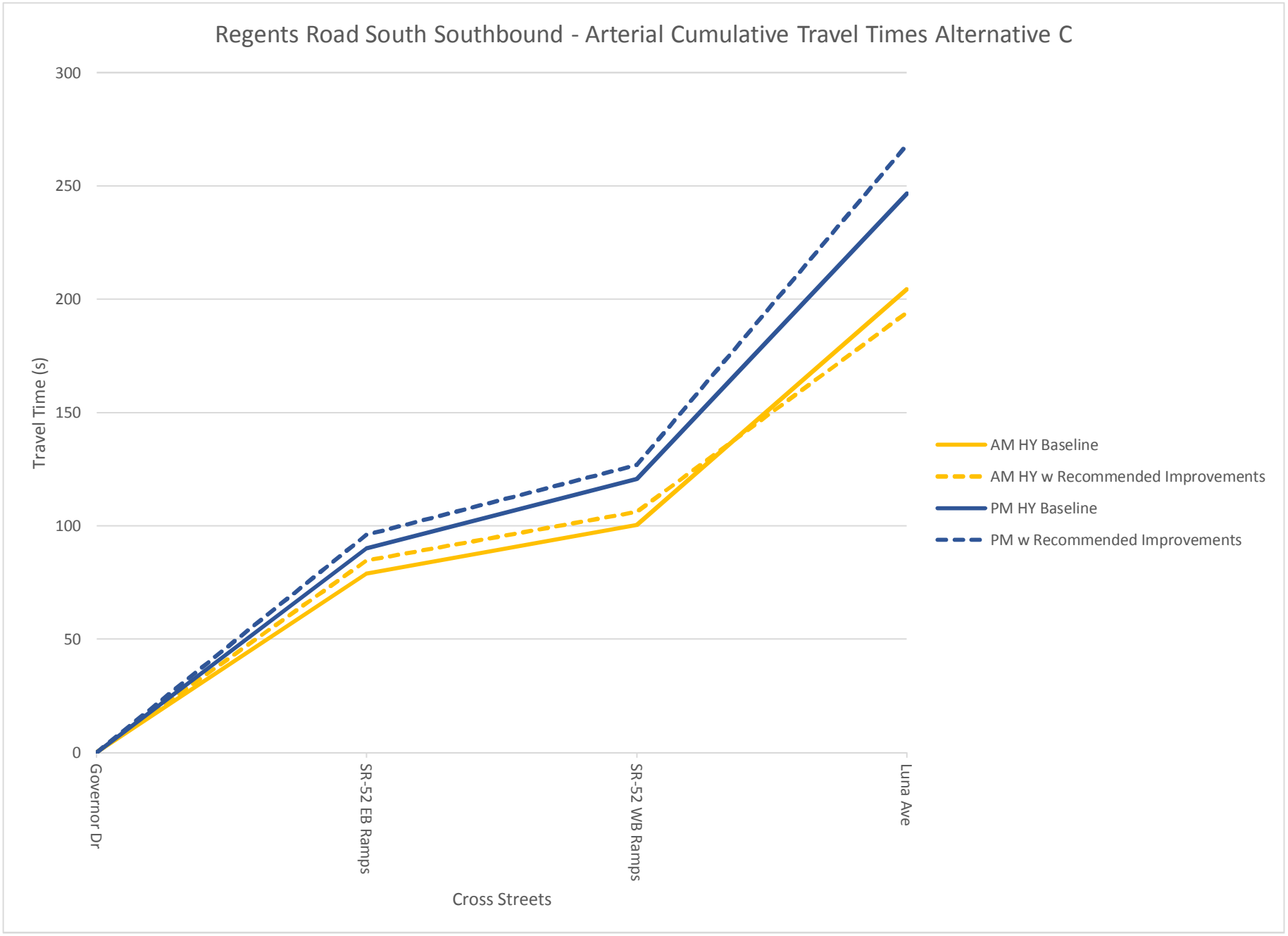
(b) The arterial LOS is based on average through-vehicle travel speed for the segment or for the entire street under consideration and is influenced both by the number of signals per mile and by the intersection control delay.

(c) A significant impact resulted in a change from LOS D or better to LOS E or LOS F, or a decrease of speeds of more than 1.0 mph at LOS E and LOS F.


Regents Road North Northbound- Arterial Cumulative Travel Times Alternative C
Travel Time (s)
450
400
350
300
250
200
150
100
50
0
Arriba St
Berino Ct
Nobel Dr
Mahaila Ave/Plaza De Palmas
La Jolla Village Dr
Regents Park Row/Miramar St
Executive Dr
Eastgate Mall
Country Day Ln/Health Sciences Dr
Genesee Ave
Cross Streets
AM HY Baseline
AM HY w Recommended Improvements
PM HY Baseline
PM HY w Recommended Improvements


Regents Road South Northbound- Arterial Cumulative Travel Times Alternative C
250
200
150
100
50
0
Travel Time (s)
Luna Ave
SR-52 WB Ramps
SR-52 EB Ramps
Governor Drive
Cross Streets
AM HY Baseline
PM HY w Recommended Improvements
PM HY Baseline
PM HY w Recommended Improvements


Regents Road North Southbound - Arterial Cumulative Travel Times Alternative C
Travel Time (s)
400
350
300
250
200
150
100
50
0
Genesee Ave
Country Day Ln/Health Sciences Dr
Eastgate Mall
Executive Dr
Regents Park Row/Miramar St
La Jolla Village Dr
Mahalia Ave/Plaza de Palmas
Nobel Dr
Berino Ct
Arriba St
Cross Streets
AM HY Baseline
AM HY w Recommended Improvements
PM HY Baseline
PM HY w Recommended Improvements


Regents Road South Southbound - Arterial Cumulative Travel Times Alternative C
300
250
200
150
100
50
0
Travel Time (s)
Governor Dr
SR-52 EB Ramps
SR-52 WB Ramps
Luna Ave
Cross Streets
AM HY Baseline
AM HY w Recommended Improvements
PM HY Baseline
PM w Recommended Improvements

APPENDIX J

ALTERNATIVE D SUPPORTING INFORMATION

- Intersection LOS Worksheets
- Detailed Arterial Analysis Worksheets

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	ø4
Lane Configurations							
Traffic Volume (vph)	547	435	370	1259	602	234	
Future Volume (vph)	547	435	370	1259	602	234	
Turn Type	NA	Perm	Prot	NA	Prot	pt+ov	
Protected Phases	2		1	6	8	8 1	4
Permitted Phases		2					
Detector Phase	2	2	1	6	8	8 1	
Switch Phase							
Minimum Initial (s)	10.0	10.0	7.0	10.0	10.0		4.0
Minimum Split (s)	43.2	43.2	11.4	24.0	23.3		8.0
Total Split (s)	45.8	45.8	37.4	84.7	45.3		42.8
Total Split (%)	35.2%	35.2%	28.8%	65.2%	34.8%		33%
Yellow Time (s)	5.2	5.2	3.4	5.0	4.3		3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	6.2	6.2	4.4	6.0	5.3		
Lead/Lag	Lag	Lag	Lead				
Lead-Lag Optimize?							
Recall Mode	C-Max	C-Max	None	C-Max	None		None

Intersection Summary

Cycle Length: 130
Actuated Cycle Length: 130
Offset: 30 (23%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 80
Control Type: Actuated-Coordinated

Splits and Phases: 1: N. Torrey Pines Rd. & Genesee Ave

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	547	435	370	1259	602	234
Future Volume (vph)	547	435	370	1259	602	234
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.2	6.2	4.4	6.0	5.3	5.3
Lane Util. Factor	0.91	1.00	0.97	0.91	0.97	0.88
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	5085	1583	3433	5085	3433	2787
Flt Permitted	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (perm)	5085	1583	3433	5085	3433	2787
Peak-hour factor, PHF	0.85	0.85	0.91	0.91	0.85	0.85
Adj. Flow (vph)	644	512	407	1384	708	275
RTOR Reduction (vph)	0	275	0	0	0	69
Lane Group Flow (vph)	644	237	407	1384	708	206
Turn Type	NA	Perm	Prot	NA	Prot	pt+ov
Protected Phases	2		1	6	8	8 1
Permitted Phases		2				
Actuated Green, G (s)	60.1	60.1	19.9	84.6	34.1	59.3
Effective Green, g (s)	60.1	60.1	19.9	84.6	34.1	59.3
Actuated g/C Ratio	0.46	0.46	0.15	0.65	0.26	0.46
Clearance Time (s)	6.2	6.2	4.4	6.0	5.3	
Vehicle Extension (s)	4.0	4.0	2.0	3.7	3.8	
Lane Grp Cap (vph)	2350	731	525	3309	900	1271
v/s Ratio Prot	0.13		c0.12	c0.27	c0.21	0.07
v/s Ratio Perm		0.15				
v/c Ratio	0.27	0.32	0.78	0.42	0.79	0.16
Uniform Delay, d1	21.5	22.1	52.9	10.9	44.6	20.8
Progression Factor	1.00	1.00	1.09	0.32	0.81	0.27
Incremental Delay, d2	0.3	1.2	6.2	0.4	4.6	0.1
Delay (s)	21.8	23.3	63.7	3.9	40.7	5.7
Level of Service	C	C	E	A	D	A
Approach Delay (s)	22.5			17.5	30.9	
Approach LOS	C			B	C	

Intersection Summary

HCM 2000 Control Delay	22.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	15.9
Intersection Capacity Utilization	51.5%	ICU Level of Service	A
Analysis Period (min)	15		

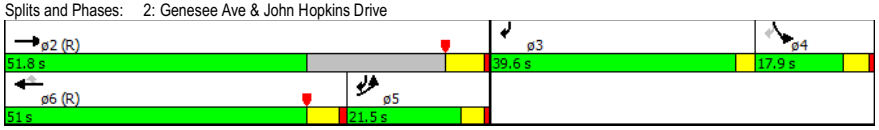
c Critical Lane Group

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	ø3
Lane Configurations							
Traffic Volume (vph)	77	748	1552	1347	146	21	
Future Volume (vph)	77	748	1552	1347	146	21	
Turn Type	Prot	NA	NA	Perm	Prot	pt+ov	
Protected Phases	5	2	6		4	3 5	3
Permitted Phases				6		4	
Detector Phase	5	2	6	6	4	3 5	
Switch Phase							
Minimum Initial (s)	4.0	10.0	10.0	10.0	7.0		4.0
Minimum Split (s)	9.5	16.7	15.9	15.9	11.9		7.0
Total Split (s)	21.5	51.8	51.0	51.0	17.9		39.6
Total Split (%)	16.5%	39.8%	39.2%	39.2%	13.8%		30%
Yellow Time (s)	3.4	5.7	4.9	4.9	3.9		3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		0.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	4.4	6.7	5.9	5.9	4.9		
Lead/Lag	Lag		Lead	Lead	Lag		Lead
Lead-Lag Optimize?	Yes		Yes	Yes	Yes		Yes
Recall Mode	None	C-Min	C-Min	C-Min	None		None

Intersection Summary

Cycle Length: 130
Actuated Cycle Length: 130
Offset: 16 (12%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 2: Genesee Ave & John Hopkins Drive



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	77	748	1552	1347	146	21
Future Volume (vph)	77	748	1552	1347	146	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	6.7	5.9	5.9	4.9	3.0
Lane Util. Factor	1.00	0.91	0.81	1.00	0.97	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	5085	7544	1583	3433	1583
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	5085	7544	1583	3433	1583
Peak-hour factor, PHF	0.89	0.89	0.94	0.94	0.80	0.80
Adj. Flow (vph)	87	840	1651	1433	182	26
RTOR Reduction (vph)	0	0	0	0	0	1
Lane Group Flow (vph)	87	840	1651	1433	183	25
Turn Type	Prot	NA	NA	Perm	Prot	pt+ov
Protected Phases	5	2	6		4	3 5
Permitted Phases				6		4
Actuated Green, G (s)	10.8	92.9	78.5	78.5	13.3	37.7
Effective Green, g (s)	10.8	92.9	78.5	78.5	13.3	33.3
Actuated g/C Ratio	0.08	0.71	0.60	0.60	0.10	0.26
Clearance Time (s)	4.4	6.7	5.9	5.9	4.9	
Vehicle Extension (s)	2.0	4.0	3.9	3.9	5.0	
Lane Grp Cap (vph)	147	3633	4555	955	351	442
v/s Ratio Prot	c0.05	0.17	0.22		c0.05	c0.01
v/s Ratio Perm				c0.91		0.01
v/c Ratio	0.59	0.23	0.36	1.50	0.52	0.06
Uniform Delay, d1	57.5	6.3	13.1	25.8	55.3	36.5
Progression Factor	0.79	0.50	1.18	1.21	1.00	1.00
Incremental Delay, d2	4.1	0.1	0.1	228.1	2.6	0.0
Delay (s)	49.3	3.3	15.5	259.2	58.0	36.5
Level of Service	D	A	B	F	E	D
Approach Delay (s)		7.6	128.7		55.3	
Approach LOS		A	F		E	

Intersection Summary

HCM 2000 Control Delay	98.5	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.18		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	18.2
Intersection Capacity Utilization	96.3%	ICU Level of Service	F
Analysis Period (min)	15		

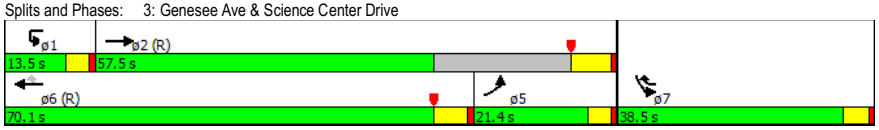
c Critical Lane Group

Lane Group	EBL	EBT	WBU	WBT	WBR	SBL
Lane Configurations						
Traffic Volume (vph)	98	809	3	2870	323	33
Future Volume (vph)	98	809	3	2870	323	33
Turn Type	Prot	NA	Prot	NA	pm+ov	Prot
Protected Phases	5	2	1	6	7	7
Permitted Phases					6	
Detector Phase	5	2	1	6	7	7
Switch Phase						
Minimum Initial (s)	4.0	10.0	4.0	10.0	4.0	4.0
Minimum Split (s)	9.5	22.5	9.5	16.0	8.9	8.9
Total Split (s)	21.4	57.5	13.5	70.1	38.5	38.5
Total Split (%)	16.5%	44.2%	10.4%	53.9%	29.6%	29.6%
Yellow Time (s)	3.4	5.9	3.4	5.0	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	6.9	4.4	6.0	4.9	4.9
Lead/Lag	Lag	Lag	Lead	Lead		
Lead-Lag Optimize?	Yes	Yes	Yes	Yes		
Recall Mode	None	C-Max	None	C-Max	None	None

Intersection Summary

Cycle Length: 130
Actuated Cycle Length: 130
Offset: 39 (30%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 70
Control Type: Actuated-Coordinated

Splits and Phases: 3: Genesee Ave & Science Center Drive



Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Traffic Volume (vph)	98	809	3	2870	323	33	18
Future Volume (vph)	98	809	3	2870	323	33	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	6.9	4.4	6.0	4.9	4.9	
Lane Util. Factor	1.00	0.91	1.00	0.91	1.00	0.97	
Frt	1.00	1.00	1.00	1.00	0.85	0.95	
Flt Protected	0.95	1.00	0.95	1.00	1.00	0.97	
Satd. Flow (prot)	1770	5085	1770	5085	1583	3313	
Flt Permitted	0.95	1.00	0.95	1.00	1.00	0.97	
Satd. Flow (perm)	1770	5085	1770	5085	1583	3313	
Peak-hour factor, PHF	0.88	0.88	0.92	0.95	0.95	0.80	0.80
Adj. Flow (vph)	111	919	3	3021	340	41	22
RTOR Reduction (vph)	0	0	0	0	94	22	0
Lane Group Flow (vph)	111	919	3	3021	246	42	0
Turn Type	Prot	NA	Prot	NA	pm+ov	Prot	
Protected Phases	5	2	1	6	7	7	
Permitted Phases					6		
Actuated Green, G (s)	20.5	105.4	1.3	87.1	94.2	7.1	
Effective Green, g (s)	20.5	105.4	1.3	87.1	94.2	7.1	
Actuated g/C Ratio	0.16	0.81	0.01	0.67	0.72	0.05	
Clearance Time (s)	4.4	6.9	4.4	6.0	4.9	4.9	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	279	4122	17	3406	1206	180	
v/s Ratio Prot	c0.06	0.18	0.00	c0.59	c0.01	0.01	
v/s Ratio Perm					0.14		
v/c Ratio	0.40	0.22	0.18	0.89	0.20	0.23	
Uniform Delay, d1	49.2	2.8	63.8	17.4	5.8	58.8	
Progression Factor	0.91	0.62	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.9	0.1	4.9	3.9	0.1	0.7	
Delay (s)	45.5	1.9	68.7	21.3	5.9	59.5	
Level of Service	D	A	E	C	A	E	
Approach Delay (s)		6.6		19.8		59.5	
Approach LOS		A		B		E	

Intersection Summary

HCM 2000 Control Delay	17.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	16.2
Intersection Capacity Utilization	77.0%	ICU Level of Service	D
Analysis Period (min)	15		

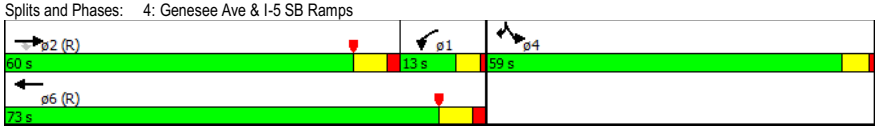
c Critical Lane Group

Lane Group	EBT	EBR	WBL	WBT	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	617	203	96	2176	1095	746
Future Volume (vph)	617	203	96	2176	1095	746
Turn Type	NA	Perm	Prot	NA	Prot	Prot
Protected Phases	2		1	6	4	4
Permitted Phases		2				
Detector Phase	2	2	1	6	4	4
Switch Phase						
Minimum Initial (s)	10.0	10.0	5.0	10.0	13.0	13.0
Minimum Split (s)	25.2	25.2	9.7	28.2	18.1	18.1
Total Split (s)	60.0	60.0	13.0	73.0	59.0	59.0
Total Split (%)	45.5%	45.5%	9.8%	55.3%	44.7%	44.7%
Yellow Time (s)	5.2	5.2	3.7	5.2	4.1	4.1
All-Red Time (s)	2.0	2.0	1.0	2.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.2	7.2	4.7	7.2	5.1	5.1
Lead/Lag	Lead	Lead	Lag			
Lead-Lag Optimize?	Yes	Yes	Yes			
Recall Mode	C-Max	C-Max	None	C-Max	Min	Min

Intersection Summary

Cycle Length: 132
Actuated Cycle Length: 132
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 4: Genesee Ave & I-5 SB Ramps



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	617	203	96	2176	0	0	0	0	1095	0	746
Future Volume (vph)	0	617	203	96	2176	0	0	0	0	1095	0	746
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		7.2	7.2	4.7	7.2					5.1		5.1
Lane Util. Factor		0.81	0.88	0.97	0.91					0.97		0.88
Frt		1.00	0.85	1.00	1.00					1.00		0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (prot)		7544	2787	3433	5085					3433		2787
Flt Permitted		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (perm)		7544	2787	3433	5085					3433		2787
Peak-hour factor, PHF	0.99	0.99	0.99	0.93	0.93	0.93	0.25	0.25	0.25	0.85	0.85	0.85
Adj. Flow (vph)	0	623	205	103	2340	0	0	0	0	1288	0	878
RTOR Reduction (vph)	0	0	121	0	0	0	0	0	0	0	0	57
Lane Group Flow (vph)	0	623	84	103	2340	0	0	0	0	1288	0	821
Turn Type		NA	Perm	Prot	NA					Prot		Prot
Protected Phases		2		1	6					4		4
Permitted Phases			2									
Actuated Green, G (s)		54.1	54.1	8.3	67.1					52.6		52.6
Effective Green, g (s)		54.1	54.1	8.3	67.1					52.6		52.6
Actuated g/C Ratio		0.41	0.41	0.06	0.51					0.40		0.40
Clearance Time (s)		7.2	7.2	4.7	7.2					5.1		5.1
Vehicle Extension (s)		2.0	2.0	2.0	2.0					2.0		2.0
Lane Grp Cap (vph)		3091	1142	215	2584					1367		1110
v/s Ratio Prot		0.08		0.03	c0.46					c0.38		0.29
v/s Ratio Perm			0.03									
v/c Ratio		0.20	0.07	0.48	0.91					0.94		0.74
Uniform Delay, d1		25.1	23.7	59.8	29.6					38.2		33.9
Progression Factor		1.00	1.00	1.17	1.29					1.00		1.00
Incremental Delay, d2		0.1	0.1	0.3	3.3					12.8		2.4
Delay (s)		25.2	23.8	70.3	41.4					51.1		36.2
Level of Service		C	C	E	D					D		D
Approach Delay (s)		24.9			42.6			0.0			45.0	
Approach LOS		C			D			A			D	

Intersection Summary

HCM 2000 Control Delay	40.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.96		
Actuated Cycle Length (s)	132.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	104.6%	ICU Level of Service	G
Analysis Period (min)	15		

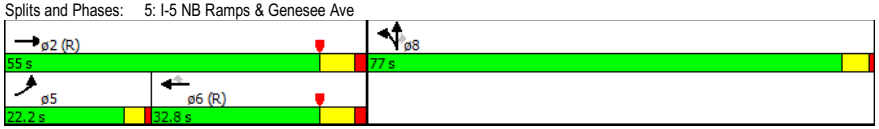
c Critical Lane Group

Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Configurations							
Traffic Volume (vph)	241	1551	608	384	1585	9	561
Future Volume (vph)	241	1551	608	384	1585	9	561
Turn Type	Prot	NA	NA	Perm	Split	NA	Perm
Protected Phases	5	2	6		8	8	
Permitted Phases				6			8
Detector Phase	5	2	6	6	8	8	8
Switch Phase							
Minimum Initial (s)	11.0	10.0	10.0	10.0	5.0	5.0	5.0
Minimum Split (s)	22.2	28.2	25.2	25.2	10.1	10.1	10.1
Total Split (s)	22.2	55.0	32.8	32.8	77.0	77.0	77.0
Total Split (%)	16.8%	41.7%	24.8%	24.8%	58.3%	58.3%	58.3%
Yellow Time (s)	3.2	5.2	5.2	5.2	4.1	4.1	4.1
All-Red Time (s)	1.0	2.0	2.0	2.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.2	7.2	7.2	7.2	5.1	5.1	5.1
Lead/Lag	Lead		Lag	Lag			
Lead-Lag Optimize?	Yes		Yes	Yes			
Recall Mode	None	C-Max	C-Max	C-Max	None	None	None

Intersection Summary

Cycle Length: 132
Actuated Cycle Length: 132
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 110
Control Type: Actuated-Coordinated

Splits and Phases: 5: I-5 NB Ramps & Genesee Ave



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	241	1551	0	0	608	384	1585	9	561	0	0	0
Future Volume (vph)	241	1551	0	0	608	384	1585	9	561	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	7.2			7.2	7.2	5.1	5.1	5.1			
Lane Util. Factor	0.97	0.91			0.81	0.88	0.95	0.95	0.88			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.95	1.00			
Satd. Flow (prot)	3433	5085			7544	2787	1681	1686	2787			
Flt Permitted	0.95	1.00			1.00	1.00	0.95	0.95	1.00			
Satd. Flow (perm)	3433	5085			7544	2787	1681	1686	2787			
Peak-hour factor, PHF	0.86	0.86	0.86	0.80	0.80	0.80	0.88	0.88	0.88	0.25	0.25	0.25
Adj. Flow (vph)	280	1803	0	0	760	480	1801	10	638	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	375	0	0	31	0	0	0
Lane Group Flow (vph)	280	1803	0	0	760	105	900	911	607	0	0	0
Turn Type	Prot	NA			NA	Perm	Split	NA	Perm			
Protected Phases	5	2			6		8	8				
Permitted Phases						6			8			
Actuated Green, G (s)	14.8	47.8			28.8	28.8	71.9	71.9	71.9			
Effective Green, g (s)	14.8	47.8			28.8	28.8	71.9	71.9	71.9			
Actuated g/C Ratio	0.11	0.36			0.22	0.22	0.54	0.54	0.54			
Clearance Time (s)	4.2	7.2			7.2	7.2	5.1	5.1	5.1			
Vehicle Extension (s)	2.0	2.0			2.0	2.0	2.0	2.0	2.0			
Lane Grp Cap (vph)	384	1841			1645	608	915	918	1518			
v/s Ratio Prot	0.08	c0.35			0.10		0.54	c0.54				
v/s Ratio Perm						0.04			0.22			
v/c Ratio	0.73	0.98			0.46	0.17	0.98	0.99	0.40			
Uniform Delay, d1	56.7	41.6			44.9	41.9	29.5	29.8	17.5			
Progression Factor	0.65	1.02			0.79	1.47	1.00	1.00	1.00			
Incremental Delay, d2	4.5	14.2			0.9	0.6	25.5	27.7	0.1			
Delay (s)	41.6	56.6			36.5	62.4	55.0	57.4	17.6			
Level of Service	D	E			D	E	D	E	B			
Approach Delay (s)		54.5			46.5			46.1			0.0	
Approach LOS		D			D			D			A	

Intersection Summary

HCM 2000 Control Delay	49.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.02		
Actuated Cycle Length (s)	132.0	Sum of lost time (s)	16.5
Intersection Capacity Utilization	104.6%	ICU Level of Service	G
Analysis Period (min)	15		

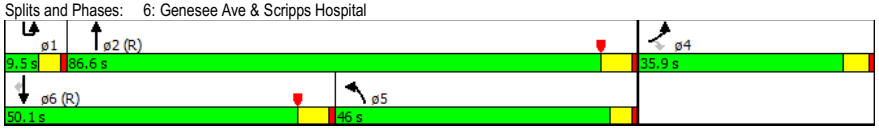
c Critical Lane Group

Lane Group	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	115	363	650	814	6	1507	936
Future Volume (vph)	115	363	650	814	6	1507	936
Turn Type	Prot	Perm	Prot	NA	Prot	NA	Perm
Protected Phases	4		5	2	1	6	
Permitted Phases		4					6
Detector Phase	4	4	5	2	1	6	6
Switch Phase							
Minimum Initial (s)	7.0	7.0	4.0	10.0	4.0	10.0	10.0
Minimum Split (s)	35.9	35.9	9.5	22.5	9.5	30.5	30.5
Total Split (s)	35.9	35.9	46.0	86.6	9.5	50.1	50.1
Total Split (%)	27.2%	27.2%	34.8%	65.6%	7.2%	38.0%	38.0%
Yellow Time (s)	3.9	3.9	3.4	4.7	3.4	4.7	4.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	4.4	5.7	4.4	5.7	5.7
Lead/Lag			Lag	Lag	Lead	Lead	Lead
Lead-Lag Optimize?			Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	C-Max	None	C-Max	C-Max

Intersection Summary

Cycle Length: 132
Actuated Cycle Length: 132
Offset: 69 (52%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 6: Genesee Ave & Scripps Hospital



Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	115	363	650	814	6	1507	936
Future Volume (vph)	115	363	650	814	6	1507	936
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9	4.4	5.7	4.4	5.7	5.7
Lane Util. Factor	0.97	1.00	1.00	0.91	1.00	0.91	1.00
Frt	1.00	0.85	1.00	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	1583	1770	5085	1770	5085	1583
Flt Permitted	0.95	1.00	0.95	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	1583	1770	5085	1770	5085	1583
Peak-hour factor, PHF	0.90	0.90	0.90	0.80	0.92	0.89	0.90
Adj. Flow (vph)	128	403	722	1018	7	1693	1040
RTOR Reduction (vph)	0	350	0	0	0	0	295
Lane Group Flow (vph)	128	53	722	1018	7	1693	745
Turn Type	Prot	Perm	Prot	NA	Prot	NA	Perm
Protected Phases	4		5	2	1	6	
Permitted Phases		4					6
Actuated Green, G (s)	17.3	17.3	45.1	98.7	1.0	54.6	54.6
Effective Green, g (s)	17.3	17.3	45.1	98.7	1.0	54.6	54.6
Actuated g/C Ratio	0.13	0.13	0.34	0.75	0.01	0.41	0.41
Clearance Time (s)	4.9	4.9	4.4	5.7	4.4	5.7	5.7
Vehicle Extension (s)	2.0	2.0	2.0	5.2	2.0	4.0	4.0
Lane Grp Cap (vph)	449	207	604	3802	13	2103	654
v/s Ratio Prot	c0.04		c0.41	0.20	0.00	0.33	
v/s Ratio Perm		0.03					c0.47
v/c Ratio	0.29	0.26	1.20	0.27	0.54	0.81	1.14
Uniform Delay, d1	51.8	51.6	43.5	5.3	65.3	34.0	38.7
Progression Factor	1.00	1.00	0.56	0.15	0.77	0.88	1.38
Incremental Delay, d2	0.1	0.2	101.1	0.1	13.3	2.3	74.9
Delay (s)	51.9	51.8	125.3	0.9	63.4	32.2	128.4
Level of Service	D	D	F	A	E	C	F
Approach Delay (s)	51.8			52.5		68.8	
Approach LOS	D			D		E	

Intersection Summary

HCM 2000 Control Delay	61.3	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.03		
Actuated Cycle Length (s)	132.0	Sum of lost time (s)	15.0
Intersection Capacity Utilization	102.4%	ICU Level of Service	G
Analysis Period (min)	15		

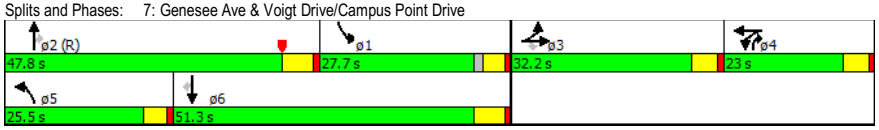
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	140	12	114	26	12	464	1310	500	359	1048	461
Future Volume (vph)	140	12	114	26	12	464	1310	500	359	1048	461
Turn Type	Split	NA	Perm	Split	NA	Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	3	3		4	4	5	2	4	1	6	
Permitted Phases			3					2			6
Detector Phase	3	3	3	4	4	5	2	4	1	6	6
Switch Phase											
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	4.0	10.0	7.0	4.0	10.0	10.0
Minimum Split (s)	11.9	11.9	11.9	22.5	22.5	22.5	37.7	22.5	22.5	33.7	33.7
Total Split (s)	32.2	32.2	32.2	23.0	23.0	25.5	47.8	23.0	27.7	51.3	51.3
Total Split (%)	24.4%	24.4%	24.4%	17.4%	17.4%	19.3%	36.2%	17.4%	21.0%	38.9%	38.9%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.9	3.4	4.7	3.9	3.4	4.7	4.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	4.9	4.9	4.9	4.4	5.7	4.9	4.4	5.7	5.7
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	None	None	None	None

Intersection Summary

Cycle Length: 132
Actuated Cycle Length: 132
Offset: 99 (75%), Referenced to phase 2:NBT, Start of Yellow
Natural Cycle: 95
Control Type: Actuated-Coordinated

Splits and Phases: 7: Genesee Ave & Voigt Drive/Campus Point Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	140	12	114	26	12	57	464	1310	500	359	1048	461
Future Volume (vph)	140	12	114	26	12	57	464	1310	500	359	1048	461
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9	4.9	4.9	4.9		4.4	5.7	4.9	4.4	5.7	5.7
Lane Util. Factor	0.97	1.00	0.88	0.97	0.95		0.97	0.91	1.00	0.97	0.91	1.00
Frt	1.00	1.00	0.85	1.00	0.88		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	1863	2787	3433	3098		3433	5085	1583	3433	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	1863	2787	3433	3098		3433	5085	1583	3433	5085	1583
Peak-hour factor, PHF	0.90	0.90	0.90	0.83	0.83	0.83	0.88	0.88	0.88	0.80	0.80	0.80
Adj. Flow (vph)	156	13	127	31	14	69	527	1489	568	449	1310	576
RTOR Reduction (vph)	0	0	111	0	63	0	0	0	208	0	0	243
Lane Group Flow (vph)	156	13	16	31	20	0	527	1489	360	449	1310	333
Turn Type	Split	NA	Perm	Split	NA		Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	3	3		4	4		5	2	4	1	6	
Permitted Phases			3						2			6
Actuated Green, G (s)	16.3	16.3	16.3	11.9	11.9		23.2	61.1	73.0	22.8	60.7	60.7
Effective Green, g (s)	16.3	16.3	16.3	11.9	11.9		23.2	61.1	73.0	22.8	60.7	60.7
Actuated g/C Ratio	0.12	0.12	0.12	0.09	0.09		0.18	0.46	0.55	0.17	0.46	0.46
Clearance Time (s)	4.9	4.9	4.9	4.9	4.9		4.4	5.7	4.9	4.4	5.7	5.7
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0		2.0	3.7	2.0	2.0	4.0	4.0
Lane Grp Cap (vph)	423	230	344	309	279		603	2353	934	592	2338	727
v/s Ratio Prot	c0.05	0.01		0.01	0.01		c0.15	c0.29	c0.03	c0.13	0.26	
v/s Ratio Perm			0.01						0.19			0.21
v/c Ratio	0.37	0.06	0.05	0.10	0.07		0.87	0.63	0.39	0.76	0.56	0.46
Uniform Delay, d1	53.1	51.1	51.0	55.1	55.0		53.0	26.9	16.8	52.0	25.9	24.4
Progression Factor	1.00	1.00	1.00	1.00	1.00		0.78	1.02	1.88	1.15	1.15	2.58
Incremental Delay, d2	0.2	0.0	0.0	0.1	0.0		10.7	1.1	0.1	3.8	0.3	0.5
Delay (s)	53.3	51.1	51.0	55.2	55.0		52.0	28.6	31.6	63.7	30.0	63.5
Level of Service	D	D	D	E	E		D	C	C	E	C	E
Approach Delay (s)		52.2			55.1			34.1			44.8	
Approach LOS		D			E			C			D	

Intersection Summary

HCM 2000 Control Delay	40.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	132.0	Sum of lost time (s)	19.9
Intersection Capacity Utilization	60.1%	ICU Level of Service	B
Analysis Period (min)	15		

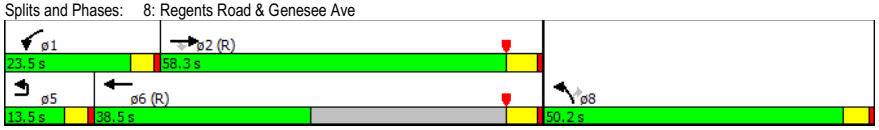
c Critical Lane Group

Lane Group	EBU	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations							
Traffic Volume (vph)	98	889	149	85	1780	267	66
Future Volume (vph)	98	889	149	85	1780	267	66
Turn Type	Prot	NA	Perm	Prot	NA	Prot	Perm
Protected Phases	5	2		1	6	8	
Permitted Phases			2				8
Detector Phase	5	2	2	1	6	8	8
Switch Phase							
Minimum Initial (s)	4.0	10.0	10.0	4.0	10.0	7.0	7.0
Minimum Split (s)	9.5	22.7	22.7	9.5	22.5	37.9	37.9
Total Split (s)	13.5	58.3	58.3	23.5	38.5	50.2	50.2
Total Split (%)	10.2%	44.2%	44.2%	17.8%	29.2%	38.0%	38.0%
Yellow Time (s)	3.4	4.7	4.7	3.4	4.7	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.7	5.7	4.4	5.7	4.9	4.9
Lead/Lag	Lead	Lag	Lag	Lead	Lag		
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		
Recall Mode	None	C-Max	C-Max	None	C-Max	None	None

Intersection Summary

Cycle Length: 132
Actuated Cycle Length: 132
Offset: 60 (45%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 8: Regents Road & Genesee Ave



Movement	EBU	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations							
Traffic Volume (vph)	98	889	149	85	1780	267	66
Future Volume (vph)	98	889	149	85	1780	267	66
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	12	16	12
Total Lost time (s)	4.4	5.7	5.7	4.4	5.7	4.9	4.9
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	1770	5085	1583	1770	5085	2006	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (perm)	1770	5085	1583	1770	5085	2006	1583
Peak-hour factor, PHF	0.92	0.80	0.80	0.90	0.90	0.80	0.80
Adj. Flow (vph)	107	1111	186	94	1978	334	82
RTOR Reduction (vph)	0	0	75	0	0	0	66
Lane Group Flow (vph)	107	1111	111	94	1978	334	17
Turn Type	Prot	NA	Perm	Prot	NA	Prot	Perm
Protected Phases	5	2		1	6	8	
Permitted Phases			2				8
Actuated Green, G (s)	13.6	78.8	78.8	11.4	76.6	26.8	26.8
Effective Green, g (s)	13.6	78.8	78.8	11.4	76.6	26.8	26.8
Actuated g/C Ratio	0.10	0.60	0.60	0.09	0.58	0.20	0.20
Clearance Time (s)	4.4	5.7	5.7	4.4	5.7	4.9	4.9
Vehicle Extension (s)	2.0	5.0	5.0	2.0	3.9	2.0	2.0
Lane Grp Cap (vph)	182	3035	945	152	2950	407	321
v/s Ratio Prot	c0.06	0.22		0.05	c0.39	c0.17	
v/s Ratio Perm			0.07				0.01
v/c Ratio	0.59	0.37	0.12	0.62	0.67	0.82	0.05
Uniform Delay, d1	56.5	13.7	11.5	58.2	19.0	50.3	42.4
Progression Factor	0.77	1.53	4.30	1.31	0.66	1.00	1.00
Incremental Delay, d2	2.7	0.3	0.2	1.2	0.3	11.9	0.0
Delay (s)	46.0	21.3	49.8	77.6	12.8	62.2	42.4
Level of Service	D	C	D	E	B	E	D
Approach Delay (s)		26.9			15.8	58.3	
Approach LOS		C			B	E	

Intersection Summary

HCM 2000 Control Delay	24.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	132.0	Sum of lost time (s)	15.0
Intersection Capacity Utilization	67.1%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	99	262	75	383	349	1599	200	531
Future Volume (vph)	99	262	75	383	349	1599	200	531
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	7	4	3	8	5	2	1	6
Permitted Phases								
Detector Phase	7	4	3	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	4.0	7.0	4.0	7.0	4.0	10.0	4.0	10.0
Minimum Split (s)	15.0	38.9	9.5	39.1	9.5	31.7	9.5	32.7
Total Split (s)	15.0	39.7	14.4	39.1	40.0	62.9	15.0	37.9
Total Split (%)	11.4%	30.1%	10.9%	29.6%	30.3%	47.7%	11.4%	28.7%
Yellow Time (s)	3.4	3.9	3.4	4.1	3.4	4.7	3.4	4.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	4.9	4.4	5.1	4.4	5.7	4.4	5.7
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max

Intersection Summary

Cycle Length: 132
Actuated Cycle Length: 132
Offset: 101 (77%), Referenced to phase 6:SBT, Start of Yellow
Natural Cycle: 140
Control Type: Actuated-Coordinated

Splits and Phases: 9: Genesee Ave & Eastgate Mall

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	99	262	112	75	383	411	349	1599	283	200	531	161
Future Volume (vph)	99	262	112	75	383	411	349	1599	283	200	531	161
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	5.1		4.4	5.7		4.4	5.7	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.91		0.97	0.91	
Frt	1.00	0.96		1.00	0.92		1.00	0.98		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3380		1770	3264		1770	4971		3433	4908	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	3380		1770	3264		1770	4971		3433	4908	
Peak-hour factor, PHF	0.80	0.80	0.80	0.82	0.82	0.82	0.86	0.86	0.86	0.80	0.80	0.80
Adj. Flow (vph)	124	328	140	91	467	501	406	1859	329	250	664	201
RTOR Reduction (vph)	0	0	0	0	135	0	0	19	0	0	42	0
Lane Group Flow (vph)	124	468	0	91	833	0	406	2169	0	250	823	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Actuated Green, G (s)	10.5	35.5		9.3	34.1		35.6	57.2		10.6	32.2	
Effective Green, g (s)	10.5	35.5		9.3	34.1		35.6	57.2		10.6	32.2	
Actuated g/C Ratio	0.08	0.27		0.07	0.26		0.27	0.43		0.08	0.24	
Clearance Time (s)	4.4	4.9		4.4	5.1		4.4	5.7		4.4	5.7	
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	4.2		2.0	4.3	
Lane Grp Cap (vph)	140	909		124	843		477	2154		275	1197	
v/s Ratio Prot	c0.07	0.14		0.05	c0.26		0.23	c0.44		c0.07	0.17	
v/s Ratio Perm												
v/c Ratio	0.89	0.51		0.73	0.99		0.85	1.01		0.91	0.69	
Uniform Delay, d1	60.2	40.9		60.1	48.7		45.7	37.4		60.2	45.3	
Progression Factor	1.00	1.00		1.00	1.00		0.66	0.57		0.83	1.16	
Incremental Delay, d2	42.7	0.2		17.5	27.7		9.9	18.2		29.7	3.1	
Delay (s)	102.8	41.1		77.6	76.5		40.0	39.6		79.5	55.8	
Level of Service	F	D		E	E		D	D		E	E	
Approach Delay (s)		54.1			76.6			39.6			61.1	
Approach LOS		D			E			D			E	

Intersection Summary

HCM 2000 Control Delay	53.0	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.98		
Actuated Cycle Length (s)	132.0	Sum of lost time (s)	19.6
Intersection Capacity Utilization	88.5%	ICU Level of Service	E
Analysis Period (min)	15		

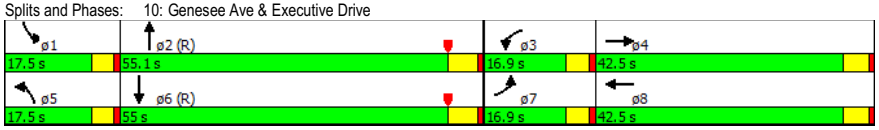
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	17	90	102	64	88	1836	36	557
Future Volume (vph)	17	90	102	64	88	1836	36	557
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	7	4	3	8	5	2	1	6
Permitted Phases								
Detector Phase	7	4	3	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	10.0	4.0	10.0
Minimum Split (s)	8.4	8.9	8.4	8.9	8.4	15.5	9.5	15.4
Total Split (s)	16.9	42.5	16.9	42.5	17.5	55.1	17.5	55.0
Total Split (%)	12.8%	32.2%	12.8%	32.2%	13.3%	41.7%	13.3%	41.7%
Yellow Time (s)	3.4	3.9	3.4	3.9	3.4	4.5	3.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	4.9	4.4	4.9	4.4	5.5	4.4	5.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	None	C-Max

Intersection Summary

Cycle Length: 132
Actuated Cycle Length: 132
Offset: 127 (96%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 75
Control Type: Actuated-Coordinated

Splits and Phases: 10: Genesee Ave & Executive Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	17	90	51	102	64	85	88	1836	526	36	557	15
Future Volume (vph)	17	90	51	102	64	85	88	1836	526	36	557	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	4.9		4.4	5.5		4.4	5.4	
Lane Util. Factor	1.00	0.95		0.97	0.95		1.00	0.91		1.00	0.91	
Frt	1.00	0.95		1.00	0.91		1.00	0.97		1.00	1.00	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3348		3433	3237		1770	4915		1770	5065	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	3348		3433	3237		1770	4915		1770	5065	
Peak-hour factor, PHF	0.92	0.92	0.92	0.80	0.80	0.80	0.91	0.91	0.91	0.80	0.80	0.80
Adj. Flow (vph)	18	98	55	128	80	106	97	2018	578	45	696	19
RTOR Reduction (vph)	0	47	0	0	85	0	0	27	0	0	1	0
Lane Group Flow (vph)	18	106	0	128	101	0	97	2569	0	45	714	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Actuated Green, G (s)	2.9	20.3		9.3	26.7		11.6	76.3		6.9	71.7	
Effective Green, g (s)	2.9	20.3		9.3	26.7		11.6	76.3		6.9	71.7	
Actuated g/C Ratio	0.02	0.15		0.07	0.20		0.09	0.58		0.05	0.54	
Clearance Time (s)	4.4	4.9		4.4	4.9		4.4	5.5		4.4	5.4	
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	3.6		2.0	3.8	
Lane Grp Cap (vph)	38	514		241	654		155	2841		92	2751	
v/s Ratio Prot	0.01	c0.03		c0.04	0.03		c0.05	c0.52		0.03	0.14	
v/s Ratio Perm												
v/c Ratio	0.47	0.21		0.53	0.16		0.63	0.90		0.49	0.26	
Uniform Delay, d1	63.8	48.8		59.2	43.4		58.1	24.6		60.8	16.0	
Progression Factor	1.00	1.00		1.00	1.00		1.28	0.67		1.23	0.28	
Incremental Delay, d2	3.4	0.1		1.1	0.0		3.9	3.8		1.1	0.2	
Delay (s)	67.2	48.9		60.4	43.4		78.3	20.4		75.9	4.7	
Level of Service	E	D		E	D		E	C		E	A	
Approach Delay (s)		50.8			50.3			22.5			8.9	
Approach LOS		D			D			C			A	

Intersection Summary

HCM 2000 Control Delay	23.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	132.0	Sum of lost time (s)	19.2
Intersection Capacity Utilization	74.4%	ICU Level of Service	D
Analysis Period (min)	15		

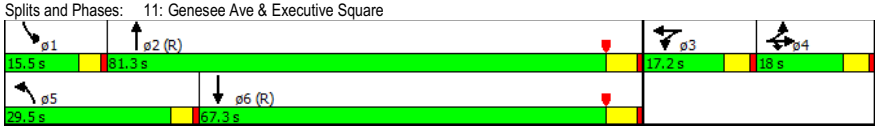
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	17	3	34	4	11	290	2576	22	632
Future Volume (vph)	17	3	34	4	11	290	2576	22	632
Turn Type	Split	NA	Prot	NA	NA	Prot	NA	Prot	NA
Protected Phases	4	4	4	3		5	2	1	6
Permitted Phases									
Detector Phase	4	4	4	3		5	2	1	6
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	4.0		4.0	10.0	4.0	10.0
Minimum Split (s)	8.9	8.9	8.9	8.9		8.4	15.7	8.4	15.7
Total Split (s)	18.0	18.0	18.0	17.2		29.5	81.3	15.5	67.3
Total Split (%)	13.6%	13.6%	13.6%	13.0%		22.3%	61.6%	11.7%	51.0%
Yellow Time (s)	3.9	3.9	3.9	3.9		3.4	4.7	3.4	4.7
All-Red Time (s)	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	4.9	4.9		4.4	5.7	4.4	5.7
Lead/Lag	Lag	Lag	Lag	Lead		Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None		None	C-Max	None	C-Max

Intersection Summary

Cycle Length: 132
Actuated Cycle Length: 132
Offset: 14 (11%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 80
Control Type: Actuated-Coordinated

Splits and Phases: 11: Genesee Ave & Executive Square



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	17	3	34	10	4	11	290	2576	212	22	632	28
Future Volume (vph)	17	3	34	10	4	11	290	2576	212	22	632	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9	4.9		4.9	4.0	4.4	5.7		4.4	5.7	
Lane Util. Factor	0.95	0.91	0.95		0.95	0.95	1.00	0.91		1.00	0.91	
Frt	1.00	0.88	0.85		0.99	0.85	1.00	0.99		1.00	0.99	
Flt Protected	0.95	1.00	1.00		0.97	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1492	1504		1698	1504	1770	5027		1770	5053	
Flt Permitted	0.95	1.00	1.00		0.97	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1681	1492	1504		1698	1504	1770	5027		1770	5053	
Peak-hour factor, PHF	0.87	0.87	0.87	0.80	0.80	0.80	0.96	0.96	0.96	0.80	0.80	0.80
Adj. Flow (vph)	20	3	39	12	5	14	302	2683	221	28	790	35
RTOR Reduction (vph)	0	16	21	0	1	13	0	4	0	0	3	0
Lane Group Flow (vph)	18	6	1	0	18	0	302	2900	0	28	822	0
Turn Type	Split	NA	Prot	Split	NA	NA	Prot	NA		Prot	NA	
Protected Phases	4	4	4	3	3		5	2		1	6	
Permitted Phases												
Actuated Green, G (s)	5.1	5.1	5.1		3.0	0.0	28.1	99.4		4.6	75.9	
Effective Green, g (s)	5.1	5.1	5.1		3.0	0.0	28.1	99.4		4.6	75.9	
Actuated g/C Ratio	0.04	0.04	0.04		0.02	0.00	0.21	0.75		0.03	0.58	
Clearance Time (s)	4.9	4.9	4.9		4.9		4.4	5.7		4.4	5.7	
Vehicle Extension (s)	2.0	2.0	2.0		2.0		2.0	3.9		2.0	2.2	
Lane Grp Cap (vph)	64	57	58		38	0	376	3785		61	2905	
v/s Ratio Prot	c0.01	0.00	0.00		c0.01		c0.17	c0.58		0.02	0.16	
v/s Ratio Perm												
v/c Ratio	0.28	0.10	0.01		0.47	0.00	0.80	0.77		0.46	0.28	
Uniform Delay, d1	61.7	61.2	61.0		63.7	66.0	49.3	9.5		62.5	14.2	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.16	0.26	
Incremental Delay, d2	0.9	0.3	0.0		3.4	0.0	11.1	1.5		1.9	0.2	
Delay (s)	62.5	61.5	61.1		67.1	66.0	60.4	11.1		74.7	3.9	
Level of Service	E	E	E		E	E	E	B		E	A	
Approach Delay (s)		61.7			66.6			15.7			6.2	
Approach LOS		E			E			B			A	

Intersection Summary

HCM 2000 Control Delay	14.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	132.0	Sum of lost time (s)	19.9
Intersection Capacity Utilization	78.0%	ICU Level of Service	D
Analysis Period (min)	15		

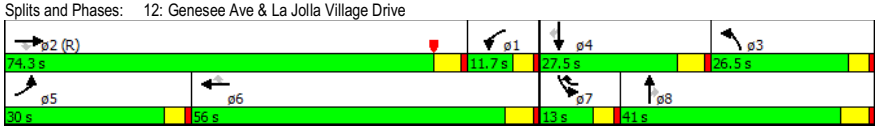
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	694	1639	157	115	1783	349	350	1711	107	195	317	119
Future Volume (vph)	694	1639	157	115	1783	349	350	1711	107	195	317	119
Turn Type	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6	7	3	8		7	4	
Permitted Phases			2			6			8			4
Detector Phase	5	2	2	1	6	7	3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	4.0	10.0	10.0	4.0	10.0	4.0	4.0	10.0	10.0	4.0	10.0	10.0
Minimum Split (s)	8.4	15.3	15.3	8.4	15.5	8.4	8.4	15.7	15.7	8.4	15.4	15.4
Total Split (s)	30.0	74.3	74.3	11.7	56.0	13.0	26.5	41.0	41.0	13.0	27.5	27.5
Total Split (%)	21.4%	53.1%	53.1%	8.4%	40.0%	9.3%	18.9%	29.3%	29.3%	9.3%	19.6%	19.6%
Yellow Time (s)	3.4	4.3	4.3	3.4	4.5	3.4	3.4	4.7	4.7	3.4	4.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.3	5.3	4.4	5.5	4.4	4.4	5.7	5.7	4.4	5.4	5.4
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lead	Lag	Lag	Lag	Lead	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 140
Actuated Cycle Length: 140
Offset: 21 (15%), Referenced to phase 2:EBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 12: Genesee Ave & La Jolla Village Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	694	1639	157	115	1783	349	350	1711	107	195	317	119
Future Volume (vph)	694	1639	157	115	1783	349	350	1711	107	195	317	119
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.3	5.3	4.4	5.5	4.4	4.4	5.7	5.7	4.4	5.4	5.4
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.91	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5085	1583	3433	5085	1583	3433	5085	1583	3433	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5085	1583	3433	5085	1583	3433	5085	1583	3433	5085	1583
Peak-hour factor, PHF	0.87	0.87	0.87	0.82	0.82	0.82	0.89	0.89	0.89	0.80	0.80	0.80
Adj. Flow (vph)	798	1884	180	140	2174	426	393	1922	120	244	396	149
RTOR Reduction (vph)	0	0	74	0	0	56	0	0	90	0	0	130
Lane Group Flow (vph)	798	1884	106	140	2174	370	393	1922	30	244	396	19
Turn Type	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6	7	3	8		7	4	
Permitted Phases			2			6			8			4
Actuated Green, G (s)	25.6	69.0	69.0	7.3	50.5	59.1	26.0	35.3	35.3	8.6	18.2	18.2
Effective Green, g (s)	25.6	69.0	69.0	7.3	50.5	59.1	26.0	35.3	35.3	8.6	18.2	18.2
Actuated g/C Ratio	0.18	0.49	0.49	0.05	0.36	0.42	0.19	0.25	0.25	0.06	0.13	0.13
Clearance Time (s)	4.4	5.3	5.3	4.4	5.5	4.4	4.4	5.7	5.7	4.4	5.4	5.4
Vehicle Extension (s)	2.0	6.0	6.0	2.0	5.8	2.0	2.0	3.5	3.5	2.0	4.1	4.1
Lane Grp Cap (vph)	627	2506	780	179	1834	668	637	1282	399	210	661	205
v/s Ratio Prot	c0.23	0.37		0.04	c0.43	0.03	0.11	c0.38		c0.07	0.08	
v/s Ratio Perm			0.07			0.20			0.02			0.01
v/c Ratio	1.27	0.75	0.14	0.78	1.19	0.55	0.62	1.50	0.08	1.16	0.60	0.09
Uniform Delay, d1	57.2	28.6	19.3	65.6	44.8	30.5	52.4	52.4	39.9	65.7	57.5	53.6
Progression Factor	1.05	1.46	3.45	0.61	0.47	0.07	0.63	0.63	0.27	1.00	1.00	1.00
Incremental Delay, d2	133.9	1.9	0.3	1.9	84.0	0.1	0.4	225.9	0.0	112.6	1.8	0.3
Delay (s)	194.0	43.8	66.9	41.8	105.0	2.2	33.4	259.0	10.8	178.3	59.2	53.9
Level of Service	F	D	E	D	F	A	C	F	B	F	E	D
Approach Delay (s)		87.1			85.8			210.4			95.1	
Approach LOS		F			F			F			F	

Intersection Summary

HCM 2000 Control Delay	121.4	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.29		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	109.5%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	187	26	109	42	455	49	1955	355	233
Future Volume (vph)	187	26	109	42	455	49	1955	355	233
Turn Type	Split	NA	Split	NA	Perm	Prot	NA	Prot	NA
Protected Phases	4	4	3	3		5	2	1	6
Permitted Phases					3				
Detector Phase	4	4	3	3	3	5	2	1	6
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	10.0	4.0	10.0
Minimum Split (s)	8.9	8.9	8.9	8.9	8.9	8.4	16.0	8.4	15.7
Total Split (s)	18.0	18.0	41.9	41.9	41.9	18.0	63.6	16.5	62.1
Total Split (%)	12.9%	12.9%	29.9%	29.9%	29.9%	12.9%	45.4%	11.8%	44.4%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.9	3.4	5.0	3.4	4.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	4.9	4.9	4.9	4.4	6.0	4.4	5.7
Lead/Lag	Lag	Lag	Lead	Lead	Lead	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	None	C-Max

Intersection Summary

Cycle Length: 140
Actuated Cycle Length: 140
Offset: 75 (54%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 100
Control Type: Actuated-Coordinated

Splits and Phases: 13: Genesee Ave & Esplanade Court

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	187	26	27	109	42	455	49	1955	215	355	233	126
Future Volume (vph)	187	26	27	109	42	455	49	1955	215	355	233	126
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9		4.9	4.9	4.9	4.4	6.0		4.4	5.7	
Lane Util. Factor	0.97	1.00		0.97	0.95	0.95	1.00	0.91		0.97	0.91	
Frt	1.00	0.92		1.00	0.88	0.85	1.00	0.99		1.00	0.95	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	3433	1721		3433	1549	1504	1770	5010		3433	4817	
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	3433	1721		3433	1549	1504	1770	5010		3433	4817	
Peak-hour factor, PHF	0.80	0.80	0.80	0.80	0.80	0.80	0.92	0.92	0.92	0.87	0.87	0.87
Adj. Flow (vph)	234	32	34	136	52	569	53	2125	234	408	268	145
RTOR Reduction (vph)	0	26	0	0	141	141	0	9	0	0	53	0
Lane Group Flow (vph)	234	41	0	136	174	166	53	2350	0	408	360	0
Turn Type	Split	NA		Split	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	4	4		3	3		5	2		1	6	
Permitted Phases						3						
Actuated Green, G (s)	12.5	12.5		23.4	23.4	23.4	7.6	60.2		23.7	76.6	
Effective Green, g (s)	12.5	12.5		23.4	23.4	23.4	7.6	60.2		23.7	76.6	
Actuated g/C Ratio	0.09	0.09		0.17	0.17	0.17	0.05	0.43		0.17	0.55	
Clearance Time (s)	4.9	4.9		4.9	4.9	4.9	4.4	6.0		4.4	5.7	
Vehicle Extension (s)	2.0	2.0		2.0	2.0	2.0	2.0	3.7		2.0	4.1	
Lane Grp Cap (vph)	306	153		573	258	251	96	2154		581	2635	
v/s Ratio Prot	c0.07	0.02		0.04	c0.11		0.03	c0.47		c0.12	0.07	
v/s Ratio Perm						0.11						
v/c Ratio	0.76	0.27		0.24	0.68	0.66	0.55	1.09		0.70	0.14	
Uniform Delay, d1	62.3	59.5		50.6	54.7	54.6	64.5	39.9		54.8	15.5	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.31	0.36		1.30	0.21	
Incremental Delay, d2	9.8	0.3		0.1	5.4	5.0	0.4	41.8		2.9	0.1	
Delay (s)	72.1	59.8		50.6	60.1	59.6	84.7	56.3		74.4	3.4	
Level of Service	E	E		D	E	E	F	E		E	A	
Approach Delay (s)		69.4			58.2			56.9			38.7	
Approach LOS		E			E			E			D	

Intersection Summary

HCM 2000 Control Delay	54.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	20.2
Intersection Capacity Utilization	86.4%	ICU Level of Service	E
Analysis Period (min)	15		

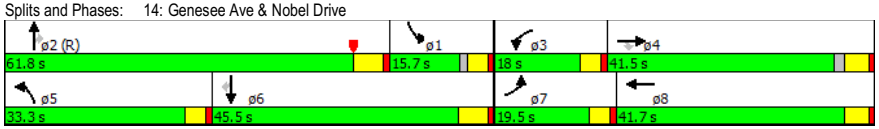
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	87	633	203	183	327	360	2016	400	48	314	35
Future Volume (vph)	87	633	203	183	327	360	2016	400	48	314	35
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8	5	2		1	6	
Permitted Phases			4					2			6
Detector Phase	7	4	4	3	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	4.0	10.0	10.0	4.0	10.0	4.0	10.0	10.0	4.0	10.0	10.0
Minimum Split (s)	8.4	14.9	14.9	8.4	15.1	8.4	15.7	15.7	8.4	15.9	15.9
Total Split (s)	19.5	41.5	41.5	18.0	41.7	33.3	61.8	61.8	15.7	45.5	45.5
Total Split (%)	13.9%	29.6%	29.6%	12.9%	29.8%	23.8%	44.1%	44.1%	11.2%	32.5%	32.5%
Yellow Time (s)	3.4	3.9	3.9	3.4	4.1	3.4	4.7	4.7	3.4	4.9	4.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	4.9	4.9	4.4	5.1	4.4	5.7	5.7	4.4	5.9	5.9
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	None	None	None

Intersection Summary

Cycle Length: 140
Actuated Cycle Length: 140
Offset: 65 (46%), Referenced to phase 2:NBT, Start of Yellow
Natural Cycle: 140
Control Type: Actuated-Coordinated

Splits and Phases: 14: Genesee Ave & Nobel Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	87	633	203	183	327	39	360	2016	400	48	314	35
Future Volume (vph)	87	633	203	183	327	39	360	2016	400	48	314	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9	4.9	4.4	5.1		4.4	5.7	5.7	4.4	5.9	5.9
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95		0.97	0.95	1.00	0.97	0.91	1.00
Frt	1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	3539	1583	3433	3482		3433	3539	1583	3433	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3539	1583	3433	3482		3433	3539	1583	3433	5085	1583
Peak-hour factor, PHF	0.84	0.84	0.84	0.91	0.91	0.91	0.94	0.94	0.94	0.80	0.80	0.80
Adj. Flow (vph)	104	754	242	201	359	43	383	2145	426	60	392	44
RTOR Reduction (vph)	0	0	173	0	6	0	0	0	54	0	0	28
Lane Group Flow (vph)	104	754	69	201	396	0	383	2145	372	60	393	16
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4						2			6
Actuated Green, G (s)	8.6	37.7	37.7	12.5	41.4		20.0	64.5	64.5	5.9	50.2	50.2
Effective Green, g (s)	8.6	37.7	37.7	12.5	41.4		20.0	64.5	64.5	5.9	50.2	50.2
Actuated g/C Ratio	0.06	0.27	0.27	0.09	0.30		0.14	0.46	0.46	0.04	0.36	0.36
Clearance Time (s)	4.4	4.9	4.9	4.4	5.1		4.4	5.7	5.7	4.4	5.9	5.9
Vehicle Extension (s)	2.0	4.0	4.0	2.0	2.1		2.0	8.0	8.0	2.0	4.0	4.0
Lane Grp Cap (vph)	210	953	426	306	1029		490	1630	729	144	1823	567
v/s Ratio Prot	0.03	c0.21		c0.06	c0.11		0.11	c0.61		c0.02	0.08	
v/s Ratio Perm			0.04						0.23			0.01
v/c Ratio	0.50	0.79	0.16	0.66	0.38		0.78	1.32	0.51	0.42	0.22	0.03
Uniform Delay, d1	63.6	47.5	39.1	61.7	39.2		57.9	37.8	26.6	65.4	31.2	29.1
Progression Factor	1.00	1.00	1.00	1.00	1.00		0.90	0.65	0.49	0.98	1.22	12.87
Incremental Delay, d2	0.7	4.8	0.2	3.8	0.1		0.7	142.6	0.2	0.7	0.1	0.0
Delay (s)	64.3	52.3	39.3	65.5	39.3		53.1	167.1	13.3	65.1	38.3	374.5
Level of Service	E	D	D	E	D		D	F	B	E	D	F
Approach Delay (s)		50.6			48.0			130.1			71.3	
Approach LOS		D			D			F			E	

Intersection Summary

HCM 2000 Control Delay	97.9	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.04		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	19.8
Intersection Capacity Utilization	97.9%	ICU Level of Service	F
Analysis Period (min)	15		

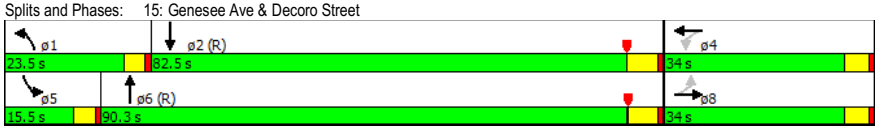
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	43	29	49	23	123	2793	19	884
Future Volume (vph)	43	29	49	23	123	2793	19	884
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		8		4	1	6	5	2
Permitted Phases	8		4					
Detector Phase	8	8	4	4	1	6	5	2
Switch Phase								
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	10.0	4.0	10.0
Minimum Split (s)	8.9	8.9	8.9	8.9	8.4	15.7	8.4	15.9
Total Split (s)	34.0	34.0	34.0	34.0	23.5	90.3	15.5	82.5
Total Split (%)	24.3%	24.3%	24.3%	24.3%	16.8%	64.5%	11.1%	58.9%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.4	4.7	3.4	4.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.9		4.9	4.4	5.7	4.4	5.9
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	None	C-Max

Intersection Summary

Cycle Length: 140
Actuated Cycle Length: 140
Offset: 44 (31%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 15: Genesee Ave & Decoro Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	43	29	158	49	23	37	123	2793	113	19	884	64
Future Volume (vph)	43	29	158	49	23	37	123	2793	113	19	884	64
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9			4.9		4.4	5.7		4.4	5.9	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frt		0.91			0.95		1.00	0.99		1.00	0.99	
Flt Protected		0.99			0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1675			1738		1770	3518		1770	3503	
Flt Permitted		0.89			0.44		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1499			781		1770	3518		1770	3503	
Peak-hour factor, PHF	0.84	0.84	0.84	0.85	0.85	0.85	0.93	0.93	0.93	0.80	0.80	0.80
Adj. Flow (vph)	51	35	188	58	27	44	132	3003	122	24	1105	80
RTOR Reduction (vph)	0	59	0	0	14	0	0	2	0	0	3	0
Lane Group Flow (vph)	0	215	0	0	115	0	132	3123	0	24	1182	0
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		8			4		1	6		5	2	
Permitted Phases	8			4								
Actuated Green, G (s)		22.9			22.9		14.5	97.6		4.5	87.4	
Effective Green, g (s)		22.9			22.9		14.5	97.6		4.5	87.4	
Actuated g/C Ratio		0.16			0.16		0.10	0.70		0.03	0.62	
Clearance Time (s)		4.9			4.9		4.4	5.7		4.4	5.9	
Vehicle Extension (s)		2.0			2.0		2.0	4.3		2.0	3.7	
Lane Grp Cap (vph)		245			127		183	2452		56	2186	
v/s Ratio Prot							c0.07	c0.89		0.01	0.34	
v/s Ratio Perm		0.14			c0.15							
v/c Ratio		0.88			0.90		0.72	1.27		0.43	0.54	
Uniform Delay, d1		57.2			57.5		60.8	21.2		66.5	14.9	
Progression Factor		1.00			1.00		0.93	1.28		1.01	1.57	
Incremental Delay, d2		26.8			50.4		1.1	123.5		1.9	0.9	
Delay (s)		84.0			107.9		57.7	150.6		69.3	24.3	
Level of Service		F			F		E	F		E	C	
Approach Delay (s)		84.0			107.9			146.8			25.2	
Approach LOS		F			F			F			C	

Intersection Summary

HCM 2000 Control Delay	112.1	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.20		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	15.2
Intersection Capacity Utilization	111.0%	ICU Level of Service	H
Analysis Period (min)	15		

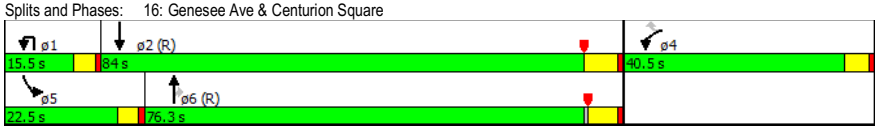
c Critical Lane Group

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	ø1
Lane Configurations							
Traffic Volume (vph)	337	205	2713	299	168	957	
Future Volume (vph)	337	205	2713	299	168	957	
Turn Type	Prot	Perm	NA	Perm	Prot	NA	
Protected Phases	4		6		5	2	1
Permitted Phases		4		6			
Detector Phase	4	4	6	6	5	2	
Switch Phase							
Minimum Initial (s)	7.0	7.0	10.0	10.0	4.0	10.0	4.0
Minimum Split (s)	34.9	34.9	28.7	28.7	8.4	16.4	8.4
Total Split (s)	40.5	40.5	76.3	76.3	22.5	84.0	15.5
Total Split (%)	28.9%	28.9%	54.5%	54.5%	16.1%	60.0%	11%
Yellow Time (s)	3.9	3.9	4.7	4.7	3.4	5.4	3.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.9	4.9	5.7	5.7	4.4	6.4	
Lead/Lag			Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?			Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	C-Max	C-Max	None	C-Max	None

Intersection Summary

Cycle Length: 140
Actuated Cycle Length: 140
Offset: 43 (31%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 16: Genesee Ave & Centurion Square



Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	337	205	0	2713	299	168	957
Future Volume (vph)	337	205	0	2713	299	168	957
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9		5.7	5.7	4.4	6.4
Lane Util. Factor	1.00	1.00		0.95	1.00	0.97	0.95
Frt	1.00	0.85		1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00		1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583		3539	1583	3433	3539
Flt Permitted	0.95	1.00		1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583		3539	1583	3433	3539
Peak-hour factor, PHF	0.80	0.80	0.92	0.93	0.93	0.81	0.81
Adj. Flow (vph)	421	256	0	2917	322	207	1181
RTOR Reduction (vph)	0	134	0	0	44	0	0
Lane Group Flow (vph)	421	122	0	2917	278	207	1181
Turn Type	Prot	Perm	Prot	NA	Perm	Prot	NA
Protected Phases	4		1	6		5	2
Permitted Phases		4			6		
Actuated Green, G (s)	34.7	34.7		77.5	77.5	12.8	94.0
Effective Green, g (s)	34.7	34.7		77.5	77.5	12.8	94.0
Actuated g/C Ratio	0.25	0.25		0.55	0.55	0.09	0.67
Clearance Time (s)	4.9	4.9		5.7	5.7	4.4	6.4
Vehicle Extension (s)	2.0	2.0		4.2	4.2	2.0	3.4
Lane Grp Cap (vph)	438	392		1959	876	313	2376
v/s Ratio Prot	c0.24			c0.82		c0.06	0.33
v/s Ratio Perm		0.08			0.18		
v/c Ratio	0.96	0.31		1.49	0.32	0.66	0.50
Uniform Delay, d1	52.0	42.9		31.2	16.9	61.5	11.3
Progression Factor	1.00	1.00		1.00	1.00	1.13	0.60
Incremental Delay, d2	32.8	0.2		222.8	1.0	3.4	0.6
Delay (s)	84.8	43.1		254.1	17.9	72.9	7.4
Level of Service	F	D		F	B	E	A
Approach Delay (s)	69.0			230.6			17.1
Approach LOS	E			F			B

Intersection Summary

HCM 2000 Control Delay	154.1	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.26		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	15.7
Intersection Capacity Utilization	102.5%	ICU Level of Service	G
Analysis Period (min)	15		

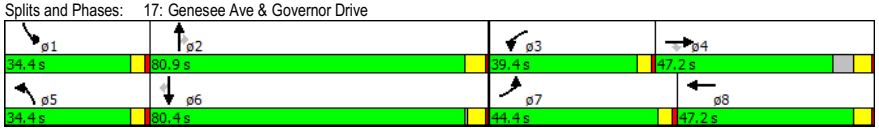
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	771	324	138	220	247	64	1793	189	287	698	423
Future Volume (vph)	771	324	138	220	247	64	1793	189	287	698	423
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8	5	2		1	6	
Permitted Phases			4					2			6
Detector Phase	7	4	4	3	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	4.0	8.0	8.0	4.0	8.0	4.0	8.0	8.0	4.0	8.0	8.0
Minimum Split (s)	8.4	13.2	13.2	8.4	13.2	8.4	13.9	13.9	8.4	13.4	13.4
Total Split (s)	44.4	47.2	47.2	39.4	47.2	34.4	80.9	80.9	34.4	80.4	80.4
Total Split (%)	21.5%	22.8%	22.8%	19.0%	22.8%	16.6%	39.1%	39.1%	16.6%	38.9%	38.9%
Yellow Time (s)	3.4	4.2	4.2	3.4	4.2	3.4	4.9	4.9	3.4	4.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.2	5.2	4.4	5.2	4.4	5.9	5.9	4.4	5.4	5.4
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	Min

Intersection Summary

Cycle Length: 206.9
Actuated Cycle Length: 199.5
Natural Cycle: 150
Control Type: Actuated-Uncoordinated

Splits and Phases: 17: Genesee Ave & Governor Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	771	324	138	220	247	395	64	1793	189	287	698	423
Future Volume (vph)	771	324	138	220	247	395	64	1793	189	287	698	423
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	16	12	12	12	12	12	12	12
Total Lost time (s)	4.4	5.2	5.2	4.4	5.2		4.4	5.9	5.9	4.4	5.4	5.4
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95		1.00	0.95	1.00	0.97	0.95	1.00
Frt	1.00	1.00	0.85	1.00	0.91		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	3539	1583	3433	3641		1770	3539	1583	3433	3539	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3539	1583	3433	3641		1770	3539	1583	3433	3539	1583
Peak-hour factor, PHF	0.80	0.80	0.80	0.80	0.80	0.80	0.90	0.90	0.90	0.85	0.85	0.85
Adj. Flow (vph)	964	405	172	275	309	494	71	1992	210	338	821	498
RTOR Reduction (vph)	0	0	59	0	141	0	0	0	50	0	0	78
Lane Group Flow (vph)	964	405	114	275	662	0	71	1992	160	338	821	420
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4						2			6
Actuated Green, G (s)	40.0	60.2	60.2	20.4	40.6		12.4	75.1	75.1	23.8	87.0	87.0
Effective Green, g (s)	40.0	60.2	60.2	20.4	40.6		12.4	75.1	75.1	23.8	87.0	87.0
Actuated g/C Ratio	0.20	0.30	0.30	0.10	0.20		0.06	0.38	0.38	0.12	0.44	0.44
Clearance Time (s)	4.4	5.2	5.2	4.4	5.2		4.4	5.9	5.9	4.4	5.4	5.4
Vehicle Extension (s)	2.0	2.3	2.3	2.0	3.8		2.0	2.9	2.9	2.0	3.5	3.5
Lane Grp Cap (vph)	688	1068	477	351	741		110	1332	596	409	1544	690
v/s Ratio Prot	c0.28	0.11		0.08	c0.18		0.04	c0.56		c0.10	0.23	
v/s Ratio Perm			0.07						0.10			0.27
v/c Ratio	1.40	0.38	0.24	0.78	0.98dr		0.65	1.50	0.27	0.83	0.53	0.61
Uniform Delay, d1	79.7	54.9	52.4	87.3	77.3		91.4	62.2	43.1	85.8	41.2	43.1
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	189.2	0.1	0.2	10.1	13.4		9.3	227.0	0.2	12.2	0.4	1.6
Delay (s)	268.9	55.0	52.5	97.4	90.7		100.7	289.1	43.3	98.0	41.6	44.7
Level of Service	F	E	D	F	F		F	F	D	F	D	D
Approach Delay (s)		188.5			92.4			260.5			54.1	
Approach LOS		F			F			F			D	

Intersection Summary

HCM 2000 Control Delay	163.7	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.25		
Actuated Cycle Length (s)	199.4	Sum of lost time (s)	19.9
Intersection Capacity Utilization	115.9%	ICU Level of Service	H
Analysis Period (min)	15		

dr Defacto Right Lane. Recode with 1 though lane as a right lane.
c Critical Lane Group

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	131	414	1125	1039	129
Future Volume (Veh/h)	0	131	414	1125	1039	129
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.80	0.80	0.83	0.83	0.83	0.83
Hourly flow rate (vph)	0	164	499	1355	1252	155
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2928	626	1252			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2928	626	1252			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	62	10			
cM capacity (veh/h)	1	427	552			

Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	164	499	678	678	626	626	155
Volume Left	0	499	0	0	0	0	0
Volume Right	164	0	0	0	0	0	155
cSH	427	552	1700	1700	1700	1700	1700
Volume to Capacity	0.38	0.90	0.40	0.40	0.37	0.37	0.09
Queue Length 95th (ft)	44	270	0	0	0	0	0
Control Delay (s)	18.6	45.9	0.0	0.0	0.0	0.0	0.0
Lane LOS	C	E					
Approach Delay (s)	18.6	12.4			0.0		
Approach LOS	C						

Intersection Summary			
Average Delay		7.6	
Intersection Capacity Utilization	58.3%	ICU Level of Service	B
Analysis Period (min)		15	

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	147	164	1480	808	435	747
Future Volume (vph)	147	164	1480	808	435	747
Turn Type	Prot	Perm	NA	Perm	Prot	NA
Protected Phases	4		2		1	6
Permitted Phases		4		2		
Detector Phase	4	4	2	2	1	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	13.0	13.0	5.0	10.0
Minimum Split (s)	37.1	37.1	38.5	38.5	10.7	17.5
Total Split (s)	37.1	37.1	73.9	73.9	39.0	112.9
Total Split (%)	24.7%	24.7%	49.3%	49.3%	26.0%	75.3%
Yellow Time (s)	4.1	4.1	5.5	5.5	3.7	5.5
All-Red Time (s)	1.0	1.0	2.0	2.0	1.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.1	5.1	7.5	7.5	4.7	7.5
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	None	None	Min	Min	None	Min

Intersection Summary
Cycle Length: 150
Actuated Cycle Length: 137
Natural Cycle: 150
Control Type: Actuated-Uncoordinated

Splits and Phases: 19: Genesee Ave & SR-52 EB Ramps

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	147	164	1480	808	435	747
Future Volume (vph)	147	164	1480	808	435	747
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1	7.5	7.5	4.7	7.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.83	0.83	0.83	0.83	0.84	0.84
Adj. Flow (vph)	177	198	1783	973	518	889
RTOR Reduction (vph)	0	171	0	138	0	0
Lane Group Flow (vph)	177	27	1783	835	518	889
Turn Type	Prot	Perm	NA	Perm	Prot	NA
Protected Phases	4		2		1	6
Permitted Phases		4		2		
Actuated Green, G (s)	18.9	18.9	66.5	66.5	34.3	105.5
Effective Green, g (s)	18.9	18.9	66.5	66.5	34.3	105.5
Actuated g/C Ratio	0.14	0.14	0.49	0.49	0.25	0.77
Clearance Time (s)	5.1	5.1	7.5	7.5	4.7	7.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	244	218	1717	768	443	2725
v/s Ratio Prot	c0.10		0.50		c0.29	0.25
v/s Ratio Perm		0.02		c0.53		
v/c Ratio	0.73	0.13	1.04	1.09	1.17	0.33
Uniform Delay, d1	56.6	51.8	35.2	35.2	51.4	4.8
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	10.2	0.3	32.4	58.8	98.0	0.1
Delay (s)	66.8	52.1	67.7	94.1	149.4	4.9
Level of Service	E	D	E	F	F	A
Approach Delay (s)	59.0		77.0			58.1
Approach LOS	E		E			E

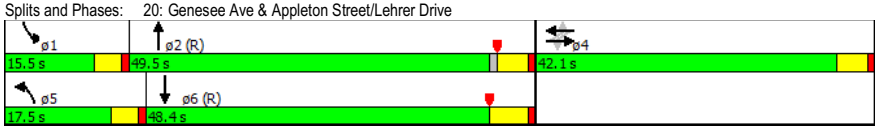
Intersection Summary			
HCM 2000 Control Delay	69.6	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.05		
Actuated Cycle Length (s)	137.0	Sum of lost time (s)	17.3
Intersection Capacity Utilization	87.6%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	500	5	7	11	4	1385	64	643
Future Volume (vph)	500	5	7	11	4	1385	64	643
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		4	5	2	1	6
Permitted Phases	4		4					
Detector Phase	4	4	4	4	5	2	1	6
Switch Phase								
Minimum Initial (s)	6.0	6.0	6.0	6.0	4.0	10.0	4.0	10.0
Minimum Split (s)	10.9	10.9	10.9	10.9	8.4	14.9	8.4	15.8
Total Split (s)	42.1	42.1	42.1	42.1	17.5	49.5	15.5	48.4
Total Split (%)	39.0%	39.0%	39.0%	39.0%	16.2%	45.8%	14.4%	44.8%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.4	3.9	3.4	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.9		4.9	4.4	4.9	4.4	5.8
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	None	C-Max

Intersection Summary
Cycle Length: 108
Actuated Cycle Length: 108
Offset: 7 (6%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 20: Genesee Ave & Appleton Street/Lehrer Drive



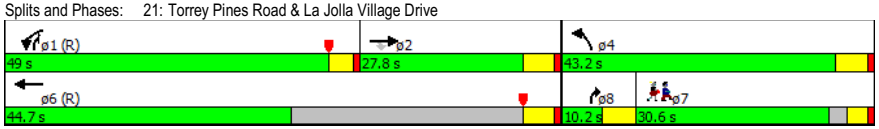
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	500	5	9	7	11	371	4	1385	4	64	643	111
Future Volume (vph)	500	5	9	7	11	371	4	1385	4	64	643	111
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	16	12	12	16	12	12	12	12	12	12	12
Total Lost time (s)		4.9			4.9		4.4	4.9		4.4	5.8	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frt		1.00			0.87		1.00	1.00		1.00	0.98	
Flt Protected		0.95			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		2008			1837		1770	3538		1770	3461	
Flt Permitted		0.31			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		648			1821		1770	3538		1770	3461	
Peak-hour factor, PHF	0.83	0.83	0.83	0.89	0.89	0.89	0.80	0.80	0.80	0.80	0.80	0.80
Adj. Flow (vph)	602	6	11	8	12	417	5	1731	5	80	804	139
RTOR Reduction (vph)	0	1	0	0	149	0	0	0	0	0	10	0
Lane Group Flow (vph)	0	618	0	0	288	0	5	1736	0	80	933	0
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4			4								
Actuated Green, G (s)		37.2			37.2		1.4	48.4		8.2	54.3	
Effective Green, g (s)		37.2			37.2		1.4	48.4		8.2	54.3	
Actuated g/C Ratio		0.34			0.34		0.01	0.45		0.08	0.50	
Clearance Time (s)		4.9			4.9		4.4	4.9		4.4	5.8	
Vehicle Extension (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		223			627		22	1585		134	1740	
v/s Ratio Prot							0.00	c0.49		c0.05	0.27	
v/s Ratio Perm		c0.95			0.16							
v/c Ratio		2.77			0.46		0.23	1.10		0.60	0.54	
Uniform Delay, d1		35.4			27.6		52.8	29.8		48.3	18.3	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		810.2			0.5		5.2	53.4		7.0	1.2	
Delay (s)		845.6			28.1		58.0	83.2		55.3	19.5	
Level of Service		F			C		E	F		E	B	
Approach Delay (s)		845.6			28.1			83.1			22.3	
Approach LOS		F			C			F			C	

Intersection Summary			
HCM 2000 Control Delay	184.1	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.73		
Actuated Cycle Length (s)	108.0	Sum of lost time (s)	15.1
Intersection Capacity Utilization	110.3%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	ø7	ø8
Lane Configurations								
Traffic Volume (vph)	388	66	1328	1731	286	1293		
Future Volume (vph)	388	66	1328	1731	286	1293		
Turn Type	NA	Perm	Prot	NA	Prot	pt+ov		
Protected Phases	2		1	6	4	8 1	7	8
Permitted Phases		2						
Detector Phase	2	2	1	6	4	8 1		
Switch Phase								
Minimum Initial (s)	10.0	10.0	4.0	10.0	4.0		4.0	4.0
Minimum Split (s)	15.4	15.4	8.4	15.3	9.6		8.0	9.6
Total Split (s)	27.8	27.8	49.0	44.7	43.2		30.6	10.2
Total Split (%)	23.2%	23.2%	40.8%	37.3%	36.0%		26%	9%
Yellow Time (s)	4.4	4.4	3.4	4.3	4.6		3.0	4.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	0.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0			
Total Lost Time (s)	5.4	5.4	4.4	5.3	5.6			
Lead/Lag	Lag	Lag	Lead				Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes				Yes	Yes
Recall Mode	None	None	C-Max	C-Max	None		None	None

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 116 (97%), Referenced to phase 1:WBL and 6:WBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 21: Torrey Pines Road & La Jolla Village Drive



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	388	66	1328	1731	286	1293
Future Volume (vph)	388	66	1328	1731	286	1293
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.4	5.4	4.4	5.3	5.6	4.6
Lane Util. Factor	0.91	1.00	0.97	0.91	0.97	0.88
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	5085	1583	3433	5085	3433	2787
Flt Permitted	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (perm)	5085	1583	3433	5085	3433	2787
Peak-hour factor, PHF	0.83	0.83	0.93	0.93	0.84	0.84
Adj. Flow (vph)	467	80	1428	1861	340	1539
RTOR Reduction (vph)	0	65	0	0	0	0
Lane Group Flow (vph)	467	15	1428	1861	340	1539
Turn Type	NA	Perm	Prot	NA	Prot	pt+ov
Protected Phases	2		1	6	4	8 1
Permitted Phases		2				
Actuated Green, G (s)	22.4	22.4	49.0	75.9	33.2	56.0
Effective Green, g (s)	22.4	22.4	49.0	75.9	33.2	56.0
Actuated g/C Ratio	0.19	0.19	0.41	0.63	0.28	0.47
Clearance Time (s)	5.4	5.4	4.4	5.3	5.6	
Vehicle Extension (s)	5.5	5.5	2.0	8.0	2.0	
Lane Grp Cap (vph)	949	295	1401	3216	949	1300
v/s Ratio Prot	0.09		0.42	c0.37	c0.10	c0.55
v/s Ratio Perm		0.01				
v/c Ratio	0.49	0.05	1.02	0.58	0.36	1.18
Uniform Delay, d1	43.7	40.1	35.5	12.8	34.8	32.0
Progression Factor	0.66	0.72	0.98	0.49	1.00	1.00
Incremental Delay, d2	1.0	0.2	17.1	0.2	0.1	90.8
Delay (s)	29.8	28.9	51.9	6.4	34.9	122.8
Level of Service	C	C	D	A	C	F
Approach Delay (s)	29.6			26.2	106.9	
Approach LOS	C			C	F	

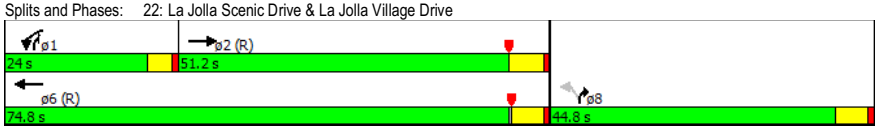
Intersection Summary			
HCM 2000 Control Delay	53.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	18.4
Intersection Capacity Utilization	67.2%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Configurations					
Traffic Volume (vph)	1567	534	2431	694	554
Future Volume (vph)	1567	534	2431	694	554
Turn Type	NA	Prot	NA	Perm	pt+ov
Protected Phases	2	1	6		8 1
Permitted Phases				8	
Detector Phase	2	1	6	8	8 1
Switch Phase					
Minimum Initial (s)	10.0	4.0	10.0	4.0	
Minimum Split (s)	15.7	8.4	15.3	9.5	
Total Split (s)	51.2	24.0	74.8	44.8	
Total Split (%)	42.7%	20.0%	62.3%	37.3%	
Yellow Time (s)	4.7	3.4	4.3	4.5	
All-Red Time (s)	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.7	4.4	5.3	5.5	
Lead/Lag	Lag	Lead			
Lead-Lag Optimize?	Yes	Yes			
Recall Mode	C-Max	None	C-Max	None	

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 29 (24%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 140
Control Type: Actuated-Coordinated

Splits and Phases: 22: La Jolla Scenic Drive & La Jolla Village Drive



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1567	72	534	2431	694	554
Future Volume (vph)	1567	72	534	2431	694	554
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.7		4.4	5.3	5.5	5.5
Lane Util. Factor	0.91		0.97	0.91	1.00	0.88
Frt	0.99		1.00	1.00	1.00	0.85
Flt Protected	1.00		0.95	1.00	0.95	1.00
Satd. Flow (prot)	5052		3433	5085	1770	2787
Flt Permitted	1.00		0.95	1.00	0.95	1.00
Satd. Flow (perm)	5052		3433	5085	1770	2787
Peak-hour factor, PHF	0.88	0.88	0.96	0.96	0.85	0.85
Adj. Flow (vph)	1781	82	556	2532	816	652
RTOR Reduction (vph)	4	0	0	0	0	1
Lane Group Flow (vph)	1859	0	556	2532	816	651
Turn Type	NA		Prot	NA	Perm	pt+ov
Protected Phases	2		1	6		8 1
Permitted Phases					8	
Actuated Green, G (s)	45.5		19.6	69.9	39.3	64.4
Effective Green, g (s)	45.5		19.6	69.9	39.3	64.4
Actuated g/C Ratio	0.38		0.16	0.58	0.33	0.54
Clearance Time (s)	5.7		4.4	5.3	5.5	
Vehicle Extension (s)	4.0		2.0	5.9	2.0	
Lane Grp Cap (vph)	1915		560	2962	579	1495
v/s Ratio Prot	c0.37		c0.16	0.50		0.23
v/s Ratio Perm					c0.46	
v/c Ratio	0.97		0.99	0.85	1.41	0.44
Uniform Delay, d1	36.6		50.1	20.8	40.4	16.8
Progression Factor	0.71		0.70	0.97	1.00	1.00
Incremental Delay, d2	5.1		24.5	1.7	194.3	0.1
Delay (s)	31.0		59.7	21.8	234.7	16.9
Level of Service	C		E	C	F	B
Approach Delay (s)	31.0			28.6	138.0	
Approach LOS	C			C	F	

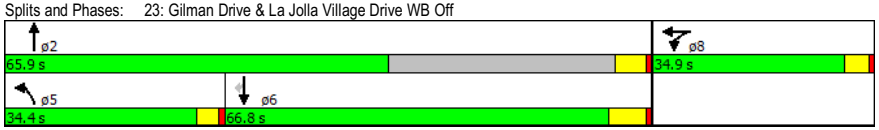
Intersection Summary			
HCM 2000 Control Delay	54.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.14		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	15.6
Intersection Capacity Utilization	98.6%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	WBT	NBL	NBT	SBT	SBR
Lane Configurations					
Traffic Volume (vph)	0	598	666	145	61
Future Volume (vph)	0	598	666	145	61
Turn Type	NA	Prot	NA	NA	Perm
Protected Phases	8	5	2	6	
Permitted Phases					6
Detector Phase	8	5	2	6	6
Switch Phase					
Minimum Initial (s)	4.0	4.0	10.0	10.0	10.0
Minimum Split (s)	8.9	8.4	15.9	16.8	16.8
Total Split (s)	34.9	34.4	65.9	66.8	66.8
Total Split (%)	25.6%	25.3%	48.4%	49.1%	49.1%
Yellow Time (s)	3.9	3.4	4.9	5.8	5.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.4	5.9	6.8	6.8
Lead/Lag		Lead		Lag	Lag
Lead-Lag Optimize?		Yes		Yes	Yes
Recall Mode	None	None	Min	Min	Min

Intersection Summary
Cycle Length: 136.1
Actuated Cycle Length: 68.1
Natural Cycle: 65
Control Type: Actuated-Uncoordinated

Splits and Phases: 23: Gilman Drive & La Jolla Village Drive WB Off



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	30	0	256	598	666	0	0	145	61
Future Volume (vph)	0	0	0	30	0	256	598	666	0	0	145	61
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.9		4.4	5.9			6.8	6.8
Lane Util. Factor					1.00		1.00	0.95			0.95	1.00
Frt					0.88		1.00	1.00			1.00	0.85
Flt Protected					0.99		0.95	1.00			1.00	1.00
Satd. Flow (prot)					1629		1770	3539			3539	1583
Flt Permitted					0.99		0.95	1.00			1.00	1.00
Satd. Flow (perm)					1629		1770	3539			3539	1583
Peak-hour factor, PHF	0.25	0.25	0.25	0.90	0.90	0.90	0.90	0.90	0.90	0.83	0.83	0.83
Adj. Flow (vph)	0	0	0	33	0	284	664	740	0	0	175	73
RTOR Reduction (vph)	0	0	0	0	233	0	0	0	0	0	0	62
Lane Group Flow (vph)	0	0	0	0	84	0	664	740	0	0	175	11
Turn Type				Split	NA		Prot	NA			NA	Perm
Protected Phases				8	8		5	2			6	
Permitted Phases												6
Actuated Green, G (s)					10.6		30.6	46.5			10.6	10.6
Effective Green, g (s)					10.6		30.6	46.5			10.6	10.6
Actuated g/C Ratio					0.16		0.45	0.68			0.16	0.16
Clearance Time (s)					4.9		4.4	5.9			6.8	6.8
Vehicle Extension (s)					3.0		3.0	3.0			3.0	3.0
Lane Grp Cap (vph)					254		797	2423			552	247
v/s Ratio Prot					c0.05		c0.38	c0.21			0.05	
v/s Ratio Perm												0.01
v/c Ratio					0.33		0.83	0.31			0.32	0.05
Uniform Delay, d1					25.5		16.4	4.3			25.4	24.4
Progression Factor					1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2					0.8		7.5	0.1			0.3	0.1
Delay (s)					26.3		23.9	4.3			25.8	24.4
Level of Service					C		C	A			C	C
Approach Delay (s)		0.0			26.3			13.6			25.4	
Approach LOS		A			C			B			C	

Intersection Summary				
HCM 2000 Control Delay	17.1	HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio	0.64			
Actuated Cycle Length (s)	67.9	Sum of lost time (s)	16.1	
Intersection Capacity Utilization	Err%	ICU Level of Service	H	
Analysis Period (min)	15			

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	53	4	432	0	0	0	0	1152	126	42	143	0
Future Volume (Veh/h)	53	4	432	0	0	0	0	1152	126	42	143	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.64	0.64	0.64	0.25	0.25	0.25	0.92	0.92	0.92	1.00	1.00	1.00
Hourly flow rate (vph)	83	6	675	0	0	0	0	1252	137	42	143	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)			13									
Median type								None			None	
Median storage veh)												
Upstream signal (ft)											483	
pX, platoon unblocked												
vC, conflicting volume	853	1616	72	1748	1479	626	143			1389		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	853	1616	72	1748	1479	626	143			1389		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	65	94	31	100	100	100	100			91		
cM capacity (veh/h)	236	94	976	15	114	427	1437			489		

Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	758	626	626	137	42	72	72
Volume Left	83	0	0	0	42	0	0
Volume Right	675	0	0	137	0	0	0
cSH	1096	1700	1700	1700	489	1700	1700
Volume to Capacity	0.69	0.37	0.37	0.08	0.09	0.04	0.04
Queue Length 95th (ft)	147	0	0	0	7	0	0
Control Delay (s)	17.8	0.0	0.0	0.0	13.1	0.0	0.0
Lane LOS	C				B		
Approach Delay (s)	Err	0.0			3.0		
Approach LOS	F						

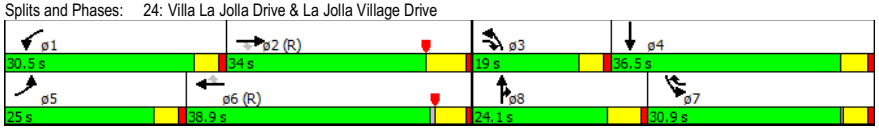
Intersection Summary				
Average Delay	Err			
Intersection Capacity Utilization	Err%	ICU Level of Service	H	
Analysis Period (min)	15			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	219	1201	34	467	1815	750	361	345	457	460	102
Future Volume (vph)	219	1201	34	467	1815	750	361	345	457	460	102
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	Prot	Prot	NA
Protected Phases	5	2	3	1	6	7	3	8	8	7	4
Permitted Phases			2			6					
Detector Phase	5	2	3	1	6	7	3	8	8	7	4
Switch Phase											
Minimum Initial (s)	4.0	10.0	4.0	4.0	10.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.4	16.4	8.4	8.4	15.3	8.4	8.4	9.5	9.5	8.4	8.9
Total Split (s)	25.0	34.0	19.0	30.5	38.9	30.9	19.0	24.1	24.1	30.9	36.5
Total Split (%)	20.8%	28.3%	15.8%	25.4%	32.4%	25.8%	15.8%	20.1%	20.1%	25.8%	30.4%
Yellow Time (s)	3.4	5.4	3.4	3.4	4.3	3.4	3.4	4.5	4.5	3.4	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	6.4	4.4	4.4	5.3	4.4	4.4	5.5	5.5	4.4	4.9
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	C-Max	None	None	None	None	None	None

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 65 (54%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 24: Villa La Jolla Drive & La Jolla Village Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	219	1201	34	467	1815	750	361	345	457	460	102	38
Future Volume (vph)	219	1201	34	467	1815	750	361	345	457	460	102	38
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	6.4	4.4	4.4	5.3	4.4	4.4	5.5	5.5	4.4	4.9	
Lane Util. Factor	1.00	0.91	1.00	0.97	0.91	1.00	0.97	0.95	0.95	0.97	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.97	0.85	1.00	0.96	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	5085	1583	3433	5085	1583	3433	1718	1504	3433	1787	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	5085	1583	3433	5085	1583	3433	1718	1504	3433	1787	
Peak-hour factor, PHF	0.87	0.87	0.87	0.91	0.91	0.91	0.80	0.80	0.80	0.80	0.80	0.80
Adj. Flow (vph)	252	1380	39	513	1995	824	451	431	571	575	128	48
RTOR Reduction (vph)	0	0	24	0	0	49	0	7	274	0	11	0
Lane Group Flow (vph)	252	1380	15	513	1995	775	451	527	194	575	165	0
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	Prot	Prot	NA	
Protected Phases	5	2	3	1	6	7	3	8	8	7	4	
Permitted Phases			2			6						
Actuated Green, G (s)	19.3	31.8	46.4	21.9	35.5	62.5	14.6	18.6	18.6	27.0	31.6	
Effective Green, g (s)	19.3	31.8	46.4	21.9	35.5	62.5	14.6	18.6	18.6	27.0	31.6	
Actuated g/C Ratio	0.16	0.27	0.39	0.18	0.30	0.52	0.12	0.16	0.16	0.22	0.26	
Clearance Time (s)	4.4	6.4	4.4	4.4	5.3	4.4	4.4	5.5	5.5	4.4	4.9	
Vehicle Extension (s)	2.0	4.4	2.0	2.0	4.7	2.0	2.0	3.3	3.3	2.0	2.0	
Lane Grp Cap (vph)	284	1347	612	626	1504	824	417	266	233	772	470	
v/s Ratio Prot	0.14	0.27	0.00	c0.15	c0.39	c0.21	0.13	c0.31	0.13	0.17	c0.09	
v/s Ratio Perm			0.01			0.28						
v/c Ratio	0.89	1.02	0.02	0.82	1.33	0.94	1.08	1.98	0.83	0.74	0.35	
Uniform Delay, d1	49.3	44.1	22.8	47.1	42.2	27.0	52.7	50.7	49.2	43.3	35.9	
Progression Factor	1.32	0.64	1.00	1.06	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	16.9	25.1	0.0	0.8	147.3	2.5	67.7	455.2	22.1	3.4	0.2	
Delay (s)	82.2	53.3	22.8	50.9	189.7	29.5	120.4	505.9	71.3	46.7	36.0	
Level of Service	F	D	C	D	F	C	F	F	E	D	D	
Approach Delay (s)		56.9			128.7			246.3			44.2	
Approach LOS		E			F			F			D	

Intersection Summary

HCM 2000 Control Delay	127.0	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.24		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	20.7
Intersection Capacity Utilization	104.1%	ICU Level of Service	G
Analysis Period (min)	15		

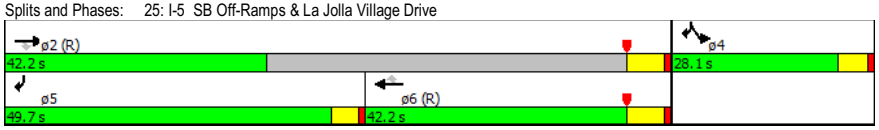
c Critical Lane Group

Lane Group	EBT	EBR	WBT	WBR	SBL	SBR	ø5
Lane Configurations							
Traffic Volume (vph)	1767	398	1520	340	605	1453	
Future Volume (vph)	1767	398	1520	340	605	1453	
Turn Type	NA	Perm	NA	Perm	Prot	custom	
Protected Phases	2		6		4	4 5	5
Permitted Phases		2		6			
Detector Phase	2	2	6	6	4	4 5	
Switch Phase							
Minimum Initial (s)	10.0	10.0	15.0	15.0	5.0		2.0
Minimum Split (s)	16.2	16.2	21.2	21.2	10.1		6.7
Total Split (s)	42.2	42.2	42.2	42.2	28.1		49.7
Total Split (%)	35.2%	35.2%	35.2%	35.2%	23.4%		41%
Yellow Time (s)	5.2	5.2	5.2	5.2	4.1		3.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	6.2	6.2	6.2	6.2	5.1		
Lead/Lag			Lag	Lag			Lead
Lead-Lag Optimize?			Yes	Yes			Yes
Recall Mode	C-Max	C-Max	C-Max	C-Max	Min		None

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 70 (58%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 100
Control Type: Actuated-Coordinated

Splits and Phases: 25: I-5 SB Off-Ramps & La Jolla Village Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1767	398	0	1520	340	0	0	0	605	0	1453
Future Volume (vph)	0	1767	398	0	1520	340	0	0	0	605	0	1453
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.2	6.2		6.2	6.2				5.1		5.1
Lane Util. Factor		0.86	1.00		0.91	1.00				0.97		0.88
Frt		1.00	0.85		1.00	0.85				1.00		0.85
Flt Protected		1.00	1.00		1.00	1.00				0.95		1.00
Satd. Flow (prot)		6408	1583		5085	1583				3433		2787
Flt Permitted		1.00	1.00		1.00	1.00				0.95		1.00
Satd. Flow (perm)		6408	1583		5085	1583				3433		2787
Peak-hour factor, PHF	0.93	0.93	0.93	0.94	0.94	0.94	0.25	0.25	0.25	0.84	0.84	0.84
Adj. Flow (vph)	0	1900	428	0	1617	362	0	0	0	720	0	1730
RTOR Reduction (vph)	0	0	122	0	0	202	0	0	0	0	0	11
Lane Group Flow (vph)	0	1900	306	0	1617	160	0	0	0	720	0	1719
Turn Type		NA	Perm		NA	Perm				Prot		custom
Protected Phases		2			6					4		4 5
Permitted Phases			2			6						
Actuated Green, G (s)		85.7	85.7		36.0	36.0				23.0		73.1
Effective Green, g (s)		85.7	85.7		36.0	36.0				23.0		73.1
Actuated g/C Ratio		0.71	0.71		0.30	0.30				0.19		0.61
Clearance Time (s)		6.2	6.2		6.2	6.2				5.1		
Vehicle Extension (s)		2.0	2.0		2.0	2.0				2.0		
Lane Grp Cap (vph)		4576	1130		1525	474				657		1697
v/s Ratio Prot		0.30			c0.32					0.21		c0.62
v/s Ratio Perm			0.19			0.10						
v/c Ratio		0.42	0.27		1.06	0.34				1.10		1.01
Uniform Delay, d1		7.0	6.1		42.0	32.7				48.5		23.5
Progression Factor		1.05	3.86		0.90	0.79				1.00		1.00
Incremental Delay, d2		0.1	0.2		39.6	1.7				64.2		25.0
Delay (s)		7.4	23.6		77.2	27.4				112.7		48.5
Level of Service		A	C		E	C				F		D
Approach Delay (s)		10.4			68.1			0.0			67.4	
Approach LOS		B			E			A			E	

Intersection Summary

HCM 2000 Control Delay	48.0	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.08		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	89.6%	ICU Level of Service	E
Analysis Period (min)	15		

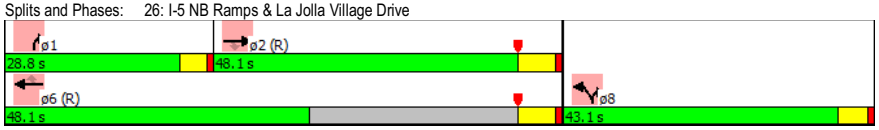
c Critical Lane Group

Lane Group	EBT	EBR	WBT	WBR	NBL	NBR	ø1
Lane Configurations							
Traffic Volume (vph)	1413	978	1382	669	515	951	
Future Volume (vph)	1413	978	1382	669	515	951	
Turn Type	NA	Perm	NA	Perm	Prot	custom	
Protected Phases	2		6		8	1 8	1
Permitted Phases		2		6			
Detector Phase	2	2	6	6	8	1 8	
Switch Phase							
Minimum Initial (s)	16.0	16.0	16.0	16.0	5.0		2.0
Minimum Split (s)	36.2	36.2	22.2	22.2	21.1		9.5
Total Split (s)	48.1	48.1	48.1	48.1	43.1		28.8
Total Split (%)	40.1%	40.1%	40.1%	40.1%	35.9%		24%
Yellow Time (s)	5.2	5.2	5.2	5.2	4.1		3.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	6.2	6.2	6.2	6.2	5.1		
Lead/Lag	Lag	Lag					Lead
Lead-Lag Optimize?	Yes	Yes					Yes
Recall Mode	C-Max	C-Max	C-Max	C-Max	Min		None

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 75 (63%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 70
Control Type: Actuated-Coordinated

Splits and Phases: 26: I-5 NB Ramps & La Jolla Village Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1413	978	0	1382	669	515	0	951	0	0	0
Future Volume (vph)	0	1413	978	0	1382	669	515	0	951	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.2	6.2		6.2	6.2	5.1		4.7			
Lane Util. Factor		0.91	1.00		0.91	1.00	0.97		0.88			
Frt		1.00	0.85		1.00	0.85	1.00		0.85			
Flt Protected		1.00	1.00		1.00	1.00	0.95		1.00			
Satd. Flow (prot)		5085	1583		5085	1583	3433		2787			
Flt Permitted		1.00	1.00		1.00	1.00	0.95		1.00			
Satd. Flow (perm)		5085	1583		5085	1583	3433		2787			
Peak-hour factor, PHF	0.98	0.98	0.98	0.92	0.92	0.92	0.92	0.92	0.92	0.25	0.25	0.25
Adj. Flow (vph)	0	1442	998	0	1502	727	560	0	1034	0	0	0
RTOR Reduction (vph)	0	0	542	0	0	299	0	0	16	0	0	0
Lane Group Flow (vph)	0	1442	456	0	1502	428	560	0	1018	0	0	0
Turn Type		NA	Perm		NA	Perm	Prot		custom			
Protected Phases		2			6		8		1 8			
Permitted Phases			2			6						
Actuated Green, G (s)		52.1	52.1		70.7	70.7	38.0		57.0			
Effective Green, g (s)		52.1	52.1		70.7	70.7	38.0		51.9			
Actuated g/C Ratio		0.43	0.43		0.59	0.59	0.32		0.43			
Clearance Time (s)		6.2	6.2		6.2	6.2	5.1					
Vehicle Extension (s)		2.0	2.0		2.0	2.0	2.0					
Lane Grp Cap (vph)		2207	687		2995	932	1087		1205			
v/s Ratio Prot		0.28			0.30		0.16		c0.37			
v/s Ratio Perm			c0.29			0.27						
v/c Ratio		0.65	0.66		0.50	0.46	0.52		0.84			
Uniform Delay, d1		26.8	27.0		14.4	13.9	33.5		30.4			
Progression Factor		1.32	4.50		1.00	1.00	1.00		1.00			
Incremental Delay, d2		1.2	4.0		0.6	1.6	0.2		5.6			
Delay (s)		36.6	125.6		15.0	15.5	33.7		36.0			
Level of Service		D	F		B	B	C		D			
Approach Delay (s)		73.0			15.2			35.2			0.0	
Approach LOS		E			B			D			A	

Intersection Summary

HCM 2000 Control Delay	42.8	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	69.7%	ICU Level of Service	C
Analysis Period (min)	15		

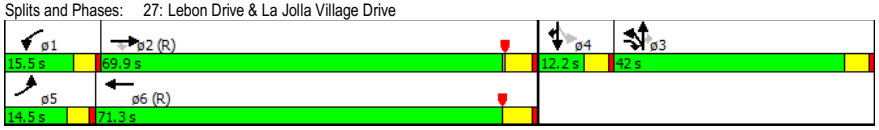
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	3	1592	161	199	1449	610	8	250	17	3	23
Future Volume (vph)	3	1592	161	199	1449	610	8	250	17	3	23
Turn Type	Prot	NA	pm+ov	Prot	NA	Split	NA	Perm	Perm	NA	Prot
Protected Phases	5	2	3	1	6	3	3			4	4
Permitted Phases			2					3	4		
Detector Phase	5	2	3	1	6	3	3	3	4	4	4
Switch Phase											
Minimum Initial (s)	4.0	10.0	7.0	4.0	10.0	7.0	7.0	7.0	4.0	4.0	4.0
Minimum Split (s)	8.4	15.3	11.9	8.4	15.7	11.9	11.9	11.9	8.9	8.9	8.9
Total Split (s)	14.5	69.9	42.0	15.5	71.3	42.0	42.0	42.0	12.2	12.2	12.2
Total Split (%)	10.4%	49.9%	30.0%	11.1%	50.9%	30.0%	30.0%	30.0%	8.7%	8.7%	8.7%
Yellow Time (s)	3.4	4.3	3.9	3.4	4.7	3.9	3.9	3.9	3.9	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	4.4	5.3	4.9	4.4	5.7	4.9	4.9	4.9		4.9	4.9
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lag	Lag	Lead	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	C-Max	None	None	None	None	None	None

Intersection Summary

Cycle Length: 140
Actuated Cycle Length: 140
Offset: 83 (59%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 27: Lebon Drive & La Jolla Village Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	1592	161	199	1449	11	610	8	250	17	3	23
Future Volume (vph)	3	1592	161	199	1449	11	610	8	250	17	3	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.3	4.9	4.4	5.7		4.9	4.9	4.9		4.9	4.9
Lane Util. Factor	1.00	0.91	1.00	0.97	0.91		0.97	0.95	0.95		1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00		1.00	0.86	0.85		1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00		0.96	1.00
Satd. Flow (prot)	1770	5085	1583	3433	5079		3433	1521	1504		1788	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00		0.65	1.00
Satd. Flow (perm)	1770	5085	1583	3433	5079		3433	1521	1504		1203	1583
Peak-hour factor, PHF	0.80	0.80	0.80	0.94	0.94	0.94	0.84	0.84	0.84	0.80	0.80	0.80
Adj. Flow (vph)	4	1990	201	212	1541	12	726	10	298	21	4	29
RTOR Reduction (vph)	0	0	52	0	0	0	0	107	111	0	0	28
Lane Group Flow (vph)	4	1990	149	212	1553	0	726	49	41	0	25	1
Turn Type	Prot	NA	pm+ov	Prot	NA		Split	NA	Perm	Perm	NA	Prot
Protected Phases	5	2	3	1	6		3	3			4	4
Permitted Phases			2						3	4		
Actuated Green, G (s)	1.2	66.4	104.0	10.8	75.6		37.6	37.6	37.6		5.7	5.7
Effective Green, g (s)	1.2	66.4	104.0	10.8	75.6		37.6	37.6	37.6		5.7	5.7
Actuated g/C Ratio	0.01	0.47	0.74	0.08	0.54		0.27	0.27	0.27		0.04	0.04
Clearance Time (s)	4.4	5.3	4.9	4.4	5.7		4.9	4.9	4.9		4.9	4.9
Vehicle Extension (s)	2.0	6.1	6.5	2.0	5.6		6.5	6.5	6.5		2.0	2.0
Lane Grp Cap (vph)	15	2411	1175	264	2742		922	408	403		48	64
v/s Ratio Prot	0.00	c0.39	0.03	c0.06	0.31		c0.21	0.03				0.00
v/s Ratio Perm			0.06						0.03		c0.02	
v/c Ratio	0.27	0.83	0.13	0.80	0.57		0.79	0.12	0.10		0.52	0.02
Uniform Delay, d1	69.0	31.8	5.1	63.6	21.3		47.5	38.7	38.5		65.8	64.5
Progression Factor	1.00	1.00	1.00	1.10	0.91		1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	3.5	3.4	0.2	6.7	0.3		5.8	0.4	0.4		4.6	0.0
Delay (s)	72.4	35.2	5.3	76.4	19.7		53.2	39.1	38.8		70.4	64.5
Level of Service	E	D	A	E	B		D	D	D		E	E
Approach Delay (s)		32.5			26.5			49.0			67.3	
Approach LOS		C			C			D			E	

Intersection Summary

HCM 2000 Control Delay	34.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	19.9
Intersection Capacity Utilization	72.7%	ICU Level of Service	C
Analysis Period (min)	15		

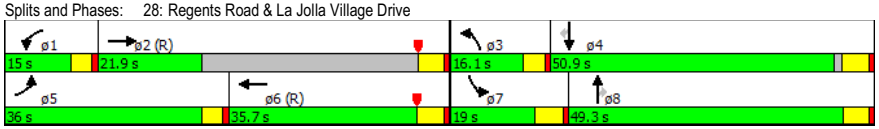
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	822	1379	89	800	305	498	147	115	160	266
Future Volume (vph)	822	1379	89	800	305	498	147	115	160	266
Turn Type	Prot	NA	Prot	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2	1	6	3	8		7	4	
Permitted Phases							8			4
Detector Phase	5	2	1	6	3	8	8	7	4	4
Switch Phase										
Minimum Initial (s)	4.0	10.0	4.0	10.0	4.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	8.4	15.3	8.4	15.4	8.4	15.3	15.3	15.4	15.4	15.4
Total Split (s)	36.0	21.9	15.0	35.7	16.1	49.3	49.3	19.0	50.9	50.9
Total Split (%)	25.7%	15.6%	10.7%	25.5%	11.5%	35.2%	35.2%	13.6%	36.4%	36.4%
Yellow Time (s)	3.4	4.3	3.4	4.4	3.4	4.3	4.3	4.4	4.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.3	4.4	5.4	4.4	5.3	5.3	5.4	5.4	5.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Min	None	C-Min	None	Min	Min	Min	Min	Min

Intersection Summary

Cycle Length: 140
Actuated Cycle Length: 140
Offset: 55 (39%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 100
Control Type: Actuated-Coordinated

Splits and Phases: 28: Regents Road & La Jolla Village Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	822	1379	36	89	800	108	305	498	147	115	160	266
Future Volume (vph)	822	1379	36	89	800	108	305	498	147	115	160	266
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.3		4.4	5.4		4.4	5.3	5.3	5.4	5.4	5.4
Lane Util. Factor	0.97	0.91		0.97	0.91		0.97	0.95	1.00	1.00	0.95	1.00
Frt	1.00	1.00		1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5066		3433	4994		3433	3539	1583	1770	3539	1583
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5066		3433	4994		3433	3539	1583	1770	3539	1583
Peak-hour factor, PHF	0.86	0.86	0.86	0.84	0.84	0.84	0.80	0.80	0.80	0.80	0.80	0.80
Adj. Flow (vph)	956	1603	42	106	952	129	381	622	184	144	200	332
RTOR Reduction (vph)	0	2	0	0	13	0	0	0	142	0	0	251
Lane Group Flow (vph)	956	1643	0	106	1068	0	381	623	42	144	200	82
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases									8			4
Actuated Green, G (s)	44.0	64.6		9.7	30.2		11.7	32.0	32.0	13.3	34.5	34.5
Effective Green, g (s)	44.0	64.6		9.7	30.2		11.7	32.0	32.0	13.3	34.5	34.5
Actuated g/C Ratio	0.31	0.46		0.07	0.22		0.08	0.23	0.23	0.10	0.25	0.25
Clearance Time (s)	4.4	5.3		4.4	5.4		4.4	5.3	5.3	5.4	5.4	5.4
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	1078	2337		237	1077		286	808	361	168	872	390
v/s Ratio Prot	c0.28	0.32		0.03	c0.21		c0.11	c0.18		0.08	c0.06	
v/s Ratio Perm									0.03			0.05
v/c Ratio	0.89	0.70		0.45	0.99		1.33	0.77	0.12	0.86	0.23	0.21
Uniform Delay, d1	45.6	30.1		62.6	54.8		64.2	50.6	42.8	62.4	42.1	41.9
Progression Factor	1.30	1.57		1.33	0.46		1.00	1.00	1.00	0.99	1.03	1.89
Incremental Delay, d2	7.0	1.4		0.1	6.6		171.5	4.6	0.1	32.0	0.1	0.3
Delay (s)	66.3	48.4		83.6	31.6		235.6	55.2	42.9	93.5	43.7	79.3
Level of Service	E	D		F	C		F	E	D	F	D	E
Approach Delay (s)		55.0			36.3			111.1			71.8	
Approach LOS		D			D			F			E	

Intersection Summary

HCM 2000 Control Delay	64.9	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.91		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	20.5
Intersection Capacity Utilization	80.5%	ICU Level of Service	D
Analysis Period (min)	15		

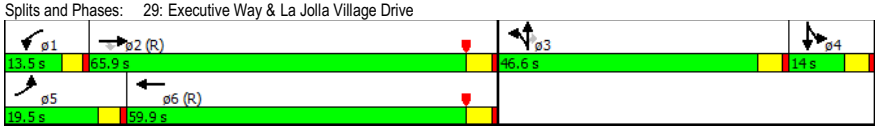
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	73	1891	112	171	2287	37	56	179	60	24
Future Volume (vph)	73	1891	112	171	2287	37	56	179	60	24
Turn Type	Prot	NA	Perm	Prot	NA	Split	NA	Perm	Split	NA
Protected Phases	5	2		1	6	3	3		4	4
Permitted Phases			2					3		
Detector Phase	5	2	2	1	6	3	3	3	4	4
Switch Phase										
Minimum Initial (s)	4.0	10.0	10.0	4.0	10.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.4	15.3	15.3	8.4	15.3	45.9	45.9	45.9	8.9	8.9
Total Split (s)	19.5	65.9	65.9	13.5	59.9	46.6	46.6	46.6	14.0	14.0
Total Split (%)	13.9%	47.1%	47.1%	9.6%	42.8%	33.3%	33.3%	33.3%	10.0%	10.0%
Yellow Time (s)	3.4	4.3	4.3	3.4	4.3	3.9	3.9	3.9	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.3	5.3	4.4	5.3	4.9	4.9	4.9	4.9	4.9
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	None	None	None	None	None

Intersection Summary

Cycle Length: 140
Actuated Cycle Length: 140
Offset: 20 (14%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 29: Executive Way & La Jolla Village Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	73	1891	112	171	2287	465	37	56	179	60	24	24
Future Volume (vph)	73	1891	112	171	2287	465	37	56	179	60	24	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.3	5.3	4.4	5.3		4.9	4.9	4.9	4.9	4.9	
Lane Util. Factor	1.00	0.91	1.00	0.97	0.91		0.95	0.95	1.00	1.00	0.95	
Frt	1.00	1.00	0.85	1.00	0.97		1.00	1.00	0.85	1.00	0.93	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	5085	1583	3433	4957		1681	1765	1583	1770	3274	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	5085	1583	3433	4957		1681	1765	1583	1770	3274	
Peak-hour factor, PHF	0.91	0.91	0.91	0.87	0.87	0.87	0.85	0.85	0.85	0.80	0.80	0.80
Adj. Flow (vph)	80	2078	123	197	2629	534	44	66	211	75	30	30
RTOR Reduction (vph)	0	0	50	0	18	0	0	0	132	0	28	0
Lane Group Flow (vph)	80	2078	73	197	3145	0	40	70	79	75	32	0
Turn Type	Prot	NA	Perm	Prot	NA		Split	NA	Perm	Split	NA	
Protected Phases	5	2		1	6		3	3		4	4	
Permitted Phases			2						3			
Actuated Green, G (s)	10.7	72.8	72.8	9.8	71.9		27.4	27.4	27.4	10.5	10.5	
Effective Green, g (s)	10.7	72.8	72.8	9.8	71.9		27.4	27.4	27.4	10.5	10.5	
Actuated g/C Ratio	0.08	0.52	0.52	0.07	0.51		0.20	0.20	0.20	0.08	0.08	
Clearance Time (s)	4.4	5.3	5.3	4.4	5.3		4.9	4.9	4.9	4.9	4.9	
Vehicle Extension (s)	2.0	5.8	5.8	2.0	5.5		2.0	2.0	2.0	6.1	6.1	
Lane Grp Cap (vph)	135	2644	823	240	2545		328	345	309	132	245	
v/s Ratio Prot	0.05	0.41		c0.06	c0.63		0.02	0.04		c0.04	0.01	
v/s Ratio Perm			0.05						c0.05			
v/c Ratio	0.59	0.79	0.09	0.82	1.24		0.12	0.20	0.26	0.57	0.13	
Uniform Delay, d1	62.5	27.3	16.9	64.2	34.0		46.4	47.2	47.7	62.6	60.5	
Progression Factor	1.21	0.60	0.44	1.31	0.37		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	2.9	1.6	0.1	2.0	106.5		0.1	0.1	0.2	11.4	0.7	
Delay (s)	78.9	17.9	7.6	86.4	119.0		46.4	47.3	47.8	73.9	61.2	
Level of Service	E	B	A	F	F		D	D	D	E	E	
Approach Delay (s)		19.5			117.1			47.5			68.3	
Approach LOS		B			F			D			E	

Intersection Summary

HCM 2000 Control Delay	75.8	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.91		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	19.5
Intersection Capacity Utilization	80.8%	ICU Level of Service	D
Analysis Period (min)	15		

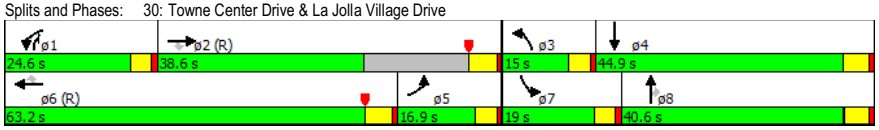
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	348	1702	72	260	2824	1023	125	299	483	191	26
Future Volume (vph)	348	1702	72	260	2824	1023	125	299	483	191	26
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA
Protected Phases	5	2		1	6		3	8	1	7	4
Permitted Phases			2			6			8		
Detector Phase	5	2	2	1	6	6	3	8	1	7	4
Switch Phase											
Minimum Initial (s)	4.0	10.0	10.0	4.0	10.0	10.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.4	15.5	15.5	8.4	15.3	15.3	8.4	9.0	8.4	8.4	9.3
Total Split (s)	16.9	38.6	38.6	24.6	63.2	63.2	15.0	40.6	24.6	19.0	44.9
Total Split (%)	12.1%	27.6%	27.6%	17.6%	45.1%	45.1%	10.7%	29.0%	17.6%	13.6%	32.1%
Yellow Time (s)	3.4	4.5	4.5	3.4	4.3	4.3	3.4	4.0	3.4	3.4	4.3
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.5	5.5	4.4	5.3	5.3	4.4	5.0	4.4	4.4	5.3
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lead	Lead	Lag	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	None	None	None	None

Intersection Summary

Cycle Length: 140
Actuated Cycle Length: 140
Offset: 13 (9%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 30: Towne Center Drive & La Jolla Village Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	348	1702	72	260	2824	1023	125	299	483	191	26	31
Future Volume (vph)	348	1702	72	260	2824	1023	125	299	483	191	26	31
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.5	5.5	4.4	5.3	5.3	4.4	5.0	4.4	4.4	5.3	
Lane Util. Factor	0.97	0.91	1.00	0.97	0.86	0.86	0.97	1.00	0.88	0.97	0.95	
Frt	1.00	1.00	0.85	1.00	0.99	0.85	1.00	1.00	0.85	1.00	0.92	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	3433	5085	1583	3433	4766	1362	3433	1863	2787	3433	3248	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	3433	5085	1583	3433	4766	1362	3433	1863	2787	3433	3248	
Peak-hour factor, PHF	0.93	0.93	0.93	0.90	0.90	0.90	0.80	0.80	0.80	0.92	0.92	0.92
Adj. Flow (vph)	374	1830	77	289	3138	1137	156	374	604	208	28	34
RTOR Reduction (vph)	0	0	45	0	4	166	0	0	61	0	27	0
Lane Group Flow (vph)	374	1830	32	289	3316	789	156	374	543	208	35	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	
Protected Phases	5	2		1	6		3	8	1	7	4	
Permitted Phases			2			6			8			
Actuated Green, G (s)	12.5	57.4	57.4	17.3	62.4	62.4	16.3	33.0	50.3	13.0	29.4	
Effective Green, g (s)	12.5	57.4	57.4	17.3	62.4	62.4	16.3	33.0	50.3	13.0	29.4	
Actuated g/C Ratio	0.09	0.41	0.41	0.12	0.45	0.45	0.12	0.24	0.36	0.09	0.21	
Clearance Time (s)	4.4	5.5	5.5	4.4	5.3	5.3	4.4	5.0	4.4	4.4	5.3	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	306	2084	649	424	2124	607	399	439	1001	318	682	
v/s Ratio Prot	c0.11	0.36		0.08	c0.70		0.05	c0.20	0.07	c0.06	0.01	
v/s Ratio Perm			0.02			0.58			0.13			
v/c Ratio	1.22	0.88	0.05	0.68	1.56	1.30	0.39	0.85	0.54	0.65	0.05	
Uniform Delay, d1	63.8	38.1	24.9	58.7	38.8	38.8	57.3	51.2	35.7	61.3	44.2	
Progression Factor	0.59	0.32	0.10	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	117.9	3.8	0.1	4.5	254.9	146.5	0.6	14.7	0.6	4.8	0.0	
Delay (s)	155.8	16.0	2.7	63.2	293.7	185.3	57.9	65.9	36.3	66.1	44.2	
Level of Service	F	B	A	E	F	F	E	E	D	E	D	
Approach Delay (s)		38.4			256.4			49.0			61.1	
Approach LOS		D			F			D			E	

Intersection Summary

HCM 2000 Control Delay	161.2	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.24		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	19.6
Intersection Capacity Utilization	109.2%	ICU Level of Service	H
Analysis Period (min)	15		

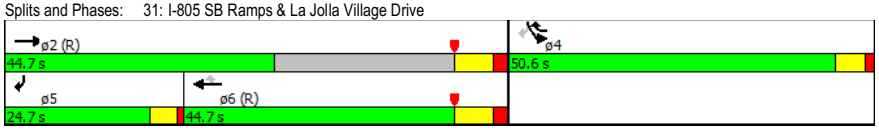
c Critical Lane Group

Lane Group	EBT	WBT	WBR	SBL	SBR
Lane Configurations					
Traffic Volume (vph)	1786	2035	510	349	2083
Future Volume (vph)	1786	2035	510	349	2083
Turn Type	NA	NA	pm+ov	Prot	custom
Protected Phases	2	6	4	4	5
Permitted Phases			6		4
Detector Phase	2	6	4	4	5
Switch Phase					
Minimum Initial (s)	15.0	15.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	10.6	10.6	9.7
Total Split (s)	44.7	44.7	50.6	50.6	24.7
Total Split (%)	37.3%	37.3%	42.2%	42.2%	20.6%
Yellow Time (s)	5.5	5.5	4.1	4.1	3.7
All-Red Time (s)	2.0	2.0	1.5	1.5	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.5	7.5	5.6	5.6	4.7
Lead/Lag		Lag			Lead
Lead-Lag Optimize?		Yes			Yes
Recall Mode	C-Max	C-Max	None	None	None

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 10 (8%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 140
Control Type: Actuated-Coordinated

Splits and Phases: 31: I-805 SB Ramps & La Jolla Village Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1786	545	0	2035	510	0	0	0	349	0	2083
Future Volume (vph)	0	1786	545	0	2035	510	0	0	0	349	0	2083
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		7.5			7.5	5.6				5.6		4.7
Lane Util. Factor		0.91			0.91	1.00				0.97		0.88
Frt		0.96			1.00	0.85				1.00		0.85
Flt Protected		1.00			1.00	1.00				0.95		1.00
Satd. Flow (prot)		4907			5085	1583				3433		2787
Flt Permitted		1.00			1.00	1.00				0.95		1.00
Satd. Flow (perm)		4907			5085	1583				3433		2787
Peak-hour factor, PHF	0.92	0.92	0.92	0.96	0.96	0.96	0.25	0.25	0.25	0.80	0.80	0.80
Adj. Flow (vph)	0	1941	592	0	2120	531	0	0	0	436	0	2604
RTOR Reduction (vph)	0	26	0	0	0	277	0	0	0	0	0	19
Lane Group Flow (vph)	0	2507	0	0	2120	254	0	0	0	436	0	2585
Turn Type		NA			NA	pm+ov				Prot		custom
Protected Phases		2			6	4				4		5
Permitted Phases						6						4
Actuated Green, G (s)		86.6			37.2	57.5				20.3		65.0
Effective Green, g (s)		86.6			37.2	57.5				20.3		65.0
Actuated g/C Ratio		0.72			0.31	0.48				0.17		0.54
Clearance Time (s)		7.5			7.5	5.6				5.6		4.7
Vehicle Extension (s)		2.0			2.0	2.0				2.0		2.0
Lane Grp Cap (vph)		3541			1576	758				580		1509
v/s Ratio Prot		0.51			c0.42	0.06				0.13		c0.64
v/s Ratio Perm						0.10						0.29
v/c Ratio		0.71			1.35	0.34				0.75		1.71
Uniform Delay, d1		9.5			41.4	19.4				47.5		27.5
Progression Factor		1.00			0.86	3.55				1.00		1.00
Incremental Delay, d2		1.2			158.1	0.1				4.9		323.8
Delay (s)		10.7			193.8	69.0				52.3		351.3
Level of Service		B			F	E				D		F
Approach Delay (s)		10.7			168.8			0.0			308.4	
Approach LOS		B			F			A			F	

Intersection Summary

HCM 2000 Control Delay	171.7	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.58		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	17.8
Intersection Capacity Utilization	122.4%	ICU Level of Service	H
Analysis Period (min)	15		

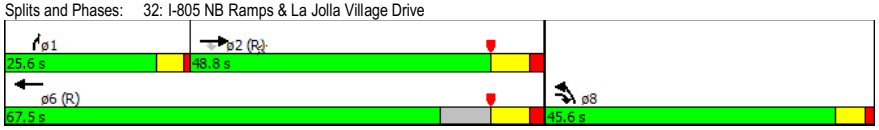
c Critical Lane Group

Lane Group	EBT	EBR	WBT	NBL	NBR
Lane Configurations					
Traffic Volume (vph)	1370	851	1541	972	576
Future Volume (vph)	1370	851	1541	972	576
Turn Type	NA	pm+ov	NA	Prot	Prot
Protected Phases	2	8	6	8	1
Permitted Phases		2			
Detector Phase	2	8	6	8	1
Switch Phase					
Minimum Initial (s)	16.0	5.0	15.0	5.0	5.0
Minimum Split (s)	23.5	10.6	22.5	10.6	10.6
Total Split (s)	48.8	45.6	67.5	45.6	25.6
Total Split (%)	40.7%	38.0%	56.3%	38.0%	21.3%
Yellow Time (s)	5.5	4.1	5.5	4.1	3.7
All-Red Time (s)	2.0	1.5	2.0	1.5	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.5	5.6	7.5	5.6	4.7
Lead/Lag	Lag				Lead
Lead-Lag Optimize?	Yes				Yes
Recall Mode	C-Max	None	C-Max	None	None

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 18 (15%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 80
Control Type: Actuated-Coordinated

Splits and Phases: 32: I-805 NB Ramps & La Jolla Village Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1370	851	0	1541	492	972	0	576	0	0	0
Future Volume (vph)	0	1370	851	0	1541	492	972	0	576	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		7.5	5.6		7.5		5.6		4.7			
Lane Util. Factor		0.91	1.00		0.86		0.97		0.88			
Frt		1.00	0.85		0.96		1.00		0.85			
Flt Protected		1.00	1.00		1.00		0.95		1.00			
Satd. Flow (prot)		5085	1583		6175		3433		2787			
Flt Permitted		1.00	1.00		1.00		0.95		1.00			
Satd. Flow (perm)		5085	1583		6175		3433		2787			
Peak-hour factor, PHF	0.90	0.90	0.90	0.96	0.96	0.96	0.88	0.88	0.88	0.25	0.25	0.25
Adj. Flow (vph)	0	1522	946	0	1605	512	1105	0	655	0	0	0
RTOR Reduction (vph)	0	0	250	0	48	0	0	0	406	0	0	0
Lane Group Flow (vph)	0	1522	696	0	2070	0	1105	0	249	0	0	0
Turn Type		NA	pm+ov		NA		Prot		Prot			
Protected Phases		2	8		6		8		1			
Permitted Phases			2									
Actuated Green, G (s)		48.4	88.3		67.0		39.9		13.9			
Effective Green, g (s)		48.4	88.3		67.0		39.9		13.9			
Actuated g/C Ratio		0.40	0.74		0.56		0.33		0.12			
Clearance Time (s)		7.5	5.6		7.5		5.6		4.7			
Vehicle Extension (s)		2.0	2.0		2.0		2.0		2.0			
Lane Grp Cap (vph)		2050	1164		3447		1141		322			
v/s Ratio Prot		c0.30	0.20		0.34		c0.32		c0.09			
v/s Ratio Perm			0.24									
v/c Ratio		0.74	0.60		0.60		0.97		0.77			
Uniform Delay, d1		30.5	7.5		17.6		39.4		51.5			
Progression Factor		0.95	10.80		1.00		1.00		1.00			
Incremental Delay, d2		2.0	0.4		0.8		19.1		10.1			
Delay (s)		30.9	81.2		18.4		58.6		61.6			
Level of Service		C	F		B		E		E			
Approach Delay (s)		50.2			18.4			59.7			0.0	
Approach LOS		D			B			E			A	

Intersection Summary

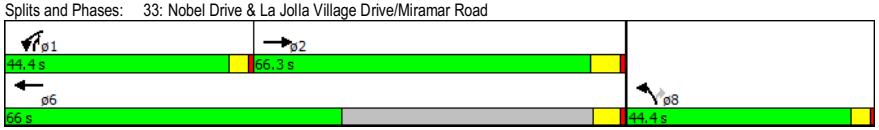
HCM 2000 Control Delay	42.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	17.8
Intersection Capacity Utilization	67.9%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Configurations					
Traffic Volume (vph)	1880	428	2052	113	903
Future Volume (vph)	1880	428	2052	113	903
Turn Type	NA	Prot	NA	Prot	pm+ov
Protected Phases	2	1	6	8	1
Permitted Phases					8
Detector Phase	2	1	6	8	1
Switch Phase					
Minimum Initial (s)	10.0	4.0	10.0	7.0	4.0
Minimum Split (s)	16.3	8.4	16.0	11.4	8.4
Total Split (s)	66.3	44.4	66.0	44.4	44.4
Total Split (%)	42.7%	28.6%	42.6%	28.6%	28.6%
Yellow Time (s)	5.3	3.4	5.0	3.4	3.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.3	4.4	6.0	4.4	4.4
Lead/Lag	Lag	Lead			Lead
Lead-Lag Optimize?	Yes	Yes			Yes
Recall Mode	Min	None	Min	None	None

Intersection Summary
Cycle Length: 155.1
Actuated Cycle Length: 120.6
Natural Cycle: 60
Control Type: Actuated-Uncoordinated

Splits and Phases: 33: Nobel Drive & La Jolla Village Drive/Miramar Road



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1880	196	428	2052	113	903
Future Volume (vph)	1880	196	428	2052	113	903
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.3		4.4	6.0	4.4	4.4
Lane Util. Factor	0.86		0.97	0.86	1.00	0.88
Frt	0.99		1.00	1.00	1.00	0.85
Flt Protected	1.00		0.95	1.00	0.95	1.00
Satd. Flow (prot)	6317		3433	6408	1770	2787
Flt Permitted	1.00		0.95	1.00	0.95	1.00
Satd. Flow (perm)	6317		3433	6408	1770	2787
Peak-hour factor, PHF	0.86	0.86	0.91	0.91	0.94	0.94
Adj. Flow (vph)	2186	228	470	2255	120	961
RTOR Reduction (vph)	9	0	0	0	0	0
Lane Group Flow (vph)	2405	0	470	2255	120	961
Turn Type	NA		Prot	NA	Prot	pm+ov
Protected Phases	2		1	6	8	1
Permitted Phases						8
Actuated Green, G (s)	60.3		33.3	98.3	11.9	45.2
Effective Green, g (s)	60.3		33.3	98.3	11.9	45.2
Actuated g/C Ratio	0.50		0.28	0.82	0.10	0.37
Clearance Time (s)	6.3		4.4	6.0	4.4	4.4
Vehicle Extension (s)	5.0		2.0	5.4	2.0	2.0
Lane Grp Cap (vph)	3158		947	5223	174	1146
v/s Ratio Prot	c0.38		0.14	0.35	0.07	c0.23
v/s Ratio Perm						0.11
v/c Ratio	0.76		0.50	0.43	0.69	0.84
Uniform Delay, d1	24.3		36.6	3.2	52.6	34.4
Progression Factor	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	1.3		0.1	0.1	8.7	5.3
Delay (s)	25.7		36.8	3.3	61.3	39.7
Level of Service	C		D	A	E	D
Approach Delay (s)	25.7			9.1	42.1	
Approach LOS	C			A	D	

Intersection Summary			
HCM 2000 Control Delay	21.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	120.6	Sum of lost time (s)	15.1
Intersection Capacity Utilization	71.0%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBU	WBT	WBR	SBL
Lane Configurations						
Traffic Volume (vph)	580	2261	3	2206	815	157
Future Volume (vph)	580	2261	3	2206	815	157
Turn Type	Prot	NA	Prot	NA	Perm	Prot
Protected Phases	5	2	1	6		7
Permitted Phases					6	
Detector Phase	5	2	1	6	6	7
Switch Phase						
Minimum Initial (s)	4.0	10.0	4.0	10.0	10.0	10.0
Minimum Split (s)	8.4	16.3	8.4	15.4	15.4	14.4
Total Split (s)	34.4	66.3	24.4	65.4	65.4	44.4
Total Split (%)	23.9%	46.0%	16.9%	45.4%	45.4%	30.8%
Yellow Time (s)	3.4	5.3	3.4	4.4	4.4	3.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	6.3	4.4	5.4	5.4	4.4
Lead/Lag	Lead	Lag	Lead	Lag	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	Min	None	Min	Min	None

Intersection Summary

Cycle Length: 144.2
Actuated Cycle Length: 117.5
Natural Cycle: 90
Control Type: Actuated-Uncoordinated

Splits and Phases: 34: Miramar Road & Eastgate Mall

Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Traffic Volume (vph)	580	2261	3	2206	815	157	210
Future Volume (vph)	580	2261	3	2206	815	157	210
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	6.3	4.4	5.4	5.4	4.4	
Lane Util. Factor	0.97	0.91	1.00	0.86	1.00	0.97	
Frt	1.00	1.00	1.00	1.00	0.85	0.91	
Flt Protected	0.95	1.00	0.95	1.00	1.00	0.98	
Satd. Flow (prot)	3433	5085	1770	6408	1583	3234	
Flt Permitted	0.95	1.00	0.95	1.00	1.00	0.98	
Satd. Flow (perm)	3433	5085	1770	6408	1583	3234	
Peak-hour factor, PHF	0.87	0.87	0.92	0.92	0.92	0.80	0.80
Adj. Flow (vph)	667	2599	3	2398	886	196	262
RTOR Reduction (vph)	0	0	0	0	316	203	0
Lane Group Flow (vph)	667	2599	3	2398	570	256	0
Turn Type	Prot	NA	Prot	NA	Perm	Prot	
Protected Phases	5	2	1	6		7	
Permitted Phases					6		
Actuated Green, G (s)	27.2	89.2	1.0	63.9	63.9	15.7	
Effective Green, g (s)	27.2	89.2	1.0	63.9	63.9	15.7	
Actuated g/C Ratio	0.22	0.74	0.01	0.53	0.53	0.13	
Clearance Time (s)	4.4	6.3	4.4	5.4	5.4	4.4	
Vehicle Extension (s)	2.0	5.0	2.0	6.1	6.1	4.5	
Lane Grp Cap (vph)	771	3748	14	3384	835	419	
v/s Ratio Prot	c0.19	c0.51	0.00	0.37		c0.08	
v/s Ratio Perm					0.36		
v/c Ratio	0.87	0.69	0.21	0.71	0.68	0.61	
Uniform Delay, d1	45.1	8.5	59.6	21.5	21.1	49.8	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	9.7	0.7	2.8	1.0	3.6	3.4	
Delay (s)	54.8	9.3	62.4	22.6	24.6	53.2	
Level of Service	D	A	E	C	C	D	
Approach Delay (s)		18.6		23.2		53.2	
Approach LOS		B		C		D	

Intersection Summary

HCM 2000 Control Delay	23.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	121.0	Sum of lost time (s)	15.1
Intersection Capacity Utilization	75.2%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBT	WBR	SBL
Lane Configurations					
Traffic Volume (vph)	121	2637	3054	124	67
Future Volume (vph)	121	2637	3054	124	67
Turn Type	Prot	NA	NA	Perm	Prot
Protected Phases	5	2	6		4
Permitted Phases				6	
Detector Phase	5	2	6	6	4
Switch Phase					
Minimum Initial (s)	4.0	10.0	10.0	10.0	4.0
Minimum Split (s)	8.4	15.8	15.4	15.4	8.9
Total Split (s)	22.6	89.9	89.9	89.9	37.5
Total Split (%)	15.1%	59.9%	59.9%	59.9%	25.0%
Yellow Time (s)	3.4	4.8	4.4	4.4	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.8	5.4	5.4	4.9
Lead/Lag	Lag		Lead	Lead	
Lead-Lag Optimize?	Yes		Yes	Yes	
Recall Mode	None	C-Max	C-Max	C-Max	None

Intersection Summary

Cycle Length: 150
Actuated Cycle Length: 150
Offset: 87 (58%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 35: Miramar Road & Miramar Mall

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	121	2637	3054	124	67	61
Future Volume (vph)	121	2637	3054	124	67	61
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.8	5.4	5.4	4.9	
Lane Util. Factor	1.00	0.91	0.91	1.00	1.00	
Frt	1.00	1.00	1.00	0.85	0.94	
Flt Protected	0.95	1.00	1.00	1.00	0.97	
Satd. Flow (prot)	1770	5085	5085	1583	1699	
Flt Permitted	0.95	1.00	1.00	1.00	0.97	
Satd. Flow (perm)	1770	5085	5085	1583	1699	
Peak-hour factor, PHF	0.86	0.86	0.92	0.92	0.81	0.81
Adj. Flow (vph)	141	3066	3320	135	83	75
RTOR Reduction (vph)	0	0	0	30	25	0
Lane Group Flow (vph)	141	3066	3320	105	133	0
Turn Type	Prot	NA	NA	Perm	Prot	
Protected Phases	5	2	6		4	
Permitted Phases				6		
Actuated Green, G (s)	18.2	121.3	99.1	99.1	18.0	
Effective Green, g (s)	18.2	121.3	99.1	99.1	18.0	
Actuated g/C Ratio	0.12	0.81	0.66	0.66	0.12	
Clearance Time (s)	4.4	5.8	5.4	5.4	4.9	
Vehicle Extension (s)	2.0	4.6	5.2	5.2	2.0	
Lane Grp Cap (vph)	214	4112	3359	1045	203	
v/s Ratio Prot	0.08	c0.60	c0.65		c0.08	
v/s Ratio Perm				0.07		
v/c Ratio	0.66	0.75	0.99	0.10	0.66	
Uniform Delay, d1	62.9	6.9	24.9	9.3	63.1	
Progression Factor	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	5.5	1.3	13.0	0.2	5.7	
Delay (s)	68.4	8.2	37.9	9.4	68.8	
Level of Service	E	A	D	A	E	
Approach Delay (s)		10.8	36.8		68.8	
Approach LOS		B	D		E	

Intersection Summary

HCM 2000 Control Delay	25.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.92		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	14.7
Intersection Capacity Utilization	85.4%	ICU Level of Service	E
Analysis Period (min)	15		

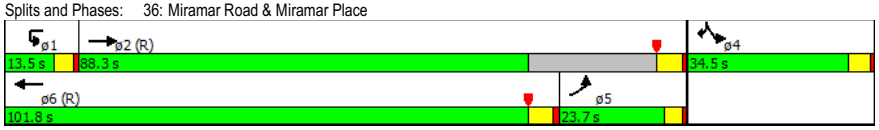
c Critical Lane Group

Lane Group	EBL	EBT	WBU	WBT	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	151	2547	24	2943	102	57
Future Volume (vph)	151	2547	24	2943	102	57
Turn Type	Prot	NA	Prot	NA	Prot	Prot
Protected Phases	5	2	1	6	4	4
Permitted Phases						
Detector Phase	5	2	1	6	4	4
Switch Phase						
Minimum Initial (s)	4.0	10.0	4.0	10.0	4.0	4.0
Minimum Split (s)	8.4	15.7	8.4	15.7	8.9	8.9
Total Split (s)	23.7	88.3	13.5	101.8	34.5	34.5
Total Split (%)	14.8%	55.2%	8.4%	63.6%	21.6%	21.6%
Yellow Time (s)	3.4	4.7	3.4	4.7	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.7	4.4	5.7	4.9	4.9
Lead/Lag	Lag	Lag	Lead	Lead		
Lead-Lag Optimize?	Yes	Yes	Yes	Yes		
Recall Mode	None	C-Max	None	C-Max	None	None

Intersection Summary

Cycle Length: 160
Actuated Cycle Length: 160
Offset: 150 (94%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 36: Miramar Road & Miramar Place



Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Traffic Volume (vph)	151	2547	24	2943	177	102	57
Future Volume (vph)	151	2547	24	2943	177	102	57
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.7	4.4	5.7		4.9	4.9
Lane Util. Factor	1.00	0.91	1.00	0.91		0.97	0.91
Frt	1.00	1.00	1.00	0.99		0.99	0.85
Flt Protected	0.95	1.00	0.95	1.00		0.96	1.00
Satd. Flow (prot)	1770	5085	1770	5042		3418	1441
Flt Permitted	0.95	1.00	0.95	1.00		0.96	1.00
Satd. Flow (perm)	1770	5085	1770	5042		3418	1441
Peak-hour factor, PHF	0.85	0.85	0.92	0.95	0.95	0.80	0.80
Adj. Flow (vph)	178	2996	26	3098	186	128	71
RTOR Reduction (vph)	0	0	0	3	0	4	58
Lane Group Flow (vph)	178	2996	26	3281	0	133	4
Turn Type	Prot	NA	Prot	NA		Prot	Prot
Protected Phases	5	2	1	6		4	4
Permitted Phases							
Actuated Green, G (s)	21.0	128.6	4.8	112.4		11.6	11.6
Effective Green, g (s)	21.0	128.6	4.8	112.4		11.6	11.6
Actuated g/C Ratio	0.13	0.80	0.03	0.70		0.07	0.07
Clearance Time (s)	4.4	5.7	4.4	5.7		4.9	4.9
Vehicle Extension (s)	3.0	4.8	2.0	5.4		3.0	3.0
Lane Grp Cap (vph)	232	4087	53	3542		247	104
v/s Ratio Prot	0.10	c0.59	0.01	c0.65		c0.04	0.00
v/s Ratio Perm							
v/c Ratio	0.77	0.73	0.49	0.93		0.54	0.04
Uniform Delay, d1	67.1	7.5	76.4	20.3		71.6	69.0
Progression Factor	1.00	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	14.1	1.2	2.6	5.5		2.3	0.2
Delay (s)	81.2	8.7	79.0	25.8		73.9	69.2
Level of Service	F	A	E	C		E	E
Approach Delay (s)		12.8		26.2		72.4	
Approach LOS		B		C		E	

Intersection Summary

HCM 2000 Control Delay	21.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	15.0
Intersection Capacity Utilization	85.2%	ICU Level of Service	E
Analysis Period (min)	15		

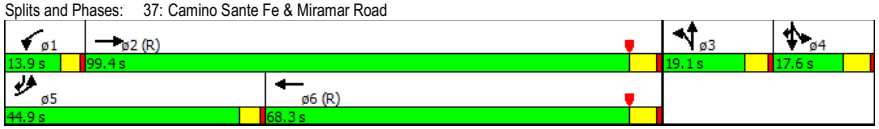
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	753	993	42	1936	23	13	82	18	647
Future Volume (vph)	753	993	42	1936	23	13	82	18	647
Turn Type	Prot	NA	Prot	NA	Split	NA	Split	NA	pt+ov
Protected Phases	5	2	1	6	3	3	4	4	4 5
Permitted Phases									
Detector Phase	5	2	1	6	3	3	4	4	4 5
Switch Phase									
Minimum Initial (s)	12.0	10.0	4.0	10.0	4.0	4.0	4.0	4.0	
Minimum Split (s)	16.4	15.8	8.4	15.7	8.9	8.9	9.5	9.5	
Total Split (s)	44.9	99.4	13.9	68.3	19.1	19.1	17.6	17.6	
Total Split (%)	29.9%	66.3%	9.3%	45.5%	12.7%	12.7%	11.7%	11.7%	
Yellow Time (s)	3.4	4.8	3.4	4.7	3.9	3.9	4.5	4.5	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.4	5.8	4.4	5.7	4.9	4.9	5.5	5.5	
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lead	Lag	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	C-Max	None	C-Max	None	None	None	None	

Intersection Summary

Cycle Length: 150
Actuated Cycle Length: 150
Offset: 98 (65%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 100
Control Type: Actuated-Coordinated

Splits and Phases: 37: Camino Sante Fe & Miramar Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	753	993	49	42	1936	167	23	13	10	82	18	647
Future Volume (vph)	753	993	49	42	1936	167	23	13	10	82	18	647
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.8		4.4	5.7		4.9	4.9		5.5	5.5	5.5
Lane Util. Factor	0.97	0.91		0.97	0.91		1.00	1.00		0.95	0.95	0.88
Frt	1.00	0.99		1.00	0.99		1.00	0.93		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	0.97	1.00
Satd. Flow (prot)	3433	5050		3433	5025		1770	1737		1681	1715	2787
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	0.97	1.00
Satd. Flow (perm)	3433	5050		3433	5025		1770	1737		1681	1715	2787
Peak-hour factor, PHF	0.99	0.99	0.99	0.97	0.97	0.97	0.80	0.80	0.80	0.80	0.80	0.80
Adj. Flow (vph)	761	1003	49	43	1996	172	29	16	12	102	22	809
RTOR Reduction (vph)	0	3	0	0	6	0	0	12	0	0	0	141
Lane Group Flow (vph)	761	1049	0	43	2162	0	29	17	0	63	63	668
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	pt+ov
Protected Phases	5	2		1	6		3	3		4	4	4 5
Permitted Phases												
Actuated Green, G (s)	37.3	98.2		5.4	66.4		6.1	6.1		19.7	19.7	62.5
Effective Green, g (s)	37.3	98.2		5.4	66.4		6.1	6.1		19.7	19.7	62.5
Actuated g/C Ratio	0.25	0.65		0.04	0.44		0.04	0.04		0.13	0.13	0.42
Clearance Time (s)	4.4	5.8		4.4	5.7		4.9	4.9		5.5	5.5	
Vehicle Extension (s)	2.0	4.8		2.0	5.4		2.0	2.0		2.8	2.8	
Lane Grp Cap (vph)	853	3306		123	2224		71	70		220	225	1161
v/s Ratio Prot	c0.22	0.21		0.01	c0.43		c0.02	0.01		0.04	0.04	c0.24
v/s Ratio Perm												
v/c Ratio	0.89	0.32		0.35	0.97		0.41	0.24		0.29	0.28	0.58
Uniform Delay, d1	54.4	11.3		70.6	40.9		70.2	69.7		58.8	58.8	33.6
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	11.3	0.3		0.6	13.6		1.4	0.6		0.6	0.6	0.6
Delay (s)	65.8	11.5		71.2	54.4		71.6	70.3		59.4	59.4	34.2
Level of Service	E	B		E	D		E	E		E	E	C
Approach Delay (s)		34.3			54.8			71.0			37.6	
Approach LOS		C			D			E			D	

Intersection Summary

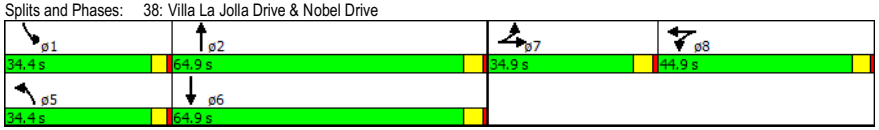
HCM 2000 Control Delay	44.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	20.6
Intersection Capacity Utilization	85.0%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	5	56	1	10	685	123	266
Future Volume (vph)	5	56	1	10	685	123	266
Turn Type	NA	Split	NA	Prot	NA	Prot	NA
Protected Phases	7	8	8	5	2	1	6
Permitted Phases							
Detector Phase	7	8	8	5	2	1	6
Switch Phase							
Minimum Initial (s)	6.0	6.0	6.0	4.0	7.0	6.0	10.0
Minimum Split (s)	10.9	10.9	10.9	8.4	11.9	10.4	14.9
Total Split (s)	34.9	44.9	44.9	34.4	64.9	34.4	64.9
Total Split (%)	19.5%	25.1%	25.1%	19.2%	36.2%	19.2%	36.2%
Yellow Time (s)	3.9	3.9	3.9	3.4	3.9	3.4	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	4.9	4.4	4.9	4.4	4.9
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	Min	None	Min

Intersection Summary
Cycle Length: 179.1
Actuated Cycle Length: 69.9
Natural Cycle: 55
Control Type: Actuated-Uncoordinated

Splits and Phases: 38: Villa La Jolla Drive & Nobel Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	27	5	7	56	1	337	10	685	113	123	266	11
Future Volume (vph)	27	5	7	56	1	337	10	685	113	123	266	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9		4.9	4.9		4.4	4.9		4.4	4.9	
Lane Util. Factor		1.00		0.97	1.00		1.00	0.95		0.97	0.95	
Frt		0.97		1.00	0.85		1.00	0.98		1.00	0.99	
Flt Protected		0.97		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1755		3433	1584		1770	3464		3433	3519	
Flt Permitted		0.97		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1755		3433	1584		1770	3464		3433	3519	
Peak-hour factor, PHF	0.81	0.81	0.81	0.92	0.92	0.92	0.91	0.91	0.91	0.89	0.89	0.89
Adj. Flow (vph)	33	6	9	61	1	366	11	753	124	138	299	12
RTOR Reduction (vph)	0	6	0	0	325	0	0	6	0	0	1	0
Lane Group Flow (vph)	0	42	0	61	42	0	11	871	0	138	310	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	7	7		8	8		5	2		1	6	
Permitted Phases												
Actuated Green, G (s)		5.6		8.2	8.2		0.9	32.6		8.6	40.3	
Effective Green, g (s)		5.6		8.2	8.2		0.9	32.6		8.6	40.3	
Actuated g/C Ratio		0.08		0.11	0.11		0.01	0.44		0.12	0.54	
Clearance Time (s)		4.9		4.9	4.9		4.4	4.9		4.4	4.9	
Vehicle Extension (s)		2.0		2.0	2.0		2.0	4.3		2.0	3.7	
Lane Grp Cap (vph)		132		379	175		21	1523		398	1913	
v/s Ratio Prot		c0.02		0.02	c0.03		0.01	c0.25		c0.04	0.09	
v/s Ratio Perm												
v/c Ratio		0.32		0.16	0.24		0.52	0.57		0.35	0.16	
Uniform Delay, d1		32.5		29.8	30.1		36.4	15.5		30.2	8.5	
Progression Factor		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.5		0.1	0.3		10.4	0.7		0.2	0.1	
Delay (s)		33.0		29.9	30.3		46.8	16.2		30.4	8.5	
Level of Service		C		C	C		D	B		C	A	
Approach Delay (s)		33.0			30.3			16.6			15.2	
Approach LOS		C			C			B			B	

Intersection Summary				
HCM 2000 Control Delay	19.9	HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio	0.46			
Actuated Cycle Length (s)	74.1	Sum of lost time (s)	19.1	
Intersection Capacity Utilization	64.4%	ICU Level of Service	C	
Analysis Period (min)	15			

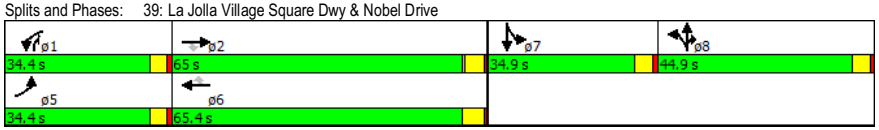
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	5	259	9	546	362	295	7	7	267	149	9
Future Volume (vph)	5	259	9	546	362	295	7	7	267	149	9
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Split	NA	pt+ov	Split	NA
Protected Phases	5	2		1	6		8	8	8 1	7	7
Permitted Phases			2			6					
Detector Phase	5	2	2	1	6	6	8	8	8 1	7	7
Switch Phase											
Minimum Initial (s)	4.0	7.0	7.0	4.0	7.0	7.0	8.0	8.0		8.0	8.0
Minimum Split (s)	9.4	12.0	12.0	8.4	12.4	12.4	12.9	12.9		12.9	12.9
Total Split (s)	34.4	65.0	65.0	34.4	65.4	65.4	44.9	44.9		34.9	34.9
Total Split (%)	19.2%	36.2%	36.2%	19.2%	36.4%	36.4%	25.0%	25.0%		19.4%	19.4%
Yellow Time (s)	3.4	4.0	4.0	3.4	4.4	4.4	3.9	3.9		3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	4.4	5.0	5.0	4.4	5.4	5.4	4.9	4.9		4.9	4.9
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lag	Lag		Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None		None	None

Intersection Summary

Cycle Length: 179.6
Actuated Cycle Length: 100.8
Natural Cycle: 60
Control Type: Actuated-Uncoordinated

Splits and Phases: 39: La Jolla Village Square Dwy & Nobel Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	259	9	546	362	295	7	7	267	149	9	0
Future Volume (vph)	5	259	9	546	362	295	7	7	267	149	9	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.0	5.0	4.4	5.4	5.4	4.9	4.9	4.9	4.9	4.9	
Lane Util. Factor	1.00	0.95	1.00	0.97	0.95	1.00	0.95	0.95	1.00	0.95	0.95	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.96	
Satd. Flow (prot)	1770	3539	1583	3433	3539	1583	1681	1761	1583	1681	1694	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.96	
Satd. Flow (perm)	1770	3539	1583	3433	3539	1583	1681	1761	1583	1681	1694	
Peak-hour factor, PHF	0.87	0.87	0.87	0.91	0.91	0.91	0.80	0.80	0.80	0.80	0.80	0.80
Adj. Flow (vph)	6	298	10	600	398	324	9	9	334	186	11	0
RTOR Reduction (vph)	0	0	8	0	0	162	0	0	179	0	0	0
Lane Group Flow (vph)	6	298	2	600	398	162	8	10	155	99	98	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Split	NA	pt+ov	Split	NA	
Protected Phases	5	2		1	6		8	8	8 1	7	7	
Permitted Phases			2			6						
Actuated Green, G (s)	0.9	22.1	22.1	29.8	50.6	50.6	10.1	10.1	44.8	22.5	22.5	
Effective Green, g (s)	0.9	22.1	22.1	29.8	50.6	50.6	10.1	10.1	44.8	22.5	22.5	
Actuated g/C Ratio	0.01	0.21	0.21	0.29	0.49	0.49	0.10	0.10	0.43	0.22	0.22	
Clearance Time (s)	4.4	5.0	5.0	4.4	5.4	5.4	4.9	4.9		4.9	4.9	
Vehicle Extension (s)	2.0	4.1	4.1	2.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)	15	754	337	986	1726	772	163	171	683	364	367	
v/s Ratio Prot	0.00	c0.08		c0.17	0.11		0.00	0.01	c0.10	c0.06	0.06	
v/s Ratio Perm			0.00			0.10						
v/c Ratio	0.40	0.40	0.01	0.61	0.23	0.21	0.05	0.06	0.23	0.27	0.27	
Uniform Delay, d1	51.1	35.1	32.1	31.9	15.3	15.1	42.4	42.5	18.5	33.8	33.7	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	6.3	0.5	0.0	0.7	0.1	0.2	0.2	0.2	0.2	0.6	0.5	
Delay (s)	57.4	35.5	32.2	32.6	15.4	15.3	42.6	42.7	18.8	34.3	34.3	
Level of Service	E	D	C	C	B	B	D	D	B	C	C	
Approach Delay (s)		35.9			23.2			20.0			34.3	
Approach LOS		D			C			B			C	

Intersection Summary

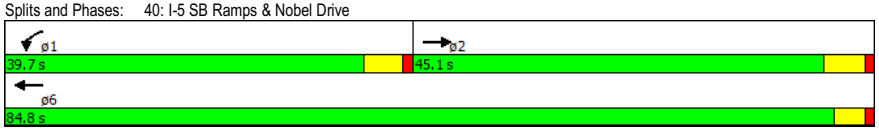
HCM 2000 Control Delay	25.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.43		
Actuated Cycle Length (s)	103.7	Sum of lost time (s)	19.6
Intersection Capacity Utilization	45.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBT	WBL	WBT
Lane Configurations			
Traffic Volume (vph)	366	324	1296
Future Volume (vph)	366	324	1296
Turn Type	NA	Prot	NA
Protected Phases	2	1	6
Permitted Phases			
Detector Phase	2	1	6
Switch Phase			
Minimum Initial (s)	13.0	5.0	1.0
Minimum Split (s)	18.1	9.7	5.5
Total Split (s)	45.1	39.7	84.8
Total Split (%)	53.2%	46.8%	100.0%
Yellow Time (s)	4.1	3.7	3.0
All-Red Time (s)	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0
Total Lost Time (s)	5.1	4.7	4.0
Lead/Lag	Lag	Lead	
Lead-Lag Optimize?	Yes	Yes	
Recall Mode	Min	None	Min

Intersection Summary
Cycle Length: 84.8
Actuated Cycle Length: 34.9
Natural Cycle: 40
Control Type: Actuated-Uncoordinated

Splits and Phases: 40: I-5 SB Ramps & Nobel Drive



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	366	303	324	1296	0	0
Future Volume (vph)	366	303	324	1296	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1		4.7	4.0		
Lane Util. Factor	0.95		0.97	0.95		
Frt	0.93		1.00	1.00		
Flt Protected	1.00		0.95	1.00		
Satd. Flow (prot)	3299		3433	3539		
Flt Permitted	1.00		0.95	1.00		
Satd. Flow (perm)	3299		3433	3539		
Peak-hour factor, PHF	0.87	0.87	0.90	0.90	0.25	0.25
Adj. Flow (vph)	421	348	360	1440	0	0
RTOR Reduction (vph)	182	0	0	0	0	0
Lane Group Flow (vph)	587	0	360	1440	0	0
Turn Type	NA		Prot	NA		
Protected Phases	2		1	6		
Permitted Phases						
Actuated Green, G (s)	15.8		9.2	34.8		
Effective Green, g (s)	15.8		9.2	34.8		
Actuated g/C Ratio	0.45		0.26	1.00		
Clearance Time (s)	5.1		4.7	4.0		
Vehicle Extension (s)	3.0		3.0	3.0		
Lane Grp Cap (vph)	1497		907	3539		
v/s Ratio Prot	0.18		0.10	c0.41		
v/s Ratio Perm						
v/c Ratio	0.39		0.40	0.41		
Uniform Delay, d1	6.3		10.5	0.0		
Progression Factor	1.00		1.00	1.00		
Incremental Delay, d2	0.2		0.3	0.1		
Delay (s)	6.5		10.8	0.1		
Level of Service	A		B	A		
Approach Delay (s)	6.5			2.2	0.0	
Approach LOS	A			A	A	

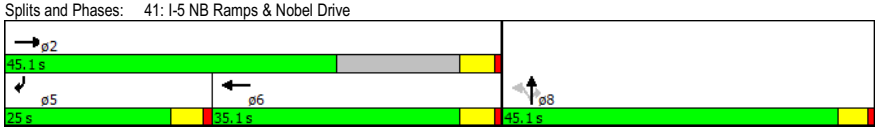
Intersection Summary			
HCM 2000 Control Delay	3.5	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	34.8	Sum of lost time (s)	9.8
Intersection Capacity Utilization	39.2%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBT	WBT	NBL	NBT	NBR	SBR
Lane Configurations						
Traffic Volume (vph)	397	1029	384	185	434	107
Future Volume (vph)	397	1029	384	185	434	107
Turn Type	NA	NA	Perm	NA	Perm	Prot
Protected Phases	2	6		8		5
Permitted Phases			8		8	
Detector Phase	2	6	8	8	8	5
Switch Phase						
Minimum Initial (s)	11.0	13.0	5.0	5.0	5.0	5.0
Minimum Split (s)	16.1	18.1	22.5	22.5	22.5	10.0
Total Split (s)	45.1	35.1	45.1	45.1	45.1	25.0
Total Split (%)	42.9%	33.4%	42.9%	42.9%	42.9%	23.8%
Yellow Time (s)	4.1	4.1	3.5	3.5	3.5	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.1	5.1	4.5	4.5	4.5	5.0
Lead/Lag		Lag				Lead
Lead-Lag Optimize?		Yes				Yes
Recall Mode	Min	Min	None	None	None	None

Intersection Summary
Cycle Length: 105.2
Actuated Cycle Length: 68
Natural Cycle: 60
Control Type: Actuated-Uncoordinated

Splits and Phases: 41: I-5 NB Ramps & Nobel Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	397	0	0	1029	27	384	185	434	0	0	107
Future Volume (vph)	0	397	0	0	1029	27	384	185	434	0	0	107
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.1			5.1		4.5	4.5	4.5			5.0
Lane Util. Factor		0.95			0.91		0.95	0.95	1.00			1.00
Frt		1.00			1.00		1.00	1.00	0.85			0.86
Flt Protected		1.00			1.00		0.95	0.98	1.00			1.00
Satd. Flow (prot)		3539			5066		1681	1738	1583			1611
Flt Permitted		1.00			1.00		0.95	0.98	1.00			1.00
Satd. Flow (perm)		3539			5066		1681	1738	1583			1611
Peak-hour factor, PHF	0.90	0.90	0.90	0.80	0.80	0.80	0.95	0.95	0.95	0.80	0.80	0.80
Adj. Flow (vph)	0	441	0	0	1286	34	404	195	457	0	0	134
RTOR Reduction (vph)	0	0	0	0	3	0	0	0	246	0	0	123
Lane Group Flow (vph)	0	441	0	0	1317	0	295	304	211	0	0	11
Turn Type		NA			NA		Perm	NA	Perm			Prot
Protected Phases		2			6			8				5
Permitted Phases							8		8			
Actuated Green, G (s)		35.9			25.2		22.1	22.1	22.1			5.7
Effective Green, g (s)		35.9			25.2		22.1	22.1	22.1			5.7
Actuated g/C Ratio		0.53			0.37		0.33	0.33	0.33			0.08
Clearance Time (s)		5.1			5.1		4.5	4.5	4.5			5.0
Vehicle Extension (s)		2.0			2.0		3.0	3.0	3.0			2.0
Lane Grp Cap (vph)		1879			1888		549	568	517			135
v/s Ratio Prot		c0.12			c0.26							0.01
v/s Ratio Perm							c0.18	0.17	0.13			
v/c Ratio		0.23			0.70		0.54	0.54	0.41			0.08
Uniform Delay, d1		8.5			18.0		18.6	18.6	17.7			28.5
Progression Factor		1.00			1.00		1.00	1.00	1.00			1.00
Incremental Delay, d2		0.0			0.9		1.0	1.0	0.5			0.1
Delay (s)		8.5			18.9		19.6	19.5	18.2			28.6
Level of Service		A			B		B	B	B			C
Approach Delay (s)		8.5			18.9			19.0			28.6	
Approach LOS		A			B			B			C	

Intersection Summary			
HCM 2000 Control Delay	17.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	67.6	Sum of lost time (s)	14.6
Intersection Capacity Utilization	54.8%	ICU Level of Service	A
Analysis Period (min)	15		

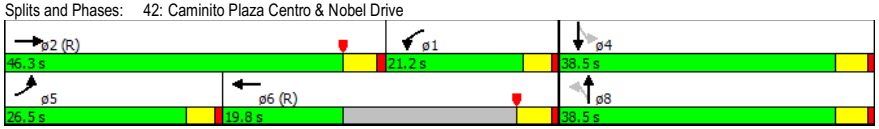
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	50	774	59	858	47	2	4	5
Future Volume (vph)	50	774	59	858	47	2	4	5
Turn Type	Prot	NA	Prot	NA	Perm	NA	Perm	NA
Protected Phases	5	2	1	6		8		4
Permitted Phases					8		4	
Detector Phase	5	2	1	6	8	8	4	4
Switch Phase								
Minimum Initial (s)	4.0	10.0	4.0	10.0	6.0	6.0	6.0	6.0
Minimum Split (s)	8.4	15.2	8.4	15.2	10.9	10.9	10.9	10.9
Total Split (s)	26.5	46.3	21.2	19.8	38.5	38.5	38.5	38.5
Total Split (%)	25.0%	43.7%	20.0%	18.7%	36.3%	36.3%	36.3%	36.3%
Yellow Time (s)	3.4	4.2	3.4	4.2	3.9	3.9	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	4.4	5.2	4.4	5.2		4.9		4.9
Lead/Lag	Lead	Lead	Lag	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes				
Recall Mode	None	C-Max	None	C-Max	None	None	None	None

Intersection Summary

Cycle Length: 106
Actuated Cycle Length: 106
Offset: 26 (25%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 40
Control Type: Actuated-Coordinated

Splits and Phases: 42: Caminito Plaza Centro & Nobel Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	50	774	116	59	858	17	47	2	23	4	5	45
Future Volume (vph)	50	774	116	59	858	17	47	2	23	4	5	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.2		4.4	5.2			4.9			4.9	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Frt	1.00	0.98		1.00	1.00			0.96			0.89	
Flt Protected	0.95	1.00		0.95	1.00			0.97			1.00	
Satd. Flow (prot)	1770	4986		1770	5071			1727			1646	
Flt Permitted	0.95	1.00		0.95	1.00			0.79			0.98	
Satd. Flow (perm)	1770	4986		1770	5071			1416			1621	
Peak-hour factor, PHF	0.92	0.92	0.92	0.93	0.93	0.93	0.80	0.80	0.80	0.80	0.80	0.80
Adj. Flow (vph)	54	841	126	63	923	18	59	2	29	5	6	56
RTOR Reduction (vph)	0	13	0	0	1	0	0	19	0	0	47	0
Lane Group Flow (vph)	54	954	0	63	940	0	0	72	0	0	20	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8			4		
Actuated Green, G (s)	6.7	61.3		13.4	68.0			16.8			16.8	
Effective Green, g (s)	6.7	61.3		13.4	68.0			16.8			16.8	
Actuated g/C Ratio	0.06	0.58		0.13	0.64			0.16			0.16	
Clearance Time (s)	4.4	5.2		4.4	5.2			4.9			4.9	
Vehicle Extension (s)	2.0	5.0		2.0	4.5			2.5			2.0	
Lane Grp Cap (vph)	111	2883		223	3253			224			256	
v/s Ratio Prot	c0.03	c0.19		0.04	c0.19							
v/s Ratio Perm								c0.05			0.01	
v/c Ratio	0.49	0.33		0.28	0.29			0.32			0.08	
Uniform Delay, d1	48.0	11.7		41.9	8.4			39.5			38.0	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	1.2	0.3		0.3	0.2			0.6			0.0	
Delay (s)	49.2	12.0		42.2	8.6			40.1			38.0	
Level of Service	D	B		D	A			D			D	
Approach Delay (s)		13.9			10.7			40.1			38.0	
Approach LOS		B			B			D			D	

Intersection Summary

HCM 2000 Control Delay	14.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.33		
Actuated Cycle Length (s)	106.0	Sum of lost time (s)	14.5
Intersection Capacity Utilization	43.7%	ICU Level of Service	A
Analysis Period (min)	15		

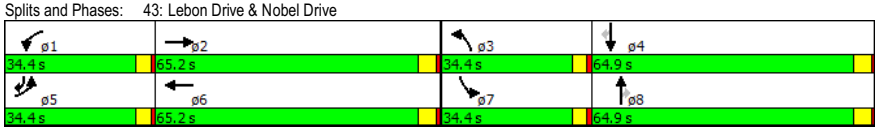
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	49	690	82	678	168	280	127	58	66	65
Future Volume (vph)	49	690	82	678	168	280	127	58	66	65
Turn Type	Prot	NA	Prot	NA	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	5	2	1	6	3	8		7	4	5
Permitted Phases							8			4
Detector Phase	5	2	1	6	3	8	8	7	4	5
Switch Phase										
Minimum Initial (s)	4.0	10.0	4.0	10.0	4.0	8.0	8.0	10.0	10.0	4.0
Minimum Split (s)	8.4	15.2	8.4	15.2	8.4	12.9	12.9	14.4	14.9	8.4
Total Split (s)	34.4	65.2	34.4	65.2	34.4	64.9	64.9	34.4	64.9	34.4
Total Split (%)	17.3%	32.8%	17.3%	32.8%	17.3%	32.6%	32.6%	17.3%	32.6%	17.3%
Yellow Time (s)	3.4	4.2	3.4	4.2	3.4	3.9	3.9	3.4	3.9	3.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.2	4.4	5.2	4.4	4.9	4.9	4.4	4.9	4.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 198.9
Actuated Cycle Length: 99.1
Natural Cycle: 60
Control Type: Actuated-Uncoordinated

Splits and Phases: 43: Lebon Drive & Nobel Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	49	690	54	82	678	143	168	280	127	58	66	65
Future Volume (vph)	49	690	54	82	678	143	168	280	127	58	66	65
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.2		4.4	5.2		4.4	4.9	4.9	4.4	4.9	4.4
Lane Util. Factor	0.97	0.91		1.00	0.91		0.97	0.95	1.00	0.97	0.95	1.00
Frt	1.00	0.99		1.00	0.97		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5030		1770	4953		3433	3539	1583	3433	3539	1583
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5030		1770	4953		3433	3539	1583	3433	3539	1583
Peak-hour factor, PHF	0.88	0.88	0.88	0.91	0.91	0.91	0.85	0.85	0.85	0.85	0.85	0.85
Adj. Flow (vph)	56	784	61	90	745	157	198	329	149	68	78	76
RTOR Reduction (vph)	0	4	0	0	15	0	0	0	88	0	0	54
Lane Group Flow (vph)	56	841	0	90	887	0	198	329	61	68	78	22
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	5	2		1	6		3	8		7	4	5
Permitted Phases									8			4
Actuated Green, G (s)	6.7	32.9		10.7	36.9		14.4	29.4	29.4	7.3	22.3	29.0
Effective Green, g (s)	6.7	32.9		10.7	36.9		14.4	29.4	29.4	7.3	22.3	29.0
Actuated g/C Ratio	0.07	0.33		0.11	0.37		0.15	0.30	0.30	0.07	0.22	0.29
Clearance Time (s)	4.4	5.2		4.4	5.2		4.4	4.9	4.9	4.4	4.9	4.4
Vehicle Extension (s)	2.0	4.5		2.0	4.5		2.0	6.4	6.4	2.0	5.5	2.0
Lane Grp Cap (vph)	231	1668		190	1842		498	1048	469	252	795	462
v/s Ratio Prot	0.02	0.17		c0.05	c0.18		c0.06	c0.09		0.02	0.02	0.00
v/s Ratio Perm									0.04			0.01
v/c Ratio	0.24	0.50		0.47	0.48		0.40	0.31	0.13	0.27	0.10	0.05
Uniform Delay, d1	43.8	26.6		41.6	23.8		38.5	27.1	25.5	43.4	30.5	25.2
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2	0.4		0.7	0.3		0.2	0.5	0.4	0.2	0.1	0.0
Delay (s)	44.0	27.0		42.3	24.2		38.7	27.6	25.9	43.6	30.6	25.2
Level of Service	D	C		D	C		D	C	C	D	C	C
Approach Delay (s)		28.1			25.8			30.5			32.8	
Approach LOS		C			C			C			C	

Intersection Summary

HCM 2000 Control Delay	28.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.44		
Actuated Cycle Length (s)	99.2	Sum of lost time (s)	18.9
Intersection Capacity Utilization	51.4%	ICU Level of Service	A
Analysis Period (min)	15		

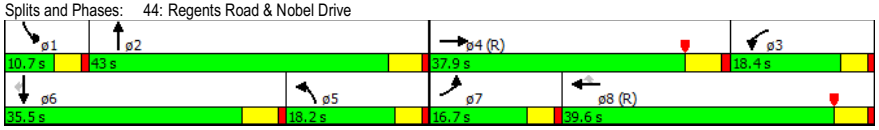
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	206	721	188	582	211	77	266	104	192	59
Future Volume (vph)	206	721	188	582	211	77	266	104	192	59
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Prot	NA	Perm
Protected Phases	7	4	3	8		5	2	1	6	
Permitted Phases					8					6
Detector Phase	7	4	3	8	8	5	2	1	6	6
Switch Phase										
Minimum Initial (s)	4.0	10.0	4.0	10.0	10.0	4.0	10.0	4.0	10.0	10.0
Minimum Split (s)	8.4	37.7	8.4	37.3	37.3	8.4	41.2	8.4	35.5	35.5
Total Split (s)	16.7	37.9	18.4	39.6	39.6	18.2	43.0	10.7	35.5	35.5
Total Split (%)	15.2%	34.5%	16.7%	36.0%	36.0%	16.5%	39.1%	9.7%	32.3%	32.3%
Yellow Time (s)	3.4	4.7	3.4	4.3	4.3	3.4	4.2	3.4	4.5	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.7	4.4	5.3	5.3	4.4	5.2	4.4	5.5	5.5
Lead/Lag	Lead	Lead	Lag	Lag	Lag	Lag	Lag	Lead	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	C-Max	None	Min	None	Min	Min

Intersection Summary

Cycle Length: 110
Actuated Cycle Length: 110
Offset: 0 (0%), Referenced to phase 4:EBT and 8:WBT, Start of Yellow
Natural Cycle: 100
Control Type: Actuated-Coordinated

Splits and Phases: 44: Regents Road & Nobel Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	206	721	42	188	582	211	77	266	223	104	192	59
Future Volume (vph)	206	721	42	188	582	211	77	266	223	104	192	59
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.7		4.4	5.3	5.3	4.4	5.2		4.4	5.5	5.5
Lane Util. Factor	0.97	0.91		0.97	0.95	1.00	1.00	0.91		1.00	0.95	1.00
Frt	1.00	0.99		1.00	1.00	0.85	1.00	0.93		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3433	5044		3433	3539	1583	1770	4738		1770	3539	1583
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	3433	5044		3433	3539	1583	1770	4738		1770	3539	1583
Peak-hour factor, PHF	0.97	0.97	0.97	0.88	0.88	0.88	0.80	0.80	0.80	0.80	0.80	0.80
Adj. Flow (vph)	212	743	43	214	661	240	96	332	279	130	240	74
RTOR Reduction (vph)	0	5	0	0	0	149	0	150	0	0	0	56
Lane Group Flow (vph)	212	781	0	214	661	91	96	462	0	130	240	18
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA		Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8						6
Actuated Green, G (s)	10.7	38.0		14.0	41.7	41.7	11.6	32.0		6.3	26.4	26.4
Effective Green, g (s)	10.7	38.0		14.0	41.7	41.7	11.6	32.0		6.3	26.4	26.4
Actuated g/C Ratio	0.10	0.35		0.13	0.38	0.38	0.11	0.29		0.06	0.24	0.24
Clearance Time (s)	4.4	5.7		4.4	5.3	5.3	4.4	5.2		4.4	5.5	5.5
Vehicle Extension (s)	2.0	4.4		2.0	6.1	6.1	2.0	5.7		2.0	6.2	6.2
Lane Grp Cap (vph)	333	1742		436	1341	600	186	1378		101	849	379
v/s Ratio Prot	c0.06	0.15		0.06	c0.19		c0.05	c0.10		c0.07	0.07	
v/s Ratio Perm						0.06						0.01
v/c Ratio	0.64	0.45		0.49	0.49	0.15	0.52	0.34		1.29	0.28	0.05
Uniform Delay, d1	47.8	27.9		44.7	26.1	22.5	46.5	30.6		51.9	34.1	32.1
Progression Factor	1.00	1.00		0.63	0.45	0.07	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	2.9	0.8		0.3	1.1	0.4	1.0	0.4		185.0	0.5	0.2
Delay (s)	50.7	28.7		28.3	12.9	2.1	47.6	31.0		236.9	34.6	32.3
Level of Service	D	C		C	B	A	D	C		F	C	C
Approach Delay (s)		33.4			13.5			33.3			93.4	
Approach LOS		C			B			C			F	

Intersection Summary

HCM 2000 Control Delay	34.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	54.0%	ICU Level of Service	A
Analysis Period (min)	15		

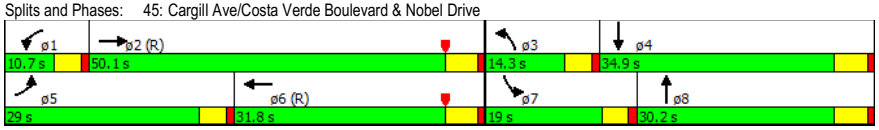
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	269	633	31	687	58	57	144	35
Future Volume (vph)	269	633	31	687	58	57	144	35
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	5	2	1	6	3	8	7	4
Permitted Phases								
Detector Phase	5	2	1	6	3	8	7	4
Switch Phase								
Minimum Initial (s)	4.0	25.0	4.0	25.0	4.0	25.0	4.0	25.0
Minimum Split (s)	8.4	30.2	8.4	30.2	8.4	30.2	8.4	30.2
Total Split (s)	29.0	50.1	10.7	31.8	14.3	30.2	19.0	34.9
Total Split (%)	26.4%	45.5%	9.7%	28.9%	13.0%	27.5%	17.3%	31.7%
Yellow Time (s)	3.4	4.2	3.4	4.2	3.4	4.2	3.4	4.2
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.2	4.4	5.2	4.4	5.2	4.4	5.2
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	Max	None	Max

Intersection Summary

Cycle Length: 110
Actuated Cycle Length: 110
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 45: Cargill Ave/Costa Verde Boulevard & Nobel Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	269	633	25	31	687	139	58	57	32	144	35	182
Future Volume (vph)	269	633	25	31	687	139	58	57	32	144	35	182
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.2		4.4	5.2		4.4	5.2		4.4	5.2	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	1.00		1.00	1.00	
Frt	1.00	0.99		1.00	0.97		1.00	0.95		1.00	0.87	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	5057		1770	4957		1770	1762		1770	1628	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	5057		1770	4957		1770	1762		1770	1628	
Peak-hour factor, PHF	0.88	0.88	0.88	0.91	0.91	0.91	0.80	0.80	0.80	0.87	0.87	0.87
Adj. Flow (vph)	306	719	28	34	755	153	72	71	40	166	40	209
RTOR Reduction (vph)	0	3	0	0	27	0	0	18	0	0	146	0
Lane Group Flow (vph)	306	744	0	34	881	0	73	93	0	166	103	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases												
Actuated Green, G (s)	21.9	46.5		3.8	28.4		7.2	27.4		13.1	33.3	
Effective Green, g (s)	21.9	46.5		3.8	28.4		7.2	27.4		13.1	33.3	
Actuated g/C Ratio	0.20	0.42		0.03	0.26		0.07	0.25		0.12	0.30	
Clearance Time (s)	4.4	5.2		4.4	5.2		4.4	5.2		4.4	5.2	
Vehicle Extension (s)	2.0	4.5		2.0	4.5		2.0	4.5		2.0	4.5	
Lane Grp Cap (vph)	352	2137		61	1279		115	438		210	492	
v/s Ratio Prot	c0.17	0.15		0.02	c0.18		0.04	0.05		c0.09	c0.06	
v/s Ratio Perm												
v/c Ratio	0.87	0.35		0.56	0.69		0.63	0.21		0.79	0.21	
Uniform Delay, d1	42.7	21.5		52.3	36.8		50.1	32.7		47.1	28.6	
Progression Factor	1.28	0.61		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	17.1	0.4		6.1	3.0		8.1	1.1		17.0	1.0	
Delay (s)	71.7	13.6		58.4	39.9		58.3	33.8		64.1	29.5	
Level of Service	E	B		E	D		E	C		E	C	
Approach Delay (s)		30.5			40.5			43.5			43.4	
Approach LOS		C			D			D			D	

Intersection Summary

HCM 2000 Control Delay	37.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	19.2
Intersection Capacity Utilization	80.5%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	82	1182	8	737	36	0	62	0
Future Volume (vph)	82	1182	8	737	36	0	62	0
Turn Type	Prot	NA	Prot	NA	Perm	NA	Perm	NA
Protected Phases	5	2	1	6		8		4
Permitted Phases					8		4	
Detector Phase	5	2	1	6	8	8	4	4
Switch Phase								
Minimum Initial (s)	4.0	7.0	4.0	7.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.4	19.0	8.4	28.9	32.9	32.9	32.9	32.9
Total Split (s)	34.4	65.0	34.4	64.9	44.9	44.9	44.9	44.9
Total Split (%)	23.8%	45.0%	23.8%	45.0%	31.1%	31.1%	31.1%	31.1%
Yellow Time (s)	3.4	4.0	3.4	3.9	3.9	3.9	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.4	5.0	4.4	4.9		4.9	4.9	4.9
Lead/Lag	Lead	Lag	Lead	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes				
Recall Mode	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 144.3
Actuated Cycle Length: 74.7
Natural Cycle: 80
Control Type: Actuated-Uncoordinated

Splits and Phases: 46: Lombard Place & Nobel Drive

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	82	1182	15	8	737	37	36	0	20	62	0	39
Future Volume (vph)	82	1182	15	8	737	37	36	0	20	62	0	39
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.0		4.4	4.9			4.9		4.9	4.9	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00		1.00	1.00	
Frt	1.00	1.00		1.00	0.99			0.95		1.00	0.85	
Flt Protected	0.95	1.00		0.95	1.00			0.97		0.95	1.00	
Satd. Flow (prot)	1770	3532		1770	3514			1718		1770	1583	
Flt Permitted	0.95	1.00		0.95	1.00			0.78		0.80	1.00	
Satd. Flow (perm)	1770	3532		1770	3514			1376		1489	1583	
Peak-hour factor, PHF	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Adj. Flow (vph)	102	1478	19	10	921	46	45	0	25	78	0	49
RTOR Reduction (vph)	0	0	0	0	2	0	0	42	0	0	43	0
Lane Group Flow (vph)	103	1497	0	10	965	0	0	28	0	78	6	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8			4		
Actuated Green, G (s)	9.6	54.3		0.9	45.7			9.8		9.8	9.8	
Effective Green, g (s)	9.6	54.3		0.9	45.7			9.8		9.8	9.8	
Actuated g/C Ratio	0.12	0.68		0.01	0.58			0.12		0.12	0.12	
Clearance Time (s)	4.4	5.0		4.4	4.9			4.9		4.9	4.9	
Vehicle Extension (s)	2.0	3.7		2.0	4.4			2.0		2.0	2.0	
Lane Grp Cap (vph)	214	2418		20	2025			170		184	195	
v/s Ratio Prot	c0.06	c0.42		0.01	0.27						0.00	
v/s Ratio Perm								0.02		c0.05		
v/c Ratio	0.48	0.62		0.50	0.48			0.16		0.42	0.03	
Uniform Delay, d1	32.5	6.8		39.0	9.8			31.1		32.1	30.6	
Progression Factor	1.00	1.00		1.00	1.00			1.00		1.00	1.00	
Incremental Delay, d2	0.6	0.5		7.0	0.3			0.2		0.6	0.0	
Delay (s)	33.1	7.4		46.0	10.1			31.3		32.7	30.6	
Level of Service	C	A		D	B			C		C	C	
Approach Delay (s)		9.0			10.5			31.3			31.9	
Approach LOS		A			B			C			C	

Intersection Summary

HCM 2000 Control Delay	11.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	79.3	Sum of lost time (s)	14.3
Intersection Capacity Utilization	58.3%	ICU Level of Service	B
Analysis Period (min)	15		

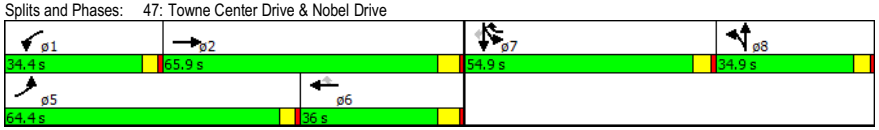
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	425	830	14	348	67	151	19	32	227
Future Volume (vph)	425	830	14	348	67	151	19	32	227
Turn Type	Prot	NA	Prot	NA	pm+ov	NA	Split	NA	Perm
Protected Phases	5	2	1	6	7	8	7	7	
Permitted Phases					6				7
Detector Phase	5	2	1	6	7	8	7	7	7
Switch Phase									
Minimum Initial (s)	4.0	7.0	4.0	7.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.4	12.9	8.4	13.0	8.9	8.9	8.9	8.9	8.9
Total Split (s)	64.4	65.9	34.4	36.0	54.9	34.9	54.9	54.9	54.9
Total Split (%)	33.9%	34.6%	18.1%	18.9%	28.9%	18.3%	28.9%	28.9%	28.9%
Yellow Time (s)	3.4	4.9	3.4	5.0	3.9	3.9	3.9	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.9	4.4	6.0	4.9	4.9	4.9	4.9	4.9
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 190.2
Actuated Cycle Length: 91.7
Natural Cycle: 55
Control Type: Actuated-Uncoordinated

Splits and Phases: 47: Towne Center Drive & Nobel Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	425	830	30	14	348	67	51	151	136	19	32	227
Future Volume (vph)	425	830	30	14	348	67	51	151	136	19	32	227
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.9		4.4	6.0	4.9		4.9		4.9	4.9	4.9
Lane Util. Factor	0.97	0.95		1.00	0.91	1.00		0.95		1.00	1.00	1.00
Frt	1.00	0.99		1.00	1.00	0.85		0.94		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.99		0.95	1.00	1.00
Satd. Flow (prot)	3433	3521		1770	5085	1583		3301		1770	1863	1583
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.99		0.95	1.00	1.00
Satd. Flow (perm)	3433	3521		1770	5085	1583		3301		1770	1863	1583
Peak-hour factor, PHF	0.85	0.85	0.85	0.91	0.91	0.91	0.80	0.80	0.80	0.82	0.82	0.82
Adj. Flow (vph)	500	976	35	15	382	74	64	189	170	23	39	277
RTOR Reduction (vph)	0	1	0	0	0	46	0	59	0	0	0	242
Lane Group Flow (vph)	500	1010	0	15	382	28	0	364	0	23	39	35
Turn Type	Prot	NA		Prot	NA	pm+ov	Split	NA		Split	NA	Perm
Protected Phases	5	2		1	6	7	8	8		7	7	
Permitted Phases						6						7
Actuated Green, G (s)	21.0	42.3		2.0	23.2	35.1		16.9		11.9	11.9	11.9
Effective Green, g (s)	21.0	42.3		2.0	23.2	35.1		16.9		11.9	11.9	11.9
Actuated g/C Ratio	0.23	0.45		0.02	0.25	0.38		0.18		0.13	0.13	0.13
Clearance Time (s)	4.4	5.9		4.4	6.0	4.9		4.9		4.9	4.9	4.9
Vehicle Extension (s)	2.0	4.9		2.0	3.3	4.0		2.0		4.0	4.0	4.0
Lane Grp Cap (vph)	773	1598		37	1265	596		598		225	237	202
v/s Ratio Prot	c0.15	c0.29		0.01	0.08	0.01		c0.11		0.01	0.02	
v/s Ratio Perm						0.01						c0.02
v/c Ratio	0.65	0.63		0.41	0.30	0.05		0.61		0.10	0.16	0.18
Uniform Delay, d1	32.7	19.5		45.0	28.4	18.4		35.1		35.9	36.2	36.3
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00
Incremental Delay, d2	1.4	1.1		2.6	0.2	0.0		1.2		0.3	0.4	0.6
Delay (s)	34.1	20.6		47.6	28.6	18.5		36.3		36.2	36.7	36.8
Level of Service	C	C		D	C	B		D		D	D	D
Approach Delay (s)		25.1			27.6			36.3			36.8	
Approach LOS		C			C			D			D	

Intersection Summary

HCM 2000 Control Delay	28.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	93.2	Sum of lost time (s)	20.2
Intersection Capacity Utilization	55.7%	ICU Level of Service	B
Analysis Period (min)	15		

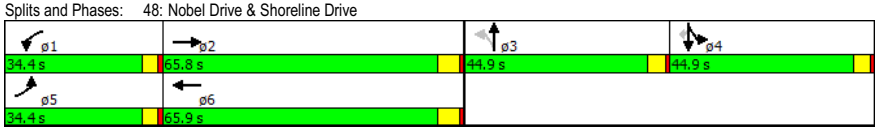
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	17	987	8	328	43	6	164	2	30
Future Volume (vph)	17	987	8	328	43	6	164	2	30
Turn Type	Prot	NA	Prot	NA	Perm	NA	Split	NA	Perm
Protected Phases	5	2	1	6		3	4	4	
Permitted Phases					3				4
Detector Phase	5	2	1	6	3	3	4	4	4
Switch Phase									
Minimum Initial (s)	4.0	10.0	4.0	10.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.4	15.8	8.4	30.9	8.9	8.9	33.9	33.9	33.9
Total Split (s)	34.4	65.8	34.4	65.9	44.9	44.9	44.9	44.9	44.9
Total Split (%)	18.1%	34.6%	18.1%	34.7%	23.6%	23.6%	23.6%	23.6%	23.6%
Yellow Time (s)	3.4	4.8	3.4	4.9	3.9	3.9	3.9	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.8	4.4	5.9		4.9	4.9	4.9	4.9
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 190.1
Actuated Cycle Length: 117.6
Natural Cycle: 85
Control Type: Actuated-Uncoordinated

Splits and Phases: 48: Nobel Drive & Shoreline Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	17	987	9	8	328	46	43	6	75	164	2	30
Future Volume (vph)	17	987	9	8	328	46	43	6	75	164	2	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.8		4.4	5.9			4.9		4.9	4.9	4.9
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00		1.00	1.00	0.88
Frt	1.00	1.00		1.00	0.98			0.92		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.98		0.95	1.00	1.00
Satd. Flow (prot)	1770	5078		1770	4991			1682		1770	1863	2787
Flt Permitted	0.95	1.00		0.95	1.00			0.19		0.95	1.00	1.00
Satd. Flow (perm)	1770	5078		1770	4991			323		1770	1863	2787
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.88	0.88	0.88	0.86	0.86	0.86
Adj. Flow (vph)	19	1085	10	9	360	51	49	7	85	191	2	35
RTOR Reduction (vph)	0	1	0	0	10	0	0	24	0	0	0	29
Lane Group Flow (vph)	19	1094	0	9	401	0	0	117	0	191	2	6
Turn Type	Prot	NA		Prot	NA		Perm	NA		Split	NA	Perm
Protected Phases	5	2		1	6			3		4	4	
Permitted Phases							3					4
Actuated Green, G (s)	2.5	39.0		1.1	37.5			41.0		19.8	19.8	19.8
Effective Green, g (s)	2.5	39.0		1.1	37.5			41.0		19.8	19.8	19.8
Actuated g/C Ratio	0.02	0.32		0.01	0.31			0.34		0.16	0.16	0.16
Clearance Time (s)	4.4	5.8		4.4	5.9			4.9		4.9	4.9	4.9
Vehicle Extension (s)	2.0	4.6		2.0	4.4			2.0		2.0	2.0	2.0
Lane Grp Cap (vph)	36	1638		16	1548			109		289	305	456
v/s Ratio Prot	c0.01	c0.22		0.01	0.08					c0.11	0.00	
v/s Ratio Perm								c0.36				0.00
v/c Ratio	0.53	0.67		0.56	0.26			1.08		0.66	0.01	0.01
Uniform Delay, d1	58.6	35.4		59.7	31.3			40.0		47.4	42.3	42.4
Progression Factor	1.00	1.00		1.00	1.00			1.00		1.00	1.00	1.00
Incremental Delay, d2	6.3	1.3		24.2	0.1			107.9		4.3	0.0	0.0
Delay (s)	64.9	36.6		83.9	31.4			147.9		51.7	42.3	42.4
Level of Service	E	D		F	C			F		D	D	D
Approach Delay (s)		37.1			32.6			147.9			50.2	
Approach LOS		D			C			F			D	

Intersection Summary

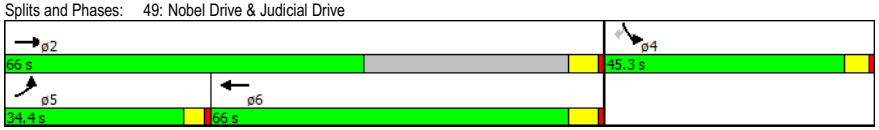
HCM 2000 Control Delay	45.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	120.9	Sum of lost time (s)	20.1
Intersection Capacity Utilization	43.9%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBT	SBL	SBR
Lane Configurations					
Traffic Volume (vph)	77	1201	384	305	12
Future Volume (vph)	77	1201	384	305	12
Turn Type	Prot	NA	NA	Prot	Perm
Protected Phases	5	2	6	4	
Permitted Phases					4
Detector Phase	5	2	6	4	4
Switch Phase					
Minimum Initial (s)	4.0	10.0	10.0	7.0	7.0
Minimum Split (s)	11.4	16.0	16.0	12.3	12.3
Total Split (s)	34.4	66.0	66.0	45.3	45.3
Total Split (%)	23.6%	45.3%	45.3%	31.1%	31.1%
Yellow Time (s)	3.4	5.0	5.0	4.3	4.3
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	6.0	6.0	5.3	5.3
Lead/Lag	Lead		Lag		
Lead-Lag Optimize?	Yes		Yes		
Recall Mode	None	Min	Min	None	None

Intersection Summary
Cycle Length: 145.7
Actuated Cycle Length: 99
Natural Cycle: 60
Control Type: Actuated-Uncoordinated

Splits and Phases: 49: Nobel Drive & Judicial Drive



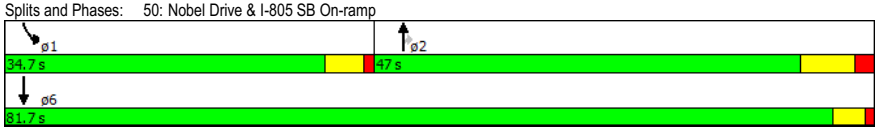
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	77	1201	384	1321	305	12
Future Volume (vph)	77	1201	384	1321	305	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	6.0	6.0		5.3	5.3
Lane Util. Factor	0.97	0.91	0.91		0.97	1.00
Frt	1.00	1.00	0.88		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	3433	5085	4494		3433	1583
Flt Permitted	0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)	3433	5085	4494		3433	1583
Peak-hour factor, PHF	0.91	0.91	0.90	0.90	0.87	0.87
Adj. Flow (vph)	85	1320	427	1468	351	14
RTOR Reduction (vph)	0	0	293	0	0	11
Lane Group Flow (vph)	85	1320	1602	0	351	3
Turn Type	Prot	NA	NA		Prot	Perm
Protected Phases	5	2	6		4	
Permitted Phases						4
Actuated Green, G (s)	5.7	69.6	59.5		18.9	18.9
Effective Green, g (s)	5.7	69.6	59.5		18.9	18.9
Actuated g/C Ratio	0.06	0.70	0.60		0.19	0.19
Clearance Time (s)	4.4	6.0	6.0		5.3	5.3
Vehicle Extension (s)	2.0	5.4	5.4		4.4	4.4
Lane Grp Cap (vph)	196	3546	2679		650	299
v/s Ratio Prot	0.02	c0.26	c0.36		c0.10	
v/s Ratio Perm						0.00
v/c Ratio	0.43	0.37	1.17dr		0.54	0.01
Uniform Delay, d1	45.5	6.2	12.6		36.5	32.8
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	0.6	0.2	0.6		1.3	0.0
Delay (s)	46.1	6.3	13.2		37.9	32.9
Level of Service	D	A	B		D	C
Approach Delay (s)		8.7	13.2		37.7	
Approach LOS		A	B		D	

Intersection Summary			
HCM 2000 Control Delay	13.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	99.8	Sum of lost time (s)	15.7
Intersection Capacity Utilization	55.4%	ICU Level of Service	B
Analysis Period (min)	15		
dr Defacto Right Lane. Recode with 1 though lane as a right lane.			
c Critical Lane Group			

Lane Group	NBT	NBR	SBL	SBT
Lane Configurations				
Traffic Volume (vph)	491	733	14	1816
Future Volume (vph)	491	733	14	1816
Turn Type	NA	Perm	Prot	NA
Protected Phases	2		1	6
Permitted Phases		2		
Detector Phase	2	2	1	6
Switch Phase				
Minimum Initial (s)	12.0	12.0	5.0	1.0
Minimum Split (s)	19.0	19.0	9.7	5.0
Total Split (s)	47.0	47.0	34.7	81.7
Total Split (%)	57.5%	57.5%	42.5%	100.0%
Yellow Time (s)	5.0	5.0	3.7	3.0
All-Red Time (s)	2.0	2.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	4.7	4.0
Lead/Lag	Lag	Lag	Lead	
Lead-Lag Optimize?	Yes	Yes	Yes	
Recall Mode	Min	Min	None	Min

Intersection Summary
Cycle Length: 81.7
Actuated Cycle Length: 45.4
Natural Cycle: 40
Control Type: Actuated-Uncoordinated

Splits and Phases: 50: Nobel Drive & I-805 SB On-ramp



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	491	733	14	1816
Future Volume (vph)	0	0	491	733	14	1816
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)			7.0	7.0	4.7	4.0
Lane Util. Factor			0.95	0.88	0.97	0.91
Frt			1.00	0.85	1.00	1.00
Flt Protected			1.00	1.00	0.95	1.00
Satd. Flow (prot)			3539	2787	3433	5085
Flt Permitted			1.00	1.00	0.95	1.00
Satd. Flow (perm)			3539	2787	3433	5085
Peak-hour factor, PHF	0.25	0.25	0.90	0.90	0.93	0.93
Adj. Flow (vph)	0	0	546	814	15	1953
RTOR Reduction (vph)	0	0	0	210	0	0
Lane Group Flow (vph)	0	0	546	604	15	1953
Turn Type			NA	Perm	Prot	NA
Protected Phases			2		1	6
Permitted Phases				2		
Actuated Green, G (s)			36.5	36.5	1.0	49.2
Effective Green, g (s)			36.5	36.5	1.0	49.2
Actuated g/C Ratio			0.74	0.74	0.02	1.00
Clearance Time (s)			7.0	7.0	4.7	4.0
Vehicle Extension (s)			3.0	3.0	3.0	3.0
Lane Grp Cap (vph)			2625	2067	69	5085
v/s Ratio Prot			0.15		0.00	c0.38
v/s Ratio Perm				0.22		
v/c Ratio			0.21	0.29	0.22	0.38
Uniform Delay, d1			1.9	2.1	23.7	0.0
Progression Factor			1.00	1.00	1.00	1.00
Incremental Delay, d2			0.0	0.1	1.6	0.0
Delay (s)			2.0	2.2	25.3	0.0
Level of Service			A	A	C	A
Approach Delay (s)	0.0		2.1			0.2
Approach LOS	A		A			A

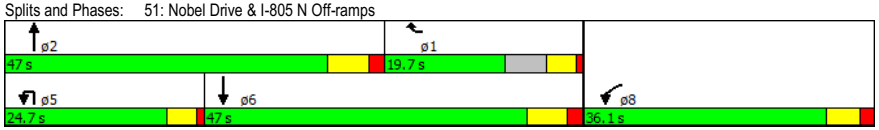
Intersection Summary			
HCM 2000 Control Delay	1.0	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	49.2	Sum of lost time (s)	11.7
Intersection Capacity Utilization	53.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	WBL	WBR	NBT	SBT	ø5
Lane Configurations					
Traffic Volume (vph)	968	608	523	592	
Future Volume (vph)	968	608	523	592	
Turn Type	Prot	Prot	NA	NA	
Protected Phases	8	1	2	6	5
Permitted Phases					
Detector Phase	8	1	2	6	
Switch Phase					
Minimum Initial (s)	5.0	5.0	16.0	11.0	5.0
Minimum Split (s)	11.1	9.7	23.0	18.0	9.7
Total Split (s)	36.1	19.7	47.0	47.0	24.7
Total Split (%)	33.5%	18.3%	43.6%	43.6%	23%
Yellow Time (s)	4.1	3.7	5.0	5.0	3.7
All-Red Time (s)	2.0	1.0	2.0	2.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.1	4.7	7.0	7.0	
Lead/Lag		Lag	Lead	Lag	Lead
Lead-Lag Optimize?		Yes	Yes	Yes	Yes
Recall Mode	None	None	Min	Min	None

Intersection Summary
Cycle Length: 107.8
Actuated Cycle Length: 75.4
Natural Cycle: 60
Control Type: Actuated-Uncoordinated

Splits and Phases: 51: Nobel Drive & I-805 N Off-ramps



Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	968	608	0	523	0	0	592
Future Volume (vph)	968	608	0	523	0	0	592
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.1	4.7		7.0			7.0
Lane Util. Factor	0.97	0.88		0.95			0.91
Frt	1.00	0.85		1.00			1.00
Flt Protected	0.95	1.00		1.00			1.00
Satd. Flow (prot)	3433	2787		3539			5085
Flt Permitted	0.95	1.00		1.00			1.00
Satd. Flow (perm)	3433	2787		3539			5085
Peak-hour factor, PHF	0.97	0.97	0.92	0.84	0.84	0.84	0.84
Adj. Flow (vph)	998	627	0	623	0	0	705
RTOR Reduction (vph)	0	486	0	0	0	0	0
Lane Group Flow (vph)	998	141	0	623	0	0	705
Turn Type	Prot	Prot	Prot	NA			NA
Protected Phases	8	1	5	2			6
Permitted Phases							
Actuated Green, G (s)	30.2	8.7		18.6			32.0
Effective Green, g (s)	30.2	8.7		18.6			32.0
Actuated g/C Ratio	0.40	0.12		0.25			0.42
Clearance Time (s)	6.1	4.7		7.0			7.0
Vehicle Extension (s)	2.0	3.0		2.0			2.0
Lane Grp Cap (vph)	1376	322		874			2160
v/s Ratio Prot	c0.29	c0.05		c0.18			0.14
v/s Ratio Perm							
v/c Ratio	0.73	0.44		0.71			0.33
Uniform Delay, d1	19.0	31.0		25.9			14.5
Progression Factor	1.00	1.00		1.00			1.00
Incremental Delay, d2	1.6	0.9		2.3			0.0
Delay (s)	20.7	32.0		28.2			14.5
Level of Service	C	C		C			B
Approach Delay (s)	25.0			28.2			14.5
Approach LOS	C			C			B

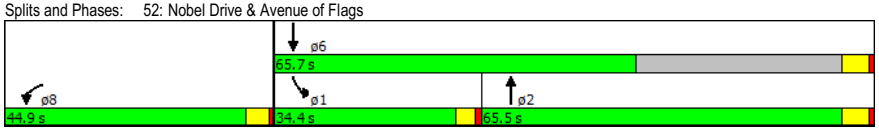
Intersection Summary			
HCM 2000 Control Delay	23.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	75.3	Sum of lost time (s)	17.8
Intersection Capacity Utilization	53.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	WBL	NBT	SBL	SBT
Lane Configurations				
Traffic Volume (vph)	2	1195	5	639
Future Volume (vph)	2	1195	5	639
Turn Type	Prot	NA	Prot	NA
Protected Phases	8	2	1	6
Permitted Phases				
Detector Phase	8	2	1	6
Switch Phase				
Minimum Initial (s)	4.0	7.0	4.0	7.0
Minimum Split (s)	8.9	12.5	8.4	12.7
Total Split (s)	44.9	65.5	34.4	65.7
Total Split (%)	31.0%	45.2%	23.8%	45.4%
Yellow Time (s)	3.9	4.5	3.4	4.7
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	5.5	4.4	5.7
Lead/Lag		Lag	Lead	
Lead-Lag Optimize?		Yes	Yes	
Recall Mode	None	Min	None	Min

Intersection Summary
Cycle Length: 144.8
Actuated Cycle Length: 64.2
Natural Cycle: 50
Control Type: Actuated-Uncoordinated

Splits and Phases: 52: Nobel Drive & Avenue of Flags



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	2	2	1195	9	5	639
Future Volume (vph)	2	2	1195	9	5	639
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9		5.5		4.4	5.7
Lane Util. Factor	1.00		0.95		1.00	0.95
Frt	0.93		1.00		1.00	1.00
Flt Protected	0.98		1.00		0.95	1.00
Satd. Flow (prot)	1695		3535		1770	3539
Flt Permitted	0.98		1.00		0.95	1.00
Satd. Flow (perm)	1695		3535		1770	3539
Peak-hour factor, PHF	0.25	0.25	0.88	0.88	0.97	0.97
Adj. Flow (vph)	8	8	1358	10	5	659
RTOR Reduction (vph)	8	0	0	0	0	0
Lane Group Flow (vph)	8	0	1368	0	5	659
Turn Type	Prot		NA		Prot	NA
Protected Phases	8		2		1	6
Permitted Phases						
Actuated Green, G (s)	0.8		55.5		0.7	60.4
Effective Green, g (s)	0.8		55.5		0.7	60.4
Actuated g/C Ratio	0.01		0.77		0.01	0.84
Clearance Time (s)	4.9		5.5		4.4	5.7
Vehicle Extension (s)	2.0		5.2		2.0	4.9
Lane Grp Cap (vph)	18		2732		17	2977
v/s Ratio Prot	c0.00		c0.39		0.00	c0.19
v/s Ratio Perm						
v/c Ratio	0.45		0.50		0.29	0.22
Uniform Delay, d1	35.3		3.0		35.3	1.1
Progression Factor	1.00		1.00		1.00	1.00
Incremental Delay, d2	6.4		0.3		3.5	0.1
Delay (s)	41.6		3.3		38.8	1.2
Level of Service	D		A		D	A
Approach Delay (s)	41.6		3.3			1.5
Approach LOS	D		A			A

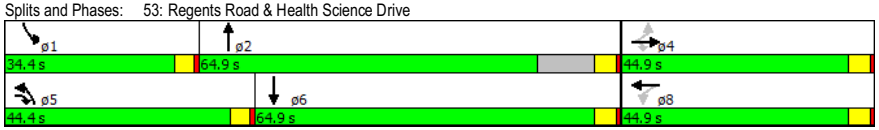
Intersection Summary			
HCM 2000 Control Delay	3.0	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	71.8	Sum of lost time (s)	14.8
Intersection Capacity Utilization	45.3%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	29	0	93	3	0	942	296	23	106
Future Volume (vph)	29	0	93	3	0	942	296	23	106
Turn Type	Perm	NA	pm+ov	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4	5		8	5	2	1	6
Permitted Phases	4		4	8					
Detector Phase	4	4	5	8	8	5	2	1	6
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	10.0	4.0	10.0
Minimum Split (s)	8.9	8.9	8.4	22.9	22.9	8.4	14.9	8.4	14.9
Total Split (s)	44.9	44.9	44.4	44.9	44.9	44.4	64.9	34.4	64.9
Total Split (%)	29.1%	29.1%	28.8%	29.1%	29.1%	28.8%	42.1%	22.3%	42.1%
Yellow Time (s)	3.9	3.9	3.4	3.9	3.9	3.4	3.9	3.4	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.9	4.4		4.9	4.4	4.9	4.4	4.9
Lead/Lag			Lead			Lead	Lag	Lead	Lag
Lead-Lag Optimize?			Yes			Yes	Yes	Yes	Yes
Recall Mode	None	None	Min	None	None	Min	None	None	None

Intersection Summary
Cycle Length: 154.2
Actuated Cycle Length: 68.8
Natural Cycle: 110
Control Type: Actuated-Uncoordinated

Splits and Phases: 53: Regents Road & Health Science Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	29	0	93	3	0	3	942	296	47	23	106	145
Future Volume (vph)	29	0	93	3	0	3	942	296	47	23	106	145
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9	4.4		4.9		4.4	4.9		4.4	4.9	
Lane Util. Factor		1.00	1.00		1.00		1.00	0.95		1.00	0.95	
Frt		1.00	0.85		0.93		1.00	0.98		1.00	0.91	
Flt Protected		0.95	1.00		0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1770	1583		1695		1770	3467		1770	3233	
Flt Permitted		1.00	1.00		0.83		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1863	1583		1435		1770	3467		1770	3233	
Peak-hour factor, PHF	0.93	0.93	0.93	0.80	0.80	0.80	0.85	0.85	0.85	0.80	0.80	0.80
Adj. Flow (vph)	31	0	100	4	0	4	1108	348	55	29	132	181
RTOR Reduction (vph)	0	0	37	0	8	0	0	4	0	0	150	0
Lane Group Flow (vph)	0	31	63	0	0	0	1108	399	0	29	164	0
Turn Type	Perm	NA	pm+ov	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4	5		8		5	2		1	6	
Permitted Phases	4		4	8								
Actuated Green, G (s)		3.8	45.1		3.8		41.3	51.4		2.3	12.4	
Effective Green, g (s)		3.8	45.1		3.8		41.3	51.4		2.3	12.4	
Actuated g/C Ratio		0.05	0.63		0.05		0.58	0.72		0.03	0.17	
Clearance Time (s)		4.9	4.4		4.9		4.4	4.9		4.4	4.9	
Vehicle Extension (s)		2.0	2.0		2.0		2.0	3.8		2.0	3.8	
Lane Grp Cap (vph)		98	995		76		1019	2485		56	559	
v/s Ratio Prot			0.04				c0.63	0.12		0.02	c0.05	
v/s Ratio Perm		c0.02	0.00		0.00							
v/c Ratio		0.32	0.06		0.01		1.09	0.16		0.52	0.29	
Uniform Delay, d1		32.7	5.1		32.2		15.2	3.2		34.2	25.8	
Progression Factor		1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.7	0.0		0.0		55.0	0.0		3.3	0.4	
Delay (s)		33.4	5.1		32.2		70.2	3.3		37.5	26.2	
Level of Service		C	A		C		E	A		D	C	
Approach Delay (s)		11.8			32.2			52.4			27.2	
Approach LOS		B			C			D			C	

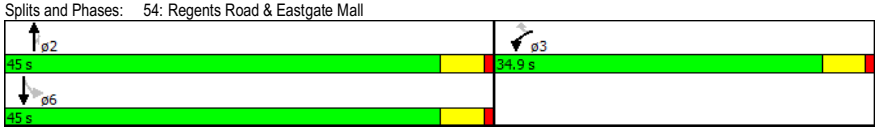
Intersection Summary					
HCM 2000 Control Delay		45.3	HCM 2000 Level of Service		D
HCM 2000 Volume to Capacity ratio		0.86			
Actuated Cycle Length (s)		71.7	Sum of lost time (s)		14.2
Intersection Capacity Utilization		75.7%	ICU Level of Service		D
Analysis Period (min)		15			

c Critical Lane Group

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	256	403	799	365	84	169
Future Volume (vph)	256	403	799	365	84	169
Turn Type	Prot	Perm	NA	Perm	Perm	NA
Protected Phases	3		2			6
Permitted Phases		3		2	6	
Detector Phase	3	3	2	2	6	6
Switch Phase						
Minimum Initial (s)	4.0	4.0	7.0	7.0	7.0	7.0
Minimum Split (s)	8.9	8.9	12.0	12.0	12.0	12.0
Total Split (s)	34.9	34.9	45.0	45.0	45.0	45.0
Total Split (%)	43.7%	43.7%	56.3%	56.3%	56.3%	56.3%
Yellow Time (s)	3.9	3.9	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	5.0	5.0	5.0	5.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None	None	Min	Min	Min	Min

Intersection Summary
Cycle Length: 79.9
Actuated Cycle Length: 63
Natural Cycle: 45
Control Type: Actuated-Uncoordinated

Splits and Phases: 54: Regents Road & Eastgate Mall



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	256	403	799	365	84	169
Future Volume (vph)	256	403	799	365	84	169
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9	5.0	5.0	5.0	5.0
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.22	1.00
Satd. Flow (perm)	1770	1583	3539	1583	401	3539
Peak-hour factor, PHF	0.80	0.80	0.81	0.81	0.87	0.87
Adj. Flow (vph)	320	504	986	451	97	194
RTOR Reduction (vph)	0	51	0	231	0	0
Lane Group Flow (vph)	320	453	986	220	97	194
Turn Type	Prot	Perm	NA	Perm	Perm	NA
Protected Phases	3		2			6
Permitted Phases		3		2	6	
Actuated Green, G (s)	21.9	21.9	30.3	30.3	30.3	30.3
Effective Green, g (s)	21.9	21.9	30.3	30.3	30.3	30.3
Actuated g/C Ratio	0.35	0.35	0.49	0.49	0.49	0.49
Clearance Time (s)	4.9	4.9	5.0	5.0	5.0	5.0
Vehicle Extension (s)	2.0	2.0	3.4	3.4	3.5	3.5
Lane Grp Cap (vph)	624	558	1726	772	195	1726
v/s Ratio Prot	0.18		c0.28			0.05
v/s Ratio Perm		c0.29		0.14	0.24	
v/c Ratio	0.51	0.81	0.57	0.29	0.50	0.11
Uniform Delay, d1	15.9	18.2	11.3	9.5	10.8	8.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.3	8.3	0.5	0.2	2.4	0.0
Delay (s)	16.2	26.6	11.8	9.7	13.1	8.6
Level of Service	B	C	B	A	B	A
Approach Delay (s)	22.5		11.1			10.1
Approach LOS	C		B			B

Intersection Summary			
HCM 2000 Control Delay	14.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	62.1	Sum of lost time (s)	9.9
Intersection Capacity Utilization	55.3%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	3	4	4	1	84	2	1016	97	269
Future Volume (vph)	3	4	4	1	84	2	1016	97	269
Turn Type	Perm	NA	Perm	NA	Perm	Prot	NA	Prot	NA
Protected Phases		4		8		5	2	1	6
Permitted Phases	4		8		8				
Detector Phase	4	4	8	8	8	5	2	1	6
Switch Phase									
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	4.0	10.0	4.0	10.0
Minimum Split (s)	11.9	11.9	11.9	11.9	11.9	8.4	14.9	8.4	14.9
Total Split (s)	34.9	34.9	44.9	44.9	44.9	34.4	64.9	34.4	64.9
Total Split (%)	24.2%	24.2%	31.1%	31.1%	31.1%	23.9%	45.0%	23.9%	45.0%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.9	3.4	3.9	3.4	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.9		4.9	4.9	4.4	4.9	4.4	4.9
Lead/Lag						Lead	Lag	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	None	Min

Intersection Summary

Cycle Length: 144.2
Actuated Cycle Length: 76.7
Natural Cycle: 60
Control Type: Actuated-Uncoordinated

Splits and Phases: 55: Regents Road & Executive Drive

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	4	2	4	1	84	2	1016	26	97	269	7
Future Volume (vph)	3	4	2	4	1	84	2	1016	26	97	269	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9			4.9	4.9	4.4	4.9		4.4	4.9	
Lane Util. Factor		1.00			1.00	1.00	1.00	0.95		1.00	0.95	
Frt		0.97			1.00	0.85	1.00	1.00		1.00	1.00	
Flt Protected		0.98			0.96	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1770			1788	1583	1770	3526		1770	3525	
Flt Permitted		0.92			0.83	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1663			1544	1583	1770	3526		1770	3525	
Peak-hour factor, PHF	0.80	0.80	0.80	0.82	0.82	0.82	0.82	0.82	0.82	0.80	0.80	0.80
Adj. Flow (vph)	4	5	2	5	1	102	2	1239	32	121	336	9
RTOR Reduction (vph)	0	3	0	0	0	89	0	1	0	0	1	0
Lane Group Flow (vph)	0	9	0	0	6	13	2	1270	0	121	344	0
Turn Type	Perm	NA		Perm	NA	Perm	Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8		8						
Actuated Green, G (s)		9.8			9.8	9.8	0.7	44.7		11.2	55.2	
Effective Green, g (s)		9.8			9.8	9.8	0.7	44.7		11.2	55.2	
Actuated g/C Ratio		0.12			0.12	0.12	0.01	0.56		0.14	0.69	
Clearance Time (s)		4.9			4.9	4.9	4.4	4.9		4.4	4.9	
Vehicle Extension (s)		2.0			3.1	3.1	2.0	3.1		2.0	3.1	
Lane Grp Cap (vph)		203			189	194	15	1972		248	2435	
v/s Ratio Prot							0.00	c0.36		c0.07	0.10	
v/s Ratio Perm		0.01			0.00	c0.01						
v/c Ratio		0.05			0.03	0.06	0.13	0.64		0.49	0.14	
Uniform Delay, d1		30.9			30.9	31.0	39.3	12.1		31.7	4.2	
Progression Factor		1.00			1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.0			0.1	0.1	1.5	0.7		0.6	0.0	
Delay (s)		31.0			30.9	31.1	40.8	12.9		32.3	4.3	
Level of Service		C			C	C	D	B		C	A	
Approach Delay (s)		31.0			31.1			12.9			11.5	
Approach LOS		C			C			B			B	

Intersection Summary

HCM 2000 Control Delay	13.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	79.9	Sum of lost time (s)	14.2
Intersection Capacity Utilization	52.8%	ICU Level of Service	A
Analysis Period (min)	15		

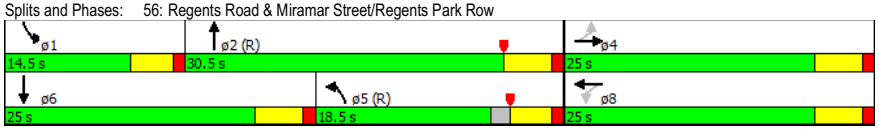
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	93	13	62	28	251	760	53	212
Future Volume (vph)	93	13	62	28	251	760	53	212
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	7.0	4.0	7.0
Minimum Split (s)	8.9	8.9	8.9	8.9	8.4	11.9	8.4	11.9
Total Split (s)	25.0	25.0	25.0	25.0	18.5	30.5	14.5	25.0
Total Split (%)	35.7%	35.7%	35.7%	35.7%	26.4%	43.6%	20.7%	35.7%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.4	3.9	3.4	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	4.9	4.9	4.4	4.9	4.4	4.9
Lead/Lag					Lag	Lag	Lead	Lead
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	C-Max	C-Max	None	Max

Intersection Summary

Cycle Length: 70
Actuated Cycle Length: 70
Offset: 10 (14%), Referenced to phase 2:NBT and 5:NBL, Start of Yellow
Natural Cycle: 50
Control Type: Actuated-Coordinated

Splits and Phases: 56: Regents Road & Miramar Street/Regents Park Row



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	93	13	225	62	28	76	251	760	220	53	212	52
Future Volume (vph)	93	13	225	62	28	76	251	760	220	53	212	52
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9		4.9	4.9		4.4	4.9		4.4	4.9	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frt	1.00	0.86		1.00	0.89		1.00	0.97		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1598		1770	1659		1770	3420		1770	3434	
Flt Permitted	0.67	1.00		0.40	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1255	1598		754	1659		1770	3420		1770	3434	
Peak-hour factor, PHF	0.97	0.97	0.97	0.80	0.80	0.80	0.81	0.81	0.81	0.87	0.87	0.87
Adj. Flow (vph)	96	13	232	78	35	95	310	938	272	61	244	60
RTOR Reduction (vph)	0	191	0	0	78	0	0	27	0	0	26	0
Lane Group Flow (vph)	96	54	0	78	52	0	310	1183	0	61	278	0
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8								
Actuated Green, G (s)	12.5	12.5		12.5	12.5		15.6	38.4		4.9	27.7	
Effective Green, g (s)	12.5	12.5		12.5	12.5		15.6	38.4		4.9	27.7	
Actuated g/C Ratio	0.18	0.18		0.18	0.18		0.22	0.55		0.07	0.40	
Clearance Time (s)	4.9	4.9		4.9	4.9		4.4	4.9		4.4	4.9	
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	3.8		2.0	3.8	
Lane Grp Cap (vph)	224	285		134	296		394	1876		123	1358	
v/s Ratio Prot		0.03			0.03		c0.18	c0.35		c0.03	0.08	
v/s Ratio Perm	0.08			c0.10								
v/c Ratio	0.43	0.19		0.58	0.18		0.79	0.63		0.50	0.20	
Uniform Delay, d1	25.6	24.4		26.4	24.4		25.6	10.9		31.4	13.9	
Progression Factor	1.00	1.00		1.00	1.00		1.37	1.58		1.00	1.00	
Incremental Delay, d2	0.5	0.1		4.1	0.1		9.3	1.0		1.1	0.3	
Delay (s)	26.1	24.6		30.5	24.5		44.4	18.2		32.5	14.2	
Level of Service	C	C		C	C		D	B		C	B	
Approach Delay (s)		25.0			26.7			23.6			17.3	
Approach LOS		C			C			C			B	

Intersection Summary

HCM 2000 Control Delay	23.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	70.0	Sum of lost time (s)	14.2
Intersection Capacity Utilization	65.3%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	65	9	37	9	167	20	776	17	215
Future Volume (vph)	65	9	37	9	167	20	776	17	215
Turn Type	Perm	NA	Perm	NA	pm+ov	Prot	NA	Prot	NA
Protected Phases		4		8	1	5	2	1	6
Permitted Phases	4		8		8				
Detector Phase	4	4	8	8	1	5	2	1	6
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	10.0	4.0	10.0
Minimum Split (s)	8.9	8.9	8.9	8.9	8.4	8.4	15.2	8.4	15.3
Total Split (s)	44.9	44.9	44.9	44.9	34.4	34.4	65.2	34.4	65.3
Total Split (%)	31.1%	31.1%	31.1%	31.1%	23.8%	23.8%	45.1%	23.8%	45.2%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.4	3.4	4.2	3.4	4.3
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.9		4.9	4.4	4.4	5.2	4.4	5.3
Lead/Lag					Lead	Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 144.6
Actuated Cycle Length: 56.3
Natural Cycle: 40
Control Type: Actuated-Uncoordinated

Splits and Phases: 57: Regents Road & Plaza De Palmas

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	65	9	22	37	9	167	20	776	26	17	215	10
Future Volume (vph)	65	9	22	37	9	167	20	776	26	17	215	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9			4.9	4.4	4.4	5.2		4.4	5.3	
Lane Util. Factor		1.00			1.00	1.00	1.00	0.91		1.00	0.95	
Frt		0.97			1.00	0.85	1.00	1.00		1.00	0.99	
Flt Protected		0.97			0.96	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1745			1790	1583	1770	5060		1770	3515	
Flt Permitted		0.76			0.76	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1375			1408	1583	1770	5060		1770	3515	
Peak-hour factor, PHF	0.80	0.80	0.80	0.81	0.81	0.81	0.80	0.80	0.80	0.80	0.80	0.80
Adj. Flow (vph)	81	11	28	46	11	206	25	970	32	21	269	12
RTOR Reduction (vph)	0	8	0	0	0	35	0	2	0	0	2	0
Lane Group Flow (vph)	0	112	0	0	57	171	25	1001	0	21	280	0
Turn Type	Perm	NA		Perm	NA	pm+ov	Prot	NA		Prot	NA	
Protected Phases		4			8	1	5	2		1	6	
Permitted Phases	4			8		8						
Actuated Green, G (s)		10.5			10.5	16.5	2.1	28.7		6.0	32.5	
Effective Green, g (s)		10.5			10.5	16.5	2.1	28.7		6.0	32.5	
Actuated g/C Ratio		0.18			0.18	0.28	0.04	0.48		0.10	0.54	
Clearance Time (s)		4.9			4.9	4.4	4.4	5.2		4.4	5.3	
Vehicle Extension (s)		2.0			2.0	2.0	2.0	4.5		2.0	4.2	
Lane Grp Cap (vph)		241			247	437	62	2432		177	1913	
v/s Ratio Prot						c0.04	0.01	c0.20		0.01	c0.08	
v/s Ratio Perm		c0.08			0.04	0.07						
v/c Ratio		0.46			0.23	0.39	0.40	0.41		0.12	0.15	
Uniform Delay, d1		22.1			21.1	17.5	28.2	10.0		24.4	6.7	
Progression Factor		1.00			1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.5			0.2	0.2	1.6	0.2		0.1	0.1	
Delay (s)		22.6			21.3	17.7	29.7	10.2		24.6	6.8	
Level of Service		C			C	B	C	B		C	A	
Approach Delay (s)		22.6			18.5			10.7			8.0	
Approach LOS		C			B			B			A	

Intersection Summary

HCM 2000 Control Delay	12.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	59.7	Sum of lost time (s)	14.6
Intersection Capacity Utilization	43.4%	ICU Level of Service	A
Analysis Period (min)	15		

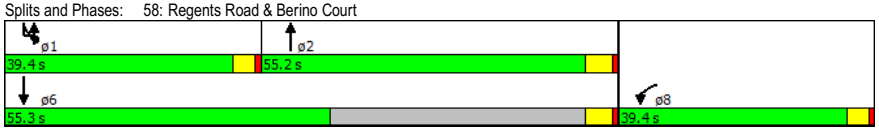
c Critical Lane Group

Lane Group	WBL	NBT	SBL	SBT
Lane Configurations				
Traffic Volume (vph)	112	217	234	153
Future Volume (vph)	112	217	234	153
Turn Type	Prot	NA	Prot	NA
Protected Phases	8	2	1	6
Permitted Phases				
Detector Phase	8	2	1	6
Switch Phase				
Minimum Initial (s)	4.0	7.0	4.0	7.0
Minimum Split (s)	8.4	12.2	8.4	23.3
Total Split (s)	39.4	55.2	39.4	55.3
Total Split (%)	29.4%	41.2%	29.4%	41.3%
Yellow Time (s)	3.4	4.2	3.4	4.3
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.2	4.4	5.3
Lead/Lag		Lag	Lead	
Lead-Lag Optimize?		Yes	Yes	
Recall Mode	None	None	None	None

Intersection Summary

Cycle Length: 134
Actuated Cycle Length: 84.3
Natural Cycle: 55
Control Type: Actuated-Uncoordinated

Splits and Phases: 58: Regents Road & Berino Court



Movement	WBL	WBR	NBT	NBR	SBU	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	112	139	217	184	89	234	153
Future Volume (vph)	112	139	217	184	89	234	153
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4		5.2			4.4	5.3
Lane Util. Factor	1.00		0.95			1.00	0.95
Frt	0.93		0.93			1.00	1.00
Flt Protected	0.98		1.00			0.95	1.00
Satd. Flow (prot)	1686		3295			1770	3539
Flt Permitted	0.98		1.00			0.95	1.00
Satd. Flow (perm)	1686		3295			1770	3539
Peak-hour factor, PHF	0.80	0.80	0.80	0.80	0.92	0.80	0.80
Adj. Flow (vph)	140	174	271	230	97	292	191
RTOR Reduction (vph)	0	0	148	0	0	0	0
Lane Group Flow (vph)	314	0	353	0	0	390	191
Turn Type	Prot		NA		Prot	Prot	NA
Protected Phases	8		2		1	1	6
Permitted Phases							
Actuated Green, G (s)	29.8		16.3			24.0	44.6
Effective Green, g (s)	29.8		16.3			24.0	44.6
Actuated g/C Ratio	0.35		0.19			0.29	0.53
Clearance Time (s)	4.4		5.2			4.4	5.3
Vehicle Extension (s)	2.0		3.9			2.0	3.7
Lane Grp Cap (vph)	597		638			505	1876
v/s Ratio Prot	c0.19		c0.11			c0.22	0.05
v/s Ratio Perm							
v/c Ratio	0.53		0.55			0.77	0.10
Uniform Delay, d1	21.5		30.6			27.5	9.8
Progression Factor	1.00		1.00			1.00	1.00
Incremental Delay, d2	0.4		1.3			6.6	0.0
Delay (s)	21.9		31.9			34.1	9.8
Level of Service	C		C			C	A
Approach Delay (s)	21.9		31.9				26.1
Approach LOS	C		C				C

Intersection Summary

HCM 2000 Control Delay	27.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	84.1	Sum of lost time (s)	14.0
Intersection Capacity Utilization	56.2%	ICU Level of Service	B
Analysis Period (min)	15		

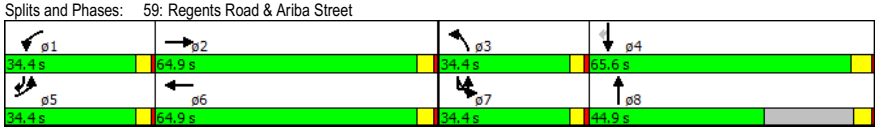
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	147	117	7	168	10	20	98	7	86
Future Volume (vph)	147	117	7	168	10	20	98	7	86
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA	pm+ov
Protected Phases	5	2	1	6	3	8	7	4	5
Permitted Phases									4
Detector Phase	5	2	1	6	3	8	7	4	5
Switch Phase									
Minimum Initial (s)	4.0	7.0	4.0	7.0	4.0	7.0	4.0	7.0	4.0
Minimum Split (s)	8.4	11.9	8.4	11.9	8.4	11.9	8.4	12.6	8.4
Total Split (s)	34.4	64.9	34.4	64.9	34.4	44.9	34.4	65.6	34.4
Total Split (%)	17.3%	32.6%	17.3%	32.6%	17.3%	22.5%	17.3%	32.9%	17.3%
Yellow Time (s)	3.4	3.9	3.4	3.9	3.4	3.9	3.4	4.6	3.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	4.9	4.4	4.9	4.4	4.9	4.4	5.6	4.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 199.3
Actuated Cycle Length: 94.9
Natural Cycle: 60
Control Type: Actuated-Uncoordinated

Splits and Phases: 59: Regents Road & Ariba Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	147	117	14	7	168	109	10	20	24	99	98	7
Future Volume (vph)	147	117	14	7	168	109	10	20	24	99	98	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	4.9		4.4	4.9			4.4	5.6
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95			1.00	0.95
Frt	1.00	0.98		1.00	0.94		1.00	0.92			1.00	1.00
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			0.95	1.00
Satd. Flow (prot)	1770	3481		1770	3331		1770	3250			1770	3539
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00			0.95	1.00
Satd. Flow (perm)	1770	3481		1770	3331		1770	3250			1770	3539
Peak-hour factor, PHF	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.92	0.80	0.80
Adj. Flow (vph)	184	146	18	9	210	136	12	25	30	108	122	9
RTOR Reduction (vph)	0	4	0	0	51	0	0	27	0	0	0	0
Lane Group Flow (vph)	184	160	0	9	295	0	13	28	0	0	231	9
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	Prot	NA
Protected Phases	5	2		1	6		3	8		7	7	4
Permitted Phases												
Actuated Green, G (s)	16.3	47.5		1.0	32.2		2.0	10.7			21.0	29.0
Effective Green, g (s)	16.3	47.5		1.0	32.2		2.0	10.7			21.0	29.0
Actuated g/C Ratio	0.16	0.48		0.01	0.33		0.02	0.11			0.21	0.29
Clearance Time (s)	4.4	4.9		4.4	4.9		4.4	4.9			4.4	5.6
Vehicle Extension (s)	2.0	6.3		2.0	5.9		2.0	4.8			2.0	4.4
Lane Grp Cap (vph)	292	1673		17	1085		35	351			376	1038
v/s Ratio Prot	c0.10	0.05		0.01	c0.09		0.01	c0.01			c0.13	0.00
v/s Ratio Perm												
v/c Ratio	0.63	0.10		0.53	0.27		0.37	0.08			0.61	0.01
Uniform Delay, d1	38.4	14.0		48.7	24.6		47.8	39.6			35.2	24.7
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2	3.2	0.1		13.0	0.4		2.4	0.2			2.1	0.0
Delay (s)	41.7	14.0		61.7	25.0		50.2	39.8			37.3	24.7
Level of Service	D	B		E	C		D	D			D	C
Approach Delay (s)		28.7			25.9			41.8				30.1
Approach LOS		C			C			D				C

Intersection Summary

HCM 2000 Control Delay	29.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	98.8	Sum of lost time (s)	19.3
Intersection Capacity Utilization	46.3%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

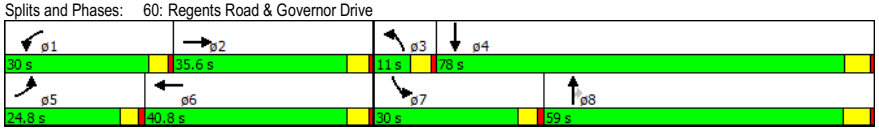
Movement	SBR
Lane Configurations	
Traffic Volume (vph)	86
Future Volume (vph)	86
Ideal Flow (vphpl)	1900
Total Lost time (s)	4.4
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1583
Flt Permitted	1.00
Satd. Flow (perm)	1583
Peak-hour factor, PHF	0.80
Adj. Flow (vph)	108
RTOR Reduction (vph)	58
Lane Group Flow (vph)	50
Turn Type	pm+ov
Protected Phases	5
Permitted Phases	4
Actuated Green, G (s)	45.3
Effective Green, g (s)	45.3
Actuated g/C Ratio	0.46
Clearance Time (s)	4.4
Vehicle Extension (s)	2.0
Lane Grp Cap (vph)	725
v/s Ratio Prot	0.01
v/s Ratio Perm	0.02
v/c Ratio	0.07
Uniform Delay, d1	15.0
Progression Factor	1.00
Incremental Delay, d2	0.0
Delay (s)	15.0
Level of Service	B
Approach Delay (s)	
Approach LOS	

Intersection Summary

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	12	207	399	170	33	70	398	49	38
Future Volume (vph)	12	207	399	170	33	70	398	49	38
Turn Type	Prot	NA	Prot	NA	Prot	NA	Perm	Prot	NA
Protected Phases	5	2	1	6	3	8		7	4
Permitted Phases							8		
Detector Phase	5	2	1	6	3	8	8	7	4
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	7.0	5.0	7.0	7.0	5.0	4.0
Minimum Split (s)	8.4	32.9	8.4	33.9	9.5	34.8	34.8	9.5	35.5
Total Split (s)	24.8	35.6	30.0	40.8	11.0	59.0	59.0	30.0	78.0
Total Split (%)	16.0%	23.0%	19.4%	26.4%	7.1%	38.2%	38.2%	19.4%	50.5%
Yellow Time (s)	3.4	3.9	3.4	3.9	3.5	4.8	4.8	3.5	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	4.9	4.4	4.9	4.5	5.8	5.8	4.5	5.5
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Min	None	Min	None	None	None	None	None

Intersection Summary
Cycle Length: 154.6
Actuated Cycle Length: 84.3
Natural Cycle: 110
Control Type: Actuated-Uncoordinated

Splits and Phases: 60: Regents Road & Governor Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	12	207	35	399	170	15	33	70	398	49	38	14
Future Volume (vph)	12	207	35	399	170	15	33	70	398	49	38	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	4.9		4.5	5.8	5.8	4.5	5.5	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00	1.00	1.00	0.95	
Frt	1.00	0.98		1.00	0.99		1.00	1.00	0.85	1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3462		1770	3496		1770	1863	1583	1770	3393	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	3462		1770	3496		1770	1863	1583	1770	3393	
Peak-hour factor, PHF	0.80	0.80	0.80	0.80	0.80	0.80	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	15	259	44	499	212	19	37	78	442	54	42	16
RTOR Reduction (vph)	0	8	0	0	3	0	0	0	368	0	13	0
Lane Group Flow (vph)	15	295	0	499	229	0	37	78	74	54	45	0
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases									8			
Actuated Green, G (s)	1.0	21.5		27.0	47.5		3.5	14.9	14.9	6.6	18.3	
Effective Green, g (s)	1.0	21.5		27.0	47.5		3.5	14.9	14.9	6.6	18.3	
Actuated g/C Ratio	0.01	0.24		0.30	0.53		0.04	0.17	0.17	0.07	0.20	
Clearance Time (s)	4.4	4.9		4.4	4.9		4.5	5.8	5.8	4.5	5.5	
Vehicle Extension (s)	2.0	4.5		2.0	5.0		3.0	4.6	4.6	3.0	2.0	
Lane Grp Cap (vph)	19	830		533	1853		69	309	263	130	692	
v/s Ratio Prot	0.01	c0.09		c0.28	0.07		0.02	0.04		c0.03	c0.01	
v/s Ratio Perm									c0.05			
v/c Ratio	0.79	0.35		0.94	0.12		0.54	0.25	0.28	0.42	0.07	
Uniform Delay, d1	44.2	28.3		30.5	10.6		42.3	32.5	32.7	39.7	28.8	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	102.4	0.5		23.7	0.1		7.8	0.8	1.0	2.1	0.0	
Delay (s)	146.6	28.7		54.2	10.6		50.0	33.3	33.7	41.8	28.8	
Level of Service	F	C		D	B		D	C	C	D	C	
Approach Delay (s)		34.3			40.4			34.7			35.1	
Approach LOS		C			D			C			D	

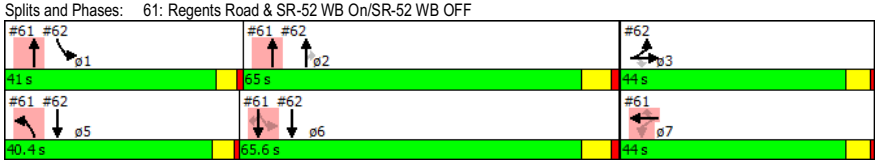
Intersection Summary			
HCM 2000 Control Delay	37.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	89.6	Sum of lost time (s)	19.6
Intersection Capacity Utilization	50.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	WBT	WBR	NBL	NBT	SBL	SBT	SBR	ø1	ø2	ø3
Lane Configurations										
Traffic Volume (vph)	1	146	598	763	1	417	391			
Future Volume (vph)	1	146	598	763	1	417	391			
Turn Type	NA	Perm	Prot	NA	Perm	NA	Perm			
Protected Phases	7		5	1 2		6		1	2	3
Permitted Phases		7			6		6			
Detector Phase	7	7	5	1 2	6	6	6			
Switch Phase										
Minimum Initial (s)	5.0	5.0	5.0		13.0	13.0	13.0	5.0	13.0	5.0
Minimum Split (s)	10.1	10.1	9.7		23.7	23.7	23.7	22.7	23.7	10.1
Total Split (s)	44.0	44.0	40.4		65.6	65.6	65.6	41.0	65.0	44.0
Total Split (%)	29.3%	29.3%	26.9%		43.7%	43.7%	43.7%	27%	43%	29%
Yellow Time (s)	4.1	4.1	3.7		5.2	5.2	5.2	3.7	5.2	4.1
All-Red Time (s)	1.0	1.0	1.0		1.5	1.5	1.5	1.0	1.5	1.0
Lost Time Adjust (s)	0.0	0.0	0.0			0.0	0.0			
Total Lost Time (s)	5.1	5.1	4.7			6.7	6.7			
Lead/Lag			Lead		Lag	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?			Yes		Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None	None		Max	Max	Max	None	Max	None

Intersection Summary
Cycle Length: 150
Actuated Cycle Length: 147.7
Natural Cycle: 100
Control Type: Actuated-Uncoordinated

Splits and Phases: 61: Regents Road & SR-52 WB On/SR-52 WB OFF



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	344	1	146	598	763	0	1	417	391
Future Volume (vph)	0	0	0	344	1	146	598	763	0	1	417	391
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					5.1	5.1	4.7	4.7			6.7	6.7
Lane Util. Factor					1.00	1.00	0.97	0.95			0.95	1.00
Frt					1.00	0.85	1.00	1.00			1.00	0.85
Flt Protected					0.95	1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)					1774	1583	3433	3539			3539	1583
Flt Permitted					0.95	1.00	0.95	1.00			0.95	1.00
Satd. Flow (perm)					1774	1583	3433	3539			3377	1583
Peak-hour factor, PHF	0.25	0.25	0.25	0.80	0.80	0.80	0.96	0.96	0.96	0.89	0.89	0.89
Adj. Flow (vph)	0	0	0	430	1	182	623	795	0	1	469	439
RTOR Reduction (vph)	0	0	0	0	0	98	0	0	0	0	0	257
Lane Group Flow (vph)	0	0	0	0	431	85	623	795	0	0	470	182
Turn Type				Perm	NA	Perm	Prot	NA		Perm	NA	Perm
Protected Phases					7		5	1 2			6	
Permitted Phases				7		7				6		6
Actuated Green, G (s)					37.5	37.5	32.4	98.4			61.3	61.3
Effective Green, g (s)					37.5	37.5	32.4	98.4			61.3	61.3
Actuated g/C Ratio					0.25	0.25	0.22	0.67			0.42	0.42
Clearance Time (s)					5.1	5.1	4.7				6.7	6.7
Vehicle Extension (s)					2.0	2.0	2.0				3.0	3.0
Lane Grp Cap (vph)					450	401	753	2357			1401	656
v/s Ratio Prot							c0.18	c0.22				
v/s Ratio Perm					0.24	0.05					0.14	0.12
v/c Ratio					0.96	0.21	0.83	0.34			0.34	0.28
Uniform Delay, d1					54.3	43.4	55.0	10.6			29.4	28.6
Progression Factor					1.00	1.00	1.35	0.96			1.00	1.00
Incremental Delay, d2					31.2	0.1	4.4	0.1			0.6	1.1
Delay (s)					85.6	43.5	78.6	10.3			30.0	29.6
Level of Service					F	D	E	B			C	C
Approach Delay (s)		0.0			73.0			40.3			29.8	
Approach LOS		A			E			D			C	

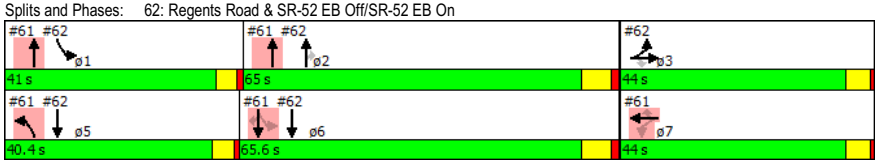
Intersection Summary			
HCM 2000 Control Delay	43.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	147.7	Sum of lost time (s)	16.5
Intersection Capacity Utilization	78.2%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	EBR	NBT	NBR	SBL	SBT	ø5	ø6	ø7
Lane Configurations										
Traffic Volume (vph)	272	0	174	1127	534	314	428			
Future Volume (vph)	272	0	174	1127	534	314	428			
Turn Type	Split	NA	Perm	NA	Perm	Prot	NA			
Protected Phases	3	3		2		1	5 6	5	6	7
Permitted Phases			3		2					
Detector Phase	3	3	3	2	2	1	5 6			
Switch Phase										
Minimum Initial (s)	5.0	5.0	5.0	13.0	13.0	5.0		5.0	13.0	5.0
Minimum Split (s)	10.1	10.1	10.1	23.7	23.7	22.7		9.7	23.7	10.1
Total Split (s)	44.0	44.0	44.0	65.0	65.0	41.0		40.4	65.6	44.0
Total Split (%)	29.3%	29.3%	29.3%	43.3%	43.3%	27.3%		27%	44%	29%
Yellow Time (s)	4.1	4.1	4.1	5.2	5.2	3.7		3.7	5.2	4.1
All-Red Time (s)	1.0	1.0	1.0	1.5	1.5	1.0		1.0	1.5	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0				
Total Lost Time (s)	5.1	5.1	5.1	6.7	6.7	4.7				
Lead/Lag				Lag	Lag	Lead		Lead	Lag	
Lead-Lag Optimize?				Yes	Yes	Yes		Yes	Yes	
Recall Mode	None	None	None	Max	Max	None		None	Max	None

Intersection Summary
Cycle Length: 150
Actuated Cycle Length: 147.7
Natural Cycle: 100
Control Type: Actuated-Uncoordinated

Splits and Phases: 62: Regents Road & SR-52 EB Off/SR-52 EB On



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	272	0	174	0	0	0	0	1127	534	314	428	0
Future Volume (vph)	272	0	174	0	0	0	0	1127	534	314	428	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1	5.1					6.7	6.7	4.7	4.7	
Lane Util. Factor	0.95	0.95	1.00					0.95	1.00	1.00	0.95	
Frt	1.00	1.00	0.85					1.00	0.85	1.00	1.00	
Flt Protected	0.95	0.95	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1681	1681	1583					3539	1583	1770	3539	
Flt Permitted	0.95	0.95	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1681	1681	1583					3539	1583	1770	3539	
Peak-hour factor, PHF	0.80	0.80	0.80	0.25	0.25	0.25	0.91	0.91	0.91	0.80	0.80	0.80
Adj. Flow (vph)	340	0	218	0	0	0	0	1238	587	392	535	0
RTOR Reduction (vph)	0	0	93	0	0	0	0	0	64	0	0	0
Lane Group Flow (vph)	170	170	125	0	0	0	0	1238	523	393	535	0
Turn Type	Split	NA	Perm					NA	Perm	Prot	NA	
Protected Phases	3	3						2		1	5 6	
Permitted Phases			3						2			
Actuated Green, G (s)	37.5	37.5	37.5					58.4	58.4	35.3	98.4	
Effective Green, g (s)	37.5	37.5	37.5					58.4	58.4	35.3	98.4	
Actuated g/C Ratio	0.25	0.25	0.25					0.40	0.40	0.24	0.67	
Clearance Time (s)	5.1	5.1	5.1					6.7	6.7	4.7		
Vehicle Extension (s)	2.0	2.0	2.0					3.0	3.0	3.0		
Lane Grp Cap (vph)	426	426	401					1399	625	423	2357	
v/s Ratio Prot	c0.10	0.10						c0.35		c0.22	c0.15	
v/s Ratio Perm			0.08						0.33			
v/c Ratio	0.40	0.40	0.31					0.88	0.84	0.93	0.23	
Uniform Delay, d1	45.7	45.7	44.6					41.5	40.3	55.0	9.7	
Progression Factor	1.00	1.00	1.00					1.00	1.00	1.21	1.24	
Incremental Delay, d2	0.2	0.2	0.2					8.5	12.6	22.8	0.0	
Delay (s)	46.0	46.0	44.8					50.0	52.9	89.1	12.1	
Level of Service	D	D	D					D	D	F	B	
Approach Delay (s)		45.5			0.0			51.0			44.7	
Approach LOS		D			A			D			D	

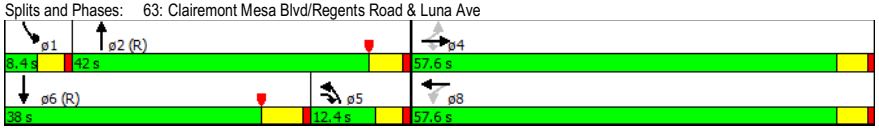
Intersection Summary			
HCM 2000 Control Delay	48.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	147.7	Sum of lost time (s)	16.5
Intersection Capacity Utilization	71.7%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	582	5	87	7	11	111	1013	11	322
Future Volume (vph)	582	5	87	7	11	111	1013	11	322
Turn Type	Perm	NA	pm+ov	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4	5		8	5	2	1	6
Permitted Phases	4		4	8					
Detector Phase	4	4	5	8	8	5	2	1	6
Switch Phase									
Minimum Initial (s)	10.0	10.0	4.0	1.0	1.0	4.0	10.0	4.0	4.0
Minimum Split (s)	14.9	14.9	8.4	5.9	5.9	8.4	15.3	8.4	10.2
Total Split (s)	57.6	57.6	12.4	57.6	57.6	12.4	42.0	8.4	38.0
Total Split (%)	53.3%	53.3%	11.5%	53.3%	53.3%	11.5%	38.9%	7.8%	35.2%
Yellow Time (s)	3.9	3.9	3.4	3.9	3.9	3.4	4.3	3.4	5.2
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.9	4.4		4.9	4.4	5.3	4.4	6.2
Lead/Lag			Lag			Lag	Lag	Lead	Lead
Lead-Lag Optimize?			Yes			Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	None	C-Max

Intersection Summary
Cycle Length: 108
Actuated Cycle Length: 108
Offset: 78 (72%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 110
Control Type: Actuated-Coordinated

Splits and Phases: 63: Clairemont Mesa Blvd/Regents Road & Luna Ave



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	582	5	87	7	11	85	111	1013	5	11	322	263
Future Volume (vph)	582	5	87	7	11	85	111	1013	5	11	322	263
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9	4.4		4.9		4.4	5.3		4.4	6.2	
Lane Util. Factor		1.00	1.00		1.00		1.00	0.95		1.00	0.95	
Frt		1.00	0.85		0.89		1.00	1.00		1.00	0.93	
Flt Protected		0.95	1.00		1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1775	1583		1650		1770	3537		1770	3301	
Flt Permitted		0.65	1.00		0.96		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1212	1583		1583		1770	3537		1770	3301	
Peak-hour factor, PHF	0.87	0.87	0.87	0.80	0.80	0.80	0.94	0.94	0.94	0.80	0.80	0.80
Adj. Flow (vph)	669	6	100	9	14	106	118	1078	5	14	402	329
RTOR Reduction (vph)	0	0	41	0	54	0	0	0	0	0	142	0
Lane Group Flow (vph)	0	675	59	0	75	0	118	1083	0	14	590	0
Turn Type	Perm	NA	pm+ov	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4	5		8		5	2		1	6	
Permitted Phases	4		4	8								
Actuated Green, G (s)		52.7	63.3		52.7		10.6	39.1		1.6	29.2	
Effective Green, g (s)		52.7	63.3		52.7		10.6	39.1		1.6	29.2	
Actuated g/C Ratio		0.49	0.59		0.49		0.10	0.36		0.01	0.27	
Clearance Time (s)		4.9	4.4		4.9		4.4	5.3		4.4	6.2	
Vehicle Extension (s)		4.0	2.0		2.0		2.0	4.4		2.0	3.2	
Lane Grp Cap (vph)		591	992		772		173	1280		26	892	
v/s Ratio Prot			0.01				0.07	c0.31		0.01	c0.18	
v/s Ratio Perm		c0.56	0.03		0.05							
v/c Ratio		1.14	0.06		0.10		0.68	0.85		0.54	0.66	
Uniform Delay, d1		27.6	9.6		14.9		47.1	31.7		52.8	35.0	
Progression Factor		1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		82.9	0.0		0.0		8.5	7.0		10.3	3.9	
Delay (s)		110.5	9.6		14.9		55.6	38.7		63.1	38.9	
Level of Service		F	A		B		E	D		E	D	
Approach Delay (s)		97.5			14.9			40.4			39.3	
Approach LOS		F			B			D			D	

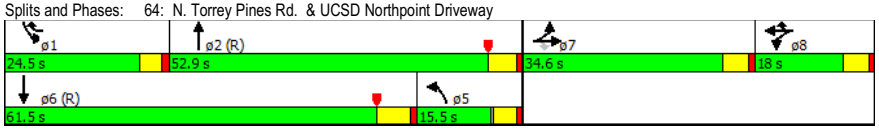
Intersection Summary				
HCM 2000 Control Delay	54.5	HCM 2000 Level of Service	D	
HCM 2000 Volume to Capacity ratio	1.03			
Actuated Cycle Length (s)	108.0	Sum of lost time (s)	15.5	
Intersection Capacity Utilization	82.8%	ICU Level of Service	E	
Analysis Period (min)	15			

c Critical Lane Group

Lane Group	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	22	16	39	17	45	76	677	129	506
Future Volume (vph)	22	16	39	17	45	76	677	129	506
Turn Type	NA	Perm	Split	NA	pt+ov	Prot	NA	Prot	NA
Protected Phases	7		8	8	8 1	5	2	1	6
Permitted Phases		7							
Detector Phase	7	7	8	8	8 1	5	2	1	6
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	4.0		4.0	10.0	4.0	10.0
Minimum Split (s)	8.9	8.9	8.9	8.9		8.4	15.3	8.4	15.9
Total Split (s)	34.6	34.6	18.0	18.0		15.5	52.9	24.5	61.5
Total Split (%)	26.6%	26.6%	13.8%	13.8%		11.9%	40.7%	18.8%	47.3%
Yellow Time (s)	3.9	3.9	3.9	3.9		3.4	4.3	3.4	4.9
All-Red Time (s)	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	4.9	4.9		4.4	5.3	4.4	5.9
Lead/Lag	Lead	Lead	Lag	Lag		Lag	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None		None	C-Max	None	C-Max

Intersection Summary
Cycle Length: 130
Actuated Cycle Length: 130
Offset: 72 (55%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 55
Control Type: Actuated-Coordinated

Splits and Phases: 64: N. Torrey Pines Rd. & UCSD Northpoint Driveway



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	22	16	39	17	45	76	677	112	129	506	59
Future Volume (vph)	10	22	16	39	17	45	76	677	112	129	506	59
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9	4.9	4.9	4.9	4.9	4.4	5.3		4.4	5.9	
Lane Util. Factor		1.00	1.00	1.00	1.00	1.00	1.00	0.95		0.97	0.95	
Frt		1.00	0.85	1.00	1.00	0.85	1.00	0.98		1.00	0.98	
Flt Protected		0.98	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1835	1583	1770	1863	1583	1770	3464		3433	3484	
Flt Permitted		0.98	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1835	1583	1770	1863	1583	1770	3464		3433	3484	
Peak-hour factor, PHF	0.89	0.89	0.89	0.80	0.80	0.80	0.89	0.89	0.89	0.91	0.91	0.91
Adj. Flow (vph)	11	25	18	49	21	56	85	761	126	142	556	65
RTOR Reduction (vph)	0	0	16	0	0	47	0	6	0	0	5	0
Lane Group Flow (vph)	0	36	2	49	21	9	85	881	0	142	616	0
Turn Type	Split	NA	Perm	Split	NA	pt+ov	Prot	NA		Prot	NA	
Protected Phases	7	7		8	8	8 1	5	2		1	6	
Permitted Phases			7									
Actuated Green, G (s)		14.4	14.4	7.1	7.1	21.8	11.6	79.2		9.8	76.8	
Effective Green, g (s)		14.4	14.4	7.1	7.1	21.8	11.6	79.2		9.8	76.8	
Actuated g/C Ratio		0.11	0.11	0.05	0.05	0.17	0.09	0.61		0.08	0.59	
Clearance Time (s)		4.9	4.9	4.9	4.9		4.4	5.3		4.4	5.9	
Vehicle Extension (s)		2.0	2.0	2.0	2.0		2.0	4.8		2.0	4.7	
Lane Grp Cap (vph)		203	175	96	101	265	157	2110		258	2058	
v/s Ratio Prot		c0.02		c0.03	0.01	0.01	c0.05	c0.25		c0.04	0.18	
v/s Ratio Perm			0.00									
v/c Ratio		0.18	0.01	0.51	0.21	0.04	0.54	0.42		0.55	0.30	
Uniform Delay, d1		52.4	51.5	59.8	58.8	45.3	56.7	13.3		58.0	13.2	
Progression Factor		1.00	1.00	1.00	1.00	1.00	1.00	1.00		0.75	1.47	
Incremental Delay, d2		0.2	0.0	1.9	0.4	0.0	2.0	0.6		1.3	0.3	
Delay (s)		52.6	51.5	61.7	59.1	45.3	58.7	13.9		44.8	19.8	
Level of Service		D	D	E	E	D	E	B		D	B	
Approach Delay (s)		52.2			54.0			17.8			24.4	
Approach LOS		D			D			B			C	

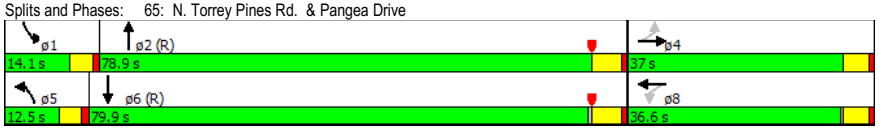
Intersection Summary				
HCM 2000 Control Delay	23.8	HCM 2000 Level of Service	C	
HCM 2000 Volume to Capacity ratio	0.41			
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	20.1	
Intersection Capacity Utilization	47.0%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	9	0	13	0	10	1088	39	389
Future Volume (vph)	9	0	13	0	10	1088	39	389
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	7.0	7.0	7.0	7.0	4.0	10.0	4.0	10.0
Minimum Split (s)	11.9	11.9	11.9	11.9	8.4	15.3	8.4	15.3
Total Split (s)	37.0	37.0	36.6	36.6	12.5	78.9	14.1	79.9
Total Split (%)	28.5%	28.5%	28.2%	28.2%	9.6%	60.7%	10.8%	61.5%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.4	4.3	3.4	4.3
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.9	4.9	4.9	4.4	5.3	4.4	5.3
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	None	C-Max

Intersection Summary
Cycle Length: 130
Actuated Cycle Length: 130
Offset: 59 (45%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 55
Control Type: Actuated-Coordinated

Splits and Phases: 65: N. Torrey Pines Rd. & Pangea Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	9	0	10	13	0	14	10	1088	53	39	389	10
Future Volume (vph)	9	0	10	13	0	14	10	1088	53	39	389	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9		4.9	4.9		4.4	5.3		4.4	5.3	
Lane Util. Factor		1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frt		0.93		1.00	0.85		1.00	0.99		1.00	1.00	
Flt Protected		0.98		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1688		1770	1583		1770	3515		1770	3526	
Flt Permitted		0.88		0.74	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1526		1381	1583		1770	3515		1770	3526	
Peak-hour factor, PHF	0.80	0.80	0.80	0.81	0.81	0.81	0.90	0.90	0.90	0.93	0.93	0.93
Adj. Flow (vph)	11	0	12	16	0	17	11	1209	59	42	418	11
RTOR Reduction (vph)	0	22	0	0	15	0	0	2	0	0	1	0
Lane Group Flow (vph)	0	2	0	16	2	0	11	1266	0	42	428	0
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8								
Actuated Green, G (s)		13.4		13.4	13.4		2.5	95.4		6.6	99.5	
Effective Green, g (s)		13.4		13.4	13.4		2.5	95.4		6.6	99.5	
Actuated g/C Ratio		0.10		0.10	0.10		0.02	0.73		0.05	0.77	
Clearance Time (s)		4.9		4.9	4.9		4.4	5.3		4.4	5.3	
Vehicle Extension (s)		2.0		2.0	2.0		2.0	5.7		2.0	5.5	
Lane Grp Cap (vph)		157		142	163		34	2579		89	2698	
v/s Ratio Prot					0.00		0.01	c0.36		c0.02	c0.12	
v/s Ratio Perm		0.00		c0.01								
v/c Ratio		0.02		0.11	0.01		0.32	0.49		0.47	0.16	
Uniform Delay, d1		52.4		52.9	52.3		62.9	7.2		60.0	4.1	
Progression Factor		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.0		0.1	0.0		2.0	0.7		1.4	0.1	
Delay (s)		52.4		53.0	52.4		64.9	7.9		61.4	4.2	
Level of Service		D		D	D		E	A		E	A	
Approach Delay (s)		52.4			52.7			8.4			9.3	
Approach LOS		D			D			A			A	

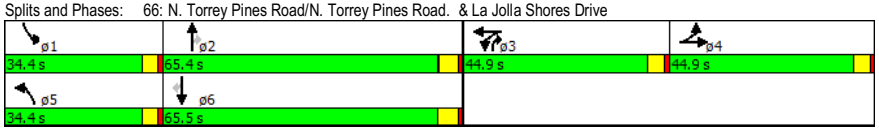
Intersection Summary			
HCM 2000 Control Delay	10.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.44		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	14.6
Intersection Capacity Utilization	48.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	203	13	25	21	176	1544	61	30	277	131
Future Volume (vph)	203	13	25	21	176	1544	61	30	277	131
Turn Type	Split	NA	Split	NA	Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	4	4	3	3	5	2	3	1	6	
Permitted Phases							2			6
Detector Phase	4	4	3	3	5	2	3	1	6	6
Switch Phase										
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	10.0	4.0	4.0	10.0	10.0
Minimum Split (s)	8.9	8.9	8.9	8.9	8.4	15.4	8.9	8.4	15.5	15.5
Total Split (s)	44.9	44.9	44.9	44.9	34.4	65.4	44.9	34.4	65.5	65.5
Total Split (%)	23.7%	23.7%	23.7%	23.7%	18.1%	34.5%	23.7%	18.1%	34.5%	34.5%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.4	4.4	3.9	3.4	4.5	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	4.9	4.9	4.4	5.4	4.9	4.4	5.5	5.5
Lead/Lag	Lag	Lag	Lead	Lead	Lead	Lag	Lead	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 189.7
Actuated Cycle Length: 139.4
Natural Cycle: 90
Control Type: Actuated-Uncoordinated

Splits and Phases: 66: N. Torrey Pines Road/N. Torrey Pines Road. & La Jolla Shores Drive



66: N. Torrey Pines Road/N. Torrey Pines Road. & La Jolla Shores Drive

Timing Plan: Morning Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	203	13	121	25	21	62	176	1544	61	30	277	131
Future Volume (vph)	203	13	121	25	21	62	176	1544	61	30	277	131
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9		4.9	4.9		4.4	5.4	4.9	4.4	5.5	5.5
Lane Util. Factor	0.95	0.95		0.97	1.00		1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	0.89		1.00	0.89		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	0.99		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1681	1558		3433	1653		1770	3539	1583	1770	3539	1583
Flt Permitted	0.95	0.99		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1681	1558		3433	1653		1770	3539	1583	1770	3539	1583
Peak-hour factor, PHF	0.90	0.90	0.90	0.80	0.80	0.80	0.93	0.93	0.93	0.80	0.80	0.80
Adj. Flow (vph)	226	14	134	31	26	78	189	1660	66	38	346	164
RTOR Reduction (vph)	0	57	0	0	59	0	0	0	13	0	0	0
Lane Group Flow (vph)	194	123	0	31	45	0	189	1660	53	38	346	164
Turn Type	Split	NA		Split	NA		Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	4	4		3	3		5	2	3	1	6	
Permitted Phases									2			6
Actuated Green, G (s)	25.5	25.5		25.7	25.7		19.1	62.8	88.5	6.2	49.8	49.8
Effective Green, g (s)	25.5	25.5		25.7	25.7		19.1	62.8	88.5	6.2	49.8	49.8
Actuated g/C Ratio	0.18	0.18		0.18	0.18		0.14	0.45	0.63	0.04	0.36	0.36
Clearance Time (s)	4.9	4.9		4.9	4.9		4.4	5.4	4.9	4.4	5.5	5.5
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	4.0	2.0	2.0	3.9	3.9
Lane Grp Cap (vph)	306	284		631	303		241	1589	1002	78	1260	563
v/s Ratio Prot	c0.12	0.08		0.01	c0.03		c0.11	c0.47	0.01	0.02	0.10	
v/s Ratio Perm									0.02			0.10
v/c Ratio	0.63	0.43		0.05	0.15		0.78	1.04	0.05	0.49	0.27	0.29
Uniform Delay, d1	52.8	50.7		47.0	47.9		58.4	38.5	9.7	65.2	32.1	32.3
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	3.1	0.4		0.0	0.1		14.2	35.2	0.0	1.7	0.2	0.4
Delay (s)	56.0	51.1		47.0	48.0		72.6	73.7	9.7	67.0	32.3	32.7
Level of Service	E	D		D	D		E	E	A	E	C	C
Approach Delay (s)		53.6			47.7			71.4			34.8	
Approach LOS		D			D			E			C	

Intersection Summary			
HCM 2000 Control Delay	61.3	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	139.8	Sum of lost time (s)	19.7
Intersection Capacity Utilization	74.6%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

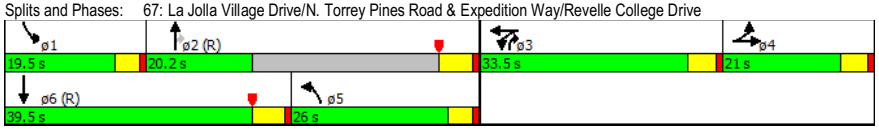
67: La Jolla Village Drive/N. Torrey Pines Road & Expedition Way/Revelle College Drive

Timing Plan: Morning Peak

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	8	34	20	25	237	1764	158	50	358
Future Volume (vph)	8	34	20	25	237	1764	158	50	358
Turn Type	Split	NA	Split	NA	Prot	NA	pm+ov	Prot	NA
Protected Phases	4	4	3	3	5	2	3	1	6
Permitted Phases							2		
Detector Phase	4	4	3	3	5	2	3	1	6
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	10.0	4.0	4.0	10.0
Minimum Split (s)	8.9	8.9	8.9	8.9	8.4	15.6	8.9	8.4	15.4
Total Split (s)	21.0	21.0	33.5	33.5	26.0	20.2	33.5	19.5	39.5
Total Split (%)	17.5%	17.5%	27.9%	27.9%	21.7%	16.8%	27.9%	16.3%	32.9%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.4	4.6	3.9	3.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	4.9	4.9	4.4	5.6	4.9	4.4	5.4
Lead/Lag	Lag	Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	None	None	C-Max

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 27 (23%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 80
Control Type: Actuated-Coordinated

Splits and Phases: 67: La Jolla Village Drive/N. Torrey Pines Road & Expedition Way/Revelle College Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	34	44	20	25	8	237	1764	158	50	358	16
Future Volume (vph)	8	34	44	20	25	8	237	1764	158	50	358	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9		4.9	4.9		4.4	5.6	4.9	4.4	5.4	
Lane Util. Factor	0.95	0.95		0.97	1.00		1.00	0.95	1.00	1.00	0.95	
Frt	1.00	0.92		1.00	0.96		1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1681	1621		3433	1795		1770	3539	1583	1770	3517	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1681	1621		3433	1795		1770	3539	1583	1770	3517	
Peak-hour factor, PHF	0.91	0.91	0.91	0.80	0.80	0.80	0.94	0.94	0.94	0.80	0.80	0.80
Adj. Flow (vph)	9	37	48	25	31	10	252	1877	168	62	448	20
RTOR Reduction (vph)	0	41	0	0	9	0	0	0	43	0	2	0
Lane Group Flow (vph)	8	45	0	25	32	0	252	1877	125	63	466	0
Turn Type	Split	NA		Split	NA		Prot	NA	pm+ov	Prot	NA	
Protected Phases	4	4		3	3		5	2	3	1	6	
Permitted Phases									2			
Actuated Green, G (s)	7.1	7.1		10.4	10.4		22.5	75.0	85.4	7.7	60.4	
Effective Green, g (s)	7.1	7.1		10.4	10.4		22.5	75.0	85.4	7.7	60.4	
Actuated g/C Ratio	0.06	0.06		0.09	0.09		0.19	0.62	0.71	0.06	0.50	
Clearance Time (s)	4.9	4.9		4.9	4.9		4.4	5.6	4.9	4.4	5.4	
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	4.0	2.0	2.0	4.2	
Lane Grp Cap (vph)	99	95		297	155		331	2211	1126	113	1770	
v/s Ratio Prot	0.00	c0.03		0.01	c0.02		0.14	c0.53	0.01	c0.04	0.13	
v/s Ratio Perm									0.07			
v/c Ratio	0.08	0.47		0.08	0.21		0.76	0.85	0.11	0.56	0.26	
Uniform Delay, d1	53.4	54.6		50.4	51.0		46.2	18.0	5.4	54.5	17.1	
Progression Factor	1.00	1.00		1.00	1.00		0.97	0.84	2.72	1.00	1.00	
Incremental Delay, d2	0.1	1.3		0.0	0.2		7.9	3.8	0.0	3.4	0.4	
Delay (s)	53.5	56.0		50.5	51.2		52.5	18.8	14.7	57.9	17.4	
Level of Service	D	E		D	D		D	B	B	E	B	
Approach Delay (s)		55.8			50.9			22.2			22.2	
Approach LOS		E			D			C			C	

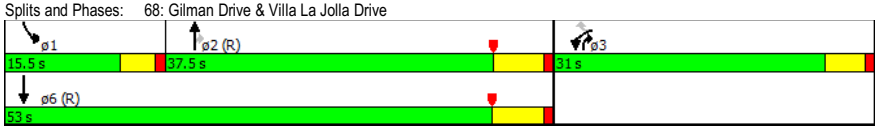
Intersection Summary			
HCM 2000 Control Delay	23.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	19.8
Intersection Capacity Utilization	71.7%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	30	273	812	48	361	346
Future Volume (vph)	30	273	812	48	361	346
Turn Type	Prot	Perm	NA	pm+ov	Prot	NA
Protected Phases	3		2	3	1	6
Permitted Phases		3		2		
Detector Phase	3	3	2	3	1	6
Switch Phase						
Minimum Initial (s)	4.0	4.0	7.0	4.0	4.0	7.0
Minimum Split (s)	8.9	8.9	12.9	8.9	8.4	13.0
Total Split (s)	31.0	31.0	37.5	31.0	15.5	53.0
Total Split (%)	36.9%	36.9%	44.6%	36.9%	18.5%	63.1%
Yellow Time (s)	3.9	3.9	4.9	3.9	3.4	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	5.9	4.9	4.4	6.0
Lead/Lag			Lag		Lead	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None	None	C-Max	None	None	C-Max

Intersection Summary
Cycle Length: 84
Actuated Cycle Length: 84
Offset: 9 (11%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 65
Control Type: Actuated-Coordinated

Splits and Phases: 68: Gilman Drive & Villa La Jolla Drive



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	30	273	812	48	361	346
Future Volume (vph)	30	273	812	48	361	346
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9	5.9	4.9	4.4	6.0
Lane Util. Factor	0.97	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	3433	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	3433	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.80	0.80	0.80	0.80	0.80	0.80
Adj. Flow (vph)	38	341	1015	60	451	432
RTOR Reduction (vph)	0	270	0	5	0	0
Lane Group Flow (vph)	38	71	1015	55	451	433
Turn Type	Prot	Perm	NA	pm+ov	Prot	NA
Protected Phases	3		2	3	1	6
Permitted Phases		3		2		
Actuated Green, G (s)	9.7	9.7	31.6	41.3	27.5	63.4
Effective Green, g (s)	9.7	9.7	31.6	41.3	27.5	63.4
Actuated g/C Ratio	0.12	0.12	0.38	0.49	0.33	0.75
Clearance Time (s)	4.9	4.9	5.9	4.9	4.4	6.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	396	182	1331	778	579	2671
v/s Ratio Prot	0.01		c0.29	0.01	c0.25	0.12
v/s Ratio Perm		c0.04		0.03		
v/c Ratio	0.10	0.39	0.76	0.07	0.78	0.16
Uniform Delay, d1	33.2	34.4	22.9	11.2	25.5	2.9
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.1	1.4	4.2	0.0	6.6	0.1
Delay (s)	33.3	35.8	27.1	11.3	32.1	3.0
Level of Service	C	D	C	B	C	A
Approach Delay (s)	35.6		26.2			17.8
Approach LOS	D		C			B

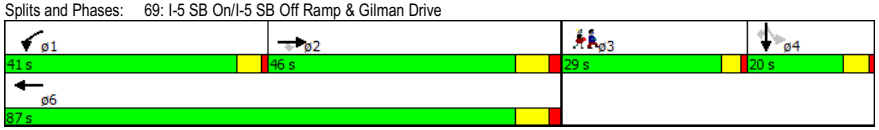
Intersection Summary			
HCM 2000 Control Delay	24.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	84.0	Sum of lost time (s)	15.2
Intersection Capacity Utilization	58.4%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBT	EBR	WBL	WBT	SBT	SBR	ø3
Lane Configurations							
Traffic Volume (vph)	94	546	360	937	0	47	
Future Volume (vph)	94	546	360	937	0	47	
Turn Type	NA	Perm	Prot	NA	NA	Perm	
Protected Phases	2		1	6	4		3
Permitted Phases		2				4	
Detector Phase	2	2	1	6	4	4	
Switch Phase							
Minimum Initial (s)	13.0	13.0	5.0	12.0	5.0	5.0	1.0
Minimum Split (s)	20.2	20.2	9.7	19.2	17.1	17.1	29.0
Total Split (s)	46.0	46.0	41.0	87.0	20.0	20.0	29.0
Total Split (%)	33.8%	33.8%	30.1%	64.0%	14.7%	14.7%	21%
Yellow Time (s)	5.2	5.2	3.7	5.2	4.1	4.1	3.0
All-Red Time (s)	2.0	2.0	1.0	2.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	7.2	7.2	4.7	7.2	5.1	5.1	
Lead/Lag	Lag	Lag	Lead		Lag	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes
Recall Mode	Min	Min	None	Min	None	None	None

Intersection Summary
Cycle Length: 136
Actuated Cycle Length: 49.4
Natural Cycle: 90
Control Type: Actuated-Uncoordinated

Splits and Phases: 69: I-5 SB On/I-5 SB Off Ramp & Gilman Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	94	546	360	937	0	0	0	0	13	0	47
Future Volume (vph)	0	94	546	360	937	0	0	0	0	13	0	47
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		7.2	7.2	4.7	7.2						5.1	5.1
Lane Util. Factor		1.00	0.88	1.00	0.95						1.00	1.00
Frt		1.00	0.85	1.00	1.00						1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00						0.95	1.00
Satd. Flow (prot)		1863	2787	1770	3539						1770	1583
Flt Permitted		1.00	1.00	0.95	1.00						0.95	1.00
Satd. Flow (perm)		1863	2787	1770	3539						1770	1583
Peak-hour factor, PHF	0.84	0.84	0.84	0.94	0.94	0.94	0.25	0.25	0.25	0.80	0.80	0.80
Adj. Flow (vph)	0	112	650	383	997	0	0	0	0	16	0	59
RTOR Reduction (vph)	0	0	475	0	0	0	0	0	0	0	0	54
Lane Group Flow (vph)	0	112	175	383	997	0	0	0	0	0	16	5
Turn Type		NA	Perm	Prot	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases			2							4		4
Actuated Green, G (s)		13.6	13.6	15.8	34.1						4.1	4.1
Effective Green, g (s)		13.6	13.6	15.8	34.1						4.1	4.1
Actuated g/C Ratio		0.27	0.27	0.31	0.68						0.08	0.08
Clearance Time (s)		7.2	7.2	4.7	7.2						5.1	5.1
Vehicle Extension (s)		2.0	2.0	2.0	2.0						2.0	2.0
Lane Grp Cap (vph)		501	750	553	2389						143	128
v/s Ratio Prot		0.06		c0.22	c0.28							
v/s Ratio Perm			0.06								0.01	0.00
v/c Ratio		0.22	0.23	0.69	0.42						0.11	0.04
Uniform Delay, d1		14.3	14.4	15.2	3.7						21.5	21.4
Progression Factor		1.00	1.00	1.00	1.00						1.00	1.00
Incremental Delay, d2		0.1	0.1	3.0	0.0						0.1	0.0
Delay (s)		14.4	14.4	18.2	3.8						21.6	21.4
Level of Service		B	B	B	A						C	C
Approach Delay (s)		14.4			7.8			0.0			21.5	
Approach LOS		B			A			A			C	

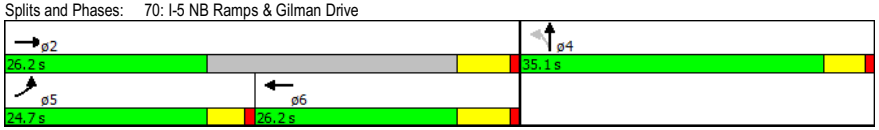
Intersection Summary			
HCM 2000 Control Delay	10.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	50.5	Sum of lost time (s)	21.0
Intersection Capacity Utilization	76.0%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBT	NBL	NBT
Lane Configurations					
Traffic Volume (vph)	72	36	393	929	0
Future Volume (vph)	72	36	393	929	0
Turn Type	Prot	NA	NA	Perm	NA
Protected Phases	5	2	6		4
Permitted Phases				4	
Detector Phase	5	2	6	4	4
Switch Phase					
Minimum Initial (s)	5.0	12.0	12.0	5.0	5.0
Minimum Split (s)	9.7	18.2	18.2	10.1	10.1
Total Split (s)	24.7	26.2	26.2	35.1	35.1
Total Split (%)	28.7%	30.5%	30.5%	40.8%	40.8%
Yellow Time (s)	3.7	5.2	5.2	4.1	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.7	6.2	6.2	5.1	5.1
Lead/Lag	Lead		Lag		
Lead-Lag Optimize?	Yes		Yes		
Recall Mode	None	Min	Min	None	None

Intersection Summary
Cycle Length: 86
Actuated Cycle Length: 64.2
Natural Cycle: 60
Control Type: Actuated-Uncoordinated

Splits and Phases: 70: I-5 NB Ramps & Gilman Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	72	36	0	0	393	53	929	0	104	0	0	0
Future Volume (vph)	72	36	0	0	393	53	929	0	104	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.7	6.2			6.2		5.1	5.1				
Lane Util. Factor	1.00	1.00			0.95		0.95	0.95				
Frt	1.00	1.00			0.98		1.00	0.97				
Flt Protected	0.95	1.00			1.00		0.95	0.96				
Satd. Flow (prot)	1770	1863			3476		1681	1650				
Flt Permitted	0.95	1.00			1.00		0.95	0.96				
Satd. Flow (perm)	1770	1863			3476		1681	1650				
Peak-hour factor, PHF	0.80	0.80	0.80	0.84	0.84	0.84	0.95	0.95	0.95	0.25	0.25	0.25
Adj. Flow (vph)	90	45	0	0	468	63	978	0	109	0	0	0
RTOR Reduction (vph)	0	0	0	0	12	0	0	58	0	0	0	0
Lane Group Flow (vph)	90	45	0	0	519	0	548	481	0	0	0	0
Turn Type	Prot	NA			NA		Perm	NA				
Protected Phases	5	2			6			4				
Permitted Phases							4					
Actuated Green, G (s)	6.5	26.5			15.3		27.1	27.1				
Effective Green, g (s)	6.5	26.5			15.3		27.1	27.1				
Actuated g/C Ratio	0.10	0.41			0.24		0.42	0.42				
Clearance Time (s)	4.7	6.2			6.2		5.1	5.1				
Vehicle Extension (s)	2.0	2.0			2.0		2.0	2.0				
Lane Grp Cap (vph)	177	760			819		701	688				
v/s Ratio Prot	c0.05	0.02			c0.15							
v/s Ratio Perm							c0.33	0.29				
v/c Ratio	0.51	0.06			0.63		0.78	0.70				
Uniform Delay, d1	27.7	11.6			22.3		16.3	15.5				
Progression Factor	1.00	1.00			1.00		1.00	1.00				
Incremental Delay, d2	0.8	0.0			1.2		5.2	2.5				
Delay (s)	28.5	11.7			23.5		21.6	18.1				
Level of Service	C	B			C		C	B				
Approach Delay (s)		22.9			23.5			19.8			0.0	
Approach LOS		C			C			B			A	

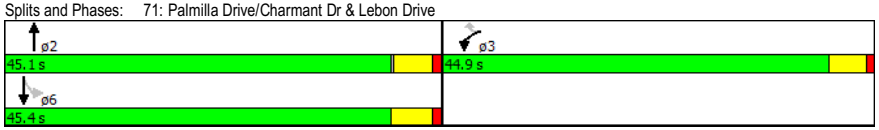
Intersection Summary			
HCM 2000 Control Delay	21.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	64.9	Sum of lost time (s)	16.0
Intersection Capacity Utilization	76.0%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Configurations					
Traffic Volume (vph)	82	38	21	230	40
Future Volume (vph)	82	38	21	230	40
Turn Type	Prot	Perm	NA	Perm	NA
Protected Phases	3		2		6
Permitted Phases		3		6	
Detector Phase	3	3	2	6	6
Switch Phase					
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	11.9	11.9	12.1	12.4	12.4
Total Split (s)	44.9	44.9	45.1	45.4	45.4
Total Split (%)	49.7%	49.7%	49.9%	50.3%	50.3%
Yellow Time (s)	3.9	3.9	4.1	4.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	5.1	5.4	5.4
Lead/Lag					
Lead-Lag Optimize?					
Recall Mode	Min	Min	None	None	None

Intersection Summary
Cycle Length: 90.3
Actuated Cycle Length: 39.3
Natural Cycle: 40
Control Type: Actuated-Uncoordinated

Splits and Phases: 71: Palmilla Drive/Charmant Dr & Lebon Drive



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	82	38	21	296	230	40
Future Volume (vph)	82	38	21	296	230	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9	5.1		5.4	5.4
Lane Util. Factor	0.97	0.91	0.95		1.00	0.95
Frt	0.99	0.85	0.86		1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	3427	1441	3044		1770	3539
Flt Permitted	0.95	1.00	1.00		0.52	1.00
Satd. Flow (perm)	3427	1441	3044		974	3539
Peak-hour factor, PHF	0.88	0.88	0.82	0.82	0.93	0.93
Adj. Flow (vph)	93	43	26	361	247	43
RTOR Reduction (vph)	3	29	189	0	0	0
Lane Group Flow (vph)	94	10	198	0	247	43
Turn Type	Prot	Perm	NA		Perm	NA
Protected Phases	3		2			6
Permitted Phases		3			6	
Actuated Green, G (s)	9.9	9.9	18.2		17.9	17.9
Effective Green, g (s)	9.9	9.9	18.2		17.9	17.9
Actuated g/C Ratio	0.26	0.26	0.48		0.47	0.47
Clearance Time (s)	4.9	4.9	5.1		5.4	5.4
Vehicle Extension (s)	2.0	2.0	3.8		3.4	3.4
Lane Grp Cap (vph)	890	374	1454		457	1662
v/s Ratio Prot	c0.03		0.07			0.01
v/s Ratio Perm		0.01			c0.25	
v/c Ratio	0.11	0.03	0.14		0.54	0.03
Uniform Delay, d1	10.7	10.5	5.6		7.2	5.4
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	0.0	0.0	0.1		1.4	0.0
Delay (s)	10.7	10.5	5.6		8.6	5.4
Level of Service	B	B	A		A	A
Approach Delay (s)	10.7		5.6			8.1
Approach LOS	B		A			A

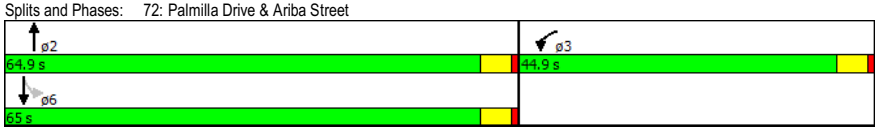
Intersection Summary				
HCM 2000 Control Delay	7.4	HCM 2000 Level of Service	A	
HCM 2000 Volume to Capacity ratio	0.39			
Actuated Cycle Length (s)	38.1	Sum of lost time (s)	10.3	
Intersection Capacity Utilization	41.6%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

Lane Group	WBL	NBT	SBL	SBT
Lane Configurations				
Traffic Volume (vph)	139	80	92	56
Future Volume (vph)	139	80	92	56
Turn Type	Prot	NA	Perm	NA
Protected Phases	3	2		6
Permitted Phases			6	
Detector Phase	3	2	6	6
Switch Phase				
Minimum Initial (s)	6.0	7.0	7.0	7.0
Minimum Split (s)	10.9	11.9	12.0	12.0
Total Split (s)	44.9	64.9	65.0	65.0
Total Split (%)	40.9%	59.1%	59.1%	59.1%
Yellow Time (s)	3.9	3.9	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	5.0	5.0
Lead/Lag				
Lead-Lag Optimize?				
Recall Mode	None	Min	Min	Min

Intersection Summary
Cycle Length: 109.9
Actuated Cycle Length: 32.9
Natural Cycle: 40
Control Type: Actuated-Uncoordinated

Splits and Phases: 72: Palmilla Drive & Ariba Street



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	139	119	80	167	92	56
Future Volume (vph)	139	119	80	167	92	56
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9		4.9		5.0	5.0
Lane Util. Factor	0.97		0.95		1.00	0.95
Frt	0.93		0.90		1.00	1.00
Flt Protected	0.97		1.00		0.95	1.00
Satd. Flow (prot)	3275		3180		1770	3539
Flt Permitted	0.97		1.00		0.57	1.00
Satd. Flow (perm)	3275		3180		1066	3539
Peak-hour factor, PHF	0.83	0.83	0.84	0.84	0.80	0.80
Adj. Flow (vph)	167	143	95	199	115	70
RTOR Reduction (vph)	104	0	117	0	0	0
Lane Group Flow (vph)	206	0	177	0	115	70
Turn Type	Prot		NA		Perm	NA
Protected Phases	3		2			6
Permitted Phases					6	
Actuated Green, G (s)	8.7		13.0		12.9	12.9
Effective Green, g (s)	8.7		13.0		12.9	12.9
Actuated g/C Ratio	0.28		0.41		0.41	0.41
Clearance Time (s)	4.9		4.9		5.0	5.0
Vehicle Extension (s)	2.0		4.0		3.8	3.8
Lane Grp Cap (vph)	904		1312		436	1449
v/s Ratio Prot	c0.06		0.06			0.02
v/s Ratio Perm					c0.11	
v/c Ratio	0.23		0.14		0.26	0.05
Uniform Delay, d1	8.8		5.8		6.2	5.6
Progression Factor	1.00		1.00		1.00	1.00
Incremental Delay, d2	0.0		0.1		0.4	0.0
Delay (s)	8.9		5.8		6.6	5.6
Level of Service	A		A		A	A
Approach Delay (s)	8.9		5.8			6.2
Approach LOS	A		A			A

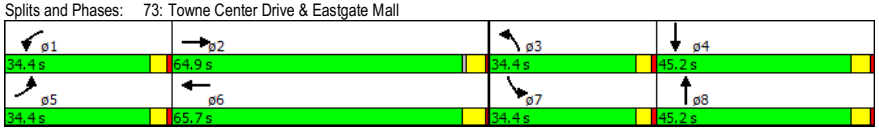
Intersection Summary			
HCM 2000 Control Delay	7.1	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.25		
Actuated Cycle Length (s)	31.5	Sum of lost time (s)	9.9
Intersection Capacity Utilization	33.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	103	257	98	553	271	600	11	49
Future Volume (vph)	103	257	98	553	271	600	11	49
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	5	2	1	6	3	8	7	4
Permitted Phases								
Detector Phase	5	2	1	6	3	8	7	4
Switch Phase								
Minimum Initial (s)	4.0	7.0	4.0	7.0	4.0	7.0	4.0	7.0
Minimum Split (s)	8.4	11.9	8.4	12.7	8.4	12.2	8.4	12.7
Total Split (s)	34.4	64.9	34.4	65.7	34.4	45.2	34.4	45.2
Total Split (%)	19.1%	36.1%	19.1%	36.6%	19.1%	25.2%	19.1%	25.2%
Yellow Time (s)	3.4	3.9	3.4	4.7	3.4	4.2	3.4	4.2
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	4.9	4.4	5.7	4.4	5.2	4.4	5.2
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 179.7
Actuated Cycle Length: 96.2
Natural Cycle: 65
Control Type: Actuated-Uncoordinated

Splits and Phases: 73: Towne Center Drive & Eastgate Mall



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	103	257	155	98	553	109	271	600	329	11	49	7
Future Volume (vph)	103	257	155	98	553	109	271	600	329	11	49	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	5.7		4.4	5.2		4.4	5.2	
Lane Util. Factor	0.97	0.95		1.00	0.95		0.97	0.95		0.97	0.95	
Frt	1.00	0.94		1.00	0.98		1.00	0.95		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	3433	3339		1770	3452		3433	3351		3433	3471	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	3433	3339		1770	3452		3433	3351		3433	3471	
Peak-hour factor, PHF	0.94	0.94	0.94	0.96	0.96	0.96	0.86	0.86	0.86	0.80	0.80	0.80
Adj. Flow (vph)	110	273	165	102	576	114	315	698	383	14	61	9
RTOR Reduction (vph)	0	55	0	0	10	0	0	31	0	0	6	0
Lane Group Flow (vph)	110	383	0	102	680	0	315	1050	0	14	64	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases												
Actuated Green, G (s)	8.0	26.7		10.7	28.6		21.3	40.7		1.9	21.3	
Effective Green, g (s)	8.0	26.7		10.7	28.6		21.3	40.7		1.9	21.3	
Actuated g/C Ratio	0.08	0.27		0.11	0.29		0.22	0.41		0.02	0.22	
Clearance Time (s)	4.4	4.9		4.4	5.7		4.4	5.2		4.4	5.2	
Vehicle Extension (s)	2.0	5.1		2.0	4.8		2.0	5.1		2.0	4.8	
Lane Grp Cap (vph)	277	901		191	998		739	1379		65	747	
v/s Ratio Prot	0.03	0.11		c0.06	c0.20		c0.09	c0.31		0.00	0.02	
v/s Ratio Perm												
v/c Ratio	0.40	0.42		0.53	0.68		0.43	0.76		0.22	0.09	
Uniform Delay, d1	43.2	29.8		41.7	31.1		33.5	24.9		47.8	31.0	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.3	0.7		1.4	2.4		0.1	3.0		0.6	0.1	
Delay (s)	43.5	30.5		43.2	33.5		33.7	28.0		48.4	31.1	
Level of Service	D	C		D	C		C	C		D	C	
Approach Delay (s)		33.1			34.8			29.2			34.0	
Approach LOS		C			C			C			C	

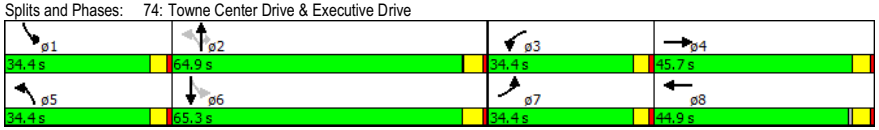
Intersection Summary			
HCM 2000 Control Delay	31.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	98.9	Sum of lost time (s)	19.7
Intersection Capacity Utilization	62.0%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	102	313	35	150	273	795	551	40	153
Future Volume (vph)	102	313	35	150	273	795	551	40	153
Turn Type	Prot	NA	Prot	NA	pm+pt	NA	Perm	pm+pt	NA
Protected Phases	7	4	3	8	5	2		1	6
Permitted Phases					2		2	6	
Detector Phase	7	4	3	8	5	2	2	1	6
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	7.0	4.0	7.0	7.0	4.0	7.0
Minimum Split (s)	8.4	8.9	8.4	11.9	8.4	11.9	11.9	8.4	12.3
Total Split (s)	34.4	45.7	34.4	44.9	34.4	64.9	64.9	34.4	65.3
Total Split (%)	19.1%	25.4%	19.1%	25.0%	19.1%	36.1%	36.1%	19.1%	36.3%
Yellow Time (s)	3.4	3.9	3.4	3.9	3.4	3.9	3.9	3.4	4.3
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	4.9	4.4	4.9	4.4	4.9	4.9	4.4	5.3
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Min	Min	None	Min

Intersection Summary
Cycle Length: 179.8
Actuated Cycle Length: 95.4
Natural Cycle: 60
Control Type: Actuated-Uncoordinated

Splits and Phases: 74: Towne Center Drive & Executive Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	102	313	26	35	150	22	273	795	551	40	153	65
Future Volume (vph)	102	313	26	35	150	22	273	795	551	40	153	65
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	4.9		4.4	4.9	4.9	4.4	5.3	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95	1.00	1.00	0.95	
Frt	1.00	0.99		1.00	0.98		1.00	1.00	0.85	1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3498		1770	3470		1770	3539	1583	1770	3381	
Flt Permitted	0.95	1.00		0.95	1.00		0.50	1.00	1.00	0.33	1.00	
Satd. Flow (perm)	1770	3498		1770	3470		928	3539	1583	622	3381	
Peak-hour factor, PHF	0.84	0.84	0.84	0.80	0.80	0.80	0.95	0.95	0.95	0.80	0.80	0.80
Adj. Flow (vph)	121	373	31	44	188	28	287	837	580	50	191	81
RTOR Reduction (vph)	0	3	0	0	6	0	0	0	184	0	27	0
Lane Group Flow (vph)	121	401	0	44	210	0	287	837	396	50	245	0
Turn Type	Prot	NA		Prot	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases							2		2	6		
Actuated Green, G (s)	12.2	25.6		5.9	19.3		51.0	41.9	41.9	33.6	28.9	
Effective Green, g (s)	12.2	25.6		5.9	19.3		51.0	41.9	41.9	33.6	28.9	
Actuated g/C Ratio	0.13	0.26		0.06	0.20		0.53	0.43	0.43	0.35	0.30	
Clearance Time (s)	4.4	4.9		4.4	4.9		4.4	4.9	4.9	4.4	5.3	
Vehicle Extension (s)	2.0	5.3		2.0	5.4		2.0	3.8	3.8	2.0	3.8	
Lane Grp Cap (vph)	223	926		107	692		640	1533	685	271	1010	
v/s Ratio Prot	c0.07	c0.11		0.02	0.06		c0.08	0.24		0.01	0.07	
v/s Ratio Perm							0.16		c0.25	0.05		
v/c Ratio	0.54	0.43		0.41	0.30		0.45	0.55	0.58	0.18	0.24	
Uniform Delay, d1	39.6	29.5		43.7	33.0		13.1	20.3	20.7	21.2	25.6	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	1.4	0.8		0.9	0.6		0.2	0.5	1.4	0.1	0.2	
Delay (s)	41.1	30.3		44.7	33.6		13.2	20.8	22.1	21.3	25.8	
Level of Service	D	C		D	C		B	C	C	C	C	
Approach Delay (s)		32.8			35.4			20.0			25.1	
Approach LOS		C			D			B			C	

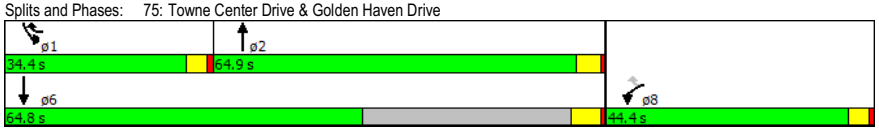
Intersection Summary			
HCM 2000 Control Delay	24.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	96.7	Sum of lost time (s)	19.0
Intersection Capacity Utilization	58.8%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Configurations					
Traffic Volume (vph)	165	459	328	195	96
Future Volume (vph)	165	459	328	195	96
Turn Type	Prot	pm+ov	NA	Prot	NA
Protected Phases	8	1	2	1	6
Permitted Phases		8			
Detector Phase	8	1	2	1	6
Switch Phase					
Minimum Initial (s)	4.0	4.0	10.0	4.0	10.0
Minimum Split (s)	33.4	8.4	14.9	8.4	15.8
Total Split (s)	44.4	34.4	64.9	34.4	64.8
Total Split (%)	30.9%	23.9%	45.2%	23.9%	45.1%
Yellow Time (s)	3.4	3.4	3.9	3.4	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	4.4	4.9	4.4	5.8
Lead/Lag		Lead	Lag	Lead	
Lead-Lag Optimize?		Yes	Yes	Yes	
Recall Mode	None	None	None	None	None

Intersection Summary
Cycle Length: 143.7
Actuated Cycle Length: 67.2
Natural Cycle: 65
Control Type: Actuated-Uncoordinated

Splits and Phases: 75: Towne Center Drive & Golden Haven Drive



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	165	459	328	305	195	96
Future Volume (vph)	165	459	328	305	195	96
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	0%		0%			-7%
Total Lost time (s)	4.4	4.4	4.9		4.4	5.8
Lane Util. Factor	1.00	1.00	0.95		1.00	0.95
Frt	1.00	0.85	0.93		1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1770	1583	3283		1832	3663
Flt Permitted	0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)	1770	1583	3283		1832	3663
Peak-hour factor, PHF	0.91	0.91	0.86	0.86	0.85	0.85
Adj. Flow (vph)	181	504	381	355	229	113
RTOR Reduction (vph)	0	192	127	0	0	0
Lane Group Flow (vph)	181	312	609	0	229	113
Turn Type	Prot	pm+ov	NA		Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8				
Actuated Green, G (s)	13.8	28.1	24.2		14.3	42.0
Effective Green, g (s)	13.8	28.1	24.2		14.3	42.0
Actuated g/C Ratio	0.21	0.43	0.37		0.22	0.64
Clearance Time (s)	4.4	4.4	4.9		4.4	5.8
Vehicle Extension (s)	2.0	2.0	5.0		2.0	5.0
Lane Grp Cap (vph)	370	779	1203		396	2331
v/s Ratio Prot	c0.10	0.09	c0.19		c0.13	0.03
v/s Ratio Perm		0.11				
v/c Ratio	0.49	0.40	0.51		0.58	0.05
Uniform Delay, d1	23.0	13.1	16.3		23.1	4.5
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	0.4	0.1	0.7		1.3	0.0
Delay (s)	23.4	13.2	17.0		24.4	4.5
Level of Service	C	B	B		C	A
Approach Delay (s)	15.9		17.0			17.8
Approach LOS	B		B			B

Intersection Summary			
HCM 2000 Control Delay	16.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	66.0	Sum of lost time (s)	13.7
Intersection Capacity Utilization	55.0%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	91	361	59	361	383	122	149	21	38
Future Volume (vph)	91	361	59	361	383	122	149	21	38
Turn Type	Perm	NA	Perm	NA	pm+pt	NA	Perm	pm+pt	NA
Protected Phases		4		8	5	2		1	6
Permitted Phases	4		8		2		2	6	
Detector Phase	4	4	8	8	5	2	2	1	6
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	7.0	7.0	4.0	7.0
Minimum Split (s)	8.9	8.9	8.4	8.4	8.4	11.9	11.9	8.4	11.9
Total Split (s)	44.9	44.9	44.4	44.4	34.4	64.9	64.9	34.4	64.9
Total Split (%)	31.1%	31.1%	30.8%	30.8%	23.9%	45.0%	45.0%	23.9%	45.0%
Yellow Time (s)	3.9	3.9	3.4	3.4	3.4	3.9	3.9	3.4	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	4.4	4.4	4.4	4.9	4.9	4.4	4.9
Lead/Lag					Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Min	Min	None	Min

Intersection Summary
Cycle Length: 144.2
Actuated Cycle Length: 64.7
Natural Cycle: 50
Control Type: Actuated-Uncoordinated

Splits and Phases: 76: Executive Way & Executive Drive

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	91	361	79	59	361	45	383	122	149	21	38	43
Future Volume (vph)	91	361	79	59	361	45	383	122	149	21	38	43
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9		4.4	4.4		4.4	4.9	4.9	4.4	4.9	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.97		1.00	0.98		1.00	1.00	0.85	1.00	0.92	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3444		1770	3480		1770	1863	1583	1770	1715	
Flt Permitted	0.39	1.00		0.35	1.00		0.52	1.00	1.00	0.66	1.00	
Satd. Flow (perm)	734	3444		646	3480		978	1863	1583	1238	1715	
Peak-hour factor, PHF	0.85	0.85	0.85	0.90	0.90	0.90	0.84	0.84	0.84	0.80	0.80	0.80
Adj. Flow (vph)	107	425	93	66	401	50	456	145	177	26	48	54
RTOR Reduction (vph)	0	14	0	0	7	0	0	0	85	0	38	0
Lane Group Flow (vph)	107	504	0	66	444	0	456	145	92	26	64	0
Turn Type	Perm	NA		Perm	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2		2	6		
Actuated Green, G (s)	16.2	16.2		16.7	16.7		40.8	34.6	34.6	15.7	13.9	
Effective Green, g (s)	16.2	16.2		16.7	16.7		40.8	34.6	34.6	15.7	13.9	
Actuated g/C Ratio	0.24	0.24		0.25	0.25		0.61	0.52	0.52	0.24	0.21	
Clearance Time (s)	4.9	4.9		4.4	4.4		4.4	4.9	4.9	4.4	4.9	
Vehicle Extension (s)	2.0	2.0		2.3	2.3		2.0	2.9	2.9	2.0	2.6	
Lane Grp Cap (vph)	178	835		161	870		864	964	819	305	356	
v/s Ratio Prot		c0.15			0.13		c0.18	0.08		0.00	0.04	
v/s Ratio Perm	0.15			0.10			c0.14		0.06	0.02		
v/c Ratio	0.60	0.60		0.41	0.51		0.53	0.15	0.11	0.09	0.18	
Uniform Delay, d1	22.4	22.5		20.9	21.5		7.0	8.4	8.2	19.8	21.8	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	3.9	0.9		1.0	0.3		0.3	0.1	0.1	0.0	0.2	
Delay (s)	26.3	23.3		21.9	21.8		7.3	8.5	8.3	19.9	22.0	
Level of Service	C	C		C	C		A	A	A	B	C	
Approach Delay (s)		23.8			21.9			7.8			21.5	
Approach LOS		C			C			A			C	

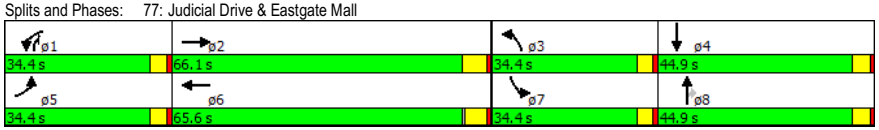
Intersection Summary			
HCM 2000 Control Delay	17.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	66.8	Sum of lost time (s)	14.2
Intersection Capacity Utilization	56.2%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	140	344	422	598	239	226	269	4	16
Future Volume (vph)	140	344	422	598	239	226	269	4	16
Turn Type	Prot	NA	Prot	NA	Prot	NA	pm+ov	Prot	NA
Protected Phases	5	2	1	6	3	8	1	7	4
Permitted Phases							8		
Detector Phase	5	2	1	6	3	8	1	7	4
Switch Phase									
Minimum Initial (s)	4.0	7.0	4.0	7.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.4	13.1	8.4	12.6	8.4	8.9	8.4	8.4	8.9
Total Split (s)	34.4	66.1	34.4	65.6	34.4	44.9	34.4	34.4	44.9
Total Split (%)	19.1%	36.8%	19.1%	36.5%	19.1%	25.0%	19.1%	19.1%	25.0%
Yellow Time (s)	3.4	5.1	3.4	4.6	3.4	3.9	3.4	3.4	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	6.1	4.4	5.6	4.4	4.9	4.4	4.4	4.9
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 179.8
Actuated Cycle Length: 98.7
Natural Cycle: 75
Control Type: Actuated-Uncoordinated

Splits and Phases: 77: Judicial Drive & Eastgate Mall



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	140	344	54	422	598	85	239	226	269	4	16	13
Future Volume (vph)	140	344	54	422	598	85	239	226	269	4	16	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	6.1		4.4	5.6		4.4	4.9	4.4	4.4	4.9	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.98		1.00	0.98		1.00	1.00	0.85	1.00	0.93	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3467		1770	3473		1770	1863	1583	1770	1739	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	3467		1770	3473		1770	1863	1583	1770	1739	
Peak-hour factor, PHF	0.93	0.93	0.93	0.84	0.84	0.84	0.94	0.94	0.94	0.80	0.80	0.80
Adj. Flow (vph)	151	370	58	502	712	101	254	240	286	5	20	16
RTOR Reduction (vph)	0	8	0	0	6	0	0	0	116	0	15	0
Lane Group Flow (vph)	151	420	0	502	807	0	254	240	170	5	21	0
Turn Type	Prot	NA		Prot	NA		Prot	NA	pm+ov	Prot	NA	
Protected Phases	5	2		1	6		3	8	1	7	4	
Permitted Phases									8			
Actuated Green, G (s)	14.4	20.4		32.2	38.7		21.5	28.3	60.5	0.8	7.6	
Effective Green, g (s)	14.4	20.4		32.2	38.7		21.5	28.3	60.5	0.8	7.6	
Actuated g/C Ratio	0.14	0.20		0.32	0.38		0.21	0.28	0.60	0.01	0.07	
Clearance Time (s)	4.4	6.1		4.4	5.6		4.4	4.9	4.4	4.4	4.9	
Vehicle Extension (s)	2.0	2.7		2.0	3.0		2.0	2.0	2.0	2.0	2.0	
Lane Grp Cap (vph)	251	696		561	1324		374	519	943	13	130	
v/s Ratio Prot	0.09	0.12		c0.28	c0.23		c0.14	c0.13	0.06	0.00	0.01	
v/s Ratio Perm									0.05			
v/c Ratio	0.60	0.60		0.89	0.61		0.68	0.46	0.18	0.38	0.16	
Uniform Delay, d1	40.9	36.9		33.0	25.3		36.8	30.3	9.3	50.1	44.0	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	2.8	1.3		16.3	0.8		3.8	0.2	0.0	6.8	0.2	
Delay (s)	43.6	38.2		49.3	26.1		40.7	30.5	9.3	56.9	44.2	
Level of Service	D	D		D	C		D	C	A	E	D	
Approach Delay (s)		39.6			35.0			26.1			45.7	
Approach LOS		D			C			C			D	

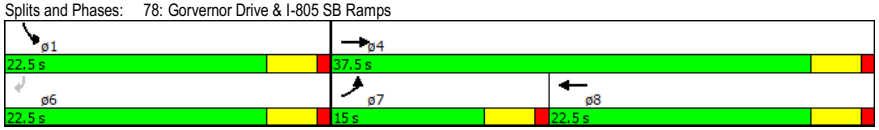
Intersection Summary			
HCM 2000 Control Delay	33.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	101.5	Sum of lost time (s)	19.8
Intersection Capacity Utilization	67.4%	ICU Level of Service	C
Analysis Period (min)	15		

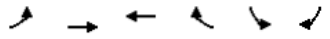
c Critical Lane Group

Lane Group	EBL	EBT	WBT	SBL	SBR
Lane Configurations					
Traffic Volume (vph)	490	349	457	73	336
Future Volume (vph)	490	349	457	73	336
Turn Type	Prot	NA	NA	Prot	Perm
Protected Phases	7	4	8	1	
Permitted Phases					6
Detector Phase	7	4	8	1	6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5
Total Split (s)	15.0	37.5	22.5	22.5	22.5
Total Split (%)	25.0%	62.5%	37.5%	37.5%	37.5%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead		Lag		
Lead-Lag Optimize?	Yes		Yes		
Recall Mode	None	None	None	None	Min

Intersection Summary
Cycle Length: 60
Actuated Cycle Length: 44.5
Natural Cycle: 60
Control Type: Actuated-Uncoordinated

Splits and Phases: 78: Gorvernor Drive & I-805 SB Ramps

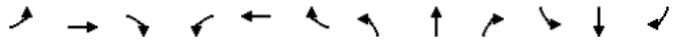




Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	490	349	457	20	73	336
Future Volume (vph)	490	349	457	20	73	336
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5		4.5	4.5
Lane Util. Factor	0.97	1.00	0.95		1.00	1.00
Frt	1.00	1.00	0.99		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	3433	1863	3517		1770	1583
Flt Permitted	0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)	3433	1863	3517		1770	1583
Peak-hour factor, PHF	0.88	0.88	0.89	0.89	1.00	1.00
Adj. Flow (vph)	557	397	513	22	73	336
RTOR Reduction (vph)	0	0	5	0	0	278
Lane Group Flow (vph)	557	397	530	0	73	58
Turn Type	Prot	NA	NA		Prot	Perm
Protected Phases	7	4	8		1	
Permitted Phases						6
Actuated Green, G (s)	10.7	27.6	12.4		7.7	7.7
Effective Green, g (s)	10.7	27.6	12.4		7.7	7.7
Actuated g/C Ratio	0.24	0.62	0.28		0.17	0.17
Clearance Time (s)	4.5	4.5	4.5		4.5	4.5
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	829	1160	984		307	275
v/s Ratio Prot	c0.16	0.21	c0.15		c0.04	
v/s Ratio Perm						0.04
v/c Ratio	0.67	0.34	0.54		0.24	0.21
Uniform Delay, d1	15.2	4.0	13.5		15.8	15.7
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	2.2	0.2	0.6		0.4	0.4
Delay (s)	17.4	4.2	14.1		16.2	16.1
Level of Service	B	A	B		B	B
Approach Delay (s)		11.9	14.1		16.1	
Approach LOS		B	B		B	

Intersection Summary			
HCM 2000 Control Delay	13.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	44.3	Sum of lost time (s)	13.5
Intersection Capacity Utilization	42.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	386	24	0	0	33	14	481	11	21	0	0	0
Future Volume (Veh/h)	386	24	0	0	33	14	481	11	21	0	0	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.96	0.96	0.96	0.55	0.55	0.55	0.95	0.95	0.95	1.00	1.00	1.00
Hourly flow rate (vph)	402	25	0	0	60	25	506	12	22	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1090	1046	0	1048	1035	23	0			34		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1090	1046	0	1048	1035	23	0			34		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	0	84	100	100	62	98	69			100		
cM capacity (veh/h)	103	157	1085	138	160	1054	1623			1578		

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	427	85	540
Volume Left	402	0	506
Volume Right	0	25	22
cSH	105	213	1623
Volume to Capacity	4.07	0.40	0.31
Queue Length 95th (ft)	Err	45	34
Control Delay (s)	Err	32.8	7.9
Lane LOS	F	D	A
Approach Delay (s)	Err	32.8	7.9
Approach LOS	F	D	

Intersection Summary			
Average Delay	4065.2		
Intersection Capacity Utilization	64.5%	ICU Level of Service	C
Analysis Period (min)	15		

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	ø4
Lane Configurations							
Traffic Volume (vph)	194	376	325	1430	305	249	
Future Volume (vph)	194	376	325	1430	305	249	
Turn Type	NA	Perm	Prot	NA	Prot	pt+ov	
Protected Phases	2		1	6	8	8 1	4
Permitted Phases		2					
Detector Phase	2	2	1	6	8	8 1	
Switch Phase							
Minimum Initial (s)	10.0	10.0	7.0	10.0	10.0		4.0
Minimum Split (s)	43.2	43.2	11.4	24.9	23.3		41.0
Total Split (s)	48.6	48.6	34.1	82.7	45.3		43.8
Total Split (%)	38.0%	38.0%	26.6%	64.6%	35.4%		34%
Yellow Time (s)	5.2	5.2	3.4	5.0	4.3		3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	6.2	6.2	4.4	6.0	5.3		
Lead/Lag	Lag	Lag	Lead				
Lead-Lag Optimize?							
Recall Mode	C-Max	C-Max	None	C-Max	None		None

Intersection Summary

Cycle Length: 128
Actuated Cycle Length: 128
Offset: 70 (55%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 100
Control Type: Actuated-Coordinated

Splits and Phases: 1: N. Torrey Pines Rd. & Genesee Ave

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	194	376	325	1430	305	249
Future Volume (vph)	194	376	325	1430	305	249
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.2	6.2	4.4	6.0	5.3	5.3
Lane Util. Factor	0.91	1.00	0.97	0.91	0.97	0.88
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	5085	1583	3433	5085	3433	2787
Flt Permitted	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (perm)	5085	1583	3433	5085	3433	2787
Peak-hour factor, PHF	0.67	0.67	0.92	0.92	0.87	0.87
Adj. Flow (vph)	290	561	353	1554	351	286
RTOR Reduction (vph)	0	234	0	0	0	190
Lane Group Flow (vph)	290	327	353	1554	351	96
Turn Type	NA	Perm	Prot	NA	Prot	pt+ov
Protected Phases	2		1	6	8	8 1
Permitted Phases		2				
Actuated Green, G (s)	74.6	74.6	17.6	96.8	19.9	42.8
Effective Green, g (s)	74.6	74.6	17.6	96.8	19.9	42.8
Actuated g/C Ratio	0.58	0.58	0.14	0.76	0.16	0.33
Clearance Time (s)	6.2	6.2	4.4	6.0	5.3	
Vehicle Extension (s)	4.0	4.0	2.0	3.7	3.8	
Lane Grp Cap (vph)	2963	922	472	3845	533	931
v/s Ratio Prot	0.06		c0.10	c0.31	c0.10	0.03
v/s Ratio Perm		0.21				
v/c Ratio	0.10	0.35	0.75	0.40	0.66	0.10
Uniform Delay, d1	11.8	14.0	53.1	5.5	50.9	29.4
Progression Factor	1.00	1.00	1.54	0.58	1.00	1.00
Incremental Delay, d2	0.1	1.1	5.0	0.3	3.2	0.1
Delay (s)	11.9	15.1	86.9	3.5	54.0	29.4
Level of Service	B	B	F	A	D	C
Approach Delay (s)	14.0			18.9	43.0	
Approach LOS	B			B	D	

Intersection Summary

HCM 2000 Control Delay	22.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	128.0	Sum of lost time (s)	15.9
Intersection Capacity Utilization	45.7%	ICU Level of Service	A
Analysis Period (min)	15		

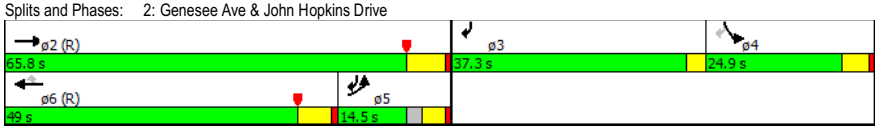
c Critical Lane Group

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	ø3
Lane Configurations							
Traffic Volume (vph)	123	400	1657	444	464	46	
Future Volume (vph)	123	400	1657	444	464	46	
Turn Type	Prot	NA	NA	Perm	Prot	pt+ov	
Protected Phases	5	2	6		4	3 5	3
Permitted Phases				6		4	
Detector Phase	5	2	6	6	4	3 5	
Switch Phase							
Minimum Initial (s)	4.0	10.0	10.0	10.0	7.0		4.0
Minimum Split (s)	9.5	16.7	15.9	15.9	11.9		7.0
Total Split (s)	14.5	65.8	49.0	49.0	24.9		37.3
Total Split (%)	11.3%	51.4%	38.3%	38.3%	19.5%		29%
Yellow Time (s)	3.4	5.7	4.9	4.9	3.9		3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		0.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	4.4	6.7	5.9	5.9	4.9		
Lead/Lag	Lag		Lead	Lead	Lag		Lead
Lead-Lag Optimize?	Yes		Yes	Yes	Yes		Yes
Recall Mode	None	C-Max	C-Max	C-Max	None		None

Intersection Summary

Cycle Length: 128
Actuated Cycle Length: 128
Offset: 58 (45%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 60
Control Type: Actuated-Coordinated

Splits and Phases: 2: Genesee Ave & John Hopkins Drive



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	123	400	1657	444	464	46
Future Volume (vph)	123	400	1657	444	464	46
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	6.7	5.9	5.9	4.9	3.0
Lane Util. Factor	1.00	0.91	0.81	1.00	0.97	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	5085	7544	1583	3433	1583
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	5085	7544	1583	3433	1583
Peak-hour factor, PHF	0.80	0.80	0.90	0.90	0.79	0.79
Adj. Flow (vph)	154	500	1841	493	587	58
RTOR Reduction (vph)	0	0	0	219	0	0
Lane Group Flow (vph)	154	500	1841	274	587	58
Turn Type	Prot	NA	NA	Perm	Prot	pt+ov
Protected Phases	5	2	6		4	3 5
Permitted Phases				6		4
Actuated Green, G (s)	12.4	76.0	60.0	60.0	34.2	54.2
Effective Green, g (s)	12.4	76.0	60.0	60.0	34.2	49.8
Actuated g/C Ratio	0.10	0.59	0.47	0.47	0.27	0.39
Clearance Time (s)	4.4	6.7	5.9	5.9	4.9	
Vehicle Extension (s)	2.0	4.0	3.9	3.9	5.0	
Lane Grp Cap (vph)	171	3019	3536	742	917	652
v/s Ratio Prot	c0.09	0.10	c0.24		c0.17	c0.01
v/s Ratio Perm				0.17		0.03
v/c Ratio	0.90	0.17	0.52	0.37	0.64	0.09
Uniform Delay, d1	57.2	11.7	23.9	21.8	41.5	24.7
Progression Factor	0.94	0.72	1.43	3.34	1.00	1.00
Incremental Delay, d2	40.8	0.1	0.4	1.1	2.1	0.0
Delay (s)	94.4	8.5	34.7	74.1	43.6	24.8
Level of Service	F	A	C	E	D	C
Approach Delay (s)		28.7	43.0		41.9	
Approach LOS		C	D		D	

Intersection Summary

HCM 2000 Control Delay	40.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	128.0	Sum of lost time (s)	18.2
Intersection Capacity Utilization	51.9%	ICU Level of Service	A
Analysis Period (min)	15		

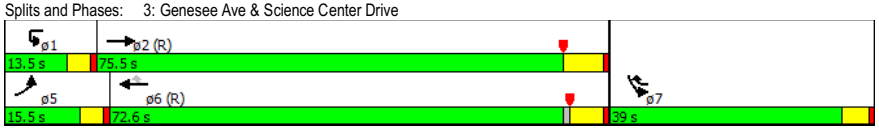
c Critical Lane Group

Lane Group	EBL	EBT	WBU	WBT	WBR	SBL
Lane Configurations						
Traffic Volume (vph)	64	755	8	2186	302	37
Future Volume (vph)	64	755	8	2186	302	37
Turn Type	Prot	NA	Prot	NA	pm+ov	Prot
Protected Phases	5	2	1	6	7	7
Permitted Phases					6	
Detector Phase	5	2	1	6	7	7
Switch Phase						
Minimum Initial (s)	4.0	10.0	4.0	10.0	4.0	4.0
Minimum Split (s)	9.5	22.5	9.5	16.0	8.9	8.9
Total Split (s)	15.5	75.5	13.5	72.6	39.0	39.0
Total Split (%)	12.1%	59.0%	10.5%	56.7%	30.5%	30.5%
Yellow Time (s)	3.4	5.9	3.4	5.0	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	6.9	4.4	6.0	4.9	4.9
Lead/Lag	Lead	Lag	Lead	Lag		
Lead-Lag Optimize?	Yes	Yes	Yes	Yes		
Recall Mode	None	C-Max	None	C-Max	None	None

Intersection Summary

Cycle Length: 128
Actuated Cycle Length: 128
Offset: 108 (84%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 60
Control Type: Actuated-Coordinated

Splits and Phases: 3: Genesee Ave & Science Center Drive



Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Traffic Volume (vph)	64	755	8	2186	302	37	16
Future Volume (vph)	64	755	8	2186	302	37	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	6.9	4.4	6.0	4.9	4.9	
Lane Util. Factor	1.00	0.91	1.00	0.91	1.00	0.97	
Frt	1.00	1.00	1.00	1.00	0.85	0.95	
Flt Protected	0.95	1.00	0.95	1.00	1.00	0.97	
Satd. Flow (prot)	1770	5085	1770	5085	1583	3332	
Flt Permitted	0.95	1.00	0.95	1.00	1.00	0.97	
Satd. Flow (perm)	1770	5085	1770	5085	1583	3332	
Peak-hour factor, PHF	0.82	0.82	0.92	0.92	0.92	0.86	0.86
Adj. Flow (vph)	78	921	9	2376	328	43	19
RTOR Reduction (vph)	0	0	0	0	64	18	0
Lane Group Flow (vph)	78	921	9	2376	264	44	0
Turn Type	Prot	NA	Prot	NA	pm+ov	Prot	
Protected Phases	5	2	1	6	7	7	
Permitted Phases					6		
Actuated Green, G (s)	9.6	103.1	1.5	95.9	103.1	7.2	
Effective Green, g (s)	9.6	103.1	1.5	95.9	103.1	7.2	
Actuated g/C Ratio	0.07	0.81	0.01	0.75	0.81	0.06	
Clearance Time (s)	4.4	6.9	4.4	6.0	4.9	4.9	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	132	4095	20	3809	1275	187	
v/s Ratio Prot	c0.04	0.18	0.01	c0.47	0.01	c0.01	
v/s Ratio Perm					0.16		
v/c Ratio	0.59	0.22	0.45	0.62	0.21	0.24	
Uniform Delay, d1	57.3	3.0	62.8	7.6	2.9	57.8	
Progression Factor	0.80	2.04	0.92	0.81	1.11	1.00	
Incremental Delay, d2	6.4	0.1	13.5	0.7	0.1	0.7	
Delay (s)	52.1	6.1	71.6	6.8	3.3	58.4	
Level of Service	D	A	E	A	A	E	
Approach Delay (s)		9.7		6.6		58.4	
Approach LOS		A		A		E	

Intersection Summary

HCM 2000 Control Delay	8.3	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	128.0	Sum of lost time (s)	16.2
Intersection Capacity Utilization	61.9%	ICU Level of Service	B
Analysis Period (min)	15		

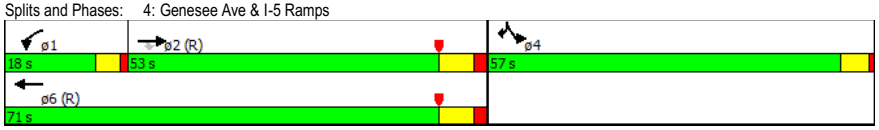
c Critical Lane Group

Lane Group	EBT	EBR	WBL	WBT	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	640	284	158	1588	767	557
Future Volume (vph)	640	284	158	1588	767	557
Turn Type	NA	Perm	Prot	NA	Prot	Prot
Protected Phases	2		1	6	4	4
Permitted Phases		2				
Detector Phase	2	2	1	6	4	4
Switch Phase						
Minimum Initial (s)	10.0	10.0	5.0	10.0	13.0	13.0
Minimum Split (s)	25.2	25.2	9.7	25.2	18.1	18.1
Total Split (s)	53.0	53.0	18.0	71.0	57.0	57.0
Total Split (%)	41.4%	41.4%	14.1%	55.5%	44.5%	44.5%
Yellow Time (s)	5.2	5.2	3.7	5.2	4.1	4.1
All-Red Time (s)	2.0	2.0	1.0	2.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.2	7.2	4.7	7.2	5.1	5.1
Lead/Lag	Lag	Lag	Lead			
Lead-Lag Optimize?	Yes	Yes	Yes			
Recall Mode	C-Max	C-Max	None	C-Max	Min	Min

Intersection Summary

Cycle Length: 128
Actuated Cycle Length: 128
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 60
Control Type: Actuated-Coordinated

Splits and Phases: 4: Genesee Ave & I-5 Ramps



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	640	284	158	1588	0	0	0	0	767	0	557
Future Volume (vph)	0	640	284	158	1588	0	0	0	0	767	0	557
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		7.2	7.2	4.7	7.2					5.1		5.1
Lane Util. Factor		0.81	0.88	0.97	0.91					0.97		0.88
Frt		1.00	0.85	1.00	1.00					1.00		0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (prot)		7544	2787	3433	5085					3433		2787
Flt Permitted		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (perm)		7544	2787	3433	5085					3433		2787
Peak-hour factor, PHF	0.67	0.67	0.67	0.92	0.92	0.92	0.25	0.25	0.25	0.86	0.86	0.86
Adj. Flow (vph)	0	955	424	172	1726	0	0	0	0	892	0	648
RTOR Reduction (vph)	0	0	225	0	0	0	0	0	0	0	0	52
Lane Group Flow (vph)	0	955	199	172	1726	0	0	0	0	892	0	596
Turn Type		NA	Perm	Prot	NA					Prot		Prot
Protected Phases		2		1	6					4		4
Permitted Phases			2									
Actuated Green, G (s)		60.2	60.2	10.8	75.7					40.0		40.0
Effective Green, g (s)		60.2	60.2	10.8	75.7					40.0		40.0
Actuated g/C Ratio		0.47	0.47	0.08	0.59					0.31		0.31
Clearance Time (s)		7.2	7.2	4.7	7.2					5.1		5.1
Vehicle Extension (s)		2.0	2.0	2.0	2.0					2.0		2.0
Lane Grp Cap (vph)		3548	1310	289	3007					1072		870
v/s Ratio Prot		0.13		0.05	c0.34					c0.26		0.21
v/s Ratio Perm			0.07									
v/c Ratio		0.27	0.15	0.60	0.57					0.83		0.68
Uniform Delay, d1		20.6	19.3	56.5	16.2					40.9		38.5
Progression Factor		1.28	5.37	1.18	0.11					1.00		1.00
Incremental Delay, d2		0.2	0.2	1.4	0.5					5.4		1.8
Delay (s)		26.5	104.1	68.1	2.3					46.3		40.3
Level of Service		C	F	E	A					D		D
Approach Delay (s)		50.4			8.3			0.0			43.7	
Approach LOS		D			A			A			D	

Intersection Summary

HCM 2000 Control Delay	31.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	128.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	83.4%	ICU Level of Service	E
Analysis Period (min)	15		

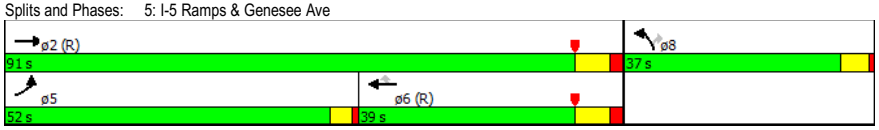
c Critical Lane Group

Lane Group	EBL	EBT	WBT	WBR	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	979	311	1365	802	563	294
Future Volume (vph)	979	311	1365	802	563	294
Turn Type	Prot	NA	NA	Perm	Prot	Perm
Protected Phases	5	2	6		8	
Permitted Phases				6		8
Detector Phase	5	2	6	6	8	8
Switch Phase						
Minimum Initial (s)	11.0	10.0	10.0	10.0	5.0	5.0
Minimum Split (s)	25.2	17.2	17.2	17.2	22.1	22.1
Total Split (s)	52.0	91.0	39.0	39.0	37.0	37.0
Total Split (%)	40.6%	71.1%	30.5%	30.5%	28.9%	28.9%
Yellow Time (s)	3.2	5.2	5.2	5.2	4.1	4.1
All-Red Time (s)	1.0	2.0	2.0	2.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.2	7.2	7.2	7.2	5.1	5.1
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Recall Mode	Min	C-Max	C-Max	C-Max	None	None

Intersection Summary

Cycle Length: 128
Actuated Cycle Length: 128
Offset: 81 (63%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 80
Control Type: Actuated-Coordinated

Splits and Phases: 5: I-5 Ramps & Genesee Ave



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	979	311	0	0	1365	802	563	0	294	0	0	0
Future Volume (vph)	979	311	0	0	1365	802	563	0	294	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	7.2			7.2	7.2	5.1		5.1			
Lane Util. Factor	0.97	0.91			0.81	0.88	0.97		0.88			
Frt	1.00	1.00			1.00	0.85	1.00		0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95		1.00			
Satd. Flow (prot)	3433	5085			7544	2787	3433		2787			
Flt Permitted	0.95	1.00			1.00	1.00	0.95		1.00			
Satd. Flow (perm)	3433	5085			7544	2787	3433		2787			
Peak-hour factor, PHF	0.90	0.90	0.90	0.88	0.88	0.88	0.79	0.79	0.79	0.25	0.25	0.25
Adj. Flow (vph)	1088	346	0	0	1551	911	713	0	372	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	559	0	0	286	0	0	0
Lane Group Flow (vph)	1088	346	0	0	1551	352	713	0	86	0	0	0
Turn Type	Prot	NA			NA	Perm	Prot		Perm			
Protected Phases	5	2			6		8					
Permitted Phases						6			8			
Actuated Green, G (s)	44.3	86.0			37.5	37.5	29.7		29.7			
Effective Green, g (s)	44.3	86.0			37.5	37.5	29.7		29.7			
Actuated g/C Ratio	0.35	0.67			0.29	0.29	0.23		0.23			
Clearance Time (s)	4.2	7.2			7.2	7.2	5.1		5.1			
Vehicle Extension (s)	2.0	2.0			2.0	2.0	2.0		2.0			
Lane Grp Cap (vph)	1188	3416			2210	816	796		646			
v/s Ratio Prot	c0.32	0.07			c0.21		c0.21					
v/s Ratio Perm						0.13			0.03			
v/c Ratio	0.92	0.10			0.70	0.43	0.90		0.13			
Uniform Delay, d1	40.1	7.4			40.3	36.6	47.6		39.0			
Progression Factor	0.93	1.46			0.70	0.47	1.00		1.00			
Incremental Delay, d2	10.0	0.1			1.8	1.6	12.3		0.0			
Delay (s)	47.4	10.9			29.9	18.6	60.0		39.0			
Level of Service	D	B			C	B	E		D			
Approach Delay (s)		38.6			25.7			52.8			0.0	
Approach LOS		D			C			D			A	

Intersection Summary

HCM 2000 Control Delay	35.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	128.0	Sum of lost time (s)	16.5
Intersection Capacity Utilization	83.4%	ICU Level of Service	E
Analysis Period (min)	15		

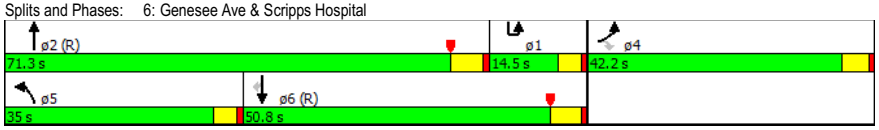
c Critical Lane Group

Lane Group	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	784	770	470	757	31	744	597
Future Volume (vph)	784	770	470	757	31	744	597
Turn Type	Prot	Perm	Prot	NA	Prot	NA	Perm
Protected Phases	4		5	2	1	6	
Permitted Phases		4					6
Detector Phase	4	4	5	2	1	6	6
Switch Phase							
Minimum Initial (s)	7.0	7.0	4.0	10.0	4.0	10.0	10.0
Minimum Split (s)	11.9	11.9	9.5	22.5	9.5	30.5	30.5
Total Split (s)	42.2	42.2	35.0	71.3	14.5	50.8	50.8
Total Split (%)	33.0%	33.0%	27.3%	55.7%	11.3%	39.7%	39.7%
Yellow Time (s)	3.9	3.9	3.4	4.7	3.4	4.7	4.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	4.4	5.7	4.4	5.7	5.7
Lead/Lag			Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?			Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	C-Max	None	C-Max	C-Max

Intersection Summary

Cycle Length: 128
Actuated Cycle Length: 128
Offset: 106 (83%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 6: Genesee Ave & Scripps Hospital



Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	784	770	470	757	31	744	597
Future Volume (vph)	784	770	470	757	31	744	597
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9	4.4	5.7	4.4	5.7	5.7
Lane Util. Factor	0.97	1.00	1.00	0.91	1.00	0.91	1.00
Frt	1.00	0.85	1.00	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	1583	1770	5085	1770	5085	1583
Flt Permitted	0.95	1.00	0.95	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	1583	1770	5085	1770	5085	1583
Peak-hour factor, PHF	0.93	0.93	0.96	0.96	0.92	0.93	0.93
Adj. Flow (vph)	843	828	490	789	34	800	642
RTOR Reduction (vph)	0	359	0	0	0	0	409
Lane Group Flow (vph)	843	469	490	789	34	800	233
Turn Type	Prot	Perm	Prot	NA	Prot	NA	Perm
Protected Phases	4		5	2	1	6	
Permitted Phases		4					6
Actuated Green, G (s)	37.3	37.3	30.6	69.6	6.1	45.1	45.1
Effective Green, g (s)	37.3	37.3	30.6	69.6	6.1	45.1	45.1
Actuated g/C Ratio	0.29	0.29	0.24	0.54	0.05	0.35	0.35
Clearance Time (s)	4.9	4.9	4.4	5.7	4.4	5.7	5.7
Vehicle Extension (s)	2.0	2.0	2.0	5.2	2.0	4.0	4.0
Lane Grp Cap (vph)	1000	461	423	2764	84	1791	557
v/s Ratio Prot	0.25		c0.28	0.16	0.02	c0.16	
v/s Ratio Perm		c0.30					0.15
v/c Ratio	0.84	1.02	1.16	0.29	0.40	0.45	0.42
Uniform Delay, d1	42.6	45.4	48.7	15.8	59.2	31.9	31.5
Progression Factor	1.00	1.00	1.01	1.54	1.02	1.00	1.77
Incremental Delay, d2	6.3	46.6	93.5	0.2	1.2	0.8	2.3
Delay (s)	48.9	92.0	142.9	24.5	61.5	32.6	58.0
Level of Service	D	F	F	C	E	C	E
Approach Delay (s)	70.3			69.9		44.3	
Approach LOS	E			E		D	

Intersection Summary

HCM 2000 Control Delay	61.5	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	128.0	Sum of lost time (s)	15.0
Intersection Capacity Utilization	75.3%	ICU Level of Service	D
Analysis Period (min)	15		

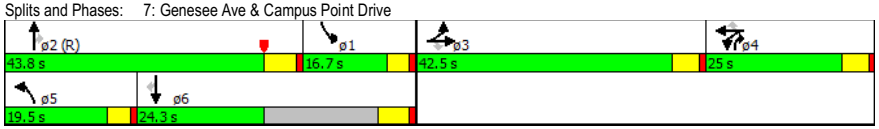
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	265	10	252	156	18	136	308	995	211	117	1000	304
Future Volume (vph)	265	10	252	156	18	136	308	995	211	117	1000	304
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	3	3		4	4		5	2	4	1	6	
Permitted Phases			3			4			2			6
Detector Phase	3	3	3	4	4	4	5	2	4	1	6	6
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	4.0	10.0	7.0	4.0	10.0	10.0
Minimum Split (s)	11.9	11.9	11.9	22.5	22.5	22.5	8.4	37.7	22.5	8.4	33.7	33.7
Total Split (s)	42.5	42.5	42.5	25.0	25.0	25.0	19.5	43.8	25.0	16.7	24.3	24.3
Total Split (%)	33.2%	33.2%	33.2%	19.5%	19.5%	19.5%	15.2%	34.2%	19.5%	13.0%	19.0%	19.0%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.9	3.9	3.4	4.7	3.9	3.4	4.7	4.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	4.9	4.9	4.9	4.9	4.4	5.7	4.9	4.4	5.7	5.7
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lag	Lead	Lead	Lag	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	None	None	None	None

Intersection Summary

Cycle Length: 128
Actuated Cycle Length: 128
Offset: 26 (20%), Referenced to phase 2:NBT, Start of Yellow
Natural Cycle: 85
Control Type: Actuated-Coordinated

Splits and Phases: 7: Genesee Ave & Campus Point Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	265	10	252	156	18	136	308	995	211	117	1000	304
Future Volume (vph)	265	10	252	156	18	136	308	995	211	117	1000	304
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9	4.9	4.9	4.9	4.9	4.4	5.7	4.9	4.4	5.7	5.7
Lane Util. Factor	0.97	1.00	0.88	0.95	0.95	0.88	0.97	0.91	1.00	0.97	0.91	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	0.96	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	1863	2787	1681	1702	2787	3433	5085	1583	3433	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	0.96	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	1863	2787	1681	1702	2787	3433	5085	1583	3433	5085	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.89	0.89	0.89	0.84	0.84	0.84	0.94	0.94	0.94
Adj. Flow (vph)	288	11	274	175	20	153	367	1185	251	124	1064	323
RTOR Reduction (vph)	0	0	240	0	0	138	0	0	90	0	0	151
Lane Group Flow (vph)	288	11	34	96	99	15	367	1185	161	124	1064	172
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	3	3		4	4		5	2	4	1	6	
Permitted Phases			3			4			2			6
Actuated Green, G (s)	15.7	15.7	15.7	12.6	12.6	12.6	18.8	69.7	82.3	10.1	61.0	61.0
Effective Green, g (s)	15.7	15.7	15.7	12.6	12.6	12.6	18.8	69.7	82.3	10.1	61.0	61.0
Actuated g/C Ratio	0.12	0.12	0.12	0.10	0.10	0.10	0.15	0.54	0.64	0.08	0.48	0.48
Clearance Time (s)	4.9	4.9	4.9	4.9	4.9	4.9	4.4	5.7	4.9	4.4	5.7	5.7
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	3.7	2.0	2.0	4.0	4.0
Lane Grp Cap (vph)	421	228	341	165	167	274	504	2768	1078	270	2423	754
v/s Ratio Prot	c0.08	0.01		0.06	c0.06		c0.11	0.23	0.01	0.04	c0.21	
v/s Ratio Perm			0.01			0.01			0.09			0.11
v/c Ratio	0.68	0.05	0.10	0.58	0.59	0.05	0.73	0.43	0.15	0.46	0.44	0.23
Uniform Delay, d1	53.8	49.6	49.9	55.2	55.2	52.3	52.2	17.3	9.0	56.3	22.2	19.7
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.34	0.89	2.38	0.93	0.79	1.26
Incremental Delay, d2	3.6	0.0	0.0	3.3	3.7	0.0	3.4	0.4	0.0	0.3	0.1	0.1
Delay (s)	57.4	49.6	49.9	58.5	59.0	52.3	73.4	15.8	21.5	52.4	17.6	25.0
Level of Service	E	D	D	E	E	D	E	B	C	D	B	C
Approach Delay (s)		53.7			55.9			28.3			22.0	
Approach LOS		D			E			C			C	

Intersection Summary

HCM 2000 Control Delay	31.8	HCM 2000 Level of Service	C	
HCM 2000 Volume to Capacity ratio	0.54			
Actuated Cycle Length (s)	128.0	Sum of lost time (s)	19.9	
Intersection Capacity Utilization	54.8%	ICU Level of Service	A	
Analysis Period (min)	15			

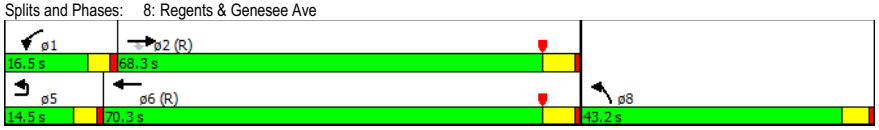
c Critical Lane Group

Lane Group	EBU	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations							
Traffic Volume (vph)	41	1185	142	36	1724	210	18
Future Volume (vph)	41	1185	142	36	1724	210	18
Turn Type	Prot	NA	Perm	Prot	NA	Prot	custom
Protected Phases	5	2		1	6	8	
Permitted Phases			2				
Detector Phase	5	2	2	1	6	8	
Switch Phase							
Minimum Initial (s)	4.0	10.0	10.0	4.0	10.0	7.0	
Minimum Split (s)	9.5	22.7	22.7	9.5	22.5	37.9	
Total Split (s)	14.5	68.3	68.3	16.5	70.3	43.2	
Total Split (%)	11.3%	53.4%	53.4%	12.9%	54.9%	33.8%	
Yellow Time (s)	3.4	4.7	4.7	3.4	4.7	3.9	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.4	5.7	5.7	4.4	5.7	4.9	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		
Recall Mode	None	C-Max	C-Max	None	C-Max	None	

Intersection Summary

Cycle Length: 128
Actuated Cycle Length: 128
Offset: 56 (44%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 100
Control Type: Actuated-Coordinated

Splits and Phases: 8: Regents & Genesee Ave



Movement	EBU	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations							
Traffic Volume (vph)	41	1185	142	36	1724	210	18
Future Volume (vph)	41	1185	142	36	1724	210	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	12	16	12
Total Lost time (s)	4.4	5.7	5.7	4.4	5.7	4.9	4.0
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	1770	5085	1583	1770	5085	2006	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (perm)	1770	5085	1583	1770	5085	2006	1583
Peak-hour factor, PHF	0.92	0.70	0.70	0.72	0.72	0.96	0.96
Adj. Flow (vph)	45	1693	203	50	2394	219	19
RTOR Reduction (vph)	0	0	63	0	0	0	19
Lane Group Flow (vph)	45	1693	140	50	2394	219	0
Turn Type	Prot	NA	Perm	Prot	NA	Prot	custom
Protected Phases	5	2		1	6	8	
Permitted Phases			2				
Actuated Green, G (s)	6.8	87.4	87.4	7.1	87.7	18.5	0.0
Effective Green, g (s)	6.8	87.4	87.4	7.1	87.7	18.5	0.0
Actuated g/C Ratio	0.05	0.68	0.68	0.06	0.69	0.14	0.00
Clearance Time (s)	4.4	5.7	5.7	4.4	5.7	4.9	
Vehicle Extension (s)	2.0	5.0	5.0	2.0	3.9	2.0	
Lane Grp Cap (vph)	94	3472	1080	98	3484	289	0
v/s Ratio Prot	0.03	0.33		c0.03	c0.47	c0.11	
v/s Ratio Perm			0.09				
v/c Ratio	0.48	0.49	0.13	0.51	0.69	0.76	0.00
Uniform Delay, d1	58.9	9.7	7.1	58.8	12.0	52.6	64.0
Progression Factor	1.02	0.52	0.29	1.06	0.84	1.00	1.00
Incremental Delay, d2	1.4	0.5	0.2	1.8	1.1	9.7	0.0
Delay (s)	61.6	5.5	2.3	64.1	11.2	62.3	64.0
Level of Service	E	A	A	E	B	E	E
Approach Delay (s)		6.4			12.3	62.4	
Approach LOS		A			B	E	

Intersection Summary

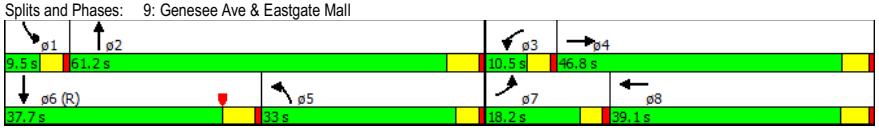
HCM 2000 Control Delay	12.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	128.0	Sum of lost time (s)	15.0
Intersection Capacity Utilization	54.5%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	161	121	21	127	412	886	37	924
Future Volume (vph)	161	121	21	127	412	886	37	924
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	7	4	3	8	5	2	1	6
Permitted Phases								
Detector Phase	7	4	3	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	4.0	7.0	4.0	7.0	4.0	10.0	4.0	10.0
Minimum Split (s)	8.4	38.9	9.5	39.1	9.5	31.7	9.5	32.7
Total Split (s)	18.2	46.8	10.5	39.1	33.0	61.2	9.5	37.7
Total Split (%)	14.2%	36.6%	8.2%	30.5%	25.8%	47.8%	7.4%	29.5%
Yellow Time (s)	3.4	3.9	3.4	4.1	3.4	4.7	3.4	4.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	4.9	4.4	5.1	4.4	5.7	4.4	5.7
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max

Intersection Summary

Cycle Length: 128
Actuated Cycle Length: 128
Offset: 93 (73%), Referenced to phase 6:SBT, Start of Yellow
Natural Cycle: 145
Control Type: Actuated-Coordinated

Splits and Phases: 9: Genesee Ave & Eastgate Mall



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	161	121	399	21	127	26	412	886	23	37	924	178
Future Volume (vph)	161	121	399	21	127	26	412	886	23	37	924	178
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	5.1		4.4	5.7		4.4	5.7	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.91		0.97	0.91	
Frt	1.00	0.88		1.00	0.97		1.00	1.00		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3132		1770	3449		1770	5066		3433	4962	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	3132		1770	3449		1770	5066		3433	4962	
Peak-hour factor, PHF	0.83	0.83	0.83	0.79	0.79	0.79	0.96	0.96	0.96	0.82	0.82	0.82
Adj. Flow (vph)	194	146	481	27	161	33	429	923	24	45	1127	217
RTOR Reduction (vph)	0	394	0	0	16	0	0	2	0	0	18	0
Lane Group Flow (vph)	194	233	0	27	178	0	429	945	0	45	1326	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Actuated Green, G (s)	13.8	23.1		3.7	12.8		29.5	76.6		5.2	52.3	
Effective Green, g (s)	13.8	23.1		3.7	12.8		29.5	76.6		5.2	52.3	
Actuated g/C Ratio	0.11	0.18		0.03	0.10		0.23	0.60		0.04	0.41	
Clearance Time (s)	4.4	4.9		4.4	5.1		4.4	5.7		4.4	5.7	
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	4.2		2.0	4.3	
Lane Grp Cap (vph)	190	565		51	344		407	3031		139	2027	
v/s Ratio Prot	c0.11	0.07		0.02	c0.05		c0.24	0.19		0.01	c0.27	
v/s Ratio Perm												
v/c Ratio	1.02	0.41		0.53	0.52		1.05	0.31		0.32	0.65	
Uniform Delay, d1	57.1	46.4		61.3	54.7		49.2	12.7		59.7	30.6	
Progression Factor	1.00	1.00		1.00	1.00		0.59	0.20		0.95	0.75	
Incremental Delay, d2	70.9	0.2		4.5	0.5		55.6	0.1		0.4	1.5	
Delay (s)	128.0	46.6		65.8	55.2		84.7	2.6		57.2	24.4	
Level of Service	F	D		E	E		F	A		E	C	
Approach Delay (s)		65.8			56.5			28.2			25.5	
Approach LOS		E			E			C			C	

Intersection Summary

HCM 2000 Control Delay	37.0	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	128.0	Sum of lost time (s)	19.6
Intersection Capacity Utilization	80.4%	ICU Level of Service	D
Analysis Period (min)	15		

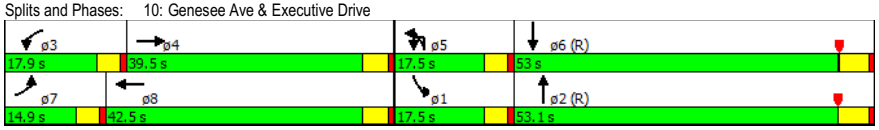
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	16	59	287	74	67	1218	56	1167
Future Volume (vph)	16	59	287	74	67	1218	56	1167
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	7	4	3	8	5	2	1	6
Permitted Phases								
Detector Phase	7	4	3	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	10.0	4.0	10.0
Minimum Split (s)	8.4	8.9	8.4	8.9	8.4	15.5	8.4	15.4
Total Split (s)	14.9	39.5	17.9	42.5	17.5	53.1	17.5	53.0
Total Split (%)	11.6%	30.9%	14.0%	33.2%	13.7%	41.5%	13.7%	41.4%
Yellow Time (s)	3.4	3.9	3.4	3.9	3.4	4.5	3.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	4.9	4.4	4.9	4.4	5.5	4.4	5.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	None	C-Max

Intersection Summary

Cycle Length: 128
Actuated Cycle Length: 128
Offset: 114 (89%), Referenced to phase 6:SBT and 2:NBT, Start of Yellow
Natural Cycle: 60
Control Type: Actuated-Coordinated

Splits and Phases: 10: Genesee Ave & Executive Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	16	59	84	287	74	74	18	67	1218	280	56	1167
Future Volume (vph)	16	59	84	287	74	74	18	67	1218	280	56	1167
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	4.9			4.4	5.5		4.4	5.4
Lane Util. Factor	1.00	0.95		0.97	0.95			1.00	0.91		1.00	0.91
Frt	1.00	0.91		1.00	0.93			1.00	0.97		1.00	1.00
Flt Protected	0.95	1.00		0.95	1.00			0.95	1.00		0.95	1.00
Satd. Flow (prot)	1770	3226		3433	3274			1770	4943		1770	5071
Flt Permitted	0.95	1.00		0.95	1.00			0.95	1.00		0.95	1.00
Satd. Flow (perm)	1770	3226		3433	3274			1770	4943		1770	5071
Peak-hour factor, PHF	0.85	0.85	0.85	0.86	0.86	0.86	0.92	0.80	0.80	0.80	0.94	0.94
Adj. Flow (vph)	19	69	99	334	86	86	20	84	1522	350	60	1241
RTOR Reduction (vph)	0	91	0	0	72	0	0	0	19	0	0	1
Lane Group Flow (vph)	19	77	0	334	100	0	0	104	1854	0	60	1263
Turn Type	Prot	NA		Prot	NA		Prot	Prot	NA		Prot	NA
Protected Phases	7	4		3	8		5	5	2		1	6
Permitted Phases												
Actuated Green, G (s)	2.9	10.0		13.5	20.6			11.8	77.6		7.7	73.6
Effective Green, g (s)	2.9	10.0		13.5	20.6			11.8	77.6		7.7	73.6
Actuated g/C Ratio	0.02	0.08		0.11	0.16			0.09	0.61		0.06	0.57
Clearance Time (s)	4.4	4.9		4.4	4.9			4.4	5.5		4.4	5.4
Vehicle Extension (s)	2.0	2.0		2.0	2.0			2.0	3.6		2.0	3.8
Lane Grp Cap (vph)	40	252		362	526			163	2996		106	2915
v/s Ratio Prot	0.01	c0.02		c0.10	0.03			c0.06	c0.38		0.03	0.25
v/s Ratio Perm												
v/c Ratio	0.47	0.30		0.92	0.19			0.64	0.62		0.57	0.43
Uniform Delay, d1	61.8	55.7		56.7	46.5			56.0	15.9		58.5	15.4
Progression Factor	1.00	1.00		1.00	1.00			1.10	0.56		1.29	0.28
Incremental Delay, d2	3.2	0.2		28.1	0.1			5.1	0.8		3.4	0.4
Delay (s)	65.0	56.0		84.8	46.5			66.4	9.7		78.7	4.6
Level of Service	E	E		F	D			E	A		E	A
Approach Delay (s)		56.9			71.8				12.7			8.0
Approach LOS		E			E				B			A

Intersection Summary

HCM 2000 Control Delay	20.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	128.0	Sum of lost time (s)	19.2
Intersection Capacity Utilization	61.6%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	22
Future Volume (vph)	22
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.94
Adj. Flow (vph)	23
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

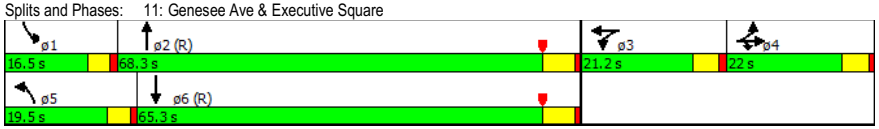
Intersection Summary

Lane Group	EBL	EBT	EBR	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	19	2	105	2	18	80	1564	16	1544
Future Volume (vph)	19	2	105	2	18	80	1564	16	1544
Turn Type	Split	NA	Prot	NA	NA	Prot	NA	Prot	NA
Protected Phases	4	4	4	3		5	2	1	6
Permitted Phases									
Detector Phase	4	4	4	3		5	2	1	6
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	4.0		4.0	10.0	4.0	10.0
Minimum Split (s)	8.9	8.9	8.9	8.9		8.4	15.7	8.4	15.7
Total Split (s)	22.0	22.0	22.0	21.2		19.5	68.3	16.5	65.3
Total Split (%)	17.2%	17.2%	17.2%	16.6%		15.2%	53.4%	12.9%	51.0%
Yellow Time (s)	3.9	3.9	3.9	3.9		3.4	4.7	3.4	4.7
All-Red Time (s)	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	4.9	4.9		4.4	5.7	4.4	5.7
Lead/Lag	Lag	Lag	Lag	Lead		Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None		None	C-Max	None	C-Max

Intersection Summary

Cycle Length: 128
Actuated Cycle Length: 128
Offset: 4 (3%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 70
Control Type: Actuated-Coordinated

Splits and Phases: 11: Genesee Ave & Executive Square



Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	1	19	2	105	237	2	18	80	1564	122	16	1544
Future Volume (vph)	1	19	2	105	237	2	18	80	1564	122	16	1544
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9	4.9	4.9		4.9	4.0	4.4	5.7		4.4	5.7
Lane Util. Factor		0.95	0.91	0.95		0.95	0.95	1.00	0.91		1.00	0.91
Frt		1.00	0.86	0.85		1.00	0.85	1.00	0.99		1.00	1.00
Flt Protected		0.95	1.00	1.00		0.95	1.00	0.95	1.00		0.95	1.00
Satd. Flow (prot)		1681	1456	1504		1685	1504	1770	5030		1770	5075
Flt Permitted		0.60	1.00	1.00		0.95	1.00	0.95	1.00		0.95	1.00
Satd. Flow (perm)		1055	1456	1504		1685	1504	1770	5030		1770	5075
Peak-hour factor, PHF	0.92	0.94	0.94	0.94	0.96	0.96	0.96	0.92	0.92	0.92	0.96	0.96
Adj. Flow (vph)	1	20	2	112	247	2	19	87	1700	133	17	1608
RTOR Reduction (vph)	0	0	47	50	0	0	17	0	6	0	0	1
Lane Group Flow (vph)	0	19	11	8	0	251	0	87	1827	0	17	1629
Turn Type		Split	NA	Prot	Split	NA	NA	Prot	NA		Prot	NA
Protected Phases		4	4	4	3	3		5	2		1	6
Permitted Phases												
Actuated Green, G (s)		17.1	17.1	17.1		16.3	0.0	10.7	71.9		2.8	64.0
Effective Green, g (s)		17.1	17.1	17.1		16.3	0.0	10.7	71.9		2.8	64.0
Actuated g/C Ratio		0.13	0.13	0.13		0.13	0.00	0.08	0.56		0.02	0.50
Clearance Time (s)		4.9	4.9	4.9		4.9		4.4	5.7		4.4	5.7
Vehicle Extension (s)		2.0	2.0	2.0		2.0		2.0	3.9		2.0	2.2
Lane Grp Cap (vph)		140	194	200		214	0	147	2825		38	2537
v/s Ratio Prot			0.01	0.01		c0.15		c0.05	c0.36		0.01	0.32
v/s Ratio Perm		c0.02										
v/c Ratio		0.14	0.06	0.04		1.17	0.00	0.59	0.65		0.45	0.64
Uniform Delay, d1		48.9	48.4	48.3		55.9	64.0	56.5	19.3		61.8	23.6
Progression Factor		1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.24	0.88
Incremental Delay, d2		0.2	0.0	0.0		116.1	0.0	4.2	1.2		2.7	1.1
Delay (s)		49.1	48.5	48.3		171.9	64.0	60.7	20.5		79.2	21.9
Level of Service		D	D	D		F	E	E	C		E	C
Approach Delay (s)			48.5			165.1			22.3			22.5
Approach LOS			D			F			C			C

Intersection Summary			
HCM 2000 Control Delay	32.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	128.0	Sum of lost time (s)	19.9
Intersection Capacity Utilization	69.0%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	21
Future Volume (vph)	21
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.96
Adj. Flow (vph)	22
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

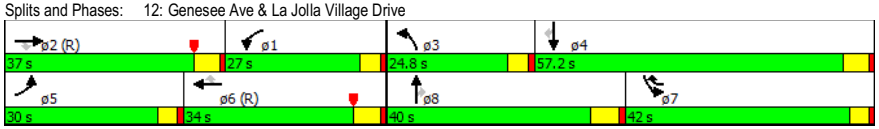
Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	334	365	312	410	629	358	327	1045	249	641	928	338
Future Volume (vph)	334	365	312	410	629	358	327	1045	249	641	928	338
Turn Type	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6	7	3	8		7	4	
Permitted Phases			2			6			8			4
Detector Phase	5	2	2	1	6	7	3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	4.0	10.0	10.0	4.0	10.0	4.0	4.0	10.0	10.0	4.0	10.0	10.0
Minimum Split (s)	8.4	15.3	15.3	8.4	15.5	8.4	8.4	15.7	15.7	8.4	15.4	15.4
Total Split (s)	30.0	37.0	37.0	27.0	34.0	42.0	24.8	40.0	40.0	42.0	57.2	57.2
Total Split (%)	20.5%	25.3%	25.3%	18.5%	23.3%	28.8%	17.0%	27.4%	27.4%	28.8%	39.2%	39.2%
Yellow Time (s)	3.4	4.3	4.3	3.4	4.5	3.4	3.4	4.7	4.7	3.4	4.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.3	5.3	4.4	5.5	4.4	4.4	5.7	5.7	4.4	5.4	5.4
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lag	Lead	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 146
Actuated Cycle Length: 146
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow, Master Intersection
Natural Cycle: 80
Control Type: Actuated-Coordinated

Splits and Phases: 12: Genesee Ave & La Jolla Village Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	334	365	312	410	629	358	327	1045	249	641	928	338
Future Volume (vph)	334	365	312	410	629	358	327	1045	249	641	928	338
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.3	5.3	4.4	5.5	4.4	4.4	5.7	5.7	4.4	5.4	5.4
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.91	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5085	1583	3433	5085	1583	3433	5085	1583	3433	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5085	1583	3433	5085	1583	3433	5085	1583	3433	5085	1583
Peak-hour factor, PHF	0.80	0.80	0.80	0.87	0.87	0.87	0.94	0.94	0.94	0.93	0.93	0.93
Adj. Flow (vph)	418	456	390	471	723	411	348	1112	265	689	998	363
RTOR Reduction (vph)	0	0	203	0	0	45	0	0	183	0	0	150
Lane Group Flow (vph)	418	456	187	471	723	366	348	1112	82	689	998	213
Turn Type	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6	7	3	8		7	4	
Permitted Phases			2			6			8			4
Actuated Green, G (s)	21.7	36.0	36.0	22.6	36.7	70.0	18.2	34.3	34.3	33.3	49.7	49.7
Effective Green, g (s)	21.7	36.0	36.0	22.6	36.7	70.0	18.2	34.3	34.3	33.3	49.7	49.7
Actuated g/C Ratio	0.15	0.25	0.25	0.15	0.25	0.48	0.12	0.23	0.23	0.23	0.34	0.34
Clearance Time (s)	4.4	5.3	5.3	4.4	5.5	4.4	4.4	5.7	5.7	4.4	5.4	5.4
Vehicle Extension (s)	2.0	6.0	6.0	2.0	5.8	2.0	2.0	3.5	3.5	2.0	4.1	4.1
Lane Grp Cap (vph)	510	1253	390	531	1278	758	427	1194	371	783	1730	538
v/s Ratio Prot	c0.12	0.09		c0.14	c0.14	0.11	0.10	c0.22		c0.20	0.20	
v/s Ratio Perm			0.12			0.12			0.05			0.13
v/c Ratio	0.82	0.36	0.48	0.89	0.57	0.48	0.81	0.93	0.22	0.88	0.58	0.40
Uniform Delay, d1	60.3	45.5	47.0	60.4	47.7	25.7	62.3	54.7	45.1	54.4	39.5	36.7
Progression Factor	0.67	0.76	1.77	0.76	0.71	0.56	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	7.3	0.6	3.1	13.7	1.5	0.1	10.8	13.0	0.4	10.8	0.6	0.7
Delay (s)	47.7	35.4	86.3	59.5	35.4	14.5	73.1	67.7	45.4	65.2	40.1	37.4
Level of Service	D	D	F	E	D	B	E	E	D	E	D	D
Approach Delay (s)		55.2			37.1			65.4			48.1	
Approach LOS		E			D			E			D	

Intersection Summary

HCM 2000 Control Delay	51.2	HCM 2000 Level of Service	D	
HCM 2000 Volume to Capacity ratio	0.84			
Actuated Cycle Length (s)	146.0	Sum of lost time (s)	20.0	
Intersection Capacity Utilization	76.8%	ICU Level of Service	D	
Analysis Period (min)	15			

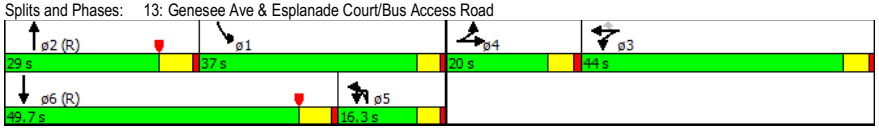
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	277	90	335	115	707	55	503	826	375
Future Volume (vph)	277	90	335	115	707	55	503	826	375
Turn Type	Split	NA	Split	NA	Perm	Prot	NA	Prot	NA
Protected Phases	4	4	3	3		5	2	1	6
Permitted Phases					3				
Detector Phase	4	4	3	3	3	5	2	1	6
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	10.0	4.0	10.0
Minimum Split (s)	8.9	8.9	8.9	8.9	8.9	8.4	16.0	8.4	15.7
Total Split (s)	20.0	20.0	44.0	44.0	44.0	16.3	29.0	37.0	49.7
Total Split (%)	15.4%	15.4%	33.8%	33.8%	33.8%	12.5%	22.3%	28.5%	38.2%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.9	3.4	5.0	3.4	4.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	4.9	4.9	4.9	4.4	6.0	4.4	5.7
Lead/Lag	Lead	Lead	Lag	Lag	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	None	C-Max

Intersection Summary

Cycle Length: 130
Actuated Cycle Length: 130
Offset: 77 (59%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 100
Control Type: Actuated-Coordinated

Splits and Phases: 13: Genesee Ave & Esplanade Court/Bus Access Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	277	90	76	335	115	707	8	55	503	378	826	375
Future Volume (vph)	277	90	76	335	115	707	8	55	503	378	826	375
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9		4.9	4.9	4.9		4.4	6.0		4.4	5.7
Lane Util. Factor	0.97	1.00		0.97	0.95	0.95		1.00	0.91		0.97	0.91
Frt	1.00	0.93		1.00	0.89	0.85		1.00	0.94		1.00	0.95
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.95	1.00		0.95	1.00
Satd. Flow (prot)	3433	1735		3433	1577	1504		1770	4758		3433	4826
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.95	1.00		0.95	1.00
Satd. Flow (perm)	3433	1735		3433	1577	1504		1770	4758		3433	4826
Peak-hour factor, PHF	0.78	0.78	0.78	0.68	0.68	0.68	0.92	0.84	0.84	0.84	0.82	0.82
Adj. Flow (vph)	355	115	97	493	169	1040	9	65	599	450	1007	457
RTOR Reduction (vph)	0	23	0	0	73	321	0	0	105	0	0	69
Lane Group Flow (vph)	355	189	0	493	543	272	0	74	944	0	1007	623
Turn Type	Split	NA		Split	NA	Perm	Prot	Prot	NA		Prot	NA
Protected Phases	4	4		3	3		5	5	2		1	6
Permitted Phases						3						
Actuated Green, G (s)	15.1	15.1		39.1	39.1	39.1		9.5	22.1		33.5	46.4
Effective Green, g (s)	15.1	15.1		39.1	39.1	39.1		9.5	22.1		33.5	46.4
Actuated g/C Ratio	0.12	0.12		0.30	0.30	0.30		0.07	0.17		0.26	0.36
Clearance Time (s)	4.9	4.9		4.9	4.9	4.9		4.4	6.0		4.4	5.7
Vehicle Extension (s)	2.0	2.0		2.0	2.0	2.0		2.0	3.7		2.0	4.1
Lane Grp Cap (vph)	398	201		1032	474	452		129	808		884	1722
v/s Ratio Prot	0.10	c0.11		0.14	c0.34			0.04	c0.20		c0.29	0.13
v/s Ratio Perm						0.18						
v/c Ratio	0.89	0.94		0.48	1.14	0.60		0.57	1.17dr		1.14	0.36
Uniform Delay, d1	56.6	57.0		37.1	45.5	38.8		58.3	54.0		48.2	30.9
Progression Factor	1.00	1.00		1.00	1.00	1.00		0.67	0.82		1.00	1.00
Incremental Delay, d2	20.9	46.3		0.1	87.5	1.6		3.2	86.9		76.3	0.6
Delay (s)	77.6	103.3		37.2	132.9	40.4		42.1	131.0		124.5	31.5
Level of Service	E	F		D	F	D		D	F		F	C
Approach Delay (s)		87.2			73.0				125.1			86.6
Approach LOS		F			E				F			F

Intersection Summary

HCM 2000 Control Delay	90.6	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.12		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	20.2
Intersection Capacity Utilization	87.0%	ICU Level of Service	E
Analysis Period (min)	15		

dr Defacto Right Lane. Recode with 1 though lane as a right lane.
c Critical Lane Group

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	193
Future Volume (vph)	193
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.82
Adj. Flow (vph)	235
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

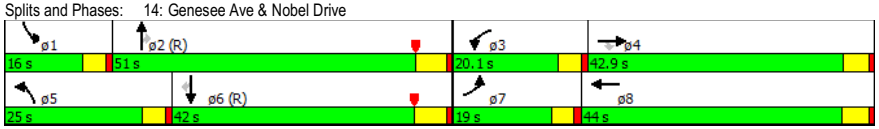
Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	201	527	323	272	589	426	700	263	128	1000	99
Future Volume (vph)	201	527	323	272	589	426	700	263	128	1000	99
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8	5	2		1	6	
Permitted Phases			4					2			6
Detector Phase	7	4	4	3	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	4.0	10.0	10.0	4.0	10.0	4.0	10.0	10.0	4.0	10.0	10.0
Minimum Split (s)	8.4	37.9	37.9	8.4	40.1	8.4	35.7	35.7	8.4	38.9	38.9
Total Split (s)	19.0	42.9	42.9	20.1	44.0	25.0	51.0	51.0	16.0	42.0	42.0
Total Split (%)	14.6%	33.0%	33.0%	15.5%	33.8%	19.2%	39.2%	39.2%	12.3%	32.3%	32.3%
Yellow Time (s)	3.4	3.9	3.9	3.4	4.1	3.4	4.7	4.7	3.4	4.9	4.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	4.9	4.9	4.4	5.1	4.4	5.7	5.7	4.4	5.9	5.9
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max

Intersection Summary

Cycle Length: 130
Actuated Cycle Length: 130
Offset: 83 (64%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 110
Control Type: Actuated-Coordinated

Splits and Phases: 14: Genesee Ave & Nobel Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	201	527	323	272	589	68	426	700	263	128	1000	99
Future Volume (vph)	201	527	323	272	589	68	426	700	263	128	1000	99
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9	4.9	4.4	5.1		4.4	5.7	5.7	4.4	5.9	5.9
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95		0.97	0.95	1.00	0.97	0.91	1.00
Frt	1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	3539	1583	3433	3484		3433	3539	1583	3433	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3539	1583	3433	3484		3433	3539	1583	3433	5085	1583
Peak-hour factor, PHF	0.90	0.90	0.90	0.87	0.87	0.87	0.87	0.87	0.87	0.92	0.92	0.92
Adj. Flow (vph)	223	586	359	313	677	78	490	805	302	139	1087	108
RTOR Reduction (vph)	0	0	208	0	7	0	0	0	108	0	0	72
Lane Group Flow (vph)	223	586	151	313	748	0	490	805	194	139	1087	36
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4						2			6
Actuated Green, G (s)	12.4	31.2	31.2	14.7	33.3		21.7	55.3	55.3	9.4	42.8	42.8
Effective Green, g (s)	12.4	31.2	31.2	14.7	33.3		21.7	55.3	55.3	9.4	42.8	42.8
Actuated g/C Ratio	0.10	0.24	0.24	0.11	0.26		0.17	0.43	0.43	0.07	0.33	0.33
Clearance Time (s)	4.4	4.9	4.9	4.4	5.1		4.4	5.7	5.7	4.4	5.9	5.9
Vehicle Extension (s)	2.0	4.0	4.0	2.0	2.1		2.0	8.0	8.0	2.0	4.0	4.0
Lane Grp Cap (vph)	327	849	379	388	892		573	1505	673	248	1674	521
v/s Ratio Prot	0.06	0.17		c0.09	c0.21		c0.14	0.23		0.04	c0.21	
v/s Ratio Perm			0.10						0.12			0.02
v/c Ratio	0.68	0.69	0.40	0.81	0.84		0.86	0.53	0.29	0.56	0.65	0.07
Uniform Delay, d1	56.9	45.0	41.5	56.3	45.8		52.6	27.8	24.5	58.3	37.2	29.9
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.21	0.41	0.15	1.23	0.67	0.67
Incremental Delay, d2	4.6	2.6	0.9	11.0	6.7		10.1	1.2	0.9	1.6	1.9	0.2
Delay (s)	61.5	47.6	42.4	67.3	52.5		73.5	12.5	4.5	73.5	26.7	20.2
Level of Service	E	D	D	E	D		E	B	A	E	C	C
Approach Delay (s)		48.7			56.8			29.7			31.1	
Approach LOS		D			E			C			C	

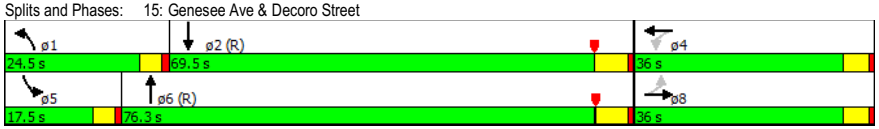
Intersection Summary				
HCM 2000 Control Delay	40.0	HCM 2000 Level of Service	D	
HCM 2000 Volume to Capacity ratio	0.78			
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	19.8	
Intersection Capacity Utilization	72.2%	ICU Level of Service	C	
Analysis Period (min)	15			

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	24	4	5	3	7	1249	139	1356
Future Volume (vph)	24	4	5	3	7	1249	139	1356
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		8		4	1	6	5	2
Permitted Phases	8		4					
Detector Phase	8	8	4	4	1	6	5	2
Switch Phase								
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	10.0	4.0	10.0
Minimum Split (s)	8.9	8.9	8.9	8.9	8.4	15.7	8.4	15.9
Total Split (s)	36.0	36.0	36.0	36.0	24.5	76.3	17.5	69.5
Total Split (%)	27.7%	27.7%	27.7%	27.7%	18.8%	58.7%	13.5%	53.5%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.4	4.7	3.4	4.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.9		4.9	4.4	5.7	4.4	5.9
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	None	C-Max

Intersection Summary
Cycle Length: 130
Actuated Cycle Length: 130
Offset: 97 (75%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow
Natural Cycle: 60
Control Type: Actuated-Coordinated

Splits and Phases: 15: Genesee Ave & Decoro Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	24	4	4	5	3	158	7	1249	10	139	1356	33
Future Volume (vph)	24	4	4	5	3	158	7	1249	10	139	1356	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9			4.9		4.4	5.7		4.4	5.9	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frt		0.98			0.87		1.00	1.00		1.00	1.00	
Flt Protected		0.96			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1766			1621		1770	3535		1770	3527	
Flt Permitted		0.42			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		762			1606		1770	3535		1770	3527	
Peak-hour factor, PHF	0.73	0.73	0.73	0.88	0.88	0.88	0.91	0.91	0.91	0.96	0.96	0.96
Adj. Flow (vph)	33	5	5	6	3	180	8	1373	11	145	1412	34
RTOR Reduction (vph)	0	5	0	0	168	0	0	0	0	0	1	0
Lane Group Flow (vph)	0	38	0	0	21	0	8	1384	0	145	1446	0
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		8			4		1	6		5	2	
Permitted Phases	8			4								
Actuated Green, G (s)		8.5			8.5		1.3	90.7		15.8	105.0	
Effective Green, g (s)		8.5			8.5		1.3	90.7		15.8	105.0	
Actuated g/C Ratio		0.07			0.07		0.01	0.70		0.12	0.81	
Clearance Time (s)		4.9			4.9		4.4	5.7		4.4	5.9	
Vehicle Extension (s)		2.0			2.0		2.0	4.3		2.0	3.7	
Lane Grp Cap (vph)		49			105		17	2466		215	2848	
v/s Ratio Prot							0.00	c0.39		c0.08	0.41	
v/s Ratio Perm		c0.05			0.01							
v/c Ratio		0.78			0.20		0.47	0.56		0.67	0.51	
Uniform Delay, d1		59.8			57.5		64.0	9.8		54.6	4.1	
Progression Factor		1.00			1.00		0.98	2.14		0.77	1.74	
Incremental Delay, d2		51.8			0.3		6.8	0.9		4.9	0.5	
Delay (s)		111.6			57.9		69.2	21.8		46.8	7.6	
Level of Service		F			E		E	C		D	A	
Approach Delay (s)		111.6			57.9			22.1			11.1	
Approach LOS		F			E			C			B	

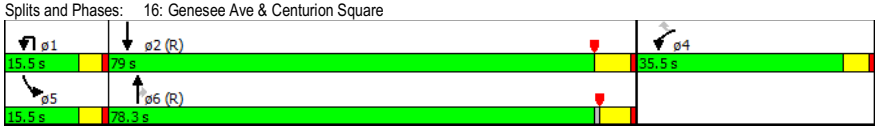
Intersection Summary			
HCM 2000 Control Delay	20.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	15.2
Intersection Capacity Utilization	69.6%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	90	28	2	1089	66	66	1252
Future Volume (vph)	90	28	2	1089	66	66	1252
Turn Type	Prot	Perm	Prot	NA	Perm	Prot	NA
Protected Phases	4		1	6		5	2
Permitted Phases		4			6		
Detector Phase	4	4	1	6	6	5	2
Switch Phase							
Minimum Initial (s)	7.0	7.0	4.0	10.0	10.0	4.0	10.0
Minimum Split (s)	11.9	11.9	8.4	15.7	15.7	8.4	16.4
Total Split (s)	35.5	35.5	15.5	78.3	78.3	15.5	79.0
Total Split (%)	27.3%	27.3%	11.9%	60.2%	60.2%	11.9%	60.8%
Yellow Time (s)	3.9	3.9	3.4	4.7	4.7	3.4	5.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	4.4	5.7	5.7	4.4	6.4
Lead/Lag			Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?			Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	C-Max	C-Max	None	C-Max

Intersection Summary
Cycle Length: 130
Actuated Cycle Length: 130
Offset: 37 (28%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow
Natural Cycle: 60
Control Type: Actuated-Coordinated

Splits and Phases: 16: Genesee Ave & Centurion Square



Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	90	28	2	1089	66	66	1252
Future Volume (vph)	90	28	2	1089	66	66	1252
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9	4.4	5.7	5.7	4.4	6.4
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	0.97	0.95
Frt	1.00	0.85	1.00	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	1770	3539	1583	3433	3539
Flt Permitted	0.95	1.00	0.95	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	1770	3539	1583	3433	3539
Peak-hour factor, PHF	0.66	0.66	0.92	0.90	0.90	0.94	0.94
Adj. Flow (vph)	136	42	2	1210	73	70	1332
RTOR Reduction (vph)	0	37	0	0	18	0	0
Lane Group Flow (vph)	136	5	2	1210	55	70	1332
Turn Type	Prot	Perm	Prot	NA	Perm	Prot	NA
Protected Phases	4		1	6		5	2
Permitted Phases		4			6		
Actuated Green, G (s)	14.4	14.4	1.1	94.5	94.5	6.1	98.8
Effective Green, g (s)	14.4	14.4	1.1	94.5	94.5	6.1	98.8
Actuated g/C Ratio	0.11	0.11	0.01	0.73	0.73	0.05	0.76
Clearance Time (s)	4.9	4.9	4.4	5.7	5.7	4.4	6.4
Vehicle Extension (s)	2.0	2.0	2.0	4.2	4.2	2.0	3.4
Lane Grp Cap (vph)	196	175	14	2572	1150	161	2689
v/s Ratio Prot	c0.08		0.00	0.34		c0.02	c0.38
v/s Ratio Perm		0.00			0.03		
v/c Ratio	0.69	0.03	0.14	0.47	0.05	0.43	0.50
Uniform Delay, d1	55.7	51.5	64.0	7.4	5.0	60.3	6.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.26	0.66
Incremental Delay, d2	8.3	0.0	1.7	0.6	0.1	0.6	0.6
Delay (s)	64.0	51.6	65.7	8.0	5.1	76.5	4.5
Level of Service	E	D	E	A	A	E	A
Approach Delay (s)	61.0			7.9			8.1
Approach LOS	E			A			A

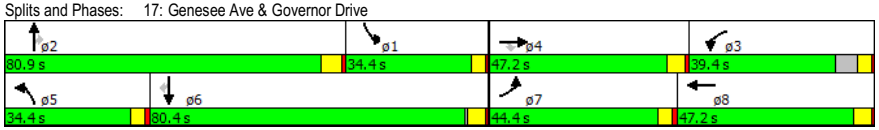
Intersection Summary			
HCM 2000 Control Delay	11.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	15.7
Intersection Capacity Utilization	49.9%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	272	279	110	205	258	133	585	148	330	612	217
Future Volume (vph)	272	279	110	205	258	133	585	148	330	612	217
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8	5	2		1	6	
Permitted Phases			4					2			6
Detector Phase	7	4	4	3	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	4.0	8.0	8.0	4.0	8.0	4.0	8.0	8.0	4.0	8.0	8.0
Minimum Split (s)	8.4	13.2	13.2	8.4	13.2	8.4	13.9	13.9	8.4	13.4	13.4
Total Split (s)	44.4	47.2	47.2	39.4	47.2	34.4	80.9	80.9	34.4	80.4	80.4
Total Split (%)	21.5%	22.8%	22.8%	19.0%	22.8%	16.6%	39.1%	39.1%	16.6%	38.9%	38.9%
Yellow Time (s)	3.4	4.2	4.2	3.4	4.2	3.4	4.9	4.9	3.4	4.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.2	5.2	4.4	5.2	4.4	5.9	5.9	4.4	5.4	5.4
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lead	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	Min

Intersection Summary
Cycle Length: 206.9
Actuated Cycle Length: 111.2
Natural Cycle: 60
Control Type: Actuated-Uncoordinated

Splits and Phases: 17: Genesee Ave & Governor Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	272	279	110	205	258	208	133	585	148	330	612	217
Future Volume (vph)	272	279	110	205	258	208	133	585	148	330	612	217
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	16	12	12	12	12	12	12	12
Total Lost time (s)	4.4	5.2	5.2	4.4	5.2		4.4	5.9	5.9	4.4	5.4	5.4
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95		1.00	0.95	1.00	0.97	0.95	1.00
Frt	1.00	1.00	0.85	1.00	0.93		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	3539	1583	3433	3742		1770	3539	1583	3433	3539	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3539	1583	3433	3742		1770	3539	1583	3433	3539	1583
Peak-hour factor, PHF	0.94	0.94	0.94	0.83	0.83	0.83	0.93	0.93	0.93	0.83	0.83	0.83
Adj. Flow (vph)	289	297	117	247	311	251	143	629	159	398	737	261
RTOR Reduction (vph)	0	0	80	0	69	0	0	0	57	0	0	55
Lane Group Flow (vph)	289	297	37	247	493	0	143	629	102	398	737	206
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4						2			6
Actuated Green, G (s)	15.8	16.1	16.1	23.7	24.0		15.2	30.2	30.2	20.3	35.8	35.8
Effective Green, g (s)	15.8	16.1	16.1	23.7	24.0		15.2	30.2	30.2	20.3	35.8	35.8
Actuated g/C Ratio	0.14	0.15	0.15	0.22	0.22		0.14	0.27	0.27	0.18	0.32	0.32
Clearance Time (s)	4.4	5.2	5.2	4.4	5.2		4.4	5.9	5.9	4.4	5.4	5.4
Vehicle Extension (s)	2.0	2.3	2.3	2.0	3.8		2.0	2.9	2.9	2.0	3.5	3.5
Lane Grp Cap (vph)	492	517	231	738	814		244	969	433	632	1149	514
v/s Ratio Prot	c0.08	0.08		0.07	c0.13		0.08	c0.18		0.12	c0.21	
v/s Ratio Perm			0.02						0.06			0.13
v/c Ratio	0.59	0.57	0.16	0.33	0.61		0.59	0.65	0.23	0.63	0.64	0.40
Uniform Delay, d1	44.2	43.9	41.1	36.6	38.8		44.5	35.3	31.0	41.5	31.7	28.9
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.2	1.1	0.2	0.1	1.4		2.3	1.5	0.3	1.4	1.3	0.6
Delay (s)	45.3	45.0	41.3	36.7	40.3		46.9	36.8	31.3	42.9	33.0	29.5
Level of Service	D	D	D	D	D		D	D	C	D	C	C
Approach Delay (s)		44.5			39.2			37.4			35.2	
Approach LOS		D			D			D			D	

Intersection Summary				
HCM 2000 Control Delay	38.3	HCM 2000 Level of Service	D	
HCM 2000 Volume to Capacity ratio	0.64			
Actuated Cycle Length (s)	110.2	Sum of lost time (s)	19.9	
Intersection Capacity Utilization	63.7%	ICU Level of Service	B	
Analysis Period (min)	15			
c Critical Lane Group				

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	209	171	704	668	194
Future Volume (Veh/h)	0	209	171	704	668	194
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.87	0.87	0.83	0.83	0.87	0.87
Hourly flow rate (vph)	0	240	206	848	768	223
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1604	384	768			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1604	384	768			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	61	76			
cM capacity (veh/h)	73	614	842			

Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	240	206	424	424	384	384	223
Volume Left	0	206	0	0	0	0	0
Volume Right	240	0	0	0	0	0	223
cSH	614	842	1700	1700	1700	1700	1700
Volume to Capacity	0.39	0.24	0.25	0.25	0.23	0.23	0.13
Queue Length 95th (ft)	46	24	0	0	0	0	0
Control Delay (s)	14.6	10.7	0.0	0.0	0.0	0.0	0.0
Lane LOS	B	B					
Approach Delay (s)	14.6	2.1			0.0		
Approach LOS	B						

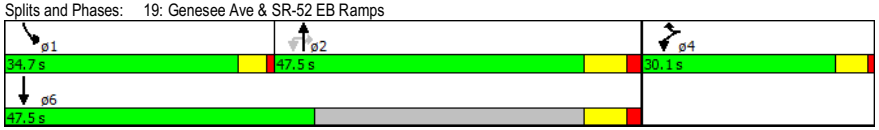
Intersection Summary				
Average Delay	2.5			
Intersection Capacity Utilization	38.1%	ICU Level of Service		A
Analysis Period (min)	15			

Lane Group	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	201	165	2	764	331	576	314
Future Volume (vph)	201	165	2	764	331	576	314
Turn Type	Prot	Prot	Perm	NA	Perm	Prot	NA
Protected Phases	4	4		2		1	6
Permitted Phases			2		2		
Detector Phase	4	4	2	2	2	1	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	13.0	13.0	13.0	5.0	10.0
Minimum Split (s)	37.1	37.1	38.5	38.5	38.5	9.7	25.5
Total Split (s)	30.1	30.1	47.5	47.5	47.5	34.7	47.5
Total Split (%)	26.8%	26.8%	42.3%	42.3%	42.3%	30.9%	42.3%
Yellow Time (s)	4.1	4.1	5.5	5.5	5.5	3.7	5.5
All-Red Time (s)	1.0	1.0	2.0	2.0	2.0	1.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	5.1	5.1		7.5	7.5	4.7	7.5
Lead/Lag			Lag	Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	Yes	
Recall Mode	None	None	Min	Min	Min	None	Min

Intersection Summary

Cycle Length: 112.3
Actuated Cycle Length: 99.9
Natural Cycle: 140
Control Type: Actuated-Uncoordinated

Splits and Phases: 19: Genesee Ave & SR-52 EB Ramps



Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	201	165	2	764	331	576	314
Future Volume (vph)	201	165	2	764	331	576	314
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1		7.5	7.5	4.7	7.5
Lane Util. Factor	1.00	1.00		0.95	1.00	1.00	0.95
Frt	1.00	0.85		1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00		1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583		3539	1583	1770	3539
Flt Permitted	0.95	1.00		0.95	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583		3377	1583	1770	3539
Peak-hour factor, PHF	0.92	0.92	0.92	0.82	0.82	0.90	0.90
Adj. Flow (vph)	218	179	2	932	404	640	349
RTOR Reduction (vph)	0	147	0	0	160	0	0
Lane Group Flow (vph)	218	32	0	934	244	640	349
Turn Type	Prot	Prot	Perm	NA	Perm	Prot	NA
Protected Phases	4	4		2		1	6
Permitted Phases			2		2		
Actuated Green, G (s)	17.6	17.6		34.4	34.4	30.4	69.5
Effective Green, g (s)	17.6	17.6		34.4	34.4	30.4	69.5
Actuated g/C Ratio	0.18	0.18		0.35	0.35	0.30	0.70
Clearance Time (s)	5.1	5.1		7.5	7.5	4.7	7.5
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	312	279		1165	546	539	2467
v/s Ratio Prot	c0.12	0.02				c0.36	0.10
v/s Ratio Perm				c0.28	0.15		
v/c Ratio	0.70	0.11		0.80	0.45	1.19	0.14
Uniform Delay, d1	38.6	34.5		29.6	25.3	34.7	5.1
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	6.7	0.2		4.1	0.6	101.8	0.0
Delay (s)	45.2	34.7		33.6	25.9	136.5	5.1
Level of Service	D	C		C	C	F	A
Approach Delay (s)	40.5			31.3			90.1
Approach LOS	D			C			F

Intersection Summary

HCM 2000 Control Delay	54.0	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.92		
Actuated Cycle Length (s)	99.7	Sum of lost time (s)	17.3
Intersection Capacity Utilization	81.0%	ICU Level of Service	D
Analysis Period (min)	15		

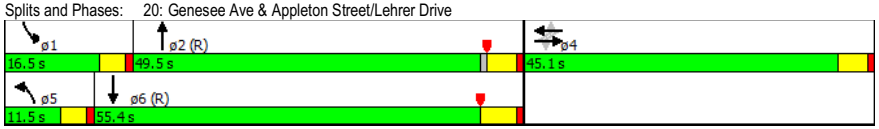
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	284	14	6	9	7	678	84	627
Future Volume (vph)	284	14	6	9	7	678	84	627
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		4	5	2	1	6
Permitted Phases	4		4					
Detector Phase	4	4	4	4	5	2	1	6
Switch Phase								
Minimum Initial (s)	6.0	6.0	6.0	6.0	4.0	10.0	4.0	10.0
Minimum Split (s)	10.9	10.9	10.9	10.9	8.4	14.9	8.4	15.8
Total Split (s)	45.1	45.1	45.1	45.1	11.5	49.5	16.5	55.4
Total Split (%)	40.3%	40.3%	40.3%	40.3%	10.3%	44.2%	14.7%	49.5%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.4	3.9	3.4	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.9		4.9	4.4	4.9	4.4	5.8
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	None	C-Max

Intersection Summary

Cycle Length: 112
Actuated Cycle Length: 112
Offset: 88 (79%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 60
Control Type: Actuated-Coordinated

Splits and Phases: 20: Genesee Ave & Appleton Street/Lehrer Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	284	14	9	6	9	143	7	678	7	84	627	132
Future Volume (vph)	284	14	9	6	9	143	7	678	7	84	627	132
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	16	12	12	16	12	12	12	12	12	12	12
Total Lost time (s)		4.9			4.9		4.4	4.9		4.4	5.8	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frt		1.00			0.88		1.00	1.00		1.00	0.97	
Flt Protected		0.96			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		2010			1849		1770	3534		1770	3447	
Flt Permitted		0.53			0.98		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1117			1822		1770	3534		1770	3447	
Peak-hour factor, PHF	0.75	0.75	0.75	0.73	0.73	0.73	0.90	0.90	0.90	0.91	0.91	0.91
Adj. Flow (vph)	379	19	12	8	12	196	8	753	8	92	689	145
RTOR Reduction (vph)	0	1	0	0	126	0	0	1	0	0	14	0
Lane Group Flow (vph)	0	409	0	0	90	0	8	760	0	92	820	0
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4			4								
Actuated Green, G (s)		40.2			40.2		1.4	48.7		8.9	55.3	
Effective Green, g (s)		40.2			40.2		1.4	48.7		8.9	55.3	
Actuated g/C Ratio		0.36			0.36		0.01	0.43		0.08	0.49	
Clearance Time (s)		4.9			4.9		4.4	4.9		4.4	5.8	
Vehicle Extension (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		400			653		22	1536		140	1701	
v/s Ratio Prot							0.00	0.22		c0.05	c0.24	
v/s Ratio Perm		c0.37			0.05							
v/c Ratio		1.02			0.14		0.36	0.50		0.66	0.48	
Uniform Delay, d1		35.9			24.2		54.9	22.8		50.1	18.8	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		50.7			0.1		9.9	1.1		10.6	1.0	
Delay (s)		86.6			24.3		64.8	23.9		60.7	19.8	
Level of Service		F			C		E	C		E	B	
Approach Delay (s)		86.6			24.3			24.4			23.9	
Approach LOS		F			C			C			C	

Intersection Summary

HCM 2000 Control Delay	35.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	112.0	Sum of lost time (s)	15.1
Intersection Capacity Utilization	68.2%	ICU Level of Service	C
Analysis Period (min)	15		

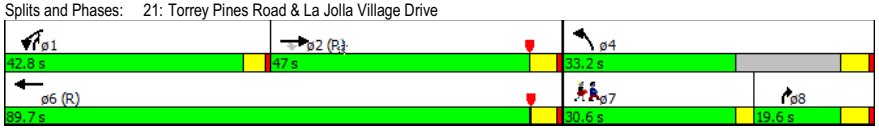
c Critical Lane Group

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	ø7	ø8
Lane Configurations								
Traffic Volume (vph)	794	166	779	723	144	740		
Future Volume (vph)	794	166	779	723	144	740		
Turn Type	NA	Perm	Prot	NA	Prot	pt+ov		
Protected Phases	2		1	6	4	8 1	7	8
Permitted Phases		2						
Detector Phase	2	2	1	6	4	8 1		
Switch Phase								
Minimum Initial (s)	10.0	10.0	4.0	10.0	4.0		4.0	4.0
Minimum Split (s)	15.4	15.4	8.4	15.3	9.6		8.0	9.6
Total Split (s)	47.0	47.0	42.8	89.7	33.2		30.6	19.6
Total Split (%)	33.6%	33.6%	30.6%	64.1%	23.7%		22%	14%
Yellow Time (s)	4.4	4.4	3.4	4.3	4.6		3.0	4.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		0.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0			
Total Lost Time (s)	5.4	5.4	4.4	5.3	5.6			
Lead/Lag	Lag	Lag	Lead				Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes				Yes	Yes
Recall Mode	C-Max	C-Max	None	C-Max	None		None	None

Intersection Summary

Cycle Length: 140
Actuated Cycle Length: 140
Offset: 15 (11%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 70
Control Type: Actuated-Coordinated

Splits and Phases: 21: Torrey Pines Road & La Jolla Village Drive



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	794	166	779	723	144	740
Future Volume (vph)	794	166	779	723	144	740
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.4	5.4	4.4	5.3	5.6	5.6
Lane Util. Factor	0.91	1.00	0.97	0.91	0.97	0.88
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	5085	1583	3433	5085	3433	2787
Flt Permitted	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (perm)	5085	1583	3433	5085	3433	2787
Peak-hour factor, PHF	0.76	0.76	0.91	0.91	0.82	0.82
Adj. Flow (vph)	1045	218	856	795	176	902
RTOR Reduction (vph)	0	131	0	0	0	0
Lane Group Flow (vph)	1045	87	856	795	176	902
Turn Type	NA	Perm	Prot	NA	Prot	pt+ov
Protected Phases	2		1	6	4	8 1
Permitted Phases		2				
Actuated Green, G (s)	53.4	53.4	38.5	96.4	32.7	76.8
Effective Green, g (s)	53.4	53.4	38.5	96.4	32.7	76.8
Actuated g/C Ratio	0.38	0.38	0.28	0.69	0.23	0.55
Clearance Time (s)	5.4	5.4	4.4	5.3	5.6	
Vehicle Extension (s)	5.5	5.5	2.0	8.0	2.0	
Lane Grp Cap (vph)	1939	603	944	3501	801	1528
v/s Ratio Prot	c0.21		c0.25	0.16	0.05	c0.32
v/s Ratio Perm		0.05				
v/c Ratio	0.54	0.14	0.91	0.23	0.22	0.59
Uniform Delay, d1	33.7	28.3	49.0	8.0	43.3	21.1
Progression Factor	1.00	1.00	0.93	0.87	1.00	1.00
Incremental Delay, d2	1.1	0.5	11.4	0.1	0.1	0.4
Delay (s)	34.8	28.8	57.1	7.2	43.4	21.5
Level of Service	C	C	E	A	D	C
Approach Delay (s)	33.8			33.0	25.1	
Approach LOS	C			C	C	

Intersection Summary

HCM 2000 Control Delay	31.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	18.4
Intersection Capacity Utilization	54.5%	ICU Level of Service	A
Analysis Period (min)	15		

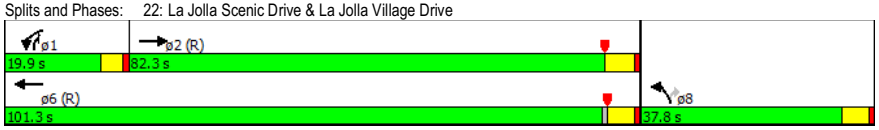
c Critical Lane Group

Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Configurations					
Traffic Volume (vph)	1425	220	1391	111	234
Future Volume (vph)	1425	220	1391	111	234
Turn Type	NA	Prot	NA	Prot	pm+ov
Protected Phases	2	1	6	8	1
Permitted Phases					8
Detector Phase	2	1	6	8	1
Switch Phase					
Minimum Initial (s)	10.0	4.0	10.0	4.0	4.0
Minimum Split (s)	15.7	8.4	15.3	9.5	8.4
Total Split (s)	82.3	19.9	101.3	37.8	19.9
Total Split (%)	58.8%	14.2%	72.4%	27.0%	14.2%
Yellow Time (s)	4.7	3.4	4.3	4.5	3.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.7	4.4	5.3	5.5	4.4
Lead/Lag	Lag	Lead			Lead
Lead-Lag Optimize?	Yes	Yes			Yes
Recall Mode	C-Max	None	C-Max	None	None

Intersection Summary

Cycle Length: 140
Actuated Cycle Length: 140
Offset: 12 (9%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 75
Control Type: Actuated-Coordinated

Splits and Phases: 22: La Jolla Scenic Drive & La Jolla Village Drive



Movement	EBU	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations							
Traffic Volume (vph)	1	1425	95	220	1391	111	234
Future Volume (vph)	1	1425	95	220	1391	111	234
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.7		4.4	5.3	5.5	4.4
Lane Util. Factor		0.91		0.97	0.91	1.00	0.88
Frt		0.99		1.00	1.00	1.00	0.85
Flt Protected		1.00		0.95	1.00	0.95	1.00
Satd. Flow (prot)		5037		3433	5085	1770	2787
Flt Permitted		0.94		0.95	1.00	0.95	1.00
Satd. Flow (perm)		4733		3433	5085	1770	2787
Peak-hour factor, PHF	0.92	0.95	0.95	0.92	0.92	0.88	0.88
Adj. Flow (vph)	1	1500	100	239	1512	126	266
RTOR Reduction (vph)	0	4	0	0	0	0	37
Lane Group Flow (vph)	0	1597	0	239	1512	126	229
Turn Type		NA		Prot	NA	Prot	pm+ov
Protected Phases		2		1	6	8	1
Permitted Phases							8
Actuated Green, G (s)		95.9		14.1	114.8	14.4	28.5
Effective Green, g (s)		95.9		14.1	114.8	14.4	28.5
Actuated g/C Ratio		0.69		0.10	0.82	0.10	0.20
Clearance Time (s)		5.7		4.4	5.3	5.5	4.4
Vehicle Extension (s)		4.0		2.0	5.9	2.0	2.0
Lane Grp Cap (vph)		3242		345	4169	182	567
v/s Ratio Prot				c0.07	0.30	c0.07	0.04
v/s Ratio Perm		c0.34					0.04
v/c Ratio		8.33dr		0.69	0.36	0.69	0.40
Uniform Delay, d1		10.5		60.9	3.2	60.7	48.4
Progression Factor		1.03		1.00	1.00	1.00	1.00
Incremental Delay, d2		0.4		4.8	0.2	8.8	0.2
Delay (s)		11.3		65.7	3.5	69.5	48.5
Level of Service		B		E	A	E	D
Approach Delay (s)		11.3			12.0	55.3	
Approach LOS		B			B	E	

Intersection Summary

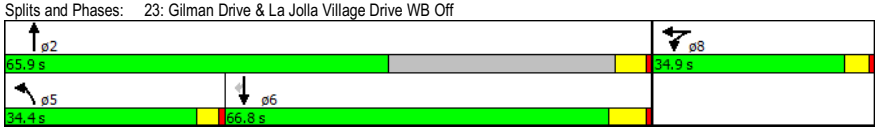
HCM 2000 Control Delay	16.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	15.6
Intersection Capacity Utilization	76.4%	ICU Level of Service	D
Analysis Period (min)	15		

dr Defacto Right Lane. Recode with 1 though lane as a right lane.
c Critical Lane Group

Lane Group	WBT	NBL	NBT	SBT	SBR
Lane Configurations					
Traffic Volume (vph)	0	186	229	256	100
Future Volume (vph)	0	186	229	256	100
Turn Type	NA	Prot	NA	NA	Perm
Protected Phases	8	5	2	6	
Permitted Phases					6
Detector Phase	8	5	2	6	6
Switch Phase					
Minimum Initial (s)	4.0	4.0	10.0	10.0	10.0
Minimum Split (s)	34.9	8.5	17.9	18.8	18.8
Total Split (s)	34.9	34.4	65.9	66.8	66.8
Total Split (%)	25.6%	25.3%	48.4%	49.1%	49.1%
Yellow Time (s)	3.9	3.4	4.9	5.8	5.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.4	5.9	6.8	6.8
Lead/Lag		Lead		Lag	Lag
Lead-Lag Optimize?		Yes		Yes	Yes
Recall Mode	None	None	Min	Min	Min

Intersection Summary
Cycle Length: 136.1
Actuated Cycle Length: 44.2
Natural Cycle: 65
Control Type: Actuated-Uncoordinated

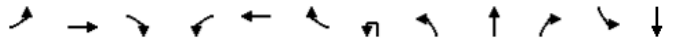
Splits and Phases: 23: Gilman Drive & La Jolla Village Drive WB Off



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	8	0	133	186	229	0	0	256	100
Future Volume (vph)	0	0	0	8	0	133	186	229	0	0	256	100
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.9		4.4	5.9			6.8	6.8
Lane Util. Factor					1.00		1.00	0.95			0.95	1.00
Frt					0.87		1.00	1.00			1.00	0.85
Flt Protected					1.00		0.95	1.00			1.00	1.00
Satd. Flow (prot)					1621		1770	3539			3539	1583
Flt Permitted					1.00		0.95	1.00			1.00	1.00
Satd. Flow (perm)					1621		1770	3539			3539	1583
Peak-hour factor, PHF	0.25	0.25	0.25	0.84	0.84	0.84	0.96	0.96	0.96	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	10	0	158	194	239	0	0	284	111
RTOR Reduction (vph)	0	0	0	0	134	0	0	0	0	0	0	84
Lane Group Flow (vph)	0	0	0	0	34	0	194	239	0	0	284	27
Turn Type				Split	NA		Prot	NA			NA	Perm
Protected Phases				8	8		5	2			6	
Permitted Phases												6
Actuated Green, G (s)					6.7		10.4	26.6			10.9	10.9
Effective Green, g (s)					6.7		10.4	26.6			10.9	10.9
Actuated g/C Ratio					0.15		0.24	0.60			0.25	0.25
Clearance Time (s)					4.9		4.4	5.9			6.8	6.8
Vehicle Extension (s)					3.0		3.0	3.0			3.0	3.0
Lane Grp Cap (vph)					246		417	2134			874	391
v/s Ratio Prot					c0.02		c0.11	0.07			c0.08	
v/s Ratio Perm												0.02
v/c Ratio					0.14		0.47	0.11			0.32	0.07
Uniform Delay, d1					16.2		14.5	3.7			13.6	12.7
Progression Factor					1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2					0.3		0.8	0.0			0.2	0.1
Delay (s)					16.5		15.3	3.7			13.8	12.8
Level of Service					B		B	A			B	B
Approach Delay (s)		0.0			16.5			8.9			13.5	
Approach LOS		A			B			A			B	

Intersection Summary					
HCM 2000 Control Delay	12.0	HCM 2000 Level of Service	B		
HCM 2000 Volume to Capacity ratio	0.33				
Actuated Cycle Length (s)	44.1	Sum of lost time (s)	16.1		
Intersection Capacity Utilization	Err%	ICU Level of Service	H		
Analysis Period (min)	15				

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (veh/h)	27	6	340	0	0	227	2	0	410	50	92	183
Future Volume (Veh/h)	27	6	340	0	0	227	2	0	410	50	92	183
Sign Control		Stop			Stop				Free			Free
Grade		0%			0%				0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	29	7	370	0	0	247	0	0	446	54	100	199
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)			13									
Median type									None			None
Median storage veh)												
Upstream signal (ft)												483
pX, platoon unblocked							0.00					
vC, conflicting volume	869	899	100	934	845	223	0	199			500	
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	869	899	100	934	845	223	0	199			500	
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	0.0	4.1			4.1	
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	0.0	2.2			2.2	
p0 queue free %	81	97	61	100	100	68	0	100			91	
cM capacity (veh/h)	156	251	937	121	270	780	0	1371			1060	

Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	399	223	223	54	100	100	100
Volume Left	29	0	0	0	100	0	0
Volume Right	370	0	0	54	0	0	0
cSH	1010	1700	1700	1700	1060	1700	1700
Volume to Capacity	0.39	0.13	0.13	0.03	0.09	0.06	0.06
Queue Length 95th (ft)	48	0	0	0	8	0	0
Control Delay (s)	12.9	0.0	0.0	0.0	8.7	0.0	0.0
Lane LOS	B				A		
Approach Delay (s)	Err	0.0			2.9		
Approach LOS	F						

Intersection Summary				
Average Delay	Err			
Intersection Capacity Utilization	Err%	ICU Level of Service	H	
Analysis Period (min)	15			

Movement	SBR
Lane Configurations	
Traffic Volume (veh/h)	0
Future Volume (Veh/h)	0
Sign Control	
Grade	
Peak Hour Factor	0.92
Hourly flow rate (vph)	0
Pedestrians	
Lane Width (ft)	
Walking Speed (ft/s)	
Percent Blockage	
Right turn flare (veh)	
Median type	
Median storage veh)	
Upstream signal (ft)	
pX, platoon unblocked	
vC, conflicting volume	
vC1, stage 1 conf vol	
vC2, stage 2 conf vol	
vCu, unblocked vol	
tC, single (s)	
tC, 2 stage (s)	
tF (s)	
p0 queue free %	
cM capacity (veh/h)	

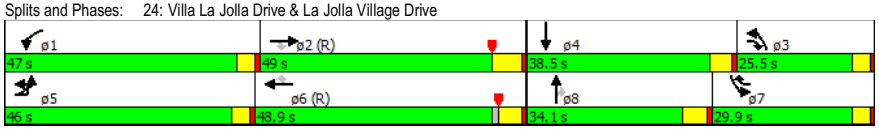
Direction, Lane #

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	71	1032	165	910	963	833	182	1111	647	700	295
Future Volume (vph)	71	1032	165	910	963	833	182	1111	647	700	295
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA
Protected Phases	5	2	3	1	6	7	3	8		7	4
Permitted Phases			2			6			8		
Detector Phase	5	2	3	1	6	7	3	8	8	7	4
Switch Phase											
Minimum Initial (s)	4.0	10.0	4.0	4.0	10.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.4	16.4	22.4	8.4	15.3	8.4	22.4	9.5	9.5	8.4	8.9
Total Split (s)	46.0	49.0	25.5	47.0	48.9	29.9	25.5	34.1	34.1	29.9	38.5
Total Split (%)	28.8%	30.6%	15.9%	29.4%	30.6%	18.7%	15.9%	21.3%	21.3%	18.7%	24.1%
Yellow Time (s)	3.4	5.4	3.4	3.4	4.3	3.4	3.4	4.5	4.5	3.4	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	6.4	4.4	4.4	5.3	4.4	4.4	5.5	5.5	4.4	4.9
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	C-Max	None	None	None	None	None	None

Intersection Summary

Cycle Length: 160
Actuated Cycle Length: 160
Offset: 4 (3%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 24: Villa La Jolla Drive & La Jolla Village Drive



Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	65	71	1032	165	910	963	833	182	1111	647	700	295
Future Volume (vph)	65	71	1032	165	910	963	833	182	1111	647	700	295
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.4	6.4	4.4	4.4	5.3	4.4	4.4	5.5	5.5	4.4	4.9
Lane Util. Factor		1.00	0.91	1.00	0.97	0.91	1.00	0.97	0.95	0.95	0.97	1.00
Frt		1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99	0.85	1.00	0.97
Flt Protected		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)		1770	5085	1583	3433	5085	1583	3433	1755	1504	3433	1812
Flt Permitted		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Satd. Flow (perm)		1770	5085	1583	3433	5085	1583	3433	1755	1504	3433	1812
Peak-hour factor, PHF	0.92	0.93	0.93	0.93	0.95	0.95	0.95	0.89	0.89	0.89	0.88	0.88
Adj. Flow (vph)	71	76	1110	177	958	1014	877	204	1248	727	795	335
RTOR Reduction (vph)	0	0	0	36	0	0	184	0	2	130	0	5
Lane Group Flow (vph)	0	147	1110	141	958	1014	693	204	1319	524	795	404
Turn Type	Prot	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA
Protected Phases	5	5	2	3	1	6	7	3	8		7	4
Permitted Phases				2			6			8		
Actuated Green, G (s)		17.8	42.6	63.7	42.6	68.5	94.0	21.1	28.6	28.6	25.5	33.6
Effective Green, g (s)		17.8	42.6	63.7	42.6	68.5	94.0	21.1	28.6	28.6	25.5	33.6
Actuated g/C Ratio		0.11	0.27	0.40	0.27	0.43	0.59	0.13	0.18	0.18	0.16	0.21
Clearance Time (s)		4.4	6.4	4.4	4.4	5.3	4.4	4.4	5.5	5.5	4.4	4.9
Vehicle Extension (s)		2.0	4.4	2.0	2.0	4.7	2.0	2.0	3.3	3.3	2.0	2.0
Lane Grp Cap (vph)		196	1353	630	914	2177	930	452	313	268	547	380
v/s Ratio Prot		0.08	c0.22	0.03	c0.28	0.20	0.12	0.06	c0.75		c0.23	0.22
v/s Ratio Perm				0.06			0.32			0.35		
v/c Ratio		0.75	0.82	0.22	1.05	0.47	0.75	0.45	4.22	1.96	1.45	1.06
Uniform Delay, d1		68.9	55.1	31.8	58.7	32.7	24.2	64.1	65.7	65.7	67.2	63.2
Progression Factor		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2		13.3	5.7	0.1	43.2	0.7	2.9	0.3	1454.3	443.6	214.1	64.1
Delay (s)		82.2	60.8	31.9	101.9	33.4	27.1	64.4	1520.0	509.3	281.3	127.3
Level of Service		F	E	C	F	C	C	E	F	F	F	F
Approach Delay (s)			59.4			54.5			1080.4			229.0
Approach LOS			E			D			F			F

Intersection Summary

HCM 2000 Control Delay	374.4	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.70		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	20.7
Intersection Capacity Utilization	154.7%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	65
Future Volume (vph)	65
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.88
Adj. Flow (vph)	74
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

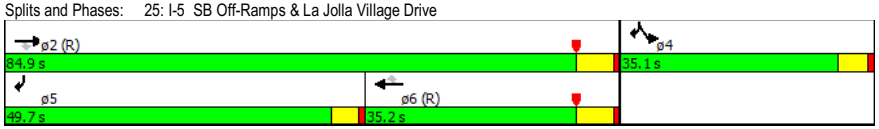
Intersection Summary

Lane Group	EBT	EBR	WBT	WBR	SBL	SBR	ø5
Lane Configurations							
Traffic Volume (vph)	1336	1218	1401	473	824	1172	
Future Volume (vph)	1336	1218	1401	473	824	1172	
Turn Type	NA	Perm	NA	Perm	Prot	custom	
Protected Phases	2		6		4	4 5	5
Permitted Phases		2		6			
Detector Phase	2	2	6	6	4	4 5	
Switch Phase							
Minimum Initial (s)	10.0	10.0	15.0	15.0	5.0		2.0
Minimum Split (s)	16.2	16.2	21.2	21.2	10.1		6.7
Total Split (s)	84.9	84.9	35.2	35.2	35.1		49.7
Total Split (%)	70.8%	70.8%	29.3%	29.3%	29.3%		41%
Yellow Time (s)	5.2	5.2	5.2	5.2	4.1		3.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	6.2	6.2	6.2	6.2	5.1		
Lead/Lag			Lag	Lag			Lead
Lead-Lag Optimize?			Yes	Yes			Yes
Recall Mode	C-Max	C-Max	C-Max	C-Max	Min		None

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 70 (58%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 75
Control Type: Actuated-Coordinated

Splits and Phases: 25: I-5 SB Off-Ramps & La Jolla Village Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1336	1218	0	1401	473	0	0	0	824	0	1172
Future Volume (vph)	0	1336	1218	0	1401	473	0	0	0	824	0	1172
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.2	6.2		6.2	6.2				5.1		5.1
Lane Util. Factor		0.86	1.00		0.91	1.00				0.97		0.88
Frt		1.00	0.85		1.00	0.85				1.00		0.85
Flt Protected		1.00	1.00		1.00	1.00				0.95		1.00
Satd. Flow (prot)		6408	1583		5085	1583				3433		2787
Flt Permitted		1.00	1.00		1.00	1.00				0.95		1.00
Satd. Flow (perm)		6408	1583		5085	1583				3433		2787
Peak-hour factor, PHF	0.92	0.92	0.92	0.80	0.80	0.80	0.25	0.25	0.25	0.88	0.88	0.88
Adj. Flow (vph)	0	1452	1324	0	1751	591	0	0	0	936	0	1332
RTOR Reduction (vph)	0	0	375	0	0	286	0	0	0	0	0	11
Lane Group Flow (vph)	0	1452	949	0	1751	305	0	0	0	936	0	1321
Turn Type		NA	Perm		NA	Perm				Prot		custom
Protected Phases		2			6					4		4 5
Permitted Phases			2			6						
Actuated Green, G (s)		78.7	78.7		34.4	34.4				30.0		74.7
Effective Green, g (s)		78.7	78.7		34.4	34.4				30.0		74.7
Actuated g/C Ratio		0.66	0.66		0.29	0.29				0.25		0.62
Clearance Time (s)		6.2	6.2		6.2	6.2				5.1		
Vehicle Extension (s)		2.0	2.0		2.0	2.0				2.0		
Lane Grp Cap (vph)		4202	1038		1457	453				858		1734
v/s Ratio Prot		0.23			c0.34					c0.27		0.47
v/s Ratio Perm			c0.60			0.19						
v/c Ratio		0.35	0.91		1.20	0.67				1.09		0.76
Uniform Delay, d1		9.2	17.7		42.8	37.8				45.0		16.3
Progression Factor		1.00	1.00		1.01	1.09				1.00		1.00
Incremental Delay, d2		0.2	13.6		97.1	7.2				58.5		1.8
Delay (s)		9.4	31.3		140.5	48.4				103.5		18.1
Level of Service		A	C		F	D				F		B
Approach Delay (s)		19.9			117.3			0.0			53.3	
Approach LOS		B			F			A			D	

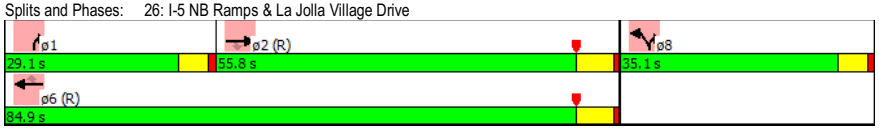
Intersection Summary			
HCM 2000 Control Delay	61.0	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.08		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	80.6%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBT	EBR	WBT	WBR	NBL	NBR	ø1
Lane Configurations							
Traffic Volume (vph)	1314	974	1351	490	416	358	
Future Volume (vph)	1314	974	1351	490	416	358	
Turn Type	NA	Perm	NA	Perm	Prot	custom	
Protected Phases	2		6		8	1 8	1
Permitted Phases		2		6			
Detector Phase	2	2	6	6	8	1 8	
Switch Phase							
Minimum Initial (s)	16.0	16.0	16.0	16.0	5.0		2.0
Minimum Split (s)	36.2	36.2	22.2	22.2	10.1		7.1
Total Split (s)	55.8	55.8	84.9	84.9	35.1		29.1
Total Split (%)	46.5%	46.5%	70.8%	70.8%	29.3%		24%
Yellow Time (s)	5.2	5.2	5.2	5.2	4.1		4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	6.2	6.2	6.2	6.2	5.1		
Lead/Lag	Lag	Lag					Lead
Lead-Lag Optimize?	Yes	Yes					Yes
Recall Mode	C-Max	C-Max	C-Max	C-Max	Min		None

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 75 (63%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 70
Control Type: Actuated-Coordinated

Splits and Phases: 26: I-5 NB Ramps & La Jolla Village Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1314	974	0	1351	490	416	0	358	0	0	0
Future Volume (vph)	0	1314	974	0	1351	490	416	0	358	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.2	6.2		6.2	6.2	5.1		5.1			
Lane Util. Factor		0.91	1.00		0.91	1.00	0.97		0.88			
Frt		1.00	0.85		1.00	0.85	1.00		0.85			
Flt Protected		1.00	1.00		1.00	1.00	0.95		1.00			
Satd. Flow (prot)		5085	1583		5085	1583	3433		2787			
Flt Permitted		1.00	1.00		1.00	1.00	0.95		1.00			
Satd. Flow (perm)		5085	1583		5085	1583	3433		2787			
Peak-hour factor, PHF	0.84	0.84	0.84	0.83	0.83	0.83	0.83	0.83	0.83	0.25	0.25	0.25
Adj. Flow (vph)	0	1564	1160	0	1628	590	501	0	431	0	0	0
RTOR Reduction (vph)	0	0	399	0	0	165	0	0	21	0	0	0
Lane Group Flow (vph)	0	1564	761	0	1628	425	501	0	410	0	0	0
Turn Type		NA	Perm		NA	Perm	Prot		custom			
Protected Phases		2			6		8		1 8			
Permitted Phases			2			6						
Actuated Green, G (s)		76.1	76.1		86.5	86.5	22.2		32.6			
Effective Green, g (s)		76.1	76.1		86.5	86.5	22.2		32.6			
Actuated g/C Ratio		0.63	0.63		0.72	0.72	0.18		0.27			
Clearance Time (s)		6.2	6.2		6.2	6.2	5.1					
Vehicle Extension (s)		2.0	2.0		2.0	2.0	2.0					
Lane Grp Cap (vph)		3224	1003		3665	1141	635		757			
v/s Ratio Prot		0.31			0.32		c0.15		c0.15			
v/s Ratio Perm			c0.48			0.27						
v/c Ratio		0.49	0.76		0.44	0.37	0.79		0.54			
Uniform Delay, d1		11.6	15.5		6.9	6.4	46.7		37.3			
Progression Factor		1.12	5.06		1.00	1.00	1.00		1.00			
Incremental Delay, d2		0.4	4.5		0.4	0.9	6.0		0.4			
Delay (s)		13.4	82.9		7.3	7.3	52.6		37.7			
Level of Service		B	F		A	A	D		D			
Approach Delay (s)		43.0			7.3			45.8			0.0	
Approach LOS		D			A			D			A	

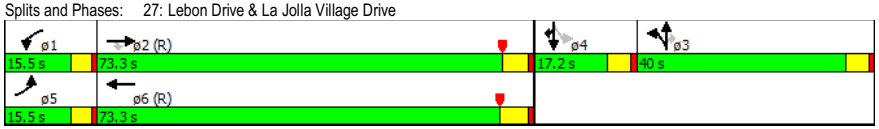
Intersection Summary			
HCM 2000 Control Delay	29.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.4
Intersection Capacity Utilization	65.5%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	4	1457	65	101	1640	169	9	125	7	2	12
Future Volume (vph)	4	1457	65	101	1640	169	9	125	7	2	12
Turn Type	Prot	NA	Perm	Prot	NA	Split	NA	Perm	Perm	NA	Prot
Protected Phases	5	2		1	6	3	3			4	4
Permitted Phases			2					3	4		
Detector Phase	5	2	2	1	6	3	3	3	4	4	4
Switch Phase											
Minimum Initial (s)	4.0	10.0	10.0	4.0	10.0	7.0	7.0	7.0	4.0	4.0	4.0
Minimum Split (s)	8.4	15.3	15.3	8.4	15.7	39.9	39.9	39.9	8.9	8.9	8.9
Total Split (s)	15.5	73.3	73.3	15.5	73.3	40.0	40.0	40.0	17.2	17.2	17.2
Total Split (%)	10.6%	50.2%	50.2%	10.6%	50.2%	27.4%	27.4%	27.4%	11.8%	11.8%	11.8%
Yellow Time (s)	3.4	4.3	4.3	3.4	4.7	3.9	3.9	3.9	3.9	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	4.4	5.3	5.3	4.4	5.7	4.9	4.9	4.9		4.9	4.9
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lag	Lag	Lead	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	None	None	None	None	None	None

Intersection Summary
Cycle Length: 146
Actuated Cycle Length: 146
Offset: 126 (86%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 100
Control Type: Actuated-Coordinated

Splits and Phases: 27: Lebon Drive & La Jolla Village Drive



Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	11	4	1457	65	101	1640	11	169	9	125	7	2
Future Volume (vph)	11	4	1457	65	101	1640	11	169	9	125	7	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.4	5.3	5.3	4.4	5.7		4.9	4.9	4.9		4.9
Lane Util. Factor		1.00	0.91	1.00	0.97	0.91		0.97	0.95	0.95		1.00
Frt		1.00	1.00	0.85	1.00	1.00		1.00	0.87	0.85		1.00
Flt Protected		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00		0.96
Satd. Flow (prot)		1770	5085	1583	3433	5080		3433	1540	1504		1791
Flt Permitted		0.13	1.00	1.00	0.95	1.00		0.95	1.00	1.00		0.57
Satd. Flow (perm)		234	5085	1583	3433	5080		3433	1540	1504		1064
Peak-hour factor, PHF	0.92	0.98	0.98	0.98	0.78	0.78	0.78	0.65	0.65	0.65	0.58	0.58
Adj. Flow (vph)	12	4	1487	66	129	2103	14	260	14	192	12	3
RTOR Reduction (vph)	0	0	0	26	0	1	0	0	76	86	0	0
Lane Group Flow (vph)	0	16	1487	40	129	2116	0	260	28	16	0	15
Turn Type		Prot	NA	Perm	Prot	NA		Split	NA	Perm	Perm	NA
Protected Phases		5	2		1	6		3	3			4
Permitted Phases				2						3	4	
Actuated Green, G (s)		31.8	88.0	88.0	9.9	65.7		22.3	22.3	22.3		6.3
Effective Green, g (s)		31.8	88.0	88.0	9.9	65.7		22.3	22.3	22.3		6.3
Actuated g/C Ratio		0.22	0.60	0.60	0.07	0.45		0.15	0.15	0.15		0.04
Clearance Time (s)		4.4	5.3	5.3	4.4	5.7		4.9	4.9	4.9		4.9
Vehicle Extension (s)		2.0	6.1	6.1	2.0	5.6		6.5	6.5	6.5		2.0
Lane Grp Cap (vph)		50	3064	954	232	2286		524	235	229		45
v/s Ratio Prot			c0.29		c0.04	c0.42		c0.08	0.02			
v/s Ratio Perm		0.07		0.03						0.01		c0.01
v/c Ratio		0.32	0.49	0.04	0.56	0.93		0.50	0.12	0.07		0.33
Uniform Delay, d1		48.0	16.3	11.8	65.9	37.9		56.7	53.4	53.0		67.8
Progression Factor		1.00	1.00	1.00	1.10	0.68		1.00	1.00	1.00		1.00
Incremental Delay, d2		1.3	0.6	0.1	1.2	5.9		2.3	0.7	0.4		1.6
Delay (s)		49.4	16.8	11.9	73.4	31.6		59.0	54.1	53.4		69.4
Level of Service		D	B	B	E	C		E	D	D		E
Approach Delay (s)			17.0			34.0			56.7			67.9
Approach LOS			B			C			E			E

Intersection Summary			
HCM 2000 Control Delay	30.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	146.0	Sum of lost time (s)	19.9
Intersection Capacity Utilization	61.0%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	12
Future Volume (vph)	12
Ideal Flow (vphpl)	1900
Total Lost time (s)	4.9
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1583
Flt Permitted	1.00
Satd. Flow (perm)	1583
Peak-hour factor, PHF	0.58
Adj. Flow (vph)	21
RTOR Reduction (vph)	20
Lane Group Flow (vph)	1
Turn Type	Prot
Protected Phases	4
Permitted Phases	
Actuated Green, G (s)	6.3
Effective Green, g (s)	6.3
Actuated g/C Ratio	0.04
Clearance Time (s)	4.9
Vehicle Extension (s)	2.0
Lane Grp Cap (vph)	68
v/s Ratio Prot	0.00
v/s Ratio Perm	
v/c Ratio	0.01
Uniform Delay, d1	66.9
Progression Factor	1.00
Incremental Delay, d2	0.0
Delay (s)	66.9
Level of Service	E
Approach Delay (s)	
Approach LOS	

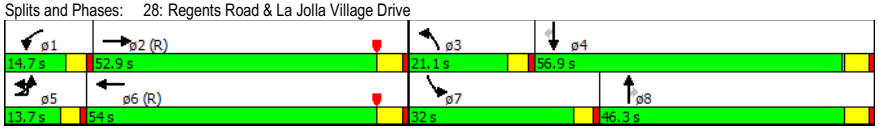
Intersection Summary

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	339	1145	226	963	257	245	128	175	278	369
Future Volume (vph)	339	1145	226	963	257	245	128	175	278	369
Turn Type	Prot	NA	Prot	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2	1	6	3	8		7	4	
Permitted Phases							8			4
Detector Phase	5	2	1	6	3	8	8	7	4	4
Switch Phase										
Minimum Initial (s)	4.0	10.0	4.0	10.0	4.0	10.0	10.0	4.0	10.0	10.0
Minimum Split (s)	8.4	41.3	8.4	35.4	8.4	41.3	41.3	8.4	35.3	35.3
Total Split (s)	13.7	52.9	14.7	54.0	21.1	46.3	46.3	32.0	56.9	56.9
Total Split (%)	9.4%	36.2%	10.1%	37.0%	14.5%	31.7%	31.7%	21.9%	39.0%	39.0%
Yellow Time (s)	3.4	4.3	3.4	4.4	3.4	4.3	4.3	3.4	4.3	4.3
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.3	4.4	5.4	4.4	5.3	5.3	4.4	5.3	5.3
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	None	None	None	None	None

Intersection Summary

Cycle Length: 146
Actuated Cycle Length: 146
Offset: 85 (58%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 110
Control Type: Actuated-Coordinated

Splits and Phases: 28: Regents Road & La Jolla Village Drive



Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	48	339	1145	56	226	963	115	257	245	128	175	278
Future Volume (vph)	48	339	1145	56	226	963	115	257	245	128	175	278
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.4	5.3		4.4	5.4		4.4	5.3	5.3	4.4	5.3
Lane Util. Factor		0.97	0.91		0.97	0.91		0.97	0.95	1.00	1.00	0.95
Frt		1.00	0.99		1.00	0.98		1.00	1.00	0.85	1.00	1.00
Flt Protected		0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)		3433	5050		3433	5004		3433	3539	1583	1770	3539
Flt Permitted		0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (perm)		3433	5050		3433	5004		3433	3539	1583	1770	3539
Peak-hour factor, PHF	0.92	0.98	0.98	0.98	0.82	0.82	0.82	0.88	0.88	0.88	0.77	0.77
Adj. Flow (vph)	52	346	1168	57	276	1174	140	292	278	145	227	361
RTOR Reduction (vph)	0	0	3	0	0	10	0	0	0	108	0	0
Lane Group Flow (vph)	0	398	1222	0	276	1304	0	292	278	37	227	361
Turn Type	Prot	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA
Protected Phases	5	5	2		1	6		3	8		7	4
Permitted Phases										8		
Actuated Green, G (s)		18.0	50.4		16.3	48.6		15.8	36.8	36.8	23.1	44.1
Effective Green, g (s)		18.0	50.4		16.3	48.6		15.8	36.8	36.8	23.1	44.1
Actuated g/C Ratio		0.12	0.35		0.11	0.33		0.11	0.25	0.25	0.16	0.30
Clearance Time (s)		4.4	5.3		4.4	5.4		4.4	5.3	5.3	4.4	5.3
Vehicle Extension (s)		3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)		423	1743		383	1665		371	892	399	280	1068
v/s Ratio Prot		c0.12	0.24		0.08	c0.26		0.09	0.08		c0.13	0.10
v/s Ratio Perm										0.02		
v/c Ratio		0.94	0.70		0.72	0.78		0.79	0.31	0.09	0.81	0.34
Uniform Delay, d1		63.5	41.3		62.7	43.9		63.5	44.3	41.8	59.3	39.6
Progression Factor		1.13	1.24		0.98	0.63		1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2		27.5	2.2		5.6	3.2		10.5	0.2	0.1	16.1	0.2
Delay (s)		99.3	53.2		67.3	31.0		74.0	44.5	41.9	75.5	39.8
Level of Service		F	D		E	C		E	D	D	E	D
Approach Delay (s)			64.5			37.3			56.0			58.7
Approach LOS			E			D			E			E

Intersection Summary

HCM 2000 Control Delay	53.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.86		
Actuated Cycle Length (s)	146.0	Sum of lost time (s)	19.5
Intersection Capacity Utilization	78.6%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	369
Future Volume (vph)	369
Ideal Flow (vphpl)	1900
Total Lost time (s)	5.3
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1583
Flt Permitted	1.00
Satd. Flow (perm)	1583
Peak-hour factor, PHF	0.77
Adj. Flow (vph)	479
RTOR Reduction (vph)	59
Lane Group Flow (vph)	420
Turn Type	Perm
Protected Phases	
Permitted Phases	4
Actuated Green, G (s)	44.1
Effective Green, g (s)	44.1
Actuated g/C Ratio	0.30
Clearance Time (s)	5.3
Vehicle Extension (s)	3.0
Lane Grp Cap (vph)	478
v/s Ratio Prot	
v/s Ratio Perm	c0.27
v/c Ratio	0.88
Uniform Delay, d1	48.4
Progression Factor	1.00
Incremental Delay, d2	16.6
Delay (s)	65.1
Level of Service	E
Approach Delay (s)	
Approach LOS	

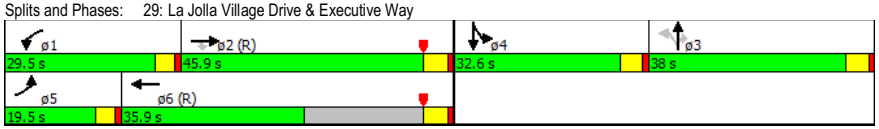
Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	65	584	631	805	604	394	171	614	139	181
Future Volume (vph)	65	584	631	805	604	394	171	614	139	181
Turn Type	Prot	NA	Perm	Prot	NA	Perm	NA	Perm	Split	NA
Protected Phases	5	2		1	6		3		4	4
Permitted Phases			2			3		3		
Detector Phase	5	2	2	1	6	3	3	3	4	4
Switch Phase										
Minimum Initial (s)	4.0	10.0	10.0	4.0	10.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.4	15.3	15.3	8.4	15.3	45.9	45.9	45.9	8.9	8.9
Total Split (s)	19.5	45.9	45.9	29.5	35.9	38.0	38.0	38.0	32.6	32.6
Total Split (%)	13.4%	31.4%	31.4%	20.2%	24.6%	26.0%	26.0%	26.0%	22.3%	22.3%
Yellow Time (s)	3.4	4.3	4.3	3.4	4.3	3.9	3.9	3.9	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.3	5.3	4.4	5.3	4.9	4.9	4.9	4.9	4.9
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lag	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	None	None	None	None	None

Intersection Summary

Cycle Length: 146
Actuated Cycle Length: 146
Offset: 28 (19%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 29: La Jolla Village Drive & Executive Way



Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	4	65	584	631	15	805	604	104	394	171	614	139
Future Volume (vph)	4	65	584	631	15	805	604	104	394	171	614	139
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.4	5.3	5.3		4.4	5.3		4.9	4.9	4.9	4.9
Lane Util. Factor		1.00	0.91	1.00		0.97	0.91		0.95	0.95	1.00	1.00
Frt		1.00	1.00	0.85		1.00	0.98		1.00	1.00	0.85	1.00
Flt Protected		0.95	1.00	1.00		0.95	1.00		0.95	0.98	1.00	0.95
Satd. Flow (prot)		1770	5085	1583		3433	4973		1681	1731	1583	1770
Flt Permitted		0.26	1.00	1.00		0.16	1.00		0.56	0.70	1.00	0.95
Satd. Flow (perm)		493	5085	1583		576	4973		987	1241	1583	1770
Peak-hour factor, PHF	0.92	0.95	0.95	0.95	0.92	0.84	0.84	0.84	0.88	0.88	0.88	0.80
Adj. Flow (vph)	4	68	615	664	16	958	719	124	448	194	698	174
RTOR Reduction (vph)	0	0	0	479	0	0	16	0	0	0	285	0
Lane Group Flow (vph)	0	72	615	185	0	974	827	0	291	351	413	174
Turn Type		Prot	NA	Perm		Prot	NA		Perm	NA	Perm	Split
Protected Phases		5	2			1	6			3		4
Permitted Phases				2					3		3	
Actuated Green, G (s)		15.1	40.6	40.6		25.1	50.6		37.5	37.5	37.5	23.3
Effective Green, g (s)		15.1	40.6	40.6		25.1	50.6		37.5	37.5	37.5	23.3
Actuated g/C Ratio		0.10	0.28	0.28		0.17	0.35		0.26	0.26	0.26	0.16
Clearance Time (s)		4.4	5.3	5.3		4.4	5.3		4.9	4.9	4.9	4.9
Vehicle Extension (s)		2.0	5.8	5.8		2.0	5.5		2.0	2.0	2.0	6.1
Lane Grp Cap (vph)		50	1414	440		99	1723		253	318	406	282
v/s Ratio Prot			0.12				c0.17					c0.10
v/s Ratio Perm		0.15		0.12		c1.69			c0.29	0.28	0.26	
v/c Ratio		1.44	0.43	0.42		9.84	0.48		1.15	1.10	1.02	0.62
Uniform Delay, d1		65.5	43.3	43.1		60.5	37.4		54.2	54.2	54.2	57.2
Progression Factor		1.00	0.62	5.72		1.00	0.71		1.00	1.00	1.00	1.00
Incremental Delay, d2		268.6	0.8	2.4		3995.3	0.9		103.3	81.3	49.3	7.0
Delay (s)		334.0	27.7	248.8		4055.7	27.4		157.5	135.5	103.6	64.1
Level of Service		F	C	F		F	C		F	F	F	E
Approach Delay (s)			152.7				2186.8			123.7		
Approach LOS			F				F			F		

Intersection Summary			
HCM 2000 Control Delay	874.7	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	2.57		
Actuated Cycle Length (s)	146.0	Sum of lost time (s)	19.5
Intersection Capacity Utilization	96.6%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	181	75
Future Volume (vph)	181	75
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	4.9	
Lane Util. Factor	0.95	
Frt	0.96	
Flt Protected	1.00	
Satd. Flow (prot)	3383	
Flt Permitted	1.00	
Satd. Flow (perm)	3383	
Peak-hour factor, PHF	0.80	0.80
Adj. Flow (vph)	226	94
RTOR Reduction (vph)	33	0
Lane Group Flow (vph)	287	0
Turn Type	NA	
Protected Phases	4	
Permitted Phases		
Actuated Green, G (s)	23.3	
Effective Green, g (s)	23.3	
Actuated g/C Ratio	0.16	
Clearance Time (s)	4.9	
Vehicle Extension (s)	6.1	
Lane Grp Cap (vph)	539	
v/s Ratio Prot	0.08	
v/s Ratio Perm		
v/c Ratio	0.53	
Uniform Delay, d1	56.4	
Progression Factor	1.00	
Incremental Delay, d2	2.5	
Delay (s)	58.8	
Level of Service	E	
Approach Delay (s)	60.7	
Approach LOS	E	

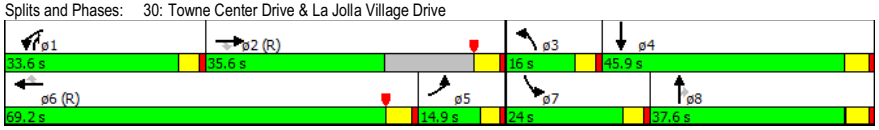
Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	36	1295	78	271	1338	123	92	37	407	549	131
Future Volume (vph)	36	1295	78	271	1338	123	92	37	407	549	131
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA
Protected Phases	5	2		1	6		3	8	1	7	4
Permitted Phases			2			6			8		
Detector Phase	5	2	2	1	6	6	3	8	1	7	4
Switch Phase											
Minimum Initial (s)	4.0	10.0	10.0	4.0	10.0	10.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.4	15.5	15.5	8.4	15.3	15.3	8.4	9.0	8.4	8.4	9.3
Total Split (s)	14.9	35.6	35.6	33.6	69.2	69.2	16.0	37.6	33.6	24.0	45.9
Total Split (%)	10.2%	24.4%	24.4%	23.0%	47.4%	47.4%	11.0%	25.8%	23.0%	16.4%	31.4%
Yellow Time (s)	3.4	4.5	4.5	3.4	4.3	4.3	3.4	4.0	3.4	3.4	4.3
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.5	5.5	4.4	5.3	5.3	4.4	5.0	4.4	4.4	5.3
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lead	Lead	Lag	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	None	None	None	None

Intersection Summary

Cycle Length: 146
Actuated Cycle Length: 146
Offset: 17 (12%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 65
Control Type: Actuated-Coordinated

Splits and Phases: 30: Towne Center Drive & La Jolla Village Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	36	1295	78	271	1338	123	92	37	407	549	131	42
Future Volume (vph)	36	1295	78	271	1338	123	92	37	407	549	131	42
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.5	5.5	4.4	5.3	5.3	4.4	5.0	4.4	4.4	5.3	
Lane Util. Factor	0.97	0.91	1.00	0.97	0.86	0.86	0.97	1.00	0.88	0.97	0.95	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.96	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	3433	5085	1583	3433	4799	1362	3433	1863	2787	3433	3409	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	3433	5085	1583	3433	4799	1362	3433	1863	2787	3433	3409	
Peak-hour factor, PHF	0.96	0.96	0.96	0.85	0.85	0.85	0.90	0.90	0.90	0.92	0.92	0.92
Adj. Flow (vph)	38	1349	81	319	1574	145	102	41	452	597	142	46
RTOR Reduction (vph)	0	0	37	0	0	47	0	0	101	0	26	0
Lane Group Flow (vph)	38	1349	44	319	1589	83	102	41	351	597	162	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	
Protected Phases	5	2		1	6		3	8	1	7	4	
Permitted Phases			2			6			8			
Actuated Green, G (s)	8.4	79.6	79.6	19.8	91.2	91.2	9.5	7.5	27.3	19.8	17.5	
Effective Green, g (s)	8.4	79.6	79.6	19.8	91.2	91.2	9.5	7.5	27.3	19.8	17.5	
Actuated g/C Ratio	0.06	0.55	0.55	0.14	0.62	0.62	0.07	0.05	0.19	0.14	0.12	
Clearance Time (s)	4.4	5.5	5.5	4.4	5.3	5.3	4.4	5.0	4.4	4.4	5.3	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	197	2772	863	465	2997	850	223	95	521	465	408	
v/s Ratio Prot	0.01	c0.27		c0.09	c0.33		0.03	0.02	c0.09	c0.17	0.05	
v/s Ratio Perm			0.03			0.06			0.03			
v/c Ratio	0.19	0.49	0.05	0.69	0.53	0.10	0.46	0.43	0.67	1.28	0.40	
Uniform Delay, d1	65.6	20.6	15.5	60.1	15.4	11.0	65.8	67.2	55.2	63.1	59.4	
Progression Factor	0.84	0.75	0.51	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.3	0.4	0.1	4.2	0.7	0.2	1.5	3.1	3.4	143.3	0.6	
Delay (s)	55.3	15.7	8.0	64.3	16.1	11.2	67.3	70.3	58.6	206.4	60.0	
Level of Service	E	B	A	E	B	B	E	E	E	F	E	
Approach Delay (s)		16.3			23.3			60.9			171.4	
Approach LOS		B			C			E			F	

Intersection Summary

HCM 2000 Control Delay	49.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	146.0	Sum of lost time (s)	19.6
Intersection Capacity Utilization	67.8%	ICU Level of Service	C
Analysis Period (min)	15		

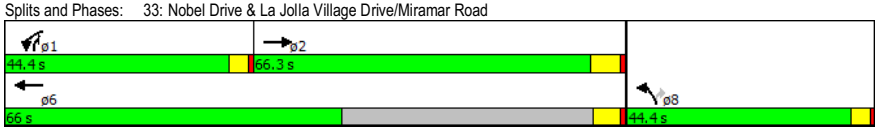
c Critical Lane Group

Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Configurations					
Traffic Volume (vph)	1227	332	1621	101	883
Future Volume (vph)	1227	332	1621	101	883
Turn Type	NA	Prot	NA	Prot	pm+ov
Protected Phases	2	1	6	8	1
Permitted Phases					8
Detector Phase	2	1	6	8	1
Switch Phase					
Minimum Initial (s)	10.0	4.0	10.0	7.0	4.0
Minimum Split (s)	16.3	8.4	16.0	11.4	8.4
Total Split (s)	66.3	44.4	66.0	44.4	44.4
Total Split (%)	42.7%	28.6%	42.6%	28.6%	28.6%
Yellow Time (s)	5.3	3.4	5.0	3.4	3.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.3	4.4	6.0	4.4	4.4
Lead/Lag	Lag	Lead			Lead
Lead-Lag Optimize?	Yes	Yes			Yes
Recall Mode	Min	None	Min	None	None

Intersection Summary

Cycle Length: 155.1
Actuated Cycle Length: 93.2
Natural Cycle: 50
Control Type: Actuated-Uncoordinated

Splits and Phases: 33: Nobel Drive & La Jolla Village Drive/Miramar Road



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1227	87	332	1621	101	883
Future Volume (vph)	1227	87	332	1621	101	883
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.3		4.4	6.0	4.4	4.4
Lane Util. Factor	0.86		0.97	0.86	1.00	0.88
Frt	0.99		1.00	1.00	1.00	0.85
Flt Protected	1.00		0.95	1.00	0.95	1.00
Satd. Flow (prot)	6344		3433	6408	1770	2787
Flt Permitted	1.00		0.95	1.00	0.95	1.00
Satd. Flow (perm)	6344		3433	6408	1770	2787
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.96	0.96
Adj. Flow (vph)	1305	93	353	1724	105	920
RTOR Reduction (vph)	6	0	0	0	0	11
Lane Group Flow (vph)	1392	0	353	1724	105	909
Turn Type	NA		Prot	NA	Prot	pm+ov
Protected Phases	2		1	6	8	1
Permitted Phases						8
Actuated Green, G (s)	39.4		27.8	71.9	10.4	38.2
Effective Green, g (s)	39.4		27.8	71.9	10.4	38.2
Actuated g/C Ratio	0.43		0.30	0.78	0.11	0.41
Clearance Time (s)	6.3		4.4	6.0	4.4	4.4
Vehicle Extension (s)	5.0		2.0	5.4	2.0	2.0
Lane Grp Cap (vph)	2696		1029	4970	198	1280
v/s Ratio Prot	c0.22		0.10	0.27	0.06	c0.21
v/s Ratio Perm						0.11
v/c Ratio	0.52		0.34	0.35	0.53	0.71
Uniform Delay, d1	19.6		25.3	3.2	38.8	22.6
Progression Factor	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	0.3		0.1	0.1	1.4	1.6
Delay (s)	20.0		25.4	3.3	40.2	24.2
Level of Service	B		C	A	D	C
Approach Delay (s)	20.0			7.0	25.9	
Approach LOS	B			A	C	

Intersection Summary

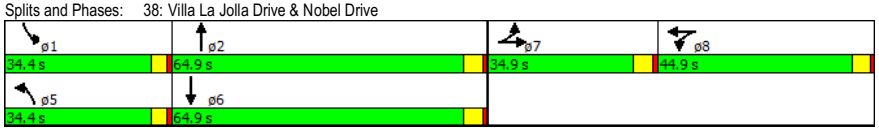
HCM 2000 Control Delay	15.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	92.7	Sum of lost time (s)	15.1
Intersection Capacity Utilization	59.0%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	5	91	2	8	583	371	586
Future Volume (vph)	5	91	2	8	583	371	586
Turn Type	NA	Split	NA	Prot	NA	Prot	NA
Protected Phases	7	8	8	5	2	1	6
Permitted Phases							
Detector Phase	7	8	8	5	2	1	6
Switch Phase							
Minimum Initial (s)	6.0	6.0	6.0	4.0	7.0	6.0	10.0
Minimum Split (s)	10.9	10.9	10.9	8.4	11.9	10.4	14.9
Total Split (s)	34.9	44.9	44.9	34.4	64.9	34.4	64.9
Total Split (%)	19.5%	25.1%	25.1%	19.2%	36.2%	19.2%	36.2%
Yellow Time (s)	3.9	3.9	3.9	3.4	3.9	3.4	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	4.9	4.4	4.9	4.4	4.9
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	Min	None	Min

Intersection Summary
Cycle Length: 179.1
Actuated Cycle Length: 77.6
Natural Cycle: 60
Control Type: Actuated-Uncoordinated

Splits and Phases: 38: Villa La Jolla Drive & Nobel Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	5	7	91	2	373	8	583	161	371	586	11
Future Volume (vph)	11	5	7	91	2	373	8	583	161	371	586	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9		4.9	4.9		4.4	4.9		4.4	4.9	
Lane Util. Factor		1.00		0.97	1.00		1.00	0.95		0.97	0.95	
Frt		0.96		1.00	0.85		1.00	0.97		1.00	1.00	
Flt Protected		0.98		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1744		3433	1585		1770	3424		3433	3530	
Flt Permitted		0.98		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1744		3433	1585		1770	3424		3433	3530	
Peak-hour factor, PHF	0.68	0.68	0.68	0.92	0.92	0.92	0.93	0.93	0.93	0.91	0.91	0.91
Adj. Flow (vph)	16	7	10	99	2	405	9	627	173	408	644	12
RTOR Reduction (vph)	0	10	0	0	360	0	0	12	0	0	0	0
Lane Group Flow (vph)	0	23	0	99	47	0	9	788	0	408	656	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	7	7		8	8		5	2		1	6	
Permitted Phases												
Actuated Green, G (s)		3.6		9.3	9.3		0.9	34.4		16.5	50.0	
Effective Green, g (s)		3.6		9.3	9.3		0.9	34.4		16.5	50.0	
Actuated g/C Ratio		0.04		0.11	0.11		0.01	0.41		0.20	0.60	
Clearance Time (s)		4.9		4.9	4.9		4.4	4.9		4.4	4.9	
Vehicle Extension (s)		2.0		2.0	2.0		2.0	4.3		2.0	3.7	
Lane Grp Cap (vph)		75		385	177		19	1420		683	2129	
v/s Ratio Prot		c0.01		0.03	c0.03		0.01	c0.23		c0.12	0.19	
v/s Ratio Perm												
v/c Ratio		0.31		0.26	0.27		0.47	0.55		0.60	0.31	
Uniform Delay, d1		38.4		33.6	33.7		40.8	18.4		30.2	8.0	
Progression Factor		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.9		0.1	0.3		6.6	0.6		0.9	0.1	
Delay (s)		39.3		33.8	34.0		47.4	19.1		31.1	8.1	
Level of Service		D		C	C		D	B		C	A	
Approach Delay (s)		39.3			33.9			19.4			16.9	
Approach LOS		D			C			B			B	

Intersection Summary				
HCM 2000 Control Delay	21.6	HCM 2000 Level of Service	C	
HCM 2000 Volume to Capacity ratio	0.51			
Actuated Cycle Length (s)	82.9	Sum of lost time (s)	19.1	
Intersection Capacity Utilization	66.9%	ICU Level of Service	C	
Analysis Period (min)	15			

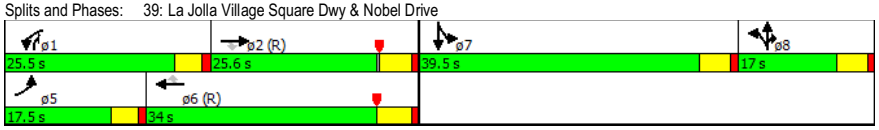
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	35	179	336	1227	149	257	255	160	963	289	169
Future Volume (vph)	35	179	336	1227	149	257	255	160	963	289	169
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Split	NA	pt+ov	Split	NA
Protected Phases	5	2		1	6		8	8	8 1	7	7
Permitted Phases			2			6					
Detector Phase	5	2	2	1	6	6	8	8	8 1	7	7
Switch Phase											
Minimum Initial (s)	4.0	7.0	7.0	4.0	7.0	7.0	8.0	8.0		8.0	8.0
Minimum Split (s)	9.4	12.0	12.0	8.4	12.4	12.4	12.9	12.9		38.9	38.9
Total Split (s)	17.5	25.6	25.6	25.5	34.0	34.0	17.0	17.0		39.5	39.5
Total Split (%)	16.2%	23.7%	23.7%	23.6%	31.5%	31.5%	15.7%	15.7%		36.6%	36.6%
Yellow Time (s)	3.4	4.0	4.0	3.4	4.4	4.4	3.9	3.9		3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	4.4	5.0	5.0	4.4	5.4	5.4	4.9	4.9		4.9	4.9
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lag	Lag		Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	None		None	None

Intersection Summary

Cycle Length: 108
Actuated Cycle Length: 108
Offset: 41 (38%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 39: La Jolla Village Square Dwy & Nobel Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	35	179	336	1227	149	257	255	160	963	289	169	26
Future Volume (vph)	35	179	336	1227	149	257	255	160	963	289	169	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.0	5.0	4.4	5.4	5.4	4.9	4.9	4.9	4.9	4.9	
Lane Util. Factor	1.00	0.95	1.00	0.97	0.95	1.00	0.95	0.95	1.00	0.95	0.95	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.99	1.00	0.95	0.99	
Satd. Flow (prot)	1770	3539	1583	3433	3539	1583	1681	1749	1583	1681	1724	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.99	1.00	0.95	0.99	
Satd. Flow (perm)	1770	3539	1583	3433	3539	1583	1681	1749	1583	1681	1724	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.86	0.86	0.86	0.92	0.92	0.92
Adj. Flow (vph)	37	190	357	1305	159	273	297	186	1120	314	184	28
RTOR Reduction (vph)	0	0	288	0	0	180	0	0	168	0	5	0
Lane Group Flow (vph)	37	190	69	1305	159	93	238	245	952	261	260	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Split	NA	pt+ov	Split	NA	
Protected Phases	5	2		1	6		8	8	8 1	7	7	
Permitted Phases			2			6						
Actuated Green, G (s)	4.8	21.0	21.0	21.1	36.9	36.9	22.6	22.6	48.6	24.1	24.1	
Effective Green, g (s)	4.8	21.0	21.0	21.1	36.9	36.9	22.6	22.6	48.6	24.1	24.1	
Actuated g/C Ratio	0.04	0.19	0.19	0.20	0.34	0.34	0.21	0.21	0.45	0.22	0.22	
Clearance Time (s)	4.4	5.0	5.0	4.4	5.4	5.4	4.9	4.9		4.9	4.9	
Vehicle Extension (s)	2.0	4.1	4.1	2.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)	78	688	307	670	1209	540	351	365	712	375	384	
v/s Ratio Prot	0.02	c0.05		c0.38	0.04		0.14	0.14	c0.60	c0.16	0.15	
v/s Ratio Perm			0.04			0.06						
v/c Ratio	0.47	0.28	0.23	1.95	0.13	0.17	0.68	0.67	1.34	0.70	0.68	
Uniform Delay, d1	50.4	37.0	36.7	43.5	24.5	24.9	39.3	39.3	29.7	38.6	38.4	
Progression Factor	1.00	1.00	1.00	1.13	1.23	3.10	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	1.7	1.0	1.7	431.4	0.2	0.6	5.6	5.2	160.9	6.0	5.1	
Delay (s)	52.0	38.0	38.4	480.4	30.3	77.6	44.9	44.5	190.6	44.5	43.5	
Level of Service	D	D	D	F	C	E	D	D	F	D	D	
Approach Delay (s)		39.1			375.9			146.7			44.0	
Approach LOS		D			F			F			D	

Intersection Summary

HCM 2000 Control Delay	209.9	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.10		
Actuated Cycle Length (s)	108.0	Sum of lost time (s)	19.6
Intersection Capacity Utilization	91.0%	ICU Level of Service	F
Analysis Period (min)	15		

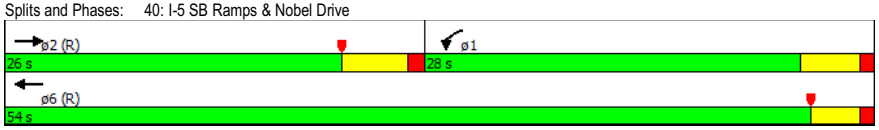
c Critical Lane Group

Lane Group	EBT	WBL	WBT
Lane Configurations			
Traffic Volume (vph)	826	208	1654
Future Volume (vph)	826	208	1654
Turn Type	NA	Prot	NA
Protected Phases	2	1	6
Permitted Phases			
Detector Phase	2	1	6
Switch Phase			
Minimum Initial (s)	13.0	5.0	1.0
Minimum Split (s)	18.1	9.7	22.0
Total Split (s)	26.0	28.0	54.0
Total Split (%)	48.1%	51.9%	100.0%
Yellow Time (s)	4.1	3.7	3.0
All-Red Time (s)	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0
Total Lost Time (s)	5.1	4.7	4.0
Lead/Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	
Recall Mode	C-Max	None	C-Max

Intersection Summary

Cycle Length: 54
Actuated Cycle Length: 54
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 45
Control Type: Actuated-Coordinated

Splits and Phases: 40: I-5 SB Ramps & Nobel Drive



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	826	579	208	1654	0	0
Future Volume (vph)	826	579	208	1654	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1		4.7	4.0		
Lane Util. Factor	0.95		0.97	0.95		
Frt	0.94		1.00	1.00		
Flt Protected	1.00		0.95	1.00		
Satd. Flow (prot)	3320		3433	3539		
Flt Permitted	1.00		0.95	1.00		
Satd. Flow (perm)	3320		3433	3539		
Peak-hour factor, PHF	0.89	0.89	0.98	0.98	0.25	0.25
Adj. Flow (vph)	928	651	212	1688	0	0
RTOR Reduction (vph)	235	0	0	0	0	0
Lane Group Flow (vph)	1344	0	212	1688	0	0
Turn Type	NA		Prot	NA		
Protected Phases	2		1	6		
Permitted Phases						
Actuated Green, G (s)	20.9		23.3	54.0		
Effective Green, g (s)	20.9		23.3	54.0		
Actuated g/C Ratio	0.39		0.43	1.00		
Clearance Time (s)	5.1		4.7	4.0		
Vehicle Extension (s)	3.0		3.0	3.0		
Lane Grp Cap (vph)	1284		1481	3539		
v/s Ratio Prot	c0.40		0.06	c0.48		
v/s Ratio Perm						
v/c Ratio	1.05		0.14	0.48		
Uniform Delay, d1	16.6		9.3	0.0		
Progression Factor	1.33		1.38	1.00		
Incremental Delay, d2	23.6		0.0	0.4		
Delay (s)	45.6		12.8	0.4		
Level of Service	D		B	A		
Approach Delay (s)	45.6			1.8	0.0	
Approach LOS	D			A	A	

Intersection Summary

HCM 2000 Control Delay	21.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	54.0	Sum of lost time (s)	9.8
Intersection Capacity Utilization	55.5%	ICU Level of Service	B
Analysis Period (min)	15		

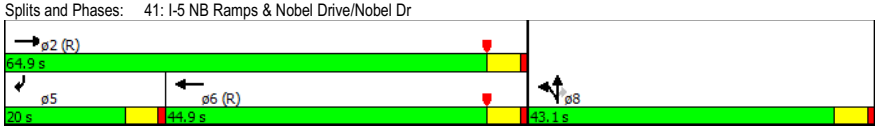
c Critical Lane Group

Lane Group	EBT	WBT	NBL	NBT	NBR	SBR
Lane Configurations						
Traffic Volume (vph)	842	1128	455	52	154	191
Future Volume (vph)	842	1128	455	52	154	191
Turn Type	NA	NA	Split	NA	Perm	Prot
Protected Phases	2	6	8	8		5
Permitted Phases					8	
Detector Phase	2	6	8	8	8	5
Switch Phase						
Minimum Initial (s)	11.0	13.0	5.0	5.0	5.0	5.0
Minimum Split (s)	16.1	18.1	10.1	10.1	10.1	10.0
Total Split (s)	64.9	44.9	43.1	43.1	43.1	20.0
Total Split (%)	60.1%	41.6%	39.9%	39.9%	39.9%	18.5%
Yellow Time (s)	4.1	4.1	4.1	4.1	4.1	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.1	5.1	5.1	5.1	5.1	5.0
Lead/Lag		Lag				Lead
Lead-Lag Optimize?		Yes				Yes
Recall Mode	C-Max	C-Max	Min	Min	Min	None

Intersection Summary

Cycle Length: 108
Actuated Cycle Length: 108
Offset: 67 (62%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 75
Control Type: Actuated-Coordinated

Splits and Phases: 41: I-5 NB Ramps & Nobel Drive/Nobel Dr



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	842	0	0	1128	41	455	52	154	0	0	191
Future Volume (vph)	11	842	0	0	1128	41	455	52	154	0	0	191
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.1			5.1		5.1	5.1	5.1			5.0
Lane Util. Factor		0.95			0.91		0.95	0.95	1.00			1.00
Frt		1.00			0.99		1.00	1.00	0.85			0.86
Flt Protected		1.00			1.00		0.95	0.96	1.00			1.00
Satd. Flow (prot)		3537			5058		1681	1702	1583			1611
Flt Permitted		0.93			1.00		0.95	0.96	1.00			1.00
Satd. Flow (perm)		3295			5058		1681	1702	1583			1611
Peak-hour factor, PHF	0.91	0.91	0.91	0.94	0.94	0.94	0.96	0.96	0.96	0.79	0.79	0.79
Adj. Flow (vph)	12	925	0	0	1200	44	474	54	160	0	0	242
RTOR Reduction (vph)	0	0	0	0	3	0	0	0	95	0	0	83
Lane Group Flow (vph)	0	937	0	0	1241	0	261	267	65	0	0	159
Turn Type		NA			NA		Split	NA	Perm			Prot
Protected Phases		2			6		8	8				5
Permitted Phases									8			
Actuated Green, G (s)		75.3			55.2		22.5	22.5	22.5			15.1
Effective Green, g (s)		75.3			55.2		22.5	22.5	22.5			15.1
Actuated g/C Ratio		0.70			0.51		0.21	0.21	0.21			0.14
Clearance Time (s)		5.1			5.1		5.1	5.1	5.1			5.0
Vehicle Extension (s)		2.0			2.0		2.0	2.0	2.0			2.0
Lane Grp Cap (vph)		2297			2585		350	354	329			225
v/s Ratio Prot					c0.25		0.16	c0.16				c0.10
v/s Ratio Perm		0.28							0.04			
v/c Ratio		0.41			0.48		0.75	0.75	0.20			0.70
Uniform Delay, d1		6.9			17.1		40.1	40.2	35.3			44.3
Progression Factor		0.85			1.06		1.00	1.00	1.00			1.00
Incremental Delay, d2		0.0			0.6		7.4	7.9	0.1			7.9
Delay (s)		5.9			18.7		47.4	48.0	35.4			52.3
Level of Service		A			B		D	D	D			D
Approach Delay (s)		5.9			18.7			44.9			52.3	
Approach LOS		A			B			D			D	

Intersection Summary

HCM 2000 Control Delay	23.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	108.0	Sum of lost time (s)	15.2
Intersection Capacity Utilization	61.2%	ICU Level of Service	B
Analysis Period (min)	15		

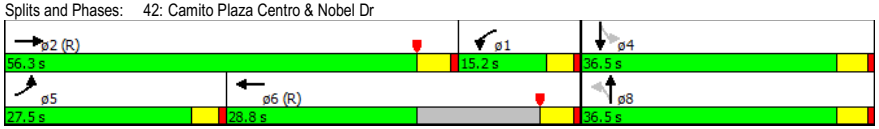
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	95	914	45	989	60	2	16	2
Future Volume (vph)	95	914	45	989	60	2	16	2
Turn Type	Prot	NA	Prot	NA	Perm	NA	Perm	NA
Protected Phases	5	2	1	6		8		4
Permitted Phases					8		4	
Detector Phase	5	2	1	6	8	8	4	4
Switch Phase								
Minimum Initial (s)	4.0	10.0	4.0	10.0	6.0	6.0	6.0	6.0
Minimum Split (s)	9.5	25.2	9.5	25.2	36.5	36.5	36.5	36.5
Total Split (s)	27.5	56.3	15.2	28.8	36.5	36.5	36.5	36.5
Total Split (%)	25.5%	52.1%	14.1%	26.7%	33.8%	33.8%	33.8%	33.8%
Yellow Time (s)	3.4	4.2	3.4	4.2	3.9	3.9	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	4.4	5.2	4.4	5.2		4.9		4.9
Lead/Lag	Lead	Lead	Lag	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes				
Recall Mode	None	C-Max	None	C-Max	None	None	None	None

Intersection Summary

Cycle Length: 108
Actuated Cycle Length: 108
Offset: 22 (20%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 75
Control Type: Actuated-Coordinated

Splits and Phases: 42: Camito Plaza Centro & Nobel Dr



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	95	914	55	45	989	24	60	2	35	16	2	47
Future Volume (vph)	95	914	55	45	989	24	60	2	35	16	2	47
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.2		4.4	5.2			4.9			4.9	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Frt	1.00	0.99		1.00	1.00			0.95			0.90	
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.99	
Satd. Flow (prot)	1770	5042		1770	5067			1718			1659	
Flt Permitted	0.95	1.00		0.95	1.00			0.77			0.92	
Satd. Flow (perm)	1770	5042		1770	5067			1358			1544	
Peak-hour factor, PHF	0.94	0.94	0.94	0.93	0.93	0.93	0.83	0.83	0.83	0.83	0.83	0.83
Adj. Flow (vph)	101	972	59	48	1063	26	72	2	42	19	2	57
RTOR Reduction (vph)	0	4	0	0	2	0	0	23	0	0	49	0
Lane Group Flow (vph)	101	1027	0	48	1087	0	0	93	0	0	29	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8			4		
Actuated Green, G (s)	11.5	70.2		8.6	67.3			14.7			14.7	
Effective Green, g (s)	11.5	70.2		8.6	67.3			14.7			14.7	
Actuated g/C Ratio	0.11	0.65		0.08	0.62			0.14			0.14	
Clearance Time (s)	4.4	5.2		4.4	5.2			4.9			4.9	
Vehicle Extension (s)	3.0	5.0		3.0	4.5			2.5			2.0	
Lane Grp Cap (vph)	188	3277		140	3157			184			210	
v/s Ratio Prot	c0.06	0.20		0.03	c0.21							
v/s Ratio Perm								c0.07			0.02	
v/c Ratio	0.54	0.31		0.34	0.34			0.50			0.14	
Uniform Delay, d1	45.7	8.3		47.0	9.8			43.3			41.1	
Progression Factor	0.84	1.43		1.00	1.00			1.00			1.00	
Incremental Delay, d2	1.8	0.2		1.5	0.3			1.6			0.1	
Delay (s)	40.0	12.1		48.5	10.1			44.8			41.2	
Level of Service	D	B		D	B			D			D	
Approach Delay (s)		14.6			11.7			44.8			41.2	
Approach LOS		B			B			D			D	

Intersection Summary

HCM 2000 Control Delay	15.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.39		
Actuated Cycle Length (s)	108.0	Sum of lost time (s)	14.5
Intersection Capacity Utilization	49.2%	ICU Level of Service	A
Analysis Period (min)	15		

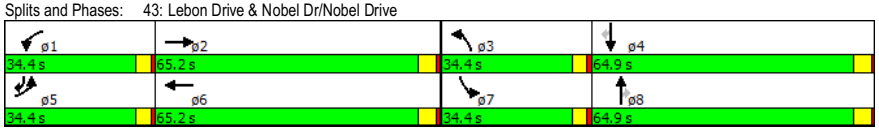
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	66	822	30	831	130	148	81	72	90	81
Future Volume (vph)	66	822	30	831	130	148	81	72	90	81
Turn Type	Prot	NA	Prot	NA	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	5	2	1	6	3	8		7	4	5
Permitted Phases							8			4
Detector Phase	5	2	1	6	3	8	8	7	4	5
Switch Phase										
Minimum Initial (s)	4.0	10.0	4.0	10.0	4.0	8.0	8.0	10.0	10.0	4.0
Minimum Split (s)	8.4	15.2	8.4	15.2	8.4	12.9	12.9	14.4	14.9	8.4
Total Split (s)	34.4	65.2	34.4	65.2	34.4	64.9	64.9	34.4	64.9	34.4
Total Split (%)	17.3%	32.8%	17.3%	32.8%	17.3%	32.6%	32.6%	17.3%	32.6%	17.3%
Yellow Time (s)	3.4	4.2	3.4	4.2	3.4	3.9	3.9	3.4	3.9	3.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.2	4.4	5.2	4.4	4.9	4.9	4.4	4.9	4.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 198.9
Actuated Cycle Length: 78
Natural Cycle: 55
Control Type: Actuated-Uncoordinated

Splits and Phases: 43: Lebon Drive & Nobel Dr/Nobel Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	66	822	83	30	831	71	130	148	81	72	90	81
Future Volume (vph)	66	822	83	30	831	71	130	148	81	72	90	81
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.2		4.4	5.2		4.4	4.9	4.9	4.4	4.9	4.4
Lane Util. Factor	0.97	0.91		1.00	0.91		0.97	0.95	1.00	0.97	0.95	1.00
Frt	1.00	0.99		1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5015		1770	5025		3433	3539	1583	3433	3539	1583
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5015		1770	5025		3433	3539	1583	3433	3539	1583
Peak-hour factor, PHF	0.91	0.91	0.91	0.89	0.89	0.89	0.94	0.94	0.94	0.79	0.79	0.79
Adj. Flow (vph)	73	903	91	34	934	80	138	157	86	91	114	103
RTOR Reduction (vph)	0	5	0	0	4	0	0	0	71	0	0	75
Lane Group Flow (vph)	73	989	0	34	1010	0	138	157	15	91	114	28
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	5	2		1	6		3	8		7	4	5
Permitted Phases									8			4
Actuated Green, G (s)	6.6	33.0		4.2	30.6		8.4	13.5	13.5	10.1	15.2	21.8
Effective Green, g (s)	6.6	33.0		4.2	30.6		8.4	13.5	13.5	10.1	15.2	21.8
Actuated g/C Ratio	0.08	0.41		0.05	0.38		0.11	0.17	0.17	0.13	0.19	0.27
Clearance Time (s)	4.4	5.2		4.4	5.2		4.4	4.9	4.9	4.4	4.9	4.4
Vehicle Extension (s)	2.0	4.5		2.0	4.5		2.0	6.4	6.4	2.0	5.5	2.0
Lane Grp Cap (vph)	284	2076		93	1929		361	599	268	435	674	432
v/s Ratio Prot	c0.02	0.20		0.02	c0.20		c0.04	c0.04		0.03	0.03	0.01
v/s Ratio Perm									0.01			0.01
v/c Ratio	0.26	0.48		0.37	0.52		0.38	0.26	0.05	0.21	0.17	0.07
Uniform Delay, d1	34.3	17.0		36.5	18.9		33.2	28.8	27.7	31.2	27.0	21.4
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2	0.3		0.9	0.4		0.2	0.7	0.3	0.1	0.3	0.0
Delay (s)	34.4	17.3		37.4	19.3		33.5	29.5	28.0	31.3	27.3	21.4
Level of Service	C	B		D	B		C	C	C	C	C	C
Approach Delay (s)		18.5			19.9			30.6			26.5	
Approach LOS		B			B			C			C	

Intersection Summary

HCM 2000 Control Delay	21.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.40		
Actuated Cycle Length (s)	79.7	Sum of lost time (s)	18.9
Intersection Capacity Utilization	51.8%	ICU Level of Service	A
Analysis Period (min)	15		

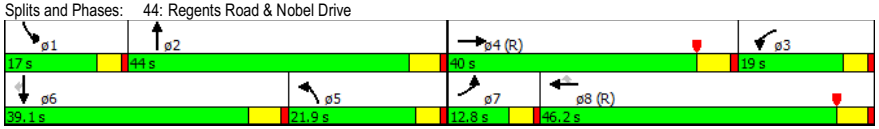
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	102	791	152	797	164	44	174	144	202	171
Future Volume (vph)	102	791	152	797	164	44	174	144	202	171
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Prot	NA	Perm
Protected Phases	7	4	3	8		5	2	1	6	
Permitted Phases					8					6
Detector Phase	7	4	3	8	8	5	2	1	6	6
Switch Phase										
Minimum Initial (s)	4.0	10.0	4.0	10.0	10.0	4.0	10.0	4.0	10.0	10.0
Minimum Split (s)	8.4	37.7	8.4	37.3	37.3	8.4	41.2	8.4	35.5	35.5
Total Split (s)	12.8	40.0	19.0	46.2	46.2	21.9	44.0	17.0	39.1	39.1
Total Split (%)	10.7%	33.3%	15.8%	38.5%	38.5%	18.3%	36.7%	14.2%	32.6%	32.6%
Yellow Time (s)	3.4	4.7	3.4	4.3	4.3	3.4	4.2	3.4	4.5	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.7	4.4	5.3	5.3	4.4	5.2	4.4	5.5	5.5
Lead/Lag	Lead	Lead	Lag	Lag	Lag	Lag	Lag	Lead	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	C-Max	None	Min	None	Min	Min

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 4:EBT and 8:WBT, Start of Yellow
Natural Cycle: 100
Control Type: Actuated-Coordinated

Splits and Phases: 44: Regents Road & Nobel Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	102	791	45	152	797	164	44	174	242	144	202	171
Future Volume (vph)	102	791	45	152	797	164	44	174	242	144	202	171
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.7		4.4	5.3	5.3	4.4	5.2		4.4	5.5	5.5
Lane Util. Factor	0.97	0.91		0.97	0.95	1.00	1.00	0.91		1.00	0.95	1.00
Frt	1.00	0.99		1.00	1.00	0.85	1.00	0.91		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3433	5045		3433	3539	1583	1770	4641		1770	3539	1583
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	3433	5045		3433	3539	1583	1770	4641		1770	3539	1583
Peak-hour factor, PHF	0.91	0.91	0.91	0.94	0.94	0.94	0.74	0.74	0.74	0.95	0.95	0.95
Adj. Flow (vph)	112	869	49	162	848	174	59	235	327	152	213	180
RTOR Reduction (vph)	0	4	0	0	0	85	0	260	0	0	0	151
Lane Group Flow (vph)	112	914	0	162	848	89	59	302	0	152	213	29
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA		Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8						6
Actuated Green, G (s)	8.3	55.0		14.6	61.7	61.7	10.9	18.6		12.1	19.5	19.5
Effective Green, g (s)	8.3	55.0		14.6	61.7	61.7	10.9	18.6		12.1	19.5	19.5
Actuated g/C Ratio	0.07	0.46		0.12	0.51	0.51	0.09	0.16		0.10	0.16	0.16
Clearance Time (s)	4.4	5.7		4.4	5.3	5.3	4.4	5.2		4.4	5.5	5.5
Vehicle Extension (s)	2.0	4.4		2.0	6.1	6.1	2.0	5.7		2.0	6.2	6.2
Lane Grp Cap (vph)	237	2312		417	1819	813	160	719		178	575	257
v/s Ratio Prot	0.03	c0.18		0.05	c0.24		0.03	c0.07		c0.09	0.06	
v/s Ratio Perm						0.06						0.02
v/c Ratio	0.47	0.40		0.39	0.47	0.11	0.37	0.42		0.85	0.37	0.11
Uniform Delay, d1	53.7	21.5		48.6	18.6	15.0	51.3	45.8		53.1	44.8	42.9
Progression Factor	1.00	1.00		0.55	0.60	0.60	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	0.5	0.5		0.2	0.6	0.2	0.5	1.0		29.7	1.2	0.6
Delay (s)	54.3	22.0		26.9	11.8	9.2	51.8	46.9		82.8	46.0	43.5
Level of Service	D	C		C	B	A	D	D		F	D	D
Approach Delay (s)		25.5			13.5			47.3			55.4	
Approach LOS		C			B			D			E	

Intersection Summary

HCM 2000 Control Delay	30.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	58.2%	ICU Level of Service	B
Analysis Period (min)	15		

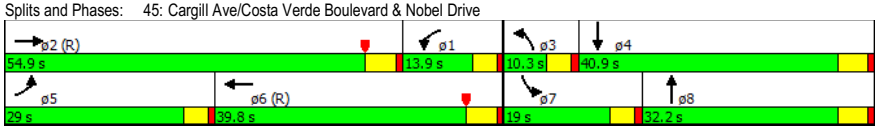
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	359	779	53	848	37	59	176	35
Future Volume (vph)	359	779	53	848	37	59	176	35
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	5	2	1	6	3	8	7	4
Permitted Phases								
Detector Phase	5	2	1	6	3	8	7	4
Switch Phase								
Minimum Initial (s)	4.0	25.0	4.0	25.0	4.0	25.0	4.0	25.0
Minimum Split (s)	8.4	32.2	8.4	39.2	8.4	32.2	8.4	39.2
Total Split (s)	29.0	54.9	13.9	39.8	10.3	32.2	19.0	40.9
Total Split (%)	24.2%	45.8%	11.6%	33.2%	8.6%	26.8%	15.8%	34.1%
Yellow Time (s)	3.4	4.2	3.4	4.2	3.4	4.2	3.4	4.2
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.2	4.4	5.2	4.4	5.2	4.4	5.2
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	Max	None	Max

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 120
Control Type: Actuated-Coordinated

Splits and Phases: 45: Cargill Ave/Costa Verde Boulevard & Nobel Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	359	779	53	53	848	156	37	59	44	176	35	212
Future Volume (vph)	359	779	53	53	848	156	37	59	44	176	35	212
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.2		4.4	5.2		4.4	5.2		4.4	5.2	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	1.00		1.00	1.00	
Frt	1.00	0.99		1.00	0.98		1.00	0.94		1.00	0.87	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	5037		1770	4967		1770	1744		1770	1623	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	5037		1770	4967		1770	1744		1770	1623	
Peak-hour factor, PHF	0.91	0.91	0.91	0.92	0.92	0.92	0.73	0.73	0.73	0.81	0.81	0.81
Adj. Flow (vph)	395	856	58	58	922	170	51	81	60	217	43	262
RTOR Reduction (vph)	0	6	0	0	22	0	0	22	0	0	178	0
Lane Group Flow (vph)	395	908	0	58	1070	0	51	119	0	217	127	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases												
Actuated Green, G (s)	24.6	50.7		7.6	33.7		4.7	27.9		14.6	37.8	
Effective Green, g (s)	24.6	50.7		7.6	33.7		4.7	27.9		14.6	37.8	
Actuated g/C Ratio	0.21	0.42		0.06	0.28		0.04	0.23		0.12	0.31	
Clearance Time (s)	4.4	5.2		4.4	5.2		4.4	5.2		4.4	5.2	
Vehicle Extension (s)	2.0	4.5		2.0	4.5		2.0	4.5		2.0	4.5	
Lane Grp Cap (vph)	362	2128		112	1394		69	405		215	511	
v/s Ratio Prot	c0.22	0.18		0.03	c0.22		0.03	c0.07		c0.12	0.08	
v/s Ratio Perm												
v/c Ratio	1.09	0.43		0.52	0.77		0.74	0.29		1.01	0.25	
Uniform Delay, d1	47.7	24.4		54.4	39.6		57.0	37.9		52.7	30.5	
Progression Factor	0.85	0.53		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	72.2	0.6		1.7	4.1		29.5	1.8		63.8	1.2	
Delay (s)	112.8	13.4		56.1	43.7		86.6	39.8		116.5	31.7	
Level of Service	F	B		E	D		F	D		F	C	
Approach Delay (s)		43.4			44.3			52.2			67.0	
Approach LOS		D			D			D			E	

Intersection Summary

HCM 2000 Control Delay	48.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	19.2
Intersection Capacity Utilization	83.8%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	314	932	10	812	7	0	142	2
Future Volume (vph)	314	932	10	812	7	0	142	2
Turn Type	Prot	NA	Prot	NA	Perm	NA	Perm	NA
Protected Phases	5	2	1	6		8		4
Permitted Phases					8		4	
Detector Phase	5	2	1	6	8	8	4	4
Switch Phase								
Minimum Initial (s)	4.0	7.0	4.0	7.0	4.0	4.0	4.0	4.0
Minimum Split (s)	9.5	19.0	9.5	28.9	32.9	32.9	32.9	32.9
Total Split (s)	34.4	65.0	34.4	64.9	44.9	44.9	44.9	44.9
Total Split (%)	23.8%	45.0%	23.8%	45.0%	31.1%	31.1%	31.1%	31.1%
Yellow Time (s)	3.4	4.0	3.4	3.9	3.9	3.9	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.4	5.0	4.4	4.9		4.9	4.9	4.9
Lead/Lag	Lead	Lag	Lead	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes				
Recall Mode	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 144.3
Actuated Cycle Length: 104.1
Natural Cycle: 90
Control Type: Actuated-Uncoordinated

Splits and Phases: 46: Lombard Place & Nobel Drive

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	314	932	13	10	812	155	7	0	10	142	2	249
Future Volume (vph)	314	932	13	10	812	155	7	0	10	142	2	249
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.0		4.4	4.9			4.9		4.9	4.9	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00		1.00	1.00	
Frt	1.00	1.00		1.00	0.98			0.92		1.00	0.85	
Flt Protected	0.95	1.00		0.95	1.00			0.98		0.95	1.00	
Satd. Flow (prot)	1770	3532		1770	3454			1680		1770	1586	
Flt Permitted	0.95	1.00		0.95	1.00			0.63		0.74	1.00	
Satd. Flow (perm)	1770	3532		1770	3454			1074		1384	1586	
Peak-hour factor, PHF	0.95	0.95	0.95	0.93	0.93	0.93	0.75	0.75	0.75	0.76	0.76	0.76
Adj. Flow (vph)	331	981	14	11	873	167	9	0	13	187	3	328
RTOR Reduction (vph)	0	0	0	0	11	0	0	18	0	0	267	0
Lane Group Flow (vph)	331	995	0	11	1029	0	0	4	0	187	64	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8			4		
Actuated Green, G (s)	26.2	71.8		1.2	46.9			19.9		19.9	19.9	
Effective Green, g (s)	26.2	71.8		1.2	46.9			19.9		19.9	19.9	
Actuated g/C Ratio	0.24	0.67		0.01	0.44			0.19		0.19	0.19	
Clearance Time (s)	4.4	5.0		4.4	4.9			4.9		4.9	4.9	
Vehicle Extension (s)	3.0	3.7		3.0	4.4			2.0		2.0	2.0	
Lane Grp Cap (vph)	432	2365		19	1511			199		256	294	
v/s Ratio Prot	c0.19	0.28		0.01	c0.30						0.04	
v/s Ratio Perm								0.00		c0.14		
v/c Ratio	0.77	0.42		0.58	0.68			0.02		0.73	0.22	
Uniform Delay, d1	37.7	8.1		52.7	24.2			35.7		41.1	37.0	
Progression Factor	1.00	1.00		1.00	1.00			1.00		1.00	1.00	
Incremental Delay, d2	7.9	0.2		36.3	1.5			0.0		8.9	0.1	
Delay (s)	45.6	8.3		89.0	25.6			35.7		50.0	37.2	
Level of Service	D	A		F	C			D		D	D	
Approach Delay (s)		17.6			26.3			35.7			41.8	
Approach LOS		B			C			D			D	

Intersection Summary

HCM 2000 Control Delay	25.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	107.2	Sum of lost time (s)	14.3
Intersection Capacity Utilization	72.1%	ICU Level of Service	C
Analysis Period (min)	15		

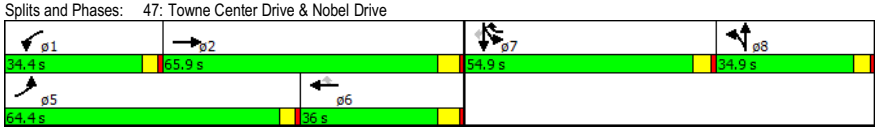
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	394	570	24	591	96	49	42	62	403
Future Volume (vph)	394	570	24	591	96	49	42	62	403
Turn Type	Prot	NA	Prot	NA	pm+ov	NA	Split	NA	Perm
Protected Phases	5	2	1	6	7	8	7	7	
Permitted Phases					6				7
Detector Phase	5	2	1	6	7	8	7	7	7
Switch Phase									
Minimum Initial (s)	4.0	7.0	4.0	7.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.4	12.9	8.4	13.0	8.9	8.9	8.9	8.9	8.9
Total Split (s)	64.4	65.9	34.4	36.0	54.9	34.9	54.9	54.9	54.9
Total Split (%)	33.9%	34.6%	18.1%	18.9%	28.9%	18.3%	28.9%	28.9%	28.9%
Yellow Time (s)	3.4	4.9	3.4	5.0	3.9	3.9	3.9	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.9	4.4	6.0	4.9	4.9	4.9	4.9	4.9
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 190.2
Actuated Cycle Length: 75.8
Natural Cycle: 60
Control Type: Actuated-Uncoordinated

Splits and Phases: 47: Towne Center Drive & Nobel Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	394	570	44	24	591	96	31	49	44	42	62	403
Future Volume (vph)	394	570	44	24	591	96	31	49	44	42	62	403
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.9		4.4	6.0	4.9		4.9		4.9	4.9	4.9
Lane Util. Factor	0.97	0.95		1.00	0.91	1.00		0.95		1.00	1.00	1.00
Frt	1.00	0.99		1.00	1.00	0.85		0.95		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.99		0.95	1.00	1.00
Satd. Flow (prot)	3433	3501		1770	5085	1583		3311		1770	1863	1583
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.99		0.95	1.00	1.00
Satd. Flow (perm)	3433	3501		1770	5085	1583		3311		1770	1863	1583
Peak-hour factor, PHF	0.96	0.96	0.96	0.85	0.85	0.85	0.78	0.78	0.78	0.91	0.91	0.91
Adj. Flow (vph)	410	594	46	28	695	113	40	63	56	46	68	443
RTOR Reduction (vph)	0	2	0	0	0	45	0	40	0	0	0	371
Lane Group Flow (vph)	410	638	0	28	695	68	0	119	0	46	68	72
Turn Type	Prot	NA		Prot	NA	pm+ov	Split	NA		Split	NA	Perm
Protected Phases	5	2		1	6	7	8	8		7	7	
Permitted Phases						6						7
Actuated Green, G (s)	15.3	32.9		3.7	21.2	33.7		7.9		12.5	12.5	12.5
Effective Green, g (s)	15.3	32.9		3.7	21.2	33.7		7.9		12.5	12.5	12.5
Actuated g/C Ratio	0.20	0.43		0.05	0.27	0.44		0.10		0.16	0.16	0.16
Clearance Time (s)	4.4	5.9		4.4	6.0	4.9		4.9		4.9	4.9	4.9
Vehicle Extension (s)	2.0	4.9		2.0	3.3	4.0		2.0		4.0	4.0	4.0
Lane Grp Cap (vph)	681	1493		84	1398	691		339		286	302	256
v/s Ratio Prot	c0.12	0.18		0.02	c0.14	0.02		c0.04		0.03	0.04	
v/s Ratio Perm						0.03						c0.05
v/c Ratio	0.60	0.43		0.33	0.50	0.10		0.35		0.16	0.23	0.28
Uniform Delay, d1	28.1	15.5		35.5	23.5	12.8		32.2		27.8	28.1	28.4
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00
Incremental Delay, d2	1.0	0.4		0.9	0.3	0.1		0.2		0.4	0.5	0.8
Delay (s)	29.2	15.9		36.4	23.8	12.8		32.4		28.1	28.6	29.2
Level of Service	C	B		D	C	B		C		C	C	C
Approach Delay (s)		21.1			22.7			32.4			29.0	
Approach LOS		C			C			C			C	

Intersection Summary

HCM 2000 Control Delay	24.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.46		
Actuated Cycle Length (s)	77.1	Sum of lost time (s)	20.2
Intersection Capacity Utilization	53.2%	ICU Level of Service	A
Analysis Period (min)	15		

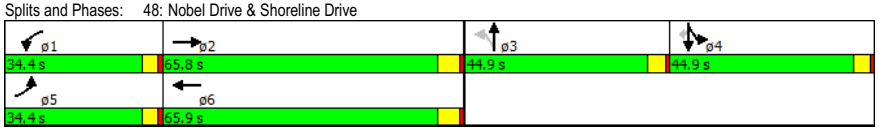
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	38	598	14	659	17	4	93	4	33
Future Volume (vph)	38	598	14	659	17	4	93	4	33
Turn Type	Prot	NA	Prot	NA	Perm	NA	Split	NA	Perm
Protected Phases	5	2	1	6		3	4	4	
Permitted Phases					3				4
Detector Phase	5	2	1	6	3	3	4	4	4
Switch Phase									
Minimum Initial (s)	4.0	10.0	4.0	10.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.4	15.8	8.4	30.9	8.9	8.9	33.9	33.9	33.9
Total Split (s)	34.4	65.8	34.4	65.9	44.9	44.9	44.9	44.9	44.9
Total Split (%)	18.1%	34.6%	18.1%	34.7%	23.6%	23.6%	23.6%	23.6%	23.6%
Yellow Time (s)	3.4	4.8	3.4	4.9	3.9	3.9	3.9	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.8	4.4	5.9		4.9	4.9	4.9	4.9
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 190.1
Actuated Cycle Length: 77.3
Natural Cycle: 85
Control Type: Actuated-Uncoordinated

Splits and Phases: 48: Nobel Drive & Shoreline Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	38	598	18	14	659	81	17	4	22	93	4	33
Future Volume (vph)	38	598	18	14	659	81	17	4	22	93	4	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.8		4.4	5.9			4.9		4.9	4.9	4.9
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00		1.00	1.00	0.88
Frt	1.00	1.00		1.00	0.98			0.93		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.98		0.95	1.00	1.00
Satd. Flow (prot)	1770	5063		1770	5002			1700		1770	1863	2787
Flt Permitted	0.95	1.00		0.95	1.00			0.23		0.95	1.00	1.00
Satd. Flow (perm)	1770	5063		1770	5002			393		1770	1863	2787
Peak-hour factor, PHF	0.93	0.93	0.93	0.87	0.87	0.87	0.62	0.62	0.62	0.93	0.93	0.93
Adj. Flow (vph)	41	643	19	16	757	93	27	6	35	100	4	35
RTOR Reduction (vph)	0	1	0	0	8	0	0	20	0	0	0	30
Lane Group Flow (vph)	41	661	0	16	842	0	0	48	0	100	4	5
Turn Type	Prot	NA		Prot	NA		Perm	NA		Split	NA	Perm
Protected Phases	5	2		1	6			3		4	4	
Permitted Phases							3					4
Actuated Green, G (s)	3.9	30.2		1.9	28.1			15.7		11.2	11.2	11.2
Effective Green, g (s)	3.9	30.2		1.9	28.1			15.7		11.2	11.2	11.2
Actuated g/C Ratio	0.05	0.38		0.02	0.36			0.20		0.14	0.14	0.14
Clearance Time (s)	4.4	5.8		4.4	5.9			4.9		4.9	4.9	4.9
Vehicle Extension (s)	2.0	4.6		2.0	4.4			2.0		2.0	2.0	2.0
Lane Grp Cap (vph)	87	1935		42	1779			78		250	264	395
v/s Ratio Prot	c0.02	0.13		0.01	c0.17					c0.06	0.00	
v/s Ratio Perm								c0.12				0.00
v/c Ratio	0.47	0.34		0.38	0.47			0.61		0.40	0.02	0.01
Uniform Delay, d1	36.5	17.3		38.0	19.7			28.9		30.8	29.2	29.1
Progression Factor	1.00	1.00		1.00	1.00			1.00		1.00	1.00	1.00
Incremental Delay, d2	1.5	0.2		2.1	0.3			9.7		0.4	0.0	0.0
Delay (s)	38.0	17.5		40.1	20.0			38.6		31.2	29.2	29.2
Level of Service	D	B		D	C			D		C	C	C
Approach Delay (s)		18.7			20.4			38.6			30.6	
Approach LOS		B			C			D			C	

Intersection Summary

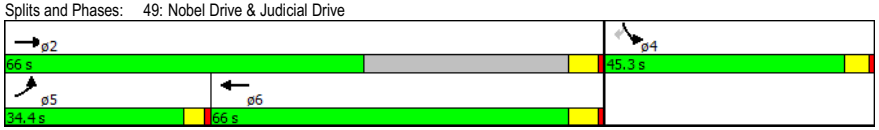
HCM 2000 Control Delay	21.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	79.0	Sum of lost time (s)	20.1
Intersection Capacity Utilization	41.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBT	SBL	SBR
Lane Configurations					
Traffic Volume (vph)	47	776	662	375	32
Future Volume (vph)	47	776	662	375	32
Turn Type	Prot	NA	NA	Prot	Perm
Protected Phases	5	2	6	4	
Permitted Phases					4
Detector Phase	5	2	6	4	4
Switch Phase					
Minimum Initial (s)	4.0	10.0	10.0	7.0	7.0
Minimum Split (s)	8.4	16.0	36.0	39.3	39.3
Total Split (s)	34.4	66.0	66.0	45.3	45.3
Total Split (%)	23.6%	45.3%	45.3%	31.1%	31.1%
Yellow Time (s)	3.4	5.0	5.0	4.3	4.3
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	6.0	6.0	5.3	5.3
Lead/Lag	Lead		Lag		
Lead-Lag Optimize?	Yes		Yes		
Recall Mode	None	Min	Min	None	None

Intersection Summary
Cycle Length: 145.7
Actuated Cycle Length: 77.4
Natural Cycle: 85
Control Type: Actuated-Uncoordinated

Splits and Phases: 49: Nobel Drive & Judicial Drive



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	47	776	662	401	375	32
Future Volume (vph)	47	776	662	401	375	32
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	6.0	6.0		5.3	5.3
Lane Util. Factor	0.97	0.91	0.91		0.97	1.00
Frt	1.00	1.00	0.94		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	3433	5085	4797		3433	1583
Flt Permitted	0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)	3433	5085	4797		3433	1583
Peak-hour factor, PHF	0.90	0.90	0.85	0.85	0.87	0.87
Adj. Flow (vph)	52	862	779	472	431	37
RTOR Reduction (vph)	0	0	64	0	0	28
Lane Group Flow (vph)	52	862	1187	0	431	9
Turn Type	Prot	NA	NA		Prot	Perm
Protected Phases	5	2	6		4	
Permitted Phases						4
Actuated Green, G (s)	4.6	48.1	39.1		18.3	18.3
Effective Green, g (s)	4.6	48.1	39.1		18.3	18.3
Actuated g/C Ratio	0.06	0.62	0.50		0.24	0.24
Clearance Time (s)	4.4	6.0	6.0		5.3	5.3
Vehicle Extension (s)	2.0	5.4	5.4		4.4	4.4
Lane Grp Cap (vph)	203	3147	2413		808	372
v/s Ratio Prot	0.02	c0.17	c0.25		c0.13	
v/s Ratio Perm						0.01
v/c Ratio	0.26	0.27	0.49		0.53	0.02
Uniform Delay, d1	34.9	6.8	12.7		26.0	22.8
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	0.2	0.1	0.4		1.0	0.0
Delay (s)	35.2	6.9	13.1		27.0	22.9
Level of Service	D	A	B		C	C
Approach Delay (s)		8.5	13.1		26.7	
Approach LOS		A	B		C	

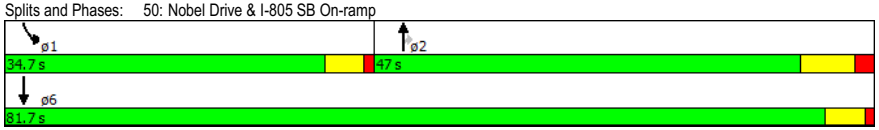
Intersection Summary			
HCM 2000 Control Delay	13.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	77.7	Sum of lost time (s)	15.7
Intersection Capacity Utilization	41.9%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	NBT	NBR	SBL	SBT
Lane Configurations				
Traffic Volume (vph)	335	690	29	1161
Future Volume (vph)	335	690	29	1161
Turn Type	NA	Perm	Prot	NA
Protected Phases	2		1	6
Permitted Phases		2		
Detector Phase	2	2	1	6
Switch Phase				
Minimum Initial (s)	12.0	12.0	5.0	5.0
Minimum Split (s)	39.0	39.0	9.7	9.7
Total Split (s)	47.0	47.0	34.7	81.7
Total Split (%)	57.5%	57.5%	42.5%	100.0%
Yellow Time (s)	5.0	5.0	3.7	3.7
All-Red Time (s)	2.0	2.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	4.7	4.7
Lead/Lag	Lag	Lag	Lead	
Lead-Lag Optimize?	Yes	Yes	Yes	
Recall Mode	Min	Min	None	None

Intersection Summary
Cycle Length: 81.7
Actuated Cycle Length: 88.5
Natural Cycle: 150
Control Type: Actuated-Uncoordinated

Splits and Phases: 50: Nobel Drive & I-805 SB On-ramp



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	335	690	29	1161
Future Volume (vph)	0	0	335	690	29	1161
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)			7.0	7.0	4.7	4.7
Lane Util. Factor			0.95	0.88	0.97	0.91
Frt			1.00	0.85	1.00	1.00
Flt Protected			1.00	1.00	0.95	1.00
Satd. Flow (prot)			3539	2787	3433	5085
Flt Permitted			1.00	1.00	0.95	1.00
Satd. Flow (perm)			3539	2787	3433	5085
Peak-hour factor, PHF	0.94	0.94	0.25	0.25	0.25	0.25
Adj. Flow (vph)	0	0	1340	2760	116	4644
RTOR Reduction (vph)	0	0	0	273	0	0
Lane Group Flow (vph)	0	0	1340	2487	116	4644
Turn Type			NA	Perm	Prot	NA
Protected Phases			2		1	6
Permitted Phases				2		
Actuated Green, G (s)			70.3	70.3	7.3	89.3
Effective Green, g (s)			70.3	70.3	7.3	89.3
Actuated g/C Ratio			0.79	0.79	0.08	1.00
Clearance Time (s)			7.0	7.0	4.7	4.7
Vehicle Extension (s)			3.0	3.0	3.0	3.0
Lane Grp Cap (vph)			2786	2194	280	5085
v/s Ratio Prot			0.38		0.03	c0.91
v/s Ratio Perm				c0.89		
v/c Ratio			0.48	1.13	0.41	0.91
Uniform Delay, d1			3.3	9.5	39.0	0.0
Progression Factor			1.00	1.00	1.00	1.00
Incremental Delay, d2			0.1	66.4	1.0	3.0
Delay (s)			3.4	75.9	40.0	3.0
Level of Service			A	E	D	A
Approach Delay (s)	0.0		52.2			3.9
Approach LOS	A		D			A

Intersection Summary			
HCM 2000 Control Delay	26.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	1.17		
Actuated Cycle Length (s)	89.3	Sum of lost time (s)	11.7
Intersection Capacity Utilization	44.3%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	WBL	WBR	NBT	SBT	ø5
Lane Configurations					
Traffic Volume (vph)	606	607	331	484	
Future Volume (vph)	606	607	331	484	
Turn Type	Prot	Prot	NA	NA	
Protected Phases	8	1	2	6	5
Permitted Phases					
Detector Phase	8	1	2	6	
Switch Phase					
Minimum Initial (s)	5.0	5.0	16.0	11.0	5.0
Minimum Split (s)	11.1	11.1	23.0	18.0	9.7
Total Split (s)	36.1	19.7	47.0	47.0	24.7
Total Split (%)	33.5%	18.3%	43.6%	43.6%	23%
Yellow Time (s)	4.1	3.7	5.0	5.0	3.7
All-Red Time (s)	2.0	1.0	2.0	2.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.1	4.7	7.0	7.0	
Lead/Lag		Lead	Lag	Lag	Lead
Lead-Lag Optimize?		Yes	Yes	Yes	Yes
Recall Mode	None	None	Min	Min	None

Intersection Summary
Cycle Length: 107.8
Actuated Cycle Length: 72.1
Natural Cycle: 70
Control Type: Actuated-Uncoordinated

Splits and Phases: 51: Nobel Drive & I-805 N Off-ramps

Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	606	607	0	331	0	0	484
Future Volume (vph)	606	607	0	331	0	0	484
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.1	4.7		7.0			7.0
Lane Util. Factor	0.97	0.88		0.95			0.91
Frt	1.00	0.85		1.00			1.00
Flt Protected	0.95	1.00		1.00			1.00
Satd. Flow (prot)	3433	2787		3539			5085
Flt Permitted	0.95	1.00		1.00			1.00
Satd. Flow (perm)	3433	2787		3539			5085
Peak-hour factor, PHF	0.86	0.86	0.92	0.93	0.93	0.25	0.25
Adj. Flow (vph)	705	706	0	356	0	0	1936
RTOR Reduction (vph)	0	639	0	0	0	0	0
Lane Group Flow (vph)	705	67	0	356	0	0	1936
Turn Type	Prot	Prot	Prot	NA			NA
Protected Phases	8	1	5	2			6
Permitted Phases							
Actuated Green, G (s)	18.9	6.8		28.6			40.1
Effective Green, g (s)	18.9	6.8		28.6			40.1
Actuated g/C Ratio	0.26	0.09		0.40			0.56
Clearance Time (s)	6.1	4.7		7.0			7.0
Vehicle Extension (s)	2.0	2.0		2.0			2.0
Lane Grp Cap (vph)	899	262		1403			2828
v/s Ratio Prot	c0.21	0.02		0.10			c0.38
v/s Ratio Perm							
v/c Ratio	0.78	0.25		0.25			0.68
Uniform Delay, d1	24.7	30.3		14.6			11.5
Progression Factor	1.00	1.00		1.00			1.00
Incremental Delay, d2	4.2	0.2		0.0			0.6
Delay (s)	28.9	30.5		14.6			12.0
Level of Service	C	C		B			B
Approach Delay (s)	29.7			14.6			12.0
Approach LOS	C			B			B

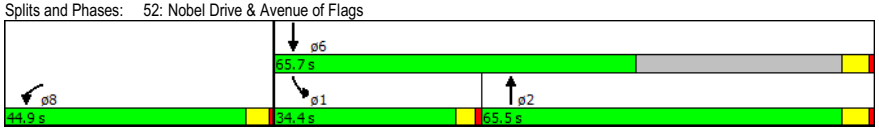
Intersection Summary			
HCM 2000 Control Delay	19.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	72.1	Sum of lost time (s)	17.8
Intersection Capacity Utilization	44.3%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	WBL	NBT	SBL	SBT
Lane Configurations				
Traffic Volume (vph)	41	971	44	392
Future Volume (vph)	41	971	44	392
Turn Type	Prot	NA	Prot	NA
Protected Phases	8	2	1	6
Permitted Phases				
Detector Phase	8	2	1	6
Switch Phase				
Minimum Initial (s)	4.0	7.0	4.0	7.0
Minimum Split (s)	28.9	26.5	9.5	12.7
Total Split (s)	44.9	65.5	34.4	65.7
Total Split (%)	31.0%	45.2%	23.8%	45.4%
Yellow Time (s)	3.9	4.5	3.4	4.7
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	5.5	4.4	5.7
Lead/Lag		Lag	Lead	
Lead-Lag Optimize?		Yes	Yes	
Recall Mode	None	Min	None	Min

Intersection Summary
Cycle Length: 144.8
Actuated Cycle Length: 67.4
Natural Cycle: 70
Control Type: Actuated-Uncoordinated

Splits and Phases: 52: Nobel Drive & Avenue of Flags



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	41	31	971	66	44	392
Future Volume (vph)	41	31	971	66	44	392
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9		5.5		4.4	5.7
Lane Util. Factor	1.00		0.95		1.00	0.95
Frt	0.94		0.99		1.00	1.00
Flt Protected	0.97		1.00		0.95	1.00
Satd. Flow (prot)	1706		3505		1770	3539
Flt Permitted	0.97		1.00		0.95	1.00
Satd. Flow (perm)	1706		3505		1770	3539
Peak-hour factor, PHF	0.75	0.75	0.91	0.91	0.89	0.89
Adj. Flow (vph)	55	41	1067	73	49	440
RTOR Reduction (vph)	24	0	2	0	0	0
Lane Group Flow (vph)	72	0	1138	0	49	440
Turn Type	Prot		NA		Prot	NA
Protected Phases	8		2		1	6
Permitted Phases						
Actuated Green, G (s)	6.6		41.7		6.2	52.1
Effective Green, g (s)	6.6		41.7		6.2	52.1
Actuated g/C Ratio	0.10		0.60		0.09	0.75
Clearance Time (s)	4.9		5.5		4.4	5.7
Vehicle Extension (s)	2.0		5.2		3.0	4.9
Lane Grp Cap (vph)	162		2109		158	2660
v/s Ratio Prot	c0.04		c0.32		c0.03	0.12
v/s Ratio Perm						
v/c Ratio	0.45		0.54		0.31	0.17
Uniform Delay, d1	29.6		8.1		29.5	2.4
Progression Factor	1.00		1.00		1.00	1.00
Incremental Delay, d2	0.7		0.5		1.1	0.1
Delay (s)	30.3		8.7		30.7	2.5
Level of Service	C		A		C	A
Approach Delay (s)	30.3		8.7			5.3
Approach LOS	C		A			A

Intersection Summary			
HCM 2000 Control Delay	8.9	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	69.3	Sum of lost time (s)	14.8
Intersection Capacity Utilization	48.8%	ICU Level of Service	A
Analysis Period (min)	15		

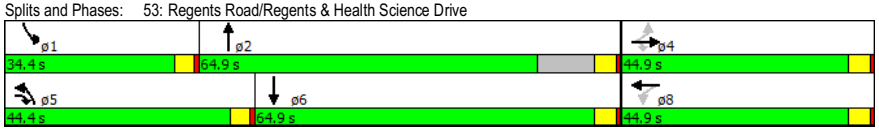
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBT	ø1
Lane Configurations									
Traffic Volume (vph)	81	0	428	2	2	375	132	109	
Future Volume (vph)	81	0	428	2	2	375	132	109	
Turn Type	Perm	NA	pm+ov	Perm	NA	Prot	NA	NA	
Protected Phases		4	5		8	5	2	6	1
Permitted Phases	4		4	8					
Detector Phase	4	4	5	8	8	5	2	6	
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	10.0	10.0	4.0
Minimum Split (s)	8.9	8.9	8.4	22.9	22.9	8.4	14.9	14.9	8.4
Total Split (s)	44.9	44.9	44.4	44.9	44.9	44.4	64.9	64.9	34.4
Total Split (%)	29.1%	29.1%	28.8%	29.1%	29.1%	28.8%	42.1%	42.1%	22%
Yellow Time (s)	3.9	3.9	3.4	3.9	3.9	3.4	3.9	3.9	3.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	
Total Lost Time (s)		4.9	4.4		4.9	4.4	4.9	4.9	
Lead/Lag			Lead			Lead	Lag	Lag	Lead
Lead-Lag Optimize?			Yes			Yes	Yes	Yes	Yes
Recall Mode	None	None	Min	None	None	Min	None	None	None

Intersection Summary

Cycle Length: 154.2
Actuated Cycle Length: 52.6
Natural Cycle: 60
Control Type: Actuated-Uncoordinated

Splits and Phases: 53: Regents Road/Regents & Health Science Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	81	0	428	2	2	0	375	132	2	0	109	96
Future Volume (vph)	81	0	428	2	2	0	375	132	2	0	109	96
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9	4.4		4.9		4.4	4.9			4.9	
Lane Util. Factor		1.00	1.00		1.00		1.00	0.95			0.95	
Frt		1.00	0.85		1.00		1.00	1.00			0.93	
Flt Protected		0.95	1.00		0.98		0.95	1.00			1.00	
Satd. Flow (prot)		1770	1583		1817		1770	3532			3290	
Flt Permitted		0.75	1.00		0.84		0.95	1.00			1.00	
Satd. Flow (perm)		1402	1583		1565		1770	3532			3290	
Peak-hour factor, PHF	0.78	0.78	0.78	0.50	0.50	0.50	0.92	0.92	0.92	0.81	0.81	0.81
Adj. Flow (vph)	104	0	549	4	4	0	408	143	2	0	135	119
RTOR Reduction (vph)	0	0	261	0	0	0	0	0	0	0	94	0
Lane Group Flow (vph)	0	104	288	0	8	0	408	145	0	0	160	0
Turn Type	Perm	NA	pm+ov	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4	5		8		5	2		1	6	
Permitted Phases	4		4	8								
Actuated Green, G (s)		7.9	28.0		7.9		20.1	35.6			11.1	
Effective Green, g (s)		7.9	28.0		7.9		20.1	35.6			11.1	
Actuated g/C Ratio		0.15	0.53		0.15		0.38	0.67			0.21	
Clearance Time (s)		4.9	4.4		4.9		4.4	4.9			4.9	
Vehicle Extension (s)		2.0	2.0		2.0		2.0	3.8			3.8	
Lane Grp Cap (vph)		207	831		231		667	2359			685	
v/s Ratio Prot			0.13				c0.23	0.04			c0.05	
v/s Ratio Perm		c0.07	0.05		0.01							
v/c Ratio		0.50	0.35		0.03		0.61	0.06			0.23	
Uniform Delay, d1		20.9	7.3		19.4		13.4	3.1			17.6	
Progression Factor		1.00	1.00		1.00		1.00	1.00			1.00	
Incremental Delay, d2		0.7	0.1		0.0		1.2	0.0			0.2	
Delay (s)		21.6	7.4		19.5		14.6	3.1			17.8	
Level of Service		C	A		B		B	A			B	
Approach Delay (s)		9.7			19.5			11.6			17.8	
Approach LOS		A			B			B			B	

Intersection Summary

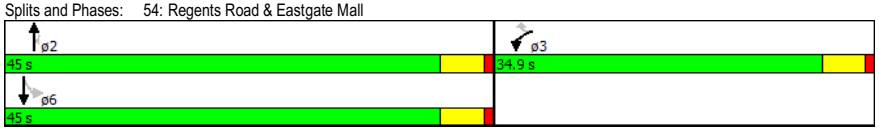
HCM 2000 Control Delay	11.9	HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio	0.48			
Actuated Cycle Length (s)	53.3	Sum of lost time (s)	14.2	
Intersection Capacity Utilization	50.0%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	149	107	409	140	105	434
Future Volume (vph)	149	107	409	140	105	434
Turn Type	Prot	Perm	NA	Perm	Perm	NA
Protected Phases	3		2			6
Permitted Phases		3		2	6	
Detector Phase	3	3	2	2	6	6
Switch Phase						
Minimum Initial (s)	4.0	4.0	7.0	7.0	7.0	7.0
Minimum Split (s)	8.9	8.9	12.0	12.0	12.0	12.0
Total Split (s)	34.9	34.9	45.0	45.0	45.0	45.0
Total Split (%)	43.7%	43.7%	56.3%	56.3%	56.3%	56.3%
Yellow Time (s)	3.9	3.9	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	5.0	5.0	5.0	5.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None	None	Min	Min	Min	Min

Intersection Summary
Cycle Length: 79.9
Actuated Cycle Length: 33
Natural Cycle: 40
Control Type: Actuated-Uncoordinated

Splits and Phases: 54: Regents Road & Eastgate Mall



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	149	107	409	140	105	434
Future Volume (vph)	149	107	409	140	105	434
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9	5.0	5.0	5.0	5.0
Lane Util. Factor	1.00	1.00	0.91	0.91	1.00	0.95
Frt	1.00	0.85	0.99	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3373	1441	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.48	1.00
Satd. Flow (perm)	1770	1583	3373	1441	899	3539
Peak-hour factor, PHF	0.95	0.95	0.94	0.94	0.85	0.85
Adj. Flow (vph)	157	113	435	149	124	511
RTOR Reduction (vph)	0	86	3	72	0	0
Lane Group Flow (vph)	157	27	447	62	124	511
Turn Type	Prot	Perm	NA	Perm	Perm	NA
Protected Phases	3		2			6
Permitted Phases		3		2	6	
Actuated Green, G (s)	7.7	7.7	15.2	15.2	15.2	15.2
Effective Green, g (s)	7.7	7.7	15.2	15.2	15.2	15.2
Actuated g/C Ratio	0.23	0.23	0.46	0.46	0.46	0.46
Clearance Time (s)	4.9	4.9	5.0	5.0	5.0	5.0
Vehicle Extension (s)	2.0	2.0	3.4	3.4	3.5	3.5
Lane Grp Cap (vph)	415	371	1563	667	416	1640
v/s Ratio Prot	c0.09		0.13			c0.14
v/s Ratio Perm		0.02		0.04	0.14	
v/c Ratio	0.38	0.07	0.29	0.09	0.30	0.31
Uniform Delay, d1	10.5	9.8	5.4	4.9	5.5	5.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2	0.0	0.1	0.1	0.5	0.1
Delay (s)	10.8	9.8	5.6	5.0	6.0	5.6
Level of Service	B	A	A	A	A	A
Approach Delay (s)	10.4		5.4			5.7
Approach LOS	B		A			A

Intersection Summary			
HCM 2000 Control Delay	6.4	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.33		
Actuated Cycle Length (s)	32.8	Sum of lost time (s)	9.9
Intersection Capacity Utilization	39.3%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	11	8	41	7	98	6	423	92	421
Future Volume (vph)	11	8	41	7	98	6	423	92	421
Turn Type	Perm	NA	Perm	NA	Perm	Prot	NA	Prot	NA
Protected Phases		4		8		5	2	1	6
Permitted Phases	4		8		8				
Detector Phase	4	4	8	8	8	5	2	1	6
Switch Phase									
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	4.0	10.0	4.0	10.0
Minimum Split (s)	11.9	11.9	11.9	11.9	11.9	8.4	14.9	8.4	14.9
Total Split (s)	34.9	34.9	44.9	44.9	44.9	34.4	64.9	34.4	64.9
Total Split (%)	24.2%	24.2%	31.1%	31.1%	31.1%	23.9%	45.0%	23.9%	45.0%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.9	3.4	3.9	3.4	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.9		4.9	4.9	4.4	4.9	4.4	4.9
Lead/Lag						Lead	Lag	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	None	Min

Intersection Summary

Cycle Length: 144.2
Actuated Cycle Length: 40.6
Natural Cycle: 40
Control Type: Actuated-Uncoordinated

Splits and Phases: 55: Regents Road & Executive Drive

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	8	7	41	7	98	6	423	34	92	421	23
Future Volume (vph)	11	8	7	41	7	98	6	423	34	92	421	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9			4.9	4.9	4.4	4.9		4.4	4.9	
Lane Util. Factor		1.00			1.00	1.00	1.00	0.95		1.00	0.95	
Frt		0.96			1.00	0.85	1.00	0.99		1.00	0.99	
Flt Protected		0.98			0.96	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1758			1787	1583	1770	3499		1770	3511	
Flt Permitted		0.84			0.74	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1504			1377	1583	1770	3499		1770	3511	
Peak-hour factor, PHF	0.96	0.96	0.96	0.90	0.90	0.90	0.95	0.95	0.95	0.93	0.93	0.93
Adj. Flow (vph)	11	8	7	46	8	109	6	445	36	99	453	25
RTOR Reduction (vph)	0	6	0	0	0	94	0	4	0	0	2	0
Lane Group Flow (vph)	0	20	0	0	54	15	6	477	0	99	476	0
Turn Type	Perm	NA		Perm	NA	Perm	Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8		8						
Actuated Green, G (s)		6.1			6.1	6.1	0.9	19.2		5.9	24.2	
Effective Green, g (s)		6.1			6.1	6.1	0.9	19.2		5.9	24.2	
Actuated g/C Ratio		0.13			0.13	0.13	0.02	0.42		0.13	0.53	
Clearance Time (s)		4.9			4.9	4.9	4.4	4.9		4.4	4.9	
Vehicle Extension (s)		2.0			3.1	3.1	2.0	3.1		2.0	3.1	
Lane Grp Cap (vph)		202			185	212	35	1479		230	1871	
v/s Ratio Prot							0.00	c0.14		c0.06	0.14	
v/s Ratio Perm		0.01			c0.04	0.01						
v/c Ratio		0.10			0.29	0.07	0.17	0.32		0.43	0.25	
Uniform Delay, d1		17.2			17.7	17.2	21.9	8.8		18.2	5.7	
Progression Factor		1.00			1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.1			0.9	0.1	0.8	0.1		0.5	0.1	
Delay (s)		17.3			18.6	17.3	22.7	8.9		18.7	5.8	
Level of Service		B			B	B	C	A		B	A	
Approach Delay (s)		17.3			17.7			9.1			8.0	
Approach LOS		B			B			A			A	

Intersection Summary

HCM 2000 Control Delay	9.9	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.34		
Actuated Cycle Length (s)	45.4	Sum of lost time (s)	14.2
Intersection Capacity Utilization	37.8%	ICU Level of Service	A
Analysis Period (min)	15		

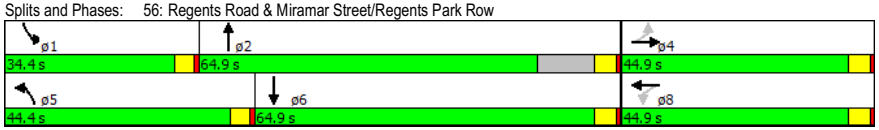
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	36	9	142	12	89	388	69	403
Future Volume (vph)	36	9	142	12	89	388	69	403
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	7.0	4.0	7.0
Minimum Split (s)	8.9	8.9	8.9	8.9	8.4	11.9	8.4	11.9
Total Split (s)	44.9	44.9	44.9	44.9	44.4	64.9	34.4	64.9
Total Split (%)	29.1%	29.1%	29.1%	29.1%	28.8%	42.1%	22.3%	42.1%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.4	3.9	3.4	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	4.9	4.9	4.4	4.9	4.4	4.9
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 154.2
Actuated Cycle Length: 53.2
Natural Cycle: 40
Control Type: Actuated-Uncoordinated

Splits and Phases: 56: Regents Road & Miramar Street/Regents Park Row



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	36	9	108	142	12	89	89	388	125	69	403	51
Future Volume (vph)	36	9	108	142	12	89	89	388	125	69	403	51
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9		4.9	4.9		4.4	4.9		4.4	4.9	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frt	1.00	0.86		1.00	0.87		1.00	0.96		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1605		1770	1617		1770	3410		1770	3480	
Flt Permitted	0.69	1.00		0.66	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1281	1605		1226	1617		1770	3410		1770	3480	
Peak-hour factor, PHF	0.75	0.75	0.75	0.95	0.95	0.95	0.86	0.86	0.86	0.91	0.91	0.91
Adj. Flow (vph)	48	12	144	149	13	94	103	451	145	76	443	56
RTOR Reduction (vph)	0	106	0	0	69	0	0	24	0	0	7	0
Lane Group Flow (vph)	48	50	0	149	38	0	103	572	0	76	492	0
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8								
Actuated Green, G (s)	14.0	14.0		14.0	14.0		7.0	19.0		6.1	18.1	
Effective Green, g (s)	14.0	14.0		14.0	14.0		7.0	19.0		6.1	18.1	
Actuated g/C Ratio	0.26	0.26		0.26	0.26		0.13	0.36		0.11	0.34	
Clearance Time (s)	4.9	4.9		4.9	4.9		4.4	4.9		4.4	4.9	
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	3.8		2.0	3.8	
Lane Grp Cap (vph)	336	421		322	424		232	1215		202	1181	
v/s Ratio Prot		0.03			0.02		c0.06	c0.17		0.04	0.14	
v/s Ratio Perm	0.04			c0.12								
v/c Ratio	0.14	0.12		0.46	0.09		0.44	0.47		0.38	0.42	
Uniform Delay, d1	15.1	15.0		16.5	14.8		21.4	13.3		21.8	13.5	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.1	0.0		0.4	0.0		0.5	0.4		0.4	0.3	
Delay (s)	15.1	15.0		16.9	14.9		21.8	13.6		22.3	13.8	
Level of Service	B	B		B	B		C	B		C	B	
Approach Delay (s)		15.0			16.0			14.8			15.0	
Approach LOS		B			B			B			B	

Intersection Summary

HCM 2000 Control Delay	15.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.47		
Actuated Cycle Length (s)	53.3	Sum of lost time (s)	14.2
Intersection Capacity Utilization	44.9%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	27	6	44	21	149	16	404	65	448
Future Volume (vph)	27	6	44	21	149	16	404	65	448
Turn Type	Perm	NA	Perm	NA	pm+ov	Prot	NA	Prot	NA
Protected Phases		4		8	1	5	2	1	6
Permitted Phases	4		8		8				
Detector Phase	4	4	8	8	1	5	2	1	6
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	10.0	4.0	10.0
Minimum Split (s)	8.9	8.9	8.9	8.9	8.4	8.4	15.2	8.4	15.3
Total Split (s)	44.9	44.9	44.9	44.9	34.4	34.4	65.2	34.4	65.3
Total Split (%)	31.1%	31.1%	31.1%	31.1%	23.8%	23.8%	45.1%	23.8%	45.2%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.4	3.4	4.2	3.4	4.3
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.9		4.9	4.4	4.4	5.2	4.4	5.3
Lead/Lag					Lead	Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 144.6
Actuated Cycle Length: 34.4
Natural Cycle: 40
Control Type: Actuated-Uncoordinated

Splits and Phases: 57: Regents Road & Plaza De Palmas

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	27	6	7	44	21	149	16	404	45	65	448	24
Future Volume (vph)	27	6	7	44	21	149	16	404	45	65	448	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9			4.9	4.4	4.4	5.2		4.4	5.3	
Lane Util. Factor		1.00			1.00	1.00	1.00	0.91		1.00	0.95	
Frt		0.98			1.00	0.85	1.00	0.98		1.00	0.99	
Flt Protected		0.97			0.97	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1760			1801	1583	1770	5009		1770	3512	
Flt Permitted		0.90			0.91	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1645			1693	1583	1770	5009		1770	3512	
Peak-hour factor, PHF	0.77	0.77	0.77	0.94	0.94	0.94	0.90	0.90	0.90	0.89	0.89	0.89
Adj. Flow (vph)	35	8	9	47	22	159	18	449	50	73	503	27
RTOR Reduction (vph)	0	6	0	0	0	124	0	9	0	0	2	0
Lane Group Flow (vph)	0	46	0	0	69	35	18	490	0	73	528	0
Turn Type	Perm	NA		Perm	NA	pm+ov	Prot	NA		Prot	NA	
Protected Phases		4			8	1	5	2		1	6	
Permitted Phases	4			8		8						
Actuated Green, G (s)		3.7			3.7	8.7	0.9	16.5		5.0	20.5	
Effective Green, g (s)		3.7			3.7	8.7	0.9	16.5		5.0	20.5	
Actuated g/C Ratio		0.09			0.09	0.22	0.02	0.42		0.13	0.52	
Clearance Time (s)		4.9			4.9	4.4	4.4	5.2		4.4	5.3	
Vehicle Extension (s)		2.0			2.0	2.0	2.0	4.5		2.0	4.2	
Lane Grp Cap (vph)		153			157	346	40	2081		222	1813	
v/s Ratio Prot						0.01	0.01	0.10		c0.04	c0.15	
v/s Ratio Perm		0.03			c0.04	0.01						
v/c Ratio		0.30			0.44	0.10	0.45	0.24		0.33	0.29	
Uniform Delay, d1		16.8			17.0	12.4	19.2	7.5		15.8	5.5	
Progression Factor		1.00			1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.4			0.7	0.0	2.9	0.1		0.3	0.1	
Delay (s)		17.2			17.7	12.4	22.1	7.6		16.1	5.6	
Level of Service		B			B	B	C	A		B	A	
Approach Delay (s)		17.2			14.0			8.1			6.9	
Approach LOS		B			B			A			A	

Intersection Summary

HCM 2000 Control Delay	8.9	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.34		
Actuated Cycle Length (s)	39.7	Sum of lost time (s)	14.6
Intersection Capacity Utilization	37.6%	ICU Level of Service	A
Analysis Period (min)	15		

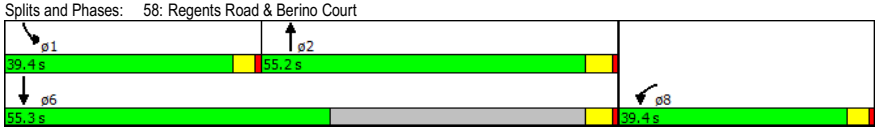
c Critical Lane Group

Lane Group	WBL	NBT	SBL	SBT
Lane Configurations				
Traffic Volume (vph)	17	156	110	268
Future Volume (vph)	17	156	110	268
Turn Type	Prot	NA	Prot	NA
Protected Phases	8	2	1	6
Permitted Phases				
Detector Phase	8	2	1	6
Switch Phase				
Minimum Initial (s)	4.0	7.0	4.0	7.0
Minimum Split (s)	8.4	12.2	8.4	12.3
Total Split (s)	39.4	55.2	39.4	55.3
Total Split (%)	29.4%	41.2%	29.4%	41.3%
Yellow Time (s)	3.4	4.2	3.4	4.3
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.2	4.4	5.3
Lead/Lag		Lag	Lead	
Lead-Lag Optimize?		Yes	Yes	
Recall Mode	None	None	None	None

Intersection Summary

Cycle Length: 134
Actuated Cycle Length: 22.8
Natural Cycle: 40
Control Type: Actuated-Uncoordinated

Splits and Phases: 58: Regents Road & Berino Court



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	17	4	156	10	110	268
Future Volume (vph)	17	4	156	10	110	268
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4		5.2		4.4	5.3
Lane Util. Factor	1.00		0.95		1.00	0.95
Frt	0.97		0.99		1.00	1.00
Flt Protected	0.96		1.00		0.95	1.00
Satd. Flow (prot)	1744		3508		1770	3539
Flt Permitted	0.96		1.00		0.95	1.00
Satd. Flow (perm)	1744		3508		1770	3539
Peak-hour factor, PHF	0.81	0.81	0.88	0.88	0.91	0.91
Adj. Flow (vph)	21	5	177	11	121	295
RTOR Reduction (vph)	5	0	4	0	0	0
Lane Group Flow (vph)	21	0	184	0	121	295
Turn Type	Prot		NA		Prot	NA
Protected Phases	8		2		1	6
Permitted Phases						
Actuated Green, G (s)	0.7		6.5		3.7	14.5
Effective Green, g (s)	0.7		6.5		3.7	14.5
Actuated g/C Ratio	0.03		0.26		0.15	0.58
Clearance Time (s)	4.4		5.2		4.4	5.3
Vehicle Extension (s)	2.0		3.9		2.0	3.7
Lane Grp Cap (vph)	49		915		263	2060
v/s Ratio Prot	c0.01		c0.05		c0.07	0.08
v/s Ratio Perm						
v/c Ratio	0.43		0.20		0.46	0.14
Uniform Delay, d1	11.9		7.2		9.7	2.4
Progression Factor	1.00		1.00		1.00	1.00
Incremental Delay, d2	2.2		0.1		0.5	0.0
Delay (s)	14.1		7.3		10.2	2.4
Level of Service	B		A		B	A
Approach Delay (s)	14.1		7.3			4.7
Approach LOS	B		A			A

Intersection Summary

HCM 2000 Control Delay	5.8	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.30		
Actuated Cycle Length (s)	24.9	Sum of lost time (s)	14.0
Intersection Capacity Utilization	26.9%	ICU Level of Service	A
Analysis Period (min)	15		

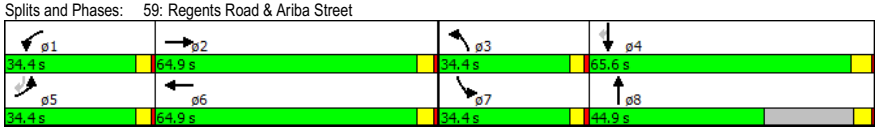
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	55	108	6	97	9	10	132	28	76
Future Volume (vph)	55	108	6	97	9	10	132	28	76
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA	custom
Protected Phases	5	2	1	6	3	8	7	4	
Permitted Phases									5 4
Detector Phase	5	2	1	6	3	8	7	4	5 4
Switch Phase									
Minimum Initial (s)	4.0	7.0	4.0	7.0	4.0	7.0	4.0	7.0	
Minimum Split (s)	8.4	11.9	8.4	11.9	8.4	11.9	8.4	12.6	
Total Split (s)	34.4	64.9	34.4	64.9	34.4	44.9	34.4	65.6	
Total Split (%)	17.3%	32.6%	17.3%	32.6%	17.3%	22.5%	17.3%	32.9%	
Yellow Time (s)	3.4	3.9	3.4	3.9	3.4	3.9	3.4	4.6	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.4	4.9	4.4	4.9	4.4	4.9	4.4	5.6	
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	None	None	None	None	None	

Intersection Summary

Cycle Length: 199.3
Actuated Cycle Length: 45.2
Natural Cycle: 45
Control Type: Actuated-Uncoordinated

Splits and Phases: 59: Regents Road & Ariba Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	55	108	22	6	97	27	9	10	15	132	28	76
Future Volume (vph)	55	108	22	6	97	27	9	10	15	132	28	76
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	4.9		4.4	4.9		4.4	5.6	4.4
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	1.00
Frt	1.00	0.97		1.00	0.97		1.00	0.91		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	3449		1770	3424		1770	3217		1770	3539	1583
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1770	3449		1770	3424		1770	3217		1770	3539	1583
Peak-hour factor, PHF	0.85	0.85	0.85	0.71	0.71	0.71	0.88	0.88	0.88	0.87	0.87	0.87
Adj. Flow (vph)	65	127	26	8	137	38	10	11	17	152	32	87
RTOR Reduction (vph)	0	8	0	0	13	0	0	16	0	0	0	58
Lane Group Flow (vph)	65	145	0	8	162	0	10	12	0	152	32	29
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	custom
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases												5 4
Actuated Green, G (s)	5.5	16.9		0.8	12.2		0.8	2.4		10.0	10.9	22.0
Effective Green, g (s)	5.5	16.9		0.8	12.2		0.8	2.4		10.0	10.9	16.4
Actuated g/C Ratio	0.11	0.35		0.02	0.25		0.02	0.05		0.21	0.22	0.34
Clearance Time (s)	4.4	4.9		4.4	4.9		4.4	4.9		4.4	5.6	
Vehicle Extension (s)	2.0	6.3		2.0	5.9		2.0	4.8		2.0	4.4	
Lane Grp Cap (vph)	199	1196		29	857		29	158		363	792	533
v/s Ratio Prot	c0.04	0.04		0.00	c0.05		0.01	0.00		c0.09	0.01	
v/s Ratio Perm												c0.02
v/c Ratio	0.33	0.12		0.28	0.19		0.34	0.07		0.42	0.04	0.05
Uniform Delay, d1	19.9	10.8		23.7	14.4		23.7	22.1		16.8	14.8	10.9
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	0.4	0.1		1.9	0.3		2.6	0.4		0.3	0.0	0.0
Delay (s)	20.2	11.0		25.5	14.7		26.3	22.5		17.1	14.8	10.9
Level of Service	C	B		C	B		C	C		B	B	B
Approach Delay (s)		13.7			15.1			23.5			14.9	
Approach LOS		B			B			C			B	

Intersection Summary

HCM 2000 Control Delay	15.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.29		
Actuated Cycle Length (s)	48.7	Sum of lost time (s)	19.3
Intersection Capacity Utilization	35.6%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	9	111	300	152	27	75	242	27	23
Future Volume (vph)	9	111	300	152	27	75	242	27	23
Turn Type	Prot	NA	Prot	NA	Perm	NA	NA	Perm	NA
Protected Phases	5	2	1	6		8			4
Permitted Phases					8			4	
Detector Phase	5	2	1	6	8	8		4	4
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	7.0	7.0	7.0		4.0	4.0
Minimum Split (s)	8.4	8.9	8.4	11.9	12.8	12.8		9.5	9.5
Total Split (s)	34.4	64.9	34.4	64.9	45.8	45.8		45.5	45.5
Total Split (%)	23.7%	44.7%	23.7%	44.7%	31.6%	31.6%		31.4%	31.4%
Yellow Time (s)	3.4	3.9	3.4	3.9	4.8	4.8		4.5	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	4.4	4.9	4.4	4.9	5.8	5.8		5.5	5.5
Lead/Lag	Lead	Lag	Lead	Lag					
Lead-Lag Optimize?	Yes	Yes	Yes	Yes					
Recall Mode	None	Min	None	Min	None	None		None	None

Intersection Summary

Cycle Length: 145.1
Actuated Cycle Length: 50.4
Natural Cycle: 40
Control Type: Actuated-Uncoordinated

Splits and Phases: 60: Regents Road & Governor Drive

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	9	111	28	300	152	21	27	75	242	27	23	7
Future Volume (vph)	9	111	28	300	152	21	27	75	242	27	23	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	4.9		5.8	5.8	4.0	5.5	5.5	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00	1.00	1.00	0.95	
Frt	1.00	0.97		1.00	0.98		1.00	1.00	0.85	1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3432		1770	3476		1770	1863	1583	1770	3421	
Flt Permitted	0.95	1.00		0.95	1.00		0.73	1.00	1.00	0.70	1.00	
Satd. Flow (perm)	1770	3432		1770	3476		1364	1863	1583	1303	3421	
Peak-hour factor, PHF	0.90	0.90	0.90	0.86	0.86	0.86	0.84	0.84	0.84	0.83	0.83	0.83
Adj. Flow (vph)	10	123	31	349	177	24	32	89	288	33	28	8
RTOR Reduction (vph)	0	20	0	0	5	0	0	0	288	0	7	0
Lane Group Flow (vph)	10	134	0	349	196	0	32	89	0	33	29	0
Turn Type	Prot	NA		Prot	NA		Perm	NA	NA	Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8			4		
Actuated Green, G (s)	1.0	13.4		19.1	31.5		7.7	7.7	0.0	8.0	8.0	
Effective Green, g (s)	1.0	13.4		19.1	31.5		7.7	7.7	0.0	8.0	8.0	
Actuated g/C Ratio	0.02	0.24		0.35	0.57		0.14	0.14	0.00	0.14	0.14	
Clearance Time (s)	4.4	4.9		4.4	4.9		5.8	5.8		5.5	5.5	
Vehicle Extension (s)	2.0	4.5		2.0	5.0		4.6	4.6		2.0	2.0	
Lane Grp Cap (vph)	32	831		611	1980		189	259	0	188	494	
v/s Ratio Prot	0.01	c0.04		c0.20	0.06			c0.05			0.01	
v/s Ratio Perm							0.02			0.03		
v/c Ratio	0.31	0.16		0.57	0.10		0.17	0.34	0.00	0.18	0.06	
Uniform Delay, d1	26.8	16.5		14.8	5.4		21.0	21.5	27.6	20.8	20.4	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	2.0	0.2		0.8	0.0		0.8	1.4	0.0	0.2	0.0	
Delay (s)	28.8	16.7		15.6	5.5		21.7	22.9	27.6	20.9	20.4	
Level of Service	C	B		B	A		C	C	C	C	C	
Approach Delay (s)		17.4			11.9			26.2			20.7	
Approach LOS		B			B			C			C	

Intersection Summary

HCM 2000 Control Delay	18.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.39		
Actuated Cycle Length (s)	55.3	Sum of lost time (s)	15.1
Intersection Capacity Utilization	41.3%	ICU Level of Service	A
Analysis Period (min)	15		

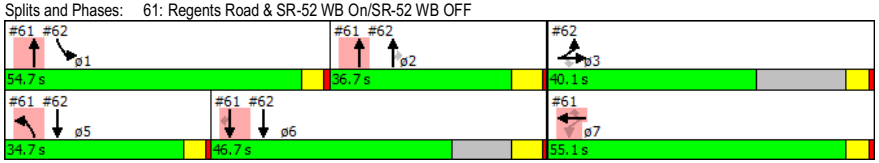
c Critical Lane Group

Lane Group	WBT	WBR	NBL	NBT	SBT	SBR	ø1	ø2	ø3
Lane Configurations									
Traffic Volume (vph)	2	128	354	426	364	183			
Future Volume (vph)	2	128	354	426	364	183			
Turn Type	NA	Perm	Prot	NA	NA	Perm			
Protected Phases	7		5	1 2	6		1	2	3
Permitted Phases		7				6			
Detector Phase	7	7	5	1 2	6	6			
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0		13.0	13.0	5.0	13.0	5.0
Minimum Split (s)	10.1	10.1	9.7		19.2	19.2	9.7	19.2	10.1
Total Split (s)	55.1	55.1	34.7		46.7	46.7	54.7	36.7	40.1
Total Split (%)	37.6%	37.6%	23.7%		31.9%	31.9%	37%	25%	27%
Yellow Time (s)	4.1	4.1	3.7		5.2	5.2	3.7	5.2	4.1
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0			
Total Lost Time (s)	5.1	5.1	4.7		6.2	6.2			
Lead/Lag			Lead		Lag	Lag	Lead	Lag	
Lead-Lag Optimize?			Yes		Yes	Yes	Yes	Yes	
Recall Mode	None	None	None		Max	Max	None	Max	None

Intersection Summary

Cycle Length: 146.5
Actuated Cycle Length: 103.5
Natural Cycle: 55
Control Type: Actuated-Uncoordinated

Splits and Phases: 61: Regents Road & SR-52 WB On/SR-52 WB OFF



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	337	2	128	354	426	0	0	364	183
Future Volume (vph)	0	0	0	337	2	128	354	426	0	0	364	183
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					5.1	5.1	4.7	4.7			6.2	6.2
Lane Util. Factor					1.00	1.00	0.97	0.95			0.95	1.00
Frt					1.00	0.85	1.00	1.00			1.00	0.85
Flt Protected					0.95	1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)					1775	1583	3433	3539			3539	1583
Flt Permitted					0.95	1.00	0.95	1.00			1.00	1.00
Satd. Flow (perm)					1775	1583	3433	3539			3539	1583
Peak-hour factor, PHF	0.25	0.25	0.25	0.93	0.93	0.93	0.85	0.85	0.85	0.87	0.87	0.87
Adj. Flow (vph)	0	0	0	362	2	138	416	501	0	0	418	210
RTOR Reduction (vph)	0	0	0	0	0	101	0	0	0	0	0	126
Lane Group Flow (vph)	0	0	0	0	364	37	416	501	0	0	418	84
Turn Type				Perm	NA	Perm	Prot	NA			NA	Perm
Protected Phases					7		5	1 2			6	
Permitted Phases				7		7						6
Actuated Green, G (s)					26.3	26.3	19.8	65.7			41.2	41.2
Effective Green, g (s)					26.3	26.3	19.8	65.7			41.2	41.2
Actuated g/C Ratio					0.25	0.25	0.19	0.64			0.40	0.40
Clearance Time (s)					5.1	5.1	4.7				6.2	6.2
Vehicle Extension (s)					2.0	2.0	2.0				2.0	2.0
Lane Grp Cap (vph)					451	403	658	2250			1411	631
v/s Ratio Prot							c0.12	0.14			c0.12	
v/s Ratio Perm					0.21	0.02						0.05
v/c Ratio					0.81	0.09	0.63	0.22			0.30	0.13
Uniform Delay, d1					36.1	29.4	38.4	8.0			21.2	19.7
Progression Factor					1.00	1.00	1.40	0.93			1.00	1.00
Incremental Delay, d2					9.6	0.0	1.4	0.0			0.5	0.4
Delay (s)					45.7	29.4	55.3	7.4			21.7	20.1
Level of Service					D	C	E	A			C	C
Approach Delay (s)		0.0			41.3			29.1			21.2	
Approach LOS		A			D			C			C	

Intersection Summary

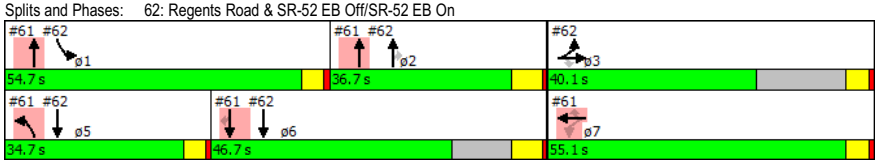
HCM 2000 Control Delay	29.7	HCM 2000 Level of Service	C	
HCM 2000 Volume to Capacity ratio	0.53			
Actuated Cycle Length (s)	103.3	Sum of lost time (s)	16.0	
Intersection Capacity Utilization	53.5%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

Lane Group	EBL	EBT	EBR	NBT	NBR	SBL	SBT	ø5	ø6	ø7
Lane Configurations										
Traffic Volume (vph)	238	3	334	548	396	134	565			
Future Volume (vph)	238	3	334	548	396	134	565			
Turn Type	Split	NA	Perm	NA	Perm	Prot	NA			
Protected Phases	3	3		2		1	5 6	5	6	7
Permitted Phases			3		2					
Detector Phase	3	3	3	2	2	1	5 6			
Switch Phase										
Minimum Initial (s)	5.0	5.0	5.0	13.0	13.0	5.0		5.0	13.0	5.0
Minimum Split (s)	10.1	10.1	10.1	19.2	19.2	9.7		9.7	19.2	10.1
Total Split (s)	40.1	40.1	40.1	36.7	36.7	54.7		34.7	46.7	55.1
Total Split (%)	27.4%	27.4%	27.4%	25.1%	25.1%	37.3%		24%	32%	38%
Yellow Time (s)	4.1	4.1	4.1	5.2	5.2	3.7		3.7	5.2	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0				
Total Lost Time (s)	5.1	5.1	5.1	6.2	6.2	4.7				
Lead/Lag				Lag	Lag	Lead		Lead	Lag	
Lead-Lag Optimize?				Yes	Yes	Yes		Yes	Yes	
Recall Mode	None	None	None	Max	Max	None		None	Max	None

Intersection Summary
Cycle Length: 146.5
Actuated Cycle Length: 103.5
Natural Cycle: 55
Control Type: Actuated-Uncoordinated

Splits and Phases: 62: Regents Road & SR-52 EB Off/SR-52 EB On



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	238	3	334	0	0	0	0	548	396	134	565	0
Future Volume (vph)	238	3	334	0	0	0	0	548	396	134	565	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1	5.1					6.2	6.2	4.7	4.7	
Lane Util. Factor	0.95	0.95	1.00					0.95	1.00	1.00	0.95	
Frt	1.00	1.00	0.85					1.00	0.85	1.00	1.00	
Flt Protected	0.95	0.95	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1681	1687	1583					3539	1583	1770	3539	
Flt Permitted	0.95	0.95	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1681	1687	1583					3539	1583	1770	3539	
Peak-hour factor, PHF	0.96	0.96	0.96	0.25	0.25	0.25	0.86	0.86	0.86	0.89	0.89	0.89
Adj. Flow (vph)	248	3	348	0	0	0	0	637	460	151	635	0
RTOR Reduction (vph)	0	0	201	0	0	0	0	0	70	0	0	0
Lane Group Flow (vph)	126	125	147	0	0	0	0	637	390	151	635	0
Turn Type	Split	NA	Perm					NA	Perm	Prot	NA	
Protected Phases	3	3						2		1	5 6	
Permitted Phases			3						2			
Actuated Green, G (s)	26.3	26.3	26.3					46.6	46.6	14.4	65.7	
Effective Green, g (s)	26.3	26.3	26.3					46.6	46.6	14.4	65.7	
Actuated g/C Ratio	0.25	0.25	0.25					0.45	0.45	0.14	0.64	
Clearance Time (s)	5.1	5.1	5.1					6.2	6.2	4.7		
Vehicle Extension (s)	2.0	2.0	2.0					2.0	2.0	2.0		
Lane Grp Cap (vph)	427	429	403					1596	714	246	2250	
v/s Ratio Prot	0.07	0.07						0.18		c0.09	0.18	
v/s Ratio Perm			c0.09						c0.25			
v/c Ratio	0.30	0.29	0.36					0.40	0.55	0.61	0.28	
Uniform Delay, d1	31.0	31.0	31.6					19.0	20.6	41.8	8.3	
Progression Factor	1.00	1.00	1.00					1.00	1.00	1.00	1.07	
Incremental Delay, d2	0.1	0.1	0.2					0.7	3.0	3.1	0.0	
Delay (s)	31.2	31.1	31.8					19.7	23.6	45.0	9.0	
Level of Service	C	C	C					B	C	D	A	
Approach Delay (s)		31.5			0.0			21.4			15.9	
Approach LOS		C			A			C			B	

Intersection Summary				
HCM 2000 Control Delay	22.1	HCM 2000 Level of Service	C	
HCM 2000 Volume to Capacity ratio	0.50			
Actuated Cycle Length (s)	103.3	Sum of lost time (s)	16.0	
Intersection Capacity Utilization	53.5%	ICU Level of Service	A	
Analysis Period (min)	15			

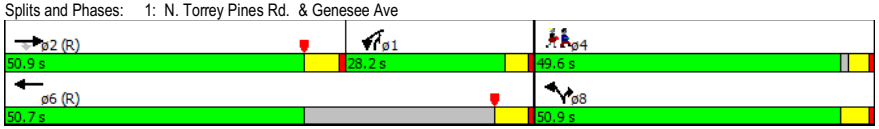
c Critical Lane Group

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	ø4
Lane Configurations							
Traffic Volume (vph)	1132	1017	431	393	703	294	
Future Volume (vph)	1132	1017	431	393	703	294	
Turn Type	NA	Perm	Prot	NA	Prot	pt+ov	
Protected Phases	2		1	6	8	8 1	4
Permitted Phases		2					
Detector Phase	2	2	1	6	8	8 1	
Switch Phase							
Minimum Initial (s)	10.0	10.0	7.0	10.0	10.0		4.0
Minimum Split (s)	43.2	43.2	11.4	24.9	23.3		41.0
Total Split (s)	50.9	50.9	28.2	50.7	50.9		49.6
Total Split (%)	39.2%	39.2%	21.7%	39.0%	39.2%		38%
Yellow Time (s)	5.2	5.2	3.4	5.0	4.3		3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	6.2	6.2	4.4	6.0	5.3		
Lead/Lag	Lead	Lead	Lag				
Lead-Lag Optimize?							
Recall Mode	C-Max	C-Max	None	C-Max	None		None

Intersection Summary

Cycle Length: 130
Actuated Cycle Length: 130
Offset: 7 (5%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 110
Control Type: Actuated-Coordinated

Splits and Phases: 1: N. Torrey Pines Rd. & Genesee Ave



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1132	1017	431	393	703	294
Future Volume (vph)	1132	1017	431	393	703	294
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.2	6.2	4.4	6.0	5.3	5.3
Lane Util. Factor	0.91	1.00	0.97	0.91	0.97	0.88
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	5085	1583	3433	5085	3433	2787
Flt Permitted	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (perm)	5085	1583	3433	5085	3433	2787
Peak-hour factor, PHF	0.95	0.95	0.80	0.80	0.90	0.90
Adj. Flow (vph)	1192	1071	539	491	781	327
RTOR Reduction (vph)	0	432	0	0	0	8
Lane Group Flow (vph)	1192	639	539	491	781	319
Turn Type	NA	Perm	Prot	NA	Prot	pt+ov
Protected Phases	2		1	6	8	8 1
Permitted Phases		2				
Actuated Green, G (s)	52.5	52.5	23.8	80.9	37.8	66.0
Effective Green, g (s)	52.5	52.5	23.8	80.9	37.8	61.6
Actuated g/C Ratio	0.40	0.40	0.18	0.62	0.29	0.47
Clearance Time (s)	6.2	6.2	4.4	6.0	5.3	
Vehicle Extension (s)	4.0	4.0	2.0	3.7	3.8	
Lane Grp Cap (vph)	2053	639	628	3164	998	1320
v/s Ratio Prot	0.23		c0.16	0.10	c0.23	0.11
v/s Ratio Perm		c0.40				
v/c Ratio	0.58	1.00	0.86	0.16	0.78	0.24
Uniform Delay, d1	30.2	38.8	51.5	10.3	42.3	20.3
Progression Factor	1.00	1.00	0.50	0.30	0.71	0.66
Incremental Delay, d2	1.2	35.7	10.4	0.1	4.0	0.1
Delay (s)	31.4	74.5	36.3	3.2	34.0	13.6
Level of Service	C	E	D	A	C	B
Approach Delay (s)	51.8			20.5	28.0	
Approach LOS	D			C	C	

Intersection Summary

HCM 2000 Control Delay	38.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	15.9
Intersection Capacity Utilization	84.1%	ICU Level of Service	E
Analysis Period (min)	15		

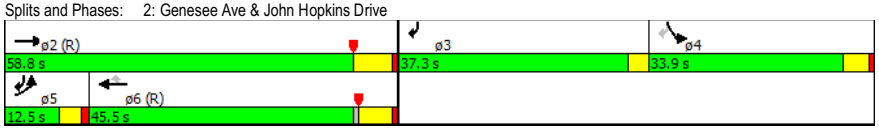
c Critical Lane Group

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	ø3
Lane Configurations							
Traffic Volume (vph)	36	1351	737	188	929	111	
Future Volume (vph)	36	1351	737	188	929	111	
Turn Type	Prot	NA	NA	Perm	Prot	pt+ov	
Protected Phases	5	2	6		4	3 5	3
Permitted Phases				6		4	
Detector Phase	5	2	6	6	4	3 5	
Switch Phase							
Minimum Initial (s)	4.0	10.0	10.0	10.0	7.0		4.0
Minimum Split (s)	9.5	16.7	15.9	15.9	11.9		7.0
Total Split (s)	12.5	58.8	45.5	45.5	33.9		37.3
Total Split (%)	9.6%	45.2%	35.0%	35.0%	26.1%		29%
Yellow Time (s)	3.4	5.7	4.9	4.9	3.9		3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		0.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	4.4	6.7	5.9	5.9	4.9		
Lead/Lag	Lead		Lag	Lag	Lag		Lead
Lead-Lag Optimize?	Yes		Yes	Yes	Yes		Yes
Recall Mode	None	C-Max	C-Max	C-Max	None		None

Intersection Summary

Cycle Length: 130
Actuated Cycle Length: 130
Offset: 22 (17%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 65
Control Type: Actuated-Coordinated

Splits and Phases: 2: Genesee Ave & John Hopkins Drive



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	36	1351	737	188	929	111
Future Volume (vph)	36	1351	737	188	929	111
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	6.7	5.9	5.9	4.9	3.0
Lane Util. Factor	1.00	0.91	0.81	1.00	0.97	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	5085	7544	1583	3433	1583
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	5085	7544	1583	3433	1583
Peak-hour factor, PHF	0.92	0.92	0.80	0.80	0.80	0.80
Adj. Flow (vph)	39	1468	921	235	1161	139
RTOR Reduction (vph)	0	0	0	160	0	9
Lane Group Flow (vph)	39	1468	921	75	1161	130
Turn Type	Prot	NA	NA	Perm	Prot	pt+ov
Protected Phases	5	2	6		4	3 5
Permitted Phases				6		4
Actuated Green, G (s)	6.8	52.1	41.7	41.7	46.3	70.1
Effective Green, g (s)	6.8	52.1	41.7	41.7	46.3	70.1
Actuated g/C Ratio	0.05	0.40	0.32	0.32	0.36	0.54
Clearance Time (s)	4.4	6.7	5.9	5.9	4.9	
Vehicle Extension (s)	2.0	4.0	3.9	3.9	5.0	
Lane Grp Cap (vph)	92	2037	2419	507	1222	890
v/s Ratio Prot	0.02	c0.29	0.12		c0.34	c0.03
v/s Ratio Perm				0.05		0.06
v/c Ratio	0.42	0.72	0.38	0.15	0.95	0.15
Uniform Delay, d1	59.7	32.8	34.2	31.5	40.7	15.0
Progression Factor	1.09	0.57	0.92	1.34	1.00	1.00
Incremental Delay, d2	1.0	2.0	0.4	0.6	15.7	0.0
Delay (s)	66.0	20.8	32.0	42.8	56.4	15.0
Level of Service	E	C	C	D	E	B
Approach Delay (s)		22.0	34.2		52.0	
Approach LOS		C	C		D	

Intersection Summary

HCM 2000 Control Delay	35.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	18.2
Intersection Capacity Utilization	62.3%	ICU Level of Service	B
Analysis Period (min)	15		

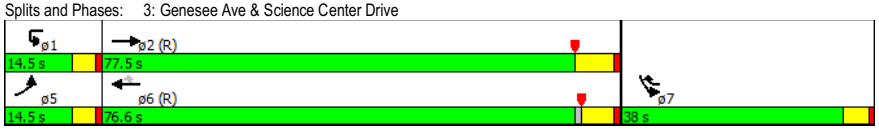
c Critical Lane Group

Lane Group	EBL	EBT	WBU	WBT	WBR	SBL
Lane Configurations						
Traffic Volume (vph)	92	2166	12	841	364	342
Future Volume (vph)	92	2166	12	841	364	342
Turn Type	Prot	NA	Prot	NA	pm+ov	Prot
Protected Phases	5	2	1	6	7	7
Permitted Phases					6	
Detector Phase	5	2	1	6	7	7
Switch Phase						
Minimum Initial (s)	4.0	10.0	4.0	10.0	4.0	4.0
Minimum Split (s)	9.5	22.5	9.5	16.0	8.9	8.9
Total Split (s)	14.5	77.5	14.5	76.6	38.0	38.0
Total Split (%)	11.2%	59.6%	11.2%	58.9%	29.2%	29.2%
Yellow Time (s)	3.4	5.9	3.4	5.0	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	6.9	4.4	6.0	4.9	4.9
Lead/Lag	Lead	Lag	Lead	Lag		
Lead-Lag Optimize?	Yes	Yes	Yes	Yes		
Recall Mode	None	C-Max	None	C-Max	None	None

Intersection Summary

Cycle Length: 130
Actuated Cycle Length: 130
Offset: 55 (42%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 60
Control Type: Actuated-Coordinated

Splits and Phases: 3: Genesee Ave & Science Center Drive



Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Traffic Volume (vph)	92	2166	12	841	364	342	80
Future Volume (vph)	92	2166	12	841	364	342	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	6.9	4.4	6.0	4.9	4.9	
Lane Util. Factor	1.00	0.91	1.00	0.91	1.00	0.97	
Frt	1.00	1.00	1.00	1.00	0.85	0.97	
Flt Protected	0.95	1.00	0.95	1.00	1.00	0.96	
Satd. Flow (prot)	1770	5085	1770	5085	1583	3374	
Flt Permitted	0.95	1.00	0.95	1.00	1.00	0.96	
Satd. Flow (perm)	1770	5085	1770	5085	1583	3374	
Peak-hour factor, PHF	0.97	0.97	0.92	0.83	0.83	0.90	0.90
Adj. Flow (vph)	95	2233	13	1013	439	380	89
RTOR Reduction (vph)	0	0	0	0	46	18	0
Lane Group Flow (vph)	95	2233	13	1013	393	451	0
Turn Type	Prot	NA	Prot	NA	pm+ov	Prot	
Protected Phases	5	2	1	6	7	7	
Permitted Phases					6		
Actuated Green, G (s)	11.9	87.2	3.0	79.2	102.8	23.6	
Effective Green, g (s)	11.9	87.2	3.0	79.2	102.8	23.6	
Actuated g/C Ratio	0.09	0.67	0.02	0.61	0.79	0.18	
Clearance Time (s)	4.4	6.9	4.4	6.0	4.9	4.9	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	162	3410	40	3097	1251	612	
v/s Ratio Prot	c0.05	c0.44	0.01	0.20	0.06	c0.13	
v/s Ratio Perm					0.19		
v/c Ratio	0.59	0.65	0.33	0.33	0.31	0.74	
Uniform Delay, d1	56.7	12.6	62.5	12.4	3.8	50.3	
Progression Factor	1.10	0.61	1.00	1.00	1.00	1.00	
Incremental Delay, d2	2.9	0.5	4.7	0.3	0.1	4.6	
Delay (s)	65.5	8.2	67.2	12.7	3.9	54.9	
Level of Service	E	A	E	B	A	D	
Approach Delay (s)		10.5		10.5		54.9	
Approach LOS		B		B		D	

Intersection Summary

HCM 2000 Control Delay	15.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	16.2
Intersection Capacity Utilization	71.0%	ICU Level of Service	C
Analysis Period (min)	15		

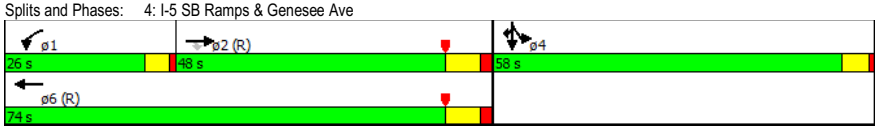
c Critical Lane Group

Lane Group	EBT	EBR	WBL	WBT	SBL	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	1803	776	347	770	892	3	372
Future Volume (vph)	1803	776	347	770	892	3	372
Turn Type	NA	Perm	Prot	NA	Split	NA	Prot
Protected Phases	2		1	6	4	4	4
Permitted Phases		2					
Detector Phase	2	2	1	6	4	4	4
Switch Phase							
Minimum Initial (s)	10.0	10.0	5.0	10.0	13.0	13.0	13.0
Minimum Split (s)	25.2	25.2	9.7	28.2	18.1	18.1	18.1
Total Split (s)	48.0	48.0	26.0	74.0	58.0	58.0	58.0
Total Split (%)	36.4%	36.4%	19.7%	56.1%	43.9%	43.9%	43.9%
Yellow Time (s)	5.2	5.2	3.7	5.2	4.1	4.1	4.1
All-Red Time (s)	2.0	2.0	1.0	2.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.2	7.2	4.7	7.2	5.1	5.1	5.1
Lead/Lag	Lag	Lag	Lead				
Lead-Lag Optimize?	Yes	Yes	Yes				
Recall Mode	C-Max	C-Max	Max	C-Max	Min	Min	Min

Intersection Summary

Cycle Length: 132
Actuated Cycle Length: 132
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 70
Control Type: Actuated-Coordinated

Splits and Phases: 4: I-5 SB Ramps & Genesee Ave



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1803	776	347	770	0	0	0	0	892	3	372
Future Volume (vph)	0	1803	776	347	770	0	0	0	0	892	3	372
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		7.2	7.2	4.7	7.2					5.1	5.1	5.1
Lane Util. Factor		0.81	0.88	0.97	0.91					0.95	0.95	0.88
Frt		1.00	0.85	1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	0.95	1.00
Satd. Flow (prot)		7544	2787	3433	5085					1681	1686	2787
Flt Permitted		1.00	1.00	0.95	1.00					0.95	0.95	1.00
Satd. Flow (perm)		7544	2787	3433	5085					1681	1686	2787
Peak-hour factor, PHF	0.95	0.95	0.95	0.89	0.89	0.89	0.25	0.25	0.25	0.90	0.90	0.90
Adj. Flow (vph)	0	1898	817	390	865	0	0	0	0	991	3	413
RTOR Reduction (vph)	0	0	564	0	0	0	0	0	0	0	0	130
Lane Group Flow (vph)	0	1898	253	390	865	0	0	0	0	495	499	283
Turn Type		NA	Perm	Prot	NA					Split	NA	Prot
Protected Phases		2		1	6					4	4	4
Permitted Phases			2									
Actuated Green, G (s)		40.8	40.8	27.9	73.4					46.3	46.3	46.3
Effective Green, g (s)		40.8	40.8	27.9	73.4					46.3	46.3	46.3
Actuated g/C Ratio		0.31	0.31	0.21	0.56					0.35	0.35	0.35
Clearance Time (s)		7.2	7.2	4.7	7.2					5.1	5.1	5.1
Vehicle Extension (s)		2.0	2.0	2.0	2.0					2.0	2.0	2.0
Lane Grp Cap (vph)		2331	861	725	2827					589	591	977
v/s Ratio Prot		c0.25		c0.11	0.17					0.29	c0.30	0.10
v/s Ratio Perm			0.09									
v/c Ratio		0.81	0.29	0.54	0.31					0.84	0.84	0.29
Uniform Delay, d1		42.1	34.6	46.3	15.7					39.4	39.5	31.0
Progression Factor		1.00	1.00	0.40	0.35					1.00	1.00	1.00
Incremental Delay, d2		3.3	0.9	2.5	0.2					10.1	10.3	0.1
Delay (s)		45.4	35.5	20.8	5.8					49.5	49.8	31.0
Level of Service		D	D	C	A					D	D	C
Approach Delay (s)		42.4			10.5			0.0			44.2	
Approach LOS		D			B			A			D	

Intersection Summary

HCM 2000 Control Delay	35.4	HCM 2000 Level of Service	D	
HCM 2000 Volume to Capacity ratio	0.76			
Actuated Cycle Length (s)	132.0	Sum of lost time (s)	17.0	
Intersection Capacity Utilization	87.2%	ICU Level of Service	E	
Analysis Period (min)	15			

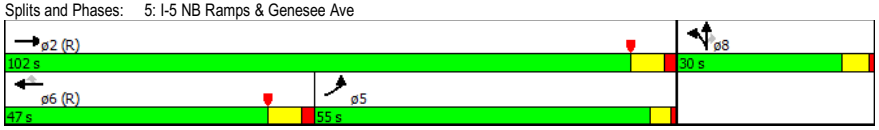
c Critical Lane Group

Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Configurations							
Traffic Volume (vph)	1055	1557	742	911	410	5	89
Future Volume (vph)	1055	1557	742	911	410	5	89
Turn Type	Prot	NA	NA	Perm	Split	NA	Perm
Protected Phases	5	2	6		8	8	
Permitted Phases				6			8
Detector Phase	5	2	6	6	8	8	8
Switch Phase							
Minimum Initial (s)	11.0	10.0	10.0	10.0	5.0	5.0	5.0
Minimum Split (s)	15.2	28.2	25.2	25.2	10.1	10.1	10.1
Total Split (s)	55.0	102.0	47.0	47.0	30.0	30.0	30.0
Total Split (%)	41.7%	77.3%	35.6%	35.6%	22.7%	22.7%	22.7%
Yellow Time (s)	3.2	5.2	5.2	5.2	4.1	4.1	4.1
All-Red Time (s)	1.0	2.0	2.0	2.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.2	7.2	7.2	7.2	5.1	5.1	5.1
Lead/Lag	Lag		Lead	Lead			
Lead-Lag Optimize?	Yes		Yes	Yes			
Recall Mode	Max	C-Max	C-Max	C-Max	Min	Min	Min

Intersection Summary

Cycle Length: 132
Actuated Cycle Length: 132
Offset: 102 (77%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 80
Control Type: Actuated-Coordinated

Splits and Phases: 5: I-5 NB Ramps & Genesee Ave



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1055	1557	0	0	742	911	410	5	89	0	0	0
Future Volume (vph)	1055	1557	0	0	742	911	410	5	89	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	7.2			7.2	7.2	5.1	5.1	5.1			
Lane Util. Factor	0.97	0.91			0.86	0.88	0.95	0.95	0.88			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.95	1.00			
Satd. Flow (prot)	3433	5085			6408	2787	1681	1687	2787			
Flt Permitted	0.95	1.00			1.00	1.00	0.95	0.95	1.00			
Satd. Flow (perm)	3433	5085			6408	2787	1681	1687	2787			
Peak-hour factor, PHF	0.95	0.95	0.95	0.90	0.90	0.90	0.91	0.91	0.91	0.25	0.25	0.25
Adj. Flow (vph)	1111	1639	0	0	824	1012	451	5	98	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	443	0	0	79	0	0	0
Lane Group Flow (vph)	1111	1639	0	0	824	569	230	226	19	0	0	0
Turn Type	Prot	NA			NA	Perm	Split	NA	Perm			
Protected Phases	5	2			6		8	8				
Permitted Phases						6			8			
Actuated Green, G (s)	50.8	98.4			43.4	43.4	21.3	21.3	21.3			
Effective Green, g (s)	50.8	98.4			43.4	43.4	21.3	21.3	21.3			
Actuated g/C Ratio	0.38	0.75			0.33	0.33	0.16	0.16	0.16			
Clearance Time (s)	4.2	7.2			7.2	7.2	5.1	5.1	5.1			
Vehicle Extension (s)	2.0	2.0			2.0	2.0	2.0	2.0	2.0			
Lane Grp Cap (vph)	1321	3790			2106	916	271	272	449			
v/s Ratio Prot	c0.32	0.32			0.13		c0.14	0.13				
v/s Ratio Perm						c0.20			0.01			
v/c Ratio	0.84	0.43			0.39	0.62	0.85	0.83	0.04			
Uniform Delay, d1	36.9	6.3			34.1	37.4	53.8	53.6	46.7			
Progression Factor	0.74	0.92			0.88	1.08	1.00	1.00	1.00			
Incremental Delay, d2	4.0	0.2			0.5	2.7	20.4	18.2	0.0			
Delay (s)	31.5	6.0			30.7	43.1	74.2	71.8	46.8			
Level of Service	C	A			C	D	E	E	D			
Approach Delay (s)		16.3			37.5			68.4			0.0	
Approach LOS		B			D			E			A	

Intersection Summary

HCM 2000 Control Delay	29.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	132.0	Sum of lost time (s)	16.5
Intersection Capacity Utilization	87.2%	ICU Level of Service	E
Analysis Period (min)	15		

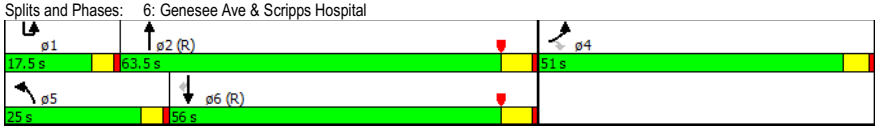
c Critical Lane Group

Lane Group	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	747	851	309	1084	8	1544	176
Future Volume (vph)	747	851	309	1084	8	1544	176
Turn Type	Prot	Perm	Prot	NA	Prot	NA	Perm
Protected Phases	4		5	2	1	6	
Permitted Phases		4					6
Detector Phase	4	4	5	2	1	6	6
Switch Phase							
Minimum Initial (s)	7.0	7.0	4.0	10.0	4.0	10.0	10.0
Minimum Split (s)	11.9	11.9	9.5	22.5	9.5	30.5	30.5
Total Split (s)	51.0	51.0	25.0	63.5	17.5	56.0	56.0
Total Split (%)	38.6%	38.6%	18.9%	48.1%	13.3%	42.4%	42.4%
Yellow Time (s)	3.9	3.9	3.4	4.7	3.4	4.7	4.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	4.4	5.7	4.4	5.7	5.7
Lead/Lag			Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?			Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	C-Max	None	C-Max	C-Max

Intersection Summary

Cycle Length: 132
Actuated Cycle Length: 132
Offset: 34 (26%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 120
Control Type: Actuated-Coordinated

Splits and Phases: 6: Genesee Ave & Scripps Hospital



Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	747	851	309	1084	8	1544	176
Future Volume (vph)	747	851	309	1084	8	1544	176
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9	4.4	5.7	4.4	5.7	5.7
Lane Util. Factor	0.97	1.00	1.00	0.91	1.00	0.91	1.00
Frt	1.00	0.85	1.00	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	1583	1770	5085	1770	5085	1583
Flt Permitted	0.95	1.00	0.95	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	1583	1770	5085	1770	5085	1583
Peak-hour factor, PHF	0.90	0.90	0.90	0.86	0.92	0.89	0.90
Adj. Flow (vph)	830	946	343	1260	9	1735	196
RTOR Reduction (vph)	0	174	0	0	0	0	62
Lane Group Flow (vph)	830	772	343	1260	9	1735	134
Turn Type	Prot	Perm	Prot	NA	Prot	NA	Perm
Protected Phases	4		5	2	1	6	
Permitted Phases		4					6
Actuated Green, G (s)	46.1	46.1	20.6	69.6	1.3	50.3	50.3
Effective Green, g (s)	46.1	46.1	20.6	69.6	1.3	50.3	50.3
Actuated g/C Ratio	0.35	0.35	0.16	0.53	0.01	0.38	0.38
Clearance Time (s)	4.9	4.9	4.4	5.7	4.4	5.7	5.7
Vehicle Extension (s)	2.0	2.0	2.0	5.2	2.0	4.0	4.0
Lane Grp Cap (vph)	1198	552	276	2681	17	1937	603
v/s Ratio Prot	0.24		c0.19	0.25	0.01	c0.34	
v/s Ratio Perm		c0.49					0.08
v/c Ratio	0.69	1.40	1.24	0.47	0.53	0.90	0.22
Uniform Delay, d1	36.9	43.0	55.7	19.6	65.0	38.4	27.6
Progression Factor	1.00	1.00	1.19	0.29	1.10	0.56	0.36
Incremental Delay, d2	1.4	190.3	134.0	0.5	12.3	6.6	0.8
Delay (s)	38.3	233.3	200.3	6.3	83.9	28.0	10.7
Level of Service	D	F	F	A	F	C	B
Approach Delay (s)	142.2			47.8		26.5	
Approach LOS	F			D		C	

Intersection Summary

HCM 2000 Control Delay	71.5	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.15		
Actuated Cycle Length (s)	132.0	Sum of lost time (s)	15.0
Intersection Capacity Utilization	91.4%	ICU Level of Service	F
Analysis Period (min)	15		

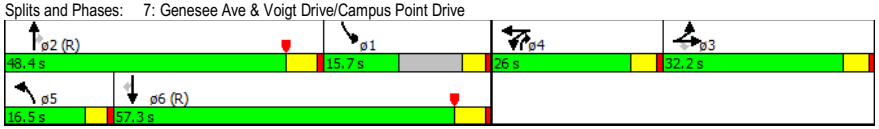
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	303	11	414	521	23	215	829	59	56	2165	115
Future Volume (vph)	303	11	414	521	23	215	829	59	56	2165	115
Turn Type	Split	NA	Perm	Split	NA	Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	3	3		4	4	5	2	4	1	6	
Permitted Phases			3					2			6
Detector Phase	3	3	3	4	4	5	2	4	1	6	6
Switch Phase											
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	4.0	10.0	7.0	4.0	10.0	10.0
Minimum Split (s)	11.9	11.9	11.9	22.5	22.5	8.4	37.7	22.5	8.4	33.7	33.7
Total Split (s)	32.2	32.2	32.2	26.0	26.0	16.5	48.4	26.0	15.7	57.3	57.3
Total Split (%)	24.4%	24.4%	24.4%	19.7%	19.7%	12.5%	36.7%	19.7%	11.9%	43.4%	43.4%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.9	3.4	4.7	3.9	3.4	4.7	4.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	4.9	4.9	4.9	4.4	5.7	4.9	4.4	5.7	5.7
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lead	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	None	None	C-Max	C-Max

Intersection Summary

Cycle Length: 132
Actuated Cycle Length: 132
Offset: 25 (19%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 115
Control Type: Actuated-Coordinated

Splits and Phases: 7: Genesee Ave & Voigt Drive/Campus Point Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	303	11	414	521	23	300	215	829	59	56	2165	115
Future Volume (vph)	303	11	414	521	23	300	215	829	59	56	2165	115
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9	4.9	4.9	4.9		4.4	5.7	4.9	4.4	5.7	5.7
Lane Util. Factor	0.97	1.00	0.88	0.97	0.95		0.97	0.91	1.00	0.97	0.91	1.00
Frt	1.00	1.00	0.85	1.00	0.86		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	1863	2787	3433	3046		3433	5085	1583	3433	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	1863	2787	3433	3046		3433	5085	1583	3433	5085	1583
Peak-hour factor, PHF	0.90	0.90	0.90	0.87	0.87	0.87	0.92	0.92	0.92	0.94	0.94	0.94
Adj. Flow (vph)	337	12	460	599	26	345	234	901	64	60	2303	122
RTOR Reduction (vph)	0	0	251	0	255	0	0	0	28	0	0	52
Lane Group Flow (vph)	337	12	209	599	116	0	234	901	36	60	2303	70
Turn Type	Split	NA	Perm	Split	NA		Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	3	3		4	4		5	2	4	1	6	
Permitted Phases			3						2			6
Actuated Green, G (s)	20.5	20.5	20.5	21.1	21.1		11.9	53.7	74.8	16.8	58.6	58.6
Effective Green, g (s)	20.5	20.5	20.5	21.1	21.1		11.9	53.7	74.8	16.8	58.6	58.6
Actuated g/C Ratio	0.16	0.16	0.16	0.16	0.16		0.09	0.41	0.57	0.13	0.44	0.44
Clearance Time (s)	4.9	4.9	4.9	4.9	4.9		4.4	5.7	4.9	4.4	5.7	5.7
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0		2.0	3.7	2.0	2.0	4.0	4.0
Lane Grp Cap (vph)	533	289	432	548	486		309	2068	897	436	2257	702
v/s Ratio Prot	c0.10	0.01		c0.17	0.04		c0.07	0.18	0.01	0.02	c0.45	
v/s Ratio Perm			0.08						0.02			0.04
v/c Ratio	0.63	0.04	0.48	1.09	0.24		0.76	0.44	0.04	0.14	1.02	0.10
Uniform Delay, d1	52.2	47.4	50.9	55.5	48.4		58.6	28.2	12.7	51.2	36.7	21.4
Progression Factor	1.00	1.00	1.00	1.00	1.00		0.67	0.71	1.14	0.66	0.53	0.23
Incremental Delay, d2	1.8	0.0	0.3	66.3	0.1		8.8	0.6	0.0	0.0	11.9	0.0
Delay (s)	54.0	47.4	51.2	121.7	48.5		48.1	20.8	14.5	34.0	31.5	4.9
Level of Service	D	D	D	F	D		D	C	B	C	C	A
Approach Delay (s)		52.3			93.7			25.8			30.2	
Approach LOS		D			F			C			C	

Intersection Summary

HCM 2000 Control Delay	43.8	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.93		
Actuated Cycle Length (s)	132.0	Sum of lost time (s)	19.9
Intersection Capacity Utilization	85.2%	ICU Level of Service	E
Analysis Period (min)	15		

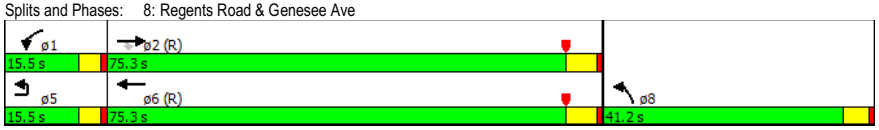
c Critical Lane Group

Lane Group	EBU	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations							
Traffic Volume (vph)	48	2186	835	22	904	161	41
Future Volume (vph)	48	2186	835	22	904	161	41
Turn Type	Prot	NA	Perm	Prot	NA	Prot	custom
Protected Phases	5	2		1	6	8	
Permitted Phases			2				
Detector Phase	5	2	2	1	6	8	
Switch Phase							
Minimum Initial (s)	4.0	10.0	10.0	4.0	10.0	7.0	
Minimum Split (s)	9.5	22.7	22.7	9.5	22.5	37.9	
Total Split (s)	15.5	75.3	75.3	15.5	75.3	41.2	
Total Split (%)	11.7%	57.0%	57.0%	11.7%	57.0%	31.2%	
Yellow Time (s)	3.4	4.7	4.7	3.4	4.7	3.9	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.4	5.7	5.7	4.4	5.7	4.9	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		
Recall Mode	None	C-Max	C-Max	None	C-Max	None	

Intersection Summary

Cycle Length: 132
Actuated Cycle Length: 132
Offset: 29 (22%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 8: Regents Road & Genesee Ave



Movement	EBU	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations							
Traffic Volume (vph)	48	2186	835	22	904	161	41
Future Volume (vph)	48	2186	835	22	904	161	41
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	12	16	12
Total Lost time (s)	4.4	5.7	5.7	4.4	5.7	4.9	4.0
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	1770	5085	1583	1770	5085	2006	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (perm)	1770	5085	1583	1770	5085	2006	1583
Peak-hour factor, PHF	0.92	0.96	0.96	0.94	0.94	0.88	0.88
Adj. Flow (vph)	52	2277	870	23	962	183	47
RTOR Reduction (vph)	0	0	161	0	0	0	47
Lane Group Flow (vph)	52	2277	709	23	962	183	0
Turn Type	Prot	NA	Perm	Prot	NA	Prot	custom
Protected Phases	5	2		1	6	8	
Permitted Phases			2				
Actuated Green, G (s)	7.3	84.2	84.2	4.3	81.2	28.5	0.0
Effective Green, g (s)	7.3	84.2	84.2	4.3	81.2	28.5	0.0
Actuated g/C Ratio	0.06	0.64	0.64	0.03	0.62	0.22	0.00
Clearance Time (s)	4.4	5.7	5.7	4.4	5.7	4.9	
Vehicle Extension (s)	2.0	5.0	5.0	2.0	3.9	2.0	
Lane Grp Cap (vph)	97	3243	1009	57	3128	433	0
v/s Ratio Prot	c0.03	0.45		0.01	0.19	c0.09	
v/s Ratio Perm			c0.45				
v/c Ratio	0.54	0.70	0.70	0.40	0.31	0.42	0.00
Uniform Delay, d1	60.7	15.7	15.7	62.6	12.1	44.7	66.0
Progression Factor	0.78	1.51	2.20	0.85	1.10	1.00	1.00
Incremental Delay, d2	0.8	0.4	1.2	1.5	0.2	0.2	0.0
Delay (s)	48.2	24.1	35.7	54.7	13.5	44.9	66.0
Level of Service	D	C	D	D	B	D	E
Approach Delay (s)		27.6			14.5	49.2	
Approach LOS		C			B	D	

Intersection Summary

HCM 2000 Control Delay	25.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	132.0	Sum of lost time (s)	15.0
Intersection Capacity Utilization	63.5%	ICU Level of Service	B
Analysis Period (min)	15		

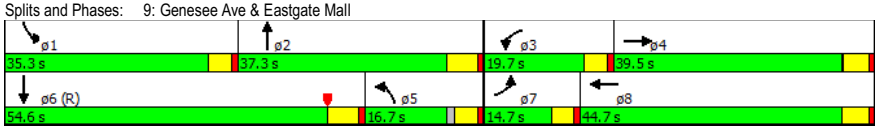
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	82	249	231	331	65	617	489	1314
Future Volume (vph)	82	249	231	331	65	617	489	1314
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	7	4	3	8	5	2	1	6
Permitted Phases								
Detector Phase	7	4	3	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	4.0	7.0	4.0	7.0	4.0	10.0	4.0	10.0
Minimum Split (s)	8.4	38.9	9.5	39.1	9.5	31.7	9.5	32.7
Total Split (s)	14.7	39.5	19.7	44.7	16.7	37.3	35.3	54.6
Total Split (%)	11.1%	29.9%	14.9%	33.9%	12.7%	28.3%	26.7%	41.4%
Yellow Time (s)	3.4	3.9	3.4	4.1	3.4	4.7	3.4	4.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	4.9	4.4	5.1	4.4	5.7	4.4	5.7
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max

Intersection Summary

Cycle Length: 132
Actuated Cycle Length: 132
Offset: 58 (44%), Referenced to phase 6:SBT, Start of Yellow
Natural Cycle: 115
Control Type: Actuated-Coordinated

Splits and Phases: 9: Genesee Ave & Eastgate Mall



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	82	249	129	231	331	178	65	617	127	489	1314	115
Future Volume (vph)	82	249	129	231	331	178	65	617	127	489	1314	115
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	5.1		4.4	5.7		4.4	5.7	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.91		0.97	0.91	
Frt	1.00	0.95		1.00	0.95		1.00	0.97		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3358		1770	3354		1770	4955		3433	5024	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	3358		1770	3354		1770	4955		3433	5024	
Peak-hour factor, PHF	0.92	0.92	0.92	0.82	0.82	0.82	0.96	0.96	0.96	0.95	0.95	0.95
Adj. Flow (vph)	89	271	140	282	404	217	68	643	132	515	1383	121
RTOR Reduction (vph)	0	56	0	0	58	0	0	20	0	0	6	0
Lane Group Flow (vph)	89	355	0	282	563	0	68	755	0	515	1498	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Actuated Green, G (s)	10.0	22.6		20.5	32.9		8.4	45.4		24.1	61.1	
Effective Green, g (s)	10.0	22.6		20.5	32.9		8.4	45.4		24.1	61.1	
Actuated g/C Ratio	0.08	0.17		0.16	0.25		0.06	0.34		0.18	0.46	
Clearance Time (s)	4.4	4.9		4.4	5.1		4.4	5.7		4.4	5.7	
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	4.2		2.0	4.3	
Lane Grp Cap (vph)	134	574		274	835		112	1704		626	2325	
v/s Ratio Prot	0.05	0.11		c0.16	c0.17		c0.04	0.15		c0.15	c0.30	
v/s Ratio Perm												
v/c Ratio	0.66	0.62		1.03	0.67		0.61	0.44		0.82	0.64	
Uniform Delay, d1	59.4	50.7		55.8	44.7		60.2	33.5		51.9	27.1	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		0.77	0.43	
Incremental Delay, d2	9.2	1.4		62.1	1.7		6.2	0.3		5.9	1.0	
Delay (s)	68.6	52.1		117.9	46.4		66.4	33.8		45.6	12.6	
Level of Service	E	D		F	D		E	C		D	B	
Approach Delay (s)		55.0			68.7			36.4			21.0	
Approach LOS		E			E			D			C	

Intersection Summary

HCM 2000 Control Delay	38.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	132.0	Sum of lost time (s)	19.6
Intersection Capacity Utilization	71.5%	ICU Level of Service	C
Analysis Period (min)	15		

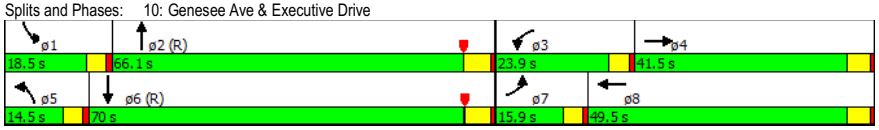
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	14	95	319	198	111	530	101	1985
Future Volume (vph)	14	95	319	198	111	530	101	1985
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	7	4	3	8	5	2	1	6
Permitted Phases								
Detector Phase	7	4	3	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	10.0	4.0	10.0
Minimum Split (s)	8.4	8.9	8.4	8.9	8.4	15.5	9.5	15.4
Total Split (s)	15.9	41.5	23.9	49.5	14.5	66.1	18.5	70.0
Total Split (%)	10.6%	27.7%	15.9%	33.0%	9.7%	44.1%	12.3%	46.7%
Yellow Time (s)	3.4	3.9	3.4	3.9	3.4	4.5	3.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	4.9	4.4	4.9	4.4	5.5	4.4	5.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	None	C-Max

Intersection Summary

Cycle Length: 150
Actuated Cycle Length: 150
Offset: 100 (67%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 80
Control Type: Actuated-Coordinated

Splits and Phases: 10: Genesee Ave & Executive Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	14	95	98	319	198	90	111	530	178	101	1985	28
Future Volume (vph)	14	95	98	319	198	90	111	530	178	101	1985	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	4.9		4.4	5.5		4.4	5.4	
Lane Util. Factor	1.00	0.95		0.97	0.95		1.00	0.91		1.00	0.91	
Frt	1.00	0.92		1.00	0.95		1.00	0.96		1.00	1.00	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3269		3433	3373		1770	4893		1770	5075	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	3269		3433	3373		1770	4893		1770	5075	
Peak-hour factor, PHF	0.80	0.80	0.80	0.92	0.92	0.92	0.91	0.91	0.91	0.90	0.90	0.90
Adj. Flow (vph)	18	119	122	347	215	98	122	582	196	112	2206	31
RTOR Reduction (vph)	0	107	0	0	39	0	0	32	0	0	1	0
Lane Group Flow (vph)	18	135	0	347	274	0	122	746	0	112	2236	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Actuated Green, G (s)	4.2	20.1		18.1	34.0		15.1	79.1		13.5	77.6	
Effective Green, g (s)	4.2	20.1		18.1	34.0		15.1	79.1		13.5	77.6	
Actuated g/C Ratio	0.03	0.13		0.12	0.23		0.10	0.53		0.09	0.52	
Clearance Time (s)	4.4	4.9		4.4	4.9		4.4	5.5		4.4	5.4	
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	3.6		2.0	3.8	
Lane Grp Cap (vph)	49	438		414	764		178	2580		159	2625	
v/s Ratio Prot	0.01	0.04		c0.10	c0.08		c0.07	0.15		0.06	c0.44	
v/s Ratio Perm												
v/c Ratio	0.37	0.31		0.84	0.36		0.69	0.29		0.70	0.85	
Uniform Delay, d1	71.6	58.7		64.5	48.8		65.2	19.8		66.3	31.2	
Progression Factor	1.00	1.00		1.00	1.00		1.46	0.42		1.00	1.00	
Incremental Delay, d2	1.7	0.1		13.2	0.1		8.2	0.3		11.0	3.7	
Delay (s)	73.3	58.8		77.7	48.9		103.6	8.6		77.3	35.0	
Level of Service	E	E		E	D		F	A		E	C	
Approach Delay (s)		59.8			64.1			21.5			37.0	
Approach LOS		E			E			C			D	

Intersection Summary

HCM 2000 Control Delay	39.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	19.2
Intersection Capacity Utilization	75.9%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	46	3	165	11	27	30	723	11	2447
Future Volume (vph)	46	3	165	11	27	30	723	11	2447
Turn Type	Split	NA	Prot	NA	NA	Prot	NA	Prot	NA
Protected Phases	4	4	4	3		5	2	1	6
Permitted Phases									
Detector Phase	4	4	4	3		5	2	1	6
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	4.0		4.0	10.0	4.0	10.0
Minimum Split (s)	8.9	8.9	8.9	8.9		8.4	15.7	8.4	15.7
Total Split (s)	15.0	15.0	15.0	13.2		13.5	33.3	13.5	33.3
Total Split (%)	20.0%	20.0%	20.0%	17.6%		18.0%	44.4%	18.0%	44.4%
Yellow Time (s)	3.9	3.9	3.9	3.9		3.4	4.7	3.4	4.7
All-Red Time (s)	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	4.9	4.9		4.4	5.7	4.4	5.7
Lead/Lag	Lag	Lag	Lag	Lead		Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None		None	C-Max	None	C-Max

Intersection Summary

Cycle Length: 75
Actuated Cycle Length: 75
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 11: Genesee Ave & Executive Square

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	46	3	165	125	11	27	30	723	7	11	2447	22
Future Volume (vph)	46	3	165	125	11	27	30	723	7	11	2447	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9	4.9		4.9	4.0	4.4	5.7		4.4	5.7	
Lane Util. Factor	0.95	0.91	0.95		0.95	0.95	1.00	0.91		1.00	0.91	
Frt	1.00	0.86	0.85		1.00	0.85	1.00	1.00		1.00	1.00	
Flt Protected	0.95	1.00	1.00		0.96	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1460	1504		1689	1504	1770	5078		1770	5079	
Flt Permitted	0.95	1.00	1.00		0.96	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1681	1460	1504		1689	1504	1770	5078		1770	5079	
Peak-hour factor, PHF	0.80	0.80	0.80	0.80	0.80	0.80	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	58	4	206	156	14	34	33	795	8	12	2689	24
RTOR Reduction (vph)	0	91	98	0	1	31	0	1	0	0	1	0
Lane Group Flow (vph)	52	18	9	0	172	0	33	802	0	12	2712	0
Turn Type	Split	NA	Prot	Split	NA	NA	Prot	NA		Prot	NA	
Protected Phases	4	4	4	3	3		5	2		1	6	
Permitted Phases												
Actuated Green, G (s)	6.0	6.0	6.0		8.3	0.0	2.9	39.6		1.2	37.9	
Effective Green, g (s)	6.0	6.0	6.0		8.3	0.0	2.9	39.6		1.2	37.9	
Actuated g/C Ratio	0.08	0.08	0.08		0.11	0.00	0.04	0.53		0.02	0.51	
Clearance Time (s)	4.9	4.9	4.9		4.9		4.4	5.7		4.4	5.7	
Vehicle Extension (s)	2.0	2.0	2.0		2.0		2.0	3.9		2.0	2.2	
Lane Grp Cap (vph)	134	116	120		186	0	68	2681		28	2566	
v/s Ratio Prot	c0.03	0.01	0.01		c0.10		c0.02	0.16		0.01	c0.53	
v/s Ratio Perm												
v/c Ratio	0.39	0.15	0.07		0.93	0.00	0.49	0.30		0.43	1.06	
Uniform Delay, d1	32.8	32.1	31.9		33.0	37.5	35.3	9.9		36.6	18.6	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.12	0.84		1.19	1.20	
Incremental Delay, d2	0.7	0.2	0.1		44.3	0.0	1.6	0.2		2.3	31.8	
Delay (s)	33.4	32.4	32.0		77.3	37.5	41.1	8.6		45.9	54.1	
Level of Service	C	C	C		E	D	D	A		D	D	
Approach Delay (s)		32.4			71.3			9.8			54.1	
Approach LOS		C			E			A			D	

Intersection Summary

HCM 2000 Control Delay	44.3	HCM 2000 Level of Service	D	
HCM 2000 Volume to Capacity ratio	0.93			
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	19.9	
Intersection Capacity Utilization	75.5%	ICU Level of Service	D	
Analysis Period (min)	15			

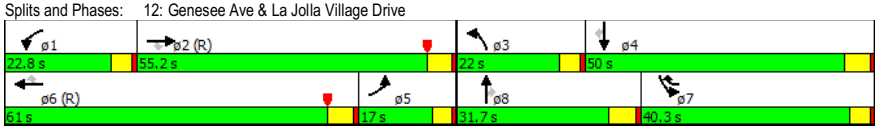
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	208	1247	378	391	1468	118	419	411	79	550	1598	451
Future Volume (vph)	208	1247	378	391	1468	118	419	411	79	550	1598	451
Turn Type	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6	7	3	8		7	4	
Permitted Phases			2			6			8			4
Detector Phase	5	2	2	1	6	7	3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	4.0	10.0	10.0	4.0	10.0	4.0	4.0	10.0	10.0	4.0	10.0	10.0
Minimum Split (s)	8.4	15.3	15.3	8.4	15.5	8.4	8.4	15.7	15.7	8.4	15.4	15.4
Total Split (s)	17.0	55.2	55.2	22.8	61.0	40.3	22.0	31.7	31.7	40.3	50.0	50.0
Total Split (%)	11.3%	36.8%	36.8%	15.2%	40.7%	26.9%	14.7%	21.1%	21.1%	26.9%	33.3%	33.3%
Yellow Time (s)	3.4	4.3	4.3	3.4	4.5	3.4	3.4	4.7	4.7	3.4	4.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.3	5.3	4.4	5.5	4.4	4.4	5.7	5.7	4.4	5.4	5.4
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lag	Lead	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 150
Actuated Cycle Length: 150
Offset: 6 (4%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 130
Control Type: Actuated-Coordinated

Splits and Phases: 12: Genesee Ave & La Jolla Village Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	208	1247	378	391	1468	118	419	411	79	550	1598	451
Future Volume (vph)	208	1247	378	391	1468	118	419	411	79	550	1598	451
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.3	5.3	4.4	5.5	4.4	4.4	5.7	5.7	4.4	5.4	5.4
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.91	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5085	1583	3433	5085	1583	3433	5085	1583	3433	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5085	1583	3433	5085	1583	3433	5085	1583	3433	5085	1583
Peak-hour factor, PHF	0.80	0.80	0.80	0.80	0.80	0.80	0.91	0.91	0.91	0.93	0.93	0.93
Adj. Flow (vph)	260	1559	472	489	1835	148	460	452	87	591	1718	485
RTOR Reduction (vph)	0	0	172	0	0	31	0	0	76	0	0	111
Lane Group Flow (vph)	260	1559	301	489	1835	117	460	452	11	591	1718	374
Turn Type	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6	7	3	8		7	4	
Permitted Phases			2			6			8			4
Actuated Green, G (s)	12.6	49.9	49.9	18.4	55.5	97.7	17.6	19.7	19.7	42.2	44.6	44.6
Effective Green, g (s)	12.6	49.9	49.9	18.4	55.5	97.7	17.6	19.7	19.7	42.2	44.6	44.6
Actuated g/C Ratio	0.08	0.33	0.33	0.12	0.37	0.65	0.12	0.13	0.13	0.28	0.30	0.30
Clearance Time (s)	4.4	5.3	5.3	4.4	5.5	4.4	4.4	5.7	5.7	4.4	5.4	5.4
Vehicle Extension (s)	2.0	6.0	6.0	2.0	5.8	2.0	2.0	3.5	3.5	2.0	4.1	4.1
Lane Grp Cap (vph)	288	1691	526	421	1881	1077	402	667	207	965	1511	470
v/s Ratio Prot	0.08	c0.31		c0.14	c0.36	0.03	c0.13	0.09		0.17	c0.34	
v/s Ratio Perm			0.19			0.04			0.01			0.24
v/c Ratio	0.90	0.92	0.57	1.16	0.98	0.11	1.14	0.68	0.06	0.61	1.14	0.80
Uniform Delay, d1	68.1	48.2	41.2	65.8	46.6	9.8	66.2	62.1	57.0	46.8	52.7	48.5
Progression Factor	0.52	0.36	0.08	0.72	0.80	0.17	0.91	0.90	2.16	0.84	0.86	0.88
Incremental Delay, d2	3.9	1.1	0.4	75.4	2.7	0.0	74.6	0.9	0.0	0.3	65.2	3.9
Delay (s)	39.4	18.5	3.9	122.6	40.2	1.6	134.7	56.8	122.9	39.6	110.4	46.5
Level of Service	D	B	A	F	D	A	F	E	F	D	F	D
Approach Delay (s)		17.9			54.2			98.4			84.3	
Approach LOS		B			D			F			F	

Intersection Summary

HCM 2000 Control Delay	59.5	HCM 2000 Level of Service	E	
HCM 2000 Volume to Capacity ratio	1.07			
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	20.0	
Intersection Capacity Utilization	94.3%	ICU Level of Service	F	
Analysis Period (min)	15			

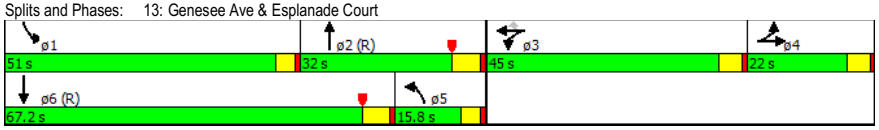
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	213	113	460	138	829	71	449	1055	1127
Future Volume (vph)	213	113	460	138	829	71	449	1055	1127
Turn Type	Split	NA	Split	NA	Perm	Prot	NA	Prot	NA
Protected Phases	4	4	3	3		5	2	1	6
Permitted Phases					3				
Detector Phase	4	4	3	3	3	5	2	1	6
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	10.0	4.0	10.0
Minimum Split (s)	8.9	8.9	8.9	8.9	8.9	8.4	16.0	8.4	15.7
Total Split (s)	22.0	22.0	45.0	45.0	45.0	15.8	32.0	51.0	67.2
Total Split (%)	14.7%	14.7%	30.0%	30.0%	30.0%	10.5%	21.3%	34.0%	44.8%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.9	3.4	5.0	3.4	4.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	4.9	4.9	4.9	4.4	6.0	4.4	5.7
Lead/Lag	Lag	Lag	Lead	Lead	Lead	Lag	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	None	C-Max

Intersection Summary

Cycle Length: 150
Actuated Cycle Length: 150
Offset: 125 (83%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 120
Control Type: Actuated-Coordinated

Splits and Phases: 13: Genesee Ave & Esplanade Court



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	213	113	80	460	138	829	71	449	394	1055	1127	237
Future Volume (vph)	213	113	80	460	138	829	71	449	394	1055	1127	237
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9		4.9	4.9	4.9	4.4	6.0		4.4	5.7	
Lane Util. Factor	0.97	1.00		0.97	0.95	0.95	1.00	0.91		0.97	0.91	
Frt	1.00	0.94		1.00	0.89	0.85	1.00	0.93		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	3433	1747		3433	1578	1504	1770	4729		3433	4953	
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	3433	1747		3433	1578	1504	1770	4729		3433	4953	
Peak-hour factor, PHF	0.80	0.80	0.80	0.83	0.83	0.83	0.80	0.80	0.80	0.80	0.80	0.80
Adj. Flow (vph)	266	141	100	554	166	999	89	561	492	1319	1409	296
RTOR Reduction (vph)	0	17	0	0	62	417	0	106	0	0	22	0
Lane Group Flow (vph)	266	224	0	554	534	152	89	948	0	1319	1683	0
Turn Type	Split	NA		Split	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	4	4		3	3		5	2		1	6	
Permitted Phases						3						
Actuated Green, G (s)	17.1	17.1		40.1	40.1	40.1	11.4	26.0		46.6	61.5	
Effective Green, g (s)	17.1	17.1		40.1	40.1	40.1	11.4	26.0		46.6	61.5	
Actuated g/C Ratio	0.11	0.11		0.27	0.27	0.27	0.08	0.17		0.31	0.41	
Clearance Time (s)	4.9	4.9		4.9	4.9	4.9	4.4	6.0		4.4	5.7	
Vehicle Extension (s)	2.0	2.0		2.0	2.0	2.0	2.0	3.7		2.0	4.1	
Lane Grp Cap (vph)	391	199		917	421	402	134	819		1066	2030	
v/s Ratio Prot	0.08	c0.13		0.16	c0.34		0.05	c0.20		c0.38	0.34	
v/s Ratio Perm						0.10						
v/c Ratio	0.68	1.13		0.60	1.27	0.38	0.66	1.30dr		1.24	0.83	
Uniform Delay, d1	63.8	66.5		48.0	54.9	44.8	67.4	62.0		51.7	39.6	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.10	1.16		0.66	0.55	
Incremental Delay, d2	3.9	101.9		0.8	138.1	0.2	7.9	82.8		109.7	1.5	
Delay (s)	67.7	168.4		48.8	193.1	45.0	81.8	154.5		143.8	23.4	
Level of Service	E	F		D	F	D	F	F		F	C	
Approach Delay (s)		115.5			97.6			148.9			75.9	
Approach LOS		F			F			F			E	

Intersection Summary

HCM 2000 Control Delay	97.9	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.21		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	20.2
Intersection Capacity Utilization	94.8%	ICU Level of Service	F
Analysis Period (min)	15		

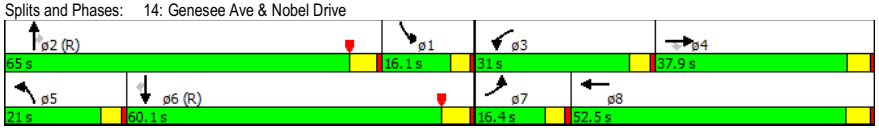
dr Defacto Right Lane. Recode with 1 though lane as a right lane.
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	191	449	470	596	722	414	651	255	100	1732	109
Future Volume (vph)	191	449	470	596	722	414	651	255	100	1732	109
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8	5	2		1	6	
Permitted Phases			4					2			6
Detector Phase	7	4	4	3	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	4.0	10.0	10.0	4.0	10.0	4.0	10.0	10.0	4.0	10.0	10.0
Minimum Split (s)	8.4	37.9	37.9	8.4	40.1	8.4	35.7	35.7	8.4	38.9	38.9
Total Split (s)	16.4	37.9	37.9	31.0	52.5	21.0	65.0	65.0	16.1	60.1	60.1
Total Split (%)	10.9%	25.3%	25.3%	20.7%	35.0%	14.0%	43.3%	43.3%	10.7%	40.1%	40.1%
Yellow Time (s)	3.4	3.9	3.9	3.4	4.1	3.4	4.7	4.7	3.4	4.9	4.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	4.9	4.9	4.4	5.1	4.4	5.7	5.7	4.4	5.9	5.9
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max

Intersection Summary

Cycle Length: 150
Actuated Cycle Length: 150
Offset: 20 (13%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 14: Genesee Ave & Nobel Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	191	449	470	596	722	58	414	651	255	100	1732	109
Future Volume (vph)	191	449	470	596	722	58	414	651	255	100	1732	109
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9	4.9	4.4	5.1		4.4	5.7	5.7	4.4	5.9	5.9
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95		0.97	0.95	1.00	0.97	0.91	1.00
Frt	1.00	1.00	0.85	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	3539	1583	3433	3500		3433	3539	1583	3433	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3539	1583	3433	3500		3433	3539	1583	3433	5085	1583
Peak-hour factor, PHF	0.91	0.91	0.91	0.84	0.84	0.84	0.87	0.87	0.87	0.84	0.84	0.84
Adj. Flow (vph)	210	493	516	710	860	69	476	748	293	119	2062	130
RTOR Reduction (vph)	0	0	163	0	4	0	0	0	111	0	0	71
Lane Group Flow (vph)	210	493	353	710	925	0	476	748	182	119	2062	59
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4						2			6
Actuated Green, G (s)	11.6	33.0	33.0	26.6	47.8		16.6	59.3	59.3	11.7	54.2	54.2
Effective Green, g (s)	11.6	33.0	33.0	26.6	47.8		16.6	59.3	59.3	11.7	54.2	54.2
Actuated g/C Ratio	0.08	0.22	0.22	0.18	0.32		0.11	0.40	0.40	0.08	0.36	0.36
Clearance Time (s)	4.4	4.9	4.9	4.4	5.1		4.4	5.7	5.7	4.4	5.9	5.9
Vehicle Extension (s)	2.0	4.0	4.0	2.0	2.1		2.0	8.0	8.0	2.0	4.0	4.0
Lane Grp Cap (vph)	265	778	348	608	1115		379	1399	625	267	1837	571
v/s Ratio Prot	0.06	0.14		c0.21	0.26		c0.14	0.21		0.03	c0.41	
v/s Ratio Perm			c0.22						0.12			0.04
v/c Ratio	0.79	0.63	1.01	1.17	0.83		1.26	0.53	0.29	0.45	1.12	0.10
Uniform Delay, d1	68.0	53.0	58.5	61.7	47.3		66.7	34.8	31.0	66.1	47.9	31.8
Progression Factor	0.86	1.23	1.40	1.00	1.00		1.28	0.32	0.16	0.92	0.88	1.22
Incremental Delay, d2	12.3	1.6	48.5	92.3	5.0		127.7	0.9	0.7	0.3	60.8	0.3
Delay (s)	71.1	67.1	130.3	154.0	52.3		213.4	12.1	5.8	61.0	102.8	39.1
Level of Service	E	E	F	F	D		F	B	A	E	F	D
Approach Delay (s)		94.5			96.4			74.0			97.1	
Approach LOS		F			F			E			F	

Intersection Summary

HCM 2000 Control Delay	91.2	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.12		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	19.8
Intersection Capacity Utilization	92.2%	ICU Level of Service	F
Analysis Period (min)	15		

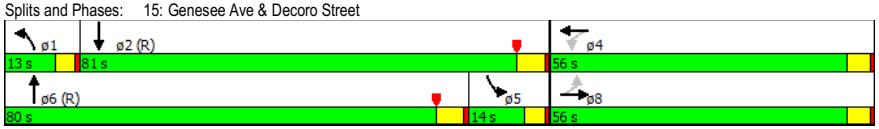
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	43	22	236	38	152	1219	27	3057
Future Volume (vph)	43	22	236	38	152	1219	27	3057
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		8		4	1	6	5	2
Permitted Phases	8		4					
Detector Phase	8	8	4	4	1	6	5	2
Switch Phase								
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	10.0	4.0	10.0
Minimum Split (s)	8.9	8.9	8.9	8.9	8.4	15.7	8.4	15.9
Total Split (s)	56.0	56.0	56.0	56.0	13.0	80.0	14.0	81.0
Total Split (%)	37.3%	37.3%	37.3%	37.3%	8.7%	53.3%	9.3%	54.0%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.4	4.7	3.4	4.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.9		4.9	4.4	5.7	4.4	5.9
Lead/Lag					Lead	Lead	Lag	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	None	C-Max

Intersection Summary

Cycle Length: 150
Actuated Cycle Length: 150
Offset: 21 (14%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 15: Genesee Ave & Decoro Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	43	22	187	236	38	34	152	1219	24	27	3057	81
Future Volume (vph)	43	22	187	236	38	34	152	1219	24	27	3057	81
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9			4.9		4.4	5.7		4.4	5.9	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frt		0.90			0.98		1.00	1.00		1.00	1.00	
Flt Protected		0.99			0.96		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1662			1767		1770	3529		1770	3526	
Flt Permitted		0.90			0.49		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1505			899		1770	3529		1770	3526	
Peak-hour factor, PHF	0.85	0.85	0.85	0.80	0.80	0.80	0.85	0.85	0.85	0.90	0.90	0.90
Adj. Flow (vph)	51	26	220	295	48	42	179	1434	28	30	3397	90
RTOR Reduction (vph)	0	69	0	0	3	0	0	1	0	0	1	0
Lane Group Flow (vph)	0	228	0	0	383	0	179	1461	0	30	3486	0
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		8			4		1	6		5	2	
Permitted Phases	8			4								
Actuated Green, G (s)		51.1			51.1		8.6	78.1		5.8	75.1	
Effective Green, g (s)		51.1			51.1		8.6	78.1		5.8	75.1	
Actuated g/C Ratio		0.34			0.34		0.06	0.52		0.04	0.50	
Clearance Time (s)		4.9			4.9		4.4	5.7		4.4	5.9	
Vehicle Extension (s)		2.0			2.0		2.0	4.3		2.0	3.7	
Lane Grp Cap (vph)		512			306		101	1837		68	1765	
v/s Ratio Prot							c0.10	0.41		0.02	c0.99	
v/s Ratio Perm		0.15			c0.43							
v/c Ratio		0.45			1.25		1.77	0.80		0.44	1.98	
Uniform Delay, d1		38.4			49.5		70.7	29.4		70.5	37.5	
Progression Factor		1.00			1.00		1.28	0.25		0.96	0.92	
Incremental Delay, d2		0.2			137.0		380.0	3.2		0.2	439.0	
Delay (s)		38.7			186.4		470.4	10.6		68.1	473.6	
Level of Service		D			F		F	B		E	F	
Approach Delay (s)		38.7			186.4			60.7			470.1	
Approach LOS		D			F			E			F	

Intersection Summary

HCM 2000 Control Delay	314.4	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.69		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	15.2
Intersection Capacity Utilization	144.4%	ICU Level of Service	H
Analysis Period (min)	15		

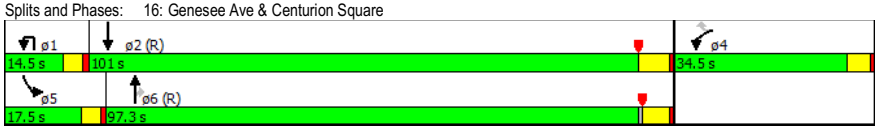
c Critical Lane Group

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	ø1
Lane Configurations							
Traffic Volume (vph)	89	23	1355	46	46	3394	
Future Volume (vph)	89	23	1355	46	46	3394	
Turn Type	Prot	Perm	NA	Perm	Prot	NA	
Protected Phases	4		6		5	2	1
Permitted Phases		4		6			
Detector Phase	4	4	6	6	5	2	
Switch Phase							
Minimum Initial (s)	7.0	7.0	10.0	10.0	4.0	10.0	4.0
Minimum Split (s)	11.9	11.9	15.7	15.7	8.4	16.4	8.4
Total Split (s)	34.5	34.5	97.3	97.3	17.5	101.0	14.5
Total Split (%)	23.0%	23.0%	64.9%	64.9%	11.7%	67.3%	10%
Yellow Time (s)	3.9	3.9	4.7	4.7	3.4	5.4	3.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.9	4.9	5.7	5.7	4.4	6.4	
Lead/Lag			Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?			Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	C-Max	C-Max	None	C-Max	None

Intersection Summary

Cycle Length: 150
Actuated Cycle Length: 150
Offset: 33 (22%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 16: Genesee Ave & Centurion Square



Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	89	23	0	1355	46	46	3394
Future Volume (vph)	89	23	0	1355	46	46	3394
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9		5.7	5.7	4.4	6.4
Lane Util. Factor	1.00	1.00		0.95	1.00	0.97	0.95
Frt	1.00	0.85		1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00		1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583		3539	1583	3433	3539
Flt Permitted	0.95	1.00		1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583		3539	1583	3433	3539
Peak-hour factor, PHF	0.80	0.80	0.92	0.89	0.89	0.94	0.94
Adj. Flow (vph)	111	29	0	1522	52	49	3611
RTOR Reduction (vph)	0	26	0	0	8	0	0
Lane Group Flow (vph)	111	3	0	1522	44	49	3611
Turn Type	Prot	Perm	Prot	NA	Perm	Prot	NA
Protected Phases	4		1	6		5	2
Permitted Phases		4			6		
Actuated Green, G (s)	13.8	13.8		115.6	115.6	5.6	124.9
Effective Green, g (s)	13.8	13.8		115.6	115.6	5.6	124.9
Actuated g/C Ratio	0.09	0.09		0.77	0.77	0.04	0.83
Clearance Time (s)	4.9	4.9		5.7	5.7	4.4	6.4
Vehicle Extension (s)	2.0	2.0		4.2	4.2	2.0	3.4
Lane Grp Cap (vph)	162	145		2727	1219	128	2946
v/s Ratio Prot	c0.06			0.43		0.01	c1.02
v/s Ratio Perm		0.00			0.03		
v/c Ratio	0.69	0.02		0.56	0.04	0.38	1.23
Uniform Delay, d1	66.0	61.9		6.9	4.1	70.5	12.5
Progression Factor	1.00	1.00		1.30	1.60	0.72	2.56
Incremental Delay, d2	9.2	0.0		0.5	0.0	0.1	101.9
Delay (s)	75.2	62.0		9.5	6.5	51.1	134.1
Level of Service	E	E		A	A	D	F
Approach Delay (s)	72.4			9.4			132.9
Approach LOS	E			A			F

Intersection Summary

HCM 2000 Control Delay	95.2	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.21		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	15.7
Intersection Capacity Utilization	109.1%	ICU Level of Service	H
Analysis Period (min)	15		

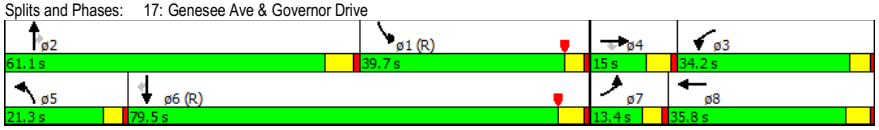
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	344	305	122	289	382	193	715	218	580	1852	780
Future Volume (vph)	344	305	122	289	382	193	715	218	580	1852	780
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8	5	2		1	6	
Permitted Phases			4					2			6
Detector Phase	7	4	4	3	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	4.0	8.0	8.0	4.0	8.0	4.0	8.0	8.0	4.0	8.0	8.0
Minimum Split (s)	8.4	13.2	13.2	8.4	13.2	8.4	13.9	13.9	8.4	13.4	13.4
Total Split (s)	13.4	15.0	15.0	34.2	35.8	21.3	61.1	61.1	39.7	79.5	79.5
Total Split (%)	8.9%	10.0%	10.0%	22.8%	23.9%	14.2%	40.7%	40.7%	26.5%	53.0%	53.0%
Yellow Time (s)	3.4	4.2	4.2	3.4	4.2	3.4	4.9	4.9	3.4	4.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.2	5.2	4.4	5.2	4.4	5.9	5.9	4.4	5.4	5.4
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lead	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	C-Max	C-Max	C-Max

Intersection Summary

Cycle Length: 150
Actuated Cycle Length: 150
Offset: 0 (0%), Referenced to phase 1:SBL and 6:SBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 17: Genesee Ave & Governor Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	344	305	122	289	382	183	193	715	218	580	1852	780
Future Volume (vph)	344	305	122	289	382	183	193	715	218	580	1852	780
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	16	12	12	12	12	12	12	12
Total Lost time (s)	4.4	5.2	5.2	4.4	5.2		4.4	5.9	5.9	4.4	5.4	5.4
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95		1.00	0.95	1.00	0.97	0.95	1.00
Frt	1.00	1.00	0.85	1.00	0.95		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	3539	1583	3433	3816		1770	3539	1583	3433	3539	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3539	1583	3433	3816		1770	3539	1583	3433	3539	1583
Peak-hour factor, PHF	0.95	0.95	0.95	0.87	0.87	0.87	0.92	0.92	0.92	0.89	0.89	0.89
Adj. Flow (vph)	362	321	128	332	439	210	210	777	237	652	2081	876
RTOR Reduction (vph)	0	0	120	0	39	0	0	0	96	0	0	85
Lane Group Flow (vph)	362	321	8	332	610	0	210	777	141	652	2081	791
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4						2			6
Actuated Green, G (s)	9.0	9.8	9.8	28.0	28.8		18.7	41.0	41.0	51.3	74.1	74.1
Effective Green, g (s)	9.0	9.8	9.8	28.0	28.8		18.7	41.0	41.0	51.3	74.1	74.1
Actuated g/C Ratio	0.06	0.07	0.07	0.19	0.19		0.12	0.27	0.27	0.34	0.49	0.49
Clearance Time (s)	4.4	5.2	5.2	4.4	5.2		4.4	5.9	5.9	4.4	5.4	5.4
Vehicle Extension (s)	2.0	2.3	2.3	2.0	3.8		2.0	2.9	2.9	2.0	3.5	3.5
Lane Grp Cap (vph)	205	231	103	640	732		220	967	432	1174	1748	782
v/s Ratio Prot	c0.11	0.09		0.10	c0.16		c0.12	0.22		0.19	c0.59	
v/s Ratio Perm			0.01						0.09			0.50
v/c Ratio	1.77	1.39	0.08	0.52	0.83		0.95	0.80	0.33	0.56	1.19	1.01
Uniform Delay, d1	70.5	70.1	65.9	54.9	58.3		65.2	50.7	43.5	40.1	38.0	38.0
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.07	1.07	1.10
Incremental Delay, d2	363.8	199.7	0.2	0.3	8.4		47.2	4.9	0.4	0.2	86.3	12.8
Delay (s)	434.3	269.8	66.1	55.2	66.7		112.5	55.6	43.9	43.1	126.8	54.4
Level of Service	F	F	E	E	E		F	E	D	D	F	D
Approach Delay (s)		311.1			62.8			63.1			94.1	
Approach LOS		F			E			E			F	

Intersection Summary

HCM 2000 Control Delay	110.3	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.12		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	19.9
Intersection Capacity Utilization	104.3%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	420	337	546	1867	346
Future Volume (Veh/h)	0	420	337	546	1867	346
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.81	0.81	0.91	0.91	0.91	0.91
Hourly flow rate (vph)	0	519	370	600	2052	380
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	3092	1026	2052			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	3092	1026	2052			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	0	0	0			
cM capacity (veh/h)	0	232	270			

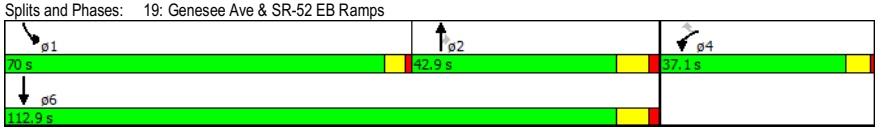
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	519	370	300	300	1026	1026	380
Volume Left	0	370	0	0	0	0	0
Volume Right	519	0	0	0	0	0	380
cSH	232	270	1700	1700	1700	1700	1700
Volume to Capacity	2.24	1.37	0.18	0.18	0.60	0.60	0.22
Queue Length 95th (ft)	1016	490	0	0	0	0	0
Control Delay (s)	603.8	224.9	0.0	0.0	0.0	0.0	0.0
Lane LOS	F	F					
Approach Delay (s)	603.8	85.8			0.0		
Approach LOS	F						

Intersection Summary			
Average Delay	101.1		
Intersection Capacity Utilization	84.3%	ICU Level of Service	E
Analysis Period (min)	15		

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	380	223	713	338	780	1556
Future Volume (vph)	380	223	713	338	780	1556
Turn Type	Prot	Perm	NA	Perm	Prot	NA
Protected Phases	4		2		1	6
Permitted Phases		4		2		
Detector Phase	4	4	2	2	1	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	13.0	13.0	5.0	10.0
Minimum Split (s)	37.1	37.1	38.5	38.5	10.7	17.5
Total Split (s)	37.1	37.1	42.9	42.9	70.0	112.9
Total Split (%)	24.7%	24.7%	28.6%	28.6%	46.7%	75.3%
Yellow Time (s)	4.1	4.1	5.5	5.5	3.7	5.5
All-Red Time (s)	1.0	1.0	2.0	2.0	1.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.1	5.1	7.5	7.5	4.7	7.5
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	None	None	Min	Min	None	Min

Intersection Summary
Cycle Length: 150
Actuated Cycle Length: 149.8
Natural Cycle: 140
Control Type: Actuated-Uncoordinated

Splits and Phases: 19: Genesee Ave & SR-52 EB Ramps



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	380	223	713	338	780	1556
Future Volume (vph)	380	223	713	338	780	1556
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1	7.5	7.5	4.7	7.5
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.86	0.86	0.91	0.91	0.92	0.92
Adj. Flow (vph)	442	259	784	371	848	1691
RTOR Reduction (vph)	0	155	0	129	0	0
Lane Group Flow (vph)	442	104	784	242	848	1691
Turn Type	Prot	Perm	NA	Perm	Prot	NA
Protected Phases	4		2		1	6
Permitted Phases		4		2		
Actuated Green, G (s)	32.0	32.0	35.2	35.2	65.3	105.2
Effective Green, g (s)	32.0	32.0	35.2	35.2	65.3	105.2
Actuated g/C Ratio	0.21	0.21	0.23	0.23	0.44	0.70
Clearance Time (s)	5.1	5.1	7.5	7.5	4.7	7.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	378	338	831	371	771	2485
v/s Ratio Prot	c0.25		c0.22		c0.48	0.48
v/s Ratio Perm		0.07		0.15		
v/c Ratio	1.17	0.31	0.94	0.65	1.10	0.68
Uniform Delay, d1	58.9	49.6	56.3	51.8	42.3	12.7
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	101.0	0.5	18.8	4.1	63.2	0.8
Delay (s)	159.9	50.1	75.1	55.8	105.5	13.5
Level of Service	F	D	E	E	F	B
Approach Delay (s)	119.3		68.9			44.2
Approach LOS	F		E			D

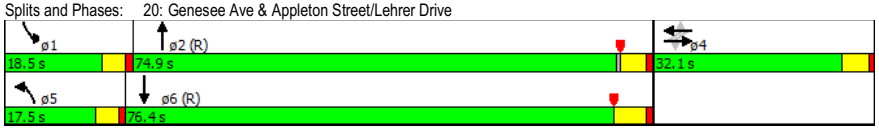
Intersection Summary			
HCM 2000 Control Delay	62.7	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.07		
Actuated Cycle Length (s)	149.8	Sum of lost time (s)	17.3
Intersection Capacity Utilization	98.4%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	278	37	11	16	16	691	215	1279
Future Volume (vph)	278	37	11	16	16	691	215	1279
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		4	5	2	1	6
Permitted Phases	4		4					
Detector Phase	4	4	4	4	5	2	1	6
Switch Phase								
Minimum Initial (s)	6.0	6.0	6.0	6.0	4.0	10.0	4.0	10.0
Minimum Split (s)	10.9	10.9	10.9	10.9	8.4	14.9	8.4	15.8
Total Split (s)	32.1	32.1	32.1	32.1	17.5	74.9	18.5	76.4
Total Split (%)	25.5%	25.5%	25.5%	25.5%	13.9%	59.4%	14.7%	60.6%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.4	3.9	3.4	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.9		4.9	4.4	4.9	4.4	5.8
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	None	C-Max

Intersection Summary
Cycle Length: 126
Actuated Cycle Length: 126
Offset: 107 (85%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 100
Control Type: Actuated-Coordinated

Splits and Phases: 20: Genesee Ave & Appleton Street/Lehrer Drive



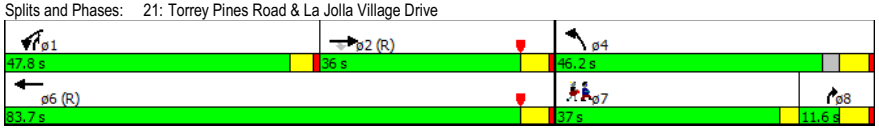
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	278	37	15	11	16	107	16	691	10	215	1279	329
Future Volume (vph)	278	37	15	11	16	107	16	691	10	215	1279	329
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	16	12	12	16	12	12	12	12	12	12	12
Total Lost time (s)		4.9			4.9		4.4	4.9		4.4	5.8	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frt		0.99			0.89		1.00	1.00		1.00	0.97	
Flt Protected		0.96			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		2014			1876		1770	3532		1770	3431	
Flt Permitted		0.53			0.98		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1110			1847		1770	3532		1770	3431	
Peak-hour factor, PHF	0.86	0.86	0.86	0.84	0.84	0.84	0.82	0.82	0.82	0.93	0.93	0.93
Adj. Flow (vph)	323	43	17	13	19	127	20	843	12	231	1375	354
RTOR Reduction (vph)	0	2	0	0	100	0	0	1	0	0	15	0
Lane Group Flow (vph)	0	381	0	0	59	0	20	854	0	231	1714	0
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4			4								
Actuated Green, G (s)		27.2			27.2		3.3	70.5		14.1	80.4	
Effective Green, g (s)		27.2			27.2		3.3	70.5		14.1	80.4	
Actuated g/C Ratio		0.22			0.22		0.03	0.56		0.11	0.64	
Clearance Time (s)		4.9			4.9		4.4	4.9		4.4	5.8	
Vehicle Extension (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		239			398		46	1976		198	2189	
v/s Ratio Prot							0.01	0.24		c0.13	c0.50	
v/s Ratio Perm		c0.34			0.03							
v/c Ratio		1.60			0.15		0.43	0.43		1.17	0.78	
Uniform Delay, d1		49.4			40.0		60.4	16.1		56.0	16.5	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		287.0			0.2		6.5	0.7		116.1	2.9	
Delay (s)		336.4			40.2		66.9	16.8		172.1	19.4	
Level of Service		F			D		E	B		F	B	
Approach Delay (s)		336.4			40.2			18.0			37.4	
Approach LOS		F			D			B			D	

Intersection Summary			
HCM 2000 Control Delay	66.4	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.05		
Actuated Cycle Length (s)	126.0	Sum of lost time (s)	15.1
Intersection Capacity Utilization	92.2%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	ø7	ø8
Lane Configurations								
Traffic Volume (vph)	1739	349	1438	773	130	1067		
Future Volume (vph)	1739	349	1438	773	130	1067		
Turn Type	NA	Perm	Prot	NA	Prot	pt+ov		
Protected Phases	2		1	6	4	8 1	7	8
Permitted Phases		2						
Detector Phase	2	2	1	6	4	8 1		
Switch Phase								
Minimum Initial (s)	10.0	10.0	4.0	10.0	4.0		4.0	4.0
Minimum Split (s)	15.4	15.4	8.4	15.3	9.6		37.0	9.6
Total Split (s)	36.0	36.0	47.8	83.7	46.2		37.0	11.6
Total Split (%)	27.2%	27.2%	36.1%	63.2%	34.9%		28%	9%
Yellow Time (s)	4.4	4.4	3.4	4.3	4.6		3.0	4.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		0.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0			
Total Lost Time (s)	5.4	5.4	4.4	5.3	5.6			
Lead/Lag	Lag	Lag	Lead				Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes				Yes	Yes
Recall Mode	C-Max	C-Max	None	C-Max	None		None	None

Intersection Summary
Cycle Length: 132.4
Actuated Cycle Length: 132.4
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 21: Torrey Pines Road & La Jolla Village Drive



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1739	349	1438	773	130	1067
Future Volume (vph)	1739	349	1438	773	130	1067
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.4	5.4	4.4	5.3	5.6	5.6
Lane Util. Factor	0.91	1.00	0.97	0.91	0.97	0.88
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	5085	1583	3433	5085	3433	2787
Flt Permitted	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (perm)	5085	1583	3433	5085	3433	2787
Peak-hour factor, PHF	0.90	0.90	0.89	0.89	0.91	0.91
Adj. Flow (vph)	1932	388	1616	869	143	1173
RTOR Reduction (vph)	0	153	0	0	0	0
Lane Group Flow (vph)	1932	235	1616	869	143	1173
Turn Type	NA	Perm	Prot	NA	Prot	pt+ov
Protected Phases	2		1	6	4	8 1
Permitted Phases		2				
Actuated Green, G (s)	30.0	30.0	43.4	77.9	43.6	62.4
Effective Green, g (s)	30.0	30.0	43.4	77.9	43.6	62.4
Actuated g/C Ratio	0.23	0.23	0.33	0.59	0.33	0.47
Clearance Time (s)	5.4	5.4	4.4	5.3	5.6	
Vehicle Extension (s)	5.5	5.5	2.0	8.0	2.0	
Lane Grp Cap (vph)	1152	358	1125	2991	1130	1313
v/s Ratio Prot	c0.38		c0.47	0.17	c0.04	c0.42
v/s Ratio Perm		0.15				
v/c Ratio	1.68	0.66	1.44	0.29	0.13	0.89
Uniform Delay, d1	51.2	46.5	44.5	13.5	31.1	32.0
Progression Factor	0.66	0.44	1.00	1.00	1.00	1.00
Incremental Delay, d2	305.7	2.6	201.5	0.2	0.0	7.9
Delay (s)	339.5	23.2	246.0	13.8	31.1	39.9
Level of Service	F	C	F	B	C	D
Approach Delay (s)	286.6			164.8	38.9	
Approach LOS	F			F	D	

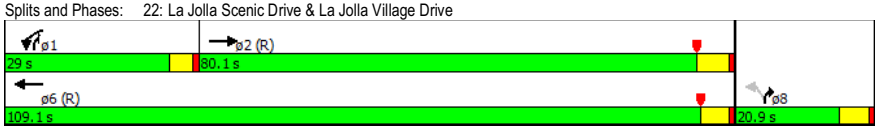
Intersection Summary			
HCM 2000 Control Delay	183.9	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.15		
Actuated Cycle Length (s)	132.4	Sum of lost time (s)	18.4
Intersection Capacity Utilization	91.2%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Configurations					
Traffic Volume (vph)	2655	584	2024	163	385
Future Volume (vph)	2655	584	2024	163	385
Turn Type	NA	Prot	NA	Perm	pt+ov
Protected Phases	2	1	6		8 1
Permitted Phases				8	
Detector Phase	2	1	6	8	8 1
Switch Phase					
Minimum Initial (s)	10.0	4.0	10.0	4.0	
Minimum Split (s)	15.7	8.4	15.3	9.5	
Total Split (s)	80.1	29.0	109.1	20.9	
Total Split (%)	61.6%	22.3%	83.9%	16.1%	
Yellow Time (s)	4.7	3.4	4.3	4.5	
All-Red Time (s)	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.7	4.4	5.3	5.5	
Lead/Lag	Lag	Lead			
Lead-Lag Optimize?	Yes	Yes			
Recall Mode	C-Max	None	C-Max	None	

Intersection Summary
Cycle Length: 130
Actuated Cycle Length: 130
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 22: La Jolla Scenic Drive & La Jolla Village Drive



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	2655	147	584	2024	163	385
Future Volume (vph)	2655	147	584	2024	163	385
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.7		4.4	5.3	5.5	5.5
Lane Util. Factor	0.91		0.97	0.91	1.00	0.88
Frt	0.99		1.00	1.00	1.00	0.85
Flt Protected	1.00		0.95	1.00	0.95	1.00
Satd. Flow (prot)	5045		3433	5085	1770	2787
Flt Permitted	1.00		0.95	1.00	0.95	1.00
Satd. Flow (perm)	5045		3433	5085	1770	2787
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.83	0.83
Adj. Flow (vph)	2886	160	635	2200	196	464
RTOR Reduction (vph)	5	0	0	0	0	1
Lane Group Flow (vph)	3041	0	635	2200	196	463
Turn Type	NA		Prot	NA	Perm	pt+ov
Protected Phases	2		1	6		8 1
Permitted Phases					8	
Actuated Green, G (s)	74.4		24.6	103.8	15.4	45.5
Effective Green, g (s)	74.4		24.6	103.8	15.4	45.5
Actuated g/C Ratio	0.57		0.19	0.80	0.12	0.35
Clearance Time (s)	5.7		4.4	5.3	5.5	
Vehicle Extension (s)	4.0		2.0	5.9	2.0	
Lane Grp Cap (vph)	2887		649	4060	209	975
v/s Ratio Prot	c0.60		c0.18	0.43		0.17
v/s Ratio Perm					c0.11	
v/c Ratio	1.05		0.98	0.54	0.94	0.47
Uniform Delay, d1	27.8		52.4	4.7	56.8	32.9
Progression Factor	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	33.0		29.5	0.5	44.1	0.1
Delay (s)	60.8		81.9	5.2	100.9	33.1
Level of Service	E		F	A	F	C
Approach Delay (s)	60.8			22.4	53.2	
Approach LOS	E			C	D	

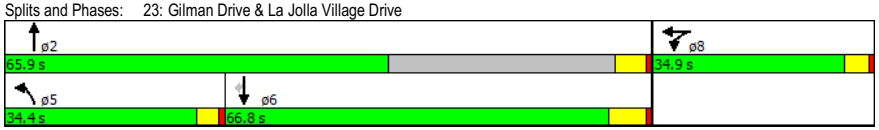
Intersection Summary			
HCM 2000 Control Delay	43.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.02		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	15.6
Intersection Capacity Utilization	93.3%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	WBT	NBL	NBT	SBT	SBR
Lane Configurations					
Traffic Volume (vph)	0	209	217	1080	156
Future Volume (vph)	0	209	217	1080	156
Turn Type	NA	Prot	NA	NA	Perm
Protected Phases	8	5	2	6	
Permitted Phases					6
Detector Phase	8	5	2	6	6
Switch Phase					
Minimum Initial (s)	4.0	4.0	10.0	10.0	10.0
Minimum Split (s)	8.9	8.4	15.9	16.8	16.8
Total Split (s)	34.9	34.4	65.9	66.8	66.8
Total Split (%)	25.6%	25.3%	48.4%	49.1%	49.1%
Yellow Time (s)	3.9	3.4	4.9	5.8	5.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.4	5.9	6.8	6.8
Lead/Lag		Lead		Lag	Lag
Lead-Lag Optimize?		Yes		Yes	Yes
Recall Mode	None	None	Min	Min	Min

Intersection Summary
Cycle Length: 136.1
Actuated Cycle Length: 84.2
Natural Cycle: 60
Control Type: Actuated-Uncoordinated

Splits and Phases: 23: Gilman Drive & La Jolla Village Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	33	0	152	209	217	0	0	1080	156
Future Volume (vph)	0	0	0	33	0	152	209	217	0	0	1080	156
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.9		4.4	5.9			6.8	6.8
Lane Util. Factor					1.00		1.00	0.95			0.95	1.00
Frt					0.89		1.00	1.00			1.00	0.85
Flt Protected					0.99		0.95	1.00			1.00	1.00
Satd. Flow (prot)					1642		1770	3539			3539	1583
Flt Permitted					0.99		0.95	1.00			1.00	1.00
Satd. Flow (perm)					1642		1770	3539			3539	1583
Peak-hour factor, PHF	0.25	0.25	0.25	0.83	0.83	0.83	0.83	0.83	0.83	0.97	0.97	0.97
Adj. Flow (vph)	0	0	0	40	0	183	252	261	0	0	1113	161
RTOR Reduction (vph)	0	0	0	0	135	0	0	0	0	0	0	44
Lane Group Flow (vph)	0	0	0	0	88	0	252	261	0	0	1113	117
Turn Type				Split	NA		Prot	NA			NA	Perm
Protected Phases				8	8		5	2			6	
Permitted Phases												6
Actuated Green, G (s)					10.5		19.0	62.0			37.7	37.7
Effective Green, g (s)					10.5		19.0	62.0			37.7	37.7
Actuated g/C Ratio					0.13		0.23	0.74			0.45	0.45
Clearance Time (s)					4.9		4.4	5.9			6.8	6.8
Vehicle Extension (s)					3.0		3.0	3.0			3.0	3.0
Lane Grp Cap (vph)					206		403	2634			1601	716
v/s Ratio Prot					c0.05		c0.14	0.07			c0.31	
v/s Ratio Perm												0.07
v/c Ratio					0.42		0.63	0.10			0.70	0.16
Uniform Delay, d1					33.6		28.9	2.9			18.2	13.5
Progression Factor					1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2					1.4		3.0	0.0			1.3	0.1
Delay (s)					35.0		32.0	3.0			19.5	13.6
Level of Service					D		C	A			B	B
Approach Delay (s)		0.0			35.0			17.2			18.8	
Approach LOS		A			D			B			B	

Intersection Summary				
HCM 2000 Control Delay	20.2	HCM 2000 Level of Service	C	
HCM 2000 Volume to Capacity ratio	0.63			
Actuated Cycle Length (s)	83.3	Sum of lost time (s)	16.1	
Intersection Capacity Utilization	Err%	ICU Level of Service	H	
Analysis Period (min)	15			

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	13	6	1071	0	0	0	0	417	89	206	889	0
Future Volume (Veh/h)	13	6	1071	0	0	0	0	417	89	206	889	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.97	0.97	0.97	0.25	0.25	0.25	0.83	0.83	0.83	0.96	0.96	0.96
Hourly flow rate (vph)	13	6	1104	0	0	0	0	502	107	215	926	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)			13									
Median type								None			None	
Median storage veh)												
Upstream signal (ft)											483	
pX, platoon unblocked	0.77	0.77	0.77	0.77	0.77		0.77					
vC, conflicting volume	1607	1965	463	1950	1858	251	926			609		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1184	1651	0	1631	1512	251	297			609		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	86	90	0	0	100	100	100			78		
cM capacity (veh/h)	92	58	832	0	71	749	968			966		

Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	1117	251	251	107	215	463	463
Volume Left	13	0	0	0	215	0	0
Volume Right	1104	0	0	107	0	0	0
cSH	842	1700	1700	1700	966	1700	1700
Volume to Capacity	1.33	0.15	0.15	0.06	0.22	0.27	0.27
Queue Length 95th (ft)	1098	0	0	0	21	0	0
Control Delay (s)	170.9	0.0	0.0	0.0	9.8	0.0	0.0
Lane LOS	F				A		
Approach Delay (s)	Err	0.0			1.8		
Approach LOS	F						

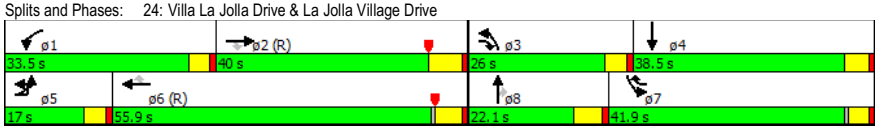
Intersection Summary				
Average Delay	Err			
Intersection Capacity Utilization	Err%	ICU Level of Service	H	
Analysis Period (min)	15			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	60	1907	67	597	1132	393	450	235	654	1219	718
Future Volume (vph)	60	1907	67	597	1132	393	450	235	654	1219	718
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA
Protected Phases	5	2	3	1	6	7	3	8		7	4
Permitted Phases			2			6			8		
Detector Phase	5	2	3	1	6	7	3	8	8	7	4
Switch Phase											
Minimum Initial (s)	4.0	10.0	4.0	4.0	10.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.4	16.4	22.4	8.4	15.3	8.4	22.4	9.5	9.5	8.4	8.9
Total Split (s)	17.0	40.0	26.0	33.5	55.9	41.9	26.0	22.1	22.1	41.9	38.5
Total Split (%)	12.3%	29.0%	18.8%	24.3%	40.5%	30.4%	18.8%	16.0%	16.0%	30.4%	27.9%
Yellow Time (s)	3.4	5.4	3.4	3.4	4.3	3.4	3.4	4.5	4.5	3.4	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	6.4	4.4	4.4	5.3	4.4	4.4	5.5	5.5	4.4	4.9
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	C-Max	None	None	None	None	None	None

Intersection Summary

Cycle Length: 138
Actuated Cycle Length: 138
Offset: 44 (32%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 24: Villa La Jolla Drive & La Jolla Village Drive



Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	54	60	1907	67	597	1132	393	450	235	654	1219	718
Future Volume (vph)	54	60	1907	67	597	1132	393	450	235	654	1219	718
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.4	6.4	4.4	4.4	5.3	4.4	4.4	5.5	5.5	4.4	4.9
Lane Util. Factor		1.00	0.91	1.00	0.97	0.91	1.00	0.97	0.95	0.95	0.97	1.00
Frt		1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.93	0.85	1.00	0.98
Flt Protected		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)		1770	5085	1583	3433	5085	1583	3433	1639	1504	3433	1824
Flt Permitted		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Satd. Flow (perm)		1770	5085	1583	3433	5085	1583	3433	1639	1504	3433	1824
Peak-hour factor, PHF	0.92	0.80	0.80	0.80	0.85	0.85	0.85	0.82	0.82	0.82	0.82	0.82
Adj. Flow (vph)	59	75	2384	84	702	1332	462	549	287	798	1487	876
RTOR Reduction (vph)	0	0	0	50	0	0	65	0	26	258	0	5
Lane Group Flow (vph)	0	134	2384	34	702	1332	397	549	540	261	1487	1014
Turn Type	Prot	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA
Protected Phases	5	5	2	3	1	6	7	3	8		7	4
Permitted Phases				2			6			8		
Actuated Green, G (s)		12.1	33.6	55.2	29.1	51.7	89.7	21.6	16.6	16.6	38.0	33.6
Effective Green, g (s)		12.1	33.6	55.2	29.1	51.7	89.7	21.6	16.6	16.6	38.0	33.6
Actuated g/C Ratio		0.09	0.24	0.40	0.21	0.37	0.65	0.16	0.12	0.12	0.28	0.24
Clearance Time (s)		4.4	6.4	4.4	4.4	5.3	4.4	4.4	5.5	5.5	4.4	4.9
Vehicle Extension (s)		2.0	4.4	2.0	2.0	4.7	2.0	2.0	3.3	3.3	2.0	2.0
Lane Grp Cap (vph)		155	1238	633	723	1905	1028	537	197	180	945	444
v/s Ratio Prot		0.08	c0.47	0.01	c0.20	0.26	0.11	0.16	c0.33		c0.43	c0.56
v/s Ratio Perm				0.01			0.14			0.17		
v/c Ratio		0.86	1.93	0.05	0.97	0.70	0.39	1.02	2.74	1.45	1.57	2.28
Uniform Delay, d1		62.1	52.2	25.4	54.0	36.6	11.3	58.2	60.7	60.7	50.0	52.2
Progression Factor		1.00	1.00	1.00	1.15	0.71	0.28	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2		35.2	419.6	0.0	24.2	1.9	0.1	44.6	798.7	231.3	263.2	585.3
Delay (s)		97.3	471.8	25.4	86.4	27.7	3.3	102.8	859.4	292.0	313.2	637.5
Level of Service		F	F	C	F	C	A	F	F	F	F	F
Approach Delay (s)			438.1			39.7			425.0			445.1
Approach LOS			F			D			F			F

Intersection Summary

HCM 2000 Control Delay	330.0	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.85		
Actuated Cycle Length (s)	138.0	Sum of lost time (s)	20.7
Intersection Capacity Utilization	131.6%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

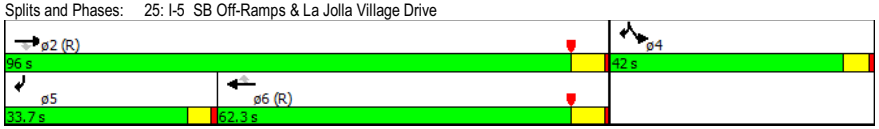
Movement	SBR
Lane Configurations	
Traffic Volume (vph)	117
Future Volume (vph)	117
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.82
Adj. Flow (vph)	143
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

Intersection Summary

Lane Group	EBT	EBR	WBT	WBR	SBL	SBR	ø5
Lane Configurations							
Traffic Volume (vph)	2140	1458	1537	1170	881	575	
Future Volume (vph)	2140	1458	1537	1170	881	575	
Turn Type	NA	Perm	NA	Perm	Prot	custom	
Protected Phases	2		6		4	4 5	5
Permitted Phases		2		6			
Detector Phase	2	2	6	6	4	4 5	
Switch Phase							
Minimum Initial (s)	10.0	10.0	15.0	15.0	5.0		2.0
Minimum Split (s)	16.2	16.2	21.2	21.2	10.1		6.7
Total Split (s)	96.0	96.0	62.3	62.3	42.0		33.7
Total Split (%)	69.6%	69.6%	45.1%	45.1%	30.4%		24%
Yellow Time (s)	5.2	5.2	5.2	5.2	4.1		3.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	6.2	6.2	6.2	6.2	5.1		
Lead/Lag			Lag	Lag			Lead
Lead-Lag Optimize?			Yes	Yes			Yes
Recall Mode	C-Max	C-Max	C-Max	C-Max	Min		None

Intersection Summary
Cycle Length: 138
Actuated Cycle Length: 138
Offset: 59 (43%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 120
Control Type: Actuated-Coordinated

Splits and Phases: 25: I-5 SB Off-Ramps & La Jolla Village Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	2140	1458	0	1537	1170	0	0	0	881	0	575
Future Volume (vph)	0	2140	1458	0	1537	1170	0	0	0	881	0	575
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.2	6.2		6.2	6.2				5.1		5.1
Lane Util. Factor		0.86	1.00		0.91	1.00				0.97		0.88
Frt		1.00	0.85		1.00	0.85				1.00		0.85
Flt Protected		1.00	1.00		1.00	1.00				0.95		1.00
Satd. Flow (prot)		6408	1583		5085	1583				3433		2787
Flt Permitted		1.00	1.00		1.00	1.00				0.95		1.00
Satd. Flow (perm)		6408	1583		5085	1583				3433		2787
Peak-hour factor, PHF	0.93	0.93	0.93	0.94	0.94	0.94	0.25	0.25	0.25	0.84	0.84	0.84
Adj. Flow (vph)	0	2301	1568	0	1635	1245	0	0	0	1049	0	685
RTOR Reduction (vph)	0	0	381	0	0	442	0	0	0	0	0	16
Lane Group Flow (vph)	0	2301	1187	0	1635	803	0	0	0	1049	0	669
Turn Type		NA	Perm		NA	Perm				Prot		custom
Protected Phases		2			6					4		4 5
Permitted Phases			2			6						
Actuated Green, G (s)		89.8	89.8		77.3	77.3				36.9		49.8
Effective Green, g (s)		89.8	89.8		77.3	77.3				36.9		49.8
Actuated g/C Ratio		0.65	0.65		0.56	0.56				0.27		0.36
Clearance Time (s)		6.2	6.2		6.2	6.2				5.1		
Vehicle Extension (s)		2.0	2.0		2.0	2.0				2.0		
Lane Grp Cap (vph)		4169	1030		2848	886				917		1005
v/s Ratio Prot		0.36			0.32					c0.31		0.24
v/s Ratio Perm			c0.75			0.51						
v/c Ratio		0.55	1.15		0.57	0.91				1.14		0.67
Uniform Delay, d1		13.1	24.1		19.7	27.1				50.6		37.1
Progression Factor		0.67	5.11		0.81	1.65				1.00		1.00
Incremental Delay, d2		0.0	69.7		0.7	12.0				77.8		1.3
Delay (s)		8.8	192.9		16.7	56.7				128.3		38.4
Level of Service		A	F		B	E				F		D
Approach Delay (s)		83.5			34.0			0.0			92.8	
Approach LOS		F			C			A			F	

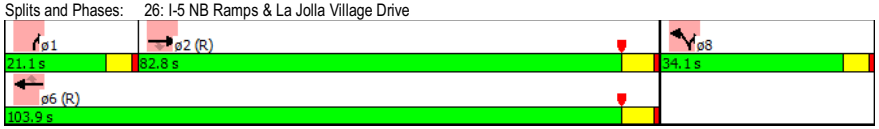
Intersection Summary			
HCM 2000 Control Delay	68.6	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.19		
Actuated Cycle Length (s)	138.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	95.4%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBT	EBR	WBT	WBR	NBL	NBR	ø1
Lane Configurations							
Traffic Volume (vph)	1720	1450	2324	747	304	341	
Future Volume (vph)	1720	1450	2324	747	304	341	
Turn Type	NA	Perm	NA	Perm	Prot	custom	
Protected Phases	2		6		8	1 8	1
Permitted Phases		2		6			
Detector Phase	2	2	6	6	8	1 8	
Switch Phase							
Minimum Initial (s)	16.0	16.0	16.0	16.0	5.0		2.0
Minimum Split (s)	36.2	36.2	22.2	22.2	10.1		7.1
Total Split (s)	82.8	82.8	103.9	103.9	34.1		21.1
Total Split (%)	60.0%	60.0%	75.3%	75.3%	24.7%		15%
Yellow Time (s)	5.2	5.2	5.2	5.2	4.1		4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	6.2	6.2	6.2	6.2	5.1		
Lead/Lag	Lag	Lag					Lead
Lead-Lag Optimize?	Yes	Yes					Yes
Recall Mode	C-Max	C-Max	C-Max	C-Max	Min		None

Intersection Summary
Cycle Length: 138
Actuated Cycle Length: 138
Offset: 65 (47%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 120
Control Type: Actuated-Coordinated

Splits and Phases: 26: I-5 NB Ramps & La Jolla Village Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1720	1450	0	2324	747	304	0	341	0	0	0
Future Volume (vph)	0	1720	1450	0	2324	747	304	0	341	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.2	6.2		6.2	6.2	5.1		5.1			
Lane Util. Factor		0.91	1.00		0.91	1.00	0.97		0.88			
Frt		1.00	0.85		1.00	0.85	1.00		0.85			
Flt Protected		1.00	1.00		1.00	1.00	0.95		1.00			
Satd. Flow (prot)		5085	1583		5085	1583	3433		2787			
Flt Permitted		1.00	1.00		1.00	1.00	0.95		1.00			
Satd. Flow (perm)		5085	1583		5085	1583	3433		2787			
Peak-hour factor, PHF	0.98	0.98	0.98	0.92	0.92	0.92	0.92	0.92	0.92	0.25	0.25	0.25
Adj. Flow (vph)	0	1755	1480	0	2526	812	330	0	371	0	0	0
RTOR Reduction (vph)	0	0	332	0	0	148	0	0	19	0	0	0
Lane Group Flow (vph)	0	1755	1148	0	2526	664	330	0	352	0	0	0
Turn Type		NA	Perm		NA	Perm	Prot		custom			
Protected Phases		2			6		8		1 8			
Permitted Phases			2			6						
Actuated Green, G (s)		96.0	96.0		106.3	106.3	20.4		30.7			
Effective Green, g (s)		96.0	96.0		106.3	106.3	20.4		30.7			
Actuated g/C Ratio		0.70	0.70		0.77	0.77	0.15		0.22			
Clearance Time (s)		6.2	6.2		6.2	6.2	5.1					
Vehicle Extension (s)		2.0	2.0		2.0	2.0	2.0					
Lane Grp Cap (vph)		3537	1101		3916	1219	507		620			
v/s Ratio Prot		0.35			c0.50		c0.10		0.13			
v/s Ratio Perm			c0.73			0.42						
v/c Ratio		0.50	1.04		0.65	0.54	0.65		0.57			
Uniform Delay, d1		9.8	21.0		7.2	6.3	55.4		47.7			
Progression Factor		1.11	3.60		1.00	1.00	1.00		1.00			
Incremental Delay, d2		0.3	34.0		0.8	1.8	2.3		0.7			
Delay (s)		11.1	109.7		8.1	8.0	57.7		48.4			
Level of Service		B	F		A	A	E		D			
Approach Delay (s)		56.2			8.1			52.8			0.0	
Approach LOS		E			A			D			A	

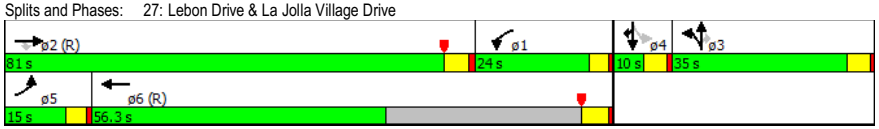
Intersection Summary			
HCM 2000 Control Delay	33.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.97		
Actuated Cycle Length (s)	138.0	Sum of lost time (s)	16.4
Intersection Capacity Utilization	94.9%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	10	2512	289	408	2175	556	9	175	8	2	6
Future Volume (vph)	10	2512	289	408	2175	556	9	175	8	2	6
Turn Type	Prot	NA	Perm	Prot	NA	Split	NA	Perm	Perm	NA	Prot
Protected Phases	5	2		1	6	3	3			4	4
Permitted Phases			2					3	4		
Detector Phase	5	2	2	1	6	3	3	3	4	4	4
Switch Phase											
Minimum Initial (s)	4.0	10.0	10.0	4.0	10.0	7.0	7.0	7.0	4.0	4.0	4.0
Minimum Split (s)	8.4	15.3	15.3	8.4	15.7	11.9	11.9	11.9	8.9	8.9	8.9
Total Split (s)	15.0	81.0	81.0	24.0	56.3	35.0	35.0	35.0	10.0	10.0	10.0
Total Split (%)	10.0%	54.0%	54.0%	16.0%	37.5%	23.3%	23.3%	23.3%	6.7%	6.7%	6.7%
Yellow Time (s)	3.4	4.3	4.3	3.4	4.7	3.9	3.9	3.9	3.9	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	4.4	5.3	5.3	4.4	5.7	4.9	4.9	4.9		4.9	4.9
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lag	Lag	Lag	Lead	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	None	None	None	None	None	None

Intersection Summary
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 3 (2%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 140
Control Type: Actuated-Coordinated

Splits and Phases: 27: Lebon Drive & La Jolla Village Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	2512	289	408	2175	10	556	9	175	8	2	6
Future Volume (vph)	10	2512	289	408	2175	10	556	9	175	8	2	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.3	5.3	4.4	5.7		4.9	4.9	4.9		4.9	4.9
Lane Util. Factor	1.00	0.91	1.00	0.97	0.91		0.97	0.95	0.95		1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00		1.00	0.86	0.85		1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00		0.96	1.00
Satd. Flow (prot)	1770	5085	1583	3433	5082		3433	1530	1504		1794	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00		0.88	1.00
Satd. Flow (perm)	1770	5085	1583	3433	5082		3433	1530	1504		1648	1583
Peak-hour factor, PHF	0.94	0.94	0.94	0.85	0.85	0.85	0.83	0.83	0.83	0.80	0.80	0.80
Adj. Flow (vph)	11	2672	307	480	2559	12	670	11	211	10	2	8
RTOR Reduction (vph)	0	0	125	0	0	0	0	80	87	0	0	8
Lane Group Flow (vph)	11	2672	182	480	2571	0	670	32	23	0	13	0
Turn Type	Prot	NA	Perm	Prot	NA		Split	NA	Perm	Perm	NA	Prot
Protected Phases	5	2		1	6		3	3			4	4
Permitted Phases			2						3	4		
Actuated Green, G (s)	2.6	72.6	72.6	22.2	91.8		31.7	31.7	31.7		4.0	4.0
Effective Green, g (s)	2.6	72.6	72.6	22.2	91.8		31.7	31.7	31.7		4.0	4.0
Actuated g/C Ratio	0.02	0.48	0.48	0.15	0.61		0.21	0.21	0.21		0.03	0.03
Clearance Time (s)	4.4	5.3	5.3	4.4	5.7		4.9	4.9	4.9		4.9	4.9
Vehicle Extension (s)	2.0	6.1	6.1	2.0	5.6		6.5	6.5	6.5		2.0	2.0
Lane Grp Cap (vph)	30	2461	766	508	3110		725	323	317		43	42
v/s Ratio Prot	0.01	c0.53		c0.14	0.51		c0.20	0.02				0.00
v/s Ratio Perm			0.11						0.02		c0.01	
v/c Ratio	0.37	1.09	0.24	0.94	0.83		0.92	0.10	0.07		0.30	0.01
Uniform Delay, d1	72.9	38.7	22.6	63.3	22.8		58.0	47.7	47.4		71.6	71.1
Progression Factor	1.00	1.00	1.00	0.82	0.71		1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	2.8	46.3	0.7	4.2	0.2		18.9	0.4	0.3		1.4	0.0
Delay (s)	75.6	85.0	23.3	56.2	16.5		76.8	48.1	47.7		73.1	71.1
Level of Service	E	F	C	E	B		E	D	D		E	E
Approach Delay (s)		78.6			22.7			69.6			72.3	
Approach LOS		E			C			E			E	

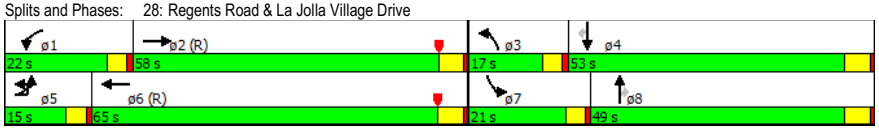
Intersection Summary			
HCM 2000 Control Delay	52.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.00		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	19.9
Intersection Capacity Utilization	94.9%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	466	1958	435	2068	368	257	78	221	799	907
Future Volume (vph)	466	1958	435	2068	368	257	78	221	799	907
Turn Type	Prot	NA	Prot	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2	1	6	3	8		7	4	
Permitted Phases							8			4
Detector Phase	5	2	1	6	3	8	8	7	4	4
Switch Phase										
Minimum Initial (s)	4.0	10.0	4.0	10.0	4.0	10.0	10.0	4.0	10.0	10.0
Minimum Split (s)	8.4	41.3	8.4	35.4	8.4	41.3	41.3	8.4	35.3	35.3
Total Split (s)	15.0	58.0	22.0	65.0	17.0	49.0	49.0	21.0	53.0	53.0
Total Split (%)	10.0%	38.7%	14.7%	43.3%	11.3%	32.7%	32.7%	14.0%	35.3%	35.3%
Yellow Time (s)	3.4	4.3	3.4	4.4	3.4	4.3	4.3	3.4	4.3	4.3
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.3	4.4	5.4	4.4	5.3	5.3	4.4	5.3	5.3
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	None	None	None	None	None

Intersection Summary
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 5 (3%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 28: Regents Road & La Jolla Village Drive



Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	35	466	1958	135	435	2068	78	368	257	78	221	799
Future Volume (vph)	35	466	1958	135	435	2068	78	368	257	78	221	799
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.4	5.3		4.4	5.4		4.4	5.3	5.3	4.4	5.3
Lane Util. Factor		0.97	0.91		0.97	0.91		0.97	0.95	1.00	1.00	0.95
Frt		1.00	0.99		1.00	0.99		1.00	1.00	0.85	1.00	1.00
Flt Protected		0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)		3433	5036		3433	5057		3433	3539	1583	1770	3539
Flt Permitted		0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (perm)		3433	5036		3433	5057		3433	3539	1583	1770	3539
Peak-hour factor, PHF	0.92	0.96	0.96	0.96	0.90	0.90	0.90	0.82	0.82	0.82	0.89	0.89
Adj. Flow (vph)	38	485	2040	141	483	2298	87	449	313	95	248	898
RTOR Reduction (vph)	0	0	5	0	0	2	0	0	0	67	0	0
Lane Group Flow (vph)	0	523	2176	0	483	2383	0	449	313	28	248	898
Turn Type	Prot	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA
Protected Phases	5	5	2		1	6		3	8		7	4
Permitted Phases										8		
Actuated Green, G (s)		10.6	52.7		17.6	59.6		12.6	43.7	43.7	16.6	47.7
Effective Green, g (s)		10.6	52.7		17.6	59.6		12.6	43.7	43.7	16.6	47.7
Actuated g/C Ratio		0.07	0.35		0.12	0.40		0.08	0.29	0.29	0.11	0.32
Clearance Time (s)		4.4	5.3		4.4	5.4		4.4	5.3	5.3	4.4	5.3
Vehicle Extension (s)		3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)		242	1769		402	2009		288	1031	461	195	1125
v/s Ratio Prot		c0.15	0.43		c0.14	c0.47		c0.13	0.09		0.14	0.25
v/s Ratio Perm										0.02		
v/c Ratio		2.16	1.23		1.20	1.19		1.56	0.30	0.06	1.27	0.80
Uniform Delay, d1		69.7	48.6		66.2	45.2		68.7	41.3	38.3	66.7	46.8
Progression Factor		1.33	0.71		1.11	0.85		0.93	0.98	2.07	1.00	1.00
Incremental Delay, d2		526.3	104.9		98.7	85.5		267.9	0.2	0.1	156.1	4.0
Delay (s)		619.3	139.4		172.2	124.0		332.0	40.8	79.4	222.8	50.8
Level of Service		F	F		F	F		F	D	E	F	D
Approach Delay (s)			232.2			132.1			197.7			259.0
Approach LOS			F			F			F			F

Intersection Summary			
HCM 2000 Control Delay	202.1	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.56		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	19.5
Intersection Capacity Utilization	138.9%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	907
Future Volume (vph)	907
Ideal Flow (vphpl)	1900
Total Lost time (s)	5.3
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1583
Flt Permitted	1.00
Satd. Flow (perm)	1583
Peak-hour factor, PHF	0.89
Adj. Flow (vph)	1019
RTOR Reduction (vph)	77
Lane Group Flow (vph)	942
Turn Type	Perm
Protected Phases	
Permitted Phases	4
Actuated Green, G (s)	47.7
Effective Green, g (s)	47.7
Actuated g/C Ratio	0.32
Clearance Time (s)	5.3
Vehicle Extension (s)	3.0
Lane Grp Cap (vph)	503
v/s Ratio Prot	
v/s Ratio Perm	c0.59
v/c Ratio	1.87
Uniform Delay, d1	51.1
Progression Factor	1.00
Incremental Delay, d2	400.2
Delay (s)	451.4
Level of Service	F
Approach Delay (s)	
Approach LOS	

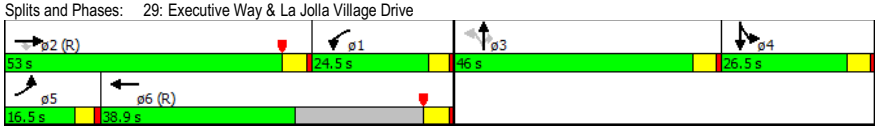
Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	82	1478	433	601	1440	358	69	558	406	227
Future Volume (vph)	82	1478	433	601	1440	358	69	558	406	227
Turn Type	Prot	NA	Perm	Prot	NA	Perm	NA	Perm	Split	NA
Protected Phases	5	2		1	6		3		4	4
Permitted Phases			2			3		3		
Detector Phase	5	2	2	1	6	3	3	3	4	4
Switch Phase										
Minimum Initial (s)	4.0	10.0	10.0	4.0	10.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.4	15.3	15.3	8.4	15.3	45.9	45.9	45.9	8.9	8.9
Total Split (s)	16.5	53.0	53.0	24.5	38.9	46.0	46.0	46.0	26.5	26.5
Total Split (%)	11.0%	35.3%	35.3%	16.3%	25.9%	30.7%	30.7%	30.7%	17.7%	17.7%
Yellow Time (s)	3.4	4.3	4.3	3.4	4.3	3.9	3.9	3.9	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.3	5.3	4.4	5.3	4.9	4.9	4.9	4.9	4.9
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lead	Lead	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	None	None	None	None	None

Intersection Summary

Cycle Length: 150
Actuated Cycle Length: 150
Offset: 81 (54%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 140
Control Type: Actuated-Coordinated

Splits and Phases: 29: Executive Way & La Jolla Village Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	82	1478	433	601	1440	109	358	69	558	406	227	274
Future Volume (vph)	82	1478	433	601	1440	109	358	69	558	406	227	274
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.3	5.3	4.4	5.3		4.9	4.9	4.9	4.9	4.9	
Lane Util. Factor	1.00	0.91	1.00	0.97	0.91		0.95	0.95	1.00	1.00	0.95	
Frt	1.00	1.00	0.85	1.00	0.99		1.00	1.00	0.85	1.00	0.92	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	0.97	1.00	0.95	1.00	
Satd. Flow (prot)	1770	5085	1583	3433	5032		1681	1710	1583	1770	3249	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.10	0.08	1.00	0.95	1.00	
Satd. Flow (perm)	1770	5085	1583	3433	5032		172	146	1583	1770	3249	
Peak-hour factor, PHF	0.83	0.83	0.83	0.80	0.80	0.80	0.89	0.89	0.89	0.84	0.84	0.84
Adj. Flow (vph)	99	1781	522	751	1800	136	402	78	627	483	270	326
RTOR Reduction (vph)	0	0	273	0	6	0	0	0	183	0	145	0
Lane Group Flow (vph)	99	1781	249	751	1930	0	225	255	444	483	451	0
Turn Type	Prot	NA	Perm	Prot	NA		Perm	NA	Perm	Split	NA	
Protected Phases	5	2		1	6			3		4	4	
Permitted Phases			2				3		3			
Actuated Green, G (s)	11.0	47.7	47.7	20.1	56.8		41.1	41.1	41.1	21.6	21.6	
Effective Green, g (s)	11.0	47.7	47.7	20.1	56.8		41.1	41.1	41.1	21.6	21.6	
Actuated g/C Ratio	0.07	0.32	0.32	0.13	0.38		0.27	0.27	0.27	0.14	0.14	
Clearance Time (s)	4.4	5.3	5.3	4.4	5.3		4.9	4.9	4.9	4.9	4.9	
Vehicle Extension (s)	2.0	5.8	5.8	2.0	5.5		2.0	2.0	2.0	6.1	6.1	
Lane Grp Cap (vph)	129	1617	503	460	1905		47	40	433	254	467	
v/s Ratio Prot	0.06	c0.35		c0.22	0.38					c0.27	0.14	
v/s Ratio Perm			0.16				1.31	c1.75	0.28			
v/c Ratio	0.77	1.10	0.50	1.63	1.01		4.79	6.38	1.03	1.90	0.97	
Uniform Delay, d1	68.2	51.1	41.4	65.0	46.6		54.4	54.4	54.4	64.2	63.8	
Progression Factor	0.66	0.98	1.56	0.61	0.42		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	14.3	52.3	2.2	286.9	13.3		1751.4	2471.0	49.9	420.1	33.6	
Delay (s)	59.4	102.4	66.6	326.7	32.9		1805.8	2525.4	104.4	484.3	97.5	
Level of Service	E	F	E	F	C		F	F	F	F	F	
Approach Delay (s)		92.8			115.0			1007.9			270.6	
Approach LOS		F			F			F			F	

Intersection Summary

HCM 2000 Control Delay	266.6	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	2.98		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	19.5
Intersection Capacity Utilization	98.2%	ICU Level of Service	F
Analysis Period (min)	15		

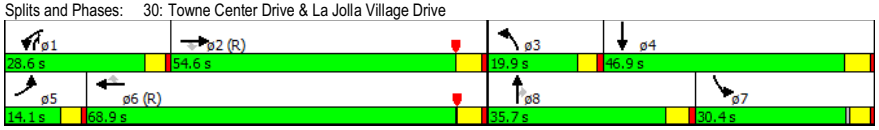
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	40	2301	145	471	1849	185	178	71	699	795	405
Future Volume (vph)	40	2301	145	471	1849	185	178	71	699	795	405
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA
Protected Phases	5	2		1	6		3	8	1	7	4
Permitted Phases			2			6			8		
Detector Phase	5	2	2	1	6	6	3	8	1	7	4
Switch Phase											
Minimum Initial (s)	4.0	10.0	10.0	4.0	10.0	10.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.4	33.5	33.5	8.4	15.3	15.3	8.4	9.0	8.4	8.4	9.3
Total Split (s)	14.1	54.6	54.6	28.6	68.9	68.9	19.9	35.7	28.6	30.4	46.9
Total Split (%)	9.4%	36.4%	36.4%	19.1%	45.9%	45.9%	13.3%	23.8%	19.1%	20.3%	31.3%
Yellow Time (s)	3.4	4.5	4.5	3.4	4.3	4.3	3.4	4.0	3.4	3.4	4.3
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.5	5.5	4.4	5.3	5.3	4.4	5.0	4.4	4.4	5.3
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lead	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	Max	None	None	None

Intersection Summary

Cycle Length: 150
Actuated Cycle Length: 150
Offset: 93 (62%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 30: Towne Center Drive & La Jolla Village Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	40	2301	145	471	1849	185	178	71	699	795	405	99
Future Volume (vph)	40	2301	145	471	1849	185	178	71	699	795	405	99
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.5	5.5	4.4	5.3	5.3	4.4	5.0	4.4	4.4	5.3	
Lane Util. Factor	0.97	0.91	1.00	0.97	0.86	0.86	0.97	1.00	0.88	0.97	0.95	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.97	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	3433	5085	1583	3433	4799	1362	3433	1863	2787	3433	3435	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	3433	5085	1583	3433	4799	1362	3433	1863	2787	3433	3435	
Peak-hour factor, PHF	0.84	0.84	0.84	0.80	0.80	0.80	0.80	0.80	0.80	0.87	0.87	0.87
Adj. Flow (vph)	48	2739	173	589	2311	231	222	89	874	914	466	114
RTOR Reduction (vph)	0	0	100	0	1	65	0	0	36	0	14	0
Lane Group Flow (vph)	48	2739	73	589	2333	143	223	89	838	914	566	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	
Protected Phases	5	2		1	6		3	8	1	7	4	
Permitted Phases			2			6			8			
Actuated Green, G (s)	6.4	49.1	49.1	24.2	67.1	67.1	14.1	30.7	54.9	26.7	43.0	
Effective Green, g (s)	6.4	49.1	49.1	24.2	67.1	67.1	14.1	30.7	54.9	26.7	43.0	
Actuated g/C Ratio	0.04	0.33	0.33	0.16	0.45	0.45	0.09	0.20	0.37	0.18	0.29	
Clearance Time (s)	4.4	5.5	5.5	4.4	5.3	5.3	4.4	5.0	4.4	4.4	5.3	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	146	1664	518	553	2146	609	322	381	1020	611	984	
v/s Ratio Prot	0.01	c0.54		c0.17	0.49		0.06	0.05	c0.13	c0.27	0.16	
v/s Ratio Perm			0.05			0.11			0.17			
v/c Ratio	0.33	1.65	0.14	1.07	1.09	0.24	0.69	0.23	0.82	1.50	0.57	
Uniform Delay, d1	69.7	50.5	35.6	62.9	41.5	25.6	65.8	49.8	43.1	61.6	45.7	
Progression Factor	1.28	0.43	0.12	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.1	291.0	0.1	56.8	47.9	0.9	6.3	1.4	5.4	231.7	0.8	
Delay (s)	89.5	312.9	4.3	119.7	89.3	26.5	72.2	51.3	48.5	293.4	46.5	
Level of Service	F	F	A	F	F	C	E	D	D	F	D	
Approach Delay (s)		291.2			90.9			53.2			197.5	
Approach LOS		F			F			D			F	

Intersection Summary

HCM 2000 Control Delay	171.5	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.32		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	19.6
Intersection Capacity Utilization	103.5%	ICU Level of Service	G
Analysis Period (min)	15		

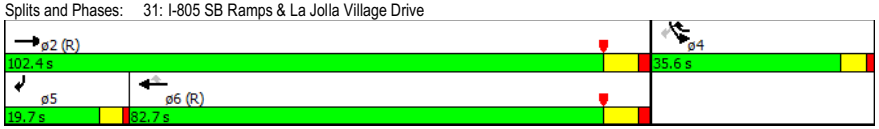
c Critical Lane Group

Lane Group	EBT	WBT	WBR	SBL	SBR
Lane Configurations					
Traffic Volume (vph)	2382	1812	669	65	655
Future Volume (vph)	2382	1812	669	65	655
Turn Type	NA	NA	pm+ov	Prot	custom
Protected Phases	2	6	4	4	5
Permitted Phases			6		4
Detector Phase	2	6	4	4	5
Switch Phase					
Minimum Initial (s)	15.0	15.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	10.6	10.6	9.7
Total Split (s)	102.4	82.7	35.6	35.6	19.7
Total Split (%)	74.2%	59.9%	25.8%	25.8%	14.3%
Yellow Time (s)	5.5	5.5	4.1	4.1	3.7
All-Red Time (s)	2.0	2.0	1.5	1.5	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.5	7.5	5.6	5.6	4.7
Lead/Lag		Lag			Lead
Lead-Lag Optimize?		Yes			Yes
Recall Mode	C-Max	C-Max	None	None	None

Intersection Summary

Cycle Length: 138
Actuated Cycle Length: 138
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 120
Control Type: Actuated-Coordinated

Splits and Phases: 31: I-805 SB Ramps & La Jolla Village Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	2382	1278	0	1812	669	0	0	0	65	0	655
Future Volume (vph)	0	2382	1278	0	1812	669	0	0	0	65	0	655
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		7.5			7.5	5.6				5.6		4.7
Lane Util. Factor		0.91			0.91	1.00				0.97		0.88
Frt		0.95			1.00	0.85				1.00		0.85
Flt Protected		1.00			1.00	1.00				0.95		1.00
Satd. Flow (prot)		4819			5085	1583				3433		2787
Flt Permitted		1.00			1.00	1.00				0.95		1.00
Satd. Flow (perm)		4819			5085	1583				3433		2787
Peak-hour factor, PHF	0.92	0.92	0.92	0.83	0.83	0.83	0.25	0.25	0.25	0.85	0.85	0.85
Adj. Flow (vph)	0	2589	1389	0	2183	806	0	0	0	76	0	771
RTOR Reduction (vph)	0	34	0	0	0	290	0	0	0	0	0	26
Lane Group Flow (vph)	0	3944	0	0	2183	516	0	0	0	76	0	745
Turn Type		NA			NA	pm+ov				Prot		custom
Protected Phases		2			6	4				4		5
Permitted Phases						6						4
Actuated Green, G (s)		117.2			80.6	88.3				7.7		39.6
Effective Green, g (s)		117.2			80.6	88.3				7.7		39.6
Actuated g/C Ratio		0.85			0.58	0.64				0.06		0.29
Clearance Time (s)		7.5			7.5	5.6				5.6		4.7
Vehicle Extension (s)		2.0			2.0	2.0				2.0		2.0
Lane Grp Cap (vph)		4092			2969	1012				191		799
v/s Ratio Prot		c0.82			0.43	0.03				0.02		c0.22
v/s Ratio Perm						0.30						0.05
v/c Ratio		0.99dr			0.74	0.51				0.40		0.93
Uniform Delay, d1		8.6			20.9	13.3				62.9		47.9
Progression Factor		1.00			0.60	0.73				1.00		1.00
Incremental Delay, d2		7.9			1.3	0.1				0.5		17.4
Delay (s)		16.5			13.9	9.7				63.4		65.3
Level of Service		B			B	A				E		E
Approach Delay (s)		16.5			12.8			0.0			65.1	
Approach LOS		B			B			A			E	

Intersection Summary

HCM 2000 Control Delay	20.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	1.00		
Actuated Cycle Length (s)	138.0	Sum of lost time (s)	17.8
Intersection Capacity Utilization	87.5%	ICU Level of Service	E
Analysis Period (min)	15		

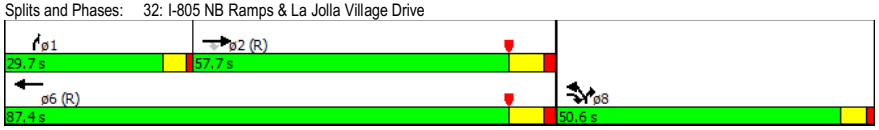
dr Defacto Right Lane. Recode with 1 though lane as a right lane.
c Critical Lane Group

Lane Group	EBT	EBR	WBT	NBL	NBR	ø1
Lane Configurations						
Traffic Volume (vph)	1070	1452	1870	484	249	
Future Volume (vph)	1070	1452	1870	484	249	
Turn Type	NA	pm+ov	NA	Prot	custom	
Protected Phases	2	8	6	8	1 8	1
Permitted Phases		2				
Detector Phase	2	8	6	8	1 8	
Switch Phase						
Minimum Initial (s)	16.0	5.0	15.0	5.0		5.0
Minimum Split (s)	23.5	10.6	24.5	10.6		10.2
Total Split (s)	57.7	50.6	87.4	50.6		29.7
Total Split (%)	41.8%	36.7%	63.3%	36.7%		22%
Yellow Time (s)	5.5	4.1	5.5	4.1		3.7
All-Red Time (s)	2.0	1.5	2.0	1.5		1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		
Total Lost Time (s)	7.5	5.6	7.5	5.6		
Lead/Lag	Lag					Lead
Lead-Lag Optimize?	Yes					Yes
Recall Mode	C-Max	None	C-Max	None		None

Intersection Summary

Cycle Length: 138
Actuated Cycle Length: 138
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 50
Control Type: Actuated-Coordinated

Splits and Phases: 32: I-805 NB Ramps & La Jolla Village Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1070	1452	0	1870	455	484	0	249	0	0	0
Future Volume (vph)	0	1070	1452	0	1870	455	484	0	249	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		7.5	5.6		7.5		5.6		4.7			
Lane Util. Factor		0.91	1.00		0.86		0.97		0.88			
Frt		1.00	0.85		0.97		1.00		0.85			
Flt Protected		1.00	1.00		1.00		0.95		1.00			
Satd. Flow (prot)		5085	1583		6220		3433		2787			
Flt Permitted		1.00	1.00		1.00		0.95		1.00			
Satd. Flow (perm)		5085	1583		6220		3433		2787			
Peak-hour factor, PHF	0.91	0.91	0.91	0.85	0.85	0.85	0.85	0.85	0.85	0.25	0.25	0.25
Adj. Flow (vph)	0	1176	1596	0	2200	535	569	0	293	0	0	0
RTOR Reduction (vph)	0	0	180	0	32	0	0	0	23	0	0	0
Lane Group Flow (vph)	0	1176	1416	0	2703	0	569	0	270	0	0	0
Turn Type		NA	pm+ov		NA		Prot		custom			
Protected Phases		2	8		6		8		1 8			
Permitted Phases			2									
Actuated Green, G (s)		70.2	115.2		79.9		45.0		55.6			
Effective Green, g (s)		70.2	115.2		79.9		45.0		50.0			
Actuated g/C Ratio		0.51	0.83		0.58		0.33		0.36			
Clearance Time (s)		7.5	5.6		7.5		5.6					
Vehicle Extension (s)		2.0	2.0		2.0		2.0					
Lane Grp Cap (vph)		2586	1321		3601		1119		1009			
v/s Ratio Prot		0.23	c0.35		c0.43		0.17		0.10			
v/s Ratio Perm			0.54									
v/c Ratio		0.45	1.07		0.75		0.51		0.27			
Uniform Delay, d1		21.7	11.4		21.6		37.6		31.1			
Progression Factor		0.79	5.58		1.00		1.00		1.00			
Incremental Delay, d2		0.2	39.2		1.5		0.1		0.1			
Delay (s)		17.4	102.7		23.1		37.7		31.1			
Level of Service		B	F		C		D		C			
Approach Delay (s)		66.5			23.1			35.5			0.0	
Approach LOS		E			C			D			A	

Intersection Summary

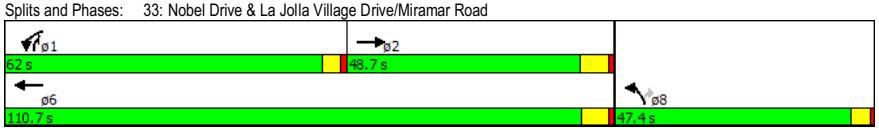
HCM 2000 Control Delay	43.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.07		
Actuated Cycle Length (s)	138.0	Sum of lost time (s)	17.8
Intersection Capacity Utilization	94.6%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Configurations					
Traffic Volume (vph)	1450	1132	1661	210	580
Future Volume (vph)	1450	1132	1661	210	580
Turn Type	NA	Prot	NA	Prot	pm+ov
Protected Phases	2	1	6	8	1
Permitted Phases					8
Detector Phase	2	1	6	8	1
Switch Phase					
Minimum Initial (s)	10.0	4.0	10.0	7.0	4.0
Minimum Split (s)	31.3	8.4	16.0	47.4	8.4
Total Split (s)	48.7	62.0	110.7	47.4	62.0
Total Split (%)	30.8%	39.2%	70.0%	30.0%	39.2%
Yellow Time (s)	5.3	3.4	5.0	3.4	3.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.3	4.4	6.0	4.4	4.4
Lead/Lag	Lag	Lead			Lead
Lead-Lag Optimize?	Yes	Yes			Yes
Recall Mode	Min	None	Min	None	None

Intersection Summary
Cycle Length: 158.1
Actuated Cycle Length: 138.9
Natural Cycle: 150
Control Type: Actuated-Uncoordinated

Splits and Phases: 33: Nobel Drive & La Jolla Village Drive/Miramar Road



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1450	54	1132	1661	210	580
Future Volume (vph)	1450	54	1132	1661	210	580
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.3		4.4	6.0	4.4	4.4
Lane Util. Factor	0.86		0.97	0.86	1.00	0.88
Frt	0.99		1.00	1.00	1.00	0.85
Flt Protected	1.00		0.95	1.00	0.95	1.00
Satd. Flow (prot)	6373		3433	6408	1770	2787
Flt Permitted	1.00		0.95	1.00	0.95	1.00
Satd. Flow (perm)	6373		3433	6408	1770	2787
Peak-hour factor, PHF	0.80	0.80	0.80	0.80	0.85	0.85
Adj. Flow (vph)	1812	68	1415	2076	247	682
RTOR Reduction (vph)	3	0	0	0	0	0
Lane Group Flow (vph)	1878	0	1415	2076	247	682
Turn Type	NA		Prot	NA	Prot	pm+ov
Protected Phases	2		1	6	8	1
Permitted Phases						8
Actuated Green, G (s)	42.5		57.7	104.9	23.6	81.3
Effective Green, g (s)	42.5		57.7	104.9	23.6	81.3
Actuated g/C Ratio	0.31		0.42	0.76	0.17	0.59
Clearance Time (s)	6.3		4.4	6.0	4.4	4.4
Vehicle Extension (s)	5.0		2.0	5.4	2.0	2.0
Lane Grp Cap (vph)	1949		1426	4839	300	1719
v/s Ratio Prot	c0.29		c0.41	0.32	c0.14	0.16
v/s Ratio Perm						0.08
v/c Ratio	0.96		0.99	0.43	0.82	0.40
Uniform Delay, d1	47.4		40.4	6.2	55.6	15.6
Progression Factor	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	13.1		21.9	0.1	15.8	0.1
Delay (s)	60.5		62.2	6.3	71.4	15.6
Level of Service	E		E	A	E	B
Approach Delay (s)	60.5			29.0	30.4	
Approach LOS	E			C	C	

Intersection Summary			
HCM 2000 Control Delay	38.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.95		
Actuated Cycle Length (s)	138.9	Sum of lost time (s)	15.1
Intersection Capacity Utilization	78.4%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBU	WBT	WBR	SBL
Lane Configurations						
Traffic Volume (vph)	383	1461	9	2422	380	721
Future Volume (vph)	383	1461	9	2422	380	721
Turn Type	Prot	NA	Prot	NA	Perm	Prot
Protected Phases	5	2	1	6		7
Permitted Phases					6	
Detector Phase	5	2	1	6	6	7
Switch Phase						
Minimum Initial (s)	4.0	10.0	4.0	10.0	10.0	10.0
Minimum Split (s)	8.4	16.3	8.4	29.4	29.4	38.4
Total Split (s)	34.4	66.3	24.4	65.4	65.4	44.4
Total Split (%)	23.9%	46.0%	16.9%	45.4%	45.4%	30.8%
Yellow Time (s)	3.4	5.3	3.4	4.4	4.4	3.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	6.3	4.4	5.4	5.4	4.4
Lead/Lag	Lead	Lag	Lead	Lag	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	Min	None	Min	Min	None

Intersection Summary

Cycle Length: 144.2
Actuated Cycle Length: 138.5
Natural Cycle: 140
Control Type: Actuated-Uncoordinated

Splits and Phases: 34: Miramar Road & Eastgate Mall

Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Traffic Volume (vph)	383	1461	9	2422	380	721	547
Future Volume (vph)	383	1461	9	2422	380	721	547
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	6.3	4.4	5.4	5.4	4.4	
Lane Util. Factor	0.97	0.91	1.00	0.86	1.00	0.97	
Frt	1.00	1.00	1.00	1.00	0.85	0.94	
Flt Protected	0.95	1.00	0.95	1.00	1.00	0.97	
Satd. Flow (prot)	3433	5085	1770	6408	1583	3286	
Flt Permitted	0.95	1.00	0.95	1.00	1.00	0.97	
Satd. Flow (perm)	3433	5085	1770	6408	1583	3286	
Peak-hour factor, PHF	0.80	0.80	0.92	0.86	0.86	0.80	0.80
Adj. Flow (vph)	479	1826	10	2816	442	901	684
RTOR Reduction (vph)	0	0	0	0	244	94	0
Lane Group Flow (vph)	479	1826	10	2816	198	1491	0
Turn Type	Prot	NA	Prot	NA	Perm	Prot	
Protected Phases	5	2	1	6		7	
Permitted Phases					6		
Actuated Green, G (s)	24.2	85.4	1.5	63.6	63.6	40.0	
Effective Green, g (s)	24.2	85.4	1.5	63.6	63.6	40.0	
Actuated g/C Ratio	0.17	0.60	0.01	0.45	0.45	0.28	
Clearance Time (s)	4.4	6.3	4.4	5.4	5.4	4.4	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	585	3058	18	2870	709	925	
v/s Ratio Prot	c0.14	0.36	0.01	c0.44		c0.45	
v/s Ratio Perm					0.13		
v/c Ratio	0.82	0.60	0.56	0.98	0.28	1.61	
Uniform Delay, d1	56.8	17.6	69.9	38.6	24.7	51.0	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	8.7	0.3	32.3	12.7	0.2	280.3	
Delay (s)	65.5	17.9	102.2	51.3	25.0	331.3	
Level of Service	E	B	F	D	C	F	
Approach Delay (s)		27.8		47.9		331.3	
Approach LOS		C		D		F	

Intersection Summary

HCM 2000 Control Delay	104.2	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.16		
Actuated Cycle Length (s)	142.0	Sum of lost time (s)	15.1
Intersection Capacity Utilization	95.7%	ICU Level of Service	F
Analysis Period (min)	15		

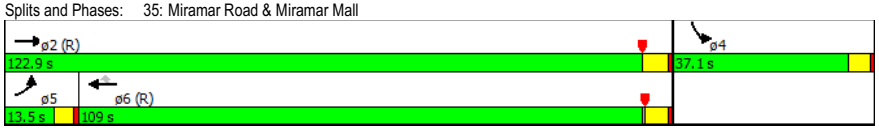
c Critical Lane Group

Lane Group	EBL	EBT	WBT	WBR	SBL
Lane Configurations					
Traffic Volume (vph)	36	2295	2934	127	145
Future Volume (vph)	36	2295	2934	127	145
Turn Type	Prot	NA	NA	Perm	Prot
Protected Phases	5	2	6		4
Permitted Phases				6	
Detector Phase	5	2	6	6	4
Switch Phase					
Minimum Initial (s)	4.0	10.0	10.0	10.0	4.0
Minimum Split (s)	8.4	15.8	15.4	15.4	8.9
Total Split (s)	13.5	122.9	109.0	109.0	37.1
Total Split (%)	8.4%	76.8%	68.1%	68.1%	23.2%
Yellow Time (s)	3.4	4.8	4.4	4.4	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.8	5.4	5.4	4.9
Lead/Lag	Lead		Lag	Lag	
Lead-Lag Optimize?	Yes		Yes	Yes	
Recall Mode	None	C-Max	C-Max	C-Max	None

Intersection Summary

Cycle Length: 160
Actuated Cycle Length: 160
Offset: 91 (57%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 100
Control Type: Actuated-Coordinated

Splits and Phases: 35: Miramar Road & Miramar Mall



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	36	2295	2934	127	145	105
Future Volume (vph)	36	2295	2934	127	145	105
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.8	5.4	5.4	4.9	
Lane Util. Factor	1.00	0.91	0.91	1.00	1.00	
Frt	1.00	1.00	1.00	0.85	0.94	
Flt Protected	0.95	1.00	1.00	1.00	0.97	
Satd. Flow (prot)	1770	5085	5085	1583	1708	
Flt Permitted	0.95	1.00	1.00	1.00	0.97	
Satd. Flow (perm)	1770	5085	5085	1583	1708	
Peak-hour factor, PHF	0.89	0.89	0.87	0.87	0.93	0.93
Adj. Flow (vph)	40	2579	3372	146	156	113
RTOR Reduction (vph)	0	0	0	33	17	0
Lane Group Flow (vph)	40	2579	3372	113	252	0
Turn Type	Prot	NA	NA	Perm	Prot	
Protected Phases	5	2	6		4	
Permitted Phases				6		
Actuated Green, G (s)	6.6	122.2	111.6	111.6	27.1	
Effective Green, g (s)	6.6	122.2	111.6	111.6	27.1	
Actuated g/C Ratio	0.04	0.76	0.70	0.70	0.17	
Clearance Time (s)	4.4	5.8	5.4	5.4	4.9	
Vehicle Extension (s)	2.0	4.6	5.2	5.2	2.0	
Lane Grp Cap (vph)	73	3883	3546	1104	289	
v/s Ratio Prot	0.02	c0.51	c0.66		c0.15	
v/s Ratio Perm				0.07		
v/c Ratio	0.55	0.66	0.95	0.10	0.87	
Uniform Delay, d1	75.2	9.1	21.7	7.9	64.8	
Progression Factor	1.00	1.00	0.93	0.58	1.00	
Incremental Delay, d2	4.4	0.9	4.9	0.1	23.3	
Delay (s)	79.7	10.0	25.1	4.7	88.1	
Level of Service	E	A	C	A	F	
Approach Delay (s)		11.0	24.3		88.1	
Approach LOS		B	C		F	

Intersection Summary

HCM 2000 Control Delay	21.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.93		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	14.7
Intersection Capacity Utilization	79.7%	ICU Level of Service	D
Analysis Period (min)	15		

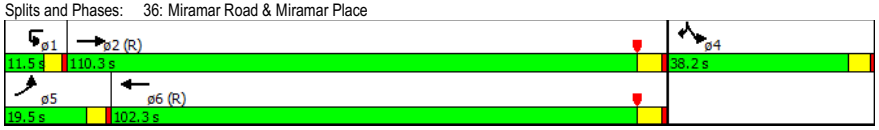
c Critical Lane Group

Lane Group	EBL	EBT	WBU	WBT	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	33	2337	9	3043	180	64
Future Volume (vph)	33	2337	9	3043	180	64
Turn Type	Prot	NA	Prot	NA	Prot	Prot
Protected Phases	5	2	1	6	4	4
Permitted Phases						
Detector Phase	5	2	1	6	4	4
Switch Phase						
Minimum Initial (s)	4.0	10.0	4.0	10.0	4.0	4.0
Minimum Split (s)	8.4	15.7	8.4	28.7	37.9	37.9
Total Split (s)	19.5	110.3	11.5	102.3	38.2	38.2
Total Split (%)	12.2%	68.9%	7.2%	63.9%	23.9%	23.9%
Yellow Time (s)	3.4	4.7	3.4	4.7	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.7	4.4	5.7	4.9	4.9
Lead/Lag	Lead	Lag	Lead	Lag		
Lead-Lag Optimize?	Yes	Yes	Yes	Yes		
Recall Mode	None	C-Max	None	C-Max	None	None

Intersection Summary

Cycle Length: 160
Actuated Cycle Length: 160
Offset: 54 (34%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 140
Control Type: Actuated-Coordinated

Splits and Phases: 36: Miramar Road & Miramar Place



Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Traffic Volume (vph)	33	2337	9	3043	83	180	64
Future Volume (vph)	33	2337	9	3043	83	180	64
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.7	4.4	5.7		4.9	4.9
Lane Util. Factor	1.00	0.91	1.00	0.91		0.97	0.91
Frt	1.00	1.00	1.00	1.00		0.99	0.85
Flt Protected	0.95	1.00	0.95	1.00		0.95	1.00
Satd. Flow (prot)	1770	5085	1770	5065		3429	1441
Flt Permitted	0.95	1.00	0.95	1.00		0.95	1.00
Satd. Flow (perm)	1770	5085	1770	5065		3429	1441
Peak-hour factor, PHF	0.89	0.89	0.92	0.96	0.96	0.82	0.82
Adj. Flow (vph)	37	2626	10	3170	86	220	78
RTOR Reduction (vph)	0	0	0	1	0	2	62
Lane Group Flow (vph)	37	2626	10	3255	0	226	8
Turn Type	Prot	NA	Prot	NA		Prot	Prot
Protected Phases	5	2	1	6		4	4
Permitted Phases							
Actuated Green, G (s)	7.6	123.9	2.6	118.9		18.5	18.5
Effective Green, g (s)	7.6	123.9	2.6	118.9		18.5	18.5
Actuated g/C Ratio	0.05	0.77	0.02	0.74		0.12	0.12
Clearance Time (s)	4.4	5.7	4.4	5.7		4.9	4.9
Vehicle Extension (s)	3.0	4.8	2.0	5.4		3.0	3.0
Lane Grp Cap (vph)	84	3937	28	3763		396	166
v/s Ratio Prot	c0.02	c0.52	0.01	c0.64		c0.07	0.01
v/s Ratio Perm							
v/c Ratio	0.44	0.67	0.36	0.86		0.57	0.05
Uniform Delay, d1	74.1	8.4	77.9	14.8		67.0	62.9
Progression Factor	0.90	0.74	0.94	0.69		1.00	1.00
Incremental Delay, d2	2.7	0.7	0.3	0.3		2.0	0.1
Delay (s)	69.8	6.9	73.7	10.5		69.0	63.0
Level of Service	E	A	E	B		E	E
Approach Delay (s)		7.8		10.7		67.6	
Approach LOS		A		B		E	

Intersection Summary

HCM 2000 Control Delay	12.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	15.0
Intersection Capacity Utilization	75.3%	ICU Level of Service	D
Analysis Period (min)	15		

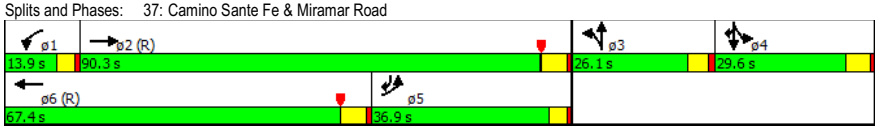
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	902	1736	59	1412	123	58	261	15	1608
Future Volume (vph)	902	1736	59	1412	123	58	261	15	1608
Turn Type	Prot	NA	Prot	NA	Split	NA	Split	NA	pt+ov
Protected Phases	5	2	1	6	3	3	4	4	4 5
Permitted Phases									
Detector Phase	5	2	1	6	3	3	4	4	4 5
Switch Phase									
Minimum Initial (s)	12.0	10.0	4.0	10.0	4.0	4.0	4.0	4.0	
Minimum Split (s)	16.4	15.8	8.4	15.7	8.9	8.9	9.5	9.5	
Total Split (s)	36.9	90.3	13.9	67.4	26.1	26.1	29.6	29.6	
Total Split (%)	23.1%	56.4%	8.7%	42.1%	16.3%	16.3%	18.5%	18.5%	
Yellow Time (s)	3.4	4.8	3.4	4.7	3.9	3.9	4.5	4.5	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.4	5.8	4.4	5.7	4.9	4.9	5.5	5.5	
Lead/Lag	Lag	Lag	Lead	Lead	Lead	Lead	Lag	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	C-Max	None	C-Max	None	None	None	None	

Intersection Summary

Cycle Length: 160
Actuated Cycle Length: 160
Offset: 41 (26%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 37: Camino Sante Fe & Miramar Road



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	902	1736	121	59	1412	106	123	58	29	261	15	1608
Future Volume (vph)	902	1736	121	59	1412	106	123	58	29	261	15	1608
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.8		4.4	5.7		4.9	4.9		5.5	5.5	5.5
Lane Util. Factor	0.97	0.91		0.97	0.91		1.00	1.00		0.95	0.95	0.88
Frt	1.00	0.99		1.00	0.99		1.00	0.95		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	0.96	1.00
Satd. Flow (prot)	3433	5035		3433	5032		1770	1770		1681	1694	2787
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	0.96	1.00
Satd. Flow (perm)	3433	5035		3433	5032		1770	1770		1681	1694	2787
Peak-hour factor, PHF	0.94	0.94	0.94	0.91	0.91	0.91	0.80	0.80	0.80	0.95	0.95	0.95
Adj. Flow (vph)	960	1847	129	65	1552	116	154	72	36	275	16	1693
RTOR Reduction (vph)	0	5	0	0	6	0	0	12	0	0	0	73
Lane Group Flow (vph)	960	1971	0	65	1662	0	154	97	0	146	145	1620
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	pt+ov
Protected Phases	5	2		1	6		3	3		4	4	4 5
Permitted Phases												
Actuated Green, G (s)	33.4	87.7		6.4	60.8		17.5	17.5		27.8	27.8	61.2
Effective Green, g (s)	33.4	87.7		6.4	60.8		17.5	17.5		27.8	27.8	61.2
Actuated g/C Ratio	0.21	0.55		0.04	0.38		0.11	0.11		0.17	0.17	0.38
Clearance Time (s)	4.4	5.8		4.4	5.7		4.9	4.9		5.5	5.5	
Vehicle Extension (s)	2.0	4.8		2.0	5.4		2.0	2.0		2.8	2.8	
Lane Grp Cap (vph)	716	2759		137	1912		193	193		292	294	1066
v/s Ratio Prot	0.28	0.39		0.02	c0.33		c0.09	0.06		0.09	0.09	c0.58
v/s Ratio Perm												
v/c Ratio	1.34	0.71		0.47	0.87		0.80	0.50		0.50	0.49	1.52
Uniform Delay, d1	63.3	26.9		75.2	45.9		69.5	67.2		59.8	59.7	49.4
Progression Factor	0.88	0.67		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	160.9	1.3		0.9	5.7		18.9	0.8		1.2	1.2	238.5
Delay (s)	216.4	19.3		76.1	51.6		88.4	67.9		61.0	60.9	287.9
Level of Service	F	B		E	D		F	E		E	E	F
Approach Delay (s)		83.7			52.6			79.9			254.6	
Approach LOS		F			D			E			F	

Intersection Summary

HCM 2000 Control Delay	124.8	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.15		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	20.6
Intersection Capacity Utilization	106.1%	ICU Level of Service	G
Analysis Period (min)	15		

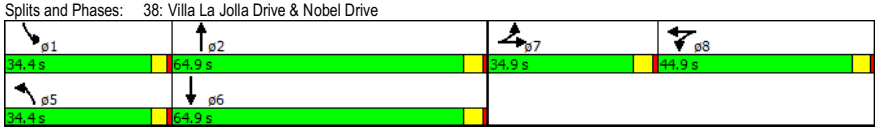
c Critical Lane Group

Lane Group	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	5	190	11	4	646	511	819
Future Volume (vph)	5	190	11	4	646	511	819
Turn Type	NA	Split	NA	Prot	NA	Prot	NA
Protected Phases	7	8	8	5	2	1	6
Permitted Phases							
Detector Phase	7	8	8	5	2	1	6
Switch Phase							
Minimum Initial (s)	6.0	6.0	6.0	4.0	7.0	6.0	10.0
Minimum Split (s)	10.9	10.9	10.9	8.4	11.9	10.4	14.9
Total Split (s)	34.9	44.9	44.9	34.4	64.9	34.4	64.9
Total Split (%)	19.5%	25.1%	25.1%	19.2%	36.2%	19.2%	36.2%
Yellow Time (s)	3.9	3.9	3.9	3.4	3.9	3.4	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	4.9	4.4	4.9	4.4	4.9
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	Min	None	Min

Intersection Summary

Cycle Length: 179.1
Actuated Cycle Length: 134.6
Natural Cycle: 75
Control Type: Actuated-Uncoordinated

Splits and Phases: 38: Villa La Jolla Drive & Nobel Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	5	2	190	11	351	4	646	264	511	819	16
Future Volume (vph)	25	5	2	190	11	351	4	646	264	511	819	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9		4.9	4.9		4.4	4.9		4.4	4.9	
Lane Util. Factor		1.00		0.97	1.00		1.00	0.95		0.97	0.95	
Frt		0.99		1.00	0.85		1.00	0.96		1.00	1.00	
Flt Protected		0.96		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1775		3433	1592		1770	3385		3433	3529	
Flt Permitted		0.96		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1775		3433	1592		1770	3385		3433	3529	
Peak-hour factor, PHF	0.80	0.80	0.80	0.94	0.94	0.94	0.86	0.86	0.86	0.95	0.95	0.95
Adj. Flow (vph)	31	6	2	202	12	373	5	751	307	538	862	17
RTOR Reduction (vph)	0	2	0	0	321	0	0	22	0	0	0	0
Lane Group Flow (vph)	0	38	0	202	64	0	5	1036	0	538	879	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	7	7		8	8		5	2		1	6	
Permitted Phases												
Actuated Green, G (s)		14.8		19.2	19.2		1.0	57.6		27.8	84.4	
Effective Green, g (s)		14.8		19.2	19.2		1.0	57.6		27.8	84.4	
Actuated g/C Ratio		0.11		0.14	0.14		0.01	0.42		0.20	0.61	
Clearance Time (s)		4.9		4.9	4.9		4.4	4.9		4.4	4.9	
Vehicle Extension (s)		2.0		2.0	2.0		2.0	4.3		2.0	3.7	
Lane Grp Cap (vph)		189		475	220		12	1407		689	2150	
v/s Ratio Prot		c0.02		c0.06	0.04		0.00	c0.31		c0.16	0.25	
v/s Ratio Perm												
v/c Ratio		0.20		0.43	0.29		0.42	0.74		0.78	0.41	
Uniform Delay, d1		56.5		54.6	53.5		68.5	34.1		52.5	14.1	
Progression Factor		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.2		0.2	0.3		8.3	2.3		5.3	0.2	
Delay (s)		56.7		54.8	53.8		76.8	36.3		57.8	14.2	
Level of Service		E		D	D		E	D		E	B	
Approach Delay (s)		56.7			54.1			36.5			30.8	
Approach LOS		E			D			D			C	

Intersection Summary

HCM 2000 Control Delay	37.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	138.5	Sum of lost time (s)	19.1
Intersection Capacity Utilization	75.0%	ICU Level of Service	D
Analysis Period (min)	15		

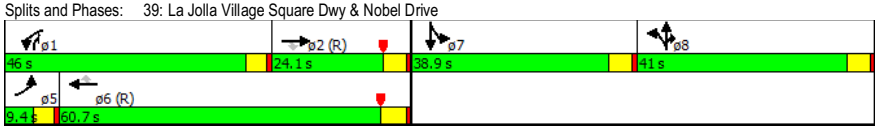
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	8	452	152	1216	338	363	109	95	1051	310	112
Future Volume (vph)	8	452	152	1216	338	363	109	95	1051	310	112
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Split	NA	pt+ov	Split	NA
Protected Phases	5	2		1	6		8	8	8 1	7	7
Permitted Phases			2			6					
Detector Phase	5	2	2	1	6	6	8	8	8 1	7	7
Switch Phase											
Minimum Initial (s)	4.0	7.0	7.0	4.0	7.0	7.0	8.0	8.0		8.0	8.0
Minimum Split (s)	9.4	12.0	12.0	8.4	12.4	12.4	12.9	12.9		38.9	38.9
Total Split (s)	9.4	24.1	24.1	46.0	60.7	60.7	41.0	41.0		38.9	38.9
Total Split (%)	6.3%	16.1%	16.1%	30.7%	40.5%	40.5%	27.3%	27.3%		25.9%	25.9%
Yellow Time (s)	3.4	4.0	4.0	3.4	4.4	4.4	3.9	3.9		3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	4.4	5.0	5.0	4.4	5.4	5.4	4.9	4.9		4.9	4.9
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lag	Lag		Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	None		None	None

Intersection Summary

Cycle Length: 150
Actuated Cycle Length: 150
Offset: 75 (50%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 39: La Jolla Village Square Dwy & Nobel Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	452	152	1216	338	363	109	95	1051	310	112	2
Future Volume (vph)	8	452	152	1216	338	363	109	95	1051	310	112	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.0	5.0	4.4	5.4	5.4	4.9	4.9	4.9	4.9	4.9	
Lane Util. Factor	1.00	0.95	1.00	0.97	0.95	1.00	0.95	0.95	1.00	0.95	0.95	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.98	
Satd. Flow (prot)	1770	3539	1583	3433	3539	1583	1681	1761	1583	1681	1727	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.98	
Satd. Flow (perm)	1770	3539	1583	3433	3539	1583	1681	1761	1583	1681	1727	
Peak-hour factor, PHF	0.80	0.80	0.80	0.90	0.90	0.90	0.88	0.88	0.88	0.86	0.86	0.86
Adj. Flow (vph)	10	565	190	1351	376	403	124	108	1194	360	130	2
RTOR Reduction (vph)	0	0	123	0	0	246	0	0	39	0	0	0
Lane Group Flow (vph)	10	565	67	1351	376	157	112	120	1155	245	247	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Split	NA	pt+ov	Split	NA	
Protected Phases	5	2		1	6		8	8	8 1	7	7	
Permitted Phases			2			6						
Actuated Green, G (s)	2.0	19.1	19.1	41.6	58.3	58.3	36.1	36.1	82.6	34.0	34.0	
Effective Green, g (s)	2.0	19.1	19.1	41.6	58.3	58.3	36.1	36.1	82.6	34.0	34.0	
Actuated g/C Ratio	0.01	0.13	0.13	0.28	0.39	0.39	0.24	0.24	0.55	0.23	0.23	
Clearance Time (s)	4.4	5.0	5.0	4.4	5.4	5.4	4.9	4.9		4.9	4.9	
Vehicle Extension (s)	2.0	4.1	4.1	2.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)	23	450	201	952	1375	615	404	423	871	381	391	
v/s Ratio Prot	0.01	c0.16		c0.39	0.11		0.07	0.07	c0.73	c0.15	0.14	
v/s Ratio Perm			0.04			0.10						
v/c Ratio	0.43	1.26	0.33	1.42	0.27	0.25	0.28	0.28	1.33	0.64	0.63	
Uniform Delay, d1	73.4	65.5	59.6	54.2	31.4	31.1	46.3	46.4	33.7	52.5	52.3	
Progression Factor	1.00	1.00	1.00	0.84	0.67	0.35	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	4.7	132.1	4.4	193.9	0.4	0.9	0.5	0.5	154.7	4.1	3.7	
Delay (s)	78.2	197.6	64.1	239.6	21.4	11.8	46.8	46.9	188.4	56.6	56.1	
Level of Service	E	F	E	F	C	B	D	D	F	E	E	
Approach Delay (s)		162.8			158.0			165.3			56.3	
Approach LOS		F			F			F			E	

Intersection Summary

HCM 2000 Control Delay	150.6	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.22		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	19.6
Intersection Capacity Utilization	101.5%	ICU Level of Service	G
Analysis Period (min)	15		

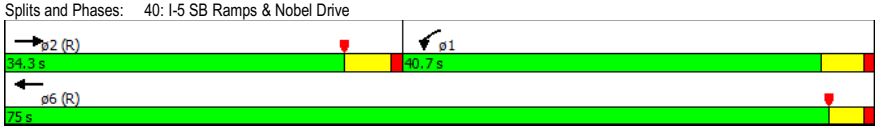
c Critical Lane Group

Lane Group	EBT	WBL	WBT
Lane Configurations			
Traffic Volume (vph)	1082	966	1914
Future Volume (vph)	1082	966	1914
Turn Type	NA	Prot	NA
Protected Phases	2	1	6
Permitted Phases			
Detector Phase	2	1	6
Switch Phase			
Minimum Initial (s)	13.0	5.0	1.0
Minimum Split (s)	18.1	9.7	5.5
Total Split (s)	34.3	40.7	75.0
Total Split (%)	45.7%	54.3%	100.0%
Yellow Time (s)	4.1	3.7	3.0
All-Red Time (s)	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0
Total Lost Time (s)	5.1	4.7	4.0
Lead/Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	
Recall Mode	C-Max	None	C-Max

Intersection Summary

Cycle Length: 75
Actuated Cycle Length: 75
Offset: 61 (81%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 130
Control Type: Actuated-Coordinated

Splits and Phases: 40: I-5 SB Ramps & Nobel Drive



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1082	899	966	1914	0	0
Future Volume (vph)	1082	899	966	1914	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1		4.7	4.0		
Lane Util. Factor	0.95		0.97	0.95		
Frt	0.93		1.00	1.00		
Flt Protected	1.00		0.95	1.00		
Satd. Flow (prot)	3298		3433	3539		
Flt Permitted	1.00		0.95	1.00		
Satd. Flow (perm)	3298		3433	3539		
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.25	0.25
Adj. Flow (vph)	1139	946	1017	2015	0	0
RTOR Reduction (vph)	39	0	0	0	0	0
Lane Group Flow (vph)	2046	0	1017	2015	0	0
Turn Type	NA		Prot	NA		
Protected Phases	2		1	6		
Permitted Phases						
Actuated Green, G (s)	29.2		36.0	75.0		
Effective Green, g (s)	29.2		36.0	75.0		
Actuated g/C Ratio	0.39		0.48	1.00		
Clearance Time (s)	5.1		4.7	4.0		
Vehicle Extension (s)	3.0		3.0	3.0		
Lane Grp Cap (vph)	1284		1647	3539		
v/s Ratio Prot	c0.62		0.30	c0.57		
v/s Ratio Perm						
v/c Ratio	1.59		0.62	0.57		
Uniform Delay, d1	22.9		14.4	0.0		
Progression Factor	1.36		1.12	1.00		
Incremental Delay, d2	267.4		0.4	0.3		
Delay (s)	298.6		16.4	0.3		
Level of Service	F		B	A		
Approach Delay (s)	298.6			5.7	0.0	
Approach LOS	F			A	A	

Intersection Summary

HCM 2000 Control Delay	125.1	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.07		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	9.8
Intersection Capacity Utilization	94.5%	ICU Level of Service	F
Analysis Period (min)	15		

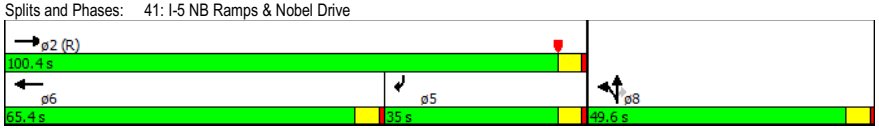
c Critical Lane Group

Lane Group	EBT	WBT	NBL	NBT	NBR	SBR
Lane Configurations						
Traffic Volume (vph)	1156	2000	467	51	284	327
Future Volume (vph)	1156	2000	467	51	284	327
Turn Type	NA	NA	Split	NA	Perm	Prot
Protected Phases	2	6	8	8		5
Permitted Phases					8	
Detector Phase	2	6	8	8	8	5
Switch Phase						
Minimum Initial (s)	11.0	13.0	5.0	5.0	5.0	5.0
Minimum Split (s)	29.1	32.1	49.1	49.1	49.1	10.0
Total Split (s)	100.4	65.4	49.6	49.6	49.6	35.0
Total Split (%)	66.9%	43.6%	33.1%	33.1%	33.1%	23.3%
Yellow Time (s)	4.1	4.1	4.1	4.1	4.1	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.1	5.1	5.1	5.1	5.1	5.0
Lead/Lag		Lead				Lag
Lead-Lag Optimize?		Yes				Yes
Recall Mode	C-Max	None	Min	Min	Min	None

Intersection Summary

Cycle Length: 150
Actuated Cycle Length: 150
Offset: 96 (64%), Referenced to phase 2:EBT, Start of Yellow
Natural Cycle: 145
Control Type: Actuated-Coordinated

Splits and Phases: 41: I-5 NB Ramps & Nobel Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1156	0	0	2000	13	467	51	284	0	0	327
Future Volume (vph)	0	1156	0	0	2000	13	467	51	284	0	0	327
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.1			5.1		5.1	5.1	5.1			5.0
Lane Util. Factor		0.95			0.91		0.95	0.95	1.00			1.00
Frt		1.00			1.00		1.00	1.00	0.85			0.86
Flt Protected		1.00			1.00		0.95	0.96	1.00			1.00
Satd. Flow (prot)		3539			5080		1681	1701	1583			1611
Flt Permitted		1.00			1.00		0.95	0.96	1.00			1.00
Satd. Flow (perm)		3539			5080		1681	1701	1583			1611
Peak-hour factor, PHF	0.93	0.93	0.93	0.95	0.95	0.95	0.87	0.87	0.87	0.84	0.84	0.84
Adj. Flow (vph)	0	1243	0	0	2105	14	537	59	326	0	0	389
RTOR Reduction (vph)	0	0	0	0	1	0	0	0	63	0	0	42
Lane Group Flow (vph)	0	1243	0	0	2118	0	295	301	263	0	0	347
Turn Type		NA			NA		Split	NA	Perm			Prot
Protected Phases		2			6		8	8				5
Permitted Phases									8			
Actuated Green, G (s)		106.8			71.8		33.0	33.0	33.0			30.0
Effective Green, g (s)		106.8			71.8		33.0	33.0	33.0			30.0
Actuated g/C Ratio		0.71			0.48		0.22	0.22	0.22			0.20
Clearance Time (s)		5.1			5.1		5.1	5.1	5.1			5.0
Vehicle Extension (s)		2.0			2.0		2.0	2.0	2.0			2.0
Lane Grp Cap (vph)		2519			2431		369	374	348			322
v/s Ratio Prot		0.35			c0.42		0.18	c0.18				c0.22
v/s Ratio Perm									0.17			
v/c Ratio		0.49			0.87		0.80	0.80	0.76			1.08
Uniform Delay, d1		9.6			35.0		55.4	55.4	54.7			60.0
Progression Factor		1.13			0.74		1.00	1.00	1.00			1.00
Incremental Delay, d2		0.1			3.1		10.8	11.3	8.0			72.8
Delay (s)		10.9			29.0		66.1	66.7	62.8			132.8
Level of Service		B			C		E	E	E			F
Approach Delay (s)		10.9			29.0			65.1			132.8	
Approach LOS		B			C			E			F	

Intersection Summary

HCM 2000 Control Delay	40.0	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	15.2
Intersection Capacity Utilization	86.1%	ICU Level of Service	E
Analysis Period (min)	15		

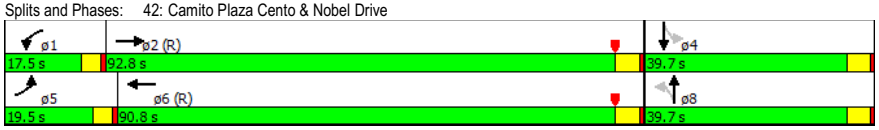
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	83	1407	30	1685	113	10	8	2
Future Volume (vph)	83	1407	30	1685	113	10	8	2
Turn Type	Prot	NA	Prot	NA	Perm	NA	Perm	NA
Protected Phases	5	2	1	6		8		4
Permitted Phases					8		4	
Detector Phase	5	2	1	6	8	8	4	4
Switch Phase								
Minimum Initial (s)	4.0	10.0	4.0	10.0	6.0	6.0	6.0	6.0
Minimum Split (s)	9.5	25.2	9.5	25.2	37.9	37.9	37.9	37.9
Total Split (s)	19.5	92.8	17.5	90.8	39.7	39.7	39.7	39.7
Total Split (%)	13.0%	61.9%	11.7%	60.5%	26.5%	26.5%	26.5%	26.5%
Yellow Time (s)	3.4	4.2	3.4	4.2	3.9	3.9	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	4.4	5.2	4.4	5.2		4.9		4.9
Lead/Lag	Lead	Lag	Lead	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes				
Recall Mode	None	C-Max	None	C-Max	None	None	None	None

Intersection Summary

Cycle Length: 150
Actuated Cycle Length: 150
Offset: 101 (67%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 42: Camito Plaza Cento & Nobel Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	83	1407	53	30	1685	32	113	10	75	8	2	51
Future Volume (vph)	83	1407	53	30	1685	32	113	10	75	8	2	51
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.2		4.4	5.2			4.9			4.9	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Frt	1.00	0.99		1.00	1.00			0.95			0.89	
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.99	
Satd. Flow (prot)	1770	5058		1770	5071			1719			1643	
Flt Permitted	0.95	1.00		0.95	1.00			0.75			0.95	
Satd. Flow (perm)	1770	5058		1770	5071			1328			1576	
Peak-hour factor, PHF	0.96	0.96	0.96	0.95	0.95	0.95	0.82	0.82	0.82	0.80	0.80	0.80
Adj. Flow (vph)	86	1466	55	32	1774	34	138	12	91	10	2	64
RTOR Reduction (vph)	0	2	0	0	1	0	0	15	0	0	52	0
Lane Group Flow (vph)	86	1519	0	32	1807	0	0	226	0	0	25	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8			4		
Actuated Green, G (s)	12.1	101.0		5.7	94.6			28.8			28.8	
Effective Green, g (s)	12.1	101.0		5.7	94.6			28.8			28.8	
Actuated g/C Ratio	0.08	0.67		0.04	0.63			0.19			0.19	
Clearance Time (s)	4.4	5.2		4.4	5.2			4.9			4.9	
Vehicle Extension (s)	3.0	5.0		3.0	4.5			2.5			2.0	
Lane Grp Cap (vph)	142	3405		67	3198			254			302	
v/s Ratio Prot	c0.05	0.30		0.02	c0.36							
v/s Ratio Perm								c0.17			0.02	
v/c Ratio	0.61	0.45		0.48	0.57			0.89			0.08	
Uniform Delay, d1	66.6	11.4		70.7	15.9			59.0			49.8	
Progression Factor	1.28	0.58		1.00	1.00			1.00			1.00	
Incremental Delay, d2	6.2	0.4		5.3	0.7			28.8			0.0	
Delay (s)	91.8	7.0		76.0	16.6			87.8			49.8	
Level of Service	F	A		E	B			F			D	
Approach Delay (s)		11.5			17.7			87.8			49.8	
Approach LOS		B			B			F			D	

Intersection Summary

HCM 2000 Control Delay	20.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	14.5
Intersection Capacity Utilization	68.0%	ICU Level of Service	C
Analysis Period (min)	15		

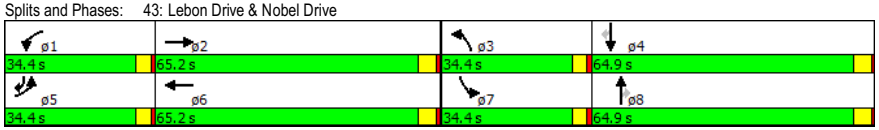
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	90	988	159	1156	136	151	80	144	247	214
Future Volume (vph)	90	988	159	1156	136	151	80	144	247	214
Turn Type	Prot	NA	Prot	NA	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	5	2	1	6	3	8		7	4	5
Permitted Phases							8			4
Detector Phase	5	2	1	6	3	8	8	7	4	5
Switch Phase										
Minimum Initial (s)	4.0	10.0	4.0	10.0	4.0	8.0	8.0	10.0	10.0	4.0
Minimum Split (s)	8.4	15.2	8.4	15.2	8.4	12.9	12.9	14.4	14.9	8.4
Total Split (s)	34.4	65.2	34.4	65.2	34.4	64.9	64.9	34.4	64.9	34.4
Total Split (%)	17.3%	32.8%	17.3%	32.8%	17.3%	32.6%	32.6%	17.3%	32.6%	17.3%
Yellow Time (s)	3.4	4.2	3.4	4.2	3.4	3.9	3.9	3.4	3.9	3.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.2	4.4	5.2	4.4	4.9	4.9	4.4	4.9	4.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 198.9
Actuated Cycle Length: 130.5
Natural Cycle: 65
Control Type: Actuated-Uncoordinated

Splits and Phases: 43: Lebon Drive & Nobel Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	90	988	148	159	1156	93	136	151	80	144	247	214
Future Volume (vph)	90	988	148	159	1156	93	136	151	80	144	247	214
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.2		4.4	5.2		4.4	4.9	4.9	4.4	4.9	4.4
Lane Util. Factor	0.97	0.91		1.00	0.91		0.97	0.95	1.00	0.97	0.95	1.00
Frt	1.00	0.98		1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	4986		1770	5029		3433	3539	1583	3433	3539	1583
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	4986		1770	5029		3433	3539	1583	3433	3539	1583
Peak-hour factor, PHF	0.88	0.88	0.88	0.91	0.91	0.91	0.96	0.96	0.96	0.80	0.80	0.80
Adj. Flow (vph)	102	1123	168	175	1270	102	142	157	83	180	309	268
RTOR Reduction (vph)	0	9	0	0	4	0	0	0	64	0	0	75
Lane Group Flow (vph)	102	1282	0	175	1368	0	142	157	19	180	309	193
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	5	2		1	6		3	8		7	4	5
Permitted Phases									8			4
Actuated Green, G (s)	8.8	50.9		18.3	60.4		10.4	28.9	28.9	12.6	31.1	39.9
Effective Green, g (s)	8.8	50.9		18.3	60.4		10.4	28.9	28.9	12.6	31.1	39.9
Actuated g/C Ratio	0.07	0.39		0.14	0.47		0.08	0.22	0.22	0.10	0.24	0.31
Clearance Time (s)	4.4	5.2		4.4	5.2		4.4	4.9	4.9	4.4	4.9	4.4
Vehicle Extension (s)	2.0	4.5		2.0	4.5		2.0	6.4	6.4	2.0	5.5	2.0
Lane Grp Cap (vph)	233	1958		249	2343		275	789	352	333	849	487
v/s Ratio Prot	0.03	c0.26		c0.10	0.27		0.04	0.04		c0.05	0.09	c0.03
v/s Ratio Perm									0.01			0.09
v/c Ratio	0.44	0.66		0.70	0.58		0.52	0.20	0.05	0.54	0.36	0.40
Uniform Delay, d1	58.0	32.2		53.1	25.4		57.2	40.9	39.6	55.7	41.0	35.3
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.5	1.0		7.1	0.5		0.7	0.4	0.2	1.0	0.7	0.2
Delay (s)	58.5	33.1		60.2	25.9		57.9	41.3	39.8	56.7	41.7	35.5
Level of Service	E	C		E	C		E	D	D	E	D	D
Approach Delay (s)		35.0			29.8			47.1			43.1	
Approach LOS		C			C			D			D	

Intersection Summary

HCM 2000 Control Delay	35.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	129.6	Sum of lost time (s)	18.9
Intersection Capacity Utilization	61.9%	ICU Level of Service	B
Analysis Period (min)	15		

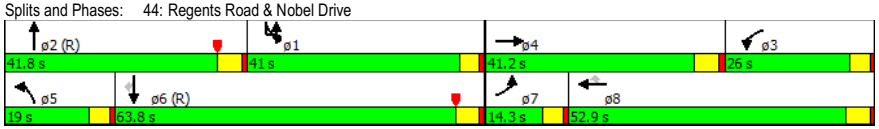
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	199	1043	276	1266	129	80	113	407	470	292
Future Volume (vph)	199	1043	276	1266	129	80	113	407	470	292
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Prot	NA	Perm
Protected Phases	7	4	3	8		5	2	1	6	
Permitted Phases					8					6
Detector Phase	7	4	3	8	8	5	2	1	6	6
Switch Phase										
Minimum Initial (s)	4.0	10.0	4.0	10.0	10.0	4.0	10.0	4.0	10.0	10.0
Minimum Split (s)	8.4	41.2	8.4	41.2	41.2	8.4	41.2	8.4	41.2	41.2
Total Split (s)	14.3	41.2	26.0	52.9	52.9	19.0	41.8	41.0	63.8	63.8
Total Split (%)	9.5%	27.5%	17.3%	35.3%	35.3%	12.7%	27.9%	27.3%	42.5%	42.5%
Yellow Time (s)	3.4	4.2	3.4	4.2	4.2	3.4	4.2	3.4	4.2	4.2
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.2	4.4	5.2	5.2	4.4	5.2	4.4	5.2	5.2
Lead/Lag	Lead	Lead	Lag	Lag	Lag	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Min	None	Min	Min	None	C-Max	None	C-Max	C-Max

Intersection Summary

Cycle Length: 150
Actuated Cycle Length: 150
Offset: 49 (33%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 44: Regents Road & Nobel Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	199	1043	73	276	1266	129	80	113	134	23	407	470
Future Volume (vph)	199	1043	73	276	1266	129	80	113	134	23	407	470
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.2		4.4	5.2	5.2	4.4	5.2			4.4	5.2
Lane Util. Factor	0.97	0.91		0.97	0.95	1.00	1.00	0.91			1.00	0.95
Frt	1.00	0.99		1.00	1.00	0.85	1.00	0.92			1.00	1.00
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00			0.95	1.00
Satd. Flow (prot)	3433	5035		3433	3539	1583	1770	4672			1770	3539
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00			0.95	1.00
Satd. Flow (perm)	3433	5035		3433	3539	1583	1770	4672			1770	3539
Peak-hour factor, PHF	0.94	0.94	0.94	0.91	0.91	0.91	0.95	0.95	0.95	0.92	0.82	0.82
Adj. Flow (vph)	212	1110	78	303	1391	142	84	119	141	25	496	573
RTOR Reduction (vph)	0	5	0	0	0	80	0	107	0	0	0	0
Lane Group Flow (vph)	212	1183	0	303	1391	62	84	153	0	0	521	573
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA		Prot	Prot	NA
Protected Phases	7	4		3	8		5	2		1	1	6
Permitted Phases						8						
Actuated Green, G (s)	9.9	36.0		21.6	47.7	47.7	11.9	36.6			36.6	61.3
Effective Green, g (s)	9.9	36.0		21.6	47.7	47.7	11.9	36.6			36.6	61.3
Actuated g/C Ratio	0.07	0.24		0.14	0.32	0.32	0.08	0.24			0.24	0.41
Clearance Time (s)	4.4	5.2		4.4	5.2	5.2	4.4	5.2			4.4	5.2
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0			3.0	3.0
Lane Grp Cap (vph)	226	1208		494	1125	503	140	1139			431	1446
v/s Ratio Prot	0.06	c0.23		0.09	c0.39		c0.05	0.03			c0.29	c0.16
v/s Ratio Perm						0.04						
v/c Ratio	0.94	0.98		0.61	1.24	0.12	0.60	0.13			1.21	0.40
Uniform Delay, d1	69.7	56.6		60.3	51.1	36.3	66.7	44.3			56.7	31.3
Progression Factor	1.00	1.00		0.69	0.65	0.15	1.00	1.00			0.71	0.70
Incremental Delay, d2	42.5	20.7		1.8	112.6	0.1	6.8	0.2			108.9	0.6
Delay (s)	112.2	77.3		43.4	145.6	5.7	73.5	44.6			149.2	22.4
Level of Service	F	E		D	F	A	E	D			F	C
Approach Delay (s)		82.6			117.9			51.6				70.6
Approach LOS		F			F			D				E

Intersection Summary

HCM 2000 Control Delay	89.9	HCM 2000 Level of Service	F	
HCM 2000 Volume to Capacity ratio	1.00			
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	19.2	
Intersection Capacity Utilization	88.8%	ICU Level of Service	E	
Analysis Period (min)	15			

c Critical Lane Group

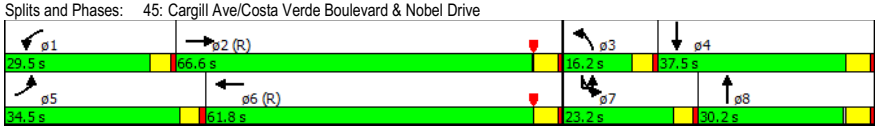
Movement	SBR
Lane Configurations	
Traffic Volume (vph)	292
Future Volume (vph)	292
Ideal Flow (vphpl)	1900
Total Lost time (s)	5.2
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1583
Flt Permitted	1.00
Satd. Flow (perm)	1583
Peak-hour factor, PHF	0.82
Adj. Flow (vph)	356
RTOR Reduction (vph)	137
Lane Group Flow (vph)	219
Turn Type	Perm
Protected Phases	
Permitted Phases	6
Actuated Green, G (s)	61.3
Effective Green, g (s)	61.3
Actuated g/C Ratio	0.41
Clearance Time (s)	5.2
Vehicle Extension (s)	3.0
Lane Grp Cap (vph)	646
v/s Ratio Prot	
v/s Ratio Perm	0.14
v/c Ratio	0.34
Uniform Delay, d1	30.4
Progression Factor	1.06
Incremental Delay, d2	1.0
Delay (s)	33.2
Level of Service	C
Approach Delay (s)	
Approach LOS	

Intersection Summary

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	385	900	90	1059	64	55	193	69
Future Volume (vph)	385	900	90	1059	64	55	193	69
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	5	2	1	6	3	8	7	4
Permitted Phases								
Detector Phase	5	2	1	6	3	8	7	4
Switch Phase								
Minimum Initial (s)	4.0	25.0	4.0	25.0	4.0	25.0	4.0	25.0
Minimum Split (s)	8.4	30.2	8.4	30.2	8.4	30.2	8.4	30.2
Total Split (s)	34.5	66.6	29.5	61.8	16.2	30.2	23.2	37.5
Total Split (%)	23.0%	44.4%	19.7%	41.2%	10.8%	20.1%	15.5%	25.0%
Yellow Time (s)	3.4	4.2	3.4	4.2	3.4	4.2	3.4	4.2
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.2	4.4	5.2	4.4	5.2	4.4	5.2
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	Max	None	Max

Intersection Summary
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 145 (97%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 120
Control Type: Actuated-Coordinated

Splits and Phases: 45: Cargill Ave/Costa Verde Boulevard & Nobel Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	385	900	74	90	1059	150	64	55	50	4	193	69
Future Volume (vph)	385	900	74	90	1059	150	64	55	50	4	193	69
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.2		4.4	5.2		4.4	5.2			4.4	5.2
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	1.00			1.00	1.00
Frt	1.00	0.99		1.00	0.98		1.00	0.93			1.00	0.88
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			0.95	1.00
Satd. Flow (prot)	1770	5027		1770	4991		1770	1730			1770	1644
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00			0.95	1.00
Satd. Flow (perm)	1770	5027		1770	4991		1770	1730			1770	1644
Peak-hour factor, PHF	0.95	0.95	0.95	0.88	0.88	0.88	0.83	0.83	0.83	0.92	0.87	0.87
Adj. Flow (vph)	405	947	78	102	1203	170	77	66	60	4	222	79
RTOR Reduction (vph)	0	6	0	0	12	0	0	22	0	0	0	84
Lane Group Flow (vph)	405	1019	0	102	1361	0	77	104	0	0	226	277
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	Prot	NA
Protected Phases	5	2		1	6		3	8		7	7	4
Permitted Phases												
Actuated Green, G (s)	30.1	73.7		13.0	56.6		10.0	25.3			18.8	34.1
Effective Green, g (s)	30.1	73.7		13.0	56.6		10.0	25.3			18.8	34.1
Actuated g/C Ratio	0.20	0.49		0.09	0.38		0.07	0.17			0.13	0.23
Clearance Time (s)	4.4	5.2		4.4	5.2		4.4	5.2			4.4	5.2
Vehicle Extension (s)	2.0	4.5		2.0	4.5		2.0	4.5			2.0	4.5
Lane Grp Cap (vph)	355	2469		153	1883		118	291			221	373
v/s Ratio Prot	c0.23	0.20		0.06	c0.27		0.04	0.06			c0.13	c0.17
v/s Ratio Perm												
v/c Ratio	1.14	0.41		0.67	0.72		0.65	0.36			1.02	0.74
Uniform Delay, d1	59.9	24.3		66.4	40.0		68.3	55.2			65.6	53.9
Progression Factor	1.38	0.24		1.44	0.21		1.00	1.00			1.00	1.00
Incremental Delay, d2	72.7	0.1		3.4	1.0		9.5	3.4			66.5	12.5
Delay (s)	155.7	5.9		99.1	9.2		77.8	58.6			132.1	66.4
Level of Service	F	A		F	A		E	E			F	E
Approach Delay (s)		48.3			15.4			65.9				91.7
Approach LOS		D			B			E				F

Intersection Summary			
HCM 2000 Control Delay	43.0	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	19.2
Intersection Capacity Utilization	92.9%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	245
Future Volume (vph)	245
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.87
Adj. Flow (vph)	282
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

Intersection Summary

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	311	781	23	1804	23	5	93	0
Future Volume (vph)	311	781	23	1804	23	5	93	0
Turn Type	Prot	NA	Prot	NA	Perm	NA	Perm	NA
Protected Phases	5	2	1	6		8		4
Permitted Phases					8		4	
Detector Phase	5	2	1	6	8	8	4	4
Switch Phase								
Minimum Initial (s)	4.0	7.0	4.0	7.0	4.0	4.0	4.0	4.0
Minimum Split (s)	9.5	19.0	9.5	28.9	32.9	32.9	32.9	32.9
Total Split (s)	31.0	110.9	11.0	90.9	33.1	33.1	33.1	33.1
Total Split (%)	20.0%	71.5%	7.1%	58.6%	21.4%	21.4%	21.4%	21.4%
Yellow Time (s)	3.4	4.0	3.4	3.9	3.9	3.9	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.4	5.0	4.4	4.9		4.9	4.9	4.9
Lead/Lag	Lead	Lag	Lead	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes				
Recall Mode	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 155
Actuated Cycle Length: 146.2
Natural Cycle: 150
Control Type: Actuated-Uncoordinated

Splits and Phases: 46: Lombard Place & Nobel Drive

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	311	781	32	23	1804	110	23	5	8	93	0	289
Future Volume (vph)	311	781	32	23	1804	110	23	5	8	93	0	289
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.0		4.4	4.9			4.9		4.9	4.9	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00		1.00	1.00	
Frt	1.00	0.99		1.00	0.99			0.97		1.00	0.85	
Flt Protected	0.95	1.00		0.95	1.00			0.97		0.95	1.00	
Satd. Flow (prot)	1770	3518		1770	3509			1750		1770	1583	
Flt Permitted	0.95	1.00		0.95	1.00			0.17		0.76	1.00	
Satd. Flow (perm)	1770	3518		1770	3509			313		1411	1583	
Peak-hour factor, PHF	0.89	0.89	0.89	0.90	0.90	0.90	0.80	0.80	0.80	0.80	0.80	0.80
Adj. Flow (vph)	349	878	36	26	2004	122	29	6	10	116	0	361
RTOR Reduction (vph)	0	2	0	0	2	0	0	7	0	0	200	0
Lane Group Flow (vph)	349	912	0	26	2124	0	0	38	0	116	161	0
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8			4		
Actuated Green, G (s)	26.7	110.9		3.8	88.1			19.0		19.0	19.0	
Effective Green, g (s)	26.7	110.9		3.8	88.1			19.0		19.0	19.0	
Actuated g/C Ratio	0.18	0.75		0.03	0.60			0.13		0.13	0.13	
Clearance Time (s)	4.4	5.0		4.4	4.9			4.9		4.9	4.9	
Vehicle Extension (s)	2.0	3.7		2.0	4.4			2.0		2.0	2.0	
Lane Grp Cap (vph)	319	2636		45	2088			40		181	203	
v/s Ratio Prot	c0.20	0.26		0.01	c0.61						0.10	
v/s Ratio Perm								c0.12		0.08		
v/c Ratio	1.09	0.35		0.58	1.02			0.95		0.64	0.79	
Uniform Delay, d1	60.6	6.3		71.3	30.0			64.0		61.3	62.6	
Progression Factor	1.00	1.00		1.00	1.00			1.00		1.00	1.00	
Incremental Delay, d2	78.0	0.1		10.7	24.1			121.7		5.7	17.5	
Delay (s)	138.6	6.4		82.0	54.0			185.8		67.0	80.1	
Level of Service	F	A		F	D			F		E	F	
Approach Delay (s)		42.9			54.4			185.8			76.9	
Approach LOS		D			D			F			E	

Intersection Summary

HCM 2000 Control Delay	54.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.02		
Actuated Cycle Length (s)	148.0	Sum of lost time (s)	14.3
Intersection Capacity Utilization	104.2%	ICU Level of Service	G
Analysis Period (min)	15		

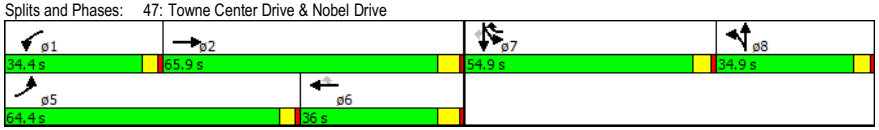
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	372	532	240	1200	39	30	50	253	695
Future Volume (vph)	372	532	240	1200	39	30	50	253	695
Turn Type	Prot	NA	Prot	NA	pm+ov	NA	Split	NA	Perm
Protected Phases	5	2	1	6	7	8	7	7	
Permitted Phases					6				7
Detector Phase	5	2	1	6	7	8	7	7	7
Switch Phase									
Minimum Initial (s)	4.0	7.0	4.0	7.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.4	12.9	8.4	13.0	8.9	8.9	8.9	8.9	8.9
Total Split (s)	64.4	65.9	34.4	36.0	54.9	34.9	54.9	54.9	54.9
Total Split (%)	33.9%	34.6%	18.1%	18.9%	28.9%	18.3%	28.9%	28.9%	28.9%
Yellow Time (s)	3.4	4.9	3.4	5.0	3.9	3.9	3.9	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.9	4.4	6.0	4.9	4.9	4.9	4.9	4.9
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 190.2
Actuated Cycle Length: 130.5
Natural Cycle: 100
Control Type: Actuated-Uncoordinated

Splits and Phases: 47: Towne Center Drive & Nobel Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	372	532	74	240	1200	39	50	30	24	50	253	695
Future Volume (vph)	372	532	74	240	1200	39	50	30	24	50	253	695
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.9		4.4	6.0	4.9		4.9		4.9	4.9	4.9
Lane Util. Factor	0.97	0.95		1.00	0.91	1.00		0.95		1.00	1.00	1.00
Frt	1.00	0.98		1.00	1.00	0.85		0.97		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.98		0.95	1.00	1.00
Satd. Flow (prot)	3433	3475		1770	5085	1583		3337		1770	1863	1583
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.98		0.95	1.00	1.00
Satd. Flow (perm)	3433	3475		1770	5085	1583		3337		1770	1863	1583
Peak-hour factor, PHF	0.90	0.90	0.90	0.87	0.87	0.87	0.80	0.80	0.80	0.86	0.86	0.86
Adj. Flow (vph)	413	591	82	276	1379	45	62	38	30	58	294	808
RTOR Reduction (vph)	0	6	0	0	0	18	0	16	0	0	0	505
Lane Group Flow (vph)	413	667	0	276	1379	27	0	115	0	58	294	303
Turn Type	Prot	NA		Prot	NA	pm+ov	Split	NA		Split	NA	Perm
Protected Phases	5	2		1	6	7	8	8		7	7	
Permitted Phases						6						7
Actuated Green, G (s)	21.5	35.7		29.2	43.3	78.8		9.4		35.5	35.5	35.5
Effective Green, g (s)	21.5	35.7		29.2	43.3	78.8		9.4		35.5	35.5	35.5
Actuated g/C Ratio	0.17	0.27		0.22	0.33	0.61		0.07		0.27	0.27	0.27
Clearance Time (s)	4.4	5.9		4.4	6.0	4.9		4.9		4.9	4.9	4.9
Vehicle Extension (s)	2.0	4.9		2.0	3.3	4.0		2.0		4.0	4.0	4.0
Lane Grp Cap (vph)	568	955		397	1695	960		241		483	509	432
v/s Ratio Prot	0.12	0.19		c0.16	c0.27	0.01		c0.03		0.03	0.16	
v/s Ratio Perm						0.01						c0.19
v/c Ratio	0.73	0.70		0.70	0.81	0.03		0.48		0.12	0.58	0.70
Uniform Delay, d1	51.4	42.3		46.3	39.6	10.2		57.9		35.5	40.7	42.4
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00
Incremental Delay, d2	3.9	2.8		4.2	3.2	0.0		0.5		0.2	1.9	5.5
Delay (s)	55.3	45.1		50.5	42.8	10.2		58.4		35.6	42.6	47.9
Level of Service	E	D		D	D	B		E		D	D	D
Approach Delay (s)		49.0			43.2			58.4			45.9	
Approach LOS		D			D			E			D	

Intersection Summary

HCM 2000 Control Delay	46.0	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	129.9	Sum of lost time (s)	20.2
Intersection Capacity Utilization	82.7%	ICU Level of Service	E
Analysis Period (min)	15		

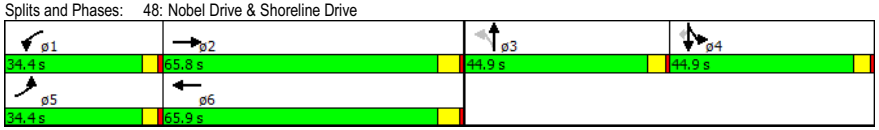
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	78	450	45	1310	22	5	74	9	47
Future Volume (vph)	78	450	45	1310	22	5	74	9	47
Turn Type	Prot	NA	Prot	NA	Perm	NA	Split	NA	Perm
Protected Phases	5	2	1	6		3	4	4	
Permitted Phases					3				4
Detector Phase	5	2	1	6	3	3	4	4	4
Switch Phase									
Minimum Initial (s)	4.0	10.0	4.0	10.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.4	15.8	8.4	30.9	8.9	8.9	33.9	33.9	33.9
Total Split (s)	34.4	65.8	34.4	65.9	44.9	44.9	44.9	44.9	44.9
Total Split (%)	18.1%	34.6%	18.1%	34.7%	23.6%	23.6%	23.6%	23.6%	23.6%
Yellow Time (s)	3.4	4.8	3.4	4.9	3.9	3.9	3.9	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.8	4.4	5.9		4.9	4.9	4.9	4.9
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 190.1
Actuated Cycle Length: 146.4
Natural Cycle: 85
Control Type: Actuated-Uncoordinated

Splits and Phases: 48: Nobel Drive & Shoreline Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	78	450	49	45	1310	224	22	5	13	4	74	9
Future Volume (vph)	78	450	49	45	1310	224	22	5	13	4	74	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.8		4.4	5.9			4.9			4.9	4.9
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	1.00
Frt	1.00	0.99		1.00	0.98			0.96			1.00	1.00
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.95	1.00
Satd. Flow (prot)	1770	5010		1770	4974			1733			1770	1863
Flt Permitted	0.95	1.00		0.95	1.00			0.22			0.73	1.00
Satd. Flow (perm)	1770	5010		1770	4974			385			1358	1863
Peak-hour factor, PHF	0.91	0.91	0.91	0.88	0.88	0.88	0.93	0.93	0.93	0.92	0.80	0.80
Adj. Flow (vph)	86	495	54	51	1489	255	24	5	14	4	92	11
RTOR Reduction (vph)	0	6	0	0	11	0	0	11	0	0	0	0
Lane Group Flow (vph)	86	543	0	51	1733	0	0	32	0	0	97	11
Turn Type	Prot	NA		Prot	NA		Perm	NA			Split	NA
Protected Phases	5	2		1	6			3			4	4
Permitted Phases							3					
Actuated Green, G (s)	11.6	66.0		7.5	61.8			14.4			40.5	40.5
Effective Green, g (s)	11.6	66.0		7.5	61.8			14.4			40.5	40.5
Actuated g/C Ratio	0.08	0.44		0.05	0.42			0.10			0.27	0.27
Clearance Time (s)	4.4	5.8		4.4	5.9			4.9			4.9	4.9
Vehicle Extension (s)	2.0	4.6		2.0	4.4			2.0			2.0	2.0
Lane Grp Cap (vph)	138	2228		89	2071			37			370	508
v/s Ratio Prot	c0.05	c0.11		0.03	c0.35							0.01
v/s Ratio Perm								c0.08			c0.07	
v/c Ratio	0.62	0.24		0.57	0.84			0.87			0.26	0.02
Uniform Delay, d1	66.3	25.7		68.9	38.8			66.1			42.2	39.5
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	1.00
Incremental Delay, d2	6.2	0.1		5.4	3.4			93.5			0.1	0.0
Delay (s)	72.4	25.8		74.3	42.2			159.5			42.4	39.5
Level of Service	E	C		E	D			F			D	D
Approach Delay (s)		32.1			43.1			159.5				41.2
Approach LOS		C			D			F				D

Intersection Summary

HCM 2000 Control Delay	42.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	148.4	Sum of lost time (s)	20.1
Intersection Capacity Utilization	56.2%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

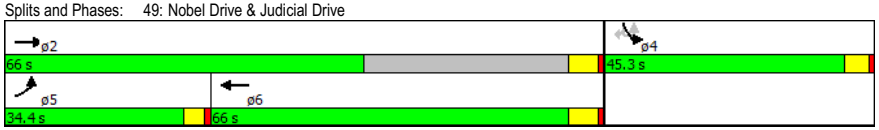
Movement	SBR
Lane Configurations	
Traffic Volume (vph)	47
Future Volume (vph)	47
Ideal Flow (vphpl)	1900
Total Lost time (s)	4.9
Lane Util. Factor	0.88
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	2787
Flt Permitted	1.00
Satd. Flow (perm)	2787
Peak-hour factor, PHF	0.80
Adj. Flow (vph)	59
RTOR Reduction (vph)	43
Lane Group Flow (vph)	16
Turn Type	Perm
Protected Phases	
Permitted Phases	4
Actuated Green, G (s)	40.5
Effective Green, g (s)	40.5
Actuated g/C Ratio	0.27
Clearance Time (s)	4.9
Vehicle Extension (s)	2.0
Lane Grp Cap (vph)	760
v/s Ratio Prot	
v/s Ratio Perm	0.01
v/c Ratio	0.02
Uniform Delay, d1	39.5
Progression Factor	1.00
Incremental Delay, d2	0.0
Delay (s)	39.5
Level of Service	D
Approach Delay (s)	
Approach LOS	

Intersection Summary

Lane Group	EBL	EBT	WBT	SBL	SBR
Lane Configurations					
Traffic Volume (vph)	25	541	1492	823	128
Future Volume (vph)	25	541	1492	823	128
Turn Type	Prot	NA	NA	Prot	Perm
Protected Phases	5	2	6	4	
Permitted Phases					4
Detector Phase	5	2	6	4	4
Switch Phase					
Minimum Initial (s)	4.0	10.0	10.0	7.0	7.0
Minimum Split (s)	11.4	16.0	16.0	12.3	12.3
Total Split (s)	34.4	66.0	66.0	45.3	45.3
Total Split (%)	23.6%	45.3%	45.3%	31.1%	31.1%
Yellow Time (s)	3.4	5.0	5.0	4.3	4.3
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	6.0	6.0	5.3	5.3
Lead/Lag	Lead		Lag		
Lead-Lag Optimize?	Yes		Yes		
Recall Mode	None	Min	Min	None	None

Intersection Summary
Cycle Length: 145.7
Actuated Cycle Length: 117.5
Natural Cycle: 90
Control Type: Actuated-Uncoordinated

Splits and Phases: 49: Nobel Drive & Judicial Drive



Movement	EBL	EBT	WBT	WBR	SBU	SBL	SBR
Lane Configurations							
Traffic Volume (vph)	25	541	1492	329	4	823	128
Future Volume (vph)	25	541	1492	329	4	823	128
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	6.0	6.0			5.3	5.3
Lane Util. Factor	0.97	0.91	0.91			0.97	1.00
Frt	1.00	1.00	0.97			1.00	0.85
Flt Protected	0.95	1.00	1.00			0.95	1.00
Satd. Flow (prot)	3433	5085	4947			3433	1583
Flt Permitted	0.95	1.00	1.00			0.95	1.00
Satd. Flow (perm)	3433	5085	4947			3433	1583
Peak-hour factor, PHF	0.94	0.94	0.92	0.92	0.92	0.84	0.84
Adj. Flow (vph)	27	576	1622	358	4	980	152
RTOR Reduction (vph)	0	0	20	0	0	0	74
Lane Group Flow (vph)	27	576	1960	0	0	984	78
Turn Type	Prot	NA	NA		Perm	Prot	Perm
Protected Phases	5	2	6			4	
Permitted Phases					4		4
Actuated Green, G (s)	3.5	68.0	60.1			40.1	40.1
Effective Green, g (s)	3.5	68.0	60.1			40.1	40.1
Actuated g/C Ratio	0.03	0.57	0.50			0.34	0.34
Clearance Time (s)	4.4	6.0	6.0			5.3	5.3
Vehicle Extension (s)	2.0	5.4	5.4			4.4	4.4
Lane Grp Cap (vph)	100	2895	2490			1152	531
v/s Ratio Prot	0.01	c0.11	c0.40				
v/s Ratio Perm						0.29	0.05
v/c Ratio	0.27	0.20	0.79			0.85	0.15
Uniform Delay, d1	56.7	12.5	24.4			36.9	27.7
Progression Factor	1.00	1.00	1.00			1.00	1.00
Incremental Delay, d2	0.5	0.1	2.0			6.8	0.2
Delay (s)	57.2	12.6	26.4			43.7	27.9
Level of Service	E	B	C			D	C
Approach Delay (s)		14.6	26.4			41.6	
Approach LOS		B	C			D	

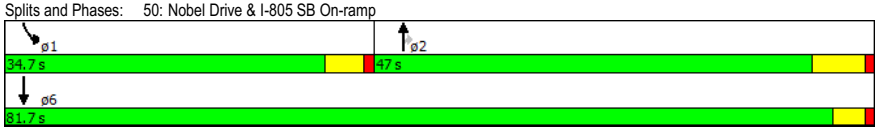
Intersection Summary			
HCM 2000 Control Delay	29.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	119.4	Sum of lost time (s)	15.7
Intersection Capacity Utilization	69.2%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	NBT	NBR	SBL	SBT
Lane Configurations				
Traffic Volume (vph)	577	643	91	1783
Future Volume (vph)	577	643	91	1783
Turn Type	NA	Perm	Prot	NA
Protected Phases	2		1	6
Permitted Phases		2		
Detector Phase	2	2	1	6
Switch Phase				
Minimum Initial (s)	12.0	12.0	5.0	1.0
Minimum Split (s)	19.0	19.0	9.7	5.5
Total Split (s)	47.0	47.0	34.7	81.7
Total Split (%)	57.5%	57.5%	42.5%	100.0%
Yellow Time (s)	5.0	5.0	3.7	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	4.7	4.0
Lead/Lag	Lag	Lag	Lead	
Lead-Lag Optimize?	Yes	Yes	Yes	
Recall Mode	Min	Min	None	Min

Intersection Summary
Cycle Length: 81.7
Actuated Cycle Length: 68.3
Natural Cycle: 45
Control Type: Actuated-Uncoordinated

Splits and Phases: 50: Nobel Drive & I-805 SB On-ramp



Movement	WBL	WBR	NBT	NBR	SBU	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	0	0	577	643	4	91	1783
Future Volume (vph)	0	0	577	643	4	91	1783
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			6.0	6.0		4.7	4.0
Lane Util. Factor			0.95	0.88		0.97	0.91
Frt			1.00	0.85		1.00	1.00
Flt Protected			1.00	1.00		0.95	1.00
Satd. Flow (prot)			3539	2787		3433	5085
Flt Permitted			1.00	1.00		0.13	1.00
Satd. Flow (perm)			3539	2787		482	5085
Peak-hour factor, PHF	0.25	0.25	0.97	0.97	0.92	0.93	0.93
Adj. Flow (vph)	0	0	595	663	4	98	1917
RTOR Reduction (vph)	0	0	0	395	0	0	0
Lane Group Flow (vph)	0	0	595	268	0	102	1917
Turn Type			NA	Perm		Prot	NA
Protected Phases			2			1	6
Permitted Phases				2			
Actuated Green, G (s)			27.6	27.6		30.0	68.3
Effective Green, g (s)			27.6	27.6		30.0	68.3
Actuated g/C Ratio			0.40	0.40		0.44	1.00
Clearance Time (s)			6.0	6.0		4.7	4.0
Vehicle Extension (s)			3.0	3.0		3.0	3.0
Lane Grp Cap (vph)			1430	1126		211	5085
v/s Ratio Prot			0.17				c0.38
v/s Ratio Perm				0.10		c0.21	
v/c Ratio			0.42	0.24		0.48	0.38
Uniform Delay, d1			14.6	13.4		13.6	0.0
Progression Factor			1.00	1.00		1.00	1.00
Incremental Delay, d2			0.2	0.1		1.7	0.0
Delay (s)			14.8	13.5		15.4	0.0
Level of Service			B	B		B	A
Approach Delay (s)	0.0		14.1				0.8
Approach LOS	A		B				A

Intersection Summary			
HCM 2000 Control Delay	5.9	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.47		
Actuated Cycle Length (s)	68.3	Sum of lost time (s)	10.7
Intersection Capacity Utilization	51.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	WBL	WBR	NBT	SBT	ø5
Lane Configurations					
Traffic Volume (vph)	758	340	604	985	
Future Volume (vph)	758	340	604	985	
Turn Type	Prot	Prot	NA	NA	
Protected Phases	8	1	2	6	5
Permitted Phases					
Detector Phase	8	1	2	6	
Switch Phase					
Minimum Initial (s)	5.0	5.0	16.0	11.0	5.0
Minimum Split (s)	11.1	11.1	23.0	18.0	9.7
Total Split (s)	36.1	19.7	47.0	47.0	24.7
Total Split (%)	33.5%	18.3%	43.6%	43.6%	23%
Yellow Time (s)	4.1	3.7	5.0	5.0	3.7
All-Red Time (s)	2.0	1.0	2.0	2.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.1	4.7	7.0	7.0	
Lead/Lag		Lead	Lag	Lag	Lead
Lead-Lag Optimize?		Yes	Yes	Yes	Yes
Recall Mode	None	None	Min	Min	None

Intersection Summary
Cycle Length: 107.8
Actuated Cycle Length: 75.9
Natural Cycle: 75
Control Type: Actuated-Uncoordinated

Splits and Phases: 51: Nobel Drive & I-805 N Off-ramps

Movement	WBL	WBR	NBU	NBT	NBR	SBU	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	758	340	0	604	0	4	0	985
Future Volume (vph)	758	340	0	604	0	4	0	985
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.1	4.7		7.0				7.0
Lane Util. Factor	0.97	0.88		0.95				0.91
Frt	1.00	0.85		1.00				1.00
Flt Protected	0.95	1.00		1.00				1.00
Satd. Flow (prot)	3433	2787		3539				5084
Flt Permitted	0.95	1.00		1.00				0.94
Satd. Flow (perm)	3433	2787		3539				4769
Peak-hour factor, PHF	0.86	0.86	0.92	0.95	0.95	0.92	0.91	0.91
Adj. Flow (vph)	881	395	0	636	0	4	0	1082
RTOR Reduction (vph)	0	339	0	0	0	0	0	0
Lane Group Flow (vph)	881	56	0	636	0	0	0	1086
Turn Type	Prot	Prot	Prot	NA				NA
Protected Phases	8	1	5	2				6
Permitted Phases								
Actuated Green, G (s)	25.3	6.5		26.2				37.4
Effective Green, g (s)	25.3	6.5		26.2				37.4
Actuated g/C Ratio	0.33	0.09		0.35				0.49
Clearance Time (s)	6.1	4.7		7.0				7.0
Vehicle Extension (s)	2.0	2.0		2.0				2.0
Lane Grp Cap (vph)	1145	238		1223				2353
v/s Ratio Prot	c0.26	0.02		c0.18				
v/s Ratio Perm								c0.23
v/c Ratio	0.77	0.23		0.52				0.46
Uniform Delay, d1	22.6	32.3		19.8				12.6
Progression Factor	1.00	1.00		1.00				1.00
Incremental Delay, d2	2.9	0.2		0.2				0.1
Delay (s)	25.5	32.5		20.0				12.6
Level of Service	C	C		B				B
Approach Delay (s)	27.7			20.0				12.6
Approach LOS	C			B				B

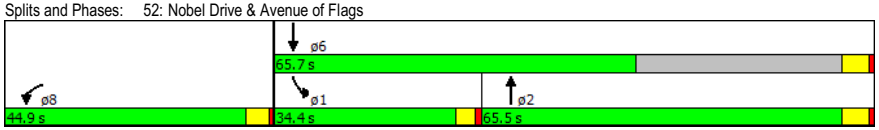
Intersection Summary			
HCM 2000 Control Delay	20.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	75.8	Sum of lost time (s)	17.8
Intersection Capacity Utilization	51.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	WBL	NBT	SBL	SBT
Lane Configurations				
Traffic Volume (vph)	10	1143	13	939
Future Volume (vph)	10	1143	13	939
Turn Type	Prot	NA	Prot	NA
Protected Phases	8	2	1	6
Permitted Phases				
Detector Phase	8	2	1	6
Switch Phase				
Minimum Initial (s)	4.0	7.0	4.0	7.0
Minimum Split (s)	28.9	26.5	9.5	12.7
Total Split (s)	44.9	65.5	34.4	65.7
Total Split (%)	31.0%	45.2%	23.8%	45.4%
Yellow Time (s)	3.9	4.5	3.4	4.7
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	5.5	4.4	5.7
Lead/Lag		Lag	Lead	
Lead-Lag Optimize?		Yes	Yes	
Recall Mode	None	Min	None	Min

Intersection Summary
Cycle Length: 144.8
Actuated Cycle Length: 60.8
Natural Cycle: 70
Control Type: Actuated-Uncoordinated

Splits and Phases: 52: Nobel Drive & Avenue of Flags



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	10	8	1143	7	13	939
Future Volume (vph)	10	8	1143	7	13	939
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9		5.5		4.4	5.7
Lane Util. Factor	1.00		0.95		1.00	0.95
Frt	0.94		1.00		1.00	1.00
Flt Protected	0.97		1.00		0.95	1.00
Satd. Flow (prot)	1705		3536		1770	3539
Flt Permitted	0.97		1.00		0.95	1.00
Satd. Flow (perm)	1705		3536		1770	3539
Peak-hour factor, PHF	0.80	0.80	0.91	0.91	0.94	0.94
Adj. Flow (vph)	12	10	1256	8	14	999
RTOR Reduction (vph)	10	0	0	0	0	0
Lane Group Flow (vph)	13	0	1264	0	14	999
Turn Type	Prot		NA		Prot	NA
Protected Phases	8		2		1	6
Permitted Phases						
Actuated Green, G (s)	1.9		49.9		1.0	55.1
Effective Green, g (s)	1.9		49.9		1.0	55.1
Actuated g/C Ratio	0.03		0.74		0.01	0.82
Clearance Time (s)	4.9		5.5		4.4	5.7
Vehicle Extension (s)	2.0		5.2		3.0	4.9
Lane Grp Cap (vph)	47		2610		26	2884
v/s Ratio Prot	c0.01		c0.36		0.01	c0.28
v/s Ratio Perm						
v/c Ratio	0.28		0.48		0.54	0.35
Uniform Delay, d1	32.2		3.6		33.1	1.6
Progression Factor	1.00		1.00		1.00	1.00
Incremental Delay, d2	1.2		0.3		19.8	0.1
Delay (s)	33.4		3.9		52.8	1.8
Level of Service	C		A		D	A
Approach Delay (s)	33.4		3.9			2.5
Approach LOS	C		A			A

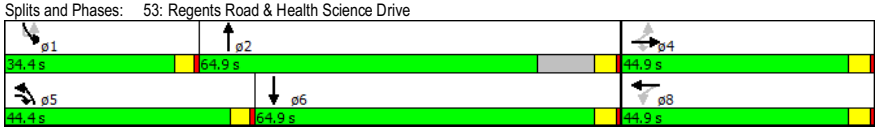
Intersection Summary			
HCM 2000 Control Delay	3.6	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	67.6	Sum of lost time (s)	14.8
Intersection Capacity Utilization	43.8%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBU	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	65	4	466	8	0	273	127	4	7	826
Future Volume (vph)	65	4	466	8	0	273	127	4	7	826
Turn Type	Perm	NA	pm+ov	Perm	NA	Prot	NA	custom	Prot	NA
Protected Phases		4	5		8	5	2		1	6
Permitted Phases	4		4	8				1		
Detector Phase	4	4	5	8	8	5	2	1	1	6
Switch Phase										
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	10.0	4.0	4.0	10.0
Minimum Split (s)	8.9	8.9	8.4	22.9	22.9	8.4	14.9	8.4	8.4	14.9
Total Split (s)	44.9	44.9	44.4	44.9	44.9	44.4	64.9	34.4	34.4	64.9
Total Split (%)	29.1%	29.1%	28.8%	29.1%	29.1%	28.8%	42.1%	22.3%	22.3%	42.1%
Yellow Time (s)	3.9	3.9	3.4	3.9	3.9	3.4	3.9	3.4	3.4	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)		4.9	4.4		4.9	4.4	4.9		4.4	4.9
Lead/Lag			Lead			Lead	Lag	Lead	Lead	Lag
Lead-Lag Optimize?			Yes			Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	Min	None	None	Min	None	None	None	None

Intersection Summary
Cycle Length: 154.2
Actuated Cycle Length: 92.3
Natural Cycle: 75
Control Type: Actuated-Uncoordinated

Splits and Phases: 53: Regents Road & Health Science Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	65	4	466	8	0	4	273	127	16	4	7	826
Future Volume (vph)	65	4	466	8	0	4	273	127	16	4	7	826
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9	4.4		4.9		4.4	4.9			4.4	4.9
Lane Util. Factor		1.00	1.00		1.00		1.00	0.95			1.00	0.95
Frt		1.00	0.85		0.95		1.00	0.98			1.00	1.00
Flt Protected		0.96	1.00		0.97		0.95	1.00			0.95	1.00
Satd. Flow (prot)		1779	1583		1722		1770	3480			1770	3523
Flt Permitted		0.73	1.00		0.79		0.95	1.00			1.00	1.00
Satd. Flow (perm)		1355	1583		1404		1770	3480			1863	3523
Peak-hour factor, PHF	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.92	0.82	0.82
Adj. Flow (vph)	81	5	582	10	0	5	341	159	20	4	9	1007
RTOR Reduction (vph)	0	0	19	0	13	0	0	3	0	0	0	1
Lane Group Flow (vph)	0	86	564	0	2	0	341	176	0	0	13	1038
Turn Type	Perm	NA	pm+ov	Perm	NA		Prot	NA		custom	Prot	NA
Protected Phases		4	5		8		5	2			1	6
Permitted Phases	4		4	8						1		
Actuated Green, G (s)		9.3	38.9		9.3		29.6	65.9			3.2	39.5
Effective Green, g (s)		9.3	38.9		9.3		29.6	65.9			3.2	39.5
Actuated g/C Ratio		0.10	0.42		0.10		0.32	0.71			0.03	0.43
Clearance Time (s)		4.9	4.4		4.9		4.4	4.9			4.4	4.9
Vehicle Extension (s)		2.0	2.0		2.0		2.0	3.8			2.0	3.8
Lane Grp Cap (vph)		136	664		141		565	2476			64	1502
v/s Ratio Prot			c0.27				0.19	0.05				c0.29
v/s Ratio Perm		0.06	0.09		0.00						0.01	
v/c Ratio		0.63	0.85		0.01		0.60	0.07			0.20	0.69
Uniform Delay, d1		40.0	24.2		37.5		26.6	4.1			43.5	21.6
Progression Factor		1.00	1.00		1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2		6.9	9.5		0.0		1.3	0.0			0.6	1.5
Delay (s)		46.9	33.7		37.5		27.8	4.1			44.0	23.1
Level of Service		D	C		D		C	A			D	C
Approach Delay (s)		35.4			37.5			19.6				23.3
Approach LOS		D			D			B				C

Intersection Summary				
HCM 2000 Control Delay	26.2	HCM 2000 Level of Service	C	
HCM 2000 Volume to Capacity ratio	0.77			
Actuated Cycle Length (s)	92.6	Sum of lost time (s)	14.2	
Intersection Capacity Utilization	67.7%	ICU Level of Service	C	
Analysis Period (min)	15			

c Critical Lane Group

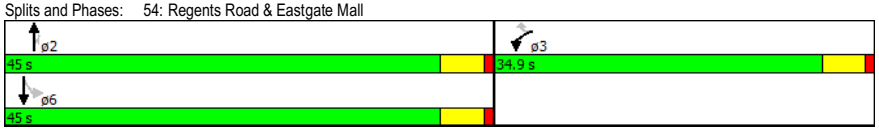
Movement	SBR
Lane Configurations	
Traffic Volume (vph)	26
Future Volume (vph)	26
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.82
Adj. Flow (vph)	32
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

Intersection Summary

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	453	92	327	152	227	1115
Future Volume (vph)	453	92	327	152	227	1115
Turn Type	Prot	Perm	NA	Perm	Perm	NA
Protected Phases	3		2			6
Permitted Phases		3		2	6	
Detector Phase	3	3	2	2	6	6
Switch Phase						
Minimum Initial (s)	4.0	4.0	7.0	7.0	7.0	7.0
Minimum Split (s)	8.9	8.9	12.0	12.0	12.0	12.0
Total Split (s)	34.9	34.9	45.0	45.0	45.0	45.0
Total Split (%)	43.7%	43.7%	56.3%	56.3%	56.3%	56.3%
Yellow Time (s)	3.9	3.9	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	5.0	5.0	5.0	5.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None	None	Min	Min	Min	Min

Intersection Summary
Cycle Length: 79.9
Actuated Cycle Length: 69.6
Natural Cycle: 60
Control Type: Actuated-Uncoordinated

Splits and Phases: 54: Regents Road & Eastgate Mall



Movement	WBL	WBR	NBT	NBR	SBU	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	453	92	327	152	4	227	1115
Future Volume (vph)	453	92	327	152	4	227	1115
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9	5.0	5.0		5.0	5.0
Lane Util. Factor	1.00	1.00	0.95	1.00		1.00	0.95
Frt	1.00	0.85	1.00	0.85		1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583		1770	3539
Flt Permitted	0.95	1.00	1.00	1.00		0.51	1.00
Satd. Flow (perm)	1770	1583	3539	1583		954	3539
Peak-hour factor, PHF	0.87	0.87	0.80	0.80	0.92	0.88	0.88
Adj. Flow (vph)	521	106	409	190	4	258	1267
RTOR Reduction (vph)	0	69	0	94	0	0	0
Lane Group Flow (vph)	521	37	409	96	0	262	1267
Turn Type	Prot	Perm	NA	Perm		Perm	NA
Protected Phases	3		2				6
Permitted Phases		3		2		6	
Actuated Green, G (s)	24.2	24.2	35.0	35.0		35.0	35.0
Effective Green, g (s)	24.2	24.2	35.0	35.0		35.0	35.0
Actuated g/C Ratio	0.35	0.35	0.51	0.51		0.51	0.51
Clearance Time (s)	4.9	4.9	5.0	5.0		5.0	5.0
Vehicle Extension (s)	2.0	2.0	3.4	3.4		3.5	3.5
Lane Grp Cap (vph)	619	554	1792	801		483	1792
v/s Ratio Prot	c0.29		0.12				c0.36
v/s Ratio Perm		0.02		0.06		0.27	
v/c Ratio	0.84	0.07	0.23	0.12		0.54	0.71
Uniform Delay, d1	20.7	14.9	9.5	9.0		11.6	13.1
Progression Factor	1.00	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	9.7	0.0	0.1	0.1		1.4	1.3
Delay (s)	30.4	15.0	9.6	9.0		13.0	14.5
Level of Service	C	B	A	A		B	B
Approach Delay (s)	27.8		9.4				14.2
Approach LOS	C		A				B

Intersection Summary			
HCM 2000 Control Delay	16.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	69.1	Sum of lost time (s)	9.9
Intersection Capacity Utilization	64.2%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBU	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	26	6	114	9	175	4	342	4	103	1321
Future Volume (vph)	26	6	114	9	175	4	342	4	103	1321
Turn Type	Perm	NA	Perm	NA	Perm	Prot	NA	custom	Prot	NA
Protected Phases		4		8		5	2		1	6
Permitted Phases	4		8		8			1		
Detector Phase	4	4	8	8	8	5	2	1	1	6
Switch Phase										
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	4.0	10.0	4.0	4.0	10.0
Minimum Split (s)	11.9	11.9	11.9	11.9	11.9	8.4	14.9	8.4	8.4	14.9
Total Split (s)	34.9	34.9	44.9	44.9	44.9	34.4	64.9	34.4	34.4	64.9
Total Split (%)	24.2%	24.2%	31.1%	31.1%	31.1%	23.9%	45.0%	23.9%	23.9%	45.0%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.9	3.4	3.9	3.4	3.4	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)		4.9		4.9	4.9	4.4	4.9		4.4	4.9
Lead/Lag						Lead	Lag	Lead	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	None	None	Min

Intersection Summary

Cycle Length: 144.2
Actuated Cycle Length: 78.6
Natural Cycle: 55
Control Type: Actuated-Uncoordinated

Splits and Phases: 55: Regents Road & Executive Drive

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	26	6	6	114	9	175	4	342	24	4	103	1321
Future Volume (vph)	26	6	6	114	9	175	4	342	24	4	103	1321
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9			4.9	4.9	4.4	4.9			4.4	4.9
Lane Util. Factor		1.00			1.00	1.00	1.00	0.95			1.00	0.95
Frt		0.98			1.00	0.85	1.00	0.99			1.00	1.00
Flt Protected		0.97			0.96	1.00	0.95	1.00			0.95	1.00
Satd. Flow (prot)		1762			1780	1583	1770	3504			1770	3522
Flt Permitted		0.76			0.71	1.00	0.95	1.00			0.13	1.00
Satd. Flow (perm)		1376			1315	1583	1770	3504			242	3522
Peak-hour factor, PHF	0.80	0.80	0.80	0.81	0.81	0.81	0.80	0.80	0.80	0.92	0.96	0.96
Adj. Flow (vph)	32	8	8	141	11	216	5	428	30	4	107	1376
RTOR Reduction (vph)	0	6	0	0	0	176	0	4	0	0	0	1
Lane Group Flow (vph)	0	43	0	0	152	40	5	454	0	0	111	1422
Turn Type	Perm	NA		Perm	NA	Perm	Prot	NA		custom	Prot	NA
Protected Phases		4			8		5	2			1	6
Permitted Phases	4			8		8				1		
Actuated Green, G (s)		15.2			15.2	15.2	0.8	21.8			30.8	51.8
Effective Green, g (s)		15.2			15.2	15.2	0.8	21.8			30.8	51.8
Actuated g/C Ratio		0.19			0.19	0.19	0.01	0.27			0.38	0.63
Clearance Time (s)		4.9			4.9	4.9	4.4	4.9			4.4	4.9
Vehicle Extension (s)		2.0			3.1	3.1	2.0	3.1			2.0	3.1
Lane Grp Cap (vph)		255			243	293	17	931			90	2224
v/s Ratio Prot							0.00	0.13				c0.40
v/s Ratio Perm		0.03			c0.12	0.03					c0.46	
v/c Ratio		0.17			0.63	0.14	0.29	0.49			1.23	0.64
Uniform Delay, d1		28.1			30.8	27.9	40.3	25.4			25.6	9.3
Progression Factor		1.00			1.00	1.00	1.00	1.00			1.00	1.00
Incremental Delay, d2		0.1			5.0	0.2	3.5	0.4			170.2	0.6
Delay (s)		28.2			35.8	28.1	43.8	25.8			195.8	9.9
Level of Service		C			D	C	D	C			F	A
Approach Delay (s)		28.2			31.3			26.0				23.4
Approach LOS		C			C			C				C

Intersection Summary

HCM 2000 Control Delay	25.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.92		
Actuated Cycle Length (s)	82.0	Sum of lost time (s)	14.2
Intersection Capacity Utilization	61.9%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

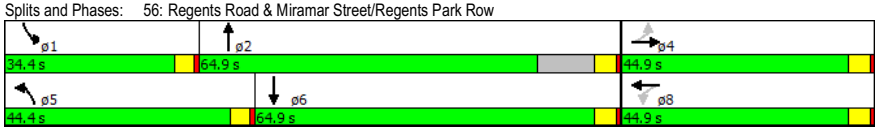
Movement	SBR
Lane Configurations	
Traffic Volume (vph)	45
Future Volume (vph)	45
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.96
Adj. Flow (vph)	47
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

Intersection Summary

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	30	9	128	8	174	368	38	1308
Future Volume (vph)	30	9	128	8	174	368	38	1308
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	7.0	4.0	7.0
Minimum Split (s)	8.9	8.9	8.9	8.9	8.4	11.9	8.4	11.9
Total Split (s)	44.9	44.9	44.9	44.9	44.4	64.9	34.4	64.9
Total Split (%)	29.1%	29.1%	29.1%	29.1%	28.8%	42.1%	22.3%	42.1%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.4	3.9	3.4	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	4.9	4.9	4.4	4.9	4.4	4.9
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 154.2
Actuated Cycle Length: 134.3
Natural Cycle: 90
Control Type: Actuated-Uncoordinated

Splits and Phases: 56: Regents Road & Miramar Street/Regents Park Row



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	30	9	249	128	8	49	174	368	71	4	38	1308
Future Volume (vph)	30	9	249	128	8	49	174	368	71	4	38	1308
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9		4.9	4.9		4.4	4.9			4.4	4.9
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95			1.00	0.95
Frt	1.00	0.86		1.00	0.87		1.00	0.98			1.00	0.99
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			0.95	1.00
Satd. Flow (prot)	1770	1593		1770	1623		1770	3453			1770	3519
Flt Permitted	0.71	1.00		0.38	1.00		0.95	1.00			0.13	1.00
Satd. Flow (perm)	1324	1593		712	1623		1770	3453			248	3519
Peak-hour factor, PHF	0.87	0.87	0.87	0.80	0.80	0.80	0.84	0.84	0.84	0.92	0.89	0.89
Adj. Flow (vph)	34	10	286	160	10	61	207	438	85	4	43	1470
RTOR Reduction (vph)	0	201	0	0	43	0	0	12	0	0	0	2
Lane Group Flow (vph)	34	95	0	160	28	0	207	511	0	0	47	1525
Turn Type	Perm	NA		Perm	NA		Prot	NA			Prot	NA
Protected Phases		4			8		5	2			1	6
Permitted Phases	4			8								
Actuated Green, G (s)	40.1	40.1		40.1	40.1		19.9	50.0			30.0	60.1
Effective Green, g (s)	40.1	40.1		40.1	40.1		19.9	50.0			30.0	60.1
Actuated g/C Ratio	0.30	0.30		0.30	0.30		0.15	0.37			0.22	0.45
Clearance Time (s)	4.9	4.9		4.9	4.9		4.4	4.9			4.4	4.9
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	3.8			2.0	3.8
Lane Grp Cap (vph)	395	475		212	484		262	1285			55	1574
v/s Ratio Prot		0.06			0.02		0.12	0.15				c0.43
v/s Ratio Perm	0.03			c0.22							c0.19	
v/c Ratio	0.09	0.20		0.75	0.06		0.79	0.40			0.85	0.97
Uniform Delay, d1	33.9	35.1		42.6	33.6		55.2	31.1			50.1	36.2
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2	0.0	0.1		12.7	0.0		14.0	0.3			68.6	15.8
Delay (s)	33.9	35.2		55.3	33.6		69.2	31.3			118.6	52.0
Level of Service	C	D		E	C		E	C			F	D
Approach Delay (s)		35.1			48.6			42.0				54.0
Approach LOS		D			D			D				D

Intersection Summary				
HCM 2000 Control Delay	48.4	HCM 2000 Level of Service	D	
HCM 2000 Volume to Capacity ratio	0.89			
Actuated Cycle Length (s)	134.3	Sum of lost time (s)	14.2	
Intersection Capacity Utilization	86.3%	ICU Level of Service	E	
Analysis Period (min)	15			

c Critical Lane Group

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	51
Future Volume (vph)	51
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.89
Adj. Flow (vph)	57
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

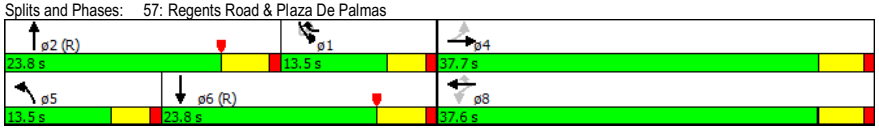
Intersection Summary

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBU	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	27	15	42	16	73	33	322	4	96	1291
Future Volume (vph)	27	15	42	16	73	33	322	4	96	1291
Turn Type	Perm	NA	Perm	NA	pm+ov	Prot	NA	custom	Prot	NA
Protected Phases		4		8	1!	5	2		1	6
Permitted Phases	4		8		8			1!		
Detector Phase	4	4	8	8	1	5	2	1	1	6
Switch Phase										
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	10.0	4.0	4.0	10.0
Minimum Split (s)	8.9	8.9	8.9	8.9	8.4	8.4	15.2	8.4	8.4	15.3
Total Split (s)	37.7	37.7	37.6	37.6	13.5	13.5	23.8	13.5	13.5	23.8
Total Split (%)	50.3%	50.3%	50.1%	50.1%	18.0%	18.0%	31.7%	18.0%	18.0%	31.7%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.4	3.4	4.2	3.4	3.4	4.3
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)		4.9		4.9	4.4	4.4	5.2		4.4	5.3
Lead/Lag					Lag	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	None	None	C-Max

Intersection Summary

Cycle Length: 75
Actuated Cycle Length: 75
Offset: 64 (85%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 60
Control Type: Actuated-Coordinated
! Phase conflict between lane groups.

Splits and Phases: 57: Regents Road & Plaza De Palmas



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	27	15	10	42	16	73	33	322	11	4	96	1291
Future Volume (vph)	27	15	10	42	16	73	33	322	11	4	96	1291
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9			4.9	4.4	4.4	5.2			4.4	5.3
Lane Util. Factor		1.00			1.00	1.00	1.00	0.91			1.00	0.95
Frt		0.97			1.00	0.85	1.00	0.99			1.00	0.99
Flt Protected		0.97			0.96	1.00	0.95	1.00			0.95	1.00
Satd. Flow (prot)		1769			1797	1583	1770	5060			1770	3510
Flt Permitted		0.84			0.77	1.00	0.95	1.00			0.50	1.00
Satd. Flow (perm)		1520			1433	1583	1770	5060			930	3510
Peak-hour factor, PHF	0.82	0.82	0.82	0.80	0.80	0.80	0.80	0.80	0.80	0.92	0.93	0.93
Adj. Flow (vph)	33	18	12	52	20	91	41	402	14	4	103	1388
RTOR Reduction (vph)	0	9	0	0	0	58	0	3	0	0	0	3
Lane Group Flow (vph)	0	54	0	0	73	33	41	414	0	0	107	1466
Turn Type	Perm	NA		Perm	NA	pm+ov	Prot	NA		custom	Prot	NA
Protected Phases		4			8	1!	5	2			1	6
Permitted Phases	4			8		8				1!		
Actuated Green, G (s)		16.0			16.0	26.9	4.3	33.6			10.9	40.1
Effective Green, g (s)		16.0			16.0	26.9	4.3	33.6			10.9	40.1
Actuated g/C Ratio		0.21			0.21	0.36	0.06	0.45			0.15	0.53
Clearance Time (s)		4.9			4.9	4.4	4.4	5.2			4.4	5.3
Vehicle Extension (s)		2.0			2.0	2.0	2.0	4.5			2.0	4.2
Lane Grp Cap (vph)		324			305	660	101	2266			135	1876
v/s Ratio Prot						0.01	c0.02	0.08				c0.42
v/s Ratio Perm		0.04			c0.05	0.01					0.12	
v/c Ratio		0.17			0.24	0.05	0.41	0.18			0.79	0.78
Uniform Delay, d1		24.1			24.5	15.7	34.1	12.4			31.0	13.9
Progression Factor		1.00			1.00	1.00	0.92	0.69			1.00	0.95
Incremental Delay, d2		0.1			0.1	0.0	0.8	0.1			10.2	1.2
Delay (s)		24.1			24.6	15.7	32.1	8.7			41.1	14.4
Level of Service		C			C	B	C	A			D	B
Approach Delay (s)		24.1			19.7			10.8				16.3
Approach LOS		C			B			B				B

Intersection Summary

HCM 2000 Control Delay	15.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	14.6
Intersection Capacity Utilization	63.1%	ICU Level of Service	B
Analysis Period (min)	15		

! Phase conflict between lane groups.
c Critical Lane Group

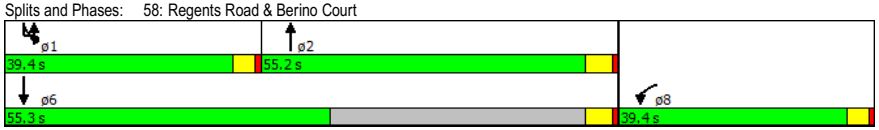
Movement	SBR
Lane Configurations	
Traffic Volume (vph)	75
Future Volume (vph)	75
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.93
Adj. Flow (vph)	81
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

Intersection Summary

Lane Group	WBL	NBT	SBL	SBT
Lane Configurations				
Traffic Volume (vph)	42	194	84	577
Future Volume (vph)	42	194	84	577
Turn Type	Prot	NA	Prot	NA
Protected Phases	8	2	1	6
Permitted Phases				
Detector Phase	8	2	1	6
Switch Phase				
Minimum Initial (s)	4.0	7.0	4.0	7.0
Minimum Split (s)	8.4	12.2	8.4	12.3
Total Split (s)	39.4	55.2	39.4	55.3
Total Split (%)	29.4%	41.2%	29.4%	41.3%
Yellow Time (s)	3.4	4.2	3.4	4.3
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.2	4.4	5.3
Lead/Lag		Lag	Lead	
Lead-Lag Optimize?		Yes	Yes	
Recall Mode	None	None	None	None

Intersection Summary
Cycle Length: 134
Actuated Cycle Length: 55.7
Natural Cycle: 40
Control Type: Actuated-Uncoordinated

Splits and Phases: 58: Regents Road & Berino Court



Movement	WBL	WBR	NBT	NBR	SBU	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	42	24	194	37	105	84	577
Future Volume (vph)	42	24	194	37	105	84	577
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4		5.2			4.4	5.3
Lane Util. Factor	1.00		0.95			1.00	0.95
Frt	0.95		0.98			1.00	1.00
Flt Protected	0.97		1.00			0.95	1.00
Satd. Flow (prot)	1717		3454			1770	3539
Flt Permitted	0.97		1.00			0.95	1.00
Satd. Flow (perm)	1717		3454			1770	3539
Peak-hour factor, PHF	0.80	0.80	0.84	0.84	0.92	0.93	0.93
Adj. Flow (vph)	52	30	231	44	114	90	620
RTOR Reduction (vph)	15	0	14	0	0	0	0
Lane Group Flow (vph)	68	0	261	0	0	204	620
Turn Type	Prot		NA		Prot	Prot	NA
Protected Phases	8		2		1	1	6
Permitted Phases							
Actuated Green, G (s)	15.1		13.9			12.7	30.9
Effective Green, g (s)	15.1		13.9			12.7	30.9
Actuated g/C Ratio	0.27		0.25			0.23	0.55
Clearance Time (s)	4.4		5.2			4.4	5.3
Vehicle Extension (s)	2.0		3.9			2.0	3.7
Lane Grp Cap (vph)	465		861			403	1963
v/s Ratio Prot	c0.04		0.08			c0.12	c0.18
v/s Ratio Perm							
v/c Ratio	0.15		0.30			0.51	0.32
Uniform Delay, d1	15.4		17.0			18.8	6.7
Progression Factor	1.00		1.00			1.00	1.00
Incremental Delay, d2	0.1		0.3			0.4	0.1
Delay (s)	15.5		17.2			19.1	6.8
Level of Service	B		B			B	A
Approach Delay (s)	15.5		17.2				9.9
Approach LOS	B		B				A

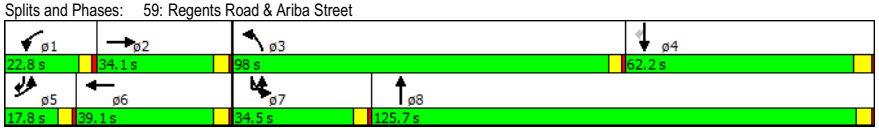
Intersection Summary			
HCM 2000 Control Delay	12.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.33		
Actuated Cycle Length (s)	55.7	Sum of lost time (s)	14.0
Intersection Capacity Utilization	32.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	64	180	19	159	26	20	166	50	339
Future Volume (vph)	64	180	19	159	26	20	166	50	339
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA	pm+ov
Protected Phases	5	2	1	6	3	8	7	4	5
Permitted Phases									4
Detector Phase	5	2	1	6	3	8	7	4	5
Switch Phase									
Minimum Initial (s)	4.0	7.0	4.0	7.0	4.0	7.0	4.0	7.0	4.0
Minimum Split (s)	8.4	32.9	8.4	36.9	8.4	28.9	8.4	37.6	8.4
Total Split (s)	17.8	34.1	22.8	39.1	98.0	125.7	34.5	62.2	17.8
Total Split (%)	8.2%	15.7%	10.5%	18.0%	45.1%	57.9%	15.9%	28.7%	8.2%
Yellow Time (s)	3.4	3.9	3.4	3.9	3.4	3.9	3.4	4.6	3.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	4.9	4.4	4.9	4.4	4.9	4.4	5.6	4.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 217.1
Actuated Cycle Length: 96.1
Natural Cycle: 95
Control Type: Actuated-Uncoordinated

Splits and Phases: 59: Regents Road & Ariba Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	64	180	30	19	159	31	26	20	33	86	166	50
Future Volume (vph)	64	180	30	19	159	31	26	20	33	86	166	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	4.9		4.4	4.9			4.4	5.6
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95			1.00	0.95
Frt	1.00	0.98		1.00	0.98		1.00	0.91			1.00	1.00
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			0.95	1.00
Satd. Flow (prot)	1770	3464		1770	3452		1770	3210			1770	3539
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00			0.95	1.00
Satd. Flow (perm)	1770	3464		1770	3452		1770	3210			1770	3539
Peak-hour factor, PHF	0.90	0.90	0.90	0.84	0.84	0.84	0.91	0.91	0.91	0.92	0.91	0.91
Adj. Flow (vph)	71	200	33	23	189	37	29	22	36	93	182	55
RTOR Reduction (vph)	0	4	0	0	6	0	0	32	0	0	0	0
Lane Group Flow (vph)	71	229	0	23	220	0	29	26	0	0	275	55
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	Prot	NA
Protected Phases	5	2		1	6		3	8		7	7	4
Permitted Phases												
Actuated Green, G (s)	8.8	36.5		2.4	30.1		3.8	11.9			30.4	37.8
Effective Green, g (s)	8.8	36.5		2.4	30.1		3.8	11.9			30.4	37.8
Actuated g/C Ratio	0.09	0.37		0.02	0.30		0.04	0.12			0.30	0.38
Clearance Time (s)	4.4	4.9		4.4	4.9		4.4	4.9			4.4	5.6
Vehicle Extension (s)	2.0	6.3		2.0	5.9		2.0	4.8			2.0	4.4
Lane Grp Cap (vph)	156	1266		42	1041		67	382			539	1340
v/s Ratio Prot	c0.04	0.07		0.01	c0.06		0.02	0.01			c0.16	0.02
v/s Ratio Perm												
v/c Ratio	0.46	0.18		0.55	0.21		0.43	0.07			0.51	0.04
Uniform Delay, d1	43.2	21.5		48.2	26.0		46.9	39.0			28.6	19.6
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2	0.8	0.2		7.6	0.3		1.6	0.1			0.3	0.0
Delay (s)	44.0	21.7		55.8	26.3		48.6	39.2			28.9	19.6
Level of Service	D	C		E	C		D	D			C	B
Approach Delay (s)		26.9			29.0			42.3				21.3
Approach LOS		C			C			D				C

Intersection Summary			
HCM 2000 Control Delay	25.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.36		
Actuated Cycle Length (s)	99.8	Sum of lost time (s)	19.3
Intersection Capacity Utilization	42.4%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	339
Future Volume (vph)	339
Ideal Flow (vphpl)	1900
Total Lost time (s)	4.4
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1583
Flt Permitted	1.00
Satd. Flow (perm)	1583
Peak-hour factor, PHF	0.91
Adj. Flow (vph)	373
RTOR Reduction (vph)	199
Lane Group Flow (vph)	174
Turn Type	pm+ov
Protected Phases	5
Permitted Phases	4
Actuated Green, G (s)	46.6
Effective Green, g (s)	46.6
Actuated g/C Ratio	0.47
Clearance Time (s)	4.4
Vehicle Extension (s)	2.0
Lane Grp Cap (vph)	739
v/s Ratio Prot	c0.02
v/s Ratio Perm	0.09
v/c Ratio	0.24
Uniform Delay, d1	15.9
Progression Factor	1.00
Incremental Delay, d2	0.1
Delay (s)	16.0
Level of Service	B
Approach Delay (s)	
Approach LOS	

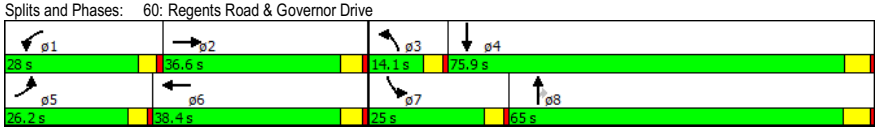
Intersection Summary

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	12	169	469	257	41	77	432	26	31
Future Volume (vph)	12	169	469	257	41	77	432	26	31
Turn Type	Prot	NA	Prot	NA	Prot	NA	Perm	Prot	NA
Protected Phases	5	2	1	6	3	8		7	4
Permitted Phases							8		
Detector Phase	5	2	1	6	3	8	8	7	4
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	7.0	5.0	7.0	7.0	5.0	4.0
Minimum Split (s)	8.4	32.9	8.4	33.9	9.5	34.8	34.8	9.5	35.5
Total Split (s)	26.2	36.6	28.0	38.4	14.1	65.0	65.0	25.0	75.9
Total Split (%)	16.9%	23.7%	18.1%	24.8%	9.1%	42.0%	42.0%	16.2%	49.1%
Yellow Time (s)	3.4	3.9	3.4	3.9	3.5	4.8	4.8	3.5	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	4.9	4.4	4.9	4.5	5.8	5.8	4.5	5.5
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Min	None	Min	None	None	None	None	None

Intersection Summary

Cycle Length: 154.6
Actuated Cycle Length: 73.9
Natural Cycle: 110
Control Type: Actuated-Uncoordinated

Splits and Phases: 60: Regents Road & Governor Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	12	169	27	469	257	17	41	77	432	26	31	3
Future Volume (vph)	12	169	27	469	257	17	41	77	432	26	31	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	4.9		4.5	5.8	5.8	4.5	5.5	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00	1.00	1.00	0.95	
Frt	1.00	0.98		1.00	0.99		1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3466		1770	3506		1770	1863	1583	1770	3496	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	3466		1770	3506		1770	1863	1583	1770	3496	
Peak-hour factor, PHF	0.80	0.80	0.80	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	15	211	34	521	286	19	46	86	480	29	34	3
RTOR Reduction (vph)	0	8	0	0	2	0	0	0	391	0	3	0
Lane Group Flow (vph)	15	237	0	521	303	0	46	86	89	29	34	0
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases									8			
Actuated Green, G (s)	0.9	17.8		25.1	42.0		4.5	14.9	14.9	2.6	13.3	
Effective Green, g (s)	0.9	17.8		25.1	42.0		4.5	14.9	14.9	2.6	13.3	
Actuated g/C Ratio	0.01	0.22		0.31	0.52		0.06	0.19	0.19	0.03	0.17	
Clearance Time (s)	4.4	4.9		4.4	4.9		4.5	5.8	5.8	4.5	5.5	
Vehicle Extension (s)	2.0	4.5		2.0	5.0		3.0	4.6	4.6	3.0	2.0	
Lane Grp Cap (vph)	19	771		555	1840		99	346	294	57	581	
v/s Ratio Prot	0.01	c0.07		c0.29	0.09		c0.03	0.05		0.02	0.01	
v/s Ratio Perm									c0.06			
v/c Ratio	0.79	0.31		0.94	0.16		0.46	0.25	0.30	0.51	0.06	
Uniform Delay, d1	39.5	26.0		26.7	9.9		36.6	27.8	28.1	38.1	28.1	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	102.4	0.4		23.5	0.1		3.4	0.7	1.1	7.0	0.0	
Delay (s)	141.9	26.4		50.2	10.0		40.0	28.5	29.1	45.0	28.1	
Level of Service	F	C		D	A		D	C	C	D	C	
Approach Delay (s)		33.0			35.3			29.9			35.5	
Approach LOS		C			D			C			D	

Intersection Summary

HCM 2000 Control Delay	33.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	19.6
Intersection Capacity Utilization	53.0%	ICU Level of Service	A
Analysis Period (min)	15		

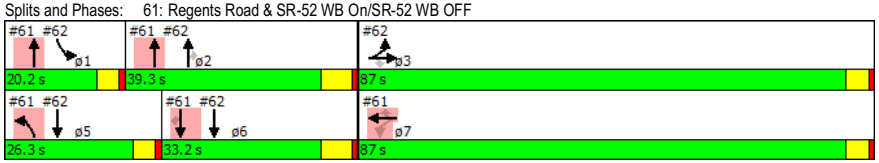
c Critical Lane Group

Lane Group	WBT	WBR	NBL	NBT	SBT	SBR	ø1	ø2	ø3
Lane Configurations									
Traffic Volume (vph)	1	228	338	526	457	297			
Future Volume (vph)	1	228	338	526	457	297			
Turn Type	NA	Perm	Prot	NA	NA	Perm			
Protected Phases	7		5	1 2	6		1	2	3
Permitted Phases		7				6			
Detector Phase	7	7	5	1 2	6	6			
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0		13.0	13.0	5.0	13.0	5.0
Minimum Split (s)	10.1	10.1	9.7		19.2	19.2	9.7	19.2	10.1
Total Split (s)	87.0	87.0	26.3		33.2	33.2	20.2	39.3	87.0
Total Split (%)	59.4%	59.4%	18.0%		22.7%	22.7%	14%	27%	59%
Yellow Time (s)	4.1	4.1	3.7		5.2	5.2	3.7	5.2	4.1
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0			
Total Lost Time (s)	5.1	5.1	4.7		6.2	6.2			
Lead/Lag			Lead		Lag	Lag	Lead	Lag	
Lead-Lag Optimize?			Yes		Yes	Yes	Yes	Yes	
Recall Mode	None	None	None		Max	Max	None	Max	None

Intersection Summary

Cycle Length: 146.5
Actuated Cycle Length: 139
Natural Cycle: 75
Control Type: Actuated-Uncoordinated

Splits and Phases: 61: Regents Road & SR-52 WB On/SR-52 WB OFF



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	571	1	228	338	526	0	0	457	297
Future Volume (vph)	0	0	0	571	1	228	338	526	0	0	457	297
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					5.1	5.1	4.7	4.7			6.2	6.2
Lane Util. Factor					1.00	1.00	0.97	0.95			0.95	1.00
Frt					1.00	0.85	1.00	1.00			1.00	0.85
Flt Protected					0.95	1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)					1774	1583	3433	3539			3539	1583
Flt Permitted					0.95	1.00	0.95	1.00			1.00	1.00
Satd. Flow (perm)					1774	1583	3433	3539			3539	1583
Peak-hour factor, PHF	0.25	0.25	0.25	0.92	0.92	0.92	0.88	0.88	0.88	0.86	0.86	0.86
Adj. Flow (vph)	0	0	0	621	1	248	384	598	0	0	531	345
RTOR Reduction (vph)	0	0	0	0	0	62	0	0	0	0	0	277
Lane Group Flow (vph)	0	0	0	0	622	186	384	598	0	0	531	68
Turn Type				Perm	NA	Perm	Prot	NA			NA	Perm
Protected Phases					7		5	1 2			6	
Permitted Phases				7		7						6
Actuated Green, G (s)					74.0	74.0	21.7	53.6			27.2	27.2
Effective Green, g (s)					74.0	74.0	21.7	53.6			27.2	27.2
Actuated g/C Ratio					0.53	0.53	0.16	0.39			0.20	0.20
Clearance Time (s)					5.1	5.1	4.7				6.2	6.2
Vehicle Extension (s)					2.0	2.0	2.0				2.0	2.0
Lane Grp Cap (vph)					945	843	536	1365			693	309
v/s Ratio Prot							c0.11	0.17			c0.15	
v/s Ratio Perm					0.35	0.12						0.04
v/c Ratio					0.66	0.22	0.72	0.44			0.77	0.22
Uniform Delay, d1					23.3	17.2	55.7	31.5			52.8	46.9
Progression Factor					1.00	1.00	1.51	0.90			1.00	1.00
Incremental Delay, d2					1.3	0.0	3.3	0.1			7.9	1.6
Delay (s)					24.6	17.2	87.4	28.3			60.8	48.5
Level of Service					C	B	F	C			E	D
Approach Delay (s)		0.0			22.5			51.4			55.9	
Approach LOS		A			C			D			E	

Intersection Summary

HCM 2000 Control Delay	43.7	HCM 2000 Level of Service	D	
HCM 2000 Volume to Capacity ratio	0.69			
Actuated Cycle Length (s)	138.9	Sum of lost time (s)	16.0	
Intersection Capacity Utilization	82.2%	ICU Level of Service	E	
Analysis Period (min)	15			

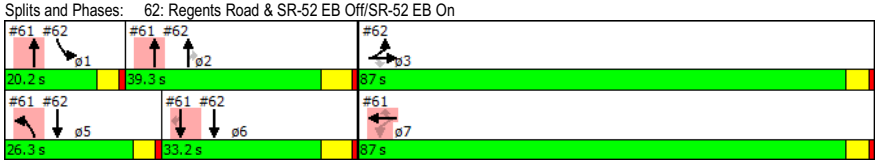
c Critical Lane Group

Lane Group	EBL	EBT	EBR	NBT	NBR	SBL	SBT	ø5	ø6	ø7
Lane Configurations										
Traffic Volume (vph)	338	7	760	555	237	124	976			
Future Volume (vph)	338	7	760	555	237	124	976			
Turn Type	Split	NA	Perm	NA	Perm	Prot	NA			
Protected Phases	3	3		2		1	5 6	5	6	7
Permitted Phases			3		2					
Detector Phase	3	3	3	2	2	1	5 6			
Switch Phase										
Minimum Initial (s)	5.0	5.0	5.0	13.0	13.0	5.0		5.0	13.0	5.0
Minimum Split (s)	10.1	10.1	10.1	19.2	19.2	9.7		9.7	19.2	10.1
Total Split (s)	87.0	87.0	87.0	39.3	39.3	20.2		26.3	33.2	87.0
Total Split (%)	59.4%	59.4%	59.4%	26.8%	26.8%	13.8%		18%	23%	59%
Yellow Time (s)	4.1	4.1	4.1	5.2	5.2	3.7		3.7	5.2	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0				
Total Lost Time (s)	5.1	5.1	5.1	6.2	6.2	4.7				
Lead/Lag				Lag	Lag	Lead		Lead	Lag	
Lead-Lag Optimize?				Yes	Yes	Yes		Yes	Yes	
Recall Mode	None	None	None	Max	Max	None		None	Max	None

Intersection Summary

Cycle Length: 146.5
Actuated Cycle Length: 139
Natural Cycle: 75
Control Type: Actuated-Uncoordinated

Splits and Phases: 62: Regents Road & SR-52 EB Off/SR-52 EB On



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	338	7	760	0	0	0	0	555	237	124	976	0
Future Volume (vph)	338	7	760	0	0	0	0	555	237	124	976	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1	5.1					6.2	6.2	4.7	4.7	
Lane Util. Factor	0.95	0.95	1.00					0.95	1.00	1.00	0.95	
Frt	1.00	1.00	0.85					1.00	0.85	1.00	1.00	
Flt Protected	0.95	0.95	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1681	1689	1583					3539	1583	1770	3539	
Flt Permitted	0.95	0.95	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1681	1689	1583					3539	1583	1770	3539	
Peak-hour factor, PHF	0.89	0.89	0.89	0.25	0.25	0.25	0.88	0.88	0.88	0.91	0.91	0.91
Adj. Flow (vph)	380	8	854	0	0	0	0	631	269	136	1073	0
RTOR Reduction (vph)	0	0	44	0	0	0	0	0	58	0	0	0
Lane Group Flow (vph)	194	194	810	0	0	0	0	631	211	136	1073	0
Turn Type	Split	NA	Perm					NA	Perm	Prot	NA	
Protected Phases	3	3						2		1	5 6	
Permitted Phases			3						2			
Actuated Green, G (s)	74.0	74.0	74.0					33.7	33.7	15.2	53.6	
Effective Green, g (s)	74.0	74.0	74.0					33.7	33.7	15.2	53.6	
Actuated g/C Ratio	0.53	0.53	0.53					0.24	0.24	0.11	0.39	
Clearance Time (s)	5.1	5.1	5.1					6.2	6.2	4.7		
Vehicle Extension (s)	2.0	2.0	2.0					2.0	2.0	2.0		
Lane Grp Cap (vph)	895	899	843					858	384	193	1365	
v/s Ratio Prot	0.12	0.11						0.18		0.08	c0.30	
v/s Ratio Perm			c0.51						0.13			
v/c Ratio	0.22	0.22	0.96					0.74	0.55	0.70	0.79	
Uniform Delay, d1	17.1	17.1	31.1					48.5	46.0	59.7	37.6	
Progression Factor	1.00	1.00	1.00					1.00	1.00	1.16	1.03	
Incremental Delay, d2	0.0	0.0	21.8					5.6	5.5	7.1	2.2	
Delay (s)	17.2	17.2	52.8					54.1	51.5	76.2	40.8	
Level of Service	B	B	D					D	D	E	D	
Approach Delay (s)		41.7			0.0			53.3			44.8	
Approach LOS		D			A			D			D	

Intersection Summary

HCM 2000 Control Delay	45.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.92		
Actuated Cycle Length (s)	138.9	Sum of lost time (s)	16.0
Intersection Capacity Utilization	82.2%	ICU Level of Service	E
Analysis Period (min)	15		

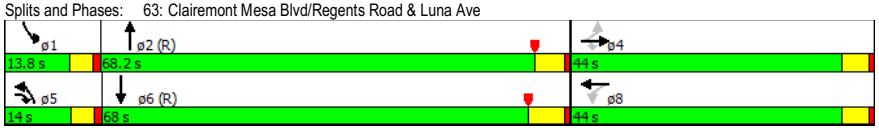
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	428	12	144	6	13	137	370	50	1085
Future Volume (vph)	428	12	144	6	13	137	370	50	1085
Turn Type	Perm	NA	pm+ov	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4	5		8	5	2	1	6
Permitted Phases	4		4	8					
Detector Phase	4	4	5	8	8	5	2	1	6
Switch Phase									
Minimum Initial (s)	10.0	10.0	4.0	1.0	1.0	4.0	10.0	4.0	4.0
Minimum Split (s)	36.9	36.9	8.4	33.9	33.9	8.4	22.3	8.4	23.2
Total Split (s)	44.0	44.0	14.0	44.0	44.0	14.0	68.2	13.8	68.0
Total Split (%)	34.9%	34.9%	11.1%	34.9%	34.9%	11.1%	54.1%	11.0%	54.0%
Yellow Time (s)	3.9	3.9	3.4	3.9	3.9	3.4	4.3	3.4	5.2
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.9	4.4		4.9	4.4	5.3	4.4	6.2
Lead/Lag			Lead			Lead	Lag	Lead	Lag
Lead-Lag Optimize?			Yes			Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	None	C-Max

Intersection Summary

Cycle Length: 126
Actuated Cycle Length: 126
Offset: 24 (19%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 140
Control Type: Actuated-Coordinated

Splits and Phases: 63: Clairemont Mesa Blvd/Regents Road & Luna Ave



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	428	12	144	6	13	23	137	370	5	50	1085	534
Future Volume (vph)	428	12	144	6	13	23	137	370	5	50	1085	534
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9	4.4		4.9		4.4	5.3		4.4	6.2	
Lane Util. Factor		1.00	1.00		1.00		1.00	0.95		1.00	0.95	
Frt		1.00	0.85		0.93		1.00	1.00		1.00	0.95	
Flt Protected		0.95	1.00		0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1776	1583		1713		1770	3532		1770	3364	
Flt Permitted		0.73	1.00		0.87		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1362	1583		1502		1770	3532		1770	3364	
Peak-hour factor, PHF	0.94	0.94	0.94	0.81	0.81	0.81	0.87	0.87	0.87	0.94	0.94	0.94
Adj. Flow (vph)	455	13	153	7	16	28	157	425	6	53	1154	568
RTOR Reduction (vph)	0	0	28	0	19	0	0	1	0	0	48	0
Lane Group Flow (vph)	0	468	125	0	32	0	157	430	0	53	1674	0
Turn Type	Perm	NA	pm+ov	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4	5		8		5	2		1	6	
Permitted Phases	4		4	8								
Actuated Green, G (s)		39.1	48.7		39.1		9.6	65.5		6.8	61.8	
Effective Green, g (s)		39.1	48.7		39.1		9.6	65.5		6.8	61.8	
Actuated g/C Ratio		0.31	0.39		0.31		0.08	0.52		0.05	0.49	
Clearance Time (s)		4.9	4.4		4.9		4.4	5.3		4.4	6.2	
Vehicle Extension (s)		4.0	2.0		2.0		2.0	4.4		2.0	3.2	
Lane Grp Cap (vph)		422	611		466		134	1836		95	1649	
v/s Ratio Prot			0.02				c0.09	c0.12		0.03	c0.50	
v/s Ratio Perm		c0.34	0.06		0.02							
v/c Ratio		1.11	0.20		0.07		1.17	0.23		0.56	1.02	
Uniform Delay, d1		43.5	25.7		30.6		58.2	16.5		58.1	32.1	
Progression Factor		1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		76.8	0.1		0.0		131.2	0.3		4.0	26.0	
Delay (s)		120.2	25.8		30.6		189.4	16.8		62.1	58.1	
Level of Service		F	C		C		F	B		E	E	
Approach Delay (s)		97.0			30.6			62.9			58.2	
Approach LOS		F			C			E			E	

Intersection Summary

HCM 2000 Control Delay	66.6	HCM 2000 Level of Service	E	
HCM 2000 Volume to Capacity ratio	1.05			
Actuated Cycle Length (s)	126.0	Sum of lost time (s)	15.5	
Intersection Capacity Utilization	98.6%	ICU Level of Service	F	
Analysis Period (min)	15			

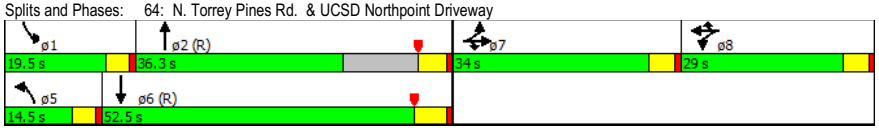
c Critical Lane Group

Lane Group	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	29	82	138	13	147	19	537	124	1543
Future Volume (vph)	29	82	138	13	147	19	537	124	1543
Turn Type	NA	Prot	Split	NA	Prot	Prot	NA	Prot	NA
Protected Phases	7	7	8	8	8	5	2	1	6
Permitted Phases									
Detector Phase	7	7	8	8	8	5	2	1	6
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	10.0	4.0	10.0
Minimum Split (s)	8.9	8.9	8.9	8.9	8.9	8.4	15.3	8.4	15.9
Total Split (s)	34.0	34.0	29.0	29.0	29.0	14.5	36.3	19.5	52.5
Total Split (%)	26.2%	26.2%	22.3%	22.3%	22.3%	11.2%	27.9%	15.0%	40.4%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.9	3.4	4.3	3.4	4.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	4.9	4.9	4.9	4.4	5.3	4.4	5.9
Lead/Lag	Lead	Lead	Lag	Lag	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	None	C-Max

Intersection Summary

Cycle Length: 130
Actuated Cycle Length: 130
Offset: 72 (55%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 64: N. Torrey Pines Rd. & UCSD Northpoint Driveway



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	56	29	82	138	13	147	19	537	85	124	1543	9
Future Volume (vph)	56	29	82	138	13	147	19	537	85	124	1543	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9	4.9	4.9	4.9	4.9	4.4	5.3		4.4	5.9	
Lane Util. Factor		1.00	1.00	1.00	1.00	1.00	1.00	0.95		0.97	0.95	
Frt		1.00	0.85	1.00	1.00	0.85	1.00	0.98		1.00	1.00	
Flt Protected		0.97	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1803	1583	1770	1863	1583	1770	3467		3433	3536	
Flt Permitted		0.97	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1803	1583	1770	1863	1583	1770	3467		3433	3536	
Peak-hour factor, PHF	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.92	0.92	0.92
Adj. Flow (vph)	70	36	102	172	16	184	24	671	106	135	1677	10
RTOR Reduction (vph)	0	0	86	0	0	160	0	7	0	0	0	0
Lane Group Flow (vph)	0	106	17	173	16	24	24	770	0	135	1687	0
Turn Type	Split	NA	Prot	Split	NA	Prot	Prot	NA		Prot	NA	
Protected Phases	7	7	7	8	8	8	5	2		1	6	
Permitted Phases												
Actuated Green, G (s)		20.9	20.9	17.1	17.1	17.1	4.4	63.0		9.5	67.5	
Effective Green, g (s)		20.9	20.9	17.1	17.1	17.1	4.4	63.0		9.5	67.5	
Actuated g/C Ratio		0.16	0.16	0.13	0.13	0.13	0.03	0.48		0.07	0.52	
Clearance Time (s)		4.9	4.9	4.9	4.9	4.9	4.4	5.3		4.4	5.9	
Vehicle Extension (s)		2.0	2.0	2.0	2.0	2.0	2.0	4.8		2.0	4.7	
Lane Grp Cap (vph)		289	254	232	245	208	59	1680		250	1836	
v/s Ratio Prot		c0.06	0.01	c0.10	0.01	0.02	0.01	0.22		c0.04	c0.48	
v/s Ratio Perm												
v/c Ratio		0.37	0.07	0.75	0.07	0.12	0.41	0.46		0.54	0.92	
Uniform Delay, d1		48.6	46.3	54.4	49.4	49.8	61.5	22.2		58.1	28.7	
Progression Factor		1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.10	0.73	
Incremental Delay, d2		0.3	0.0	10.8	0.0	0.1	1.7	0.9		0.7	5.0	
Delay (s)		48.9	46.3	65.2	49.5	49.9	63.2	23.1		64.8	26.0	
Level of Service		D	D	E	D	D	E	C		E	C	
Approach Delay (s)		47.6			57.0			24.3			28.8	
Approach LOS		D			E			C			C	

Intersection Summary

HCM 2000 Control Delay	32.2	HCM 2000 Level of Service	C	
HCM 2000 Volume to Capacity ratio	0.78			
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	20.1	
Intersection Capacity Utilization	73.3%	ICU Level of Service	D	
Analysis Period (min)	15			

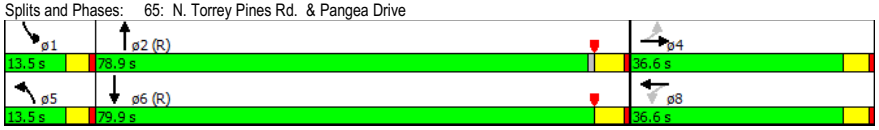
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	10	1	79	1	27	513	57	1894
Future Volume (vph)	10	1	79	1	27	513	57	1894
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	7.0	7.0	7.0	7.0	4.0	10.0	4.0	10.0
Minimum Split (s)	11.9	11.9	11.9	11.9	8.4	15.3	8.4	15.3
Total Split (s)	36.6	36.6	36.6	36.6	13.5	78.9	13.5	79.9
Total Split (%)	28.2%	28.2%	28.2%	28.2%	10.4%	60.7%	10.4%	61.5%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.4	4.3	3.4	4.3
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.9	4.9	4.9	4.4	5.3	4.4	5.3
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	None	C-Max

Intersection Summary

Cycle Length: 130
Actuated Cycle Length: 130
Offset: 103 (79%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 75
Control Type: Actuated-Coordinated

Splits and Phases: 65: N. Torrey Pines Rd. & Pangea Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	1	20	79	1	40	27	513	57	57	1894	28
Future Volume (vph)	10	1	20	79	1	40	27	513	57	57	1894	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9		4.9	4.9		4.4	5.3		4.4	5.3	
Lane Util. Factor		1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frt		0.91		1.00	0.85		1.00	0.98		1.00	1.00	
Flt Protected		0.98		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1674		1770	1589		1770	3486		1770	3532	
Flt Permitted		0.92		0.80	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1561		1484	1589		1770	3486		1770	3532	
Peak-hour factor, PHF	0.80	0.80	0.80	0.84	0.84	0.84	0.89	0.89	0.89	0.93	0.93	0.93
Adj. Flow (vph)	12	1	25	94	1	48	30	576	64	61	2037	30
RTOR Reduction (vph)	0	21	0	0	40	0	0	5	0	0	1	0
Lane Group Flow (vph)	0	18	0	94	9	0	30	635	0	61	2066	0
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8								
Actuated Green, G (s)		22.2		22.2	22.2		4.7	86.0		7.2	88.5	
Effective Green, g (s)		22.2		22.2	22.2		4.7	86.0		7.2	88.5	
Actuated g/C Ratio		0.17		0.17	0.17		0.04	0.66		0.06	0.68	
Clearance Time (s)		4.9		4.9	4.9		4.4	5.3		4.4	5.3	
Vehicle Extension (s)		2.0		2.0	2.0		2.0	5.7		2.0	5.5	
Lane Grp Cap (vph)		266		253	271		63	2306		98	2404	
v/s Ratio Prot					0.01		0.02	0.18		c0.03	c0.59	
v/s Ratio Perm		0.01		c0.06								
v/c Ratio		0.07		0.37	0.03		0.48	0.28		0.62	0.86	
Uniform Delay, d1		45.2		47.7	45.0		61.4	9.1		60.1	16.0	
Progression Factor		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.0		0.3	0.0		2.1	0.3		8.5	4.3	
Delay (s)		45.3		48.1	45.0		63.5	9.4		68.6	20.3	
Level of Service		D		D	D		E	A		E	C	
Approach Delay (s)		45.3			47.0			11.8			21.6	
Approach LOS		D			D			B			C	

Intersection Summary

HCM 2000 Control Delay	21.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	14.6
Intersection Capacity Utilization	72.8%	ICU Level of Service	C
Analysis Period (min)	15		

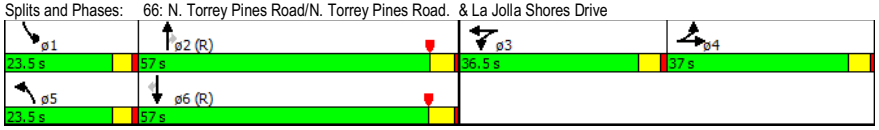
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	117	41	108	42	197	615	88	128	1860	226
Future Volume (vph)	117	41	108	42	197	615	88	128	1860	226
Turn Type	Split	NA	Split	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	4	4	3	3	5	2		1	6	
Permitted Phases							2			6
Detector Phase	4	4	3	3	5	2	2	1	6	6
Switch Phase										
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	10.0	10.0	4.0	10.0	10.0
Minimum Split (s)	8.9	8.9	8.9	8.9	8.4	15.4	15.4	8.4	15.5	15.5
Total Split (s)	37.0	37.0	36.5	36.5	23.5	57.0	57.0	23.5	57.0	57.0
Total Split (%)	24.0%	24.0%	23.7%	23.7%	15.3%	37.0%	37.0%	15.3%	37.0%	37.0%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.4	4.4	4.4	3.4	4.5	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	4.9	4.9	4.4	5.4	5.4	4.4	5.5	5.5
Lead/Lag	Lag	Lag	Lead	Lead	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max

Intersection Summary

Cycle Length: 154
Actuated Cycle Length: 154
Offset: 97 (63%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 130
Control Type: Actuated-Coordinated

Splits and Phases: 66: N. Torrey Pines Road/N. Torrey Pines Road. & La Jolla Shores Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	117	41	146	108	42	37	197	615	88	128	1860	226
Future Volume (vph)	117	41	146	108	42	37	197	615	88	128	1860	226
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9		4.9	4.9		4.4	5.4	5.4	4.4	5.5	5.5
Lane Util. Factor	0.95	0.95		0.97	1.00		1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	0.89		1.00	0.93		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1681	1570		3433	1732		1770	3539	1583	1770	3539	1583
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1681	1570		3433	1732		1770	3539	1583	1770	3539	1583
Peak-hour factor, PHF	0.80	0.80	0.80	0.83	0.83	0.83	0.80	0.80	0.80	0.91	0.91	0.91
Adj. Flow (vph)	146	51	182	130	51	45	246	769	110	141	2044	248
RTOR Reduction (vph)	0	70	0	0	21	0	0	0	43	0	0	0
Lane Group Flow (vph)	131	179	0	130	75	0	246	769	67	141	2044	248
Turn Type	Split	NA		Split	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	4	4		3	3		5	2		1	6	
Permitted Phases									2			6
Actuated Green, G (s)	21.7	21.7		26.7	26.7		28.1	70.2	70.2	15.8	57.8	57.8
Effective Green, g (s)	21.7	21.7		26.7	26.7		28.1	70.2	70.2	15.8	57.8	57.8
Actuated g/C Ratio	0.14	0.14		0.17	0.17		0.18	0.46	0.46	0.10	0.38	0.38
Clearance Time (s)	4.9	4.9		4.9	4.9		4.4	5.4	5.4	4.4	5.5	5.5
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	4.0	4.0	2.0	3.9	3.9
Lane Grp Cap (vph)	236	221		595	300		322	1613	721	181	1328	594
v/s Ratio Prot	0.08	c0.11		0.04	c0.04		c0.14	0.22		0.08	c0.58	
v/s Ratio Perm									0.04			0.16
v/c Ratio	0.56	0.81		0.22	0.25		0.76	0.48	0.09	0.78	1.54	0.42
Uniform Delay, d1	61.7	64.1		54.7	55.0		59.8	29.1	23.8	67.4	48.1	35.6
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.6	18.1		0.1	0.2		9.3	1.0	0.3	17.3	246.4	2.2
Delay (s)	63.3	82.3		54.8	55.1		69.1	30.1	24.1	84.7	294.5	37.8
Level of Service	E	F		D	E		E	C	C	F	F	D
Approach Delay (s)		75.7			54.9			38.1			256.2	
Approach LOS		E			D			D			F	

Intersection Summary

HCM 2000 Control Delay	169.9	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.00		
Actuated Cycle Length (s)	154.0	Sum of lost time (s)	19.7
Intersection Capacity Utilization	92.0%	ICU Level of Service	F
Analysis Period (min)	15		

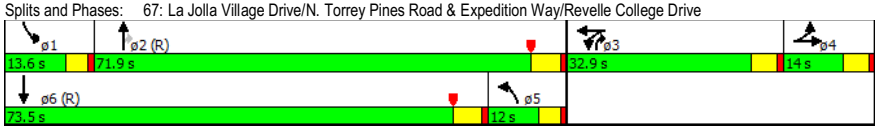
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	44	28	121	21	87	818	72	54	2013
Future Volume (vph)	44	28	121	21	87	818	72	54	2013
Turn Type	Split	NA	Split	NA	Prot	NA	pm+ov	Prot	NA
Protected Phases	4	4	3	3	5	2	3	1	6
Permitted Phases							2		
Detector Phase	4	4	3	3	5	2	3	1	6
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	10.0	4.0	4.0	10.0
Minimum Split (s)	8.9	8.9	32.9	32.9	8.4	37.6	32.9	8.4	29.4
Total Split (s)	14.0	14.0	32.9	32.9	12.0	71.9	32.9	13.6	73.5
Total Split (%)	10.6%	10.6%	24.8%	24.8%	9.1%	54.3%	24.8%	10.3%	55.5%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.4	4.6	3.9	3.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	4.9	4.9	4.4	5.6	4.9	4.4	5.4
Lead/Lag	Lag	Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	None	None	C-Max

Intersection Summary

Cycle Length: 132.4
Actuated Cycle Length: 132.4
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 67: La Jolla Village Drive/N. Torrey Pines Road & Expedition Way/Revelle College Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	44	28	167	121	21	42	87	818	72	54	2013	21
Future Volume (vph)	44	28	167	121	21	42	87	818	72	54	2013	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9		4.9	4.9		4.4	5.6	4.9	4.4	5.4	
Lane Util. Factor	0.95	0.95		0.97	1.00		1.00	0.95	1.00	1.00	0.95	
Frt	1.00	0.87		1.00	0.90		1.00	1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1681	1546		3433	1675		1770	3539	1583	1770	3534	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1681	1546		3433	1675		1770	3539	1583	1770	3534	
Peak-hour factor, PHF	0.81	0.81	0.81	0.94	0.94	0.94	0.80	0.80	0.80	0.97	0.97	0.97
Adj. Flow (vph)	54	35	206	129	22	45	109	1022	90	56	2075	22
RTOR Reduction (vph)	0	135	0	0	40	0	0	0	27	0	0	0
Lane Group Flow (vph)	49	111	0	129	27	0	109	1023	63	56	2097	0
Turn Type	Split	NA		Split	NA		Prot	NA	pm+ov	Prot	NA	
Protected Phases	4	4		3	3		5	2	3	1	6	
Permitted Phases									2			
Actuated Green, G (s)	13.5	13.5		16.0	16.0		8.4	76.3	92.3	6.8	74.9	
Effective Green, g (s)	13.5	13.5		16.0	16.0		8.4	76.3	92.3	6.8	74.9	
Actuated g/C Ratio	0.10	0.10		0.12	0.12		0.06	0.58	0.70	0.05	0.57	
Clearance Time (s)	4.9	4.9		4.9	4.9		4.4	5.6	4.9	4.4	5.4	
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	4.0	2.0	2.0	4.2	
Lane Grp Cap (vph)	171	157		414	202		112	2039	1103	90	1999	
v/s Ratio Prot	0.03	c0.07		c0.04	0.02		c0.06	0.29	0.01	0.03	c0.59	
v/s Ratio Perm									0.03			
v/c Ratio	0.29	0.71		0.31	0.14		0.97	0.50	0.06	0.62	1.05	
Uniform Delay, d1	55.0	57.5		53.2	52.0		61.9	16.7	6.3	61.5	28.8	
Progression Factor	1.00	1.00		1.00	1.00		1.00	0.92	3.01	1.00	1.00	
Incremental Delay, d2	0.3	11.3		0.2	0.1		75.2	0.9	0.0	9.2	34.3	
Delay (s)	55.3	68.9		53.3	52.1		137.0	16.3	19.1	70.8	63.1	
Level of Service	E	E		D	D		F	B	B	E	E	
Approach Delay (s)		66.6			52.9			27.3			63.3	
Approach LOS		E			D			C			E	

Intersection Summary

HCM 2000 Control Delay	51.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	132.4	Sum of lost time (s)	19.8
Intersection Capacity Utilization	88.2%	ICU Level of Service	E
Analysis Period (min)	15		

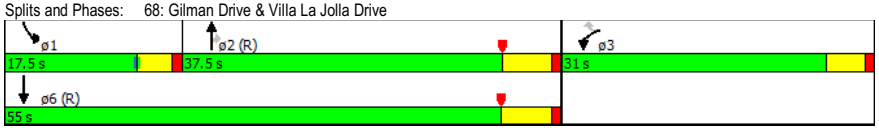
c Critical Lane Group

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	191	380	405	111	605	1635
Future Volume (vph)	191	380	405	111	605	1635
Turn Type	Prot	Perm	NA	Perm	Prot	NA
Protected Phases	3		2		1	6
Permitted Phases		3		2		
Detector Phase	3	3	2	2	1	6
Switch Phase						
Minimum Initial (s)	4.0	4.0	7.0	7.0	4.0	7.0
Minimum Split (s)	8.9	8.9	12.9	12.9	8.4	13.0
Total Split (s)	31.0	31.0	37.5	37.5	17.5	55.0
Total Split (%)	36.0%	36.0%	43.6%	43.6%	20.3%	64.0%
Yellow Time (s)	3.9	3.9	4.9	4.9	3.4	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	5.9	5.9	4.4	6.0
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	None	None	C-Max	C-Max	None	C-Max

Intersection Summary

Cycle Length: 86
Actuated Cycle Length: 86
Offset: 18 (21%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 65
Control Type: Actuated-Coordinated

Splits and Phases: 68: Gilman Drive & Villa La Jolla Drive



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	191	380	405	111	605	1635
Future Volume (vph)	191	380	405	111	605	1635
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9	5.9	5.9	4.4	6.0
Lane Util. Factor	0.97	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	3433	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	3433	1583	3539	1583	1770	3539
Peak-hour factor, PHF	0.86	0.86	0.93	0.93	0.88	0.88
Adj. Flow (vph)	222	442	435	119	688	1858
RTOR Reduction (vph)	0	373	0	75	0	0
Lane Group Flow (vph)	222	69	435	44	688	1858
Turn Type	Prot	Perm	NA	Perm	Prot	NA
Protected Phases	3		2		1	6
Permitted Phases		3		2		
Actuated Green, G (s)	13.5	13.5	31.6	31.6	25.7	61.6
Effective Green, g (s)	13.5	13.5	31.6	31.6	25.7	61.6
Actuated g/C Ratio	0.16	0.16	0.37	0.37	0.30	0.72
Clearance Time (s)	4.9	4.9	5.9	5.9	4.4	6.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	538	248	1300	581	528	2534
v/s Ratio Prot	c0.06		0.12		c0.39	c0.52
v/s Ratio Perm		0.04		0.03		
v/c Ratio	0.41	0.28	0.33	0.08	1.30	0.73
Uniform Delay, d1	32.7	32.0	19.6	17.7	30.2	7.3
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.5	0.6	0.7	0.3	149.7	1.9
Delay (s)	33.2	32.6	20.3	17.9	179.9	9.2
Level of Service	C	C	C	B	F	A
Approach Delay (s)	32.8		19.8			55.3
Approach LOS	C		B			E

Intersection Summary

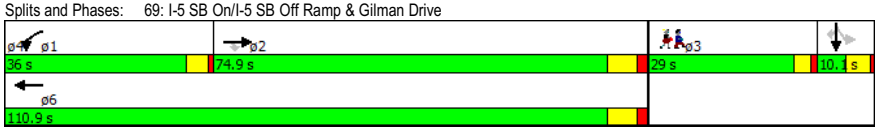
HCM 2000 Control Delay	46.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	86.0	Sum of lost time (s)	15.2
Intersection Capacity Utilization	62.8%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBT	EBR	WBL	WBT	SBT	SBR	ø3
Lane Configurations							
Traffic Volume (vph)	343	1390	625	582	9	22	
Future Volume (vph)	343	1390	625	582	9	22	
Turn Type	NA	Perm	Prot	NA	NA	Perm	
Protected Phases	2		1	6	4		3
Permitted Phases		2				4	
Detector Phase	2	2	1	6	4	4	
Switch Phase							
Minimum Initial (s)	13.0	13.0	5.0	12.0	5.0	5.0	1.0
Minimum Split (s)	20.2	20.2	9.7	19.2	10.1	10.1	29.0
Total Split (s)	74.9	74.9	36.0	110.9	10.1	10.1	29.0
Total Split (%)	49.9%	49.9%	24.0%	73.9%	6.7%	6.7%	19%
Yellow Time (s)	5.2	5.2	3.7	5.2	4.1	4.1	3.0
All-Red Time (s)	2.0	2.0	1.0	2.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	7.2	7.2	4.7	7.2	5.1	5.1	
Lead/Lag	Lag	Lag	Lead		Lag	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes
Recall Mode	Min	Min	None	Min	None	None	None

Intersection Summary
Cycle Length: 150
Actuated Cycle Length: 121
Natural Cycle: 150
Control Type: Actuated-Uncoordinated

Splits and Phases: 69: I-5 SB On/I-5 SB Off Ramp & Gilman Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	343	1390	625	582	0	0	0	0	31	9	22
Future Volume (vph)	0	343	1390	625	582	0	0	0	0	31	9	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		7.2	7.2	4.7	7.2						5.1	5.1
Lane Util. Factor		1.00	0.88	1.00	0.95						1.00	1.00
Frt		1.00	0.85	1.00	1.00						1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00						0.96	1.00
Satd. Flow (prot)		1863	2787	1770	3539						1793	1583
Flt Permitted		1.00	1.00	0.95	1.00						0.96	1.00
Satd. Flow (perm)		1863	2787	1770	3539						1793	1583
Peak-hour factor, PHF	0.89	0.89	0.89	0.92	0.92	0.92	0.25	0.25	0.25	0.80	0.80	0.80
Adj. Flow (vph)	0	385	1562	679	633	0	0	0	0	39	11	28
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	27
Lane Group Flow (vph)	0	385	1562	679	633	0	0	0	0	0	50	1
Turn Type		NA	Perm	Prot	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases			2							4		4
Actuated Green, G (s)		67.7	67.7	31.3	103.7						5.0	5.0
Effective Green, g (s)		67.7	67.7	31.3	103.7						5.0	5.0
Actuated g/C Ratio		0.56	0.56	0.26	0.86						0.04	0.04
Clearance Time (s)		7.2	7.2	4.7	7.2						5.1	5.1
Vehicle Extension (s)		2.0	2.0	2.0	2.0						2.0	2.0
Lane Grp Cap (vph)		1042	1559	457	3033						74	65
v/s Ratio Prot		0.21		c0.38	0.18							
v/s Ratio Perm			c0.56								0.03	0.00
v/c Ratio		0.37	1.00	1.49	0.21						0.68	0.02
Uniform Delay, d1		14.8	26.6	44.9	1.5						57.2	55.6
Progression Factor		1.00	1.00	1.00	1.00						1.00	1.00
Incremental Delay, d2		0.1	23.3	230.0	0.0						17.5	0.0
Delay (s)		14.9	49.9	274.9	1.5						74.7	55.7
Level of Service		B	D	F	A						E	E
Approach Delay (s)		43.0			143.0			0.0			67.9	
Approach LOS		D			F			A			E	

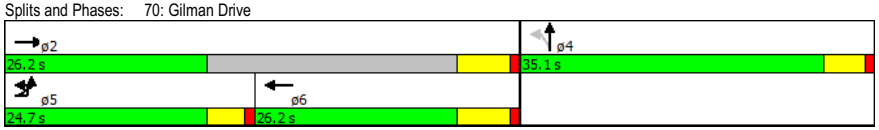
Intersection Summary					
HCM 2000 Control Delay	82.9	HCM 2000 Level of Service	F		
HCM 2000 Volume to Capacity ratio	1.18				
Actuated Cycle Length (s)	121.0	Sum of lost time (s)	21.0		
Intersection Capacity Utilization	101.8%	ICU Level of Service	G		
Analysis Period (min)	15				

c Critical Lane Group

Lane Group	EBL	EBT	WBT	NBL	NBT
Lane Configurations					
Traffic Volume (vph)	38	151	454	668	4
Future Volume (vph)	38	151	454	668	4
Turn Type	Prot	NA	NA	Perm	NA
Protected Phases	5	2	6		4
Permitted Phases				4	
Detector Phase	5	2	6	4	4
Switch Phase					
Minimum Initial (s)	5.0	12.0	12.0	5.0	5.0
Minimum Split (s)	9.7	18.2	18.2	10.1	10.1
Total Split (s)	24.7	26.2	26.2	35.1	35.1
Total Split (%)	28.7%	30.5%	30.5%	40.8%	40.8%
Yellow Time (s)	3.7	5.2	5.2	4.1	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.7	6.2	6.2	5.1	5.1
Lead/Lag	Lead		Lag		
Lead-Lag Optimize?	Yes		Yes		
Recall Mode	None	Min	Min	None	None

Intersection Summary
Cycle Length: 86
Actuated Cycle Length: 64.4
Natural Cycle: 60
Control Type: Actuated-Uncoordinated

Splits and Phases: 70: Gilman Drive



Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	88	38	151	0	0	454	4	668	4	211	0	0
Future Volume (vph)	88	38	151	0	0	454	4	668	4	211	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.7	6.2			6.2		5.1	5.1			
Lane Util. Factor		1.00	1.00			0.95		0.95	0.95			
Frt		1.00	1.00			1.00		1.00	0.93			
Flt Protected		0.95	1.00			1.00		0.95	0.98			
Satd. Flow (prot)		1770	1863			3535		1681	1599			
Flt Permitted		0.95	1.00			1.00		0.95	0.98			
Satd. Flow (perm)		1770	1863			3535		1681	1599			
Peak-hour factor, PHF	0.92	0.90	0.90	0.90	0.89	0.89	0.89	0.93	0.93	0.93	0.25	0.25
Adj. Flow (vph)	96	42	168	0	0	510	4	718	4	227	0	0
RTOR Reduction (vph)	0	0	0	0	0	1	0	0	38	0	0	0
Lane Group Flow (vph)	0	138	168	0	0	513	0	488	423	0	0	0
Turn Type	Prot	Prot	NA			NA		Perm	NA			
Protected Phases	5	5	2			6			4			
Permitted Phases								4				
Actuated Green, G (s)		8.1	28.2			15.4		25.2	25.2			
Effective Green, g (s)		8.1	28.2			15.4		25.2	25.2			
Actuated g/C Ratio		0.13	0.44			0.24		0.39	0.39			
Clearance Time (s)		4.7	6.2			6.2		5.1	5.1			
Vehicle Extension (s)		2.0	2.0			2.0		2.0	2.0			
Lane Grp Cap (vph)		221	812			841		654	622			
v/s Ratio Prot		c0.08	0.09			c0.15						
v/s Ratio Perm								c0.29	0.26			
v/c Ratio		0.62	0.21			0.61		0.75	0.68			
Uniform Delay, d1		26.9	11.3			22.0		17.0	16.4			
Progression Factor		1.00	1.00			1.00		1.00	1.00			
Incremental Delay, d2		3.9	0.0			0.9		4.1	2.4			
Delay (s)		30.8	11.4			22.9		21.1	18.9			
Level of Service		C	B			C		C	B			
Approach Delay (s)			20.1			22.9			20.0			0.0
Approach LOS			C			C			B			A

Intersection Summary			
HCM 2000 Control Delay	20.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	64.7	Sum of lost time (s)	16.0
Intersection Capacity Utilization	101.8%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

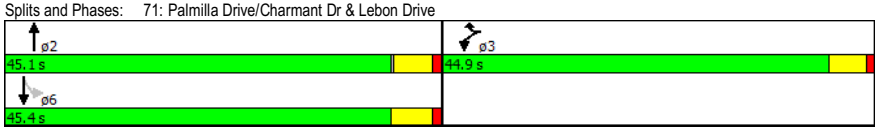
Movement	SBR
Lane Configurations	
Traffic Volume (vph)	0
Future Volume (vph)	0
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.25
Adj. Flow (vph)	0
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

Intersection Summary

Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Configurations					
Traffic Volume (vph)	179	89	53	78	37
Future Volume (vph)	179	89	53	78	37
Turn Type	Prot	Prot	NA	Perm	NA
Protected Phases	3	3	2		6
Permitted Phases				6	
Detector Phase	3	3	2	6	6
Switch Phase					
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	11.9	11.9	12.1	12.4	12.4
Total Split (s)	44.9	44.9	45.1	45.4	45.4
Total Split (%)	49.7%	49.7%	49.9%	50.3%	50.3%
Yellow Time (s)	3.9	3.9	4.1	4.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	5.1	5.4	5.4
Lead/Lag					
Lead-Lag Optimize?					
Recall Mode	Min	Min	None	None	None

Intersection Summary
Cycle Length: 90.3
Actuated Cycle Length: 33.1
Natural Cycle: 40
Control Type: Actuated-Uncoordinated

Splits and Phases: 71: Palmilla Drive/Charmant Dr & Lebon Drive



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	179	89	53	217	78	37
Future Volume (vph)	179	89	53	217	78	37
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9	5.1		5.4	5.4
Lane Util. Factor	0.97	0.91	0.95		1.00	0.95
Frt	0.99	0.85	0.88		1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	3425	1441	3112		1770	3539
Flt Permitted	0.95	1.00	1.00		0.56	1.00
Satd. Flow (perm)	3425	1441	3112		1042	3539
Peak-hour factor, PHF	0.87	0.87	0.85	0.85	0.80	0.80
Adj. Flow (vph)	206	102	62	255	98	46
RTOR Reduction (vph)	5	63	161	0	0	0
Lane Group Flow (vph)	211	29	156	0	98	46
Turn Type	Prot	Prot	NA		Perm	NA
Protected Phases	3	3	2			6
Permitted Phases					6	
Actuated Green, G (s)	9.9	9.9	11.6		11.3	11.3
Effective Green, g (s)	9.9	9.9	11.6		11.3	11.3
Actuated g/C Ratio	0.31	0.31	0.37		0.36	0.36
Clearance Time (s)	4.9	4.9	5.1		5.4	5.4
Vehicle Extension (s)	2.0	2.0	3.8		3.4	3.4
Lane Grp Cap (vph)	1076	452	1146		373	1269
v/s Ratio Prot	c0.06	0.02	0.05			0.01
v/s Ratio Perm					c0.09	
v/c Ratio	0.20	0.06	0.14		0.26	0.04
Uniform Delay, d1	7.9	7.6	6.6		7.2	6.6
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	0.0	0.0	0.1		0.4	0.0
Delay (s)	7.9	7.6	6.7		7.6	6.6
Level of Service	A	A	A		A	A
Approach Delay (s)	7.8		6.7			7.3
Approach LOS	A		A			A

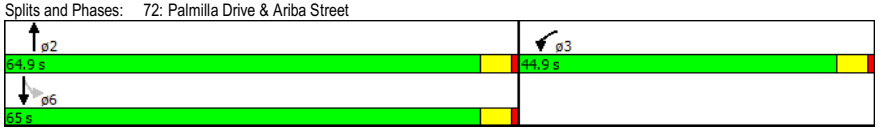
Intersection Summary			
HCM 2000 Control Delay	7.2	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.23		
Actuated Cycle Length (s)	31.5	Sum of lost time (s)	10.3
Intersection Capacity Utilization	33.2%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	WBL	NBT	SBL	SBT
Lane Configurations				
Traffic Volume (vph)	345	145	76	119
Future Volume (vph)	345	145	76	119
Turn Type	Prot	NA	Perm	NA
Protected Phases	3	2		6
Permitted Phases			6	
Detector Phase	3	2	6	6
Switch Phase				
Minimum Initial (s)	6.0	7.0	7.0	7.0
Minimum Split (s)	10.9	11.9	12.0	12.0
Total Split (s)	44.9	64.9	65.0	65.0
Total Split (%)	40.9%	59.1%	59.1%	59.1%
Yellow Time (s)	3.9	3.9	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	5.0	5.0
Lead/Lag				
Lead-Lag Optimize?				
Recall Mode	None	Min	Min	Min

Intersection Summary
Cycle Length: 109.9
Actuated Cycle Length: 34.2
Natural Cycle: 40
Control Type: Actuated-Uncoordinated

Splits and Phases: 72: Palmilla Drive & Ariba Street



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	345	159	145	131	76	119
Future Volume (vph)	345	159	145	131	76	119
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9		4.9		5.0	5.0
Lane Util. Factor	0.97		0.95		1.00	0.95
Frt	0.95		0.93		1.00	1.00
Flt Protected	0.97		1.00		0.95	1.00
Satd. Flow (prot)	3329		3287		1770	3539
Flt Permitted	0.97		1.00		0.56	1.00
Satd. Flow (perm)	3329		3287		1045	3539
Peak-hour factor, PHF	0.82	0.82	0.88	0.88	0.85	0.85
Adj. Flow (vph)	421	194	165	149	89	140
RTOR Reduction (vph)	54	0	94	0	0	0
Lane Group Flow (vph)	561	0	220	0	89	140
Turn Type	Prot		NA		Perm	NA
Protected Phases	3		2			6
Permitted Phases					6	
Actuated Green, G (s)	11.1		12.1		12.0	12.0
Effective Green, g (s)	11.1		12.1		12.0	12.0
Actuated g/C Ratio	0.34		0.37		0.36	0.36
Clearance Time (s)	4.9		4.9		5.0	5.0
Vehicle Extension (s)	2.0		4.0		3.8	3.8
Lane Grp Cap (vph)	1119		1205		380	1286
v/s Ratio Prot	c0.17		0.07			0.04
v/s Ratio Perm					c0.09	
v/c Ratio	0.50		0.18		0.23	0.11
Uniform Delay, d1	8.7		7.1		7.3	7.0
Progression Factor	1.00		1.00		1.00	1.00
Incremental Delay, d2	0.1		0.1		0.4	0.0
Delay (s)	8.9		7.2		7.7	7.0
Level of Service	A		A		A	A
Approach Delay (s)	8.9		7.2			7.3
Approach LOS	A		A			A

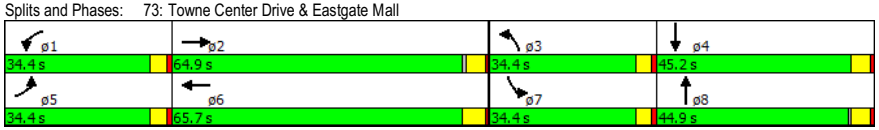
Intersection Summary			
HCM 2000 Control Delay	8.1	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.36		
Actuated Cycle Length (s)	33.0	Sum of lost time (s)	9.9
Intersection Capacity Utilization	41.2%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	19	462	298	254	155	78	202	657
Future Volume (vph)	19	462	298	254	155	78	202	657
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	5	2	1	6	3	8	7	4
Permitted Phases								
Detector Phase	5	2	1	6	3	8	7	4
Switch Phase								
Minimum Initial (s)	4.0	7.0	4.0	7.0	4.0	7.0	4.0	7.0
Minimum Split (s)	8.4	11.9	8.4	12.7	8.4	12.2	8.4	12.7
Total Split (s)	34.4	64.9	34.4	65.7	34.4	44.9	34.4	45.2
Total Split (%)	19.1%	36.1%	19.1%	36.6%	19.1%	25.0%	19.1%	25.2%
Yellow Time (s)	3.4	3.9	3.4	4.7	3.4	4.2	3.4	4.2
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	4.9	4.4	5.7	4.4	5.2	4.4	5.2
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 179.7
Actuated Cycle Length: 154.4
Natural Cycle: 90
Control Type: Actuated-Uncoordinated

Splits and Phases: 73: Towne Center Drive & Eastgate Mall



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	19	462	400	298	254	6	155	78	152	202	657	92
Future Volume (vph)	19	462	400	298	254	6	155	78	152	202	657	92
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	5.7		4.4	5.2		4.4	5.2	
Lane Util. Factor	0.97	0.95		1.00	0.95		0.97	0.95		0.97	0.95	
Frt	1.00	0.93		1.00	1.00		1.00	0.90		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	3433	3293		1770	3526		3433	3189		3433	3474	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	3433	3293		1770	3526		3433	3189		3433	3474	
Peak-hour factor, PHF	0.87	0.87	0.87	0.91	0.91	0.91	0.88	0.88	0.88	0.80	0.80	0.80
Adj. Flow (vph)	22	531	460	327	279	7	176	89	173	252	821	115
RTOR Reduction (vph)	0	85	0	0	0	0	0	132	0	0	6	0
Lane Group Flow (vph)	22	906	0	327	286	0	176	130	0	253	930	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases												
Actuated Green, G (s)	3.5	54.7		30.1	80.5		12.4	36.7		15.9	40.2	
Effective Green, g (s)	3.5	54.7		30.1	80.5		12.4	36.7		15.9	40.2	
Actuated g/C Ratio	0.02	0.35		0.19	0.52		0.08	0.23		0.10	0.26	
Clearance Time (s)	4.4	4.9		4.4	5.7		4.4	5.2		4.4	5.2	
Vehicle Extension (s)	2.0	5.1		2.0	4.8		2.0	5.1		2.0	4.8	
Lane Grp Cap (vph)	76	1152		340	1816		272	748		349	893	
v/s Ratio Prot	0.01	c0.28		c0.18	0.08		0.05	0.04		c0.07	c0.27	
v/s Ratio Perm												
v/c Ratio	0.29	0.79		0.96	0.16		0.65	0.17		0.72	1.04	
Uniform Delay, d1	75.2	45.6		62.5	20.0		69.8	47.7		68.1	58.1	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.8	4.2		38.3	0.1		3.9	0.2		6.2	41.5	
Delay (s)	75.9	49.8		100.8	20.1		73.8	47.9		74.3	99.5	
Level of Service	E	D		F	C		E	D		E	F	
Approach Delay (s)		50.3			63.2			58.3			94.1	
Approach LOS		D			E			E			F	

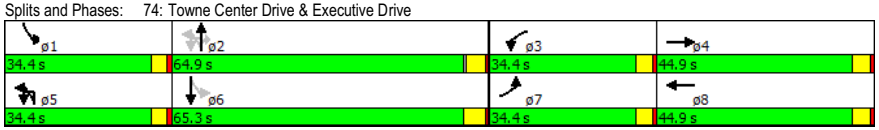
Intersection Summary				
HCM 2000 Control Delay	69.8	HCM 2000 Level of Service	E	
HCM 2000 Volume to Capacity ratio	0.91			
Actuated Cycle Length (s)	156.3	Sum of lost time (s)	19.7	
Intersection Capacity Utilization	83.4%	ICU Level of Service	E	
Analysis Period (min)	15			

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	69	138	294	437	52	128	120	73	33	1006
Future Volume (vph)	69	138	294	437	52	128	120	73	33	1006
Turn Type	Prot	NA	Prot	NA	pm+pt	pm+pt	NA	Perm	pm+pt	NA
Protected Phases	7	4	3	8	5	5	2		1	6
Permitted Phases					2	2		2	6	
Detector Phase	7	4	3	8	5	5	2	2	1	6
Switch Phase										
Minimum Initial (s)	4.0	4.0	4.0	7.0	4.0	4.0	7.0	7.0	4.0	7.0
Minimum Split (s)	8.4	8.9	8.4	11.9	8.4	8.4	11.9	11.9	8.4	12.3
Total Split (s)	34.4	44.9	34.4	44.9	34.4	34.4	64.9	64.9	34.4	65.3
Total Split (%)	19.2%	25.1%	19.2%	25.1%	19.2%	19.2%	36.3%	36.3%	19.2%	36.5%
Yellow Time (s)	3.4	3.9	3.4	3.9	3.4	3.4	3.9	3.9	3.4	4.3
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	4.9	4.4	4.9		4.4	4.9	4.9	4.4	5.3
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min

Intersection Summary
Cycle Length: 179
Actuated Cycle Length: 147.8
Natural Cycle: 80
Control Type: Actuated-Uncoordinated

Splits and Phases: 74: Towne Center Drive & Executive Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	69	138	152	294	437	37	52	128	120	73	33	1006
Future Volume (vph)	69	138	152	294	437	37	52	128	120	73	33	1006
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	4.9			4.4	4.9	4.9	4.4	5.3
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.92		1.00	0.99			1.00	1.00	0.85	1.00	0.98
Flt Protected	0.95	1.00		0.95	1.00			0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	3260		1770	3498			1770	3539	1583	1770	3483
Flt Permitted	0.95	1.00		0.95	1.00			0.06	1.00	1.00	0.67	1.00
Satd. Flow (perm)	1770	3260		1770	3498			113	3539	1583	1244	3483
Peak-hour factor, PHF	0.86	0.86	0.86	0.94	0.94	0.94	0.92	0.90	0.90	0.90	0.89	0.89
Adj. Flow (vph)	80	160	177	313	465	39	57	142	133	81	37	1130
RTOR Reduction (vph)	0	126	0	0	3	0	0	0	0	39	0	5
Lane Group Flow (vph)	80	211	0	313	501	0	0	199	133	42	37	1259
Turn Type	Prot	NA		Prot	NA		pm+pt	pm+pt	NA	Perm	pm+pt	NA
Protected Phases	7	4		3	8		5	5	2		1	6
Permitted Phases							2	2		2	6	
Actuated Green, G (s)	11.0	17.6		30.2	36.8			86.7	77.5	77.5	66.1	61.3
Effective Green, g (s)	11.0	17.6		30.2	36.8			86.7	77.5	77.5	66.1	61.3
Actuated g/C Ratio	0.07	0.12		0.20	0.25			0.58	0.52	0.52	0.44	0.41
Clearance Time (s)	4.4	4.9		4.4	4.9			4.4	4.9	4.9	4.4	5.3
Vehicle Extension (s)	2.0	5.3		2.0	5.4			2.0	3.8	3.8	2.0	3.8
Lane Grp Cap (vph)	130	385		359	865			295	1844	825	569	1435
v/s Ratio Prot	0.05	0.06		c0.18	c0.14			c0.09	0.04		0.00	c0.36
v/s Ratio Perm								0.30		0.03	0.03	
v/c Ratio	0.62	0.55		0.87	0.58			0.67	0.07	0.05	0.07	0.88
Uniform Delay, d1	66.8	61.8		57.4	49.1			41.1	17.7	17.5	23.4	40.2
Progression Factor	1.00	1.00		1.00	1.00			1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	6.0	3.0		19.5	1.7			4.7	0.0	0.0	0.0	6.6
Delay (s)	72.8	64.8		76.9	50.8			45.8	17.7	17.5	23.4	46.8
Level of Service	E	E		E	D			D	B	B	C	D
Approach Delay (s)		66.4			60.8				31.2			46.1
Approach LOS		E			E				C			D

Intersection Summary			
HCM 2000 Control Delay	51.0	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	148.7	Sum of lost time (s)	19.0
Intersection Capacity Utilization	82.4%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

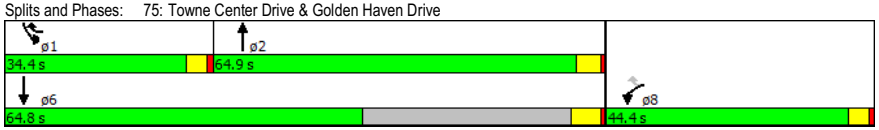
Movement	SBR
Lane Configurations	
Traffic Volume (vph)	119
Future Volume (vph)	119
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.89
Adj. Flow (vph)	134
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

Intersection Summary

Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Configurations					
Traffic Volume (vph)	355	337	215	182	661
Future Volume (vph)	355	337	215	182	661
Turn Type	Prot	pm+ov	NA	Prot	NA
Protected Phases	8	1	2	1	6
Permitted Phases		8			
Detector Phase	8	1	2	1	6
Switch Phase					
Minimum Initial (s)	4.0	4.0	10.0	4.0	10.0
Minimum Split (s)	8.4	8.4	14.9	8.4	15.8
Total Split (s)	44.4	34.4	64.9	34.4	64.8
Total Split (%)	30.9%	23.9%	45.2%	23.9%	45.1%
Yellow Time (s)	3.4	3.4	3.9	3.4	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	4.4	4.9	4.4	5.8
Lead/Lag		Lead	Lag	Lead	
Lead-Lag Optimize?		Yes	Yes	Yes	
Recall Mode	None	None	None	None	None

Intersection Summary
Cycle Length: 143.7
Actuated Cycle Length: 65.4
Natural Cycle: 50
Control Type: Actuated-Uncoordinated

Splits and Phases: 75: Towne Center Drive & Golden Haven Drive



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	355	337	215	176	182	661
Future Volume (vph)	355	337	215	176	182	661
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	0%		0%			-7%
Total Lost time (s)	4.4	4.4	4.9		4.4	5.8
Lane Util. Factor	1.00	1.00	0.95		1.00	0.95
Frt	1.00	0.85	0.93		1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1770	1583	3300		1832	3663
Flt Permitted	0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)	1770	1583	3300		1832	3663
Peak-hour factor, PHF	0.90	0.90	0.85	0.85	0.93	0.93
Adj. Flow (vph)	394	374	253	207	196	711
RTOR Reduction (vph)	0	178	131	0	0	0
Lane Group Flow (vph)	394	196	329	0	196	711
Turn Type	Prot	pm+ov	NA		Prot	NA
Protected Phases	8	1	2		1	6
Permitted Phases		8				
Actuated Green, G (s)	20.9	33.9	17.0		13.0	33.5
Effective Green, g (s)	20.9	33.9	17.0		13.0	33.5
Actuated g/C Ratio	0.32	0.52	0.26		0.20	0.52
Clearance Time (s)	4.4	4.4	4.9		4.4	5.8
Vehicle Extension (s)	2.0	2.0	5.0		2.0	5.0
Lane Grp Cap (vph)	572	938	868		368	1899
v/s Ratio Prot	c0.22	0.04	0.10		c0.11	c0.19
v/s Ratio Perm		0.08				
v/c Ratio	0.69	0.21	0.38		0.53	0.37
Uniform Delay, d1	19.0	8.2	19.5		23.1	9.3
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	2.8	0.0	0.6		0.7	0.3
Delay (s)	21.8	8.2	20.1		23.8	9.6
Level of Service	C	A	C		C	A
Approach Delay (s)	15.2		20.1			12.6
Approach LOS	B		C			B

Intersection Summary			
HCM 2000 Control Delay	15.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	64.6	Sum of lost time (s)	13.7
Intersection Capacity Utilization	52.8%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	24	313	423	384	95	38	65	18	100
Future Volume (vph)	24	313	423	384	95	38	65	18	100
Turn Type	Perm	NA	Perm	NA	pm+pt	NA	Perm	pm+pt	NA
Protected Phases		4		8	5	2		1	6
Permitted Phases	4		8		2		2	6	
Detector Phase	4	4	8	8	5	2	2	1	6
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	7.0	7.0	4.0	7.0
Minimum Split (s)	8.9	8.9	8.4	8.4	8.4	11.9	11.9	8.4	11.9
Total Split (s)	44.9	44.9	44.4	44.4	34.4	64.9	64.9	34.4	64.9
Total Split (%)	31.1%	31.1%	30.8%	30.8%	23.9%	45.0%	45.0%	23.9%	45.0%
Yellow Time (s)	3.9	3.9	3.4	3.4	3.4	3.9	3.9	3.4	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	4.4	4.4	4.4	4.9	4.9	4.4	4.9
Lead/Lag					Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Min	Min	None	Min

Intersection Summary

Cycle Length: 144.2
Actuated Cycle Length: 77.8
Natural Cycle: 150
Control Type: Actuated-Uncoordinated

Splits and Phases: 76: Executive Way & Executive Drive

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	24	313	764	423	384	13	95	38	65	18	100	71
Future Volume (vph)	24	313	764	423	384	13	95	38	65	18	100	71
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9		4.4	4.4		4.4	4.9	4.9	4.4	4.9	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.89		1.00	1.00		1.00	1.00	0.85	1.00	0.94	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3163		1770	3522		1770	1863	1583	1770	1747	
Flt Permitted	0.47	1.00		0.10	1.00		0.39	1.00	1.00	0.73	1.00	
Satd. Flow (perm)	872	3163		183	3522		724	1863	1583	1352	1747	
Peak-hour factor, PHF	0.80	0.80	0.80	0.87	0.87	0.87	0.80	0.80	0.80	0.80	0.80	0.80
Adj. Flow (vph)	30	391	955	486	441	15	119	48	81	22	125	89
RTOR Reduction (vph)	0	211	0	0	1	0	0	0	57	0	24	0
Lane Group Flow (vph)	30	1135	0	486	455	0	119	48	24	23	190	0
Turn Type	Perm	NA		Perm	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2		2	6		
Actuated Green, G (s)	40.3	40.3		40.8	40.8		30.4	23.9	23.9	19.1	17.0	
Effective Green, g (s)	40.3	40.3		40.8	40.8		30.4	23.9	23.9	19.1	17.0	
Actuated g/C Ratio	0.50	0.50		0.51	0.51		0.38	0.30	0.30	0.24	0.21	
Clearance Time (s)	4.9	4.9		4.4	4.4		4.4	4.9	4.9	4.4	4.9	
Vehicle Extension (s)	2.0	2.0		2.3	2.3		2.0	2.9	2.9	2.0	2.6	
Lane Grp Cap (vph)	436	1583		92	1785		390	553	469	331	368	
v/s Ratio Prot		0.36			0.13		c0.03	0.03		0.00	c0.11	
v/s Ratio Perm	0.03			c2.66			0.08		0.02	0.01		
v/c Ratio	0.07	0.93dr		5.28	0.25		0.31	0.09	0.05	0.07	0.52	
Uniform Delay, d1	10.4	15.7		19.9	11.2		17.2	20.4	20.2	23.7	28.1	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.0	1.3		1951.0	0.0		0.2	0.1	0.0	0.0	1.0	
Delay (s)	10.4	17.0		1970.9	11.3		17.3	20.5	20.2	23.8	29.1	
Level of Service	B	B		F	B		B	C	C	C	C	
Approach Delay (s)		16.8			1022.3			18.9			28.6	
Approach LOS		B			F			B			C	

Intersection Summary

HCM 2000 Control Delay	355.9	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	3.40		
Actuated Cycle Length (s)	80.5	Sum of lost time (s)	14.2
Intersection Capacity Utilization	87.1%	ICU Level of Service	E
Analysis Period (min)	15		

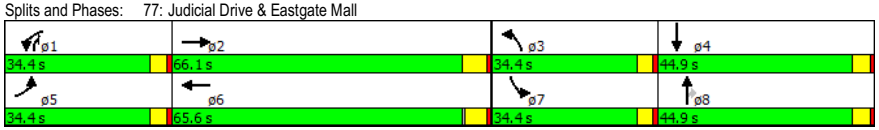
dr Defacto Right Lane. Recode with 1 though lane as a right lane.
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	15	721	252	260	163	11	506	122	155
Future Volume (vph)	15	721	252	260	163	11	506	122	155
Turn Type	Prot	NA	Prot	NA	Prot	NA	pm+ov	Prot	NA
Protected Phases	5	2	1	6	3	8	1	7	4
Permitted Phases							8		
Detector Phase	5	2	1	6	3	8	1	7	4
Switch Phase									
Minimum Initial (s)	4.0	7.0	4.0	7.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.4	13.1	8.4	12.6	8.4	8.9	8.4	8.4	8.9
Total Split (s)	34.4	66.1	34.4	65.6	34.4	44.9	34.4	34.4	44.9
Total Split (%)	19.1%	36.8%	19.1%	36.5%	19.1%	25.0%	19.1%	19.1%	25.0%
Yellow Time (s)	3.4	5.1	3.4	4.6	3.4	3.9	3.4	3.4	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	6.1	4.4	5.6	4.4	4.9	4.4	4.4	4.9
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 179.8
Actuated Cycle Length: 149.7
Natural Cycle: 90
Control Type: Actuated-Uncoordinated

Splits and Phases: 77: Judicial Drive & Eastgate Mall



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	721	173	252	260	11	163	11	506	122	155	99
Future Volume (vph)	15	721	173	252	260	11	163	11	506	122	155	99
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	6.1		4.4	5.6		4.4	4.9	4.4	4.4	4.9	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.97		1.00	0.99		1.00	1.00	0.85	1.00	0.94	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3437		1770	3518		1770	1863	1583	1770	1754	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	3437		1770	3518		1770	1863	1583	1770	1754	
Peak-hour factor, PHF	0.89	0.89	0.89	0.97	0.97	0.97	0.85	0.85	0.85	0.87	0.87	0.87
Adj. Flow (vph)	17	810	194	260	268	11	192	13	595	140	178	114
RTOR Reduction (vph)	0	11	0	0	1	0	0	0	106	0	13	0
Lane Group Flow (vph)	17	993	0	260	278	0	192	13	489	140	279	0
Turn Type	Prot	NA		Prot	NA		Prot	NA	pm+ov	Prot	NA	
Protected Phases	5	2		1	6		3	8	1	7	4	
Permitted Phases									8			
Actuated Green, G (s)	3.8	51.2		30.9	78.8		20.9	14.5	45.4	38.1	31.7	
Effective Green, g (s)	3.8	51.2		30.9	78.8		20.9	14.5	45.4	38.1	31.7	
Actuated g/C Ratio	0.02	0.33		0.20	0.51		0.14	0.09	0.29	0.25	0.21	
Clearance Time (s)	4.4	6.1		4.4	5.6		4.4	4.9	4.4	4.4	4.9	
Vehicle Extension (s)	2.0	2.7		2.0	3.0		2.0	2.0	2.0	2.0	2.0	
Lane Grp Cap (vph)	43	1138		354	1794		239	174	465	436	359	
v/s Ratio Prot	0.01	c0.29		0.15	0.08		c0.11	0.01	c0.21	0.08	c0.16	
v/s Ratio Perm									0.10			
v/c Ratio	0.40	0.87		0.73	0.15		0.80	0.07	1.05	0.32	0.78	
Uniform Delay, d1	74.2	48.6		58.0	20.1		64.8	63.9	54.5	47.6	58.1	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	2.2	7.5		6.7	0.0		16.6	0.1	56.0	0.2	9.3	
Delay (s)	76.4	56.1		64.6	20.2		81.4	63.9	110.6	47.8	67.4	
Level of Service	E	E		E	C		F	E	F	D	E	
Approach Delay (s)		56.4			41.6			102.8			61.0	
Approach LOS		E			D			F			E	

Intersection Summary

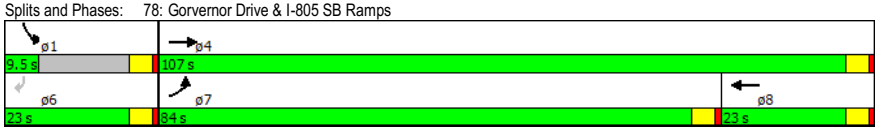
HCM 2000 Control Delay	67.6	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	154.5	Sum of lost time (s)	19.8
Intersection Capacity Utilization	79.1%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBT	SBL	SBR
Lane Configurations					
Traffic Volume (vph)	1024	320	388	16	204
Future Volume (vph)	1024	320	388	16	204
Turn Type	Prot	NA	NA	Prot	Perm
Protected Phases	7	4	8	1	
Permitted Phases					6
Detector Phase	7	4	8	1	6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5
Total Split (s)	84.0	107.0	23.0	9.5	23.0
Total Split (%)	64.6%	82.3%	17.7%	7.3%	17.7%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead		Lag		
Lead-Lag Optimize?	Yes		Yes		
Recall Mode	None	None	None	None	Min

Intersection Summary
Cycle Length: 130
Actuated Cycle Length: 66.5
Natural Cycle: 75
Control Type: Actuated-Uncoordinated

Splits and Phases: 78: Gorvernor Drive & I-805 SB Ramps



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	1024	320	388	43	16	204
Future Volume (vph)	1024	320	388	43	16	204
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5		4.5	4.5
Lane Util. Factor	0.97	1.00	0.95		1.00	1.00
Frt	1.00	1.00	0.98		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	3433	1863	3486		1770	1583
Flt Permitted	0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)	3433	1863	3486		1770	1583
Peak-hour factor, PHF	0.95	0.95	0.80	0.80	0.88	0.88
Adj. Flow (vph)	1078	337	485	54	18	232
RTOR Reduction (vph)	0	0	6	0	0	208
Lane Group Flow (vph)	1078	337	533	0	18	24
Turn Type	Prot	NA	NA		Prot	Perm
Protected Phases	7	4	8		1	
Permitted Phases						6
Actuated Green, G (s)	27.0	50.4	18.9		7.0	7.0
Effective Green, g (s)	27.0	50.4	18.9		7.0	7.0
Actuated g/C Ratio	0.41	0.76	0.28		0.11	0.11
Clearance Time (s)	4.5	4.5	4.5		4.5	4.5
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	1395	1414	992		186	166
v/s Ratio Prot	c0.31	0.18	c0.15		0.01	
v/s Ratio Perm						c0.02
v/c Ratio	0.77	0.24	0.54		0.10	0.15
Uniform Delay, d1	17.0	2.4	20.1		26.8	27.0
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	2.7	0.1	0.6		0.2	0.4
Delay (s)	19.8	2.4	20.6		27.1	27.4
Level of Service	B	A	C		C	C
Approach Delay (s)		15.6	20.6		27.4	
Approach LOS		B	C		C	

Intersection Summary			
HCM 2000 Control Delay	18.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	66.4	Sum of lost time (s)	13.5
Intersection Capacity Utilization	56.7%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	338	0	0	0	23	5	474	3	3	0	0	0
Future Volume (Veh/h)	338	0	0	0	23	5	474	3	3	0	0	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.94	0.94	0.94	0.25	0.25	0.25
Hourly flow rate (vph)	423	0	0	0	29	6	504	3	3	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1033	1014	0	1012	1012	4	0			6		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1033	1014	0	1012	1012	4	0			6		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	0	100	100	100	82	99	69			100		
cM capacity (veh/h)	139	164	1085	165	165	1079	1623			1615		

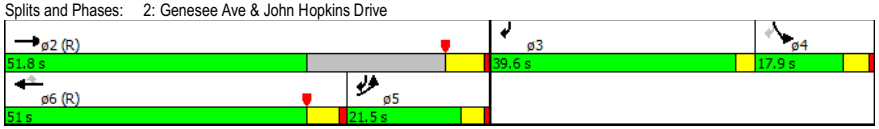
Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	423	35	510
Volume Left	423	0	504
Volume Right	0	6	3
cSH	139	193	1623
Volume to Capacity	3.05	0.18	0.31
Queue Length 95th (ft)	Err	16	33
Control Delay (s)	Err	27.8	8.1
Lane LOS	F	D	A
Approach Delay (s)	Err	27.8	8.1
Approach LOS	F	D	

Intersection Summary				
Average Delay	4374.7			
Intersection Capacity Utilization	58.7%	ICU Level of Service	B	
Analysis Period (min)	15			

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	ø3
Lane Configurations							
Traffic Volume (vph)	77	748	1552	1347	146	21	
Future Volume (vph)	77	748	1552	1347	146	21	
Turn Type	Prot	NA	NA	Perm	Prot	pt+ov	
Protected Phases	5	2	6		4	3 5	3
Permitted Phases				6		4	
Detector Phase	5	2	6	6	4	3 5	
Switch Phase							
Minimum Initial (s)	4.0	10.0	10.0	10.0	7.0		4.0
Minimum Split (s)	9.5	16.7	15.9	15.9	11.9		7.0
Total Split (s)	21.5	51.8	51.0	51.0	17.9		39.6
Total Split (%)	16.5%	39.8%	39.2%	39.2%	13.8%		30%
Yellow Time (s)	3.4	5.7	4.9	4.9	3.9		3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		0.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	4.4	6.7	5.9	5.9	4.9		
Lead/Lag	Lag		Lead	Lead	Lag		Lead
Lead-Lag Optimize?	Yes		Yes	Yes	Yes		Yes
Recall Mode	None	C-Min	C-Min	C-Min	None		None

Intersection Summary
Cycle Length: 130
Actuated Cycle Length: 130
Offset: 16 (12%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 80
Control Type: Actuated-Coordinated

Splits and Phases: 2: Genesee Ave & John Hopkins Drive



2: Genesee Ave & John Hopkins Drive

Timing Plan: Morning Peak

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	77	748	1552	1347	146	21
Future Volume (vph)	77	748	1552	1347	146	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	6.7	5.9	5.9	4.9	3.0
Lane Util. Factor	1.00	0.91	0.86	0.88	0.97	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	5085	6408	2787	3433	1583
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	5085	6408	2787	3433	1583
Peak-hour factor, PHF	0.89	0.89	0.94	0.94	0.80	0.80
Adj. Flow (vph)	87	840	1651	1433	182	26
RTOR Reduction (vph)	0	0	0	0	0	1
Lane Group Flow (vph)	87	840	1651	1433	183	25
Turn Type	Prot	NA	NA	Perm	Prot	pt+ov
Protected Phases	5	2	6		4	3 5
Permitted Phases				6		4
Actuated Green, G (s)	10.8	92.9	78.5	78.5	13.3	37.7
Effective Green, g (s)	10.8	92.9	78.5	78.5	13.3	33.3
Actuated g/C Ratio	0.08	0.71	0.60	0.60	0.10	0.26
Clearance Time (s)	4.4	6.7	5.9	5.9	4.9	
Vehicle Extension (s)	2.0	4.0	3.9	3.9	5.0	
Lane Grp Cap (vph)	147	3633	3869	1682	351	442
v/s Ratio Prot	c0.05	0.17	0.26		c0.05	c0.01
v/s Ratio Perm				c0.51		0.01
v/c Ratio	0.59	0.23	0.43	0.85	0.52	0.06
Uniform Delay, d1	57.5	6.3	13.7	21.0	55.3	36.5
Progression Factor	0.79	0.50	1.16	1.06	1.00	1.00
Incremental Delay, d2	4.1	0.1	0.2	3.1	2.6	0.0
Delay (s)	49.3	3.3	16.1	25.3	58.0	36.5
Level of Service	D	A	B	C	E	D
Approach Delay (s)		7.6	20.4		55.3	
Approach LOS		A	C		E	

Intersection Summary			
HCM 2000 Control Delay	19.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	18.2
Intersection Capacity Utilization	60.0%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

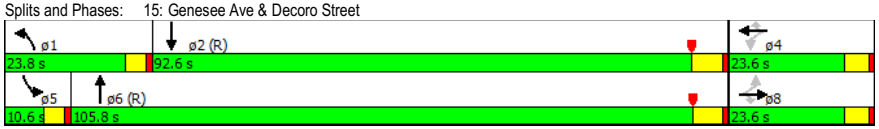
15: Genesee Ave & Decoro Street

Timing Plan: Morning Peak

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	43	29	158	49	23	37	123	2793	19	884
Future Volume (vph)	43	29	158	49	23	37	123	2793	19	884
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA	Prot	NA
Protected Phases		8			4		1	6	5	2
Permitted Phases	8		8	4		4				
Detector Phase	8	8	8	4	4	4	1	6	5	2
Switch Phase										
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	10.0	4.0	10.0
Minimum Split (s)	8.9	8.9	8.9	8.9	8.9	8.9	8.4	15.7	8.4	15.9
Total Split (s)	23.6	23.6	23.6	23.6	23.6	23.6	23.8	105.8	10.6	92.6
Total Split (%)	16.9%	16.9%	16.9%	16.9%	16.9%	16.9%	17.0%	75.6%	7.6%	66.1%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.9	3.9	3.4	4.7	3.4	4.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.9	4.9		4.9	4.9	4.4	5.7	4.4	5.9
Lead/Lag							Lead	Lag	Lead	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	None	C-Max

Intersection Summary
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 44 (31%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 15: Genesee Ave & Decoro Street



15: Genesee Ave & Decoro Street

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	43	29	158	49	23	37	123	2793	113	19	884	64
Future Volume (vph)	43	29	158	49	23	37	123	2793	113	19	884	64
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9	4.9		4.9	4.9	4.4	5.7		4.4	5.9	
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.95		1.00	0.95	
Frt		1.00	0.85		1.00	0.85	1.00	0.99		1.00	0.99	
Flt Protected		0.97	1.00		0.97	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1809	1583		1801	1583	1770	3518		1770	3503	
Flt Permitted		0.69	1.00		0.67	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1292	1583		1240	1583	1770	3518		1770	3503	
Peak-hour factor, PHF	0.84	0.84	0.84	0.85	0.85	0.85	0.93	0.93	0.93	0.80	0.80	0.80
Adj. Flow (vph)	51	35	188	58	27	44	132	3003	122	24	1105	80
RTOR Reduction (vph)	0	0	169	0	0	40	0	2	0	0	3	0
Lane Group Flow (vph)	0	86	19	0	85	4	132	3123	0	24	1182	0
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA		Prot	NA	
Protected Phases		8			4		1	6		5	2	
Permitted Phases	8		8	4		4						
Actuated Green, G (s)		13.8	13.8		13.8	13.8	14.5	107.5		3.7	96.5	
Effective Green, g (s)		13.8	13.8		13.8	13.8	14.5	107.5		3.7	96.5	
Actuated g/C Ratio		0.10	0.10		0.10	0.10	0.10	0.77		0.03	0.69	
Clearance Time (s)		4.9	4.9		4.9	4.9	4.4	5.7		4.4	5.9	
Vehicle Extension (s)		2.0	2.0		2.0	2.0	2.0	4.3		2.0	3.7	
Lane Grp Cap (vph)		127	156		122	156	183	2701		46	2414	
v/s Ratio Prot							c0.07	c0.89		0.01	0.34	
v/s Ratio Perm		0.07	0.01		c0.07	0.00						
v/c Ratio		0.68	0.12		0.70	0.03	0.72	1.16		0.52	0.49	
Uniform Delay, d1		60.9	57.6		61.1	57.0	60.8	16.2		67.3	10.2	
Progression Factor		1.00	1.00		1.00	1.00	0.79	1.82		1.03	1.67	
Incremental Delay, d2		10.7	0.1		13.1	0.0	1.1	70.8		4.8	0.7	
Delay (s)		71.6	57.7		74.1	57.1	49.0	100.4		73.7	17.8	
Level of Service		E	E		E	E	D	F		E	B	
Approach Delay (s)		62.1			68.3			98.3			18.9	
Approach LOS		E			E			F			B	

Intersection Summary			
HCM 2000 Control Delay	75.7	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.11		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	15.2
Intersection Capacity Utilization	107.2%	ICU Level of Service	G
Analysis Period (min)	15		

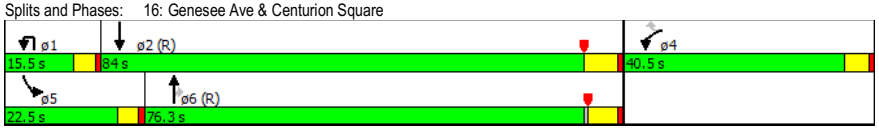
c Critical Lane Group

16: Genesee Ave & Centurion Square

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	ø1
Lane Configurations							
Traffic Volume (vph)	337	205	2713	299	168	957	
Future Volume (vph)	337	205	2713	299	168	957	
Turn Type	Prot	Perm	NA	Perm	Prot	NA	
Protected Phases	4		6		5	2	1
Permitted Phases		4		6			
Detector Phase	4	4	6	6	5	2	
Switch Phase							
Minimum Initial (s)	7.0	7.0	10.0	10.0	4.0	10.0	4.0
Minimum Split (s)	34.9	34.9	28.7	28.7	8.4	16.4	8.4
Total Split (s)	40.5	40.5	76.3	76.3	22.5	84.0	15.5
Total Split (%)	28.9%	28.9%	54.5%	54.5%	16.1%	60.0%	11%
Yellow Time (s)	3.9	3.9	4.7	4.7	3.4	5.4	3.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.9	4.9	5.7	5.7	4.4	6.4	
Lead/Lag			Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?			Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	C-Max	C-Max	None	C-Max	None

Intersection Summary
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 43 (31%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 16: Genesee Ave & Centurion Square



Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	337	205	0	2713	299	168	957
Future Volume (vph)	337	205	0	2713	299	168	957
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9		5.7	5.7	4.4	6.4
Lane Util. Factor	1.00	1.00		0.95	1.00	0.97	0.95
Frt	1.00	0.85		1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00		1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583		3539	1583	3433	3539
Flt Permitted	0.95	1.00		1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583		3539	1583	3433	3539
Peak-hour factor, PHF	0.80	0.80	0.92	0.93	0.93	0.81	0.81
Adj. Flow (vph)	421	256	0	2917	322	207	1181
RTOR Reduction (vph)	0	134	0	0	44	0	0
Lane Group Flow (vph)	421	122	0	2917	278	207	1181
Turn Type	Prot	Perm	Prot	NA	Perm	Prot	NA
Protected Phases	4		1	6		5	2
Permitted Phases		4			6		
Actuated Green, G (s)	34.7	34.7		77.5	77.5	12.8	94.0
Effective Green, g (s)	34.7	34.7		77.5	77.5	12.8	94.0
Actuated g/C Ratio	0.25	0.25		0.55	0.55	0.09	0.67
Clearance Time (s)	4.9	4.9		5.7	5.7	4.4	6.4
Vehicle Extension (s)	2.0	2.0		4.2	4.2	2.0	3.4
Lane Grp Cap (vph)	438	392		1959	876	313	2376
v/s Ratio Prot	c0.24			c0.82		c0.06	0.33
v/s Ratio Perm		0.08			0.18		
v/c Ratio	0.96	0.31		1.49	0.32	0.66	0.50
Uniform Delay, d1	52.0	42.9		31.2	16.9	61.5	11.3
Progression Factor	1.00	1.00		1.00	1.00	1.29	0.59
Incremental Delay, d2	32.8	0.2		222.8	1.0	3.6	0.7
Delay (s)	84.8	43.1		254.1	17.9	83.2	7.4
Level of Service	F	D		F	B	F	A
Approach Delay (s)	69.0			230.6			18.7
Approach LOS	E			F			B

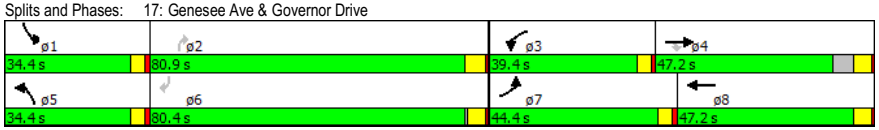
Intersection Summary			
HCM 2000 Control Delay	154.5	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.26		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	15.7
Intersection Capacity Utilization	102.5%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBR	SBL	SBR
Lane Configurations									
Traffic Volume (vph)	771	324	138	220	247	64	189	287	423
Future Volume (vph)	771	324	138	220	247	64	189	287	423
Turn Type	Prot	NA	Perm	Prot	NA	Prot	Perm	Prot	Perm
Protected Phases	7	4		3	8	5		1	
Permitted Phases			4				2		6
Detector Phase	7	4	4	3	8	5	2	1	6
Switch Phase									
Minimum Initial (s)	4.0	8.0	8.0	4.0	8.0	4.0	8.0	4.0	8.0
Minimum Split (s)	8.4	13.2	13.2	8.4	13.2	8.4	13.9	8.4	13.4
Total Split (s)	44.4	47.2	47.2	39.4	47.2	34.4	80.9	34.4	80.4
Total Split (%)	21.5%	22.8%	22.8%	19.0%	22.8%	16.6%	39.1%	16.6%	38.9%
Yellow Time (s)	3.4	4.2	4.2	3.4	4.2	3.4	4.9	3.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.2	5.2	4.4	5.2	4.4	5.9	4.4	5.4
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	None	Min

Intersection Summary
Cycle Length: 206.9
Actuated Cycle Length: 135.5
Natural Cycle: 75
Control Type: Actuated-Uncoordinated

Splits and Phases: 17: Genesee Ave & Governor Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	771	324	138	220	247	395	64	0	189	287	0	423
Future Volume (vph)	771	324	138	220	247	395	64	0	189	287	0	423
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	16	12	12	12	12	12	12	12
Total Lost time (s)	4.4	5.2	5.2	4.4	5.2		4.4		5.9	4.4		5.4
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95		1.00		0.88	0.97		1.00
Frt	1.00	1.00	0.85	1.00	0.91		1.00		0.85	1.00		0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95		1.00	0.95		1.00
Satd. Flow (prot)	3433	3539	1583	3433	3641		1770		2787	3433		1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95		1.00	0.95		1.00
Satd. Flow (perm)	3433	3539	1583	3433	3641		1770		2787	3433		1583
Peak-hour factor, PHF	0.80	0.80	0.80	0.80	0.80	0.80	0.90	0.90	0.90	0.85	0.85	0.85
Adj. Flow (vph)	964	405	172	275	309	494	71	0	210	338	0	498
RTOR Reduction (vph)	0	0	46	0	131	0	0	0	178	0	0	391
Lane Group Flow (vph)	964	405	127	275	672	0	71	0	32	338	0	107
Turn Type	Prot	NA	Perm	Prot	NA		Prot		Perm	Prot		Perm
Protected Phases	7	4		3	8		5			1		
Permitted Phases			4						2			6
Actuated Green, G (s)	41.2	60.4	60.4	15.9	35.1		10.3		20.5	18.2		28.9
Effective Green, g (s)	41.2	60.4	60.4	15.9	35.1		10.3		20.5	18.2		28.9
Actuated g/C Ratio	0.31	0.45	0.45	0.12	0.26		0.08		0.15	0.13		0.21
Clearance Time (s)	4.4	5.2	5.2	4.4	5.2		4.4		5.9	4.4		5.4
Vehicle Extension (s)	2.0	2.3	2.3	2.0	3.8		2.0		2.9	2.0		3.5
Lane Grp Cap (vph)	1048	1584	708	404	947		135		423	463		339
v/s Ratio Prot	c0.28	0.11		0.08	c0.18		0.04			c0.10		
v/s Ratio Perm			0.08						0.01			c0.07
v/c Ratio	0.92	0.26	0.18	0.68	0.71		0.53		0.08	0.73		0.31
Uniform Delay, d1	45.3	23.2	22.4	57.1	45.3		60.0		49.1	56.0		44.7
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00		1.00	1.00		1.00
Incremental Delay, d2	12.3	0.0	0.1	3.7	2.6		1.7		0.1	5.0		0.6
Delay (s)	57.6	23.3	22.4	60.8	47.9		61.7		49.1	61.0		45.3
Level of Service	E	C	C	E	D		E		D	E		D
Approach Delay (s)		44.6			51.2			52.3			51.7	
Approach LOS		D			D			D			D	

Intersection Summary				
HCM 2000 Control Delay	48.7	HCM 2000 Level of Service	D	
HCM 2000 Volume to Capacity ratio	0.73			
Actuated Cycle Length (s)	134.9	Sum of lost time (s)	19.9	
Intersection Capacity Utilization	61.5%	ICU Level of Service	B	
Analysis Period (min)	15			
c Critical Lane Group				

Lane Group	EBR	NBL	NBT	SBT	SBR
Lane Configurations					
Traffic Volume (vph)	131	414	1125	1039	129
Future Volume (vph)	131	414	1125	1039	129
Turn Type	Perm	Prot	NA	NA	Perm
Protected Phases		5	2	6	
Permitted Phases	4				6
Detector Phase	4	5	2	6	6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	36.5	9.5	9.5	32.5	32.5
Total Split (s)	36.5	55.0	127.5	72.5	72.5
Total Split (%)	22.3%	33.5%	77.7%	44.2%	44.2%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5
Lead/Lag		Lead		Lag	Lag
Lead-Lag Optimize?		Yes		Yes	Yes
Recall Mode	None	None	Min	Min	Min

Intersection Summary
Cycle Length: 164
Actuated Cycle Length: 111.6
Natural Cycle: 120
Control Type: Actuated-Uncoordinated

Splits and Phases: 18: Genesee Ave & SR-52 Ramp

18: Genesee Ave & SR-52 Ramp

Timing Plan: Morning Peak

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	131	414	1125	1039	129
Future Volume (vph)	0	131	414	1125	1039	129
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5	4.5	4.5	4.5	4.5
Lane Util. Factor		0.88	1.00	0.95	0.95	1.00
Frt		0.85	1.00	1.00	1.00	0.85
Flt Protected		1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)		2787	1770	3539	3539	1583
Flt Permitted		1.00	0.95	1.00	1.00	1.00
Satd. Flow (perm)		2787	1770	3539	3539	1583
Peak-hour factor, PHF	0.80	0.80	0.83	0.83	0.83	0.83
Adj. Flow (vph)	0	164	499	1355	1252	155
RTOR Reduction (vph)	0	156	0	0	0	35
Lane Group Flow (vph)	0	8	499	1355	1252	120
Turn Type		Perm	Prot	NA	NA	Perm
Protected Phases			5	2	6	
Permitted Phases		4				6
Actuated Green, G (s)		5.7	41.3	96.6	50.8	50.8
Effective Green, g (s)		5.7	41.3	96.6	50.8	50.8
Actuated g/C Ratio		0.05	0.37	0.87	0.46	0.46
Clearance Time (s)		4.5	4.5	4.5	4.5	4.5
Vehicle Extension (s)		3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)		142	656	3071	1615	722
v/s Ratio Prot			c0.28	0.38	c0.35	
v/s Ratio Perm		c0.00				0.08
v/c Ratio		0.06	0.76	0.44	0.78	0.17
Uniform Delay, d1		50.2	30.7	1.6	25.4	17.8
Progression Factor		1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2		0.2	5.2	0.1	2.4	0.1
Delay (s)		50.4	35.9	1.7	27.8	17.9
Level of Service		D	D	A	C	B
Approach Delay (s)	50.4			10.9	26.7	
Approach LOS	D			B	C	

Intersection Summary			
HCM 2000 Control Delay	19.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	111.3	Sum of lost time (s)	13.5
Intersection Capacity Utilization	59.2%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

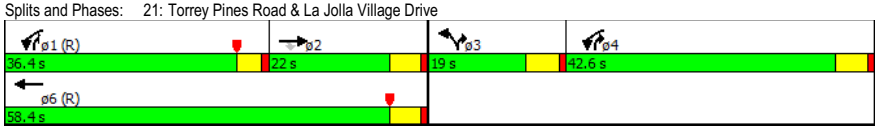
21: Torrey Pines Road & La Jolla Village Drive

Timing Plan: Morning Peak

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	ø1	ø4
Lane Configurations								
Traffic Volume (vph)	388	66	1328	1731	286	1293		
Future Volume (vph)	388	66	1328	1731	286	1293		
Turn Type	NA	Perm	Prot	NA	Prot	custom		
Protected Phases	2		1 4	6	3	1 3 4	1	4
Permitted Phases		2						
Detector Phase	2	2	1 4	6	3	1 3 4		
Switch Phase								
Minimum Initial (s)	10.0	10.0		10.0	4.0		4.0	4.0
Minimum Split (s)	15.4	15.4		15.3	9.6		8.4	42.6
Total Split (s)	22.0	22.0		58.4	19.0		36.4	42.6
Total Split (%)	18.3%	18.3%		48.7%	15.8%		30%	36%
Yellow Time (s)	4.4	4.4		4.3	4.6		3.4	4.6
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			
Total Lost Time (s)	5.4	5.4		5.3	5.6			
Lead/Lag	Lag	Lag			Lead		Lead	Lag
Lead-Lag Optimize?	Yes	Yes			Yes		Yes	Yes
Recall Mode	None	None		C-Max	None		C-Max	None

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 116 (97%), Referenced to phase 1:WBL and 6:WBT, Start of Yellow
Natural Cycle: 100
Control Type: Actuated-Coordinated

Splits and Phases: 21: Torrey Pines Road & La Jolla Village Drive



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	388	66	1328	1731	286	1293
Future Volume (vph)	388	66	1328	1731	286	1293
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.4	5.4	4.4	5.3	5.6	4.4
Lane Util. Factor	0.91	1.00	0.97	0.91	0.97	0.88
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	5085	1583	3433	5085	3433	2787
Flt Permitted	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (perm)	5085	1583	3433	5085	3433	2787
Peak-hour factor, PHF	0.83	0.83	0.93	0.93	0.84	0.84
Adj. Flow (vph)	467	80	1428	1861	340	1539
RTOR Reduction (vph)	0	69	0	0	0	0
Lane Group Flow (vph)	467	11	1428	1861	340	1539
Turn Type	NA	Perm	Prot	NA	Prot	custom
Protected Phases	2		1 4	6	3	1 3 4
Permitted Phases		2				
Actuated Green, G (s)	16.6	16.6	74.6	54.2	13.4	93.6
Effective Green, g (s)	16.6	16.6	69.0	54.2	13.4	82.4
Actuated g/C Ratio	0.14	0.14	0.58	0.45	0.11	0.69
Clearance Time (s)	5.4	5.4		5.3	5.6	
Vehicle Extension (s)	5.5	5.5		8.0	2.0	
Lane Grp Cap (vph)	703	218	1973	2296	383	1913
v/s Ratio Prot	0.09		0.42	c0.37	c0.10	c0.55
v/s Ratio Perm		0.01				
v/c Ratio	0.66	0.05	0.72	0.81	0.89	0.80
Uniform Delay, d1	49.1	44.9	18.6	28.5	52.6	13.2
Progression Factor	0.69	0.65	1.12	0.63	1.00	1.00
Incremental Delay, d2	3.4	0.2	0.3	0.8	20.7	2.4
Delay (s)	37.1	29.6	21.1	18.7	73.2	15.6
Level of Service	D	C	C	B	E	B
Approach Delay (s)	36.0			19.7	26.0	
Approach LOS	D			B	C	

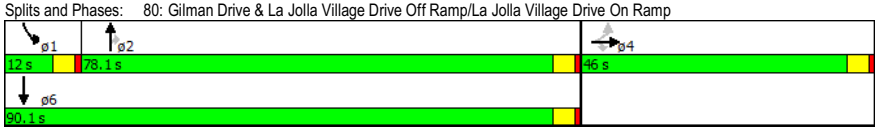
Intersection Summary			
HCM 2000 Control Delay	23.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.86		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	21.0
Intersection Capacity Utilization	67.2%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBT	EBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	4	432	1152	126	42	143
Future Volume (vph)	4	432	1152	126	42	143
Turn Type	NA	Perm	NA	Perm	Prot	NA
Protected Phases	4		2		1	6
Permitted Phases		4		2		
Detector Phase	4	4	2	2	1	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	40.5	40.5	9.5	9.5	9.5	24.5
Total Split (s)	46.0	46.0	78.1	78.1	12.0	90.1
Total Split (%)	33.8%	33.8%	57.4%	57.4%	8.8%	66.2%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	None	None	Min	Min	None	Min

Intersection Summary
Cycle Length: 136.1
Actuated Cycle Length: 84.2
Natural Cycle: 90
Control Type: Actuated-Uncoordinated

Splits and Phases: 80: Gilman Drive & La Jolla Village Drive Off Ramp/La Jolla Village Drive On Ramp



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	53	4	432	0	0	0	0	1152	126	42	143	0
Future Volume (vph)	53	4	432	0	0	0	0	1152	126	42	143	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5	4.5					4.5	4.5	4.5	4.5	
Lane Util. Factor		0.95	0.95					0.95	1.00	1.00	0.95	
Frt		0.88	0.85					1.00	0.85	1.00	1.00	
Flt Protected		0.99	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1549	1504					3539	1583	1770	3539	
Flt Permitted		0.99	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		1549	1504					3539	1583	1770	3539	
Peak-hour factor, PHF	0.64	0.64	0.64	0.25	0.25	0.25	0.92	0.92	0.92	1.00	1.00	1.00
Adj. Flow (vph)	83	6	675	0	0	0	0	1252	137	42	143	0
RTOR Reduction (vph)	0	90	268	0	0	0	0	0	30	0	0	0
Lane Group Flow (vph)	0	296	110	0	0	0	0	1252	107	42	143	0
Turn Type	Perm	NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2			
Actuated Green, G (s)		24.7	24.7					43.1	43.1	3.7	51.3	
Effective Green, g (s)		24.7	24.7					43.1	43.1	3.7	51.3	
Actuated g/C Ratio		0.29	0.29					0.51	0.51	0.04	0.60	
Clearance Time (s)		4.5	4.5					4.5	4.5	4.5	4.5	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		450	437					1794	802	77	2135	
v/s Ratio Prot								c0.35		c0.02	0.04	
v/s Ratio Perm		0.19	0.07						0.07			
v/c Ratio		0.66	0.25					0.70	0.13	0.55	0.07	
Uniform Delay, d1		26.4	23.1					16.0	11.1	39.8	7.0	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		3.5	0.3					1.2	0.1	7.7	0.0	
Delay (s)		29.9	23.4					17.2	11.2	47.5	7.0	
Level of Service		C	C					B	B	D	A	
Approach Delay (s)		26.7			0.0			16.6			16.2	
Approach LOS		C			A			B			B	

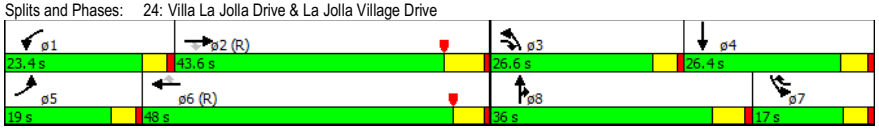
Intersection Summary			
HCM 2000 Control Delay	19.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	13.5
Intersection Capacity Utilization	72.4%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	219	1201	34	467	1815	750	361	345	457	460	102
Future Volume (vph)	219	1201	34	467	1815	750	361	345	457	460	102
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	Prot	Prot	NA
Protected Phases	5	2	3	1	6	7	3	8	8	7	4
Permitted Phases			2			6					
Detector Phase	5	2	3	1	6	7	3	8	8	7	4
Switch Phase											
Minimum Initial (s)	4.0	10.0	4.0	4.0	10.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.4	16.4	8.4	8.4	15.3	8.4	8.4	9.5	9.5	8.4	8.9
Total Split (s)	19.0	43.6	26.6	23.4	48.0	17.0	26.6	36.0	36.0	17.0	26.4
Total Split (%)	15.8%	36.3%	22.2%	19.5%	40.0%	14.2%	22.2%	30.0%	30.0%	14.2%	22.0%
Yellow Time (s)	3.4	5.4	3.4	3.4	4.3	3.4	3.4	4.5	4.5	3.4	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	6.4	4.4	4.4	5.3	4.4	4.4	5.5	5.5	4.4	4.9
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	C-Max	None	None	None	None	None	None

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 65 (54%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 140
Control Type: Actuated-Coordinated

Splits and Phases: 24: Villa La Jolla Drive & La Jolla Village Drive



24: Villa La Jolla Drive & La Jolla Village Drive

Timing Plan: Morning Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	219	1201	34	467	1815	750	361	345	457	460	102	38
Future Volume (vph)	219	1201	34	467	1815	750	361	345	457	460	102	38
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	6.4	4.4	4.4	5.3	4.4	4.4	5.5	5.5	4.4	4.9	
Lane Util. Factor	1.00	0.91	1.00	0.97	0.91	0.88	0.97	0.95	0.95	0.97	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.97	0.85	1.00	0.96	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	5085	1583	3433	5085	2787	3433	1718	1504	3433	1787	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	5085	1583	3433	5085	2787	3433	1718	1504	3433	1787	
Peak-hour factor, PHF	0.87	0.87	0.87	0.91	0.91	0.91	0.80	0.80	0.80	0.80	0.80	0.80
Adj. Flow (vph)	252	1380	39	513	1995	824	451	431	571	575	128	48
RTOR Reduction (vph)	0	0	21	0	0	94	0	7	187	0	11	0
Lane Group Flow (vph)	252	1380	18	513	1995	730	451	527	281	575	165	0
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	Prot	Prot	NA	
Protected Phases	5	2	3	1	6	7	3	8	8	7	4	
Permitted Phases			2			6						
Actuated Green, G (s)	14.6	37.2	56.6	19.0	42.7	55.3	19.4	30.5	30.5	12.6	24.3	
Effective Green, g (s)	14.6	37.2	56.6	19.0	42.7	55.3	19.4	30.5	30.5	12.6	24.3	
Actuated g/C Ratio	0.12	0.31	0.47	0.16	0.36	0.46	0.16	0.25	0.25	0.10	0.20	
Clearance Time (s)	4.4	6.4	4.4	4.4	5.3	4.4	4.4	5.5	5.5	4.4	4.9	
Vehicle Extension (s)	2.0	4.4	2.0	2.0	4.7	2.0	2.0	3.3	3.3	2.0	2.0	
Lane Grp Cap (vph)	215	1576	746	543	1809	1284	555	436	382	360	361	
v/s Ratio Prot	c0.14	0.27	0.00	0.15	c0.39	0.06	0.13	c0.31	0.19	c0.17	0.09	
v/s Ratio Perm			0.01			0.20						
v/c Ratio	1.17	0.88	0.02	0.94	1.10	0.57	0.81	1.21	0.74	1.60	0.46	
Uniform Delay, d1	52.7	39.2	16.9	50.0	38.6	23.6	48.5	44.8	41.0	53.7	42.0	
Progression Factor	1.45	0.60	1.00	1.04	1.00	1.11	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	102.3	4.3	0.0	3.9	47.2	0.0	8.4	113.3	7.3	281.5	0.3	
Delay (s)	178.6	27.9	16.9	55.9	86.0	26.2	57.0	158.0	48.4	335.2	42.4	
Level of Service	F	C	B	E	F	C	E	F	D	F	D	
Approach Delay (s)		50.4			66.6			91.3			266.6	
Approach LOS		D			E			F			F	

Intersection Summary				
HCM 2000 Control Delay	88.6	HCM 2000 Level of Service	F	
HCM 2000 Volume to Capacity ratio	1.22			
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	20.7	
Intersection Capacity Utilization	104.1%	ICU Level of Service	G	
Analysis Period (min)	15			

c Critical Lane Group

34: Miramar Road & Eastgate Mall

Timing Plan: Morning Peak

Lane Group	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Traffic Volume (vph)	580	2261	3	2206	815	157	210
Future Volume (vph)	580	2261	3	2206	815	157	210
Turn Type	Prot	NA	Prot	NA	Perm	Prot	Perm
Protected Phases	5	2	1	6		7	
Permitted Phases					6		7
Detector Phase	5	2	1	6	6	7	7
Switch Phase							
Minimum Initial (s)	4.0	10.0	4.0	10.0	10.0	10.0	10.0
Minimum Split (s)	8.4	16.3	8.4	15.4	15.4	14.4	14.4
Total Split (s)	34.4	66.3	24.4	65.4	65.4	44.4	44.4
Total Split (%)	23.9%	46.0%	16.9%	45.4%	45.4%	30.8%	30.8%
Yellow Time (s)	3.4	5.3	3.4	4.4	4.4	3.4	3.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	6.3	4.4	5.4	5.4	4.4	4.4
Lead/Lag	Lead	Lag	Lead	Lag	Lag		
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		
Recall Mode	None	Min	None	Min	Min	None	None

Intersection Summary
Cycle Length: 144.2
Actuated Cycle Length: 115.2
Natural Cycle: 90
Control Type: Actuated-Uncoordinated

Splits and Phases: 34: Miramar Road & Eastgate Mall

34: Miramar Road & Eastgate Mall

Timing Plan: Morning Peak

Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Traffic Volume (vph)	580	2261	3	2206	815	157	210
Future Volume (vph)	580	2261	3	2206	815	157	210
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	6.3	4.4	5.4	5.4	4.4	4.4
Lane Util. Factor	0.97	0.91	1.00	0.86	1.00	0.97	1.00
Frt	1.00	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)	3433	5085	1770	6408	1583	3433	1583
Flt Permitted	0.95	1.00	0.95	1.00	1.00	0.95	1.00
Satd. Flow (perm)	3433	5085	1770	6408	1583	3433	1583
Peak-hour factor, PHF	0.87	0.87	0.92	0.92	0.92	0.80	0.80
Adj. Flow (vph)	667	2599	3	2398	886	196	262
RTOR Reduction (vph)	0	0	0	0	310	0	233
Lane Group Flow (vph)	667	2599	3	2398	576	196	30
Turn Type	Prot	NA	Prot	NA	Perm	Prot	Perm
Protected Phases	5	2	1	6		7	
Permitted Phases					6		7
Actuated Green, G (s)	27.1	88.9	1.0	63.7	63.7	13.7	13.7
Effective Green, g (s)	27.1	88.9	1.0	63.7	63.7	13.7	13.7
Actuated g/C Ratio	0.23	0.75	0.01	0.54	0.54	0.12	0.12
Clearance Time (s)	4.4	6.3	4.4	5.4	5.4	4.4	4.4
Vehicle Extension (s)	2.0	5.0	2.0	6.1	6.1	4.5	4.5
Lane Grp Cap (vph)	783	3808	14	3438	849	396	182
v/s Ratio Prot	c0.19	c0.51	0.00	0.37		c0.06	
v/s Ratio Perm					0.36		0.02
v/c Ratio	0.85	0.68	0.21	0.70	0.68	0.49	0.17
Uniform Delay, d1	43.9	7.7	58.5	20.4	20.0	49.3	47.4
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	8.6	0.7	2.8	1.0	3.4	1.7	0.8
Delay (s)	52.4	8.3	61.2	21.3	23.4	50.9	48.1
Level of Service	D	A	E	C	C	D	D
Approach Delay (s)		17.3		21.9		49.3	
Approach LOS		B		C		D	

Intersection Summary			
HCM 2000 Control Delay	21.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	118.7	Sum of lost time (s)	15.1
Intersection Capacity Utilization	75.2%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

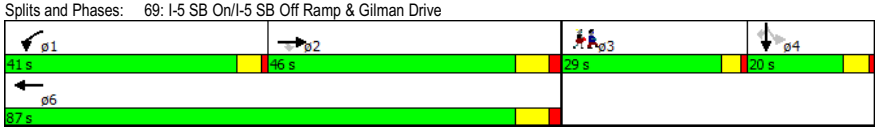
69: I-5 SB On/I-5 SB Off Ramp & Gilman Drive

Timing Plan: Morning Peak

Lane Group	EBT	EBR	WBL	WBT	SBT	SBR	ø3
Lane Configurations							
Traffic Volume (vph)	94	546	360	937	0	47	
Future Volume (vph)	94	546	360	937	0	47	
Turn Type	NA	Perm	Prot	NA	NA	Perm	
Protected Phases	2		1	6	4		3
Permitted Phases		2				4	
Detector Phase	2	2	1	6	4	4	
Switch Phase							
Minimum Initial (s)	13.0	13.0	5.0	12.0	5.0	5.0	1.0
Minimum Split (s)	20.2	20.2	9.7	19.2	17.1	17.1	29.0
Total Split (s)	46.0	46.0	41.0	87.0	20.0	20.0	29.0
Total Split (%)	33.8%	33.8%	30.1%	64.0%	14.7%	14.7%	21%
Yellow Time (s)	5.2	5.2	3.7	5.2	4.1	4.1	3.0
All-Red Time (s)	2.0	2.0	1.0	2.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	7.2	7.2	4.7	7.2	5.1	5.1	
Lead/Lag	Lag	Lag	Lead		Lag	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes
Recall Mode	Min	Min	None	Min	None	None	None

Intersection Summary
Cycle Length: 136
Actuated Cycle Length: 51.7
Natural Cycle: 110
Control Type: Actuated-Uncoordinated

Splits and Phases: 69: I-5 SB On/I-5 SB Off Ramp & Gilman Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	94	546	360	937	0	0	0	0	13	0	47
Future Volume (vph)	0	94	546	360	937	0	0	0	0	13	0	47
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		7.2	7.2	4.7	7.2						5.1	5.1
Lane Util. Factor		1.00	0.88	0.97	1.00						1.00	1.00
Frt		1.00	0.85	1.00	1.00						1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00						0.95	1.00
Satd. Flow (prot)		1863	2787	3433	1863						1770	1583
Flt Permitted		1.00	1.00	0.95	1.00						0.95	1.00
Satd. Flow (perm)		1863	2787	3433	1863						1770	1583
Peak-hour factor, PHF	0.84	0.84	0.84	0.94	0.94	0.94	0.25	0.25	0.25	0.80	0.80	0.80
Adj. Flow (vph)	0	112	650	383	997	0	0	0	0	16	0	59
RTOR Reduction (vph)	0	0	435	0	0	0	0	0	0	0	0	54
Lane Group Flow (vph)	0	112	215	383	997	0	0	0	0	0	16	5
Turn Type		NA	Perm	Prot	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases			2							4		4
Actuated Green, G (s)		17.4	17.4	13.9	36.0						4.2	4.2
Effective Green, g (s)		17.4	17.4	13.9	36.0						4.2	4.2
Actuated g/C Ratio		0.33	0.33	0.26	0.69						0.08	0.08
Clearance Time (s)		7.2	7.2	4.7	7.2						5.1	5.1
Vehicle Extension (s)		2.0	2.0	2.0	2.0						2.0	2.0
Lane Grp Cap (vph)		617	923	908	1277						141	126
v/s Ratio Prot		0.06		0.11	c0.54							
v/s Ratio Perm			0.08								0.01	0.00
v/c Ratio		0.18	0.23	0.42	0.78						0.11	0.04
Uniform Delay, d1		12.5	12.7	16.0	5.6						22.4	22.3
Progression Factor		1.00	1.00	1.00	1.00						1.00	1.00
Incremental Delay, d2		0.1	0.0	0.1	2.9						0.1	0.0
Delay (s)		12.5	12.8	16.1	8.5						22.6	22.3
Level of Service		B	B	B	A						C	C
Approach Delay (s)		12.7			10.6			0.0			22.4	
Approach LOS		B			B			A			C	

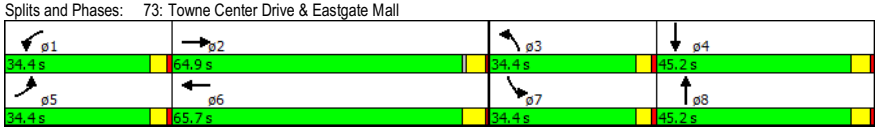
Intersection Summary			
HCM 2000 Control Delay	11.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.91		
Actuated Cycle Length (s)	52.5	Sum of lost time (s)	21.0
Intersection Capacity Utilization	76.0%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	103	257	98	553	271	600	11	49
Future Volume (vph)	103	257	98	553	271	600	11	49
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	5	2	1	6	3	8	7	4
Permitted Phases								
Detector Phase	5	2	1	6	3	8	7	4
Switch Phase								
Minimum Initial (s)	4.0	7.0	4.0	7.0	4.0	7.0	4.0	7.0
Minimum Split (s)	8.4	11.9	8.4	12.7	8.4	12.2	8.4	12.7
Total Split (s)	34.4	64.9	34.4	65.7	34.4	45.2	34.4	45.2
Total Split (%)	19.1%	36.1%	19.1%	36.6%	19.1%	25.2%	19.1%	25.2%
Yellow Time (s)	3.4	3.9	3.4	4.7	3.4	4.2	3.4	4.2
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	4.9	4.4	5.7	4.4	5.2	4.4	5.2
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 179.7
Actuated Cycle Length: 96.2
Natural Cycle: 65
Control Type: Actuated-Uncoordinated

Splits and Phases: 73: Towne Center Drive & Eastgate Mall



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	103	257	155	98	553	109	271	600	329	11	49	7
Future Volume (vph)	103	257	155	98	553	109	271	600	329	11	49	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	5.7		4.4	5.2		4.4	5.2	
Lane Util. Factor	0.97	0.95		0.97	0.95		0.97	0.95		0.97	0.95	
Frt	1.00	0.94		1.00	0.98		1.00	0.95		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	3433	3339		3433	3452		3433	3351		3433	3471	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	3433	3339		3433	3452		3433	3351		3433	3471	
Peak-hour factor, PHF	0.94	0.94	0.94	0.96	0.96	0.96	0.86	0.86	0.86	0.80	0.80	0.80
Adj. Flow (vph)	110	273	165	102	576	114	315	698	383	14	61	9
RTOR Reduction (vph)	0	53	0	0	10	0	0	31	0	0	6	0
Lane Group Flow (vph)	110	385	0	102	680	0	315	1050	0	14	64	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases												
Actuated Green, G (s)	8.0	29.6		7.8	28.6		21.3	40.7		1.9	21.3	
Effective Green, g (s)	8.0	29.6		7.8	28.6		21.3	40.7		1.9	21.3	
Actuated g/C Ratio	0.08	0.30		0.08	0.29		0.22	0.41		0.02	0.22	
Clearance Time (s)	4.4	4.9		4.4	5.7		4.4	5.2		4.4	5.2	
Vehicle Extension (s)	2.0	5.1		2.0	4.8		2.0	5.1		2.0	4.8	
Lane Grp Cap (vph)	277	999		270	998		739	1379		65	747	
v/s Ratio Prot	c0.03	0.12		0.03	c0.20		c0.09	c0.31		0.00	0.02	
v/s Ratio Perm												
v/c Ratio	0.40	0.39		0.38	0.68		0.43	0.76		0.22	0.09	
Uniform Delay, d1	43.2	27.4		43.2	31.1		33.5	24.9		47.8	31.0	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.3	0.5		0.3	2.4		0.1	3.0		0.6	0.1	
Delay (s)	43.5	28.0		43.6	33.5		33.7	28.0		48.4	31.1	
Level of Service	D	C		D	C		C	C		D	C	
Approach Delay (s)		31.1			34.8			29.2			34.0	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM 2000 Control Delay	31.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	98.9	Sum of lost time (s)	19.7
Intersection Capacity Utilization	62.0%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	91	361	59	361	383	122	149	21	38
Future Volume (vph)	91	361	59	361	383	122	149	21	38
Turn Type	pm+pt	NA	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA
Protected Phases	7	4	3	8	5	2		1	6
Permitted Phases	4		8		2		2	6	
Detector Phase	7	4	3	8	5	2	2	1	6
Switch Phase									
Minimum Initial (s)	5.0	4.0	5.0	4.0	4.0	7.0	7.0	4.0	7.0
Minimum Split (s)	9.5	8.9	9.5	8.4	8.4	11.9	11.9	8.4	11.9
Total Split (s)	9.5	44.9	9.5	44.4	34.4	64.9	64.9	34.4	64.9
Total Split (%)	6.2%	29.2%	6.2%	28.9%	22.4%	42.2%	42.2%	22.4%	42.2%
Yellow Time (s)	3.5	3.9	3.5	3.4	3.4	3.9	3.9	3.4	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.9	4.5	4.4	4.4	4.9	4.9	4.4	4.9
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Min	Min	None	Min

Intersection Summary
Cycle Length: 153.7
Actuated Cycle Length: 76.1
Natural Cycle: 55
Control Type: Actuated-Uncoordinated

Splits and Phases: 76: Executive Way & Executive Drive

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	91	361	79	59	361	45	383	122	149	21	38	43
Future Volume (vph)	91	361	79	59	361	45	383	122	149	21	38	43
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.9		4.5	4.4		4.4	4.9	4.9	4.4	4.9	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.97		1.00	0.98		1.00	1.00	0.85	1.00	0.92	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3444		1770	3480		1770	1863	1583	1770	1715	
Flt Permitted	0.32	1.00		0.34	1.00		0.52	1.00	1.00	0.66	1.00	
Satd. Flow (perm)	604	3444		638	3480		978	1863	1583	1238	1715	
Peak-hour factor, PHF	0.85	0.85	0.85	0.90	0.90	0.90	0.84	0.84	0.84	0.80	0.80	0.80
Adj. Flow (vph)	107	425	93	66	401	50	456	145	177	26	48	54
RTOR Reduction (vph)	0	12	0	0	7	0	0	0	96	0	35	0
Lane Group Flow (vph)	107	506	0	66	444	0	456	145	81	26	67	0
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		
Actuated Green, G (s)	24.0	18.7		21.7	17.8		42.6	36.3	36.3	15.8	13.9	
Effective Green, g (s)	24.0	18.7		21.7	17.8		42.6	36.3	36.3	15.8	13.9	
Actuated g/C Ratio	0.30	0.24		0.27	0.22		0.54	0.46	0.46	0.20	0.17	
Clearance Time (s)	4.5	4.9		4.5	4.4		4.4	4.9	4.9	4.4	4.9	
Vehicle Extension (s)	3.0	2.0		3.0	2.3		2.0	2.9	2.9	2.0	2.6	
Lane Grp Cap (vph)	260	810		229	779		766	850	722	258	299	
v/s Ratio Prot	c0.03	c0.15		0.01	0.13		c0.18	0.08		0.00	0.04	
v/s Ratio Perm	0.10			0.06			c0.14		0.05	0.02		
v/c Ratio	0.41	0.62		0.29	0.57		0.60	0.17	0.11	0.10	0.22	
Uniform Delay, d1	20.9	27.3		22.0	27.4		11.7	12.7	12.4	25.9	28.2	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	1.1	1.1		0.7	0.7		0.8	0.1	0.1	0.1	0.3	
Delay (s)	22.0	28.3		22.7	28.1		12.6	12.8	12.4	26.0	28.5	
Level of Service	C	C		C	C		B	B	B	C	C	
Approach Delay (s)		27.2			27.4			12.6			28.0	
Approach LOS		C			C			B			C	

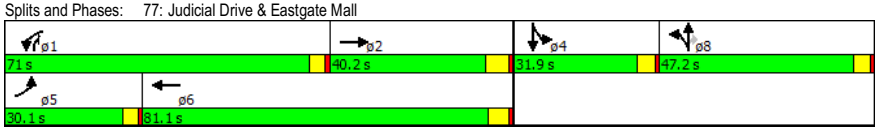
Intersection Summary			
HCM 2000 Control Delay	21.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	79.5	Sum of lost time (s)	18.7
Intersection Capacity Utilization	56.5%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	140	344	422	598	239	226	269	4	16
Future Volume (vph)	140	344	422	598	239	226	269	4	16
Turn Type	Prot	NA	Prot	NA	Split	NA	pm+ov	Split	NA
Protected Phases	5	2	1	6	8	8	1	4	4
Permitted Phases							8		
Detector Phase	5	2	1	6	8	8	1	4	4
Switch Phase									
Minimum Initial (s)	4.0	7.0	4.0	7.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.4	38.1	8.4	24.6	31.9	31.9	8.4	31.9	31.9
Total Split (s)	30.1	40.2	71.0	81.1	47.2	47.2	71.0	31.9	31.9
Total Split (%)	15.8%	21.1%	37.3%	42.6%	24.8%	24.8%	37.3%	16.8%	16.8%
Yellow Time (s)	3.4	5.1	3.4	4.6	3.9	3.9	3.4	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	6.1	4.4	5.6	4.9	4.9	4.4	4.9	4.9
Lead/Lag	Lead	Lag	Lead	Lag			Lead		
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes		
Recall Mode	None	None	None	None	None	None	None	None	None

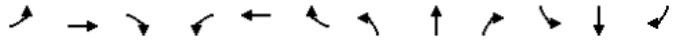
Intersection Summary
Cycle Length: 190.3
Actuated Cycle Length: 130.3
Natural Cycle: 145
Control Type: Actuated-Uncoordinated

Splits and Phases: 77: Judicial Drive & Eastgate Mall



77: Judicial Drive & Eastgate Mall

Timing Plan: Morning Peak



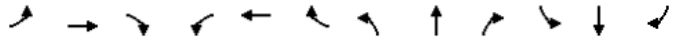
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	140	344	54	422	598	85	239	226	269	4	16	13
Future Volume (vph)	140	344	54	422	598	85	239	226	269	4	16	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	6.1		4.4	5.6		4.9	4.9	4.4	4.9	4.9	
Lane Util. Factor	1.00	0.95		1.00	0.95		0.95	0.91	0.95	1.00	1.00	
Frt	1.00	0.98		1.00	0.98		1.00	0.99	0.85	1.00	0.93	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3467		1770	3473		1681	1663	1504	1770	1739	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	3467		1770	3473		1681	1663	1504	1770	1739	
Peak-hour factor, PHF	0.93	0.93	0.93	0.84	0.84	0.84	0.94	0.94	0.94	0.80	0.80	0.80
Adj. Flow (vph)	151	370	58	502	712	101	254	240	286	5	20	16
RTOR Reduction (vph)	0	7	0	0	6	0	0	2	108	0	15	0
Lane Group Flow (vph)	151	421	0	502	807	0	229	292	149	5	21	0
Turn Type	Prot	NA		Prot	NA		Split	NA	pm+ov	Split	NA	
Protected Phases	5	2		1	6		8	8	1	4	4	
Permitted Phases									8			
Actuated Green, G (s)	17.3	23.8		44.6	51.6		30.1	30.1	74.7	10.3	10.3	
Effective Green, g (s)	17.3	23.8		44.6	51.6		30.1	30.1	74.7	10.3	10.3	
Actuated g/C Ratio	0.13	0.18		0.35	0.40		0.23	0.23	0.58	0.08	0.08	
Clearance Time (s)	4.4	6.1		4.4	5.6		4.9	4.9	4.4	4.9	4.9	
Vehicle Extension (s)	2.0	2.7		2.0	3.0		2.0	2.0	2.0	2.0	2.0	
Lane Grp Cap (vph)	237	639		611	1388		391	387	870	141	138	
v/s Ratio Prot	0.09	c0.12		c0.28	0.23		0.14	c0.18	0.06	0.00	c0.01	
v/s Ratio Perm									0.04			
v/c Ratio	0.64	0.66		0.82	0.58		0.59	0.75	0.17	0.04	0.15	
Uniform Delay, d1	52.9	48.9		38.6	30.3		44.0	46.1	12.7	54.8	55.3	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	4.1	2.3		8.3	0.6		1.4	7.2	0.0	0.0	0.2	
Delay (s)	57.0	51.2		46.9	30.9		45.4	53.3	12.8	54.9	55.5	
Level of Service	E	D		D	C		D	D	B	D	E	
Approach Delay (s)		52.7			37.0			37.6			55.4	
Approach LOS		D			D			D			E	

Intersection Summary				
HCM 2000 Control Delay	40.8	HCM 2000 Level of Service	D	
HCM 2000 Volume to Capacity ratio	0.70			
Actuated Cycle Length (s)	129.1	Sum of lost time (s)	20.3	
Intersection Capacity Utilization	69.4%	ICU Level of Service	C	
Analysis Period (min)	15			

c Critical Lane Group

79: I-805 NB Ramps/I-805 SB Ramps & Gorvernor Drive

Timing Plan: Morning Peak



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Right Turn Channelized												
Traffic Volume (veh/h)	386	24	0	0	33	14	481	11	21	0	0	0
Future Volume (veh/h)	386	24	0	0	33	14	481	11	21	0	0	0
Peak Hour Factor	0.96	0.96	0.96	0.55	0.55	0.55	0.95	0.95	0.95	1.00	1.00	1.00
Hourly flow rate (vph)	402	25	0	0	60	25	506	12	22	0	0	0
Approach Volume (veh/h)		427			85			540			0	
Crossing Volume (veh/h)		0			920			427			566	
High Capacity (veh/h)		1385			665			989			885	
High v/c (veh/h)		0.31			0.13			0.55			0.00	
Low Capacity (veh/h)		1161			519			804			712	
Low v/c (veh/h)		0.37			0.16			0.67			0.00	

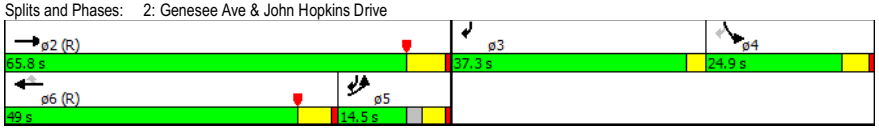
Intersection Summary				
Maximum v/c High	0.55			
Maximum v/c Low	0.67			
Intersection Capacity Utilization	64.5%	ICU Level of Service	C	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	ø3
Lane Configurations							
Traffic Volume (vph)	123	400	1657	444	464	46	
Future Volume (vph)	123	400	1657	444	464	46	
Turn Type	Prot	NA	NA	Perm	Prot	pt+ov	
Protected Phases	5	2	6		4	3 5	3
Permitted Phases				6		4	
Detector Phase	5	2	6	6	4	3 5	
Switch Phase							
Minimum Initial (s)	4.0	10.0	10.0	10.0	7.0		4.0
Minimum Split (s)	9.5	16.7	15.9	15.9	11.9		7.0
Total Split (s)	14.5	65.8	49.0	49.0	24.9		37.3
Total Split (%)	11.3%	51.4%	38.3%	38.3%	19.5%		29%
Yellow Time (s)	3.4	5.7	4.9	4.9	3.9		3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		0.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	4.4	6.7	5.9	5.9	4.9		
Lead/Lag	Lag		Lead	Lead	Lag		Lead
Lead-Lag Optimize?	Yes		Yes	Yes	Yes		Yes
Recall Mode	None	C-Max	C-Max	C-Max	None		None

Intersection Summary

Cycle Length: 128
Actuated Cycle Length: 128
Offset: 58 (45%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 65
Control Type: Actuated-Coordinated

Splits and Phases: 2: Genesee Ave & John Hopkins Drive



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	123	400	1657	444	464	46
Future Volume (vph)	123	400	1657	444	464	46
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	6.7	5.9	5.9	4.9	3.0
Lane Util. Factor	1.00	0.91	0.86	0.88	0.97	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	5085	6408	2787	3433	1583
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	5085	6408	2787	3433	1583
Peak-hour factor, PHF	0.80	0.80	0.90	0.90	0.79	0.79
Adj. Flow (vph)	154	500	1841	493	587	58
RTOR Reduction (vph)	0	0	0	187	0	0
Lane Group Flow (vph)	154	500	1841	306	587	58
Turn Type	Prot	NA	NA	Perm	Prot	pt+ov
Protected Phases	5	2	6		4	3 5
Permitted Phases				6		4
Actuated Green, G (s)	12.4	76.0	60.0	60.0	34.2	54.2
Effective Green, g (s)	12.4	76.0	60.0	60.0	34.2	49.8
Actuated g/C Ratio	0.10	0.59	0.47	0.47	0.27	0.39
Clearance Time (s)	4.4	6.7	5.9	5.9	4.9	
Vehicle Extension (s)	2.0	4.0	3.9	3.9	5.0	
Lane Grp Cap (vph)	171	3019	3003	1306	917	652
v/s Ratio Prot	c0.09	0.10	c0.29		c0.17	c0.01
v/s Ratio Perm				0.11		0.03
v/c Ratio	0.90	0.17	0.61	0.23	0.64	0.09
Uniform Delay, d1	57.2	11.7	25.3	20.3	41.5	24.7
Progression Factor	0.94	0.72	1.44	2.41	1.00	1.00
Incremental Delay, d2	40.8	0.1	0.7	0.3	2.1	0.0
Delay (s)	94.4	8.5	37.4	49.2	43.6	24.8
Level of Service	F	A	D	D	D	C
Approach Delay (s)		28.7	39.9		41.9	
Approach LOS		C	D		D	

Intersection Summary

HCM 2000 Control Delay	38.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	128.0	Sum of lost time (s)	18.2
Intersection Capacity Utilization	56.7%	ICU Level of Service	B
Analysis Period (min)	15		

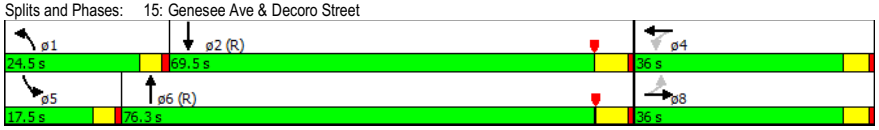
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	24	4	4	5	3	158	7	1249	139	1356
Future Volume (vph)	24	4	4	5	3	158	7	1249	139	1356
Turn Type	Perm	NA	NA	Perm	NA	NA	Prot	NA	Prot	NA
Protected Phases		8			4		1	6	5	2
Permitted Phases	8			4						
Detector Phase	8	8		4	4		1	6	5	2
Switch Phase										
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	10.0	4.0	10.0
Minimum Split (s)	8.9	8.9		8.9	8.9		8.4	15.7	8.4	15.9
Total Split (s)	36.0	36.0		36.0	36.0		24.5	76.3	17.5	69.5
Total Split (%)	27.7%	27.7%		27.7%	27.7%		18.8%	58.7%	13.5%	53.5%
Yellow Time (s)	3.9	3.9		3.9	3.9		3.4	4.7	3.4	4.9
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0			0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)		4.9			4.9		4.4	5.7	4.4	5.9
Lead/Lag							Lead	Lag	Lead	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	C-Max	None	C-Max

Intersection Summary

Cycle Length: 130
Actuated Cycle Length: 130
Offset: 97 (75%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow
Natural Cycle: 60
Control Type: Actuated-Coordinated

Splits and Phases: 15: Genesee Ave & Decoro Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	24	4	4	5	3	158	7	1249	10	139	1356	33
Future Volume (vph)	24	4	4	5	3	158	7	1249	10	139	1356	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9	4.0		4.9	4.0	4.4	5.7		4.4	5.9	
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.95		1.00	0.95	
Frt		1.00	0.85		1.00	0.85	1.00	1.00		1.00	1.00	
Flt Protected		0.96	1.00		0.97	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1785	1583		1803	1583	1770	3535		1770	3527	
Flt Permitted		0.75	1.00		0.78	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1393	1583		1450	1583	1770	3535		1770	3527	
Peak-hour factor, PHF	0.73	0.73	0.73	0.88	0.88	0.88	0.91	0.91	0.91	0.96	0.96	0.96
Adj. Flow (vph)	33	5	5	6	3	180	8	1373	11	145	1412	34
RTOR Reduction (vph)	0	0	5	0	0	180	0	0	0	0	1	0
Lane Group Flow (vph)	0	38	0	0	9	0	8	1384	0	145	1446	0
Turn Type	Perm	NA	NA	Perm	NA	NA	Prot	NA		Prot	NA	
Protected Phases		8			4		1	6		5	2	
Permitted Phases	8			4								
Actuated Green, G (s)		6.9	0.0		6.9	0.0	1.3	92.3		15.8	106.6	
Effective Green, g (s)		6.9	0.0		6.9	0.0	1.3	92.3		15.8	106.6	
Actuated g/C Ratio		0.05	0.00		0.05	0.00	0.01	0.71		0.12	0.82	
Clearance Time (s)		4.9			4.9		4.4	5.7		4.4	5.9	
Vehicle Extension (s)		2.0			2.0		2.0	4.3		2.0	3.7	
Lane Grp Cap (vph)		73	0		76	0	17	2509		215	2892	
v/s Ratio Prot							0.00	c0.39		c0.08	0.41	
v/s Ratio Perm		c0.03			0.01							
v/c Ratio		0.52	0.00		0.12	0.00	0.47	0.55		0.67	0.50	
Uniform Delay, d1		59.9	65.0		58.7	65.0	64.0	9.0		54.6	3.6	
Progression Factor		1.00	1.00		1.00	1.00	1.01	2.23		0.75	1.85	
Incremental Delay, d2		3.1	0.0		0.3	0.0	6.8	0.8		4.9	0.5	
Delay (s)		63.0	65.0		58.9	65.0	71.4	20.8		45.7	7.1	
Level of Service		E	E		E	E	E	C		D	A	
Approach Delay (s)		63.2			64.7			21.1			10.6	
Approach LOS		E			E			C			B	

Intersection Summary

HCM 2000 Control Delay	19.0	HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio	0.57			
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	15.2	
Intersection Capacity Utilization	63.3%	ICU Level of Service	B	
Analysis Period (min)	15			

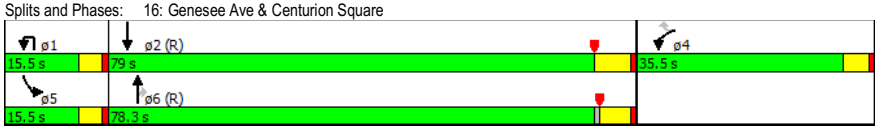
c Critical Lane Group

Lane Group	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	90	28	2	1089	66	66	1252
Future Volume (vph)	90	28	2	1089	66	66	1252
Turn Type	Prot	Perm	Prot	NA	Perm	Prot	NA
Protected Phases	4		1	6		5	2
Permitted Phases		4			6		
Detector Phase	4	4	1	6	6	5	2
Switch Phase							
Minimum Initial (s)	7.0	7.0	4.0	10.0	10.0	4.0	10.0
Minimum Split (s)	11.9	11.9	8.4	15.7	15.7	8.4	16.4
Total Split (s)	35.5	35.5	15.5	78.3	78.3	15.5	79.0
Total Split (%)	27.3%	27.3%	11.9%	60.2%	60.2%	11.9%	60.8%
Yellow Time (s)	3.9	3.9	3.4	4.7	4.7	3.4	5.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.9	4.9	4.4	5.7	5.7	4.4	6.4
Lead/Lag			Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?			Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	C-Max	C-Max	None	C-Max

Intersection Summary

Cycle Length: 130
Actuated Cycle Length: 130
Offset: 37 (28%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow
Natural Cycle: 60
Control Type: Actuated-Coordinated

Splits and Phases: 16: Genesee Ave & Centurion Square



Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	90	28	2	1089	66	66	1252
Future Volume (vph)	90	28	2	1089	66	66	1252
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9	4.4	5.7	5.7	4.4	6.4
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	0.97	0.95
Frt	1.00	0.85	1.00	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	1770	3539	1583	3433	3539
Flt Permitted	0.95	1.00	0.95	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	1770	3539	1583	3433	3539
Peak-hour factor, PHF	0.66	0.66	0.92	0.90	0.90	0.94	0.94
Adj. Flow (vph)	136	42	2	1210	73	70	1332
RTOR Reduction (vph)	0	37	0	0	18	0	0
Lane Group Flow (vph)	136	5	2	1210	55	70	1332
Turn Type	Prot	Perm	Prot	NA	Perm	Prot	NA
Protected Phases	4		1	6		5	2
Permitted Phases		4			6		
Actuated Green, G (s)	14.4	14.4	1.1	94.5	94.5	6.1	98.8
Effective Green, g (s)	14.4	14.4	1.1	94.5	94.5	6.1	98.8
Actuated g/C Ratio	0.11	0.11	0.01	0.73	0.73	0.05	0.76
Clearance Time (s)	4.9	4.9	4.4	5.7	5.7	4.4	6.4
Vehicle Extension (s)	2.0	2.0	2.0	4.2	4.2	2.0	3.4
Lane Grp Cap (vph)	196	175	14	2572	1150	161	2689
v/s Ratio Prot	c0.08		0.00	0.34		c0.02	c0.38
v/s Ratio Perm		0.00			0.03		
v/c Ratio	0.69	0.03	0.14	0.47	0.05	0.43	0.50
Uniform Delay, d1	55.7	51.5	64.0	7.4	5.0	60.3	6.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.27	0.54
Incremental Delay, d2	8.3	0.0	1.7	0.6	0.1	0.6	0.6
Delay (s)	64.0	51.6	65.7	8.0	5.1	77.1	3.8
Level of Service	E	D	E	A	A	E	A
Approach Delay (s)	61.0			7.9			7.5
Approach LOS	E			A			A

Intersection Summary

HCM 2000 Control Delay	11.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	15.7
Intersection Capacity Utilization	49.9%	ICU Level of Service	A
Analysis Period (min)	15		

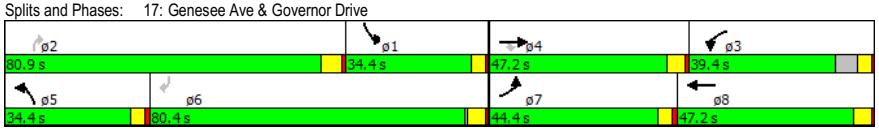
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBR	SBL	SBR
Lane Configurations									
Traffic Volume (vph)	272	279	110	205	258	133	148	330	217
Future Volume (vph)	272	279	110	205	258	133	148	330	217
Turn Type	Prot	NA	Perm	Prot	NA	Prot	Perm	Prot	Perm
Protected Phases	7	4		3	8	5		1	
Permitted Phases			4				2		6
Detector Phase	7	4	4	3	8	5	2	1	6
Switch Phase									
Minimum Initial (s)	4.0	8.0	8.0	4.0	8.0	4.0	8.0	4.0	8.0
Minimum Split (s)	8.4	13.2	13.2	8.4	13.2	8.4	13.9	8.4	13.4
Total Split (s)	44.4	47.2	47.2	39.4	47.2	34.4	80.9	34.4	80.4
Total Split (%)	21.5%	22.8%	22.8%	19.0%	22.8%	16.6%	39.1%	16.6%	38.9%
Yellow Time (s)	3.4	4.2	4.2	3.4	4.2	3.4	4.9	3.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.2	5.2	4.4	5.2	4.4	5.9	4.4	5.4
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	None	Min

Intersection Summary

Cycle Length: 206.9
Actuated Cycle Length: 76.7
Natural Cycle: 55
Control Type: Actuated-Uncoordinated

Splits and Phases: 17: Genesee Ave & Governor Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	272	279	110	205	258	208	133	0	148	330	0	217
Future Volume (vph)	272	279	110	205	258	208	133	0	148	330	0	217
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	16	12	12	12	12	12	12	12
Total Lost time (s)	4.4	5.2	5.2	4.4	5.2		4.4		5.9	4.4		5.4
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95		1.00		0.88	0.97		1.00
Frt	1.00	1.00	0.85	1.00	0.93		1.00		0.85	1.00		0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95		1.00	0.95		1.00
Satd. Flow (prot)	3433	3539	1583	3433	3742		1770		2787	3433		1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95		1.00	0.95		1.00
Satd. Flow (perm)	3433	3539	1583	3433	3742		1770		2787	3433		1583
Peak-hour factor, PHF	0.94	0.94	0.94	0.83	0.83	0.83	0.93	0.93	0.93	0.83	0.83	0.83
Adj. Flow (vph)	289	297	117	247	311	251	143	0	159	398	0	261
RTOR Reduction (vph)	0	0	78	0	66	0	0	0	142	0	0	219
Lane Group Flow (vph)	289	297	39	247	496	0	143	0	17	398	0	42
Turn Type	Prot	NA	Perm	Prot	NA		Prot		Perm	Prot		Perm
Protected Phases	7	4		3	8		5			1		
Permitted Phases			4						2			6
Actuated Green, G (s)	12.9	13.2	13.2	19.0	19.3		12.5		8.3	15.9		12.2
Effective Green, g (s)	12.9	13.2	13.2	19.0	19.3		12.5		8.3	15.9		12.2
Actuated g/C Ratio	0.17	0.17	0.17	0.25	0.25		0.16		0.11	0.21		0.16
Clearance Time (s)	4.4	5.2	5.2	4.4	5.2		4.4		5.9	4.4		5.4
Vehicle Extension (s)	2.0	2.3	2.3	2.0	3.8		2.0		2.9	2.0		3.5
Lane Grp Cap (vph)	580	612	273	854	946		289		303	715		253
v/s Ratio Prot	c0.08	0.08		0.07	c0.13		c0.08			c0.12		
v/s Ratio Perm			0.02						0.01			0.03
v/c Ratio	0.50	0.49	0.14	0.29	0.52		0.49		0.06	0.56		0.16
Uniform Delay, d1	28.8	28.5	26.8	23.2	24.5		29.0		30.5	27.0		27.7
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00		1.00	1.00		1.00
Incremental Delay, d2	0.2	0.4	0.1	0.1	0.7		0.5		0.1	0.5		0.4
Delay (s)	29.0	28.8	26.9	23.3	25.2		29.5		30.6	27.6		28.0
Level of Service	C	C	C	C	C		C		C	C		C
Approach Delay (s)		28.6			24.6			30.1			27.8	
Approach LOS		C			C			C			C	

Intersection Summary

HCM 2000 Control Delay	27.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.55		
Actuated Cycle Length (s)	76.3	Sum of lost time (s)	19.9
Intersection Capacity Utilization	46.8%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBR	NBL	NBT	SBT	SBR
Lane Configurations					
Traffic Volume (vph)	209	171	704	668	194
Future Volume (vph)	209	171	704	668	194
Turn Type	Perm	Prot	NA	NA	Perm
Protected Phases		5	2	6	
Permitted Phases	4				6
Detector Phase	4	5	2	6	6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	36.5	9.5	9.5	32.5	32.5
Total Split (s)	38.0	26.0	74.3	48.3	48.3
Total Split (%)	33.8%	23.2%	66.2%	43.0%	43.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5
Lead/Lag		Lead		Lag	Lag
Lead-Lag Optimize?		Yes		Yes	Yes
Recall Mode	None	None	Min	Min	Min

Intersection Summary
Cycle Length: 112.3
Actuated Cycle Length: 51
Natural Cycle: 80
Control Type: Actuated-Uncoordinated

Splits and Phases: 18: Genesee Ave & SR-52 Ramp

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	209	171	704	668	194
Future Volume (vph)	0	209	171	704	668	194
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5	4.5	4.5	4.5	4.5
Lane Util. Factor		0.88	1.00	0.95	0.95	1.00
Frt		0.85	1.00	1.00	1.00	0.85
Flt Protected		1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)		2787	1770	3539	3539	1583
Flt Permitted		1.00	0.95	1.00	1.00	1.00
Satd. Flow (perm)		2787	1770	3539	3539	1583
Peak-hour factor, PHF	0.87	0.87	0.83	0.83	0.87	0.87
Adj. Flow (vph)	0	240	206	848	768	223
RTOR Reduction (vph)	0	213	0	0	0	133
Lane Group Flow (vph)	0	27	206	848	768	90
Turn Type		Perm	Prot	NA	NA	Perm
Protected Phases			5	2	6	
Permitted Phases		4				6
Actuated Green, G (s)		5.6	12.2	36.1	19.4	19.4
Effective Green, g (s)		5.6	12.2	36.1	19.4	19.4
Actuated g/C Ratio		0.11	0.24	0.71	0.38	0.38
Clearance Time (s)		4.5	4.5	4.5	4.5	4.5
Vehicle Extension (s)		3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)		307	425	2519	1354	605
v/s Ratio Prot			c0.12	0.24	c0.22	
v/s Ratio Perm		c0.01				0.06
v/c Ratio		0.09	0.48	0.34	0.57	0.15
Uniform Delay, d1		20.3	16.5	2.8	12.3	10.2
Progression Factor		1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2		0.1	0.9	0.1	0.5	0.1
Delay (s)		20.4	17.4	2.8	12.9	10.4
Level of Service		C	B	A	B	B
Approach Delay (s)	20.4			5.7	12.3	
Approach LOS	C			A	B	

Intersection Summary			
HCM 2000 Control Delay	10.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.47		
Actuated Cycle Length (s)	50.7	Sum of lost time (s)	13.5
Intersection Capacity Utilization	35.4%	ICU Level of Service	A
Analysis Period (min)	15		

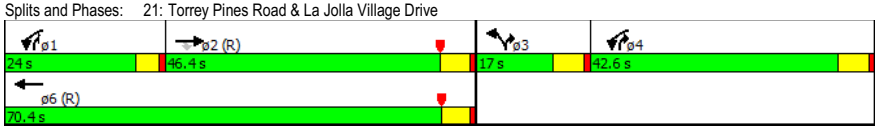
c Critical Lane Group

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	ø1	ø4
Lane Configurations								
Traffic Volume (vph)	794	166	779	723	144	740		
Future Volume (vph)	794	166	779	723	144	740		
Turn Type	NA	Perm	Prot	NA	Prot	custom		
Protected Phases	2		1 4	6	3	1 3 4	1	4
Permitted Phases		2						
Detector Phase	2	2	1 4	6	3	1 3 4		
Switch Phase								
Minimum Initial (s)	10.0	10.0		10.0	4.0		4.0	4.0
Minimum Split (s)	15.4	15.4		15.3	9.6		8.4	42.6
Total Split (s)	46.4	46.4		70.4	17.0		24.0	42.6
Total Split (%)	35.7%	35.7%		54.2%	13.1%		18%	33%
Yellow Time (s)	4.4	4.4		4.3	4.6		3.4	4.6
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			
Total Lost Time (s)	5.4	5.4		5.3	5.6			
Lead/Lag	Lag	Lag			Lead		Lead	Lag
Lead-Lag Optimize?	Yes	Yes			Yes		Yes	Yes
Recall Mode	C-Max	C-Max		C-Max	None		None	None

Intersection Summary

Cycle Length: 130
Actuated Cycle Length: 130
Offset: 15 (12%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 21: Torrey Pines Road & La Jolla Village Drive



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	794	166	779	723	144	740
Future Volume (vph)	794	166	779	723	144	740
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.4	5.4	4.4	5.3	5.6	4.4
Lane Util. Factor	0.91	1.00	0.97	0.91	0.97	0.88
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	5085	1583	3433	5085	3433	2787
Flt Permitted	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (perm)	5085	1583	3433	5085	3433	2787
Peak-hour factor, PHF	0.76	0.76	0.91	0.91	0.82	0.82
Adj. Flow (vph)	1045	218	856	795	176	902
RTOR Reduction (vph)	0	126	0	0	0	0
Lane Group Flow (vph)	1045	92	856	795	176	902
Turn Type	NA	Perm	Prot	NA	Prot	custom
Protected Phases	2		1 4	6	3	1 3 4
Permitted Phases		2				
Actuated Green, G (s)	54.6	54.6	48.6	67.7	11.4	65.6
Effective Green, g (s)	54.6	54.6	43.0	67.7	11.4	54.4
Actuated g/C Ratio	0.42	0.42	0.33	0.52	0.09	0.42
Clearance Time (s)	5.4	5.4		5.3	5.6	
Vehicle Extension (s)	5.5	5.5		8.0	2.0	
Lane Grp Cap (vph)	2135	664	1135	2648	301	1166
v/s Ratio Prot	c0.21		0.25	0.16	0.05	c0.32
v/s Ratio Perm		0.06				
v/c Ratio	0.49	0.14	0.75	0.30	0.58	0.77
Uniform Delay, d1	27.5	23.2	38.8	17.7	57.0	32.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.8	0.4	2.6	0.3	1.9	3.0
Delay (s)	28.3	23.6	41.4	18.0	58.9	35.5
Level of Service	C	C	D	B	E	D
Approach Delay (s)	27.5			30.1	39.3	
Approach LOS	C			C	D	

Intersection Summary

HCM 2000 Control Delay	31.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	21.0
Intersection Capacity Utilization	54.5%	ICU Level of Service	A
Analysis Period (min)	15		

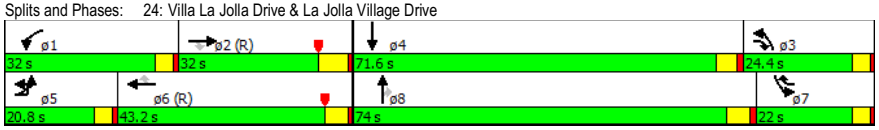
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	71	1032	165	910	963	833	182	1111	647	700	295
Future Volume (vph)	71	1032	165	910	963	833	182	1111	647	700	295
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA
Protected Phases	5	2	3	1	6	7	3	8		7	4
Permitted Phases			2			6			8		
Detector Phase	5	2	3	1	6	7	3	8	8	7	4
Switch Phase											
Minimum Initial (s)	4.0	10.0	4.0	4.0	10.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.4	16.4	22.4	8.4	15.3	8.4	22.4	9.5	9.5	8.4	8.9
Total Split (s)	20.8	32.0	24.4	32.0	43.2	22.0	24.4	74.0	74.0	22.0	71.6
Total Split (%)	13.0%	20.0%	15.3%	20.0%	27.0%	13.8%	15.3%	46.3%	46.3%	13.8%	44.8%
Yellow Time (s)	3.4	5.4	3.4	3.4	4.3	3.4	3.4	4.5	4.5	3.4	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	6.4	4.4	4.4	5.3	4.4	4.4	5.5	5.5	4.4	4.9
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	C-Max	None	None	None	None	None	None

Intersection Summary

Cycle Length: 160
Actuated Cycle Length: 160
Offset: 4 (3%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 24: Villa La Jolla Drive & La Jolla Village Drive



Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	65	71	1032	165	910	963	833	182	1111	647	700	295
Future Volume (vph)	65	71	1032	165	910	963	833	182	1111	647	700	295
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.4	6.4	4.4	4.4	5.3	4.4	4.4	5.5	5.5	4.4	4.9
Lane Util. Factor		1.00	0.91	1.00	0.97	0.91	0.88	0.97	0.95	0.95	0.97	1.00
Frt		1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99	0.85	1.00	0.97
Flt Protected		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)		1770	5085	1583	3433	5085	2787	3433	1755	1504	3433	1812
Flt Permitted		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Satd. Flow (perm)		1770	5085	1583	3433	5085	2787	3433	1755	1504	3433	1812
Peak-hour factor, PHF	0.92	0.93	0.93	0.93	0.95	0.95	0.95	0.89	0.89	0.89	0.88	0.88
Adj. Flow (vph)	71	76	1110	177	958	1014	877	204	1248	727	795	335
RTOR Reduction (vph)	0	0	0	85	0	0	113	0	1	130	0	7
Lane Group Flow (vph)	0	147	1110	92	958	1014	764	204	1320	524	795	402
Turn Type	Prot	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA
Protected Phases	5	5	2	3	1	6	7	3	8		7	4
Permitted Phases				2			6			8		
Actuated Green, G (s)		15.5	25.6	70.7	27.6	38.8	56.4	45.1	68.5	68.5	17.6	41.6
Effective Green, g (s)		15.5	25.6	70.7	27.6	38.8	56.4	45.1	68.5	68.5	17.6	41.6
Actuated g/C Ratio		0.10	0.16	0.44	0.17	0.24	0.35	0.28	0.43	0.43	0.11	0.26
Clearance Time (s)		4.4	6.4	4.4	4.4	5.3	4.4	4.4	5.5	5.5	4.4	4.9
Vehicle Extension (s)		2.0	4.4	2.0	2.0	4.7	2.0	2.0	3.3	3.3	2.0	2.0
Lane Grp Cap (vph)		171	813	699	592	1233	982	967	751	643	377	471
v/s Ratio Prot		0.08	c0.22	0.04	c0.28	0.20	0.09	0.06	c0.75		c0.23	0.22
v/s Ratio Perm				0.02			0.19			0.35		
v/c Ratio		0.86	1.37	0.13	1.62	0.82	0.78	0.21	1.76	0.82	2.11	0.85
Uniform Delay, d1		71.2	67.2	26.5	66.2	57.3	46.2	43.9	45.8	40.2	71.2	56.3
Progression Factor		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2		31.4	172.3	0.0	286.0	6.3	3.6	0.0	346.3	8.0	507.9	13.5
Delay (s)		102.6	239.5	26.5	352.2	63.6	49.8	43.9	392.1	48.2	579.1	69.9
Level of Service		F	F	C	F	E	D	D	F	D	F	E
Approach Delay (s)			199.2			156.4			256.3			406.1
Approach LOS			F			F			F			F

Intersection Summary

HCM 2000 Control Delay	232.0	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.70		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	20.7
Intersection Capacity Utilization	154.7%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

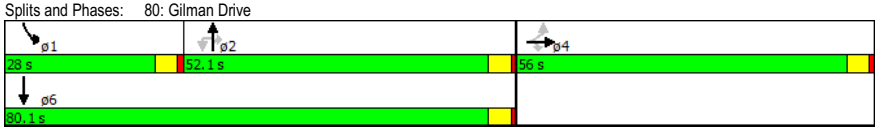
Movement	SBR
Lane Configurations	
Traffic Volume (vph)	65
Future Volume (vph)	65
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.88
Adj. Flow (vph)	74
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

Intersection Summary

Lane Group	EBT	EBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	6	340	2	410	50	92	183
Future Volume (vph)	6	340	2	410	50	92	183
Turn Type	NA	Perm	Perm	NA	Perm	Prot	NA
Protected Phases	4			2		1	6
Permitted Phases		4	2		2		
Detector Phase	4	4	2	2	2	1	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	40.5	40.5	9.5	9.5	9.5	9.5	24.5
Total Split (s)	56.0	56.0	52.1	52.1	52.1	28.0	80.1
Total Split (%)	41.1%	41.1%	38.3%	38.3%	38.3%	20.6%	58.9%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5		4.5	4.5	4.5	4.5
Lead/Lag			Lag	Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	Yes	
Recall Mode	None	None	Min	Min	Min	None	Min

Intersection Summary
Cycle Length: 136.1
Actuated Cycle Length: 39.9
Natural Cycle: 65
Control Type: Actuated-Uncoordinated

Splits and Phases: 80: Gilman Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	27	6	340	0	0	0	2	0	410	50	92	183
Future Volume (vph)	27	6	340	0	0	0	2	0	410	50	92	183
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5	4.5						4.5	4.5	4.5	4.5
Lane Util. Factor		0.95	0.95						0.95	1.00	1.00	0.95
Frt		0.88	0.85						1.00	0.85	1.00	1.00
Flt Protected		0.99	1.00						1.00	1.00	0.95	1.00
Satd. Flow (prot)		1540	1504						3538	1583	1770	3539
Flt Permitted		0.99	1.00						0.95	1.00	0.95	1.00
Satd. Flow (perm)		1540	1504						3376	1583	1770	3539
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	29	7	370	0	0	0	2	0	446	54	100	199
RTOR Reduction (vph)	0	136	160	0	0	0	0	0	0	33	0	0
Lane Group Flow (vph)	0	70	40	0	0	0	0	0	448	21	100	199
Turn Type	Perm	NA	Perm				Perm		NA	Perm	Prot	NA
Protected Phases		4							2		1	6
Permitted Phases	4		4				2			2		
Actuated Green, G (s)		8.0	8.0						12.3	12.3	6.5	23.3
Effective Green, g (s)		8.0	8.0						12.3	12.3	6.5	23.3
Actuated g/C Ratio		0.20	0.20						0.31	0.31	0.16	0.58
Clearance Time (s)		4.5	4.5						4.5	4.5	4.5	4.5
Vehicle Extension (s)		3.0	3.0						3.0	3.0	3.0	3.0
Lane Grp Cap (vph)		305	298						1030	483	285	2046
v/s Ratio Prot											c0.06	0.06
v/s Ratio Perm		0.05	0.03						c0.13	0.01		
v/c Ratio		0.23	0.13						0.43	0.04	0.35	0.10
Uniform Delay, d1		13.6	13.3						11.2	9.9	15.0	3.8
Progression Factor		1.00	1.00						1.00	1.00	1.00	1.00
Incremental Delay, d2		0.4	0.2						0.3	0.0	0.7	0.0
Delay (s)		13.9	13.5						11.5	9.9	15.8	3.8
Level of Service		B	B						B	A	B	A
Approach Delay (s)		13.7			0.0				11.3			7.8
Approach LOS		B			A				B			A

Intersection Summary			
HCM 2000 Control Delay	11.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.35		
Actuated Cycle Length (s)	40.3	Sum of lost time (s)	13.5
Intersection Capacity Utilization	40.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	0
Future Volume (vph)	0
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.92
Adj. Flow (vph)	0
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

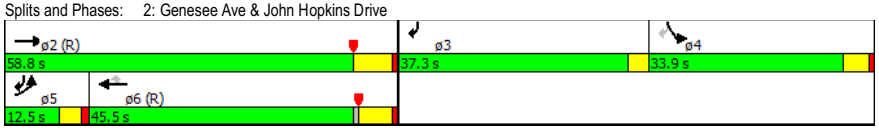
Intersection Summary

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	ø3
Lane Configurations							
Traffic Volume (vph)	36	1351	737	188	929	111	
Future Volume (vph)	36	1351	737	188	929	111	
Turn Type	Prot	NA	NA	Perm	Prot	pt+ov	
Protected Phases	5	2	6		4	3 5	3
Permitted Phases				6		4	
Detector Phase	5	2	6	6	4	3 5	
Switch Phase							
Minimum Initial (s)	4.0	10.0	10.0	10.0	7.0		4.0
Minimum Split (s)	9.5	16.7	15.9	15.9	11.9		7.0
Total Split (s)	12.5	58.8	45.5	45.5	33.9		37.3
Total Split (%)	9.6%	45.2%	35.0%	35.0%	26.1%		29%
Yellow Time (s)	3.4	5.7	4.9	4.9	3.9		3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		0.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	4.4	6.7	5.9	5.9	4.9		
Lead/Lag	Lead		Lag	Lag	Lag		Lead
Lead-Lag Optimize?	Yes		Yes	Yes	Yes		Yes
Recall Mode	None	C-Max	C-Max	C-Max	None		None

Intersection Summary

Cycle Length: 130
Actuated Cycle Length: 130
Offset: 22 (17%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 65
Control Type: Actuated-Coordinated

Splits and Phases: 2: Genesee Ave & John Hopkins Drive



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	36	1351	737	188	929	111
Future Volume (vph)	36	1351	737	188	929	111
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	6.7	5.9	5.9	4.9	3.0
Lane Util. Factor	1.00	0.91	0.86	0.88	0.97	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	5085	6408	2787	3433	1583
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	5085	6408	2787	3433	1583
Peak-hour factor, PHF	0.92	0.92	0.80	0.80	0.80	0.80
Adj. Flow (vph)	39	1468	921	235	1161	139
RTOR Reduction (vph)	0	0	0	160	0	9
Lane Group Flow (vph)	39	1468	921	75	1161	130
Turn Type	Prot	NA	NA	Perm	Prot	pt+ov
Protected Phases	5	2	6		4	3 5
Permitted Phases				6		4
Actuated Green, G (s)	6.8	52.1	41.7	41.7	46.3	70.1
Effective Green, g (s)	6.8	52.1	41.7	41.7	46.3	70.1
Actuated g/C Ratio	0.05	0.40	0.32	0.32	0.36	0.54
Clearance Time (s)	4.4	6.7	5.9	5.9	4.9	
Vehicle Extension (s)	2.0	4.0	3.9	3.9	5.0	
Lane Grp Cap (vph)	92	2037	2055	893	1222	890
v/s Ratio Prot	0.02	c0.29	0.14		c0.34	c0.03
v/s Ratio Perm				0.03		0.06
v/c Ratio	0.42	0.72	0.45	0.08	0.95	0.15
Uniform Delay, d1	59.7	32.8	35.0	30.8	40.7	15.0
Progression Factor	1.09	0.57	0.91	1.37	1.00	1.00
Incremental Delay, d2	1.0	2.0	0.7	0.2	15.7	0.0
Delay (s)	66.0	20.8	32.6	42.5	56.4	15.0
Level of Service	E	C	C	D	E	B
Approach Delay (s)		22.0	34.6		52.0	
Approach LOS		C	C		D	

Intersection Summary

HCM 2000 Control Delay	35.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	18.2
Intersection Capacity Utilization	62.3%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	43	22	187	236	38	34	152	1219	27	3057
Future Volume (vph)	43	22	187	236	38	34	152	1219	27	3057
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA	Prot	NA
Protected Phases		8			4		1	6	5	2
Permitted Phases	8		8	4		4				
Detector Phase	8	8	8	4	4	4	1	6	5	2
Switch Phase										
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	10.0	4.0	10.0
Minimum Split (s)	8.9	8.9	8.9	8.9	8.9	8.9	8.4	15.7	8.4	15.9
Total Split (s)	47.0	47.0	47.0	47.0	47.0	47.0	17.0	91.8	11.2	86.0
Total Split (%)	31.3%	31.3%	31.3%	31.3%	31.3%	31.3%	11.3%	61.2%	7.5%	57.3%
Yellow Time (s)	3.9	3.9	3.9	3.9	3.9	3.9	3.4	4.7	3.4	4.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.9	4.9		4.9	4.9	4.4	5.7	4.4	5.9
Lead/Lag							Lead	Lead	Lag	Lag
Lead-Lag Optimize?										
Recall Mode	None	None	None	None	None	None	None	C-Max	None	C-Max

Intersection Summary

Cycle Length: 150
Actuated Cycle Length: 150
Offset: 21 (14%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 15: Genesee Ave & Decoro Street

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	43	22	187	236	38	34	152	1219	24	27	3057	81
Future Volume (vph)	43	22	187	236	38	34	152	1219	24	27	3057	81
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9	4.9		4.9	4.9	4.4	5.7		4.4	5.9	
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.95		1.00	0.95	
Frt		1.00	0.85		1.00	0.85	1.00	1.00		1.00	1.00	
Flt Protected		0.97	1.00		0.96	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1803	1583		1786	1583	1770	3529		1770	3526	
Flt Permitted		0.43	1.00		0.70	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)		801	1583		1308	1583	1770	3529		1770	3526	
Peak-hour factor, PHF	0.85	0.85	0.85	0.80	0.80	0.80	0.85	0.85	0.85	0.90	0.90	0.90
Adj. Flow (vph)	51	26	220	295	48	42	179	1434	28	30	3397	90
RTOR Reduction (vph)	0	0	115	0	0	31	0	1	0	0	1	0
Lane Group Flow (vph)	0	77	105	0	343	12	179	1461	0	30	3486	0
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA		Prot	NA	
Protected Phases		8			4		1	6		5	2	
Permitted Phases	8		8	4		4						
Actuated Green, G (s)		40.8	40.8		40.8	40.8	13.9	90.1		4.1	80.1	
Effective Green, g (s)		40.8	40.8		40.8	40.8	13.9	90.1		4.1	80.1	
Actuated g/C Ratio		0.27	0.27		0.27	0.27	0.09	0.60		0.03	0.53	
Clearance Time (s)		4.9	4.9		4.9	4.9	4.4	5.7		4.4	5.9	
Vehicle Extension (s)		2.0	2.0		2.0	2.0	2.0	4.3		2.0	3.7	
Lane Grp Cap (vph)		217	430		355	430	164	2119		48	1882	
v/s Ratio Prot							c0.10	0.41		0.02	c0.99	
v/s Ratio Perm		0.10	0.07		c0.26	0.01						
v/c Ratio		0.35	0.24		0.97	0.03	1.09	0.69		0.62	1.85	
Uniform Delay, d1		44.0	42.6		53.9	40.0	68.0	20.4		72.2	35.0	
Progression Factor		1.00	1.00		1.00	1.00	1.28	0.41		0.99	0.98	
Incremental Delay, d2		0.4	0.1		38.3	0.0	92.0	1.6		1.6	383.6	
Delay (s)		44.4	42.7		92.2	40.1	179.3	10.0		73.3	417.9	
Level of Service		D	D		F	D	F	B		E	F	
Approach Delay (s)		43.1			86.4			28.5			414.9	
Approach LOS		D			F			C			F	

Intersection Summary

HCM 2000 Control Delay	265.7	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.50		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	15.2
Intersection Capacity Utilization	129.9%	ICU Level of Service	H
Analysis Period (min)	15		

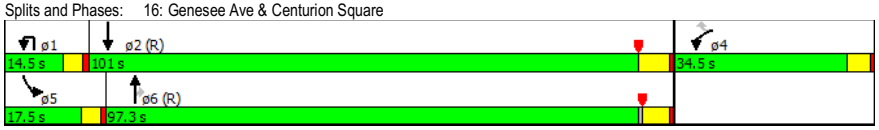
c Critical Lane Group

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT	ø1
Lane Configurations							
Traffic Volume (vph)	89	23	1355	46	46	3394	
Future Volume (vph)	89	23	1355	46	46	3394	
Turn Type	Prot	Perm	NA	Perm	Prot	NA	
Protected Phases	4		6		5	2	1
Permitted Phases		4		6			
Detector Phase	4	4	6	6	5	2	
Switch Phase							
Minimum Initial (s)	7.0	7.0	10.0	10.0	4.0	10.0	4.0
Minimum Split (s)	11.9	11.9	15.7	15.7	8.4	16.4	8.4
Total Split (s)	34.5	34.5	97.3	97.3	17.5	101.0	14.5
Total Split (%)	23.0%	23.0%	64.9%	64.9%	11.7%	67.3%	10%
Yellow Time (s)	3.9	3.9	4.7	4.7	3.4	5.4	3.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.9	4.9	5.7	5.7	4.4	6.4	
Lead/Lag			Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?			Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	C-Max	C-Max	None	C-Max	None

Intersection Summary

Cycle Length: 150
Actuated Cycle Length: 150
Offset: 33 (22%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 16: Genesee Ave & Centurion Square



Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	89	23	0	1355	46	46	3394
Future Volume (vph)	89	23	0	1355	46	46	3394
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9		5.7	5.7	4.4	6.4
Lane Util. Factor	1.00	1.00		0.95	1.00	0.97	0.95
Frt	1.00	0.85		1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00		1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583		3539	1583	3433	3539
Flt Permitted	0.95	1.00		1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583		3539	1583	3433	3539
Peak-hour factor, PHF	0.80	0.80	0.92	0.89	0.89	0.94	0.94
Adj. Flow (vph)	111	29	0	1522	52	49	3611
RTOR Reduction (vph)	0	26	0	0	8	0	0
Lane Group Flow (vph)	111	3	0	1522	44	49	3611
Turn Type	Prot	Perm	Prot	NA	Perm	Prot	NA
Protected Phases	4		1	6		5	2
Permitted Phases		4			6		
Actuated Green, G (s)	13.8	13.8		115.6	115.6	5.6	124.9
Effective Green, g (s)	13.8	13.8		115.6	115.6	5.6	124.9
Actuated g/C Ratio	0.09	0.09		0.77	0.77	0.04	0.83
Clearance Time (s)	4.9	4.9		5.7	5.7	4.4	6.4
Vehicle Extension (s)	2.0	2.0		4.2	4.2	2.0	3.4
Lane Grp Cap (vph)	162	145		2727	1219	128	2946
v/s Ratio Prot	c0.06			0.43		0.01	c1.02
v/s Ratio Perm		0.00			0.03		
v/c Ratio	0.69	0.02		0.56	0.04	0.38	1.23
Uniform Delay, d1	66.0	61.9		6.9	4.1	70.5	12.5
Progression Factor	1.00	1.00		1.27	1.40	0.76	2.30
Incremental Delay, d2	9.2	0.0		0.8	0.1	0.1	101.9
Delay (s)	75.2	62.0		9.6	5.7	53.4	130.8
Level of Service	E	E		A	A	D	F
Approach Delay (s)	72.4			9.4			129.7
Approach LOS	E			A			F

Intersection Summary

HCM 2000 Control Delay	93.0	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.21		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	15.7
Intersection Capacity Utilization	109.1%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBR	SBL	SBR
Lane Configurations									
Traffic Volume (vph)	344	305	122	289	382	193	218	580	780
Future Volume (vph)	344	305	122	289	382	193	218	580	780
Turn Type	Prot	NA	Perm	Prot	NA	Prot	Perm	Prot	Perm
Protected Phases	7	4		3	8	5		1	
Permitted Phases			4				2		6
Detector Phase	7	4	4	3	8	5	2	1	6
Switch Phase									
Minimum Initial (s)	4.0	8.0	8.0	4.0	8.0	4.0	8.0	4.0	8.0
Minimum Split (s)	8.4	13.2	13.2	8.4	13.2	8.4	13.9	8.4	13.4
Total Split (s)	12.6	15.8	15.8	12.8	16.0	13.6	19.9	26.5	32.8
Total Split (%)	16.8%	21.1%	21.1%	17.1%	21.3%	18.1%	26.5%	35.3%	43.7%
Yellow Time (s)	3.4	4.2	4.2	3.4	4.2	3.4	4.9	3.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	5.2	5.2	4.4	5.2	4.4	5.9	4.4	5.4
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	C-Max	C-Max

Intersection Summary

Cycle Length: 75
Actuated Cycle Length: 75
Offset: 0 (0%), Referenced to phase 1:SBL and 6:SBR, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 17: Genesee Ave & Governor Drive

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	344	305	122	289	382	183	193	0	218	580	0	780
Future Volume (vph)	344	305	122	289	382	183	193	0	218	580	0	780
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	16	12	12	12	12	12	12	12
Total Lost time (s)	4.4	5.2	5.2	4.4	5.2		4.4		5.9	4.4		5.4
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95		1.00		0.88	0.97		1.00
Frt	1.00	1.00	0.85	1.00	0.95		1.00		0.85	1.00		0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95		1.00	0.95		1.00
Satd. Flow (prot)	3433	3539	1583	3433	3816		1770		2787	3433		1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95		1.00	0.95		1.00
Satd. Flow (perm)	3433	3539	1583	3433	3816		1770		2787	3433		1583
Peak-hour factor, PHF	0.95	0.95	0.95	0.87	0.87	0.87	0.92	0.92	0.92	0.89	0.89	0.89
Adj. Flow (vph)	362	321	128	332	439	210	210	0	237	652	0	876
RTOR Reduction (vph)	0	0	111	0	76	0	0	0	208	0	0	257
Lane Group Flow (vph)	362	321	17	332	573	0	210	0	29	652	0	619
Turn Type	Prot	NA	Perm	Prot	NA		Prot		Perm	Prot		Perm
Protected Phases	7	4		3	8		5			1		
Permitted Phases			4						2			6
Actuated Green, G (s)	8.2	10.0	10.0	9.0	10.8		9.2		9.2	26.9		27.4
Effective Green, g (s)	8.2	10.0	10.0	9.0	10.8		9.2		9.2	26.9		27.4
Actuated g/C Ratio	0.11	0.13	0.13	0.12	0.14		0.12		0.12	0.36		0.37
Clearance Time (s)	4.4	5.2	5.2	4.4	5.2		4.4		5.9	4.4		5.4
Vehicle Extension (s)	2.0	2.3	2.3	2.0	3.8		2.0		2.9	2.0		3.5
Lane Grp Cap (vph)	375	471	211	411	549		217		341	1231		578
v/s Ratio Prot	c0.11	0.09		0.10	c0.15		c0.12			0.19		
v/s Ratio Perm			0.01						0.01			c0.39
v/c Ratio	0.97	0.68	0.08	0.81	1.04		0.97		0.09	0.53		1.07
Uniform Delay, d1	33.3	31.0	28.5	32.2	32.1		32.8		29.2	19.0		23.8
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00		1.00	0.83		1.17
Incremental Delay, d2	36.9	3.5	0.1	10.5	50.2		51.1		0.1	0.1		35.7
Delay (s)	70.1	34.5	28.6	42.7	82.3		83.8		29.3	16.0		63.5
Level of Service	E	C	C	D	F		F		C	B		E
Approach Delay (s)		49.5			68.9			54.9			43.2	
Approach LOS		D			E			D			D	

Intersection Summary

HCM 2000 Control Delay	52.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.04		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	19.9
Intersection Capacity Utilization	87.6%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBR	NBL	NBT	SBT	SBR
Lane Configurations					
Traffic Volume (vph)	420	337	546	1867	346
Future Volume (vph)	420	337	546	1867	346
Turn Type	Perm	Prot	NA	NA	Perm
Protected Phases		5	2	6	
Permitted Phases	4				6
Detector Phase	4	5	2	6	6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	36.5	9.5	22.5	32.5	32.5
Total Split (s)	36.5	27.5	113.5	86.0	86.0
Total Split (%)	24.3%	18.3%	75.7%	57.3%	57.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5
Lead/Lag		Lead		Lag	Lag
Lead-Lag Optimize?		Yes		Yes	Yes
Recall Mode	None	None	Min	Min	Min

Intersection Summary
Cycle Length: 150
Actuated Cycle Length: 128.9
Natural Cycle: 150
Control Type: Actuated-Uncoordinated

Splits and Phases: 18: Genesee Ave & SR-52 Ramp

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	420	337	546	1867	346
Future Volume (vph)	0	420	337	546	1867	346
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5	4.5	4.5	4.5	4.5
Lane Util. Factor		0.88	1.00	0.95	0.95	1.00
Frt		0.85	1.00	1.00	1.00	0.85
Flt Protected		1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)		2787	1770	3539	3539	1583
Flt Permitted		1.00	0.95	1.00	1.00	1.00
Satd. Flow (perm)		2787	1770	3539	3539	1583
Peak-hour factor, PHF	0.81	0.81	0.91	0.91	0.91	0.91
Adj. Flow (vph)	0	519	370	600	2052	380
RTOR Reduction (vph)	0	395	0	0	0	50
Lane Group Flow (vph)	0	124	370	600	2052	330
Turn Type		Perm	Prot	NA	NA	Perm
Protected Phases			5	2	6	
Permitted Phases		4				6
Actuated Green, G (s)		10.8	23.0	109.1	81.6	81.6
Effective Green, g (s)		10.8	23.0	109.1	81.6	81.6
Actuated g/C Ratio		0.08	0.18	0.85	0.63	0.63
Clearance Time (s)		4.5	4.5	4.5	4.5	4.5
Vehicle Extension (s)		3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)		233	315	2995	2240	1002
v/s Ratio Prot			c0.21	0.17	c0.58	
v/s Ratio Perm		c0.04				0.21
v/c Ratio		0.53	1.17	0.20	0.92	0.33
Uniform Delay, d1		56.6	53.0	1.8	20.7	11.0
Progression Factor		1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2		2.3	106.8	0.0	6.4	0.2
Delay (s)		59.0	159.8	1.9	27.1	11.2
Level of Service		E	F	A	C	B
Approach Delay (s)	59.0			62.1	24.6	
Approach LOS	E			E	C	

Intersection Summary			
HCM 2000 Control Delay	38.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.93		
Actuated Cycle Length (s)	128.9	Sum of lost time (s)	13.5
Intersection Capacity Utilization	77.8%	ICU Level of Service	D
Analysis Period (min)	15		

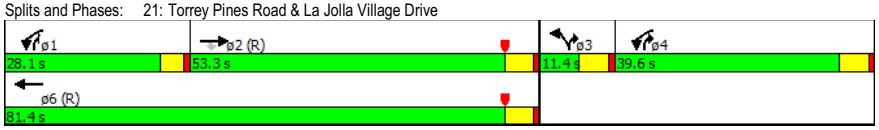
c Critical Lane Group

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	ø1	ø4
Lane Configurations								
Traffic Volume (vph)	1739	349	1438	773	130	1067		
Future Volume (vph)	1739	349	1438	773	130	1067		
Turn Type	NA	Perm	Prot	NA	Prot	custom		
Protected Phases	2		1 4	6	3	1 3 4	1	4
Permitted Phases		2						
Detector Phase	2	2	1 4	6	3	1 3 4		
Switch Phase								
Minimum Initial (s)	10.0	10.0		10.0	4.0		4.0	4.0
Minimum Split (s)	15.4	15.4		15.3	9.6		8.4	39.6
Total Split (s)	53.3	53.3		81.4	11.4		28.1	39.6
Total Split (%)	40.3%	40.3%		61.5%	8.6%		21%	30%
Yellow Time (s)	4.4	4.4		4.3	4.6		3.4	4.6
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			
Total Lost Time (s)	5.4	5.4		5.3	5.6			
Lead/Lag	Lag	Lag			Lead		Lead	Lag
Lead-Lag Optimize?					Yes			Yes
Recall Mode	C-Max	C-Max		C-Max	None		None	None

Intersection Summary

Cycle Length: 132.4
Actuated Cycle Length: 132.4
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 130
Control Type: Actuated-Coordinated

Splits and Phases: 21: Torrey Pines Road & La Jolla Village Drive



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1739	349	1438	773	130	1067
Future Volume (vph)	1739	349	1438	773	130	1067
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.4	5.4	4.4	5.3	5.6	4.4
Lane Util. Factor	0.91	1.00	0.97	0.91	0.97	0.88
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	5085	1583	3433	5085	3433	2787
Flt Permitted	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (perm)	5085	1583	3433	5085	3433	2787
Peak-hour factor, PHF	0.90	0.90	0.89	0.89	0.91	0.91
Adj. Flow (vph)	1932	388	1616	869	143	1173
RTOR Reduction (vph)	0	70	0	0	0	0
Lane Group Flow (vph)	1932	318	1616	869	143	1173
Turn Type	NA	Perm	Prot	NA	Prot	custom
Protected Phases	2		1 4	6	3	1 3 4
Permitted Phases		2				
Actuated Green, G (s)	47.9	47.9	63.3	76.1	5.8	74.7
Effective Green, g (s)	47.9	47.9	57.7	76.1	5.8	63.5
Actuated g/C Ratio	0.36	0.36	0.44	0.57	0.04	0.48
Clearance Time (s)	5.4	5.4		5.3	5.6	
Vehicle Extension (s)	5.5	5.5		8.0	2.0	
Lane Grp Cap (vph)	1839	572	1496	2922	150	1336
v/s Ratio Prot	c0.38		c0.47	0.17	c0.04	0.42
v/s Ratio Perm		0.20				
v/c Ratio	1.05	0.56	1.08	0.30	0.95	0.88
Uniform Delay, d1	42.2	33.8	37.4	14.4	63.2	31.0
Progression Factor	0.58	0.34	1.00	1.00	1.00	1.00
Incremental Delay, d2	27.4	1.1	48.2	0.3	58.7	6.6
Delay (s)	51.9	12.7	85.6	14.7	121.9	37.6
Level of Service	D	B	F	B	F	D
Approach Delay (s)	45.4			60.8	46.8	
Approach LOS	D			E	D	

Intersection Summary

HCM 2000 Control Delay	51.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.06		
Actuated Cycle Length (s)	132.4	Sum of lost time (s)	21.0
Intersection Capacity Utilization	91.2%	ICU Level of Service	F
Analysis Period (min)	15		

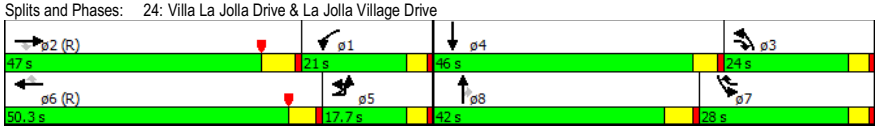
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	60	1907	67	597	1132	393	450	235	654	1219	718
Future Volume (vph)	60	1907	67	597	1132	393	450	235	654	1219	718
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA
Protected Phases	5	2	3	1	6	7	3	8		7	4
Permitted Phases			2			6			8		
Detector Phase	5	2	3	1	6	7	3	8	8	7	4
Switch Phase											
Minimum Initial (s)	4.0	10.0	4.0	4.0	10.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.4	16.4	22.4	8.4	15.3	8.4	22.4	9.5	9.5	8.4	8.9
Total Split (s)	17.7	47.0	24.0	21.0	50.3	28.0	24.0	42.0	42.0	28.0	46.0
Total Split (%)	12.8%	34.1%	17.4%	15.2%	36.4%	20.3%	17.4%	30.4%	30.4%	20.3%	33.3%
Yellow Time (s)	3.4	5.4	3.4	3.4	4.3	3.4	3.4	4.5	4.5	3.4	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	6.4	4.4	4.4	5.3	4.4	4.4	5.5	5.5	4.4	4.9
Lead/Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	C-Max	None	None	None	None	None	None

Intersection Summary

Cycle Length: 138
Actuated Cycle Length: 138
Offset: 44 (32%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 24: Villa La Jolla Drive & La Jolla Village Drive



Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	54	60	1907	67	597	1132	393	450	235	654	1219	718
Future Volume (vph)	54	60	1907	67	597	1132	393	450	235	654	1219	718
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.4	6.4	4.4	4.4	5.3	4.4	4.4	5.5	5.5	4.4	4.9
Lane Util. Factor		1.00	0.91	1.00	0.97	0.91	0.88	0.97	0.95	0.95	0.97	1.00
Frt		1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.93	0.85	1.00	0.98
Flt Protected		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)		1770	5085	1583	3433	5085	2787	3433	1639	1504	3433	1824
Flt Permitted		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Satd. Flow (perm)		1770	5085	1583	3433	5085	2787	3433	1639	1504	3433	1824
Peak-hour factor, PHF	0.92	0.80	0.80	0.80	0.85	0.85	0.85	0.82	0.82	0.82	0.82	0.82
Adj. Flow (vph)	59	75	2384	84	702	1332	462	549	287	798	1487	876
RTOR Reduction (vph)	0	0	0	31	0	0	232	0	25	145	0	4
Lane Group Flow (vph)	0	134	2384	53	702	1332	230	549	541	374	1487	1015
Turn Type	Prot	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA
Protected Phases	5	5	2	3	1	6	7	3	8		7	4
Permitted Phases				2			6			8		
Actuated Green, G (s)		13.3	40.6	60.2	16.6	45.0	68.6	19.6	36.5	36.5	23.6	41.1
Effective Green, g (s)		13.3	40.6	60.2	16.6	45.0	68.6	19.6	36.5	36.5	23.6	41.1
Actuated g/C Ratio		0.10	0.29	0.44	0.12	0.33	0.50	0.14	0.26	0.26	0.17	0.30
Clearance Time (s)		4.4	6.4	4.4	4.4	5.3	4.4	4.4	5.5	5.5	4.4	4.9
Vehicle Extension (s)		2.0	4.4	2.0	2.0	4.7	2.0	2.0	3.3	3.3	2.0	2.0
Lane Grp Cap (vph)		170	1496	741	412	1658	1474	487	433	397	587	543
v/s Ratio Prot		0.08	c0.47	0.01	c0.20	0.26	0.03	0.16	0.33		c0.43	c0.56
v/s Ratio Perm				0.02			0.06			0.25		
v/c Ratio		0.79	1.59	0.07	1.70	0.80	0.16	1.13	1.25	0.94	2.53	1.87
Uniform Delay, d1		61.0	48.7	22.6	60.7	42.5	18.9	59.2	50.8	49.7	57.2	48.5
Progression Factor		1.00	1.00	1.00	0.96	0.78	0.48	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2		19.6	270.3	0.0	325.7	3.7	0.0	80.6	130.2	30.8	695.0	398.0
Delay (s)		80.6	319.0	22.7	383.7	36.8	9.0	139.8	180.9	80.6	752.2	446.4
Level of Service		F	F	C	F	D	A	F	F	F	F	F
Approach Delay (s)			297.2			129.2			135.2			627.9
Approach LOS			F			F			F			F

Intersection Summary

HCM 2000 Control Delay	312.9	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.93		
Actuated Cycle Length (s)	138.0	Sum of lost time (s)	20.7
Intersection Capacity Utilization	131.6%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	117
Future Volume (vph)	117
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.82
Adj. Flow (vph)	143
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

Intersection Summary

Lane Group	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Traffic Volume (vph)	383	1461	9	2422	380	721	547
Future Volume (vph)	383	1461	9	2422	380	721	547
Turn Type	Prot	NA	Prot	NA	Perm	Prot	Perm
Protected Phases	5	2	1	6		7	
Permitted Phases					6		7
Detector Phase	5	2	1	6	6	7	7
Switch Phase							
Minimum Initial (s)	4.0	10.0	4.0	10.0	10.0	10.0	10.0
Minimum Split (s)	8.4	16.3	8.4	29.4	29.4	38.4	38.4
Total Split (s)	34.4	66.3	24.4	65.4	65.4	44.4	44.4
Total Split (%)	23.9%	46.0%	16.9%	45.4%	45.4%	30.8%	30.8%
Yellow Time (s)	3.4	5.3	3.4	4.4	4.4	3.4	3.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	6.3	4.4	5.4	5.4	4.4	4.4
Lead/Lag	Lead	Lag	Lead	Lag	Lag		
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		
Recall Mode	None	Min	None	Min	Min	None	None

Intersection Summary
Cycle Length: 144.2
Actuated Cycle Length: 138.5
Natural Cycle: 120
Control Type: Actuated-Uncoordinated

Splits and Phases: 34: Miramar Road & Eastgate Mall

Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Traffic Volume (vph)	383	1461	9	2422	380	721	547
Future Volume (vph)	383	1461	9	2422	380	721	547
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	6.3	4.4	5.4	5.4	4.4	4.4
Lane Util. Factor	0.97	0.91	1.00	0.86	1.00	0.97	1.00
Frt	1.00	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)	3433	5085	1770	6408	1583	3433	1583
Flt Permitted	0.95	1.00	0.95	1.00	1.00	0.95	1.00
Satd. Flow (perm)	3433	5085	1770	6408	1583	3433	1583
Peak-hour factor, PHF	0.80	0.80	0.92	0.86	0.86	0.80	0.80
Adj. Flow (vph)	479	1826	10	2816	442	901	684
RTOR Reduction (vph)	0	0	0	0	244	0	237
Lane Group Flow (vph)	479	1826	10	2816	198	901	447
Turn Type	Prot	NA	Prot	NA	Perm	Prot	Perm
Protected Phases	5	2	1	6		7	
Permitted Phases					6		7
Actuated Green, G (s)	24.2	85.4	1.5	63.6	63.6	40.0	40.0
Effective Green, g (s)	24.2	85.4	1.5	63.6	63.6	40.0	40.0
Actuated g/C Ratio	0.17	0.60	0.01	0.45	0.45	0.28	0.28
Clearance Time (s)	4.4	6.3	4.4	5.4	5.4	4.4	4.4
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	585	3058	18	2870	709	967	445
v/s Ratio Prot	c0.14	0.36	0.01	c0.44		0.26	
v/s Ratio Perm					0.13		c0.28
v/c Ratio	0.82	0.60	0.56	0.98	0.28	0.93	1.00
Uniform Delay, d1	56.8	17.6	69.9	38.6	24.7	49.7	51.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	8.7	0.3	32.3	12.7	0.2	15.1	43.8
Delay (s)	65.5	17.9	102.2	51.3	25.0	64.8	94.8
Level of Service	E	B	F	D	C	E	F
Approach Delay (s)		27.8		47.9		77.7	
Approach LOS		C		D		E	

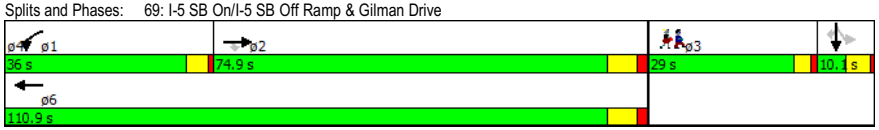
Intersection Summary			
HCM 2000 Control Delay	48.0	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.96		
Actuated Cycle Length (s)	142.0	Sum of lost time (s)	15.1
Intersection Capacity Utilization	78.4%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBT	EBR	WBL	WBT	SBT	SBR	ø3
Lane Configurations							
Traffic Volume (vph)	343	1390	625	582	9	22	
Future Volume (vph)	343	1390	625	582	9	22	
Turn Type	NA	Perm	Prot	NA	NA	Perm	
Protected Phases	2		1	6	4		3
Permitted Phases		2				4	
Detector Phase	2	2	1	6	4	4	
Switch Phase							
Minimum Initial (s)	13.0	13.0	5.0	12.0	5.0	5.0	1.0
Minimum Split (s)	20.2	20.2	9.7	19.2	10.1	10.1	29.0
Total Split (s)	74.9	74.9	36.0	110.9	10.1	10.1	29.0
Total Split (%)	49.9%	49.9%	24.0%	73.9%	6.7%	6.7%	19%
Yellow Time (s)	5.2	5.2	3.7	5.2	4.1	4.1	3.0
All-Red Time (s)	2.0	2.0	1.0	2.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	7.2	7.2	4.7	7.2	5.1	5.1	
Lead/Lag	Lag	Lag	Lead		Lag	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes
Recall Mode	Min	Min	None	Min	None	None	None

Intersection Summary
Cycle Length: 150
Actuated Cycle Length: 121
Natural Cycle: 150
Control Type: Actuated-Uncoordinated

Splits and Phases: 69: I-5 SB On/I-5 SB Off Ramp & Gilman Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	343	1390	625	582	0	0	0	0	31	9	22
Future Volume (vph)	0	343	1390	625	582	0	0	0	0	31	9	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		7.2	7.2	4.7	7.2						5.1	5.1
Lane Util. Factor		1.00	0.88	1.00	0.95						1.00	1.00
Frt		1.00	0.85	1.00	1.00						1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00						0.96	1.00
Satd. Flow (prot)		1863	2787	1770	3539						1793	1583
Flt Permitted		1.00	1.00	0.95	1.00						0.96	1.00
Satd. Flow (perm)		1863	2787	1770	3539						1793	1583
Peak-hour factor, PHF	0.89	0.89	0.89	0.92	0.92	0.92	0.25	0.25	0.25	0.80	0.80	0.80
Adj. Flow (vph)	0	385	1562	679	633	0	0	0	0	39	11	28
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	27
Lane Group Flow (vph)	0	385	1562	679	633	0	0	0	0	0	50	1
Turn Type		NA	Perm	Prot	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases			2							4		4
Actuated Green, G (s)		67.7	67.7	31.3	103.7						5.0	5.0
Effective Green, g (s)		67.7	67.7	31.3	103.7						5.0	5.0
Actuated g/C Ratio		0.56	0.56	0.26	0.86						0.04	0.04
Clearance Time (s)		7.2	7.2	4.7	7.2						5.1	5.1
Vehicle Extension (s)		2.0	2.0	2.0	2.0						2.0	2.0
Lane Grp Cap (vph)		1042	1559	457	3033						74	65
v/s Ratio Prot		0.21		c0.38	0.18							
v/s Ratio Perm			c0.56								0.03	0.00
v/c Ratio		0.37	1.00	1.49	0.21						0.68	0.02
Uniform Delay, d1		14.8	26.6	44.9	1.5						57.2	55.6
Progression Factor		1.00	1.00	1.00	1.00						1.00	1.00
Incremental Delay, d2		0.1	23.3	230.0	0.0						17.5	0.0
Delay (s)		14.9	49.9	274.9	1.5						74.7	55.7
Level of Service		B	D	F	A						E	E
Approach Delay (s)		43.0			143.0			0.0			67.9	
Approach LOS		D			F			A			E	

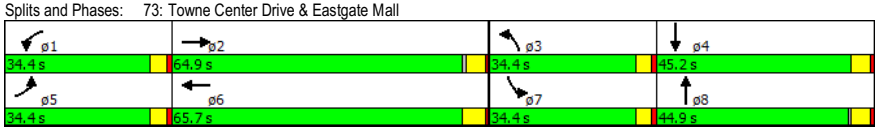
Intersection Summary				
HCM 2000 Control Delay	82.9	HCM 2000 Level of Service	F	
HCM 2000 Volume to Capacity ratio	1.18			
Actuated Cycle Length (s)	121.0	Sum of lost time (s)	21.0	
Intersection Capacity Utilization	101.8%	ICU Level of Service	G	
Analysis Period (min)	15			

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	19	462	298	254	155	78	202	657
Future Volume (vph)	19	462	298	254	155	78	202	657
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	5	2	1	6	3	8	7	4
Permitted Phases								
Detector Phase	5	2	1	6	3	8	7	4
Switch Phase								
Minimum Initial (s)	4.0	7.0	4.0	7.0	4.0	7.0	4.0	7.0
Minimum Split (s)	8.4	11.9	8.4	12.7	8.4	12.2	8.4	12.7
Total Split (s)	34.4	64.9	34.4	65.7	34.4	44.9	34.4	45.2
Total Split (%)	19.1%	36.1%	19.1%	36.6%	19.1%	25.0%	19.1%	25.2%
Yellow Time (s)	3.4	3.9	3.4	4.7	3.4	4.2	3.4	4.2
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	4.9	4.4	5.7	4.4	5.2	4.4	5.2
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 179.7
Actuated Cycle Length: 140.1
Natural Cycle: 75
Control Type: Actuated-Uncoordinated

Splits and Phases: 73: Towne Center Drive & Eastgate Mall



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	19	462	400	298	254	6	155	78	152	202	657	92
Future Volume (vph)	19	462	400	298	254	6	155	78	152	202	657	92
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	5.7		4.4	5.2		4.4	5.2	
Lane Util. Factor	0.97	0.95		0.97	0.95		0.97	0.95		0.97	0.95	
Frt	1.00	0.93		1.00	1.00		1.00	0.90		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	3433	3293		3433	3526		3433	3189		3433	3474	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	3433	3293		3433	3526		3433	3189		3433	3474	
Peak-hour factor, PHF	0.87	0.87	0.87	0.91	0.91	0.91	0.88	0.88	0.88	0.80	0.80	0.80
Adj. Flow (vph)	22	531	460	327	279	7	176	89	173	252	821	115
RTOR Reduction (vph)	0	83	0	0	1	0	0	127	0	0	6	0
Lane Group Flow (vph)	22	908	0	327	285	0	176	135	0	253	930	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases												
Actuated Green, G (s)	3.3	52.2		18.2	66.3		12.0	37.3		15.2	40.5	
Effective Green, g (s)	3.3	52.2		18.2	66.3		12.0	37.3		15.2	40.5	
Actuated g/C Ratio	0.02	0.37		0.13	0.47		0.08	0.26		0.11	0.29	
Clearance Time (s)	4.4	4.9		4.4	5.7		4.4	5.2		4.4	5.2	
Vehicle Extension (s)	2.0	5.1		2.0	4.8		2.0	5.1		2.0	4.8	
Lane Grp Cap (vph)	79	1212		440	1648		290	838		367	992	
v/s Ratio Prot	0.01	c0.28		c0.10	0.08		0.05	0.04		c0.07	c0.27	
v/s Ratio Perm												
v/c Ratio	0.28	0.75		0.74	0.17		0.61	0.16		0.69	0.94	
Uniform Delay, d1	68.1	39.1		59.5	21.9		62.6	40.2		61.0	49.4	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.7	3.1		5.9	0.1		2.5	0.2		4.3	16.1	
Delay (s)	68.8	42.2		65.4	22.0		65.1	40.4		65.3	65.5	
Level of Service	E	D		E	C		E	D		E	E	
Approach Delay (s)		42.8			45.1			50.3			65.4	
Approach LOS		D			D			D			E	

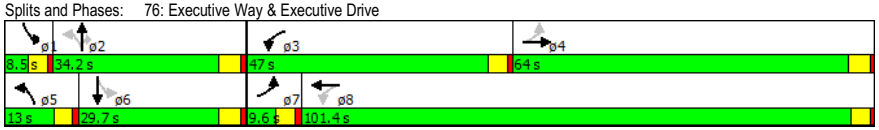
Intersection Summary			
HCM 2000 Control Delay	52.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	141.8	Sum of lost time (s)	19.7
Intersection Capacity Utilization	75.4%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	24	313	423	384	95	38	65	18	100
Future Volume (vph)	24	313	423	384	95	38	65	18	100
Turn Type	pm+pt	NA	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA
Protected Phases	7	4	3	8	5	2		1	6
Permitted Phases	4		8		2		2	6	
Detector Phase	7	4	3	8	5	2	2	1	6
Switch Phase									
Minimum Initial (s)	5.0	4.0	5.0	4.0	4.0	7.0	7.0	4.0	7.0
Minimum Split (s)	9.5	8.9	9.5	8.4	8.4	11.9	11.9	8.4	11.9
Total Split (s)	9.6	64.0	47.0	101.4	13.0	34.2	34.2	8.5	29.7
Total Split (%)	6.2%	41.6%	30.6%	66.0%	8.5%	22.3%	22.3%	5.5%	19.3%
Yellow Time (s)	3.5	3.9	3.5	3.4	3.4	3.9	3.9	3.4	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.9	4.5	4.4	4.4	4.9	4.9	4.4	4.9
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Min	Min	None	Min

Intersection Summary
Cycle Length: 153.7
Actuated Cycle Length: 142.8
Natural Cycle: 90
Control Type: Actuated-Uncoordinated

Splits and Phases: 76: Executive Way & Executive Drive



76: Executive Way & Executive Drive

Timing Plan: Evening Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	24	313	764	423	384	13	95	38	65	18	100	71
Future Volume (vph)	24	313	764	423	384	13	95	38	65	18	100	71
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.9		4.5	4.4		4.4	4.9	4.9	4.4	4.9	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.89		1.00	1.00		1.00	1.00	0.85	1.00	0.94	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3163		1770	3522		1770	1863	1583	1770	1747	
Flt Permitted	0.49	1.00		0.06	1.00		0.25	1.00	1.00	0.73	1.00	
Satd. Flow (perm)	911	3163		118	3522		471	1863	1583	1352	1747	
Peak-hour factor, PHF	0.80	0.80	0.80	0.87	0.87	0.87	0.80	0.80	0.80	0.80	0.80	0.80
Adj. Flow (vph)	30	391	955	486	441	15	119	48	81	22	125	89
RTOR Reduction (vph)	0	176	0	0	1	0	0	0	65	0	17	0
Lane Group Flow (vph)	30	1170	0	486	455	0	119	48	16	23	197	0
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		
Actuated Green, G (s)	60.9	58.1		101.4	94.1		35.8	29.1	29.1	25.1	22.8	
Effective Green, g (s)	60.9	58.1		101.4	94.1		35.8	29.1	29.1	25.1	22.8	
Actuated g/C Ratio	0.42	0.40		0.69	0.64		0.24	0.20	0.20	0.17	0.16	
Clearance Time (s)	4.5	4.9		4.5	4.4		4.4	4.9	4.9	4.4	4.9	
Vehicle Extension (s)	3.0	2.0		3.0	2.3		2.0	2.9	2.9	2.0	2.6	
Lane Grp Cap (vph)	395	1254		513	2262		191	370	314	238	271	
v/s Ratio Prot	0.00	0.37		c0.25	0.13		c0.04	0.03		0.00	c0.11	
v/s Ratio Perm	0.03			c0.41			0.12		0.01	0.02		
v/c Ratio	0.08	1.20dr		0.95	0.20		0.62	0.13	0.05	0.10	0.73	
Uniform Delay, d1	25.4	42.3		46.1	10.8		45.8	48.3	47.5	51.0	58.9	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.1	12.4		26.8	0.0		4.5	0.2	0.1	0.1	8.9	
Delay (s)	25.5	54.7		72.9	10.8		50.3	48.4	47.6	51.0	67.8	
Level of Service	C	D		E	B		D	D	D	D	E	
Approach Delay (s)		54.1			42.8			49.1			66.2	
Approach LOS		D			D			D			E	

Intersection Summary			
HCM 2000 Control Delay	50.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.91		
Actuated Cycle Length (s)	146.5	Sum of lost time (s)	18.7
Intersection Capacity Utilization	87.1%	ICU Level of Service	E
Analysis Period (min)	15		

dr Defacto Right Lane. Recode with 1 though lane as a right lane.
c Critical Lane Group

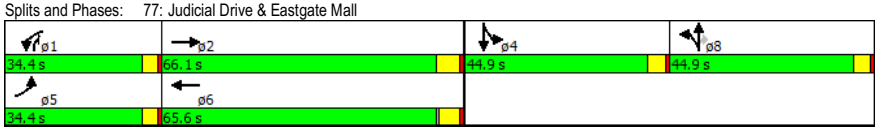
77: Judicial Drive & Eastgate Mall

Timing Plan: Evening Peak

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	15	721	252	260	163	11	506	122	155
Future Volume (vph)	15	721	252	260	163	11	506	122	155
Turn Type	Prot	NA	Prot	NA	Split	NA	pm+ov	Split	NA
Protected Phases	5	2	1	6	8	8	1	4	4
Permitted Phases							8		
Detector Phase	5	2	1	6	8	8	1	4	4
Switch Phase									
Minimum Initial (s)	4.0	7.0	4.0	7.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.4	38.1	8.4	12.6	8.9	8.9	8.4	31.9	31.9
Total Split (s)	34.4	66.1	34.4	65.6	44.9	44.9	34.4	44.9	44.9
Total Split (%)	18.1%	34.7%	18.1%	34.5%	23.6%	23.6%	18.1%	23.6%	23.6%
Yellow Time (s)	3.4	5.1	3.4	4.6	3.9	3.9	3.4	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.4	6.1	4.4	5.6	4.9	4.9	4.4	4.9	4.9
Lead/Lag	Lead	Lag	Lead	Lag			Lead		
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes		
Recall Mode	None	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 190.3
Actuated Cycle Length: 150.7
Natural Cycle: 100
Control Type: Actuated-Uncoordinated

Splits and Phases: 77: Judicial Drive & Eastgate Mall



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	721	173	252	260	11	163	11	506	122	155	99
Future Volume (vph)	15	721	173	252	260	11	163	11	506	122	155	99
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	6.1		4.4	5.6		4.9	4.9	4.4	4.9	4.9	
Lane Util. Factor	1.00	0.95		1.00	0.95		0.95	0.91	0.95	1.00	1.00	
Frt	1.00	0.97		1.00	0.99		1.00	0.87	0.85	1.00	0.94	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3437		1770	3518		1681	1462	1504	1770	1754	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	3437		1770	3518		1681	1462	1504	1770	1754	
Peak-hour factor, PHF	0.89	0.89	0.89	0.97	0.97	0.97	0.85	0.85	0.85	0.87	0.87	0.87
Adj. Flow (vph)	17	810	194	260	268	11	192	13	595	140	178	114
RTOR Reduction (vph)	0	10	0	0	1	0	0	184	139	0	12	0
Lane Group Flow (vph)	17	994	0	260	278	0	173	134	170	140	280	0
Turn Type	Prot	NA		Prot	NA		Split	NA	pm+ov	Split	NA	
Protected Phases	5	2		1	6		8	8	1	4	4	
Permitted Phases									8			
Actuated Green, G (s)	3.8	53.2		27.8	77.7		21.6	21.6	49.4	29.3	29.3	
Effective Green, g (s)	3.8	53.2		27.8	77.7		21.6	21.6	49.4	29.3	29.3	
Actuated g/C Ratio	0.02	0.35		0.18	0.51		0.14	0.14	0.32	0.19	0.19	
Clearance Time (s)	4.4	6.1		4.4	5.6		4.9	4.9	4.4	4.9	4.9	
Vehicle Extension (s)	2.0	2.7		2.0	3.0		2.0	2.0	2.0	2.0	2.0	
Lane Grp Cap (vph)	44	1201		323	1795		238	207	488	340	337	
v/s Ratio Prot	0.01	c0.29		c0.15	0.08		c0.10	0.09	0.06	0.08	c0.16	
v/s Ratio Perm									0.05			
v/c Ratio	0.39	0.83		0.80	0.15		0.73	0.65	0.35	0.41	0.83	
Uniform Delay, d1	73.1	45.3		59.6	19.8		62.5	61.7	39.1	53.9	59.1	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	2.0	4.8		12.8	0.0		9.0	5.2	0.2	0.3	15.2	
Delay (s)	75.1	50.0		72.4	19.8		71.5	66.9	39.3	54.2	74.2	
Level of Service	E	D		E	B		E	E	D	D	E	
Approach Delay (s)		50.5			45.2			57.2			67.7	
Approach LOS		D			D			E			E	

Intersection Summary				
HCM 2000 Control Delay	54.1	HCM 2000 Level of Service	D	
HCM 2000 Volume to Capacity ratio	0.81			
Actuated Cycle Length (s)	152.2	Sum of lost time (s)	20.3	
Intersection Capacity Utilization	80.5%	ICU Level of Service	D	
Analysis Period (min)	15			

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	338	0	0	0	23	5	474	3	3	0	0	0
Future Volume (Veh/h)	338	0	0	0	23	5	474	3	3	0	0	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.94	0.94	0.94	0.25	0.25	0.25
Hourly flow rate (vph)	423	0	0	0	29	6	504	3	3	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1033	1014	0	1012	1012	4	0			6		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1033	1014	0	1012	1012	4	0			6		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	0	100	100	100	82	99	69			100		
cM capacity (veh/h)	139	164	1085	165	165	1079	1623			1615		

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	423	35	510
Volume Left	423	0	504
Volume Right	0	6	3
cSH	139	193	1623
Volume to Capacity	3.05	0.18	0.31
Queue Length 95th (ft)	Err	16	33
Control Delay (s)	Err	27.8	8.1
Lane LOS	F	D	A
Approach Delay (s)	Err	27.8	8.1
Approach LOS	F	D	

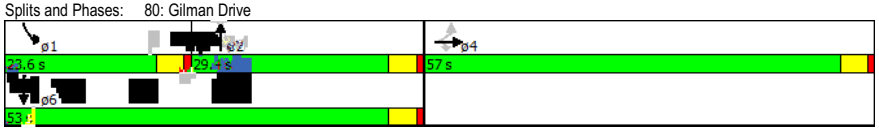
Intersection Summary				
Average Delay	4374.7			
Intersection Capacity Utilization	58.7%	ICU Level of Service	B	
Analysis Period (min)	15			

Lane Group	EBT	EBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	6	1071	417	89	206	889
Future Volume (vph)	6	1071	417	89	206	889
Turn Type	NA	Perm	NA	Perm	Prot	NA
Protected Phases	4		2		1	6
Permitted Phases		4		2		
Detector Phase	4	4	2	2	1	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	40.5	40.5	22.5	22.5	9.5	24.5
Total Split (s)	57.0	57.0	29.4	29.4	23.6	53.0
Total Split (%)	51.8%	51.8%	26.7%	26.7%	21.5%	48.2%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	None	None	Min	Min	None	Min

Intersection Summary

Cycle Length: 110
Actuated Cycle Length: 87.4
Natural Cycle: 80
Control Type: Actuated-Uncoordinated

Splits and Phases: 80: Gilman Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	13	6	1071	0	0	0	0	417	89	206	889	0
Future Volume (vph)	13	6	1071	0	0	0	0	417	89	206	889	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5	4.5					4.5	4.5	4.5	4.5	
Lane Util. Factor		0.95	0.95					0.95	1.00	1.00	0.95	
Frt		0.86	0.85					1.00	0.85	1.00	1.00	
Flt Protected		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1511	1504					3539	1583	1770	3539	
Flt Permitted		1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)		1511	1504					3539	1583	1770	3539	
Peak-hour factor, PHF	0.97	0.97	0.97	0.25	0.25	0.25	0.83	0.83	0.83	0.96	0.96	0.96
Adj. Flow (vph)	13	6	1104	0	0	0	0	502	107	215	926	0
RTOR Reduction (vph)	0	37	37	0	0	0	0	0	67	0	0	0
Lane Group Flow (vph)	0	523	526	0	0	0	0	502	40	215	926	0
Turn Type	Perm	NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2			
Actuated Green, G (s)		38.6	38.6					19.2	19.2	15.5	39.2	
Effective Green, g (s)		38.6	38.6					19.2	19.2	15.5	39.2	
Actuated g/C Ratio		0.44	0.44					0.22	0.22	0.18	0.45	
Clearance Time (s)		4.5	4.5					4.5	4.5	4.5	4.5	
Vehicle Extension (s)		3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		671	668					782	350	316	1598	
v/s Ratio Prot								0.14		c0.12	c0.26	
v/s Ratio Perm		0.35	c0.35						0.03			
v/c Ratio		0.78	0.79					0.64	0.11	0.68	0.58	
Uniform Delay, d1		20.5	20.6					30.7	27.0	33.3	17.7	
Progression Factor		1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2		5.7	6.1					1.8	0.1	5.9	0.5	
Delay (s)		26.2	26.7					32.5	27.2	39.3	18.2	
Level of Service		C	C					C	C	D	B	
Approach Delay (s)		26.5			0.0			31.6			22.2	
Approach LOS		C			A			C			C	

Intersection Summary

HCM 2000 Control Delay	25.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	86.8	Sum of lost time (s)	13.5
Intersection Capacity Utilization	76.3%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

AM Peak-Hour Arterial Segment Analysis Summary Genesee Avenue

ROADWAY SEGMENT	DIRECTION	URBAN STREET CLASS	EXISTING				HORIZON YEAR											
							Alt A Regents Bridge 6-lane Genesee			Alt B Regents Bridge 4-lane Genesee			Alt C No Bridge 6-lane Genesee			Alt D No Bridge 4-lane Genesee		
			TRAVEL TIME (S)		SIMULATION		SIMULATION			SIMULATION			SIMULATION			SIMULATION		
			FIELD	SIMULATION	SPEED (a)	LOS (b)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)
Genesee Ave																		
SR-52 EB Ramps to Governor Dr	NB	I	217	140	19.9	**E**	204.3	**F**		212.1	F		249.9	**F**		330.2	**F**	
	SB	I	68	67	41.4	B	66.9	B		66.9	B		67.0	B		67.6	B	
Governor Dr to Centurion Sq	NB	I	65	91	22.1	D	71.4	C		92.6	D		136.6	**F**		294.8	**F**	
	SB	I	99	82	24.6	D	80.5	D		80.5	D		89.4	D		88.0	D	
Centurion Sq to Decoro St	NB	I	58	42	25.3	D	41.7	D		61.4	E		51.1	**E**		168.1	**F**	
	SB	I	30	39	27.3	C	35.4	C		36.2	C		35.7	C		36.7	C	
Decoro St to Nobel Dr	NB	I	43	40	17.2	**E**	41.2	**E**		114.2	F		46.7	**F**		179.7	**F**	
	SB	I	59	37	18.7	**E**	39.7	**E**		42.5	E		42.6	**E**		46.6	**F**	
Nobel Dr to Esplanade Ct	NB	I	21	35	21.1	D	47.0	**F**		53.6	F		47.1	**F**		80.7	**F**	
	SB	I	40	41	18.0	**E**	58.6	**F**		57.5	F		60.0	**F**		62.1	**F**	
Esplanade Ct to La Jolla Village Dr	NB	I	29	45	15.0	**F**	216.2	**F**		214.0	F		273.0	**F**		273.4	**F**	
	SB	I	47	25	26.7	D	22.2	C		22.3	C		21.6	C		22.4	C	
La Jolla Village Dr to Executive Sq	NB	I	15	17	22.2	D	18.1	**E**		18.2	E		20.4	**F**		20.4	**F**	
	SB	I	17	45	8.2	**F**	70.5	**F**		70.5	F		70.3	**F**		70.4	**F**	
Executive Square to Executive Dr	NB	I	8	19	14.4	**F**	30.4	**F**		30.0	F		30.7	**F**		30.4	**F**	
	SB	I	6	11	25.2	D	13.1	D		13.3	D		13.2	D		13.3	D	
Executive Dr to Eastgate Mall	NB	I	57	42	14.0	**F**	55.8	**F**		53.4	F		56.1	**F**		57.5	**F**	
	SB	I	13	23	25.9	D	22.0	D		22.0	D		22.3	D		22.3	D	
Eastgate Mall to Regents Rd	NB	I	38	49	25.6	D	50.4	D		50.7	D		47.6	D		47.8	D	
	SB	I	30	57	22.1	D	81.9	**F**		80.9	F		84.8	**F**		85.2	**F**	
Regents Rd to Campus Point Dr	NB	I	13	32	17.6	**E**	47.4	**F**		47.3	F		48.3	**F**		48.1	**F**	
	SB	I	14	47	11.8	**F**	46.8	**F**		47.5	F		43.2	**F**		43.1	**F**	
Campus Point Dr to Scripps Hospital	NB	I	16	24	32.3	C	23.3	C		23.3	C		23.2	C		23.2	C	
	SB	I	56	32	24.0	D	57.0	**F**		56.7	F		55.3	**F**		55.6	**F**	
Scripps Hospital to I-5 NB Ramps	NB	I	140	61	19.3	**E**	69.2	**E**		69.4	E		68.7	**E**		68.8	**E**	
	SB	I	32	51	23.3	D	62.9	**E**		62.3	E		62.8	**E**		62.7	**E**	
I-5 NB Ramps to I-5 SB Ramps	NB	I	26	110	3.5	**F**	52.1	**F**		52.0	F		52.7	**F**		52.8	**F**	
	SB	I	39	28	14.0	**F**	67.6	**F**		71.6	F		68.5	**F**		67.3	**F**	
I-5 SB Ramps to Science Center Dr	NB	I	24	42	27.0	D	48.0	D		48.0	D		48.0	D		48.0	D	
	SB	I	38	59	19.3	**E**	54.8	**E**		55.0	E		55.0	**E**		55.3	**E**	
Science Center Dr to John Hopkins Dr	NB	I	38	46	28.5	C	51.4	D		51.4	D		51.3	D		51.2	D	
	SB	I	30	34	38.1	B	34.5	B		34.4	B		34.4	B		34.3	B	
John Hopkins Drive to N. Torrey Pines Rd	NB	I	13	11	29.1	C	13.5	D		13.5	D		13.9	D		14.0	D	
	SB	I	8	14	23.6	D	13.1	D		13.0	D		13.2	D		12.9	D	
Total	*NB*	*I*	*821*	*845*	*19.0*	**E**	*1081.4*	**F**	**No**	*1205.1*	*F*	**No**	*1265.3*	**F**	**No**	*1789.1*	**F**	**No**
	SB	*I*	*626*	*677*	*23.3*	*D*	*827.5*	**E**	**Yes**	*833.1*	*E*	**Yes**	*839.3*	**E**	**Yes**	*845.8*	**E**	**Yes**

Notes: (a) Travel time in miles per hour (mph).

(b) The arterial LOS is based on average through-vehicle travel speed for the segment or for the entire street under consideration and is influenced both by the number of signals per mile and by the intersection control delay.

(c) A significant impact resulted in a change from LOS D or better to LOS E or LOS F, or a decrease of speeds of more than 1.0 mph at LOS E and LOS F.

MID Peak-Hour Arterial Segment Analysis Summary Genesee Avenue

ROADWAY SEGMENT	DIRECTION	URBAN STREET CLASS	EXISTING				HORIZON YEAR											
							Alt A Regents Bridge 6-lane Genesee			Alt B Regents Bridge 4-lane Genesee			Alt C No Bridge 6-lane Genesee			Alt D No Bridge 4-lane Genesee		
			TRAVEL TIME (S)		SIMULATION		SIMULATION			SIMULATION			SIMULATION			SIMULATION		
			FIELD	SIMULATION	SPEED (a)	LOS (b)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)
Genesee Ave																		
SR-52 EB Ramps to Governor Dr	NB	I	85	93	30.0	C	92.2	C		93.6	C		102.5	C		103.0	C	
	SB	I	62	68	41.4	B	67.1	B		67.1	B		67.1	B		67.7	B	
Governor Dr to Centurion Sq	NB	I	52	55	36.8	B	60.0	C		51.9	B		51.9	A		53.3	A	
	SB	I	76	74	27.0	D	70.3	C		71.4	C		79.9	D		81.3	D	
Centurion Sq to Decoro St	NB	I	25	46	23.1	D	44.8	D		51.1	E		49.4	D		53.4	D	
	SB	I	40	33	32.3	C	32.1	C		30.3	B		31.0	B		33.5	C	
Decoro St to Nobel Dr	NB	I	57	29	23.5	D	30.8	D		34.9	E		31.1	C		34.0	D	
	SB	I	18	26	26.8	D	34.9	**E**		23.9	C		23.5	C		27.0	D	
Nobel Dr to Esplanade Ct	NB	I	26	42	17.4	**E**	84.6	**F**		83.5	F		69.7	**F**		120.5	**F**	
	SB	I	32	46	15.9	**F**	45.0	**E**		44.5	E		53.2	**F**		49.0	**F**	
Esplanade Ct to La Jolla Village Dr	NB	I	75	86	7.8	**F**	81.8	**F**		81.5	F		88.4	**F**		89.0	**F**	
	SB	I	48	37	18.0	**E**	43.9	**F**		43.5	F		44.2	**F**		46.3	**F**	
La Jolla Village Dr to Executive Sq	NB	I	12	20	18.9	**E**	29.4	**F**		29.3	F		32.1	**F**		30.6	**F**	
	SB	I	59	52	7.1	**F**	49.2	**F**		49.6	F		51.9	**F**		51.6	**F**	
Executive Square to Executive Dr	NB	I	43	15	18.0	**E**	16.8	**E**		16.8	E		17.4	**E**		17.3	**E**	
	SB	I	9	17	16.4	**E**	29.3	**F**		29.2	F		28.6	**F**		30.5	**F**	
Executive Dr to Eastgate Mall	NB	I	17	25	23.8	D	19.9	C		19.9	C		20.6	B		20.6	B	
	SB	I	16	20	29.3	C	21.2	C		21.3	C		21.5	C		21.5	C	
Eastgate Mall to Regents Rd	NB	I	34	48	26.0	D	48.3	D		48.3	D		45.4	C		45.8	C	
	SB	I	29	44	28.8	C	57.5	D		57.4	D		58.4	D		59.1	D	
Regents Rd to Campus Point Dr	NB	I	13	26	21.5	D	34.4	**E**		34.4	E		34.3	**E**		34.1	**E**	
	SB	I	13	21	26.8	D	22.4	D		22.4	D		21.7	D		21.3	D	
Campus Point Dr to Scripps Hospital	NB	I	16	34	22.9	D	46.9	**E**		46.8	E		47.6	**E**		47.6	**E**	
	SB	I	17	38	20.2	**E**	41.9	**E**		41.9	E		41.3	**E**		41.5	**E**	
Scripps Hospital to I-5 NB Ramps	NB	I	49	61	19.2	**E**	62.9	**E**		62.6	E		63.2	D		63.0	D	
	SB	I	40	46	25.6	D	64.6	**E**		64.7	E		64.8	**E**		65.0	**E**	
I-5 NB Ramps to I-5 SB Ramps	NB	I	26	26	15.0	**F**	12.8	C		13.2	C		12.9	B		13.2	B	
	SB	I	13	13	30.5	C	21.6	**E**		21.8	E		21.9	**E**		22.1	**E**	
I-5 SB Ramps to Science Center Dr	NB	I	29	37	30.7	C	37.2	C		37.3	C		37.2	B		37.1	B	
	SB	I	67	56	20.0	**E**	57.1	**E**		57.6	E		57.0	**E**		57.9	**E**	
Science Center Dr to John Hopkins Dr	NB	I	49	53	24.7	D	65.0	**E**		65.1	E		81.7	**E**		80.2	**E**	
	SB	I	28	39	32.9	C	39.4	C		39.4	C		40.3	C		40.2	C	
John Hopkins Drive to N. Torrey Pines Rd	NB	I	9	10	32.4	C	11.6	C		11.7	C		11.7	C		12.8	C	
	SB	I	12	15	21.6	D	18.9	**E**		18.7	E		18.4	**E**		17.1	**E**	
Total	*NB*	*I*	*617*	*705*	*22.8*	*D*	*779.4*	**E**	**Yes**	*781.9*	*E*	**Yes**	*797.1*	**E**	**Yes**	*855.5*	**E**	**Yes**
	SB	*I*	*579*	*630*	*24.9*	*D*	*716.4*	*D*	**No**	*704.7*	*D*	**No**	*724.7*	*D*	**No**	*732.6*	*D*	**No**

Notes: (a) Travel time in miles per hour (mph).

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PM Peak-Hour Arterial Segment Analysis Summary Genesee Avenue

ROADWAY SEGMENT	DIRECTION	URBAN STREET CLASS	EXISTING				HORIZON YEAR											
							Alt A Regents Bridge 6-lane Genesee			Alt B Regents Bridge 4-lane Genesee			Alt C No Bridge 6-lane Genesee			Alt D No Bridge 4-lane Genesee		
			TRAVEL TIME (S)		SIMULATION		SIMULATION			SIMULATION			SIMULATION			SIMULATION		
			FIELD	SIMULATION	SPEED (a)	LOS (b)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)
Genesee Ave																		
SR-52 EB Ramps to Governor Dr	NB	I	110	144	19.3	**E**	109.5	D		135.0	E		113.7	D		119.2	D	
	SB	I	60	80	35.0	B	76.5	B		76.2	B		77.7	B		76.5	B	
Governor Dr to Centurion Sq	NB	I	44	51	39.5	B	48.0	B		50.9	B		51.2	B		54.7	B	
	SB	I	214	106	18.8	**E**	80.1	D		152.5	F		216.6	**F**		167.3	**F**	
Centurion Sq to Decoro St	NB	I	43	44	24.2	D	36.3	C		50.7	E		35.9	C		39.4	D	
	SB	I	88	46	23.3	D	37.7	C		49.8	D		55.9	**E**		161.3	**F**	
Decoro St to Nobel Dr	NB	I	20	46	14.8	**F**	33.4	**E**		35.6	E		28.1	D		32.1	D	
	SB	I	70	142	4.9	**F**	99.4	**F**		253.4	F		265.0	**F**		483.0	**F**	
Nobel Dr to Esplanade Ct	NB	I	17	61	12.1	**F**	102.2	**F**		102.9	F		98.3	**F**		149.1	**F**	
	SB	I	100	37	19.9	**E**	75.4	**F**		71.0	F		142.7	**F**		121.1	**F**	
Esplanade Ct to La Jolla Village Dr	NB	I	86	76	8.8	**F**	78.2	**F**		78.2	F		77.9	**F**		76.6	**F**	
	SB	I	35	37	18.1	**E**	38.6	**E**		38.5	E		40.2	**E**		42.5	**F**	
La Jolla Village Dr to Executive Sq	NB	I	29	19	20.0	**E**	18.9	**E**		19.0	E		18.3	**E**		18.3	**E**	
	SB	I	88	51	7.3	**F**	78.4	**F**		76.6	F		115.3	**F**		117.2	**F**	
Executive Square to Executive Dr	NB	I	37	20	13.8	**F**	16.7	**E**		16.6	E		16.8	**E**		16.6	**E**	
	SB	I	71	25	11.0	**F**	53.7	**F**		51.0	F		37.8	**F**		37.9	**F**	
Executive Dr to Eastgate Mall	NB	I	15	49	12.2	**F**	51.4	**F**		51.4	F		50.9	**F**		51.4	**F**	
	SB	I	126	35	16.7	**E**	49.0	**F**		48.8	F		51.5	**F**		51.9	**F**	
Eastgate Mall to Regents Rd	NB	I	37	53	23.8	D	49.4	D		49.2	D		49.5	D		49.0	D	
	SB	I	42	42	30.2	C	46.5	C		46.5	C		46.8	D		46.7	D	
Regents Rd to Campus Point Dr	NB	I	15	27	20.8	**E**	39.4	**F**		39.6	F		38.4	**F**		38.3	**F**	
	SB	I	16	24	23.0	D	42.2	**F**		42.2	F		42.2	**F**		42.2	**F**	
Campus Point Dr to Scripps Hospital	NB	I	21	27	28.5	C	27.8	C		27.9	C		27.9	C		28.0	C	
	SB	I	45	58	13.1	**F**	62.5	**F**		61.8	F		57.6	**F**		56.2	**F**	
Scripps Hospital to I-5 NB Ramps	NB	I	77	61	19.1	**E**	63.3	**E**		63.2	E		63.6	**E**		63.5	**E**	
	SB	I	33	49	23.9	D	59.5	**E**		59.3	E		60.1	**E**		60.6	**E**	
I-5 NB Ramps to I-5 SB Ramps	NB	I	12	14	28.5	C	15.8	D		15.9	D		16.0	D		16.9	D	
	SB	I	13	11	34.2	B	16.7	D		16.8	D		16.8	D		17.1	D	
I-5 SB Ramps to Science Center Dr	NB	I	33	41	27.7	C	43.4	D		43.4	D		43.3	D		43.3	D	
	SB	I	137	95	11.9	**F**	76.2	**F**		76.1	F		76.0	**F**		75.3	**F**	
Science Center Dr to John Hopkins Dr	NB	I	50	55	23.6	D	65.0	**E**		65.0	E		64.9	**E**		64.9	**E**	
	SB	I	70	37	35.1	B	42.0	C		41.9	C		41.6	C		41.0	C	
John Hopkins Drive to N. Torrey Pines Rd	NB	I	9	13	25.1	D	12.7	D		12.7	D		12.7	D		12.4	D	
	SB	I	8	28	11.6	**F**	29.9	**F**		29.8	F		29.2	**F**		29.9	**F**	
Total	*NB*	*I*	*655*	*800*	*20.0*	**E**	*811.4*	**E**	**No**	*857.2*	*E*	**No**	*807.4*	**E**	**No**	*873.7*	**E**	**No**
	SB	*I*	*1216*	*875*	*17.9*	**E**	*964.3*	**E**	**No**	*1192.2*	*F*	**No**	*1373.0*	**F**	**No**	*1627.7*	**F**	**No**

Notes: (a) Travel time in miles per hour (mph).

(b) The arterial LOS is based on average through-vehicle travel speed for the segment or for the entire street under consideration and is influenced both by the number of signals per mile and by the intersection control delay.

(c) A significant impact resulted in a change from LOS D or better to LOS E or LOS F, or a decrease of speeds of more than 1.0 mph at LOS E and LOS F.

AM Peak-Hour Arterial Segment Analysis Summary Genesee Avenue

ROADWAY SEGMENT	DIRECTION	URBAN STREET CLASS	EXISTING				HORIZON YEAR WITH RECOMMENDED MITIGATIONS											
							Alt A Regents Bridge 6-lane Genesee			Alt B Regents Bridge 4-lane Genesee			Alt C No Bridge 6-lane Genesee			Alt D No Bridge 4-lane Genesee		
			TRAVEL TIME (S)		SIMULATION		SIMULATION			SIMULATION			SIMULATION			SIMULATION		
			FIELD	SIMULATION	SPEED (a)	LOS (b)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)
Genesee Ave																		
SR-52 EB Ramps to Governor Dr	NB	I	217	140	19.9	**E**	34.3	B		34.7	B		34.2	B		34.6	B	
	SB	I	68	67	41.4	B	37.5	C		37.5	C		37.6	C		38.2	C	
Governor Dr to Centurion Sq	NB	I	65	91	22.1	D	40.0	B		87.1	E		121.0	**F**		119.7	**F**	
	SB	I	99	82	24.6	D	63.7	D		68.5	D		66.2	D		70.2	D	
Centurion Sq to Decoro St	NB	I	58	42	25.3	D	71.4	C		92.6	D		136.6	**F**		294.8	**F**	
	SB	I	30	39	27.3	C	44.6	A		76.6	D		113.7	**E**		112.9	**E**	
Decoro St to Nobel Dr	NB	I	43	40	17.2	**E**	40.3	D		41.5	D		48.8	D		118.8	**F**	
	SB	I	59	37	18.7	**E**	35.7	C		37.3	C		35.7	C		36.7	C	
Nobel Dr to Esplanade Ct	NB	I	21	35	21.1	D	41.5	**E**		43.3	F		49.4	**F**		182.2	**F**	
	SB	I	40	41	18.0	**E**	37.3	**E**		34.3	E		39.6	**E**		39.5	**E**	
Esplanade Ct to La Jolla Village Dr	NB	I	29	45	15.0	**F**	47.0	**F**		57.8	F		47.1	**F**		80.8	**F**	
	SB	I	47	25	26.7	D	58.6	**F**		57.2	F		60.0	**F**		62.1	**F**	
La Jolla Village Dr to Executive Sq	NB	I	15	17	22.2	D	216.2	**F**		213.9	F		273.0	**F**		273.4	**F**	
	SB	I	17	45	8.2	**F**	22.2	C		22.3	C		21.6	C		22.4	C	
Executive Square to Executive Dr	NB	I	8	19	14.4	**F**	18.1	**E**		18.2	E		20.4	**F**		20.4	**F**	
	SB	I	6	11	25.2	D	70.5	**F**		70.5	F		70.3	**F**		70.4	**F**	
Executive Dr to Eastgate Mall	NB	I	57	42	14.0	**F**	30.4	**F**		30.0	F		30.7	**F**		30.4	**F**	
	SB	I	13	23	25.9	D	13.1	D		13.3	D		13.2	D		13.3	D	
Eastgate Mall to Regents Rd	NB	I	38	49	25.6	D	55.8	**F**		53.4	F		56.1	**F**		57.5	**F**	
	SB	I	30	57	22.1	D	22.0	D		22.0	D		22.3	D		22.3	D	
Regents Rd to Campus Point Dr	NB	I	13	32	17.6	**E**	50.4	D		50.7	D		47.6	D		47.8	D	
	SB	I	14	47	11.8	**F**	81.9	**F**		81.2	F		84.8	**F**		85.2	**F**	
Campus Point Dr to Scripps Hospital	NB	I	16	24	32.3	C	47.4	**F**		47.3	F		48.3	**F**		48.1	**F**	
	SB	I	56	32	24.0	D	46.8	**F**		47.4	F		43.2	**F**		43.1	**F**	
Scripps Hospital to I-5 NB Ramps	NB	I	140	61	19.3	**E**	23.3	C		23.3	C		23.2	C		23.2	C	
	SB	I	32	51	23.3	D	57.0	**F**		56.7	F		55.3	**F**		55.6	**F**	
I-5 NB Ramps to I-5 SB Ramps	NB	I	26	110	3.5	**F**	69.2	**E**		69.4	E		68.7	**E**		68.8	**E**	
	SB	I	39	28	14.0	**F**	62.9	**E**		62.3	E		62.8	**E**		62.7	**E**	
I-5 SB Ramps to Science Center Dr	NB	I	24	42	27.0	D	52.1	**F**		52.0	F		52.7	**F**		52.8	**F**	
	SB	I	38	59	19.3	**E**	67.6	**F**		71.6	F		68.5	**F**		67.3	**F**	
Science Center Dr to John Hopkins Dr	NB	I	38	46	28.5	C	48.0	D		48.0	D		48.0	D		48.0	D	
	SB	I	30	34	38.1	B	54.8	**E**		55.0	E		55.0	**E**		55.3	**E**	
John Hopkins Drive to N. Torrey Pines Rd	NB	I	13	11	29.1	C	52.2	D		52.2	D		52.1	D		52.0	D	
	SB	I	8	14	23.6	D	34.5	B		34.4	D		34.4	B		34.3	B	
Total	*NB*	*I*	*821*	*845*	*19.0*	**E**	*950.4*	**E**	**No**	*1028.2*	*F*	**No**	*1171.1*	**F**	**No**	*1566.5*	**F**	**No**
	SB	*I*	*626*	*677*	*23.3*	*D*	*823.8*	**E**	**Yes**	*861.1*	*E*	**Yes**	*897.4*	**E**	**Yes**	*904.4*	**E**	**Yes**

Notes: (a) Travel time in miles per hour (mph).

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(c) A significant impact resulted in a change from LOS D or better to LOS E or LOS F, or a decrease of speeds of more than 1.0 mph at LOS E and LOS F.

MID Peak-Hour Arterial Segment Analysis Summary Genesee Avenue

ROADWAY SEGMENT	DIRECTION	URBAN STREET CLASS	EXISTING				HORIZON YEAR WITH RECOMMENDED MITIGATIONS											
							Alt A Regents Bridge 6-lane Genesee			Alt B Regents Bridge 4-lane Genesee			Alt C No Bridge 6-lane Genesee			Alt D No Bridge 4-lane Genesee		
			TRAVEL TIME (S)		SIMULATION		SIMULATION			SIMULATION			SIMULATION			SIMULATION		
			FIELD	SIMULATION	SPEED (a)	LOS (b)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)
Genesee Ave																		
SR-52 EB Ramps to Governor Dr	NB	I	85	93	30.0	C	35.6	B		35.8	C		35.3	B		35.6	B	
	SB	I	62	68	41.4	B	37.7	C		37.7	C		37.7	C		38.3	C	
Governor Dr to Centurion Sq	NB	I	52	55	36.8	B	70.2	D		69.1	D		82.5	**E**		77.3	**E**	
	SB	I	76	74	27.0	D	51.8	C		54.0	C		53.6	C		54.7	C	
Centurion Sq to Decoro St	NB	I	25	46	23.1	D	60.0	C		51.9	B		51.9	B		53.3	B	
	SB	I	40	33	32.3	C	70.3	C		65.2	C		74.2	C		76.0	D	
Decoro St to Nobel Dr	NB	I	57	29	23.5	D	43.8	D		47.2	D		48.9	D		52.0	**E**	
	SB	I	18	26	26.8	D	32.1	C		30.3	B		30.8	B		32.8	C	
Nobel Dr to Esplanade Ct	NB	I	26	42	17.4	**E**	31.0	D		34.6	E		30.5	D		32.6	D	
	SB	I	32	46	15.9	**F**	34.9	**E**		22.4	C		23.4	C		26.3	D	
Esplanade Ct to La Jolla Village Dr	NB	I	75	86	7.8	**F**	84.5	**F**		82.8	F		68.4	**F**		119.2	**F**	
	SB	I	48	37	18.0	**E**	45.0	**E**		44.5	E		53.2	**F**		49.0	**F**	
La Jolla Village Dr to Executive Sq	NB	I	12	20	18.9	**E**	81.8	**F**		81.5	F		87.5	**F**		88.1	**F**	
	SB	I	59	52	7.1	**F**	43.9	**F**		43.5	F		44.2	**F**		46.3	**F**	
Executive Square to Executive Dr	NB	I	43	15	18.0	**E**	29.4	**F**		29.3	F		31.6	**F**		30.1	**F**	
	SB	I	9	17	16.4	**E**	49.2	**F**		49.6	F		51.9	**F**		51.6	**F**	
Executive Dr to Eastgate Mall	NB	I	17	25	23.8	D	16.8	**E**		16.8	E		17.0	**E**		16.9	**E**	
	SB	I	16	20	29.3	C	29.3	**F**		29.2	F		28.6	**F**		30.5	**F**	
Eastgate Mall to Regents Rd	NB	I	34	48	26.0	D	19.9	C		19.9	C		19.8	C		19.8	C	
	SB	I	29	44	28.8	C	21.2	C		21.3	C		21.5	C		21.5	C	
Regents Rd to Campus Point Dr	NB	I	13	26	21.5	D	48.3	D		48.3	D		45.8	C		46.2	C	
	SB	I	13	21	26.8	D	57.5	D		57.4	D		58.4	D		58.5	D	
Campus Point Dr to Scripps Hospital	NB	I	16	34	22.9	D	34.4	**E**		34.4	E		33.5	**E**		33.3	**E**	
	SB	I	17	38	20.2	**E**	22.4	D		22.4	D		21.7	D		21.8	D	
Scripps Hospital to I-5 NB Ramps	NB	I	49	61	19.2	**E**	46.9	**E**		46.8	E		46.6	**E**		46.6	**E**	
	SB	I	40	46	25.6	D	41.9	**E**		41.9	E		41.3	**E**		41.5	**E**	
I-5 NB Ramps to I-5 SB Ramps	NB	I	26	26	15.0	**F**	62.9	**E**		62.6	E		63.2	**E**		63.0	**E**	
	SB	I	13	13	30.5	C	64.6	**E**		64.7	E		64.8	**E**		65.0	**E**	
I-5 SB Ramps to Science Center Dr	NB	I	29	37	30.7	C	12.8	C		13.2	C		12.9	C		13.2	C	
	SB	I	67	56	20.0	**E**	21.6	**E**		21.8	E		22.0	**E**		22.1	**E**	
Science Center Dr to John Hopkins Dr	NB	I	49	53	24.7	D	37.2	C		37.3	C		37.2	C		37.1	C	
	SB	I	28	39	32.9	C	57.1	**E**		57.6	E		57.7	**E**		57.9	**E**	
John Hopkins Drive to N. Torrey Pines Rd	NB	I	9	10	32.4	C	67.0	**E**		67.1	E		65.4	**E**		64.4	**E**	
	SB	I	12	15	21.6	D	39.4	C		39.4	C		39.4	C		40.2	C	
Total	*NB*	*I*	*617*	*705*	*22.8*	*D*	*792.6*	**E**	**Yes**	*789.0*	*E*	**Yes**	*788.0*	**E**	**Yes**	*838.9*	**E**	**Yes**
	SB	*I*	*579*	*630*	*24.9*	*D*	*738.8*	*D*	**No**	*721.8*	*D*	**No**	*742.8*	*D*	**No**	*751.1*	*D*	**No**

Notes: (a) Travel time in miles per hour (mph).

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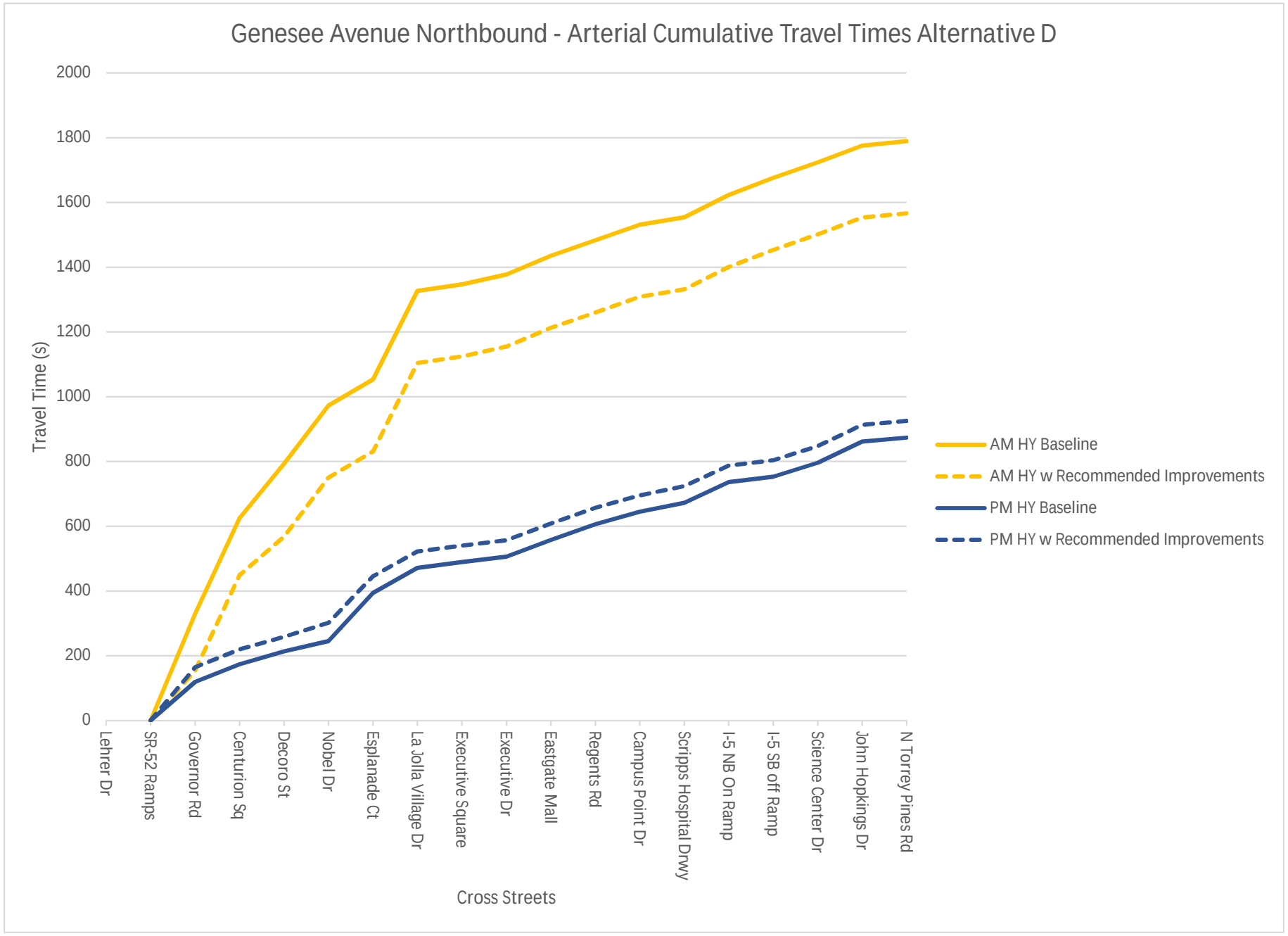
PM Peak-Hour Arterial Segment Analysis Summary Genesee Avenue

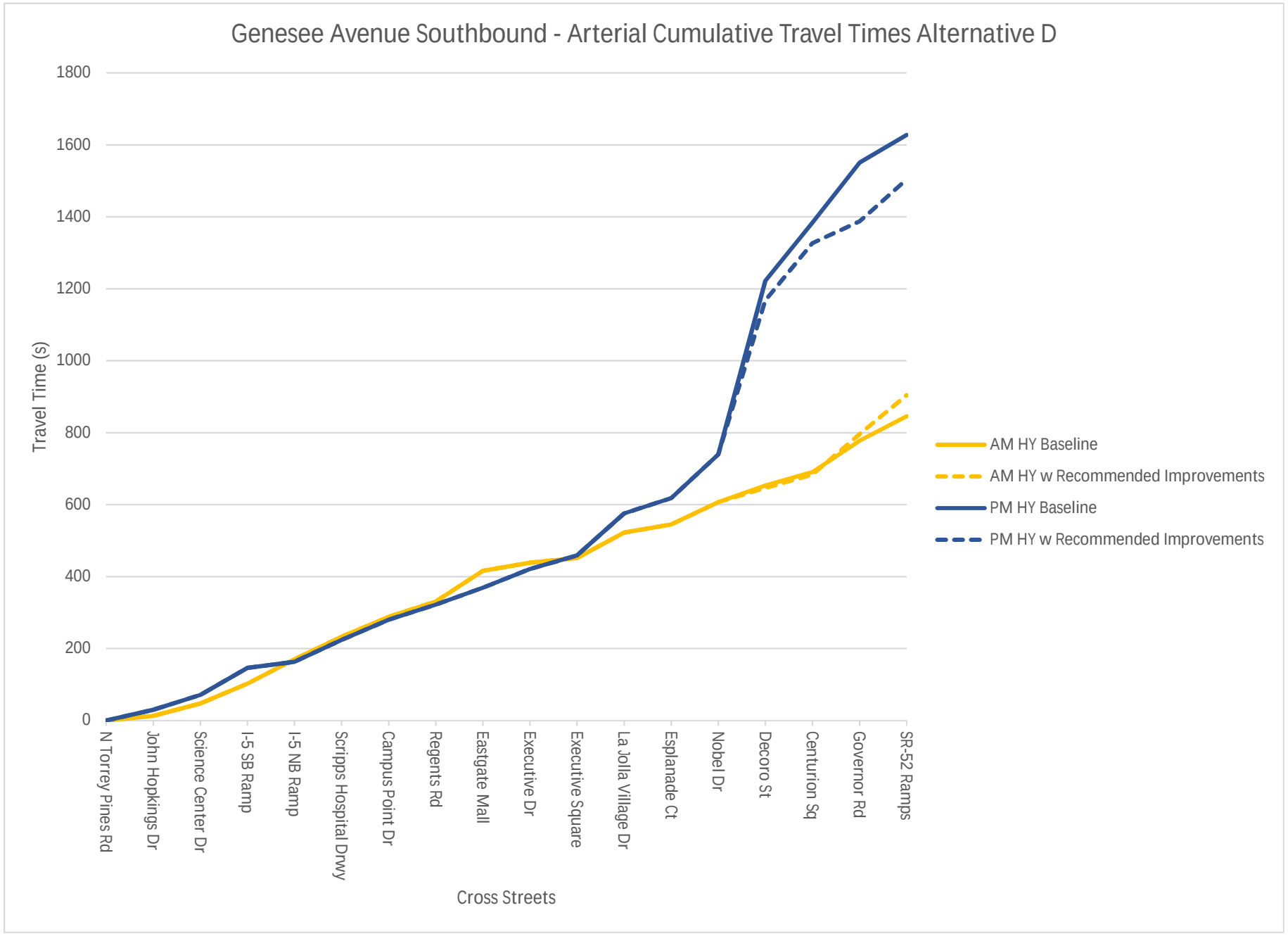
ROADWAY SEGMENT	DIRECTION	URBAN STREET CLASS	EXISTING				HORIZON YEAR WITH RECOMMENDED MITIGATIONS											
							Alt A Regents Bridge 6-lane Genesee			Alt B Regents Bridge 4-lane Genesee			Alt C No Bridge 6-lane Genesee			Alt D No Bridge 4-lane Genesee		
			TRAVEL TIME (S)		SIMULATION		SIMULATION			SIMULATION			SIMULATION			SIMULATION		
			FIELD	SIMULATION	SPEED (a)	LOS (b)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)
Genesee Ave																		
SR-52 EB Ramps to Governor Dr	NB	I	110	144	19.3	**E**	35.8	C		35.5	B		34.6	B		34.9	B	
	SB	I	60	80	35.0	B	47.1	D		46.8	D		48.3	D		47.1	D	
Governor Dr to Centurion Sq	NB	I	44	51	39.5	B	83.6	**E**		79.0	E		131.6	**F**		130.1	**F**	
	SB	I	214	106	18.8	**E**	76.6	**E**		69.4	D		79.2	**E**		69.2	D	
Centurion Sq to Decoro St	NB	I	43	44	24.2	D	50.0	B		50.9	B		50.9	B		54.7	B	
	SB	I	88	46	23.3	D	184.7	**F**		79.4	D		70.6	C		60.7	C	
Decoro St to Nobel Dr	NB	I	20	46	14.8	**F**	45.4	D		42.5	D		39.3	C		39.2	C	
	SB	I	70	142	4.9	**F**	38.0	C		49.1	D		48.2	D		159.2	**F**	
Nobel Dr to Esplanade Ct	NB	I	17	61	12.1	**F**	35.9	**E**		41.0	E		39.2	**E**		43.0	**F**	
	SB	I	100	37	19.9	**E**	84.6	**F**		69.1	F		180.4	**F**		428.3	**F**	
Esplanade Ct to La Jolla Village Dr	NB	I	86	76	8.8	**F**	98.7	**F**		126.6	F		81.2	**F**		143.5	**F**	
	SB	I	35	37	18.1	**E**	75.4	**F**		79.1	F		142.7	**F**		121.1	**F**	
La Jolla Village Dr to Executive Sq	NB	I	29	19	20.0	**E**	78.2	**F**		78.2	F		77.7	**F**		76.6	**F**	
	SB	I	88	51	7.3	**F**	38.6	**E**		38.5	E		40.2	**E**		42.5	**F**	
Executive Square to Executive Dr	NB	I	37	20	13.8	**F**	18.9	**E**		19.0	E		18.3	**E**		18.3	**E**	
	SB	I	71	25	11.0	**F**	78.4	**F**		76.6	F		115.3	**F**		117.2	**F**	
Executive Dr to Eastgate Mall	NB	I	15	49	12.2	**F**	16.7	**E**		16.6	E		16.8	**E**		16.6	**E**	
	SB	I	126	35	16.7	**E**	53.7	**F**		51.0	F		37.8	**F**		37.9	**F**	
Eastgate Mall to Regents Rd	NB	I	37	53	23.8	D	51.4	**F**		51.4	F		50.9	**F**		51.4	**F**	
	SB	I	42	42	30.2	C	49.0	**F**		48.8	F		51.5	**F**		51.9	**F**	
Regents Rd to Campus Point Dr	NB	I	15	27	20.8	**E**	49.4	D		49.2	D		49.5	D		49.0	D	
	SB	I	16	24	23.0	D	46.5	C		46.5	C		46.8	D		46.7	D	
Campus Point Dr to Scripps Hospital	NB	I	21	27	28.5	C	39.4	**F**		39.6	F		38.4	**F**		38.3	**F**	
	SB	I	45	58	13.1	**F**	42.2	**F**		42.2	F		42.2	**F**		42.2	**F**	
Scripps Hospital to I-5 NB Ramps	NB	I	77	61	19.1	**E**	27.8	C		27.9	C		27.9	C		28.0	C	
	SB	I	33	49	23.9	D	62.5	**F**		61.8	F		57.6	**F**		56.2	**F**	
I-5 NB Ramps to I-5 SB Ramps	NB	I	12	14	28.5	C	63.3	**E**		63.2	E		63.6	**E**		63.5	**E**	
	SB	I	13	11	34.2	B	59.5	**E**		59.3	E		60.1	**E**		60.6	**E**	
I-5 SB Ramps to Science Center Dr	NB	I	33	41	27.7	C	15.8	D		15.9	D		16.0	D		16.9	D	
	SB	I	137	95	11.9	**F**	16.7	D		16.8	D		16.8	D		17.1	D	
Science Center Dr to John Hopkins Dr	NB	I	50	55	23.6	D	43.4	D		43.4	D		43.3	D		43.3	D	
	SB	I	70	37	35.1	B	76.2	**F**		76.1	F		76.0	**F**		75.3	**F**	
John Hopkins Drive to N. Torrey Pines Rd	NB	I	9	13	25.1	D	65.7	**E**		65.7	E		65.6	**E**		65.6	**E**	
	SB	I	8	28	11.6	**F**	42.0	C		41.9	C		41.6	C		41.0	C	
Total	*NB*	*I*	*655*	*800*	*20.0*	**E**	*832.1*	*D*	**No**	*858.3*	*D*	**No**	*857.5*	*D*	**No**	*925.3*	*D*	**No**
	SB	*I*	*1216*	*875*	*17.9*	**E**	*1101.6*	*D*	**No**	*982.2*	*D*	**No**	*1184.5*	*D*	**No**	*1504.1*	*D*	**No**

Notes: (a) Travel time in miles per hour (mph).

(b) The arterial LOS is based on average through-vehicle travel speed for the segment or for the entire street under consideration and is influenced both by the number of signals per mile and by the intersection control delay.

(c) A significant impact resulted in a change from LOS D or better to LOS E or LOS F, or a decrease of speeds of more than 1.0 mph at LOS E and LOS F.


Genesee Avenue Northbound - Arterial Cumulative Travel Times Alternative D
Travel Time (s)
2000
1800
1600
1400
1200
1000
800
600
400
200
0
Lehrer Dr
SR-52 Ramps
Governor Rd
Centurion Sq
Decoro St
Nobel Dr
Esplanade Ct
La Jolla Village Dr
Executive Square
Executive Dr
Eastgate Mall
Regents Rd
Campus Point Dr
Scripps Hospital Drwy
I-5 NB On Ramp
I-5 SB off Ramp
Science Center Dr
John Hopkings Dr
N Torrey Pines Rd
Cross Streets
AM HY Baseline
AM HY w Recommended Improvements
PM HY Baseline
PM HY w Recommended Improvements


Genesee Avenue Southbound - Arterial Cumulative Travel Times Alternative D
Travel Time (s)
1800
1600
1400
1200
1000
800
600
400
200
0
N Torrey Pines Rd
John Hopkings Dr
Science Center Dr
I-5 SB Ramp
I-5 NB Ramp
Scripps Hospital Drwy
Campus Point Dr
Regents Rd
Eastgate Mall
Executive Dr
Executive Square
La Jolla Village Dr
Esplanade Ct
Nobel Dr
Decoro St
Centurion Sq
Governor Rd
SR-52 Ramps
Cross Streets
AM HY Baseline
AM HY w Recommended Improvements
PM HY Baseline
PM HY w Recommended Improvements

AM Peak-Hour Arterial Segment Analysis Summary La Jolla Village Drive

ROADWAY SEGMENT	DIRECTION	URBAN STREET CLASS	EXISTING				HORIZON YEAR											
							Alt A Regents Bridge 6-lane Genesee			Alt B Regents Bridge 4-lane Genesee			Alt C No Bridge 6-lane Genesee			Alt D No Bridge 4-lane Genesee		
			TRAVEL TIME (S)		SIMULATION		SIMULATION			SIMULATION			SIMULATION			SIMULATION		
			FIELD	SIMULATION	SPEED (a)	LOS (b)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)
La Jolla Village Drive																		
Torrey Pines Rd to La Jolla Scenic Dr	EB	I	10	27	11.3	**F**	41.8	**F**		41.7	**F**		40.7	**F**		40.4	**F**	
	WB	I	9	14	22.0	D	16.8	**E**		16.9	**E**		15.8	**E**		15.6	**E**	
La Jolla Scenic Dr to Villa La Jolla Dr	EB	I	33	67	23.5	D	90.6	**E**		91.8	**E**		158.0	**F**		95.1	**E**	
	WB	I	47	60	26.4	D	65.2	D		65.3	D		51.8	C		61.9	D	
Villa La Jolla Dr to I-5 SB Off-Ramp	EB	I	28	25	26.6	D	26.8	D		26.8	D		19.9	C		26.6	D	
	WB	I	58	83	8.0	**F**	189.4	**F**		191.8	**F**		192.4	**F**		200.9	**F**	
I-5 SB Off-Ramp to I-5 NB Ramps	EB	I	35	44	14.8	**F**	54.3	**F**		55.0	**F**		46.4	**F**		57.1	**F**	
	WB	I	66	63	10.5	**F**	93.5	**F**		94.5	**F**		94.1	**F**		95.4	**F**	
I-5 NB Ramps to Lebon Dr	EB	I	53	56	17.4	**E**	62.4	**F**		62.7	**F**		63.1	**F**		63.3	**F**	
	WB	I	36	41	24.2	D	42.9	D		43.0	D		43.6	D		43.5	D	
Lebon Dr to Regents Rd	EB	I	29	74	16.1	**E**	92.4	**F**		92.5	**F**		81.4	**F**		82.5	**F**	
	WB	I	29	48	24.8	D	49.8	D		50.0	D		50.7	D		49.7	D	
Regents Rd to Genesee Ave	EB	I	58	89	10.4	**F**	78.0	**F**		78.1	**F**		70.5	**F**		70.8	**F**	
	WB	I	39	48	19.1	**E**	68.2	**F**		67.9	**F**		56.4	**E**		58.7	**F**	
Genesee Ave to Executive Way	EB	I	40	34	28.3	C	44.4	D		44.5	D		47.3	**E**		47.5	**E**	
	WB	I	68	160	6.0	**F**	156.0	**F**		156.8	**F**		132.6	**F**		134.3	**F**	
Executive Way to Towne Center Dr	EB	I	16	20	25.4	D	28.9	**E**		30.4	**E**		32.9	**F**		31.9	**F**	
	WB	I	33	35	14.4	**F**	153.9	**F**		149.5	**F**		139.3	**F**		138.5	**F**	
Towne Center Dr to I-805 SB Ramps	EB	I	62	52	26.9	D	44.5	C		46.9	C		49.8	C		47.3	C	
	WB	I	80	117	11.9	**F**	296.8	**F**		311.5	**F**		313.7	**F**		308.8	**F**	
I-805 SB Ramps to I-805 NB Ramps	EB	I	17	51	14.0	**F**	53.1	**F**		51.8	**F**		50.8	**F**		52.8	**F**	
	WB	I	54	183	3.9	**F**	192.3	**F**		209.1	**F**		239.2	**F**		209.9	**F**	
I-805 NB Ramps to Nobel Dr	EB	I	34	51	26.6	D	58.9	D		58.3	D		60.6	D		59.8	D	
	WB	I	45	50	27.5	C	49.6	C		49.7	C		49.9	C		50.2	C	
Miramar Road																		
Nobel Dr to Eastgate Mall	EB	I	25	35	28.8	C	35.7	C		35.3	C		35.7	C		35.7	C	
	WB	I	21	29	34.5	B	29.5	B		29.1	B		30.3	C		30.2	C	
Eastgate Mall to Miramar Mall	EB	I	16	28	27.2	C	30.9	D		30.3	D		30.8	D		30.8	D	
	WB	I	29	44	17.5	**E**	45.9	**E**		46.7	**E**		46.0	**E**		45.9	**E**	
Miramar Mall to Miramar Place	EB	I	34	34	27.0	C	34.2	D		33.9	D		34.2	D		34.2	D	
	WB	I	19	50	18.0	**E**	63.0	**F**		60.1	**F**		62.7	**F**		63.1	**F**	
Miramar Place to Camino Sante Fe	EB	I	36	41	30.3	C	42.3	C		42.3	C		42.5	C		42.5	C	
	WB	I	30	52	23.7	D	55.5	D		54.0	D		55.4	D		55.4	D	
Total	*EB*	*I*	*526*	*725*	*20.8*	**E**	*819.2*	**E**	**No**	*822.3*	**E**	**No**	*864.6*	**E**	**No**	*818.3*	**E**	**No**
	WB	*I*	*663*	*1074*	*14.0*	**F**	*1568.3*	**F**	**No**	*1595.9*	**F**	**No**	*1573.9*	**F**	**No**	*1562.0*	**F**	**No**

Notes:

Notes: (a) Travel time in miles per hour (mph).

(b) The arterial LOS is based on average through-vehicle travel speed for the segment or for the entire street under consideration and is influenced both by the number of signals per mile and by the intersection control delay.

(c) A significant impact resulted in a change from LOS D or better to LOS E or LOS F, or a decrease of speeds of more than 1.0 mph at LOS E and LOS F.

MID Peak-Hour Arterial Segment Analysis Summary La Jolla Village Drive

ROADWAY SEGMENT	DIRECTION	URBAN STREET CLASS	EXISTING				HORIZON YEAR											
							Alt A Regents Bridge 6-lane Genesee			Alt B Regents Bridge 4-lane Genesee			Alt C No Bridge 6-lane Genesee			Alt D No Bridge 4-lane Genesee		
			TRAVEL TIME (S)		SIMULATION		SIMULATION			SIMULATION			SIMULATION			SIMULATION		
			FIELD	SIMULATION	SPEED (a)	LOS (b)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)
La Jolla Village Drive																		
Torrey Pines Rd to La Jolla Scenic Dr	EB	I	10	15	19.6	**E**	27.8	**F**		27.6	**F**		29.2	**F**		29.1	**F**	
	WB	I	9	14	21.2	D	15.8	**E**		15.8	**E**		16.1	**E**		16.1	**E**	
La Jolla Scenic Dr to Villa La Jolla Dr	EB	I	33	92	15.0	**F**	96.5	**F**		96.5	**F**		97.0	**F**		97.1	**F**	
	WB	I	47	7	25.8	D	9.1	**E**		9.0	D		9.4	**E**		9.2	**E**	
Villa La Jolla Dr to I-5 SB Off-Ramp	EB	I	28	29	22.9	D	28.7	D		28.7	D		28.6	D		28.6	D	
	WB	I	58	51	13.0	**F**	52.9	**F**		52.9	**F**		53.0	**F**		53.2	**F**	
I-5 SB Off-Ramp to I-5 NB Ramps	EB	I	35	29	22.9	D	32.2	**E**		32.6	**E**		32.9	**E**		33.0	**E**	
	WB	I	66	66	10.0	**F**	152.0	**F**		147.5	**F**		156.8	**F**		154.7	**F**	
I-5 NB Ramps to Lebon Dr	EB	I	53	42	23.6	D	46.7	D		47.0	**E**		45.9	D		46.5	D	
	WB	I	36	34	29.1	C	36.2	C		36.3	C		36.1	C		36.1	C	
Lebon Dr to Regents Rd	EB	I	29	65	18.3	**E**	88.7	**F**		89.4	**F**		84.3	**F**		85.9	**F**	
	WB	I	29	38	31.1	C	59.1	**E**		59.7	**E**		61.2	**E**		61.1	**E**	
Regents Rd to Genesee Ave	EB	I	58	79	11.7	**F**	62.8	**F**		62.6	**F**		63.6	**F**		62.7	**F**	
	WB	I	39	48	19.2	**E**	58.2	**F**		58.1	**F**		57.3	**E**		57.5	**E**	
Genesee Ave to Executive Way	EB	I	40	48	19.8	**E**	55.0	**E**		54.9	**E**		55.5	**E**		55.3	**E**	
	WB	I	68	50	18.9	**E**	64.5	**F**		64.3	**F**		63.2	**F**		63.9	**F**	
Executive Way to Towne Center Dr	EB	I	16	23	21.8	D	29.0	**E**		29.6	**E**		31.2	**E**		30.7	**E**	
	WB	I	33	30	16.8	**E**	42.8	**F**		42.6	**F**		41.4	**F**		41.2	**F**	
Towne Center Dr to I-805 SB Ramps	EB	I	62	14	36.0	B	15.0	B		15.0	B		15.0	B		15.0	B	
	WB	I	80	39	22.2	D	41.6	**E**		41.7	**E**		41.6	**E**		41.6	**E**	
Total	*EB*	*I*	*364*	*435*	*18.4*	**E**	*482.4*	**E**	**No**	*483.9*	**E**	**No**	*483.2*	**E**	**No**	*483.9*	**E**	**No**
	WB	*I*	*465*	*377*	*19.0*	**E**	*537.0*	**F**	**No**	*1184.0*	**E**	**No**	*536.1*	**F**	**No**	*534.6*	**F**	**No**

Notes:

Notes: (a) Travel time in miles per hour (mph).

(b) The arterial LOS is based on average through-vehicle travel speed for the segment or for the entire street under consideration and is influenced both by the number of signals per mile and by the intersection control delay.

(c) A significant impact resulted in a change from LOS D or better to LOS E or LOS F, or a decrease of speeds of more than 1.0 mph at LOS E and LOS F.

PM Peak-Hour Arterial Segment Analysis Summary La Jolla Village Drive

ROADWAY SEGMENT	DIRECTION	URBAN STREET CLASS	EXISTING				HORIZON YEAR											
							Alt A Regents Bridge 6-lane Genesee			Alt B Regents Bridge 4-lane Genesee			Alt C No Bridge 6-lane Genesee			Alt D No Bridge 4-lane Genesee		
			TRAVEL TIME (S)		SIMULATION		SIMULATION			SIMULATION			SIMULATION			SIMULATION		
			FIELD	SIMULATION	SPEED (a)	LOS (b)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)
La Jolla Village Drive																		
Torrey Pines Rd to La Jolla Scenic Dr	EB	I	10	34	8.9	**F**	100.2	**F**		99.3	**F**		70.0	**F**		70.0	**F**	
	WB	I	11	21	14.7	**F**	22.2	**F**		22.2	**F**		22.3	**F**		22.3	**F**	
La Jolla Scenic Dr to Villa La Jolla Dr	EB	I	55	447	3.5	**F**	478.5	**F**		479.5	**F**		481.5	**F**		481.5	**F**	
	WB	I	39	46	34.3	B	47.3	C		47.4	C		45.2	B		45.2	B	
Villa La Jolla Dr to I-5 SB Off-Ramp	EB	I	25	24	28.0	C	28.2	D		28.7	D		28.0	D		28.0	D	
	WB	I	20	50	13.3	**F**	46.6	**F**		46.3	**F**		47.1	**F**		47.1	**F**	
I-5 SB Off-Ramp to I-5 NB Ramps	EB	I	13	28	23.9	D	29.0	D		29.0	D		30.6	D		30.6	D	
	WB	I	25	35	18.8	**E**	37.2	**E**		37.5	**E**		35.8	**E**		35.8	**E**	
I-5 NB Ramps to Lebon Dr	EB	I	42	68	14.4	**F**	93.0	**F**		90.4	**F**		95.7	**F**		95.7	**F**	
	WB	I	31	33	29.5	C	36.0	C		36.1	C		37.2	D		37.2	D	
Lebon Dr to Regents Rd	EB	I	73	79	15.0	**F**	174.1	**F**		174.7	**F**		182.7	**F**		182.7	**F**	
	WB	I	48	57	20.8	**E**	46.0	D		46.7	D		46.8	D		46.8	D	
Regents Rd to Genesee Ave	EB	I	27	50	18.5	**E**	51.8	**E**		51.8	**E**		43.7	D		43.7	D	
	WB	I	100	78	11.8	**F**	150.7	**F**		150.3	**F**		147.0	**F**		147.0	**F**	
Genesee Ave to Executive Way	EB	I	55	78	12.2	**F**	146.9	**F**		144.7	**F**		124.3	**F**		124.3	**F**	
	WB	I	38	48	20.0	**E**	79.7	**F**		79.6	**F**		67.5	**F**		67.5	**F**	
Executive Way to Towne Center Dr	EB	I	29	200	2.5	**F**	326.5	**F**		330.4	**F**		320.9	**F**		320.9	**F**	
	WB	I	15	58	8.6	**F**	71.7	**F**		67.2	**F**		50.3	**F**		50.3	**F**	
Towne Center Dr to I-805 SB Ramps	EB	I	29	47	29.2	C	49.5	C		51.0	C		61.0	D		61.0	D	
	WB	I	36	83	16.7	**E**	117.7	**F**		118.6	**F**		113.1	**F**		113.1	**F**	
I-805 SB Ramps to I-805 NB Ramps	EB	I	12	38	19.0	**E**	38.0	**E**		38.2	**E**		38.0	**E**		38.0	**E**	
	WB	I	16	29	24.7	D	34.7	**E**		35.6	**E**		34.2	**E**		34.2	**E**	
I-805 NB Ramps to Nobel Dr	EB	I	45	61	22.2	D	63.6	D		84.2	**E**		96.9	**F**		96.9	**F**	
	WB	I	38	54	25.1	D	54.6	D		54.6	D		55.2	D		55.2	D	
Miramar Road																		
Nobel Dr to Eastgate Mall	EB	I	22	47	21.2	D	43.7	D		43.8	D		43.7	D		43.7	D	
	WB	I	22	31	32.8	C	31.4	C		31.5	C		34.1	C		34.1	C	
Eastgate Mall to Miramar Mall	EB	I	15	27	28.0	C	31.6	D		30.5	D		31.6	D		31.6	D	
	WB	I	61	196	3.9	**F**	79.8	**F**		83.8	**F**		79.8	**F**		79.8	**F**	
Miramar Mall to Miramar Place	EB	I	25	31	29.3	C	32.6	C		32.4	C		32.6	C		32.6	C	
	WB	I	36	41	21.9	D	51.1	**E**		49.2	**E**		50.4	**E**		50.4	**E**	
Miramar Place to Camino Sante Fe	EB	I	69	54	23.0	D	49.8	D		49.7	D		50.4	D		50.4	D	
	WB	I	31	37	33.3	C	43.0	C		41.6	C		43.3	C		43.3	C	
Total	*EB*	*I*	*546*	*1313*	*11.5*	**F**	*1737.0*	**F**	**No**	*1758.3*	**F**	**No**	*1731.6*	**F**	**No**	*1731.6*	**F**	**No**
	WB	*I*	*567*	*897*	*16.8*	**E**	*949.7*	**F**	**No**	*948.2*	**F**	**No**	*909.3*	**E**	**No**	*909.3*	**E**	**No**

Notes:

Notes: (a) Travel time in miles per hour (mph).

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(c) A significant impact resulted in a change from LOS D or better to LOS E or LOS F, or a decrease of speeds of more than 1.0 mph at LOS E and LOS F.

AM Peak-Hour Arterial Segment Analysis Summary La Jolla Village Drive

ROADWAY SEGMENT	DIRECTION	URBAN STREET CLASS	EXISTING				HORIZON YEAR WITH RECOMMENDED MITIGATIONS											
							Alt A Regents Bridge 6-lane Genesee			Alt B Regents Bridge 4-lane Genesee			Alt C No Bridge 6-lane Genesee			Alt D No Bridge 4-lane Genesee		
			TRAVEL TIME (S)		SIMULATION		SIMULATION			SIMULATION			SIMULATION			SIMULATION		
			FIELD	SIMULATION	SPEED (a)	LOS (b)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)
La Jolla Village Drive																		
Torrey Pines Rd to La Jolla Scenic Dr	EB	I	10	27	11.3	**F**	56.1	**F**		55.9	**F**		62.0	**F**		61.7	**F**	
	WB	I	9	14	22.0	D	35.9	**F**		27.7	**F**		28.0	**F**		27.8	**F**	
La Jolla Scenic Dr to Villa La Jolla Dr	EB	I	33	67	23.5	D	89.8	**E**		66.6	D		73.7	D		68.0	D	
	WB	I	47	60	26.4	D	54.3	C		67.9	D		59.2	D		64.5	D	
Villa La Jolla Dr to I-5 SB Off-Ramp	EB	I	28	25	26.6	D	21.3	C		24.3	C		20.0	C		24.0	C	
	WB	I	58	83	8.0	**F**	96.0	**F**		97.7	**F**		95.5	**F**		103.3	**F**	
I-5 SB Off-Ramp to I-5 NB Ramps	EB	I	35	44	14.8	**F**	55.6	**F**		50.8	**F**		43.7	**F**		53.2	**F**	
	WB	I	66	63	10.5	**F**	93.5	**F**		94.5	**F**		94.1	**F**		95.4	**F**	
I-5 NB Ramps to Lebon Dr	EB	I	53	56	17.4	**E**	62.4	**F**		62.7	**F**		63.1	**F**		63.3	**F**	
	WB	I	36	41	24.2	D	42.9	D		43.0	D		43.6	D		43.5	D	
Lebon Dr to Regents Rd	EB	I	29	74	16.1	**E**	92.4	**F**		92.5	**F**		81.4	**F**		82.5	**F**	
	WB	I	29	48	24.8	D	49.8	D		50.0	D		50.7	D		49.7	D	
Regents Rd to Genesee Ave	EB	I	58	89	10.4	**F**	78.0	**F**		78.1	**F**		70.5	**F**		70.8	**F**	
	WB	I	39	48	19.1	**E**	68.2	**F**		67.9	**F**		56.4	**E**		58.7	**F**	
Genesee Ave to Executive Way	EB	I	40	34	28.3	C	44.4	D		44.5	D		47.3	**E**		47.5	**E**	
	WB	I	68	160	6.0	**F**	156.0	**F**		156.8	**F**		132.6	**F**		134.3	**F**	
Executive Way to Towne Center Dr	EB	I	16	20	25.4	D	28.9	**E**		30.4	**E**		32.9	**F**		31.9	**F**	
	WB	I	33	35	14.4	**F**	153.9	**F**		149.5	**F**		139.3	**F**		138.5	**F**	
Towne Center Dr to I-805 SB Ramps	EB	I	62	52	26.9	D	44.5	C		46.9	C		49.8	C		47.3	C	
	WB	I	80	117	11.9	**F**	296.8	**F**		311.5	**F**		313.7	**F**		308.8	**F**	
I-805 SB Ramps to I-805 NB Ramps	EB	I	17	51	14.0	**F**	53.1	**F**		51.8	**F**		50.8	**F**		52.8	**F**	
	WB	I	54	183	3.9	**F**	192.3	**F**		209.1	**F**		239.2	**F**		209.9	**F**	
I-805 NB Ramps to Nobel Dr	EB	I	34	51	26.6	D	58.9	D		58.3	D		60.6	D		59.8	D	
	WB	I	45	50	27.5	C	49.6	C		49.7	C		49.9	C		50.2	C	
Miramar Road																		
Nobel Dr to Eastgate Mall	EB	I	25	35	28.8	C	34.4	C		34.3	C		34.5	C		34.5	C	
	WB	I	21	29	34.5	B	29.5	B		29.1	B		30.3	C		30.2	C	
Eastgate Mall to Miramar Mall	EB	I	16	28	27.2	C	30.9	D		30.3	D		30.8	D		30.8	D	
	WB	I	29	44	17.5	**E**	44.3	**E**		45.4	**E**		44.4	**E**		44.3	**E**	
Miramar Mall to Miramar Place	EB	I	34	34	27.0	C	34.2	D		33.9	D		34.2	D		34.2	D	
	WB	I	19	50	18.0	**E**	63.0	**F**		60.1	**F**		62.7	**F**		63.1	**F**	
Miramar Place to Camino Sante Fe	EB	I	36	41	30.3	C	42.3	C		42.3	C		42.5	C		42.5	C	
	WB	I	30	52	23.7	D	55.5	D		54.0	D		55.4	D		55.4	D	
Total	*EB*	*I*	*526*	*725*	*20.8*	**E**	*827.2*	**E**	**No**	*803.6*	**E**	**No**	*797.8*	**E**	**No**	*804.8*	**E**	**No**
	WB	*I*	*663*	*1074*	*14.0*	**F**	*1481.5*	**F**	**No**	*1513.9*	**F**	**No**	*1495.0*	**F**	**No**	*1477.6*	**F**	**No**

Notes:

Notes: (a) Travel time in miles per hour (mph).

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(c) A significant impact resulted in a change from LOS D or better to LOS E or LOS F, or a decrease of speeds of more than 1.0 mph at LOS E and LOS F.

MID Peak-Hour Arterial Segment Analysis Summary La Jolla Village Drive

ROADWAY SEGMENT	DIRECTION	URBAN STREET CLASS	EXISTING				HORIZON YEAR WITH RECOMMENDED MITIGATIONS											
							Alt A Regents Bridge 6-lane Genesee			Alt B Regents Bridge 4-lane Genesee			Alt C No Bridge 6-lane Genesee			Alt D No Bridge 4-lane Genesee		
			TRAVEL TIME (S)		SIMULATION		SIMULATION			SIMULATION			SIMULATION			SIMULATION		
			FIELD	SIMULATION	SPEED (a)	LOS (b)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)
La Jolla Village Drive																		
Torrey Pines Rd to La Jolla Scenic Dr	EB	I	10	15	19.6	**E**	27.3	**F**		27.0	**F**		29.2	**F**		29.1	**F**	
	WB	I	9	14	21.2	D	26.9	**F**		26.8	**F**		27.1	**F**		27.1	**F**	
La Jolla Scenic Dr to Villa La Jolla Dr	EB	I	33	92	15.0	**F**	249.2	**F**		249.2	**F**		255.1	**F**		256.1	**F**	
	WB	I	47	7	25.8	D	9.1	**E**		9.0	D		9.4	**E**		9.2	**E**	
Villa La Jolla Dr to I-5 SB Off-Ramp	EB	I	28	29	22.9	D	28.7	D		28.7	D		28.6	D		28.6	D	
	WB	I	58	51	13.0	**F**	82.1	**F**		82.2	**F**		82.6	**F**		83.1	**F**	
I-5 SB Off-Ramp to I-5 NB Ramps	EB	I	35	29	22.9	D	32.2	**E**		32.6	**E**		32.9	**E**		33.0	**E**	
	WB	I	66	66	10.0	**F**	152.0	**F**		147.5	**F**		156.8	**F**		154.7	**F**	
I-5 NB Ramps to Lebon Dr	EB	I	53	42	23.6	D	46.7	D		47.0	**E**		45.9	D		46.5	D	
	WB	I	36	34	29.1	C	36.2	C		36.3	C		36.1	C		36.1	C	
Lebon Dr to Regents Rd	EB	I	29	65	18.3	**E**	88.7	**F**		89.4	**F**		84.3	**F**		85.9	**F**	
	WB	I	29	38	31.1	C	59.1	**E**		59.7	**E**		61.2	**E**		61.1	**E**	
Regents Rd to Genesee Ave	EB	I	58	79	11.7	**F**	62.8	**F**		62.6	**F**		63.6	**F**		62.7	**F**	
	WB	I	39	48	19.2	**E**	58.2	**F**		58.1	**F**		57.3	**E**		57.5	**E**	
Genesee Ave to Executive Way	EB	I	40	48	19.8	**E**	55.0	**E**		54.9	**E**		55.5	**E**		55.3	**E**	
	WB	I	68	50	18.9	**E**	64.5	**F**		64.3	**F**		63.2	**F**		63.9	**F**	
Executive Way to Towne Center Dr	EB	I	16	23	21.8	D	29.0	**E**		29.6	**E**		31.2	**E**		30.7	**E**	
	WB	I	33	30	16.8	**E**	42.8	**F**		42.6	**F**		41.4	**F**		41.2	**F**	
Towne Center Dr to I-805 SB Ramps	EB	I	62	14	36.0	B	15.0	B		15.0	B		15.0	B		15.0	B	
	WB	I	80	39	22.2	D	41.6	**E**		41.7	**E**		41.6	**E**		41.6	**E**	
Total	*EB*	*I*	*364*	*435*	*18.4*	**E**	*634.6*	**F**	**No**	*660.3*	**F**	**No**	*641.3*	**F**	**No**	*642.9*	**F**	**No**
	WB	*I*	*465*	*377*	*19.0*	**E**	*572.5*	**F**	**No**	*562.0*	**F**	**No**	*570.2*	**F**	**No**	*569.0*	**F**	**No**

Notes:

Notes: (a) Travel time in miles per hour (mph).

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PM Peak-Hour Arterial Segment Analysis Summary La Jolla Village Drive

ROADWAY SEGMENT	DIRECTION	URBAN STREET CLASS	EXISTING				HORIZON YEAR WITH RECOMMENDED MITIGATIONS											
							Alt A Regents Bridge 6-lane Genesee			Alt B Regents Bridge 4-lane Genesee			Alt C No Bridge 6-lane Genesee			Alt D No Bridge 4-lane Genesee		
			TRAVEL TIME (S)		SIMULATION		SIMULATION			SIMULATION			SIMULATION			SIMULATION		
			FIELD	SIMULATION	SPEED (a)	LOS (b)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)
La Jolla Village Drive																		
Torrey Pines Rd to La Jolla Scenic Dr	EB	I	10	34	8.9	**F**	100.2	**F**		99.3	**F**		70.0	**F**		70.0	**F**	
	WB	I	11	21	14.7	**F**	23.5	**F**		23.5	**F**		23.5	**F**		23.5	**F**	
La Jolla Scenic Dr to Villa La Jolla Dr	EB	I	55	447	3.5	**F**	335.2	**F**		336.0	**F**		340.0	**F**		340.0	**F**	
	WB	I	39	46	34.3	B	47.3	C		47.4	C		45.2	B		45.2	B	
Villa La Jolla Dr to I-5 SB Off-Ramp	EB	I	25	24	28.0	C	20.7	C		20.8	C		24.3	C		24.3	C	
	WB	I	20	50	13.3	**F**	55.5	**F**		55.2	**F**		54.1	**F**		54.1	**F**	
I-5 SB Off-Ramp to I-5 NB Ramps	EB	I	13	28	23.9	D	27.7	D		27.8	D		29.5	D		29.5	D	
	WB	I	25	35	18.8	**E**	37.2	**E**		37.5	**E**		35.8	**E**		35.8	**E**	
I-5 NB Ramps to Lebon Dr	EB	I	42	68	14.4	**F**	93.0	**F**		90.4	**F**		95.7	**F**		95.7	**F**	
	WB	I	31	33	29.5	C	36.0	C		36.1	C		37.2	D		37.2	D	
Lebon Dr to Regents Rd	EB	I	73	79	15.0	**F**	174.1	**F**		174.7	**F**		182.7	**F**		182.7	**F**	
	WB	I	48	57	20.8	**E**	46.0	D		46.7	D		46.8	D		46.8	D	
Regents Rd to Genesee Ave	EB	I	27	50	18.5	**E**	51.8	**E**		51.8	**E**		43.7	D		43.7	D	
	WB	I	100	78	11.8	**F**	150.7	**F**		150.3	**F**		147.0	**F**		147.0	**F**	
Genesee Ave to Executive Way	EB	I	55	78	12.2	**F**	146.9	**F**		144.7	**F**		124.3	**F**		124.3	**F**	
	WB	I	38	48	20.0	**E**	79.7	**F**		79.6	**F**		67.5	**F**		67.5	**F**	
Executive Way to Towne Center Dr	EB	I	29	200	2.5	**F**	326.5	**F**		330.4	**F**		320.9	**F**		320.9	**F**	
	WB	I	15	58	8.6	**F**	71.7	**F**		67.2	**F**		50.3	**F**		50.3	**F**	
Towne Center Dr to I-805 SB Ramps	EB	I	29	47	29.2	C	49.5	C		51.0	C		61.0	D		61.0	D	
	WB	I	36	83	16.7	**E**	117.7	**F**		118.6	**F**		113.1	**F**		113.1	**F**	
I-805 SB Ramps to I-805 NB Ramps	EB	I	12	38	19.0	**E**	38.0	**E**		38.2	**E**		38.0	**E**		38.0	**E**	
	WB	I	16	29	24.7	D	34.7	**E**		35.6	**E**		34.2	**E**		34.2	**E**	
I-805 NB Ramps to Nobel Dr	EB	I	45	61	22.2	D	63.6	D		84.2	**E**		96.9	**F**		96.9	**F**	
	WB	I	38	54	25.1	D	54.6	D		54.6	D		55.2	D		55.2	D	
Miramar Road																		
Nobel Dr to Eastgate Mall	EB	I	22	47	21.2	D	43.7	D		43.8	D		43.2	D		43.2	D	
	WB	I	22	31	32.8	C	31.4	C		31.5	C		34.1	C		34.1	C	
Eastgate Mall to Miramar Mall	EB	I	15	27	28.0	C	31.6	D		30.5	D		31.6	D		31.6	D	
	WB	I	61	196	3.9	**F**	79.8	**F**		83.8	**F**		76.4	**F**		76.4	**F**	
Miramar Mall to Miramar Place	EB	I	25	31	29.3	C	32.6	C		32.4	C		32.6	C		32.6	C	
	WB	I	36	41	21.9	D	51.1	**E**		49.2	**E**		50.4	**E**		50.4	**E**	
Miramar Place to Camino Sante Fe	EB	I	69	54	23.0	D	49.8	D		49.7	D		50.4	D		50.4	D	
	WB	I	31	37	33.3	C	43.0	C		41.6	C		43.3	C		43.3	C	
Total	*EB*	*I*	*546*	*1313*	*11.5*	**F**	*1584.9*	**F**	**No**	*1605.7*	**F**	**No**	*1584.8*	**F**	**No**	*1584.8*	**F**	**No**
	WB	*I*	*567*	*897*	*16.8*	**E**	*959.9*	**F**	**No**	*958.4*	**F**	**No**	*914.1*	**E**	**No**	*914.1*	**E**	**No**

Notes:

Notes: (a) Travel time in miles per hour (mph).

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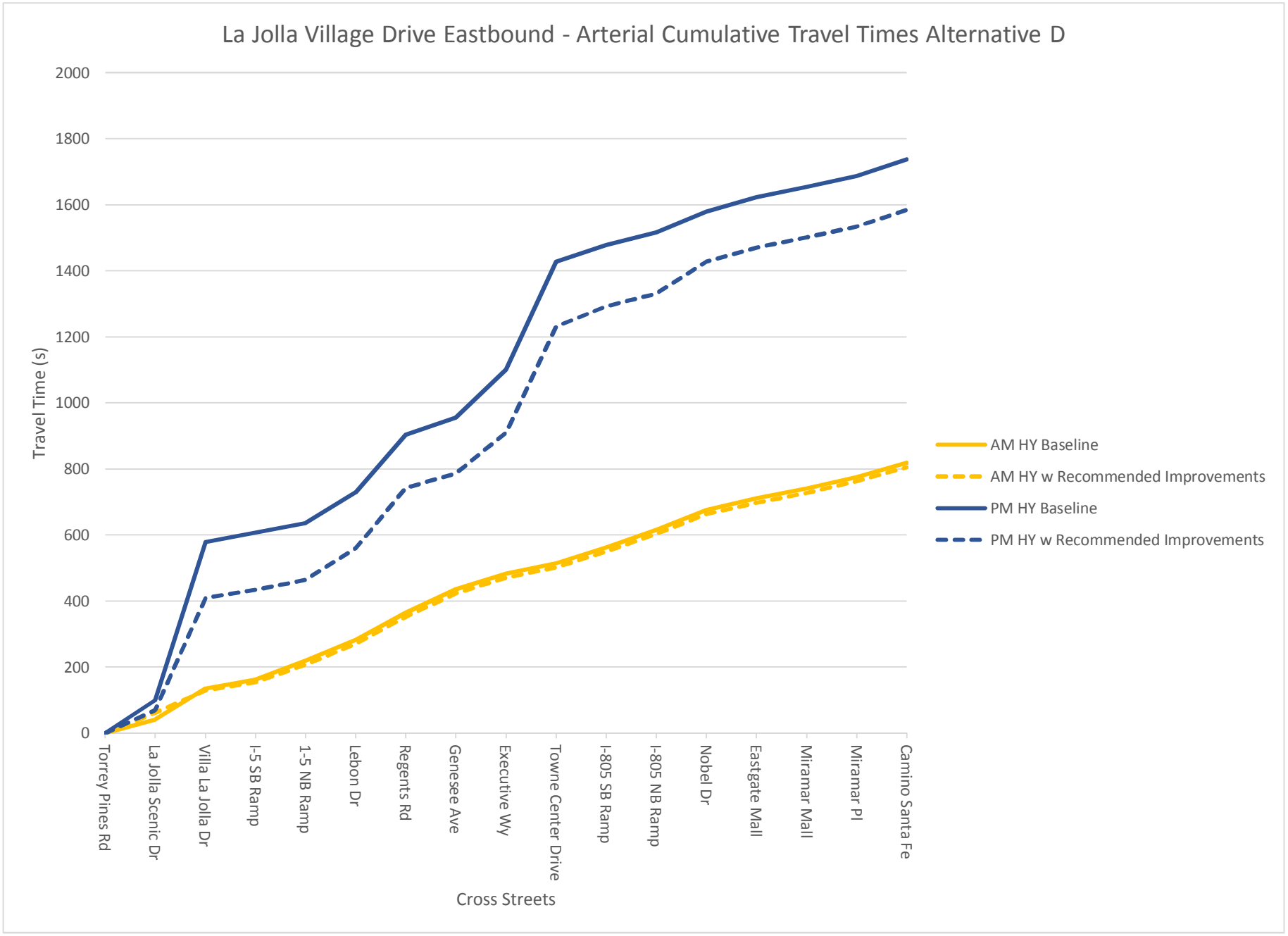
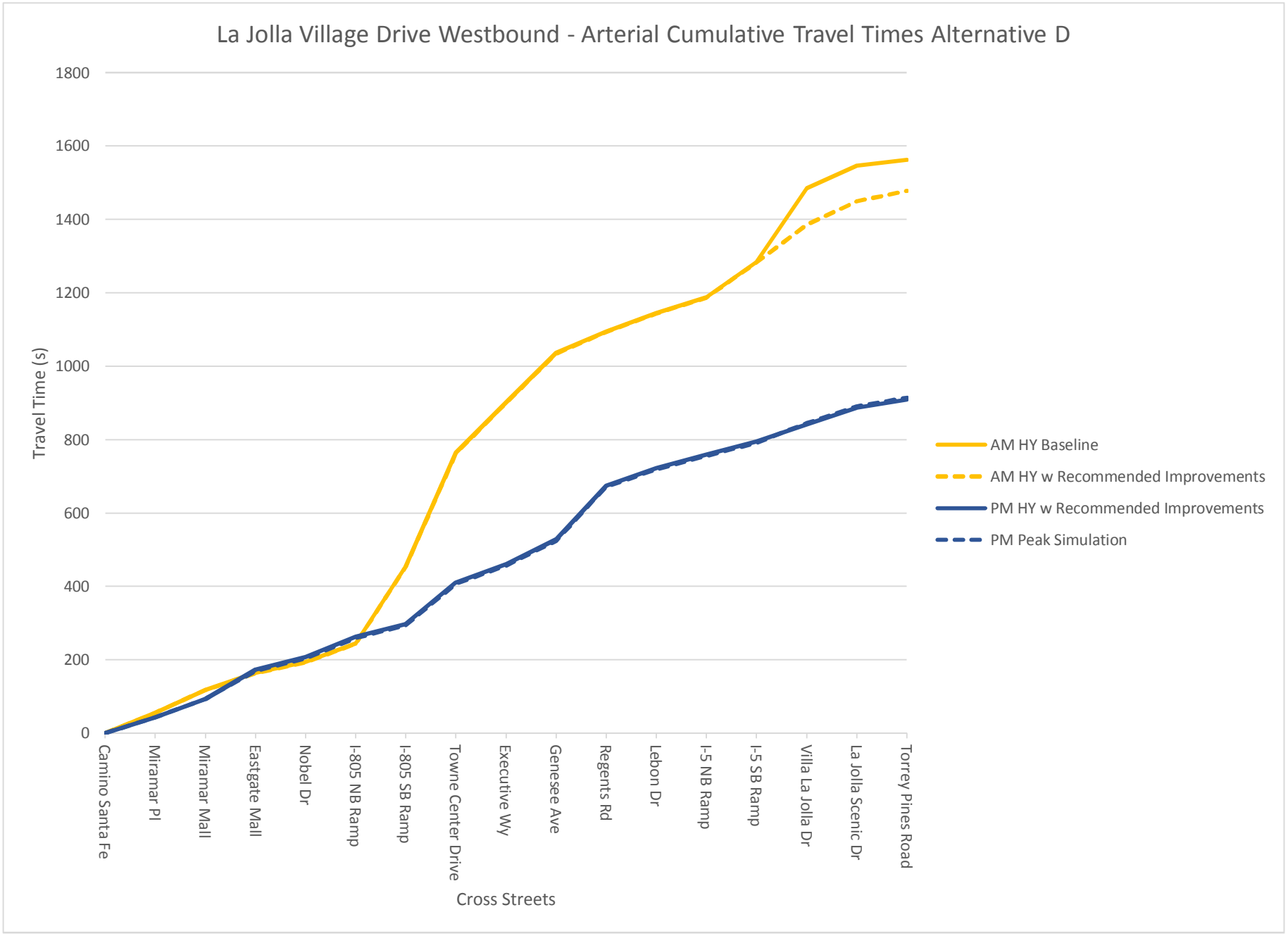

La Jolla Village Drive Eastbound - Arterial Cumulative Travel Times Alternative D
Travel Time (s)
2000
1800
1600
1400
1200
1000
800
600
400
200
0
Torrey Pines Rd
La Jolla Scenic Dr
Villa La Jolla Dr
I-5 SB Ramp
1-5 NB Ramp
Lebon Dr
Regents Rd
Genesee Ave
Executive Wy
Towne Center Drive
I-805 SB Ramp
I-805 NB Ramp
Nobel Dr
Eastgate Mall
Miramar Mall
Miramar Pl
Camino Santa Fe
Cross Streets
AM HY Baseline
AM HY w Recommended Improvements
PM HY Baseline
PM HY w Recommended Improvements


La Jolla Village Drive Westbound - Arterial Cumulative Travel Times Alternative D
1800
1600
1400
1200
1000
800
600
400
200
0
Travel Time (s)
Camino Santa Fe
Miramar Pl
Miramar Mall
Eastgate Mall
Nobel Dr
I-805 NB Ramp
I-805 SB Ramp
Towne Center Drive
Executive Wy
Genesee Ave
Regents Rd
Lebon Dr
I-5 NB Ramp
I-5 SB Ramp
Villa La Jolla Dr
La Jolla Scenic Dr
Torrey Pines Road
Cross Streets
AM HY Baseline
AM HY w Recommended Improvements
PM HY w Recommended Improvements
PM Peak Simulation

AM Peak-Hour Arterial Segment Analysis Summary Nobel Dr

ROADWAY SEGMENT	DIRECTION	URBAN STREET CLASS	EXISTING				HORIZON YEAR											
							Alt A Regents Bridge 6-lane Genesee			Alt B Regents Bridge 4-lane Genesee			Alt C No Bridge 6-lane Genesee			Alt D No Bridge 4-lane Genesee		
			TRAVEL TIME (S)		SIMULATION		SIMULATION			SIMULATION			SIMULATION			SIMULATION		
			FIELD	SIMULATION	SPEED (a)	LOS (b)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)
Nobel Drive																		
Villa La Jolla Dr to La Jolla Village Sq	EB		27.0	41.9	10.6	**F**	56.2	**F**		56.1	**F**		55.7	**F**		56.4	**F**	
	WB		35.0	25.2	17.6	D	28.8	**E**		28.7	**E**		28.7	**E**		28.7	**E**	
La Jolla Village Sq to I-5 SB On-Ramp	EB	II	11	11.7	18.8	D	11.9	D		11.9	D		11.9	D		12.2	D	
	WB	II	14	26.3	8.4	**F**	24.9	**F**		24.8	**F**		25.0	**F**		25.0	**F**	
I-5 SB On-Ramp to I-5 NB Off-Ramp	EB	II	11	16.8	15.7	**E**	17.2	**E**		17.5	**E**		18.1	**E**		19.2	**E**	
	WB	II	8	9.3	28.3	B	9.5	C		9.4	C		9.4	C		9.4	C	
I-5 NB Off-Ramp to Caminito Plaza Centro	EB	II	30	33.7	11.5	**F**	28.7	**E**		28.7	**E**		28.6	**E**		28.6	**E**	
	WB	II	14	28.4	13.7	**E**	31.6	**F**		30.7	**F**		33.2	**F**		35.2	**F**	
Caminito Plaza Centro to Lebon Dr	EB	II	42	43.6	11.0	**F**	46.7	**F**		46.7	**F**		46.5	**F**		46.6	**F**	
	WB	II	23	30.2	15.9	**E**	28.3	**E**		28.2	**E**		28.3	**E**		28.1	D	
Lebon Dr to Regents Rd	EB	II	52	54.8	22.6	C	65.6	D		65.7	D		64.0	D		64.2	D	
	WB	II	61	60.7	20.4	D	65.8	D		65.8	D		62.9	D		63.2	D	
Regents Rd to Costa Verde Blvd	EB	II	29	42.4	14.5	**E**	30.3	D		30.4	D		34.0	D		34.2	D	
	WB	II	49	54.9	11.2	**F**	34.3	D		34.4	D		33.5	D		33.5	D	
Coste Verde Blvd to Genesee Ave	EB	II	46	73.0	8.4	**F**	73.9	**F**		73.0	**F**		74.4	**F**		73.7	**F**	
	WB	II	23	46.0	13.4	**E**	59.6	**F**		59.9	**F**		59.1	**F**		59.5	**F**	
Genesee Ave to Lombard Pl	EB	II	24	24.3	17.0	D	25.3	**E**		25.3	**E**		25.3	**E**		25.3	**E**	
	WB	II	52	60.0	6.9	**F**	53.8	**F**		56.4	**F**		51.1	**F**		52.1	**F**	
Lombard Pl to Towne Center Dr	EB	II	32	45.5	17.8	D	51.3	**E**		51.3	**E**		51.3	**E**		51.3	**E**	
	WB	II	25	41.1	19.7	D	41.8	D		41.8	D		42.9	D		42.2	D	
Towne Center Dr to Shoreline Dr	EB	II	48	77.8	22.3	C	77.5	C		77.6	C		77.5	C		78.2	C	
	WB	II	72	70.0	24.8	C	75.5	C		75.4	C		75.6	C		74.8	C	
Shoreline Dr to Judicial Dr	EB	II	26	36.4	29.5	B	36.7	B		36.6	B		36.7	B		36.9	B	
	WB	II	34	58.0	18.5	D	59.8	D		59.7	D		59.8	D		60.4	D	
Judicial Dr to I-805 SB On-Ramp	EB	II	15	21.8	23.7	C	16.8	B		16.8	B		18.0	B		16.8	B	
	WB	II	19	21.8	23.7	C	24.4	D		24.8	D		24.9	D		25.1	D	
I-805 SB On-Ramp to I-805 NB Off-Ramp	EB	II	20	35.2	14.0	**E**	47.0	**F**		44.7	**F**		44.8	**F**		46.4	**F**	
	WB	II	17	15.1	32.7	B	15.2	B		15.2	B		15.2	B		15.2	B	
I-805 NB Off-Ramp to Avenue of Flags	EB	II	17	24.0	30.3	B	24.0	B		24.0	B		24.0	B		24.0	B	
	WB	II	30	31.4	23.2	C	36.3	D		35.8	D		35.8	D		36.6	D	
Avenue of Flags to Miramar Rd	EB	II	55	88.8	10.7	**F**	97.7	**F**		97.2	**F**		101.8	**F**		101.0	**F**	
	WB	II	25	28.1	33.8	B	28.0	B		28.0	B		28.0	B		28.0	B	
Total	*EB*	*II*	*458*	*671.7*	*16.6*	**E**	*706.8*	*B*	**No**	*703.5*	*B*	**No**	*712.6*	*B*	**No**	*715.0*	*B*	**No**
	WB	*II*	*466*	*606.5*	*17.2*	*D*	*617.6*	*B*	**No**	*619.0*	*B*	**No**	*613.4*	*B*	**No**	*617.0*	*B*	**No**

Notes: (a) Travel time in miles per hour (mph).

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MID Peak-Hour Arterial Segment Analysis Summary Nobel Dr

ROADWAY SEGMENT	DIRECTION	URBAN STREET CLASS	EXISTING				HORIZON YEAR											
							Alt A Regents Bridge 6-lane Genesee			Alt B Regents Bridge 4-lane Genesee			Alt C No Bridge 6-lane Genesee			Alt D No Bridge 4-lane Genesee		
			TRAVEL TIME (S)		SIMULATION		SIMULATION			SIMULATION			SIMULATION			SIMULATION		
			FIELD	SIMULATION	SPEED (a)	LOS (b)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)
Nobel Drive																		
Villa La Jolla Dr to La Jolla Village Sq	EB		24	44.4	10.0	**F**	53.1	**F**		53.1	**F**		53.7	**F**		53.7	**F**	
	WB		18	25.8	17.2	D	29.5	**E**		29.5	**E**		29.3	**E**		29.3	**E**	
La Jolla Village Sq to I-5 SB On-Ramp	EB	II	24	39.7	5.5	**F**	41.8	**F**		40.4	**F**		46.1	**F**		46.2	**F**	
	WB	II	18	23.8	9.3	**F**	35.8	**F**		35.6	**F**		37.1	**F**		38.7	**F**	
I-5 SB On-Ramp to I-5 NB Off-Ramp	EB	II	13	10.0	26.3	C	29.0	**F**		28.8	**F**		29.1	**F**		25.1	**F**	
	WB	II	9	9.5	27.7	C	11.3	C		11.3	C		11.1	C		11.0	C	
I-5 NB Off-Ramp to Caminito Plaza Centro	EB	II	12	16.9	22.4	C	28.5	**E**		28.2	**E**		28.8	**E**		29.2	**F**	
	WB	II	23	22.2	17.1	D	29.1	**E**		29.2	**F**		31.1	**F**		34.2	**F**	
Caminito Plaza Centro to Lebon Dr	EB	II	33	33.6	14.5	**E**	35.0	**E**		34.8	**E**		35.1	**E**		35.0	**E**	
	WB	II	23	26.0	18.8	D	30.5	**E**		30.2	**E**		30.6	**E**		30.2	**E**	
Lebon Dr to Regents Rd	EB	II	50	49.5	25.0	C	71.3	D		71.4	D		56.1	C		56.2	C	
	WB	II	54	54.9	22.6	C	58.9	D		58.8	D		57.8	D		57.9	D	
Regents Rd to Costa Verde Blvd	EB	II	31	51.1	12.0	**F**	32.7	D		32.8	D		34.3	D		34.3	D	
	WB	II	32	35.7	17.2	D	38.2	**E**		38.3	**E**		31.5	D		31.9	D	
Coste Verde Blvd to Genesee Ave	EB	II	50	63.7	9.7	**F**	65.4	**F**		62.3	**F**		68.4	**F**		68.6	**F**	
	WB	II	38	47.3	13.0	**E**	62.9	**F**		63.1	**F**		62.4	**F**		62.9	**F**	
Genesee Ave to Lombard Pl	EB	II	14	24.8	17.5	D	27.2	**E**		27.2	**E**		25.7	**E**		25.8	**E**	
	WB	II	52	74.4	5.8	**F**	70.5	**F**		70.5	**F**		63.8	**F**		68.0	**F**	
Lombard Pl to Towne Center Dr	EB	II	23	38.5	20.5	D	44.2	D		44.2	D		44.1	D		45.8	D	
	WB	II	39	47.8	16.5	**E**	56.1	**E**		56.0	**E**		56.4	**E**		56.8	**E**	
Towne Center Dr to Shoreline Dr	EB	II	44	52.9	32.8	B	62.4	C		62.5	C		63.1	C		63.1	C	
	WB	II	72	66.0	26.3	C	70.1	C		70.0	C		70.1	C		69.9	C	
Shoreline Dr to Judicial Dr	EB	II	33	35.4	30.4	B	36.9	B		36.8	B		36.8	B		36.8	B	
	WB	II	31	42.1	25.5	C	52.8	D		52.8	D		53.9	D		54.1	D	
Judicial Dr to I-805 SB On-Ramp	EB	II	19	22.1	23.4	C	21.5	C		21.5	C		22.8	C		19.8	C	
	WB	II	17	26.0	19.9	D	27.0	D		28.0	D		28.0	D		28.1	D	
I-805 SB On-Ramp to I-805 NB Off-Ramp	EB	II	28	30.1	16.4	**E**	32.2	**E**		31.2	**E**		31.2	**E**		31.6	**E**	
	WB	II	12	15.1	32.7	B	18.3	C		18.2	C		18.2	C		18.8	C	
I-805 NB Off-Ramp to Avenue of Flags	EB	II	20	28.3	25.8	C	31.6	C		31.5	C		32.5	C		32.6	C	
	WB	II	26	29.1	25.1	C	36.4	D		35.1	D		35.4	D		35.7	D	
Avenue of Flags to Miramar Rd	EB	II	46	73.6	12.8	**F**	77.7	**F**		77.5	**F**		81.7	**F**		81.6	**F**	
	WB	II	25	29.7	31.8	B	30.4	B		30.3	B		30.3	B		30.3	B	
Total	*EB*	*II*	*440*	*614.6*	*18.4*	*D*	*690.5*	*B*	**No**	*684.2*	*B*	**No**	*689.5*	*B*	**No**	*685.4*	*B*	**No**
	WB	*II*	*471*	*575.4*	*19.1*	*D*	*657.8*	*B*	**No**	*656.9*	*B*	**No**	*647.0*	*B*	**No**	*657.8*	*B*	**No**

Notes: (a) Travel time in miles per hour (mph).

(b) The arterial LOS is based on average through-vehicle travel speed for the segment or for the entire street under consideration and is influenced both by the number of signals per mile and by the intersection control delay.

(c) A significant impact resulted in a change from LOS D or better to LOS E or LOS F, or a decrease of speeds of more than 1.0 mph at LOS E and LOS F.

PM Peak-Hour Arterial Segment Analysis Summary Nobel Dr

ROADWAY SEGMENT	DIRECTION	URBAN STREET CLASS	EXISTING				HORIZON YEAR											
							Alt A Regents Bridge 6-lane Genesee			Alt B Regents Bridge 4-lane Genesee			Alt C No Bridge 6-lane Genesee			Alt D No Bridge 4-lane Genesee		
			TRAVEL TIME (S)		SIMULATION		SIMULATION			SIMULATION			SIMULATION			SIMULATION		
			FIELD	SIMULATION	SPEED (a)	LOS (b)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)
Nobel Drive																		
Villa La Jolla Dr to La Jolla Village Sq	EB		37	49.0	9.1	**F**	145.0	**F**		140.6	**F**		197.8	**F**		198.6	**F**	
	WB		34	27.1	16.4	**E**	29.8	**E**		29.7	**E**		29.7	**E**		29.6	**E**	
La Jolla Village Sq to I-5 SB On-Ramp	EB	II	37	31.1	7.1	**F**	265.1	**F**		264.0	**F**		281.6	**F**		293.0	**F**	
	WB	II	34	28.6	7.7	**F**	38.3	**F**		39.0	**F**		29.5	**F**		28.4	**F**	
I-5 SB On-Ramp to I-5 NB Off-Ramp	EB	II	9	10.5	25.1	C	11.3	C		23.6	**F**		19.7	**E**		21.2	**F**	
	WB	II	9	9.7	27.1	C	13.5	D		13.4	D		10.2	C		10.0	C	
I-5 NB Off-Ramp to Caminito Plaza Centro	EB	II	37	20.1	19.3	D	24.0	**E**		22.5	D		21.9	D		20.8	D	
	WB	II	26	36.0	10.8	**F**	94.1	**F**		106.1	**F**		44.3	**F**		44.5	**F**	
Caminito Plaza Centro to Lebon Dr	EB	II	42	47.5	10.1	**F**	51.8	**F**		52.0	**F**		52.1	**F**		52.0	**F**	
	WB	II	19	28.1	17.1	D	34.8	**E**		34.4	**E**		35.0	**E**		34.5	**E**	
Lebon Dr to Regents Rd	EB	II	85	81.3	15.2	**E**	100.4	**F**		100.6	**F**		106.2	**F**		111.3	**F**	
	WB	II	58	62.6	19.8	D	67.3	D		67.3	D		64.5	D		64.6	D	
Regents Rd to Costa Verde Blvd	EB	II	30	61.4	10.0	**F**	29.0	D		28.9	D		27.0	C		27.3	C	
	WB	II	52	81.0	7.6	**F**	82.0	**F**		83.6	**F**		151.6	**F**		163.1	**F**	
Coste Verde Blvd to Genesee Ave	EB	II	54	69.5	8.8	**F**	85.7	**F**		82.4	**F**		88.3	**F**		88.8	**F**	
	WB	II	18	69.1	8.9	**F**	31.5	D		33.5	D		29.9	D		30.6	D	
Genesee Ave to Lombard Pl	EB	II	26	24.0	17.6	D	24.3	D		24.3	D		24.2	D		24.0	D	
	WB	II	71	78.4	5.4	**F**	85.9	**F**		88.7	**F**		65.4	**F**		68.2	**F**	
Lombard Pl to Towne Center Dr	EB	II	48	57.6	13.9	**E**	73.5	**F**		81.7	**F**		73.9	**F**		74.7	**F**	
	WB	II	50	52.4	15.2	**E**	85.9	**F**		83.7	**F**		87.0	**F**		81.8	**F**	
Towne Center Dr to Shoreline Dr	EB	II	43	59.0	29.4	B	69.3	C		69.3	C		69.3	C		69.7	C	
	WB	II	72	73.9	23.5	C	88.6	D		99.7	D		89.7	D		89.2	D	
Shoreline Dr to Judicial Dr	EB	II	32	38.1	28.2	B	42.3	C		42.2	C		42.3	C		42.4	C	
	WB	II	39	51.2	21.0	D	71.4	**E**		71.2	**E**		71.4	**E**		73.9	**E**	
Judicial Dr to I-805 SB On-Ramp	EB	II	19	22.8	22.6	C	32.7	**E**		32.8	**E**		33.0	**E**		31.4	**E**	
	WB	II	23	31.6	16.3	**E**	40.5	**F**		40.4	**F**		40.7	**F**		41.6	**F**	
I-805 SB On-Ramp to I-805 NB Off-Ramp	EB	II	34	32.7	15.1	**E**	40.8	**F**		36.6	**E**		35.7	**E**		37.6	**E**	
	WB	II	12	15.1	32.7	B	15.2	B		15.2	B		15.2	B		15.2	B	
I-805 NB Off-Ramp to Avenue of Flags	EB	II	21	24.0	30.0	B	24.9	B		24.9	B		24.8	B		24.9	B	
	WB	II	23	30.9	23.3	C	45.0	**E**		40.6	D		40.0	D		41.5	D	
Avenue of Flags to Miramar Rd	EB	II	37	102.3	9.4	**F**	102.8	**F**		103.7	**F**		105.4	**F**		105.1	**F**	
	WB	II	25	28.4	33.7	B	29.1	B		29.1	B		29.1	B		29.1	B	
Total	*EB*	*II*	*554*	*730.9*	*15.4*	**E**	*1122.9*	*D*	**No**	*1130.1*	*D*	**No**	*1203.2*	*D*	**No**	*1222.8*	*D*	**No**
	WB	*II*	*531*	*704.1*	*14.8*	**E**	*852.9*	*C*	**No**	*875.6*	*C*	**No**	*833.2*	*C*	**No**	*845.8*	*C*	**No**

Notes: (a) Travel time in miles per hour (mph).

(b) The arterial LOS is based on average through-vehicle travel speed for the segment or for the entire street under consideration and is influenced both by the number of signals per mile and by the intersection control delay.

(c) A significant impact resulted in a change from LOS D or better to LOS E or LOS F, or a decrease of speeds of more than 1.0 mph at LOS E and LOS F.

AM Peak-Hour Arterial Segment Analysis Summary Nobel Dr

ROADWAY SEGMENT	DIRECTION	URBAN STREET CLASS	EXISTING				HORIZON YEAR WITH RECOMMENDED MITIGATIONS											
							Alt A Regents Bridge 6-lane Genesee			Alt B Regents Bridge 4-lane Genesee			Alt C No Bridge 6-lane Genesee			Alt D No Bridge 4-lane Genesee		
			TRAVEL TIME (S)		SIMULATION		SIMULATION			SIMULATION			SIMULATION			SIMULATION		
			FIELD	SIMULATION	SPEED (a)	LOS (b)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)
Nobel Drive																		
Villa La Jolla Dr to La Jolla Village Sq	EB		27.0	41.9	10.6	**F**	56.2	**F**		56.1	**F**		55.7	**F**		56.4	**F**	
	WB		35.0	25.2	17.6	D	28.8	**E**		28.7	**E**		28.7	**E**		28.7	**E**	
La Jolla Village Sq to I-5 SB On-Ramp	EB	II	11	11.7	18.8	D	11.9	D		11.9	D		11.9	D		12.2	D	
	WB	II	14	26.3	8.4	**F**	24.9	**F**		24.8	**F**		25.0	**F**		25.0	**F**	
I-5 SB On-Ramp to I-5 NB Off-Ramp	EB	II	11	16.8	15.7	**E**	17.2	**E**		17.5	**E**		18.1	**E**		19.2	**E**	
	WB	II	8	9.3	28.3	B	9.5	C		9.4	C		9.4	C		9.4	C	
I-5 NB Off-Ramp to Caminito Plaza Centro	EB	II	30	33.7	11.5	**F**	28.7	**E**		28.7	**E**		28.6	**E**		28.6	**E**	
	WB	II	14	28.4	13.7	**E**	31.6	**F**		30.7	**F**		33.2	**F**		35.2	**F**	
Caminito Plaza Centro to Lebon Dr	EB	II	42	43.6	11.0	**F**	46.7	**F**		46.7	**F**		46.5	**F**		46.6	**F**	
	WB	II	23	30.2	15.9	**E**	28.3	**E**		28.2	**E**		28.3	**E**		28.1	D	
Lebon Dr to Regents Rd	EB	II	52	54.8	22.6	C	65.6	D		65.7	D		64.0	D		64.2	D	
	WB	II	61	60.7	20.4	D	65.8	D		65.8	D		62.9	D		63.2	D	
Regents Rd to Costa Verde Blvd	EB	II	29	42.4	14.5	**E**	30.3	D		30.4	D		34.0	D		34.2	D	
	WB	II	49	54.9	11.2	**F**	34.3	D		34.4	D		33.5	D		33.5	D	
Coste Verde Blvd to Genesee Ave	EB	II	46	73.0	8.4	**F**	73.9	**F**		73.8	**F**		74.4	**F**		73.7	**F**	
	WB	II	23	46.0	13.4	**E**	59.6	**F**		59.9	**F**		59.1	**F**		59.5	**F**	
Genesee Ave to Lombard Pl	EB	II	24	24.3	17.0	D	25.3	**E**		25.3	**E**		25.3	**E**		25.3	**E**	
	WB	II	52	60.0	6.9	**F**	53.8	**F**		56.7	**F**		51.1	**F**		52.1	**F**	
Lombard Pl to Towne Center Dr	EB	II	32	45.5	17.8	D	51.3	**E**		51.3	**E**		51.3	**E**		51.3	**E**	
	WB	II	25	41.1	19.7	D	41.8	D		41.8	D		42.9	D		42.2	D	
Towne Center Dr to Shoreline Dr	EB	II	48	77.8	22.3	C	77.5	C		77.6	C		77.5	C		78.2	C	
	WB	II	72	70.0	24.8	C	75.5	C		75.4	C		75.6	C		74.8	C	
Shoreline Dr to Judicial Dr	EB	II	26	36.4	29.5	B	36.7	B		36.6	B		36.7	B		36.9	B	
	WB	II	34	58.0	18.5	D	59.8	D		59.7	D		59.8	D		60.4	D	
Judicial Dr to I-805 SB On-Ramp	EB	II	15	21.8	23.7	C	16.8	B		16.8	B		18.0	B		16.8	B	
	WB	II	19	21.8	23.7	C	24.4	D		24.8	D		24.9	D		25.1	D	
I-805 SB On-Ramp to I-805 NB Off-Ramp	EB	II	20	35.2	14.0	**E**	47.0	**F**		44.7	**F**		44.8	**F**		46.4	**F**	
	WB	II	17	15.1	32.7	B	15.2	B		15.2	B		15.2	B		15.2	B	
I-805 NB Off-Ramp to Avenue of Flags	EB	II	17	24.0	30.3	B	24.0	B		24.0	B		24.0	B		24.0	B	
	WB	II	30	31.4	23.2	C	36.3	D		35.8	D		35.8	D		36.6	D	
Avenue of Flags to Miramar Rd	EB	II	55	88.8	10.7	**F**	97.7	**F**		97.2	**F**		101.8	**F**		101.0	**F**	
	WB	II	25	28.1	33.8	B	28.0	B		28.0	B		28.0	B		28.0	B	
Total	*EB*	*II*	*458*	*671.7*	*16.6*	**E**	*650.6*	**E**	**No**	*704.3*	*B*	**No**	*712.6*	*B*	**No**	*715.0*	*B*	**No**
	WB	*II*	*466*	*606.5*	*17.2*	*D*	*589.6*	**E**	**Yes**	*619.3*	*B*	**No**	*613.4*	*B*	**No**	*617.0*	*B*	**No**

Notes: (a) Travel time in miles per hour (mph).

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(c) A significant impact resulted in a change from LOS D or better to LOS E or LOS F, or a decrease of speeds of more than 1.0 mph at LOS E and LOS F.

MID Peak-Hour Arterial Segment Analysis Summary Nobel Dr

ROADWAY SEGMENT	DIRECTION	URBAN STREET CLASS	EXISTING				HORIZON YEAR WITH RECOMMENDED MITIGATIONS											
							Alt A Regents Bridge 6-lane Genesee			Alt B Regents Bridge 4-lane Genesee			Alt C No Bridge 6-lane Genesee			Alt D No Bridge 4-lane Genesee		
			TRAVEL TIME (S)		SIMULATION		SIMULATION			SIMULATION			SIMULATION			SIMULATION		
			FIELD	SIMULATION	SPEED (a)	LOS (b)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)
Nobel Drive																		
Villa La Jolla Dr to La Jolla Village Sq	EB		24	44.4	10.0	**F**	53.1	**F**		53.1	**F**		53.7	**F**		53.7	**F**	
	WB		18	25.8	17.2	D	-	-		29.5	**E**		29.3	**E**		29.3	**E**	
La Jolla Village Sq to I-5 SB On-Ramp	EB	II	24	39.7	5.5	**F**	41.8	**F**		40.4	**F**		46.1	**F**		46.2	**F**	
	WB	II	18	23.8	9.3	**F**	35.8	**F**		35.6	**F**		37.1	**F**		38.7	**F**	
I-5 SB On-Ramp to I-5 NB Off-Ramp	EB	II	13	10.0	26.3	C	29.0	**F**		28.8	**F**		29.1	**F**		25.1	**F**	
	WB	II	9	9.5	27.7	C	11.3	C		11.3	C		11.1	C		11.0	C	
I-5 NB Off-Ramp to Caminito Plaza Centro	EB	II	12	16.9	22.4	C	26.7	**E**		26.4	**E**		28.8	**E**		29.2	**F**	
	WB	II	23	22.2	17.1	D	29.1	**E**		29.2	**F**		31.1	**F**		34.2	**F**	
Caminito Plaza Centro to Lebon Dr	EB	II	33	33.6	14.5	**E**	35.0	**E**		34.8	**E**		35.1	**E**		35.0	**E**	
	WB	II	23	26.0	18.8	D	29.3	**E**		29.0	**E**		30.6	**E**		30.2	**E**	
Lebon Dr to Regents Rd	EB	II	50	49.5	25.0	C	71.3	D		71.4	D		56.1	C		56.2	C	
	WB	II	54	54.9	22.6	C	58.9	D		58.8	D		57.8	D		57.9	D	
Regents Rd to Costa Verde Blvd	EB	II	31	51.1	12.0	**F**	32.7	D		32.8	D		34.3	D		34.3	D	
	WB	II	32	35.7	17.2	D	38.2	**E**		38.3	**E**		31.5	D		31.9	D	
Coste Verde Blvd to Genesee Ave	EB	II	50	63.7	9.7	**F**	65.4	**F**		62.3	**F**		68.4	**F**		68.6	**F**	
	WB	II	38	47.3	13.0	**E**	62.9	**F**		63.1	**F**		62.4	**F**		62.9	**F**	
Genesee Ave to Lombard Pl	EB	II	14	24.8	17.5	D	27.1	**E**		27.2	**E**		25.7	**E**		25.8	**E**	
	WB	II	52	74.4	5.8	**F**	70.5	**F**		70.5	**F**		63.8	**F**		68.0	**F**	
Lombard Pl to Towne Center Dr	EB	II	23	38.5	20.5	D	44.2	D		44.2	D		44.1	D		45.8	D	
	WB	II	39	47.8	16.5	**E**	56.1	**E**		56.0	**E**		56.4	**E**		56.8	**E**	
Towne Center Dr to Shoreline Dr	EB	II	44	52.9	32.8	B	62.4	C		62.5	C		63.1	C		63.1	C	
	WB	II	72	66.0	26.3	C	70.1	C		70.0	C		70.1	C		69.9	C	
Shoreline Dr to Judicial Dr	EB	II	33	35.4	30.4	B	36.9	B		36.8	B		36.8	B		36.8	B	
	WB	II	31	42.1	25.5	C	52.8	D		52.8	D		53.9	D		54.1	D	
Judicial Dr to I-805 SB On-Ramp	EB	II	19	22.1	23.4	C	21.5	C		21.5	C		22.8	C		19.8	C	
	WB	II	17	26.0	19.9	D	27.0	D		28.0	D		28.0	D		28.1	D	
I-805 SB On-Ramp to I-805 NB Off-Ramp	EB	II	28	30.1	16.4	**E**	32.2	**E**		31.2	**E**		31.2	**E**		31.6	**E**	
	WB	II	12	15.1	32.7	B	18.3	C		18.2	C		18.2	C		18.8	C	
I-805 NB Off-Ramp to Avenue of Flags	EB	II	20	28.3	25.8	C	31.6	C		31.5	C		32.5	C		32.6	C	
	WB	II	26	29.1	25.1	C	36.4	D		35.1	D		35.4	D		35.7	D	
Avenue of Flags to Miramar Rd	EB	II	46	73.6	12.8	**F**	77.7	**F**		77.5	**F**		81.7	**F**		81.6	**F**	
	WB	II	25	29.7	31.8	B	30.4	B		30.3	B		30.3	B		30.3	B	
Total	*EB*	*II*	*440*	*614.6*	*18.4*	*D*	*635.5*	**E**	**Yes**	*682.4*	*B*	**No**	*689.5*	*B*	**No**	*685.4*	*B*	**No**
	WB	*II*	*471*	*575.4*	*19.1*	*D*	*626.2*	**E**	**Yes**	*655.7*	*B*	**No**	*647.0*	*B*	**No**	*657.8*	*B*	**No**

Notes: (a) Travel time in miles per hour (mph).

(b) The arterial LOS is based on average through-vehicle travel speed for the segment or for the entire street under consideration and is influenced both by the number of signals per mile and by the intersection control delay.

(c) A significant impact resulted in a change from LOS D or better to LOS E or LOS F, or a decrease of speeds of more than 1.0 mph at LOS E and LOS F.

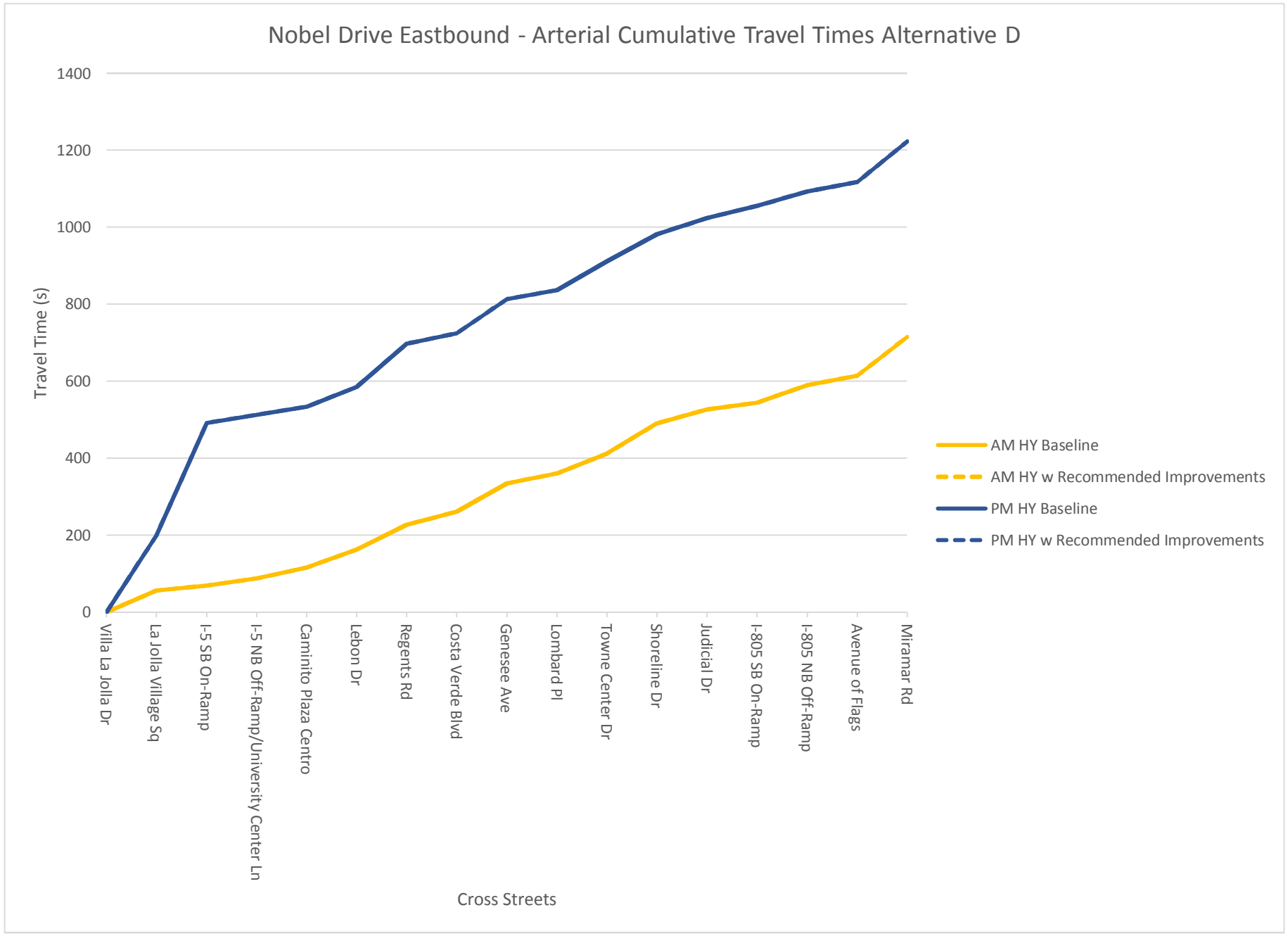
PM Peak-Hour Arterial Segment Analysis Summary Nobel Dr

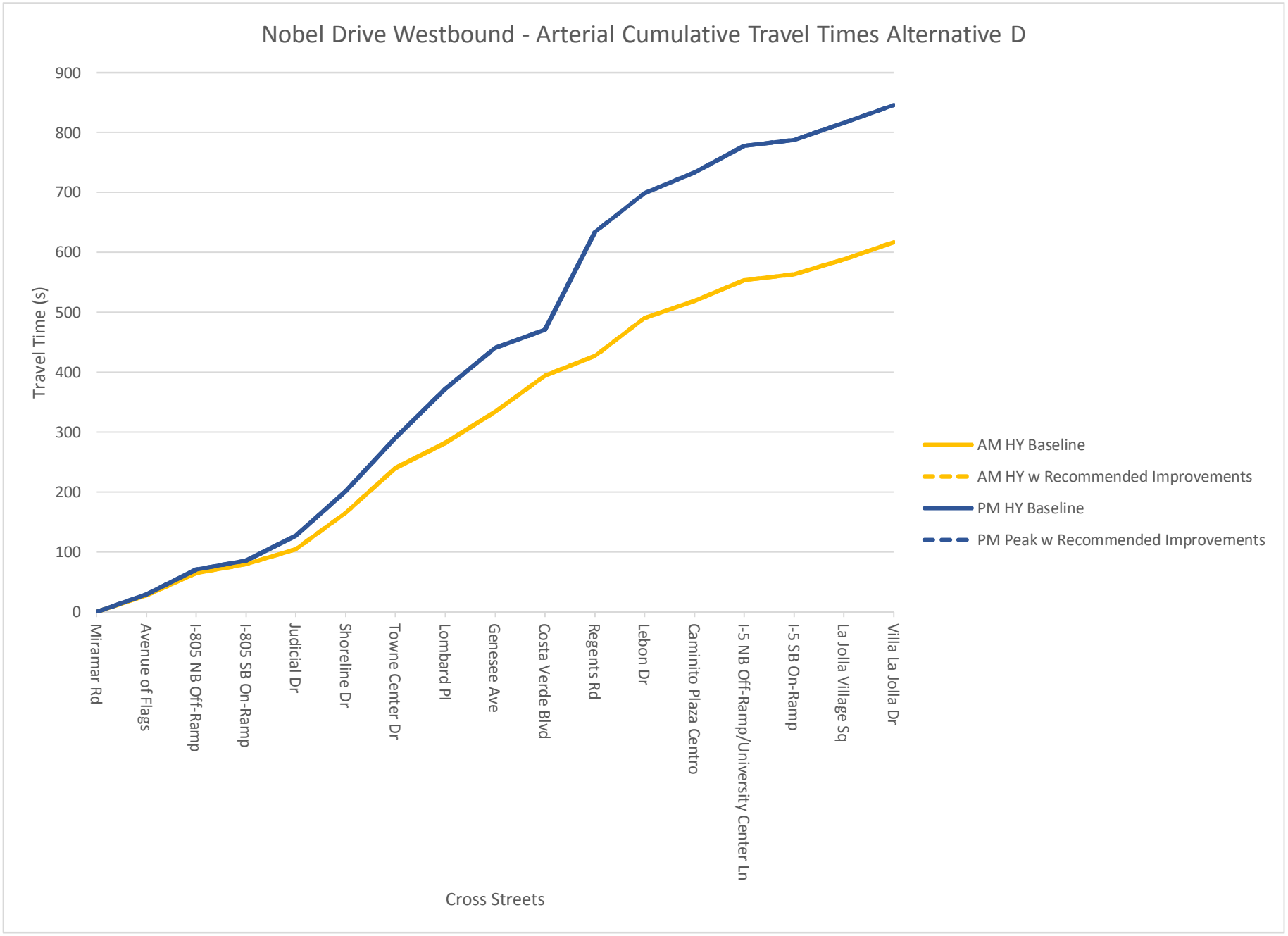
ROADWAY SEGMENT	DIRECTION	URBAN STREET CLASS	EXISTING				HORIZON YEAR WITH RECOMMENDED MITIGATIONS											
							Alt A Regents Bridge 6-lane Genesee			Alt B Regents Bridge 4-lane Genesee			Alt C No Bridge 6-lane Genesee			Alt D No Bridge 4-lane Genesee		
			TRAVEL TIME (S)		SIMULATION		SIMULATION			SIMULATION			SIMULATION			SIMULATION		
			FIELD	SIMULATION	SPEED (a)	LOS (b)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)	TIME (a)	LOS (b)	Impact? (c)
Nobel Drive																		
Villa La Jolla Dr to La Jolla Village Sq	EB		37	49.0	9.1	**F**	145.0	**F**		140.6	**F**		197.8	**F**		198.6	**F**	
	WB		34	27.1	16.4	**E**	29.8	**E**		29.7	**E**		29.7	**E**		29.6	**E**	
La Jolla Village Sq to I-5 SB On-Ramp	EB	II	37	31.1	7.1	**F**	265.1	**F**		264.0	**F**		281.6	**F**		293.0	**F**	
	WB	II	34	28.6	7.7	**F**	38.3	**F**		38.4	**F**		29.5	**F**		28.4	**F**	
I-5 SB On-Ramp to I-5 NB Off-Ramp	EB	II	9	10.5	25.1	C	11.3	C		16.1	**E**		19.7	**E**		21.2	**F**	
	WB	II	9	9.7	27.1	C	13.5	D		13.5	D		10.2	C		10.0	C	
I-5 NB Off-Ramp to Caminito Plaza Centro	EB	II	37	20.1	19.3	D	24.0	**E**		23.9	**E**		21.9	D		20.8	D	
	WB	II	26	36.0	10.8	**F**	94.1	**F**		98.3	**F**		44.3	**F**		44.5	**F**	
Caminito Plaza Centro to Lebon Dr	EB	II	42	47.5	10.1	**F**	51.8	**F**		52.0	**F**		52.1	**F**		52.0	**F**	
	WB	II	19	28.1	17.1	D	34.8	**E**		34.4	**E**		35.0	**E**		34.5	**E**	
Lebon Dr to Regents Rd	EB	II	85	81.3	15.2	**E**	100.4	**F**		100.6	**F**		106.2	**F**		111.3	**F**	
	WB	II	58	62.6	19.8	D	67.3	D		67.3	D		64.5	D		64.6	D	
Regents Rd to Costa Verde Blvd	EB	II	30	61.4	10.0	**F**	29.0	D		28.9	D		27.0	C		27.3	C	
	WB	II	52	81.0	7.6	**F**	82.0	**F**		82.4	**F**		151.6	**F**		163.1	**F**	
Coste Verde Blvd to Genesee Ave	EB	II	54	69.5	8.8	**F**	85.7	**F**		85.6	**F**		88.3	**F**		88.8	**F**	
	WB	II	18	69.1	8.9	**F**	31.5	D		48.5	**F**		29.9	D		30.6	D	
Genesee Ave to Lombard Pl	EB	II	26	24.0	17.6	D	24.4	D		24.3	D		24.2	D		24.0	D	
	WB	II	71	78.4	5.4	**F**	85.9	**F**		88.7	**F**		65.4	**F**		68.2	**F**	
Lombard Pl to Towne Center Dr	EB	II	48	57.6	13.9	**E**	73.5	**F**		81.7	**F**		73.9	**F**		74.7	**F**	
	WB	II	50	52.4	15.2	**E**	89.7	**F**		83.7	**F**		87.0	**F**		81.8	**F**	
Towne Center Dr to Shoreline Dr	EB	II	43	59.0	29.4	B	69.3	C		69.3	C		69.3	C		69.7	C	
	WB	II	72	73.9	23.5	C	88.6	D		99.7	D		89.7	D		89.2	D	
Shoreline Dr to Judicial Dr	EB	II	32	38.1	28.2	B	42.3	C		42.2	C		42.3	C		42.4	C	
	WB	II	39	51.2	21.0	D	71.4	**E**		71.2	**E**		71.4	**E**		73.9	**E**	
Judicial Dr to I-805 SB On-Ramp	EB	II	19	22.8	22.6	C	32.7	**E**		32.8	**E**		33.0	**E**		31.4	**E**	
	WB	II	23	31.6	16.3	**E**	40.5	**F**		40.4	**F**		40.7	**F**		41.6	**F**	
I-805 SB On-Ramp to I-805 NB Off-Ramp	EB	II	34	32.7	15.1	**E**	40.8	**F**		36.6	**E**		35.7	**E**		37.6	**E**	
	WB	II	12	15.1	32.7	B	15.2	B		15.2	B		15.2	B		15.2	B	
I-805 NB Off-Ramp to Avenue of Flags	EB	II	21	24.0	30.0	B	24.9	B		24.9	B		24.8	B		24.9	B	
	WB	II	23	30.9	23.3	C	45.0	**E**		40.6	D		40.0	D		41.5	D	
Avenue of Flags to Miramar Rd	EB	II	37	102.3	9.4	**F**	102.8	**F**		103.7	**F**		105.4	**F**		105.1	**F**	
	WB	II	25	28.4	33.7	B	29.1	B		29.1	B		29.1	B		29.1	B	
Total	*EB*	*II*	*554*	*730.9*	*15.4*	**E**	*978.0*	**F**	**No**	*1127.2*	*D*	**No**	*1203.2*	*D*	**No**	*1222.8*	*D*	**No**
	WB	*II*	*531*	*704.1*	*14.8*	**E**	*827.6*	**F**	**No**	*881.1*	*C*	**No**	*833.2*	*C*	**No**	*845.8*	*C*	**No**

Notes: (a) Travel time in miles per hour (mph).

(b) The arterial LOS is based on average through-vehicle travel speed for the segment or for the entire street under consideration and is influenced both by the number of signals per mile and by the intersection control delay.

(c) A significant impact resulted in a change from LOS D or better to LOS E or LOS F, or a decrease of speeds of more than 1.0 mph at LOS E and LOS F.


Nobel Drive Eastbound - Arterial Cumulative Travel Times Alternative D
Travel Time (s)
1400
1200
1000
800
600
400
200
0
Villa La Jolla Dr
La Jolla Village Sq
I-5 SB On-Ramp
I-5 NB Off-Ramp/University Center Ln
Caminito Plaza Centro
Lebon Dr
Regents Rd
Costa Verde Blvd
Genesee Ave
Lombard Pl
Towne Center Dr
Shoreline Dr
Judicial Dr
I-805 SB On-Ramp
I-805 NB Off-Ramp
Avenue of Flags
Miramar Rd
Cross Streets
AM HY Baseline
AM HY w Recommended Improvements
PM HY Baseline
PM HY w Recommended Improvements


Nobel Drive Westbound - Arterial Cumulative Travel Times Alternative D
Travel Time (s)
900
800
700
600
500
400
300
200
100
0
Miramar Rd
Avenue of Flags
I-805 NB Off-Ramp
I-805 SB On-Ramp
Judicial Dr
Shoreline Dr
Towne Center Dr
Lombard Pl
Genesee Ave
Costa Verde Blvd
Regents Rd
Lebon Dr
Caminito Plaza Centro
I-5 NB Off-Ramp/University Center Ln
I-5 SB On-Ramp
La Jolla Village Sq
Villa La Jolla Dr
Cross Streets
AM HY Baseline
AM HY w Recommended Improvements
PM HY Baseline
PM Peak w Recommended Improvements

AM Peak-Hour Arterial Segment Analysis Summary Regents Road

ROADWAY SEGMENT	DIRECTION	URBAN STREET CLASS	EXISTING				HORIZON YEAR					
							Alt C No Bridge 6-lane Genesee			Alt D No Bridge 4-lane Genesee		
			TRAVEL TIME (S)		SIMULATION		SIMULATION			SIMULATION		
			FIELD	SIMULATION	SPEED (a)	LOS (b)	TIME (a)	LOS (b)	Impact?	TIME (a)	LOS (b)	Impact?
Regents Road (N)												
Arriba St to Berino Ct	NB	II	38	47	13	**E**	43.8	**E**		43.8	**E**	
	SB	II	30	42	15	**E**	44.7	**E**		44.8	**E**	
Berino Ct to Nobel Dr	NB	II	67	54	22	D	53	C		52.4	C	
	SB	II	33	43	28	C	41.9	B		41.9	B	
Nobel Dr to Mahaila Ave	NB	II	26	31	17	D	30.1	D		30.2	D	
	SB	II	39	49	11	**F**	49.3	**F**		50.6	**F**	
Mahaila Ave to La Jolla Village Dr	NB	II	75	72	6	**F**	71.6	**F**		71.9	**F**	
	SB	II	21	27	17	D	25.1	D		25.2	D	
La Jolla Village Dr to Regents Park Row	NB	II	31	32	10	**F**	32.1	**F**		30.9	**F**	
	SB	II	60	52	6	**F**	57.6	**F**		52.8	**F**	
Regents Park Row to Executive Dr	NB	II	73	31	20	D	37.4	**E**		37.5	**E**	
	SB	II	35	37	17	**E**	34.4	D		35.6	D	
Executive Dr to Eastgate Mall	NB	II	47	32	14	**E**	29.2	**E**		28.8	**E**	
	SB	II	20	21	21	D	19.5	C		19.5	C	
Eastgate Mall to Country Day Ln	NB	II	15	27	17	**E**	21.7	D		21.7	D	
	SB	II	17	23	20	D	25.6	D		25.3	D	
Country Day Ln to Genesee Ave	NB	II	44	82	7	**F**	85.4	**F**		85.4	**F**	
	SB	II	34	49	11	**F**	32.9	**E**		32.6	**E**	
Total	*NB*	*II*	*416*	*407*	*12*	**F**	*404.3*	**E**	**No**	*402.6*	**F**	**No**
	SB	*II*	*289*	*343*	*15*	**E**	*331.0*	**E**	**No**	*328.3*	**E**	**No**
Regents Road (S)												
Luna Ave to SR-52 WB Ramps	NB	II	38	232	11	**E**	119.2	C		122.2	D	
	SB	II	30	117	23	C	103.9	C		99	C	
SR-52 WB Ramps to SR-52 EB Ramps	NB	II	67	32	10	**E**	17.3	D		17.7	D	
	SB	II	33	28	12	**E**	21.5	**E**		21.7	**E**	
SR-52 EB Ramps to Governor Dr	NB	II	26	109	22	C	82.4	B		84.5	B	
	SB	II	39	111	21	C	79	B		79.7	B	
Total	*NB*	*II*	*131*	*373*	*14*	*D*	*218.9*	*C*	**No**	*224.4*	*C*	**No**
	SB	*II*	*102*	*256*	*21*	*D*	*204.4*	*C*	**No**	*200.4*	*C*	**No**

Notes: (a) Travel time in miles per hour (mph).

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(c) A significant impact resulted in a change from LOS D or better to LOS E or LOS F, or a decrease of speeds of more than 1.0 mph at LOS E and LOS F.

MID Peak-Hour Arterial Segment Analysis Summary Regents Road

ROADWAY SEGMENT	DIRECTION	URBAN STREET CLASS	EXISTING				HORIZON YEAR					
							Alt C No Bridge 6-lane Genesee			Alt D No Bridge 4-lane Genesee		
			TRAVEL TIME (S)		SIMULATION		SIMULATION			SIMULATION		
			FIELD	SIMULATION	SPEED (a)	LOS (b)	TIME (a)	LOS (b)	Impact?	TIME (a)	LOS (b)	Impact?
Regents Road (N)												
Arriba St to Berino Ct	NB	II	39	25	25.1	C	27.3	C		27.4	C	
	SB	II	28	35	17.7	D	35.0	D		34.9	D	
Berino Ct to Nobel Dr	NB	II	50	52	22.7	C	55.9	D		55.7	D	
	SB	II	36	35	34.1	B	34.3	B		34.3	B	
Nobel Dr to Mahaila Ave	NB	II	18	25	21.0	D	26.3	D		26.3	D	
	SB	II	34	59	8.8	**F**	63.7	**F**		63.7	**F**	
Mahaila Ave to La Jolla Village Dr	NB	II	57	65	7.2	**F**	59.8	**F**		59.4	**F**	
	SB	II	20	19	23.9	C	20.5	C		20.5	C	
La Jolla Village Dr to Regents Park Row	NB	II	23	25	12.3	**F**	25.4	**F**		26.0	**F**	
	SB	II	34	55	5.5	**F**	51.8	**F**		49.3	**F**	
Regents Park Row to Executive Dr	NB	II	26	31	19.6	D	33.3	D		33.3	D	
	SB	II	35	34	17.9	D	35.8	D		37.8	**E**	
Executive Dr to Eastgate Mall	NB	II	20	21	20.3	D	21.3	D		21.4	D	
	SB	II	25	23	18.8	D	21.0	D		21.0	D	
Eastgate Mall to Country Day Ln	NB	II	14	20	22.5	C	19.4	C		19.5	C	
	SB	II	16	22	20.5	D	21.8	D		21.9	D	
Country Day Ln to Genesee Ave	NB	II	44	87	6.4	**F**	87.8	**F**		87.6	**F**	
	SB	II	35	34	16.1	**E**	32.8	**E**		32.5	**E**	
Total	*NB*	*II*	*291*	*350*	*14.5*	**E**	*356.5*	**E**	**No**	*356.6*	**E**	**No**
	SB	*II*	*263*	*316*	*16.1*	**E**	*316.7*	**E**	**No**	*315.9*	**E**	**No**
Regents Road (S)												
Luna Ave to SR-52 WB Ramps	NB	II	39	539	4.9	**F**	91.8	B		93.8	B	
	SB	II	28	88	30.0	B	71.4	A		71.8	A	
SR-52 WB Ramps to SR-52 EB Ramps	NB	II	50	23	14.4	D	16.4	D		17.0	D	
	SB	II	36	21	15.8	D	19.2	**E**		19.6	**E**	
SR-52 EB Ramps to Governor Dr	NB	II	18	98	24.6	B	69.7	A		70.2	B	
	SB	II	34	99	24.3	B	72.0	B		72.8	B	
Total	*NB*	*II*	*107*	*659*	*21.0*	*C*	*177.9*	*B*	**No**	*181.0*	*B*	**No**
	SB	*II*	*98*	*208*	*16.3*	*D*	*138.8*	*C*	**No**	*139.6*	*C*	**No**

Notes: (a) Travel time in miles per hour (mph).

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(c) A significant impact resulted in a change from LOS D or better to LOS E or LOS F, or a decrease of speeds of more than 1.0 mph at LOS E and LOS F.

PM Peak-Hour Arterial Segment Analysis Summary Regents Road

ROADWAY SEGMENT	DIRECTION	URBAN STREET CLASS	EXISTING				HORIZON YEAR					
							Alt C No Bridge 6-lane Genesee			Alt D No Bridge 4-lane Genesee		
			TRAVEL TIME (S)		SIMULATION		SIMULATION			SIMULATION		
			FIELD	SIMULATION	SPEED (a)	LOS (b)	TIME (a)	LOS (b)	Impact?	TIME (a)	LOS (b)	Impact?
Regents Road (N)												
Arriba St to Berino Ct	NB	II	24	40	15.3	**E**	41.7	**E**		41.9	**E**	
	SB	II	44	40	15.4	**E**	41.4	**E**		41.4	**E**	
Berino Ct to Nobel Dr	NB	II	76	58	20.3	D	53.8	C		53.3	C	
	SB	II	38	43	27.3	C	43.1	C		43.1	C	
Nobel Dr to Mahaila Ave	NB	II	25	34	15.4	**E**	26.4	D		26.6	D	
	SB	II	34	50	10.4	**F**	40.2	**F**		39.6	**E**	
Mahaila Ave to La Jolla Village Dr	NB	II	31	51	9.1	**F**	55.7	**F**		56.5	**F**	
	SB	II	20	34	13.5	**E**	36.2	**F**		36.1	**F**	
La Jolla Village Dr to Regents Park Row	NB	II	23	23	13.2	**E**	35.9	**F**		41.3	**F**	
	SB	II	44	54	5.7	**F**	60.7	**F**		62.9	**F**	
Regents Park Row to Executive Dr	NB	II	33	39	15.9	**E**	50.4	**F**		50.4	**F**	
	SB	II	86	53	11.7	**F**	51.3	**F**		74.3	**F**	
Executive Dr to Eastgate Mall	NB	II	16	23	18.6	D	25.6	**E**		25.7	**E**	
	SB	II	36	33	12.9	**F**	25.3	D		25.3	D	
Eastgate Mall to Country Day Ln	NB	II	32	21	21.1	D	23.0	D		21.3	D	
	SB	II	30	39	11.3	**F**	31.9	**E**		32.0	**E**	
Country Day Ln to Genesee Ave	NB	II	36	60	9.2	**F**	65.6	**F**		65.5	**F**	
	SB	II	53	43	12.8	**F**	46.2	**F**		45.6	**F**	
Total	*NB*	*II*	*296*	*349*	*14.5*	**E**	*378.1*	**E**	**No**	*382.5*	**E**	**No**
	SB	*II*	*385*	*390*	*13.0*	**F**	*376.3*	**E**	**No**	*400.3*	**F**	**No**
Regents Road (S)												
Luna Ave to SR-52 WB Ramps	NB	II	24	117	22.6	C	104.5	C		111.6	D	
	SB	II	44	161	16.4	D	125.9	D		126.6	D	
SR-52 WB Ramps to SR-52 EB Ramps	NB	II	76	29	11.1	**E**	25.5	**F**		34.9	**F**	
	SB	II	38	31	10.4	**E**	30.7	**F**		47.5	**F**	
SR-52 EB Ramps to Governor Dr	NB	II	25	107	22.3	C	76.3	B		77.6	C	
	SB	II	34	116	20.7	C	90.0	C		111.8	C	
Total	*NB*	*II*	*125*	*253*	*21.0*	*C*	*206.3*	*C*	**No**	*224.1*	*C*	**No**
	SB	*II*	*116*	*308*	*16.3*	*D*	*246.6*	*D*	**No**	*285.9*	*D*	**No**

Notes: (a) Travel time in miles per hour (mph).

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(c) A significant impact resulted in a change from LOS D or better to LOS E or LOS F, or a decrease of speeds of more than 1.0 mph at LOS E and LOS F.

AM Peak-Hour Arterial Segment Analysis Summary Regents Road

ROADWAY SEGMENT	DIRECTION	URBAN STREET CLASS	EXISTING				HORIZON YEAR WITH RECOMMENDED MITIGATIONS					
							Alt C No Bridge 6-lane Genesee			Alt D No Bridge 4-lane Genesee		
			TRAVEL TIME (S)		SIMULATION		SIMULATION			SIMULATION		
			FIELD	SIMULATION	SPEED (a)	LOS (b)	TIME (a)	LOS (b)	Impact?	TIME (a)	LOS (b)	Impact?
Regents Road (N)												
Arriba St to Berino Ct	NB	II	38	47	13	**E**	43.8	**E**		43.8	**E**	
	SB	II	30	42	15	**E**	44.7	**E**		44.8	**E**	
Berino Ct to Nobel Dr	NB	II	67	54	22	D	53	C		52.4	C	
	SB	II	33	43	28	C	41.9	B		41.9	B	
Nobel Dr to Mahaila Ave	NB	II	26	31	17	D	30.1	D		30.2	D	
	SB	II	39	49	11	**F**	49.3	**F**		50.6	**F**	
Mahaila Ave to La Jolla Village Dr	NB	II	75	72	6	**F**	71.6	**F**		71.9	**F**	
	SB	II	21	27	17	D	25.1	D		25.2	D	
La Jolla Village Dr to Regents Park Row	NB	II	31	32	10	**F**	32.1	**F**		30.9	**F**	
	SB	II	60	52	6	**F**	57.6	**F**		52.8	**F**	
Regents Park Row to Executive Dr	NB	II	73	31	20	D	37.4	**E**		37.5	**E**	
	SB	II	35	37	17	**E**	34.4	D		35.6	D	
Executive Dr to Eastgate Mall	NB	II	47	32	14	**E**	29.2	**E**		28.8	**E**	
	SB	II	20	21	21	D	19.5	C		19.5	C	
Eastgate Mall to Country Day Ln	NB	II	15	27	17	**E**	21.7	D		21.7	D	
	SB	II	17	23	20	D	25.6	D		25.3	D	
Country Day Ln to Genesee Ave	NB	II	44	82	7	**F**	85.4	**F**		85.4	**F**	
	SB	II	34	49	11	**F**	32.9	**E**		32.6	**E**	
Total	*NB*	*II*	*416*	*407*	*12*	**F**	*404.3*	**E**	**No**	*402.6*	**E**	**No**
	SB	*II*	*289*	*343*	*15*	**E**	*331.0*	**E**	**No**	*328.3*	**E**	**No**
Regents Road (S)												
Luna Ave to SR-52 WB Ramps	NB	II	38	232	11	**E**	100.7	D		103.6	D	
	SB	II	30	117	23	C	88	B		83	C	
SR-52 WB Ramps to SR-52 EB Ramps	NB	II	67	32	10	**E**	17.3	**E**		17.7	**E**	
	SB	II	33	28	12	**E**	21.5	**E**		21.7	**F**	
SR-52 EB Ramps to Governor Dr	NB	II	26	109	22	C	82.4	C		84.2	C	
	SB	II	39	111	21	C	84.6	B		79.4	C	
Total	*NB*	*II*	*131*	*373*	*14*	*D*	*200.4*	*C*	**No**	*205.5*	*C*	**No**
	SB	*II*	*102*	*256*	*21*	*D*	*194.1*	*B*	**No**	*184.1*	*B*	**No**

Notes: (a) Travel time in miles per hour (mph).

(b) The arterial LOS is based on average through-vehicle travel speed for the segment or for the entire street under consideration and is influenced both by the number of signals per mile and by the intersection control delay.

(c) A significant impact resulted in a change from LOS D or better to LOS E or LOS F, or a decrease of speeds of more than 1.0 mph at LOS E and LOS F.

MID Peak-Hour Arterial Segment Analysis Summary Regents Road

ROADWAY SEGMENT	DIRECTION	URBAN STREET CLASS	EXISTING				HORIZON YEAR WITH RECOMMENDED MITIGATIONS					
							Alt C No Bridge 6-lane Genesee			Alt D No Bridge 4-lane Genesee		
			TRAVEL TIME (S)		SIMULATION		SIMULATION			SIMULATION		
			FIELD	SIMULATION	SPEED (a)	LOS (b)	TIME (a)	LOS (b)	Impact?	TIME (a)	LOS (b)	Impact?
Regents Road (N)												
Arriba St to Berino Ct	NB	II	39	25	25.1	C	27.3	C		27.4	C	
	SB	II	28	35	17.7	D	35.0	D		34.9	D	
Berino Ct to Nobel Dr	NB	II	50	52	22.7	C	55.9	D		55.7	D	
	SB	II	36	35	34.1	B	34.3	B		34.3	B	
Nobel Dr to Mahaila Ave	NB	II	18	25	21.0	D	26.3	D		26.3	D	
	SB	II	34	59	8.8	**F**	63.7	**F**		63.7	**F**	
Mahaila Ave to La Jolla Village Dr	NB	II	57	65	7.2	**F**	59.8	**F**		59.4	**F**	
	SB	II	20	19	23.9	C	20.5	C		20.5	C	
La Jolla Village Dr to Regents Park Row	NB	II	23	25	12.3	**F**	25.4	**F**		26.0	**F**	
	SB	II	34	55	5.5	**F**	51.8	**F**		49.3	**F**	
Regents Park Row to Executive Dr	NB	II	26	31	19.6	D	33.3	D		33.3	D	
	SB	II	35	34	17.9	D	35.8	D		37.8	**E**	
Executive Dr to Eastgate Mall	NB	II	20	21	20.3	D	21.3	D		21.4	D	
	SB	II	25	23	18.8	D	21.0	D		21.0	D	
Eastgate Mall to Country Day Ln	NB	II	14	20	22.5	C	19.4	C		19.5	C	
	SB	II	16	22	20.5	D	21.8	D		21.9	D	
Country Day Ln to Genesee Ave	NB	II	44	87	6.4	**F**	87.8	**F**		87.6	**F**	
	SB	II	35	34	16.1	**E**	32.8	**E**		32.5	**E**	
Total	*NB*	*II*	*291*	*350*	*14.5*	**E**	*356.5*	**E**	**No**	*356.6*	**E**	**No**
	SB	*II*	*263*	*316*	*16.1*	**E**	*316.7*	**E**	**No**	*315.9*	**E**	**No**
Regents Road (S)												
Luna Ave to SR-52 WB Ramps	NB	II	39	539	4.9	**F**	73.5	B		75.1	B	
	SB	II	28	88	30.0	B	55.6	A		56.2	A	
SR-52 WB Ramps to SR-52 EB Ramps	NB	II	50	23	14.4	D	16.4	**E**		17.0	**E**	
	SB	II	36	21	15.8	D	19.2	**E**		19.6	**E**	
SR-52 EB Ramps to Governor Dr	NB	II	18	98	24.6	B	69.4	B		69.7	B	
	SB	II	34	99	24.3	B	71.7	C		77.9	B	
Total	*NB*	*II*	*107*	*659*	*21.0*	*C*	*159.3*	*C*	**No**	*161.8*	*C*	**No**
	SB	*II*	*98*	*208*	*16.3*	*D*	*146.5*	*C*	**No**	*153.7*	*B*	**No**

Notes: (a) Travel time in miles per hour (mph).

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(c) A significant impact resulted in a change from LOS D or better to LOS E or LOS F, or a decrease of speeds of more than 1.0 mph at LOS E and LOS F.

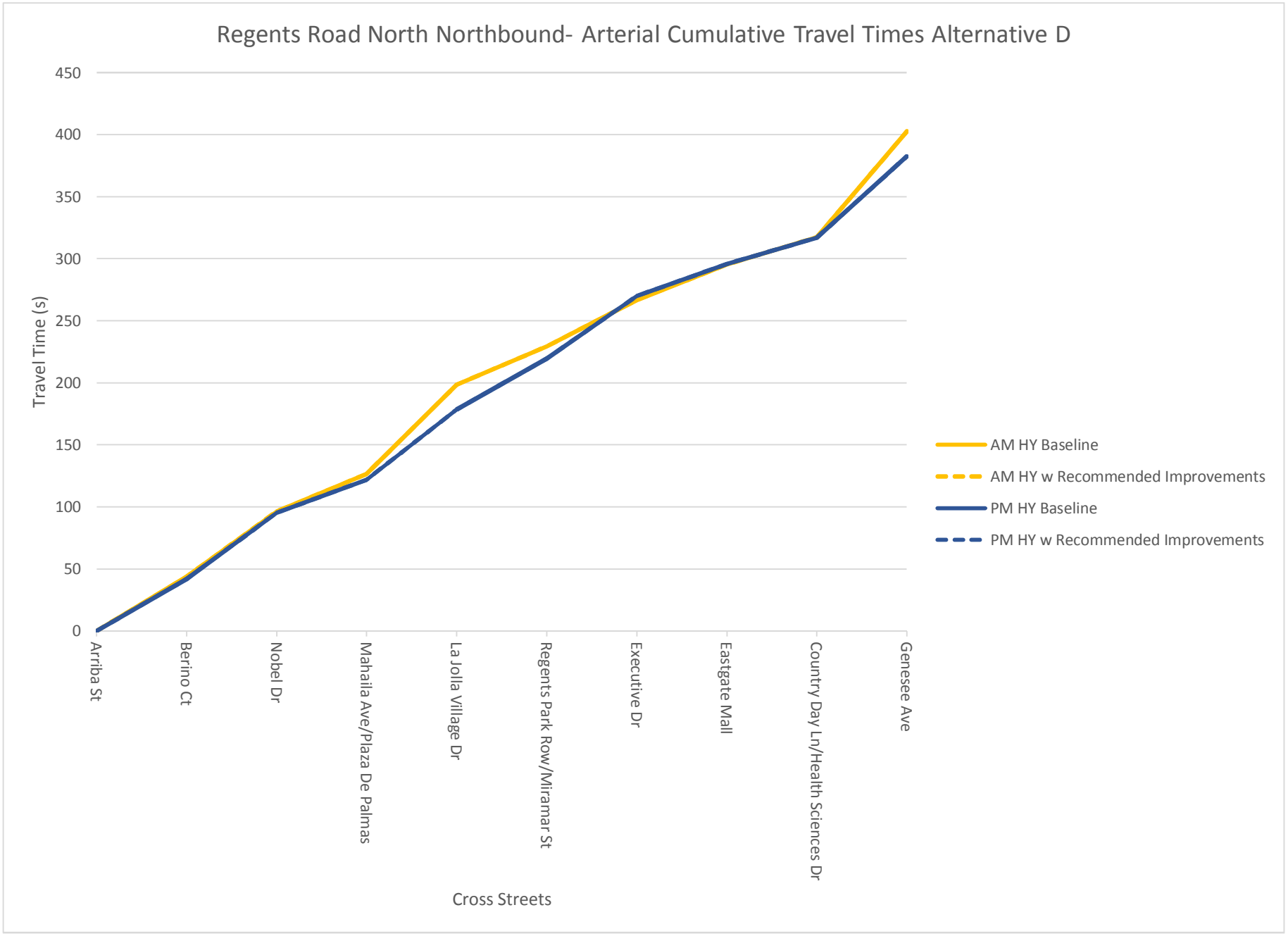
PM Peak-Hour Arterial Segment Analysis Summary Regents Road

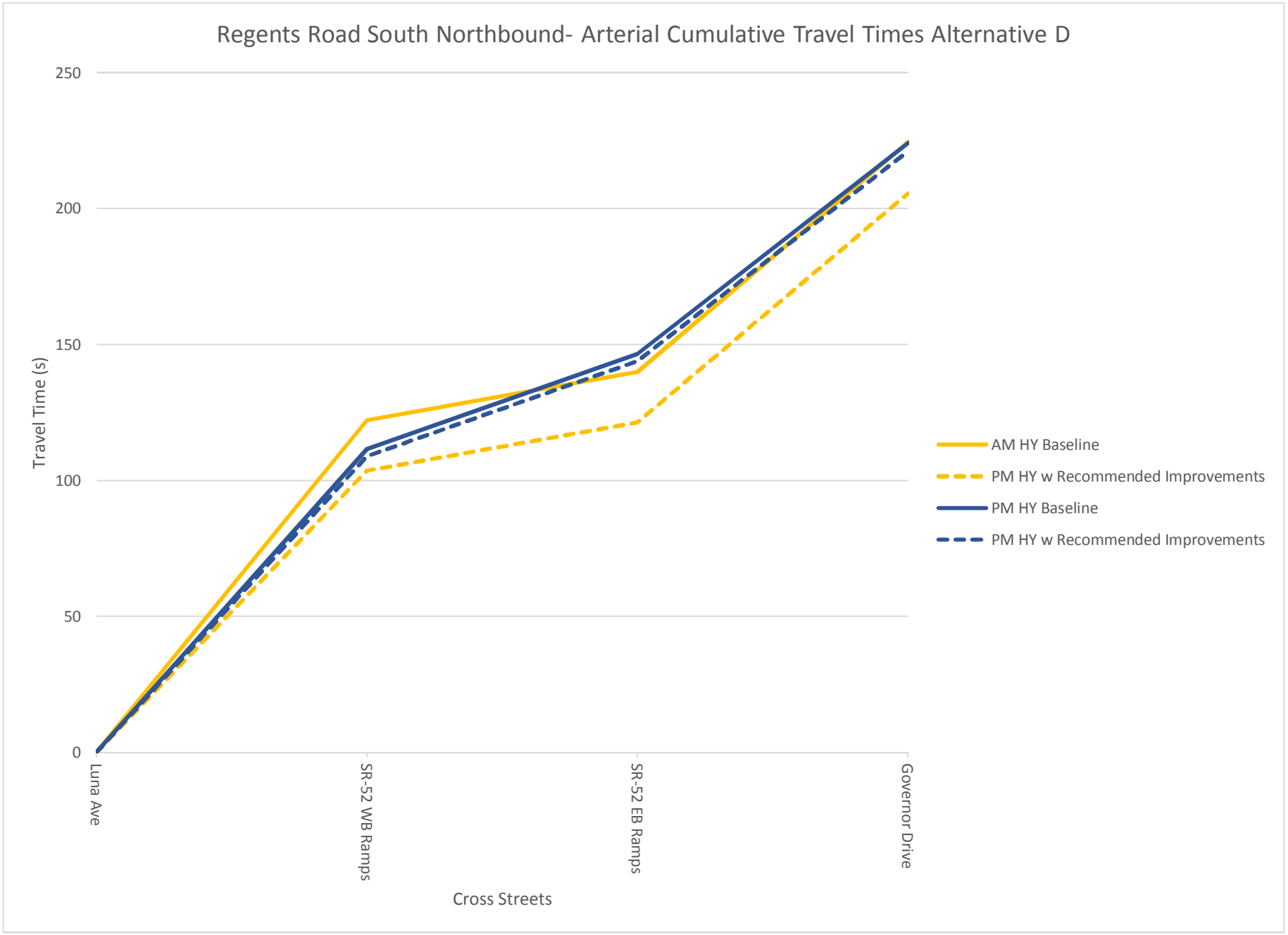
ROADWAY SEGMENT	DIRECTION	URBAN STREET CLASS	EXISTING				HORIZON YEAR WITH RECOMMENDED MITIGATIONS					
							Alt C No Bridge 6-lane Genesee			Alt D No Bridge 4-lane Genesee		
			TRAVEL TIME (S)		SIMULATION		SIMULATION			SIMULATION		
			FIELD	SIMULATION	SPEED (a)	LOS (b)	TIME (a)	LOS (b)	Impact?	TIME (a)	LOS (b)	Impact?
Regents Road (N)												
Arriba St to Berino Ct	NB	II	24	40	15.3	**E**	41.7	**E**		41.9	**E**	
	SB	II	44	40	15.4	**E**	41.4	**E**		41.4	**E**	
Berino Ct to Nobel Dr	NB	II	76	58	20.3	D	53.8	C		53.3	C	
	SB	II	38	43	27.3	C	43.1	C		43.1	C	
Nobel Dr to Mahaila Ave	NB	II	25	34	15.4	**E**	26.4	D		26.6	D	
	SB	II	34	50	10.4	**F**	40.2	**F**		39.6	**E**	
Mahaila Ave to La Jolla Village Dr	NB	II	31	51	9.1	**F**	55.7	**F**		56.5	**F**	
	SB	II	20	34	13.5	**E**	36.2	**F**		36.1	**F**	
La Jolla Village Dr to Regents Park Row	NB	II	23	23	13.2	**E**	35.9	**F**		41.3	**F**	
	SB	II	44	54	5.7	**F**	60.7	**F**		62.9	**F**	
Regents Park Row to Executive Dr	NB	II	33	39	15.9	**E**	50.4	**F**		50.4	**F**	
	SB	II	86	53	11.7	**F**	51.3	**F**		74.3	**F**	
Executive Dr to Eastgate Mall	NB	II	16	23	18.6	D	25.6	**E**		25.7	**E**	
	SB	II	36	33	12.9	**F**	25.3	D		25.3	D	
Eastgate Mall to Country Day Ln	NB	II	32	21	21.1	D	23.0	D		21.3	D	
	SB	II	30	39	11.3	**F**	31.9	**E**		32.0	**E**	
Country Day Ln to Genesee Ave	NB	II	36	60	9.2	**F**	65.6	**F**		65.5	**F**	
	SB	II	53	43	12.8	**F**	46.2	**F**		45.6	**F**	
Total	*NB*	*II*	*296*	*349*	*14.5*	**E**	*378.1*	**E**	**No**	*382.5*	**E**	**No**
	SB	*II*	*385*	*390*	*13.0*	**F**	*376.3*	**E**	**No**	*400.3*	**F**	**No**
Regents Road (S)												
Luna Ave to SR-52 WB Ramps	NB	II	24	117	22.6	C	86.1	C		108.9	D	
	SB	II	44	161	16.4	D	141.3	D		111.4	C	
SR-52 WB Ramps to SR-52 EB Ramps	NB	II	76	29	11.1	**E**	25.5	**F**		34.9	**F**	
	SB	II	38	31	10.4	**E**	30.7	**F**		47.5	**F**	
SR-52 EB Ramps to Governor Dr	NB	II	25	107	22.3	C	76.9	C		77.2	C	
	SB	II	34	116	20.7	C	96.1	C		117.0	D	
Total	*NB*	*II*	*125*	*253*	*21.0*	*C*	*188.5*	*D*	**No**	*221.0*	*D*	**No**
	SB	*II*	*116*	*308*	*16.3*	*D*	*268.1*	*D*	**No**	*275.9*	*D*	**No**

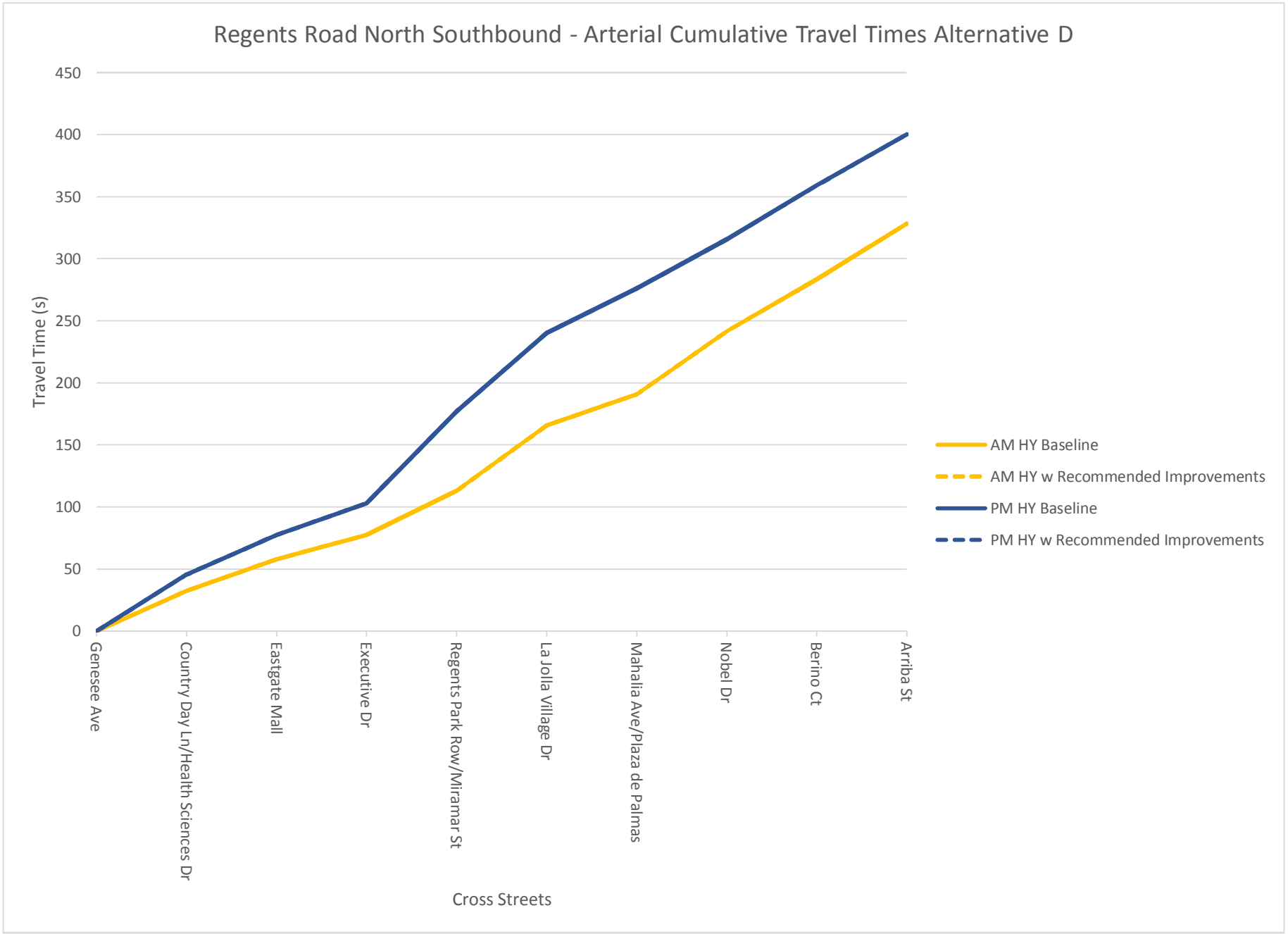
Notes: (a) Travel time in miles per hour (mph).

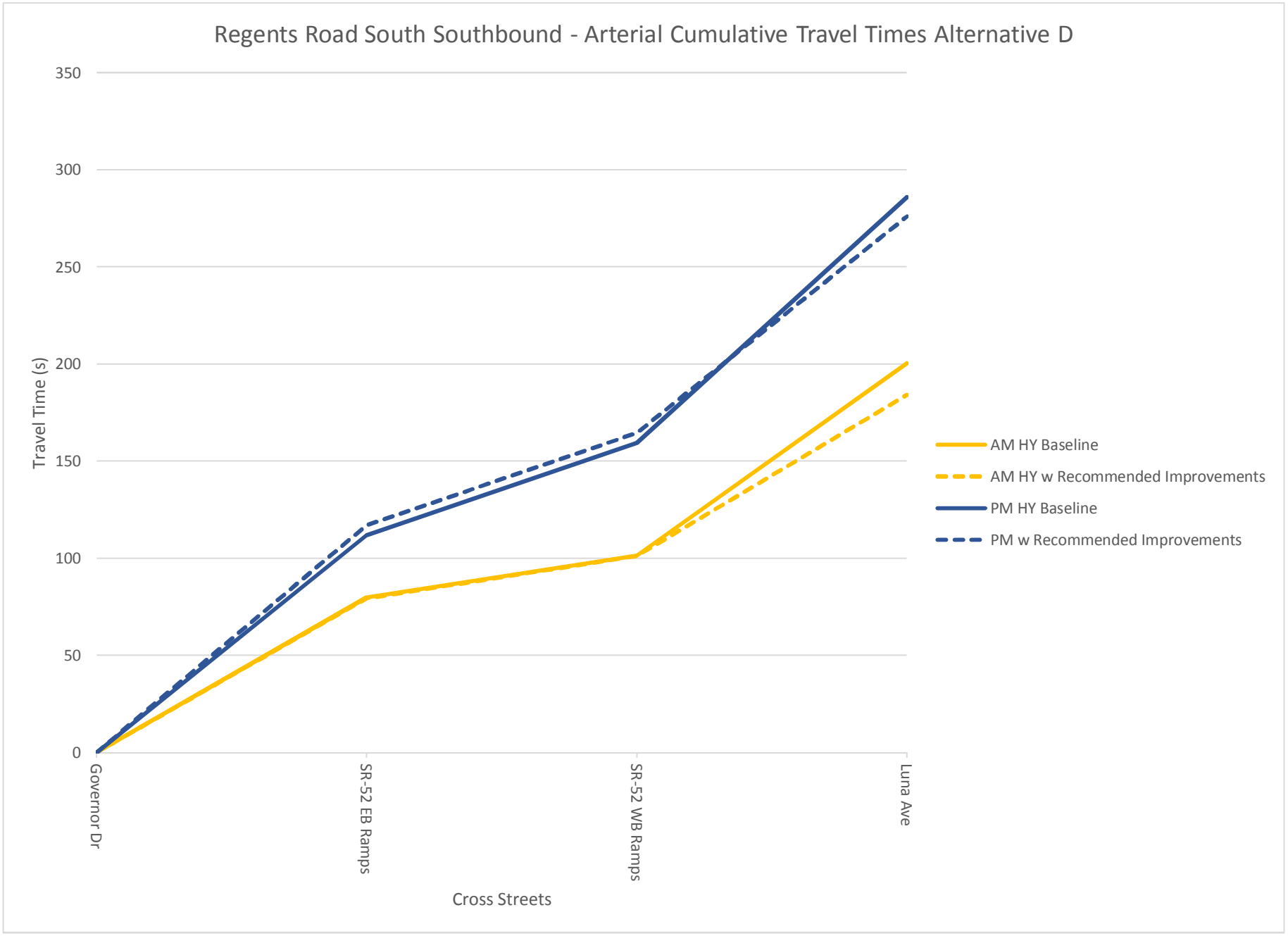
(b) The arterial LOS is based on average through-vehicle travel speed for the segment or for the entire street under consideration and is influenced both by the number of signals per mile and by the intersection control delay.

(c) A significant impact resulted in a change from LOS D or better to LOS E or LOS F, or a decrease of speeds of more than 1.0 mph at LOS E and LOS F.


Regents Road North Northbound- Arterial Cumulative Travel Times Alternative D
Travel Time (s)
450
400
350
300
250
200
150
100
50
0
Arriba St
Berino Ct
Nobel Dr
Mahaila Ave/Plaza De Palmas
La Jolla Village Dr
Regents Park Row/Miramar St
Executive Dr
Eastgate Mall
Country Day Ln/Health Sciences Dr
Genesee Ave
Cross Streets
AM HY Baseline
AM HY w Recommended Improvements
PM HY Baseline
PM HY w Recommended Improvements


Regents Road South Northbound- Arterial Cumulative Travel Times Alternative D
250
200
150
100
50
0
Travel Time (s)
Luna Ave
SR-52 WB Ramps
SR-52 EB Ramps
Governor Drive
Cross Streets
AM HY Baseline
PM HY w Recommended Improvements
PM HY Baseline
PM HY w Recommended Improvements


Regents Road North Southbound - Arterial Cumulative Travel Times Alternative D
Travel Time (s)
450
400
350
300
250
200
150
100
50
0
Genesee Ave
Country Day Ln/Health Sciences Dr
Eastgate Mall
Executive Dr
Regents Park Row/Miramar St
La Jolla Village Dr
Mahalia Ave/Plaza de Palmas
Nobel Dr
Berino Ct
Arriba St
Cross Streets
AM HY Baseline
AM HY w Recommended Improvements
PM HY Baseline
PM HY w Recommended Improvements


Regents Road South Southbound - Arterial Cumulative Travel Times Alternative D
350
300
250
200
150
100
50
0
Travel Time (s)
Governor Dr
SR-52 EB Ramps
SR-52 WB Ramps
Luna Ave
Cross Streets
AM HY Baseline
AM HY w Recommended Improvements
PM HY Baseline
PM w Recommended Improvements

APPENDIX K

FREEWAY FACTORS AND RAMP METER RATES

Location (I.D.)	Route	Dir	Period	Cars per green	Sec./ Cycle	(per lane) Veh./hr	Total # lanes	HOV
WB LJVD (218)	5	NB	1500 - 1830	1	6.5	555	1	No
EB LJVD (246)	5	NB	1500 - 1900	2	7.2 - 11.2	996 - 643	2	Lt
EB LJVD (122)	5	SB	1500 - 1900	1	6.3 - 10.5	570 - 343	2	Lt
WB LJVD (123)	5	SB	1500 - 1900	2	7.2 - 11.2	996 - 643	2	No
Gilman Dr (16303)	5	SB	1500 - 1900	2	10.3 - 15.1	696 - 478	3	Lt
Nobel Dr (16307)	5	SB	1500 - 1900	2	9.4 - 13.6	768 - 528	3	Lt
Miramar Rd (171)	805	NB	0530 - 0930	1	6.3 - 9.0	1140 - 804	2	Lt
EB LJVD (170)	805	NB	0530 - 0545	1	7.2 - 12.9	996 - 559	2	Rt
			0545 - 0700		8.3	871		
			0700 - 0900		9.6	746		
			0900 - 0930		7.2	996		
Governor Dr (169)	805	NB	0530 - 0540	1	6.3 - 9.3	570 - 385	2	Lt
			0540 - 0930		9.3	385		
Miramar Rd (73)	805	SB	1430 - 1900	2	10.2	704	2	No
EB LJVD (72)	805	SB	1430 - 1900	2	7.2 - 12.1	996 - 593	2	Lt
Nobel Dr (300)	805	SB	1430 - 1900	1	15.7	229	3	Lt
Governor Dr (71)	805	SB	1430 - 1830	2	9.4	768	1	No
			1830 - 1900		8.5	845		

The meters normally operate in a traffic responsive mode.
There are 15 separate rates or steps between the slowest and the fastest discharge rate that depend on the mainlane volumes.

									AM PEAK							PM PEAK						
DI	RTE	CO	PRE	PM	CS	LEG	YR	Dir	1 WAY PHV	% K	% D	% KD	HR	DAY	MNTH	Dir	1 WAY PHV	% K	% D	% KD	HR	DAY	MNTH
10	004	SJ		24.87	313	A	13	W	374	11.56	67.88	7.85	12	SUN	JUL	W	432	13.15	68.9	9.06	13	SUN	AUG
10	004	SJ		24.87	336	B	13	W	320	11.73	64.52	7.57	11	SUN	AUG	E	374	12.85	68.88	8.85	16	FRI	MAY
10	004	SJ		33.08	48	A	13	W	409	12.35	71.38	8.82	11	SUN	JUN	W	462	13.02	76.49	9.96	16	SUN	AUG
10	004	SJ		33.08	352	B	13	W	359	10.47	78.04	8.17	12	SUN	NOV	W	424	12.72	75.85	9.65	16	SUN	AUG
10	004	CAL		29.38	37	A	13	W	407	8.89	66.4	5.9	12	SUN	OCT	W	478	10.92	63.48	6.93	14	SUN	JUL
11	005	SD	R	.878	501	A	13	S	1343	6.01	62	3.73	12	SAT	AUG	S	2407	8.85	75.41	6.68	17	FRI	JAN
11	005	SD		4.632	901	A	13	N	5967	6.27	65.73	4.12	7	THU	OCT	S	7506	8.26	62.78	5.18	17	FRI	JUN
11	005	SD		8.562	902	B	13	N	7751	6.25	75.99	4.75	6	WED	APR	S	8285	8.14	62.33	5.08	16	TUE	MAR
11	005	SD	R	11.13	952	A	13	N	9183	7.57	65.49	4.96	7	WED	AUG	S	9841	7.8	68.12	5.31	15	FRI	OCT
11	005	SD	R	12.65	903	A	13	N	8912	7.67	74.38	5.7	7	THU	JUL	S	7960	7.76	65.62	5.09	15	TUE	MAR
11	005	SD	R	14.74	956	A	13	N	8673	8.54	61.46	5.25	7	TUE	MAR	S	7392	7.93	56.42	4.47	15	FRI	MAY
11	005	SD	R	17.53	896	A	13	N	6802	7.9	59.27	4.68	7	TUE	JUL	S	6320	8.22	52.88	4.35	15	FRI	OCT
11	005	SD	R	20.06	800	B	13	N	7741	7.59	52.13	3.96	7	THU	NOV	N	8149	8.11	51.38	4.17	16	FRI	APR
11	005	SD	R	20.06	931	A	13	N	8550	7.23	59.73	4.32	7	FRI	OCT	S	8584	7.98	54.28	4.33	16	FRI	FEB
11	005	SD	R	22.26	801	B	13	N	9199	7.56	56.04	4.24	7	FRI	SEP	S	9707	8.5	52.65	4.47	17	WED	OCT
11	005	SD	R	25.95	802	B	13	N	9472	7.64	63.18	4.82	7	MON	NOV	S	9673	8.31	59.31	4.93	16	WED	FEB
11	005	SD	R	30.68	502	A	13	S	8164	7.31	54.76	4	9	THU	APR	S	8021	7.4	53.14	3.93	14	SAT	JUL
11	005	SD	R	30.68	803	B	13	S	6211	7.78	55.4	4.31	8	WED	OCT	N	6450	8.06	55.58	4.48	15	FRI	JAN
11	005	SD	R	36.27	898	A	13	S	9351	7.06	57.65	4.07	7	THU	FEB	N	10256	7.74	57.68	4.47	17	TUE	MAR
11	005	SD	R	41.51	978	B	13	S	7639	6.76	53.84	3.64	7	WED	AUG	N	8065	7.09	54.22	3.84	17	WED	MAY
11	005	SD	R	42.71	661	B	13	S	7443	5.72	63.03	3.61	6	THU	OCT	N	8082	7.13	54.89	3.92	17	TUE	MAR
11	005	SD	R	49.28	904	B	13	S	7878	7.29	54.21	3.95	10	SAT	JUL	N	7973	6.92	57.81	4	17	WED	MAY
11	005	SD	R	53.93	906	B	13	S	6989	7.34	55.74	4.09	9	SAT	JUL	S	7123	7.35	56.8	4.17	16	FRI	JUN
11	005	SD	R	54.39	954	A	13	N	5794	8.63	51.62	4.45	10	SAT	MAR	N	5707	7.58	57.86	4.39	13	SUN	JUN
12	005	ORA		.483	401	O	12	S	6000	8.38	52.29	4.38	10	SAT	JUL	S	5800	7.26	58.33	4.23	14	SAT	MAY
12	005	ORA		17.47	902	A	13	S	12906	6.7	57.93	3.88	12	FRI	SEP	S	14633	7.14	61.56	4.4	16	WED	JAN
12	005	ORA		30.26	904	B	13	N	11271	7.18	56.41	4.05	7	THU	MAR	S	10052	6.48	55.79	3.61	17	WED	MAR
12	005	ORA		30.26	905	A	13	N	12637	7.08	54.42	3.86	7	THU	MAY	S	11368	6.09	56.92	3.47	17	WED	MAR
12	005	ORA		33.09	906	A	13	N	12224	6.18	54.15	3.34	6	WED	MAR	N	12543	6.4	53.64	3.43	15	MON	APR
07	005	LA		.7	475	A	13	N	5407	5.86	53.04	3.11	10	SUN	MAR	S	5445	5.62	55.63	3.13	18	WED	MAY
07	005	LA		3.971	52	O	13	S	5287	5.95	52.55	3.12	9	SAT	JAN	S	5216	6.05	50.96	3.08	14	WED	JAN
07	005	LA		12	453	A	13	N	7255	6.11	53.2	3.25	6	TUE	MAR	S	6779	5.98	50.85	3.04	14	SAT	JAN
07	005	LA		15.33	27	O	13	N	8311	6.03	52.96	3.19	9	SAT	APR	S	8198	6.05	51.99	3.15	13	SAT	OCT

									AM PEAK							PM PEAK						
DI	RTE	CO	PRE	PM	CS	LEG	YR	Dir	1 WAY PHV	% K	% D	% KD	HR	DAY	MNTH	Dir	1 WAY PHV	% K	% D	% KD	HR	DAY	MNTH
11	052	SD		.324	720	A	13	W	3778	7.8	60.21	4.69	7	TUE	MAY	E	4495	9.09	61.44	5.59	16	THU	FEB
11	052	SD		3.761	703	B	13	W	3891	8.67	52.7	4.57	7	WED	SEP	E	4712	9.31	59.44	5.53	16	TUE	MAY
11	052	SD		5.494	725	B	13	W	5681	9.17	61.18	5.61	7	TUE	JAN	E	5826	9.34	61.6	5.75	16	WED	OCT
11	052	SD		5.494	726	A	13	W	6508	9.73	65.15	6.34	7	FRI	MAY	E	5139	8.8	56.89	5.01	16	FRI	MAY
11	052	SD		8.713	727	B	13	W	6838	9.34	76.64	7.16	7	MON	APR	E	5773	8.71	69.34	6.04	15	WED	JAN
11	052	SD		8.713	728	A	13	W	6067	9.09	74.74	6.79	7	WED	APR	E	5873	9.18	71.69	6.58	16	MON	MAR
11	052	SD		13.27	729	B	13	W	6115	9.18	74.47	6.83	7	TUE	MAY	E	5677	9.32	68.08	6.34	16	WED	OCT
11	052	SD		13.27	730	A	13	W	4298	7.21	75.79	5.47	6	WED	MAY	E	4743	9.09	66.39	6.03	16	TUE	JAN
11	052	SD		14.96	732	B	13	W	4481	7.96	75.07	5.97	5	TUE	JUN	E	4722	9.44	66.71	6.3	16	THU	APR
11	052	SD		15.83	733	O	13	W	3340	6.58	70.08	4.61	6	TUE	APR	E	4137	9.19	62.2	5.71	16	WED	OCT
11	052	SD		16.74	734	O	13	W	3308	6.59	72.91	4.81	6	THU	MAY	E	3904	9.08	62.48	5.67	15	MON	SEP
11	054	SD		1.88	814	A	13	W	6806	7.77	68.85	5.35	7	TUE	AUG	E	6048	8.23	57.73	4.75	16	WED	DEC
11	054	SD		4.207	815	B	13	W	6098	7.88	65.29	5.15	7	WED	OCT	E	5431	8.32	55.12	4.58	16	THU	APR
11	054	SD		4.207	816	A	13	W	5471	8.35	62.02	5.18	7	THU	DEC	E	4820	8.27	55.16	4.56	16	THU	NOV
11	054	SD		4.994	743	A	13	W	4900	8.91	57.24	5.1	7	WED	DEC	W	4197	8.45	51.72	4.37	17	FRI	MAY
11	056	SD		.309	751	A	13	W	5896	10.17	65.5	6.66	7	FRI	OCT	E	5351	8.57	70.6	6.05	16	THU	APR
11	056	SD		.82	752	A	13	W	5348	8.55	78.77	6.73	7	MON	OCT	E	5044	8.6	73.81	6.35	16	MON	AUG
11	056	SD		3.103	750	B	13	W	4796	9.68	66.26	6.41	7	THU	DEC	E	4358	8.33	69.96	5.83	16	TUE	JUN
11	056	SD		3.103	755	A	13	W	4210	9.02	72.29	6.52	7	FRI	OCT	E	4135	8.8	72.74	6.4	16	THU	NOV
07	057	LA	R	3.167	77	B	13	S	7999	6.58	63.03	4.15	6	MON	APR	S	7113	7.04	52.44	3.69	13	SAT	APR
07	057	LA	R	6.85	97	B	13	S	5838	7.14	52.66	3.76	7	THU	MAY	S	6356	7.58	53.96	4.09	17	TUE	JUL
05	058	SLO		1.87	235	A	13	W	171	7.48	77.03	5.76	7	FRI	SEP	W	183	10.37	59.42	6.16	16	TUE	JUN
06	058	KER		15.41	71	B	12	W	49	17.66	79.03	13.96	9	WED	AUG	E	37	15.67	67.27	10.54	15	WED	AUG
06	058	KER		15.42	72	A	12	W	497	20.75	93.25	19.35	6	WED	MAY	E	386	16.5	91.04	15.02	16	WED	MAY
06	058	KER		28.12	73	A	12	W	809	14.31	89.99	12.88	5	TUE	AUG	E	729	14	82.94	11.61	16	TUE	MAY
06	058	KER		39.96	9	B	12	W	653	9.83	91.2	8.96	5	MON	MAY	E	610	11.25	74.39	8.37	16	MON	AUG
06	058	KER		39.97	10	A	12	W	744	10.5	92.54	9.72	5	WED	MAY	E	547	9.6	74.42	7.15	16	WED	AUG
06	058	KER		51.63	163	B	12	W	1544	7.8	56.95	4.44	12	FRI	AUG	W	1675	8.26	58.34	4.82	16	THU	MAY
06	058	KER	R	53.39	814	A	13	E	4052	8.36	63.1	5.27	7	THU	AUG	E	4120	9.04	59.33	5.36	16	FRI	MAY
06	058	KER	R	57.41	332	A	12	W	2190	7.48	56.18	4.2	7	WED	FEB	E	2373	7.98	57.11	4.56	17	FRI	FEB
06	058	KER	R	94.19	902	A	13	E	1017	7.84	63.29	4.96	10	FRI	FEB	E	1108	9.67	55.85	5.4	13	THU	DEC
06	058	KER	R	107.5	969	B	13	E	961	7.78	63.1	4.91	10	FRI	FEB	W	1074	8.63	63.55	5.49	16	MON	AUG
06	058	KER	R	142.9	953	A	12	E	714	9.72	56.94	5.53	10	MON	DEC	W	777	9.1	66.18	6.02	17	MON	MAY

									AM PEAK							PM PEAK						
DI	RTE	CO	PRE	PM	CS	LEG	YR	Dir	1 WAY PHV	% K	% D	% KD	HR	DAY	MNTH	Dir	1 WAY PHV	% K	% D	% KD	HR	DAY	MNTH
07	710	LA		10.31	38	A	13	S	7273	7.53	53.66	4.04	7	FRI	FEB	N	6810	7.3	51.84	3.78	16	THU	APR
07	710	LA		11.5	421	A	13	S	7588	7.65	53.36	4.08	7	FRI	NOV	N	7431	7.29	54.84	4	16	THU	APR
07	710	LA		14.4	39	O	13	S	9968	7.69	56.37	4.34	7	THU	SEP	N	9240	7.29	55.16	4.02	17	THU	AUG
07	710	LA		23.28	41	B	13	S	8042	7.12	53.84	3.83	7	TUE	JAN	S	7391	6.57	53.62	3.52	13	THU	DEC
07	710	LA		23.75	435	B	11	S	8521	7.82	56.88	4.44	7	FRI	NOV	N	7747	7.22	55.99	4.04	17	THU	APR
07	710	LA	R	27.11	436	A	13	S	2259	8.75	59.07	5.17	7	TUE	FEB	N	1965	7.68	58.53	4.5	17	WED	JUN
04	780	SOL		2.955	339	A	13	E	3054	8.73	63.68	5.56	7	THU	SEP	W	2850	9.06	57.23	5.19	17	WED	MAR
04	780	SOL		3.995	357	A	13	E	3199	8.49	65.81	5.59	7	WED	SEP	W	2618	9.01	50.73	4.57	17	WED	JUN
04	780	SOL		6.656	341	A	13	E	2748	8.37	56.08	4.69	7	TUE	MAY	W	2706	8.39	55.12	4.62	17	WED	SEP
11	805	SD		.647	922	A	13	S	2472	6.9	64.98	4.48	11	SAT	MAR	S	3133	8.7	65.31	5.68	17	FRI	AUG
11	805	SD		5.542	684	O	13	N	6132	5.88	64.61	3.8	6	THU	MAR	S	7336	8.01	56.68	4.54	15	WED	DEC
11	805	SD		8.854	924	B	13	N	10859	5.94	69.7	4.14	6	THU	FEB	S	12741	8.04	60.36	4.86	15	THU	MAY
11	805	SD		8.854	944	A	13	N	8691	6.63	63.55	4.21	7	MON	AUG	S	8984	7.52	57.87	4.35	16	THU	AUG
11	805	SD		11.10	925	B	13	N	9130	6.3	73.11	4.6	6	THU	MAY	S	9523	8.03	59.77	4.8	16	THU	FEB
11	805	SD		13.51	926	B	13	N	10011	6.18	74.15	4.58	6	WED	MAY	S	9990	7.86	58.11	4.57	15	FRI	MAY
11	805	SD		14.46	966	B	13	S	10525	6.57	74.19	4.87	6	MON	MAR	N	10186	7.67	61.47	4.71	15	THU	SEP
11	805	SD		16.43	927	B	13	N	8200	6.79	70.07	4.76	7	WED	JAN	S	9313	8.55	63.17	5.4	15	FRI	MAY
11	805	SD		17.65	928	A	13	N	10907	7.32	77.39	5.66	6	TUE	MAY	S	10886	8.4	67.27	5.65	16	TUE	MAY
11	805	SD		23.65	929	B	13	N	7760	5.91	73.15	4.32	6	TUE	JAN	S	8911	8.03	61.85	4.97	16	TUE	APR
11	805	SD		24.44	683	X	13	N	9360	6.71	71.23	4.78	6	MON	SEP	S	8586	7.28	60.22	4.39	16	MON	JUN
11	805	SD		28.50	930	B	13	S	8083	8.1	65.03	5.27	8	THU	MAR	N	7264	7.71	61.45	4.73	17	THU	JUN
04	880	ALA		2.283	127	A	11	S	7770	7.33	59.51	4.36	8	THU	JUN	N	7769	7.74	56.35	4.36	17	TUE	JUN
04	880	ALA		14.54	909	X	12	S	6796	7.57	50.42	3.82	12	SAT	FEB	N	7199	8.02	50.42	4.04	14	SAT	MAR
04	880	ALA		26.61	129	A	11	N	7133	6.78	50.27	3.41	7	THU	DEC	N	7578	7.13	50.81	3.62	14	FRI	DEC
11	905	SD		3.207	932	A	13	W	2545	9.27	54.05	5.01	7	THU	SEP	E	2535	9.22	54.1	4.99	16	WED	APR
11	905	SD		5.164	942	A	13	E	2783	7.57	64.66	4.89	7	TUE	SEP	W	3026	8.22	64.71	5.32	17	WED	DEC
11	905	SD	R	9.778	128	B	13	E	1834	7.03	56.59	3.98	7	THU	JUL	W	2315	8.06	62.28	5.02	17	TUE	DEC
11	905	SD	R	11.37	126	B	13	W	1420	5.05	77.55	3.92	6	WED	SEP	W	1735	8.35	57.34	4.79	16	WED	JUL
11	905	SD	R	11.37	127	A	13	W	1303	6.16	76.96	4.74	7	THU	JUL	E	1253	8.05	56.59	4.56	17	FRI	AUG

APPENDIX L

TRANSIT INFORMATION


Pacific Ocean
Voigt Drive
(at UCSD East)
Pepper Canyon
(at UCSD West)
VA Medical
Center
Nobel
Drive
Executive
Drive
Terminus
(at Westfield UTC)
UNIVERSITY CITY
LA JOLLA
CLAIREMONT MESA
PACIFIC BEACH
LINDA
VISTA
Balboa
Avenue
Clairemont
Drive
Tecolote
Road
OLD TOWN
SAN DIEGO
Old Town
Transit Center
MIDWAY/
PACIFIC HWY
CORRIDOR
UPTOWN
Mission Bay
San Diego River
Voigt Dr
Genesee Ave
Carroll Rd
Miramar Rd
La Jolla Village Dr
Nobel Dr
Regents Rd
Gilman Dr
Governor Dr
Torrey Pines Rd
La Jolla Pkwy
Prospect St
Pearl St
La Jolla Blvd
Via Capri
Nautilus St
Soledad Mtn Rd
Clairemont Mesa Blvd
Jutland Dr
Morena Blvd
Balboa Ave
Turquoise St
Foothill Blvd
Beryl St
Garnet Ave
Grand Ave
Mission Blvd
Ingraham St
Clairemont Dr
Mt Acadia Blvd
Linda Vista Rd
Ulric St
Mission Center Rd
Tecolote Rd
Friars Rd
Sea World Dr
Sports Arena Blvd
Point Loma Blvd
Nimitz Blvd
Rosecrans St
Barnett Ave
Washington St
University Ave
5th Ave
6th Ave
Mid-Coast Corridor
Transit Project
Trolley - Green Line
Trolley - Blue Line
Trolley - Orange Line
COASTER Line
Trolley Station
Transit Center
COASTER Station
Alignment
Trolley - Future Blue Line Service on Existing Tracks
Trolley - Future Blue Line Extension At-Grade

CASH FARES / *Tarifas en efectivo*

Exact fare, please / *Favor de pagar la cantidad exacta*

Day Pass (Regional) / *Pase diario (Regional)* Compass Card required ($2) / *Se requiere un Compass Card ($2)*	$5.00
One-Way Fare / *Tarifa de una direccíon*	$2.25
Senior (60+)/Disabled/Medicare *Mayores de 60 años/Discapacitados/Medicare*	$1.10*
Children 5 & under / *Niños de 5 años o menos* Up to two children ride free per paying adult / *Máximo dos niños viajan gratis por cada adulto*	FREE / *GRATIS*

MONTHLY PASSES / *Pases mensual*

Adult / *Adulto*	$72.00
Senior (60+)/Disabled/Medicare *Mayores de 60 años/Discapacitados/Medicare*	$18.00*
Youths (18 and under) *Jóvenes (18 años o menos)*	$36.00*

*I.D. required for discount fare or pass.
**Se requiere identificación para tarifas o pases de descuento.*

DAY PASS (REGIONAL) / *Pase diario (Regional)*

All passes are sold on Compass Card, which can be reloaded and reused for up to five years. Compass Cards are available for $2 at select outlets. A $5 Day Pass requires a Compass Card. A paper Day Pass can be purchased on board buses for an additional $2 fee.

Todos los pases se venden en el Compass Card, el cual puede ser recargado y reutilizado por hasta cinco años. Compass Cards están disponibles por $2 en selectas sucursales. Un pase de un día por $5 requiere un Compass Card. Un pase de un día de papel se puede obtener a bordo los autobuses por un costo adicional de $2.

DIRECTORY / *Directorio*

Regional Transit Information *Información de transporte público regional*	**511** or/ó **(619) 233-3004**
TTY/TDD (teletype for hearing impaired) *Teletipo para sordos*	**(619) 234-5005** or/ó **(888) 722-4889**
InfoExpress (24-hour info via Touch-Tone phone) *Información las 24 horas (via teléfono de teclas)*	**(619) 685-4900**
Customer Service / Suggestions *Servicio al cliente / Sugerencias*	**(619) 557-4555**
SafeWatch	**(619) 557-4500**
The Transit Store / Lost & Found *The Transit Store / Objetos extraviados*	**(619) 234-1060**
Articles found on the bus are turned in at The Transit Store *Artículos encontrados en los autobuses son entregados a The Transit Store*	1st & Broadway Downtown San Diego M–F 9am–5pm
For MTS online trip planning *Planificación de viajes por Internet*	**www.sdmts.com**

For more information on riding MTS services, pick up a Rider's Guide on a bus or at The Transit Store, or visit **www.sdmts.com**.

*Para obtener más información sobre el uso de los servicios de MTS, recoja un 'Rider's Guide' en un autobús o en The Transit Store, o visita a **www.sdmts.com**.*

Thank you for riding MTS! ***¡Gracias por viajar con MTS!***

Effective JUNE 7, 2015

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Downtown – UTC / VA Medical Center

via Old Town / Pacific Beach / La Jolla / UCSD

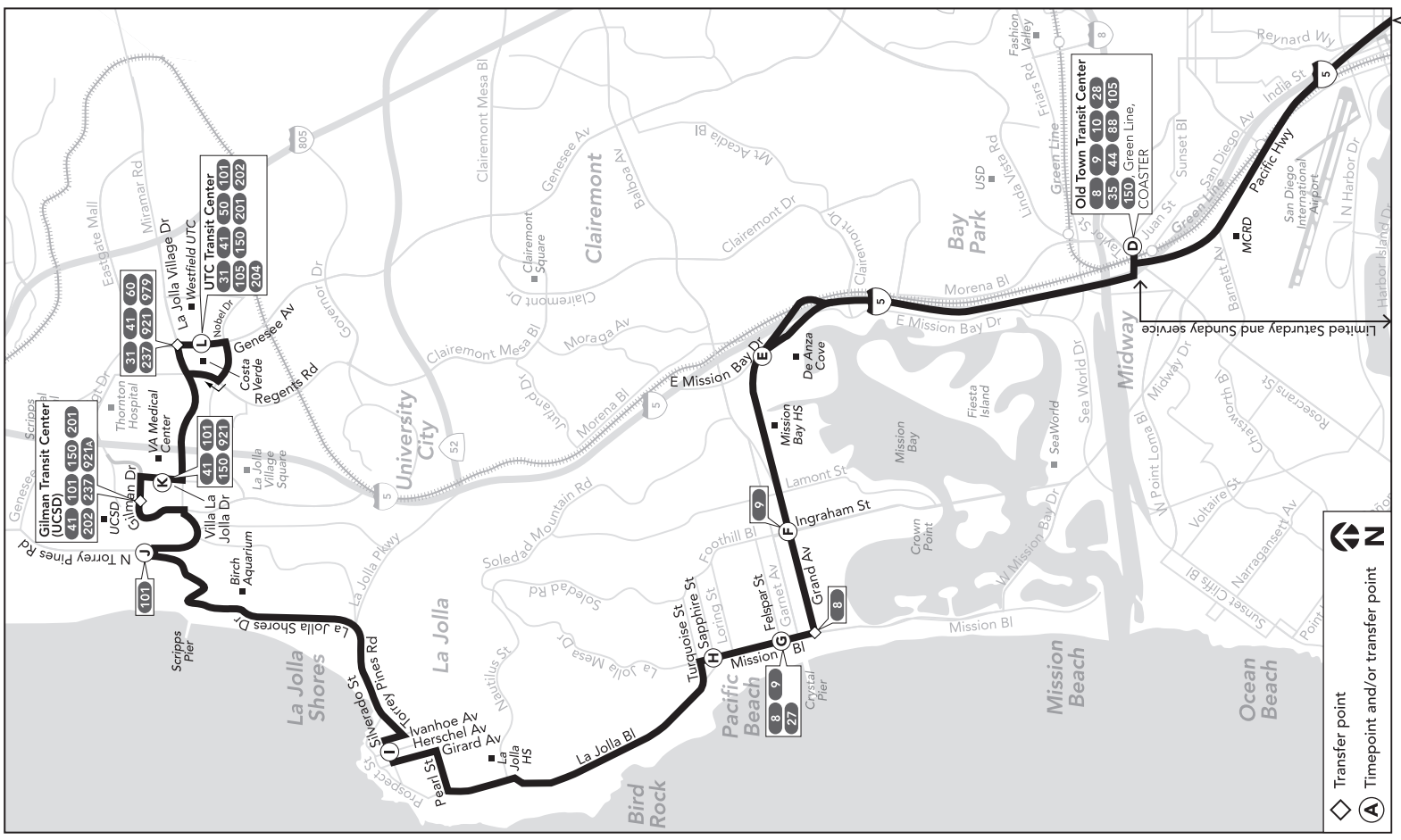
DESTINATIONS

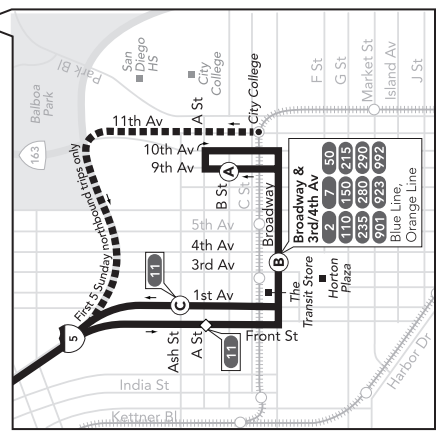
- Birch Aquarium
- Mission Bay High School
- UCSD
- VA Medical Center
- Westfield UTC

TROLLEY CONNECTIONS
Downtown
Old Town

MTS Metropolitan Transit System

Alternative formats available upon request. Please call: (619) 557-4555 / *Formato alternativo disponible al preguntar. Favor de llamar: (619) 557-4555*





The schedules and other information shown in this timetable are subject to change. MTS does not assume responsibility for errors in timetables nor for any inconvenience caused by delayed buses.

Los horarios e información que se indican en este itinerario están sujetos a cambios. MTS no asume responsabilidad por errores en los itinerarios, ni por ningún perjuicio que se origine por los autobuses demorados.

A Saturday or Sunday schedule will be operated on the following holidays and observed holidays:

Se operará con horario de sábado o domingo durante los siguientes días festivos y feriados observados:

New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving, Christmas

Route 30 – Saturday / *sábado*

Downtown ➡ Old Town ➡ Pacific Beach ➡ La Jolla ➡ UTC

Ⓐ 9th Ave. & B St. **DEPART**	Ⓒ 1st Ave. & Ash St.	Ⓓ Old Town Transit Center **ARRIVE**	Ⓓ Old Town Transit Center **DEPART**	Ⓔ Grand Ave. & Mission Bay Dr.	Ⓖ Mission Bl. & Felspar St.	Ⓗ Mission Bl. & Sapphire St.	Ⓘ Silverado St. & Herschel	Ⓙ N. Torrey Pines & LJ Shores	Ⓚ VA Medical Center	Ⓛ UTC Transit Ctr. **ARRIVE**
5:24a	5:33a	5:40a	5:43a	5:52a	6:01a	—	6:17a	6:28a	6:36a	6:49a
5:54	6:03	6:10	6:13	6:22	6:31	—	6:47	6:58	7:06	7:14
—	—	—	6:41	6:50	6:59	7:03a	—	—	—	—
6:24	6:33	6:40	6:43	6:52	7:01	—	7:17	7:28	7:36	7:44
—	—	—	7:11	7:20	7:30	7:34	—	—	—	—
6:54	7:03	7:10	7:13	7:22	7:32	—	7:48	7:59	8:07	8:15
—	—	—	7:30	7:39	7:50	7:55	—	—	—	—
			7:45	7:55	8:07	—	8:25	8:38	8:47	8:56
			8:00	8:10	8:22	8:27	—	—	—	—
			8:15	8:25	8:38	—	8:57	9:11	9:20	9:29
			8:30	8:40	8:53	8:58	—	—	—	—
			8:45	8:55	9:08	—	9:27	9:41	9:50	9:59
			9:00	9:10	9:23	9:28	—	—	—	—
			9:15	9:25	9:38	—	9:57	10:11	10:20	10:29
			9:30	9:40	9:53	9:59	—	—	—	—
			9:45	9:55	10:08	—	10:27	10:41	10:50	10:59
			10:00	10:10	10:25	10:31	—	—	—	—
			10:15	10:25	10:40	—	11:00	11:15	11:24	11:34
			10:30	10:40	10:55	11:01	—	—	—	—
			10:45	10:55	11:10	—	11:30	11:45	11:54	**12:04p**
			11:00	11:10	11:25	11:31	—	—	—	—
AND THEN EVERY 15 OR 30 MINUTES AT: / *Y LUEGO CADA 15 O 30 MINUTOS A LA:*										
—	—	—	**:13**	**:23**	**:38**	—	**:58**	**:13**	**:22**	**:32**
—	—	—	**:28**	**:38**	**:53**	**:59**	—	—	—	—
—	—	—	**:43**	**:53**	**:08**	—	**:28**	**:43**	**:52**	**:02**
—	—	—	**:58**	**:08**	**:23**	**:29**	—	—	—	—
UNTIL: / *HASTA:*										
—	—	—	**3:43p**	**3:53p**	**4:08p**	—	**4:28p**	**4:43p**	**4:52p**	**5:02**
			4:00	**4:10**	**4:25**	**4:31p**	—	—	—	—
			4:15	**4:25**	**4:40**	—	**5:00**	**5:15**	**5:24**	**5:34**
			4:30	**4:40**	**4:55**	**5:01**	—	—	—	—
			4:45	**4:55**	**5:10**	—	**5:30**	**5:45**	**5:54**	**6:04**
			5:00	**5:10**	**5:25**	**5:31**	—	—	—	—
			5:15	**5:25**	**5:38**	—	**5:57**	**6:11**	**6:20**	**6:30**
			5:30	**5:40**	**5:53**	**5:59**	—	—	—	—
			5:45	**5:55**	**6:08**	—	**6:27**	**6:41**	**6:50**	**7:00**
			6:00	**6:10**	**6:23**	**6:29**	—	—	—	—
			6:15	**6:25**	**6:38**	—	**6:57**	**7:11**	**7:20**	**7:30**
			6:30	**6:40**	**6:52**	**6:58**	—	—	—	—
			6:45	**6:55**	**7:07**	—	**7:25**	**7:38**	**7:47**	**7:56**
			7:15	**7:25**	**7:37**	—	**7:55**	**8:08**	**8:17**	**8:26**
			7:45	**7:54**	**8:05**	—	**8:21**	**8:33**	**8:41**	**8:50**
			8:15	**8:24**	**8:35**	—	**8:51**	**9:03**	**9:11**	**9:20**
			8:45	**8:54**	**9:05**	—	**9:21**	**9:33**	**9:41**	**9:50**
			9:15	**9:23**	**9:33**	—	**9:48**	**9:59**	**10:07**	**10:16**
			9:45	**9:53**	**10:03**	—	**10:18**	**10:29**	**10:37**	**10:46**
			10:15	**10:23**	**10:33**	—	**10:48**	**10:59**	**11:07**	**11:16**
			10:45	**10:53**	**11:03**	—	**11:18**	**11:29**	**11:37**	**11:46**
—	—	—	**11:15**	**11:23**	**11:33**	—	**11:48**	**11:59**	12:07a	12:16a
—	—	—	12:15a	12:23a	12:33a	—	—	—	—	—

Trips begin in Old Town. Alternate service from Downtown available on the Green Line.

Viajes comienzan en Old Town. Servicio alterno del centro en la Green Line.

Trips begin in Old Town. Alternate service from Downtown available on the Green Line.

Viajes comienzan en Old Town. Servicio alterno del centro en la Green Line.

UTC ➡ La Jolla ➡ Pacific Beach ➡ Old Town

Ⓛ UTC Transit Center **DEPART**	Ⓚ VA Medical Center	Ⓙ N. Torrey Pines & LJ Shores	Ⓘ Silverado St. & Herschel	Ⓗ Mission Bl. & Sapphire St.	Ⓖ Mission Bl. & Felspar St.	Ⓕ Grand Ave. & Ingraham St.	Ⓓ Old Town Transit Center **ARRIVE**	Ⓑ Ⓐ
—	—	—	—	5:53a	5:56a	6:00a	6:12a	—
—	—	—	6:12a	—	6:26	6:30	6:42	
6:08a	6:16a	6:21a	6:32	—	6:46	6:50	7:02	
6:36	6:44	6:49	7:00	—	7:14	7:18	7:30	
7:03	7:11	7:17	7:28	—	7:43	7:48	8:00	
7:33	7:41	7:47	7:58	—	8:13	8:18	8:30	
7:57	8:06	8:12	8:24	—	8:41	8:46	9:00	
8:23	8:33	8:39	8:51	—	9:09	9:15	9:30	
8:43	8:53	8:59	9:11	—	9:29	9:35	9:50	
—	—	—	—	9:39	9:43	9:49	10:05	
9:07	9:17	9:23	9:36	—	9:55	10:01	10:17	
—	—	—	—	10:05	10:10	10:18	10:35	
9:37	9:47	9:53	10:06	—	10:25	10:31	10:47	
—	—	—	—	10:35	10:40	10:48	11:05	
10:03	10:13	10:19	10:32	—	10:52	11:00	11:17	
—	—	—	—	11:05	11:10	11:18	11:35	
10:33	10:43	10:49	11:02	—	11:22	11:30	11:47	
—	—	—	—	11:35	11:40	11:48	**12:05p**	
11:03	11:13	11:19	11:32	—	11:52	**12:00p**	**12:17**	
—	—	—	—	**12:05p**	**12:10p**	**12:18**	**12:35**	
11:33	11:43	11:49	**12:02p**	—	**12:22**	**12:30**	**12:47**	
—	—	—	—	**12:35**	**12:40**	**12:48**	**1:05**	
12:03p	**12:13p**	**12:19p**	**12:32**	—	**12:52**	**1:00**	**1:17**	
—	—	—	—	**1:04**	**1:09**	**1:18**	**1:35**	
12:33	**12:43**	**12:49**	**1:02**	—	**1:22**	**1:30**	**1:47**	
—	—	—	—	**1:35**	**1:40**	**1:49**	**2:06**	
1:01	**1:11**	**1:18**	**1:32**	—	**1:52**	**2:01**	**2:18**	
—	—	—	—	**2:05**	**2:10**	**2:19**	**2:36**	
1:31	**1:41**	**1:48**	**2:02**	—	**2:22**	**2:31**	**2:48**	
AND THEN EVERY 15 OR 30 MINUTES AT: / Y LUEGO CADA 15 O 30 MINUTOS A LA:								
—	—	—	—	**:35**	**:40**	**:49**	**:06**	
:01	**:11**	**:18**	**:32**	—	**:52**	**:01**	**:18**	
—	—	—	—	**:05**	**:10**	**:19**	**:36**	
:31	**:41**	**:48**	**:02**	—	**:22**	**:31**	**:48**	
UNTIL: / HASTA:								
5:01	**5:11**	**5:18**	**5:32**	—	**5:52**	**6:01**	**6:18**	
—	—	—	—	**6:06**	**6:11**	**6:20**	**6:36**	
5:31	**5:41**	**5:48**	**6:02**	—	**6:22**	**6:31**	**6:48**	
—	—	—	—	**6:36**	**6:41**	**6:50**	**7:06**	
6:06	**6:15**	**6:21**	**6:34**	—	**6:53**	**7:02**	**7:18**	
6:36	**6:45**	**6:51**	**7:04**	—	**7:23**	**7:32**	**7:48**	
7:10	**7:19**	**7:25**	**7:37**	—	**7:55**	**8:03**	**8:18**	
7:40	**7:49**	**7:55**	**8:07**	—	**8:25**	**8:33**	**8:48**	
8:21	**8:30**	**8:36**	**8:48**	—	**9:05**	**9:12**	**9:26**	—
8:59	**9:08**	**9:14**	**9:26**	—	**9:43**	**9:48**	**10:01**	—
9:33	**9:41**	**9:47**	**9:59**	—	**10:14**	**10:19**	**10:31**	—
10:03	**10:11**	**10:17**	**10:29**	—	**10:44**	**10:49**	**11:01**	—
10:33	**10:41**	**10:47**	**10:59**	—	**11:14**	**11:19**	**11:31**	—
11:35	**11:43**	**11:49**	12:00a	—	12:14a	12:19a	12:31a D	—

Alternate Sunday service to Downtown available on the Green Line.
Servicio de domingo alterno al centro en la Green Line.

D = Trip continues in service ending at Broadway & 3rd Av. at 12:40 am / *Viaje continúa en servicio y termina en Broadway y 3rd Av a las 12:40 am*

Route 30 – Monday through Friday / *lunes a viernes*

Downtown ➡ Old Town ➡ Pacific Beach ➡ La Jolla ➡ UTC

Ⓐ 9th Ave. & B St. **DEPART**	Ⓒ 1st Ave. & Ash St.	Ⓓ Old Town Transit Center **ARRIVE**	Ⓓ Old Town Transit Center **DEPART**	Ⓔ Grand Ave. & Mission Bay Dr.	Ⓖ Mission Bl. & Felspar St.	Ⓘ Silverado St. & Herschel	Ⓙ N. Torrey Pines & La Jolla Shores	Ⓚ VA Medical Center	Ⓛ UTC Transit Ctr. **ARRIVE**
5:09a	5:18a	5:25a	5:28a	5:37a	5:47a	6:04a	6:14a	6:22a	6:31a
5:39	5:48	5:55	5:58	6:07	6:17	6:34	6:44	6:52	7:01
5:52	6:02	6:10	6:13	6:22	6:32	6:50	7:01	7:10	7:19
6:07	6:17	6:25	6:28	6:37	6:47	7:05	7:16	7:25	7:34
6:21	6:32	6:40	6:43	6:52	7:03	7:22	7:34	7:44	7:54
6:36	6:47	6:55	6:58	7:07	7:18	7:37	7:49	7:59	8:09
6:51	7:02	7:10	7:13	7:23	7:35	7:54	8:06	8:16	8:26
7:06	7:17	7:25	7:28	7:38	7:50	8:10	8:23	8:33	8:43
7:21	7:32	7:40	7:43	7:53	8:05	8:25	8:38	8:48	8:58
7:36	7:47	7:55	7:58	8:08	8:20	8:40	8:53	9:03	9:13
7:51	8:02	8:10	8:13	8:23	8:35	8:55	9:08	9:18	9:28
8:06	8:17	8:25	8:28	8:38	8:50	9:10	9:23	9:33	9:43
8:21	8:32	8:40	8:43	8:53	9:05	9:25	9:38	9:47	9:57
8:36	8:47	8:55	8:58	9:08	9:20	9:40	9:53	10:02	10:12
8:51	9:02	9:10	9:13	9:23	9:35	9:55	10:08	10:17	10:27
9:05	9:17	9:25	9:28	9:37	9:49	10:09	10:22	10:31	10:41
9:21	9:33	9:41	9:44	9:53	10:04	10:23	10:36	10:45	10:55
9:36	9:48	9:56	9:59	10:08	10:19	10:38	10:50	10:59	11:09
9:51	10:03	10:11	10:14	10:23	10:34	10:53	11:05	11:14	11:24
10:08	10:20	10:28	10:31	10:40	10:51	11:10	11:22	11:31	11:41
10:23	10:35	10:43	10:46	10:55	11:06	11:25	11:37	11:46	11:56
10:39	10:51	10:59	11:02	11:11	11:22	11:41	11:53	**12:02p**	**12:12p**
10:54	11:06	11:14	11:17	11:26	11:37	11:56	**12:08p**	**12:17**	**12:27**
11:09	11:21	11:29	11:32	11:41	11:52	**12:11p**	**12:23**	**12:32**	**12:42**
11:24	11:36	11:44	11:47	11:56	**12:07p**	**12:26**	**12:38**	**12:47**	**12:57**
11:39	11:51	11:59	**12:02p**	**12:11p**	**12:22**	**12:41**	**12:54**	**1:04**	**1:14**
11:54	**12:06p**	**12:14p**	**12:17**	**12:26**	**12:38**	**12:57**	**1:10**	**1:20**	**1:30**
12:09p	**12:21**	**12:29**	**12:32**	**12:41**	**12:53**	**1:12**	**1:25**	**1:35**	**1:46**
12:24	**12:36**	**12:44**	**12:47**	**12:56**	**1:08**	**1:27**	**1:40**	**1:50**	**2:01**
12:38	**12:50**	**12:58**	**1:01**	**1:10**	**1:22**	**1:41**	**1:54**	**2:04**	**2:15**
12:52	**1:04**	**1:12**	**1:15**	**1:24**	**1:36**	**1:55**	**2:08**	**2:18**	**2:29**
1:07	**1:19**	**1:27**	**1:30**	**1:39**	**1:51**	**2:10**	**2:23**	**2:33**	**2:44**
1:22	**1:34**	**1:42**	**1:45**	**1:54**	**2:06**	**2:25**	**2:38**	**2:48**	**2:59**
1:37	**1:48**	**1:56**	**1:59**	**2:08**	**2:21**	**2:41**	**2:55**	**3:05**	**3:16**
1:52	**2:03**	**2:11**	**2:14**	**2:23**	**2:36**	**2:56**	**3:10**	**3:21**	**3:32**
2:07	**2:18**	**2:26**	**2:29**	**2:38**	**2:51**	**3:11**	**3:25**	**3:36**	**3:47**
2:22	**2:33**	**2:41**	**2:44**	**2:53**	**3:06**	**3:26**	**3:40**	**3:51**	**4:02**
2:37	**2:48**	**2:56**	**2:59**	**3:08**	**3:21**	**3:41**	**3:55**	**4:06**	**4:17**
2:51	**3:02**	**3:10**	**3:13**	**3:22**	**3:35**	**3:55**	**4:09**	**4:20**	**4:31**
3:06	**3:17**	**3:25**	**3:28**	**3:37**	**3:50**	**4:10**	**4:24**	**4:35**	**4:46**
3:21	**3:32**	**3:40**	**3:43**	**3:52**	**4:05**	**4:25**	**4:39**	**4:50**	**5:01**
3:36	**3:47**	**3:55**	**3:58**	**4:07**	**4:20**	**4:40**	**4:54**	**5:05**	**5:16**
3:51	**4:02**	**4:10**	**4:13**	**4:22**	**4:35**	**4:55**	**5:09**	**5:20**	**5:31**
4:06	**4:17**	**4:25**	**4:28**	**4:37**	**4:50**	**5:10**	**5:24**	**5:35**	**5:46**
4:21	**4:32**	**4:40**	**4:43**	**4:52**	**5:05**	**5:25**	**5:39**	**5:50**	**6:01**
4:36	**4:47**	**4:55**	**4:58**	**5:07**	**5:20**	**5:40**	**5:54**	**6:05**	**6:16**
4:51	**5:02**	**5:10**	**5:13**	**5:22**	**5:35**	**5:55**	**6:09**	**6:20**	**6:31**
5:07	**5:17**	**5:25**	**5:28**	**5:37**	**5:50**	**6:09**	**6:23**	**6:34**	**6:45**
5:23	**5:33**	**5:41**	**5:44**	**5:53**	**6:06**	**6:24**	**6:38**	**6:48**	**6:59**
5:39	**5:49**	**5:57**	**6:00**	**6:09**	**6:22**	**6:40**	**6:54**	**7:04**	**7:15**
5:55	**6:05**	**6:13**	**6:16**	**6:25**	**6:38**	**6:56**	**7:10**	**7:20**	**7:31**
6:10	**6:20**	**6:28**	**6:31**	**6:40**	**6:52**	**7:10**	**7:23**	**7:33**	**7:44**
6:26	**6:36**	**6:44**	**6:47**	**6:56**	**7:08**	**7:26**	**7:39**	**7:49**	**7:59**
6:41	**6:51**	**6:59**	**7:02**	**7:11**	**7:23**	**7:40**	**7:53**	**8:03**	**8:13**
6:56	**7:06**	**7:14**	**7:17**	**7:25**	**7:37**	**7:54**	**8:07**	**8:17**	**8:27**
—	—	—	**7:30**	**7:38**	**7:49**	—	—	—	—
			7:45	**7:53**	**8:04**	**8:20**	**8:31**	**8:40**	**8:50**
			8:00	**8:08**	**8:19**	—	—	—	—
			8:15	**8:23**	**8:34**	**8:50**	**9:01**	**9:10**	**9:20**
			8:30	**8:38**	**8:49**	—	—	—	—
			8:45	**8:53**	**9:04**	**9:20**	**9:31**	**9:40**	**9:50**
			9:15	**9:23**	**9:33**	**9:48**	**9:59**	**10:08**	**10:18**
			9:45	**9:53**	**10:03**	**10:18**	**10:29**	**10:37**	**10:46**
			10:15	**10:23**	**10:33**	**10:48**	**10:59**	**11:07**	**11:16**
			10:45	**10:53**	**11:03**	**11:18**	**11:29**	**11:37**	**11:46**
			11:15	**11:23**	**11:33**	**11:48**	**11:59**	12:07a	12:16a
			11:45	**11:53**	12:03a	12:18a	12:29a	12:37	12:46
—	—	—	12:15a	12:23a	12:33	—	—	—	—

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UTC ➡ La Jolla ➡ Pacific Beach ➡ Old Town ➡ Downtown

Ⓛ UTC Transit Ctr. **DEPART**	Ⓚ VA Medical Center	Ⓙ N. Torrey Pines & La Jolla Shores	Ⓘ Silverado St. & Herschel	Ⓖ Mission Bl. & Felspar St.	Ⓕ Grand Ave. & Ingraham St.	Ⓓ Old Town Transit Center **ARRIVE**	Ⓓ Old Town Transit Center **DEPART**	Ⓑ Broadway & 3rd Ave.	Ⓐ 9th Ave. & B St. **ARRIVE**
—	—	—	4:57a	5:12a	5:16a	5:27a	5:27a	5:36a	5:40a
—	—	—	—	5:40	5:45	5:57	5:57	6:07	6:11
—	—	—	5:54	6:10	6:15	6:27	6:27	6:37	6:41
5:46a	5:55a	6:01a	6:14	6:30	6:35	6:47	6:47	6:57	7:01
—	—	—	—	6:43	6:49	7:02	7:05	7:15	7:19
6:11	6:21	6:28	6:41	6:58	7:04	7:17	7:20	7:30	7:34
6:26	6:36	6:43	6:56	7:13	7:19	7:32	7:35	7:45	7:49
6:41	6:51	6:58	7:11	7:28	7:34	7:47	7:50	8:00	8:04
6:55	7:05	7:12	7:25	7:42	7:48	8:02	8:05	8:16	8:20
7:09	7:20	7:27	7:40	7:57	8:03	8:17	8:20	8:31	8:36
7:23	7:34	7:41	7:55	8:12	8:18	8:32	8:35	8:46	8:51
7:37	7:48	7:56	8:10	8:27	8:33	8:47	8:50	9:01	9:06
7:52	8:03	8:11	8:25	8:42	8:48	9:02	9:05	9:16	9:21
8:07	8:18	8:26	8:40	8:57	9:03	9:17	9:20	9:31	9:36
8:22	8:33	8:41	8:55	9:12	9:18	9:32	9:35	9:46	9:51
8:39	8:50	8:58	9:12	9:29	9:35	9:49	9:52	10:03	10:08
8:56	9:07	9:15	9:29	9:46	9:52	10:06	10:09	10:20	10:25
9:11	9:22	9:30	9:44	10:01	10:07	10:21	10:24	10:35	10:40
9:26	9:37	9:45	9:59	10:16	10:22	10:36	10:39	10:50	10:55
9:41	9:52	10:00	10:14	10:31	10:37	10:51	10:54	11:05	11:10
9:56	10:07	10:15	10:29	10:46	10:52	11:06	11:09	11:20	11:25
10:11	10:22	10:30	10:44	11:01	11:07	11:21	11:24	11:35	11:40
10:26	10:37	10:45	10:59	11:16	11:22	11:36	11:39	11:50	11:55
10:41	10:52	11:00	11:14	11:31	11:37	11:51	11:54	**12:05p**	**12:10p**
10:55	11:06	11:14	11:28	11:45	11:51	**12:05p**	**12:08p**	**12:19**	**12:24**
11:09	11:20	11:28	11:42	11:59	**12:05p**	**12:19**	**12:22**	**12:33**	**12:38**
11:23	11:34	11:42	11:56	**12:13p**	**12:19**	**12:33**	**12:36**	**12:47**	**12:52**
11:38	11:49	11:57	**12:11p**	**12:28**	**12:34**	**12:48**	**12:51**	**1:02**	**1:07**
11:54	**12:05p**	**12:13p**	**12:27**	**12:44**	**12:50**	**1:04**	**1:07**	**1:18**	**1:23**
12:09p	**12:20**	**12:28**	**12:42**	**12:59**	**1:05**	**1:19**	**1:22**	**1:33**	**1:38**
12:25	**12:36**	**12:44**	**12:58**	**1:15**	**1:21**	**1:35**	**1:38**	**1:49**	**1:54**
12:40	**12:51**	**12:59**	**1:13**	**1:30**	**1:36**	**1:50**	**1:53**	**2:04**	**2:09**
12:52	**1:02**	**1:10**	**1:24**	**1:42**	**1:48**	**2:02**	**2:05**	**2:17**	**2:22**
1:06	**1:16**	**1:23**	**1:37**	**1:56**	**2:02**	**2:16**	**2:19**	**2:31**	**2:36**
1:19	**1:29**	**1:36**	**1:50**	**2:10**	**2:16**	**2:31**	**2:34**	**2:46**	**2:51**
1:32	**1:42**	**1:49**	**2:03**	**2:24**	**2:31**	**2:46**	**2:49**	**3:01**	**3:06**
1:46	**1:56**	**2:03**	**2:18**	**2:39**	**2:46**	**3:01**	**3:04**	**3:17**	**3:22**
2:01	**2:11**	**2:18**	**2:33**	**2:54**	**3:01**	**3:16**	**3:19**	**3:32**	**3:37**
2:15	**2:25**	**2:32**	**2:47**	**3:08**	**3:15**	**3:30**	**3:33**	**3:46**	**3:51**
2:30	**2:40**	**2:47**	**3:02**	**3:23**	**3:30**	**3:45**	**3:48**	**4:01**	**4:06**
2:45	**2:55**	**3:02**	**3:17**	**3:38**	**3:45**	**4:00**	**4:03**	**4:16**	**4:21**
2:59	**3:10**	**3:17**	**3:32**	**3:53**	**4:00**	**4:15**	**4:18**	**4:31**	**4:36**
3:13	**3:24**	**3:31**	**3:47**	**4:09**	**4:16**	**4:31**	**4:34**	**4:47**	**4:52**
3:31	**3:41**	**3:48**	**4:03**	**4:24**	**4:31**	**4:46**	**4:49**	**5:02**	**5:07**
3:45	**3:56**	**4:04**	**4:20**	**4:42**	**4:49**	**5:05**	**5:08**	**5:21**	**5:26**
4:00	**4:11**	**4:19**	**4:35**	**4:57**	**5:04**	**5:20**	**5:23**	**5:36**	**5:41**
4:15	**4:26**	**4:34**	**4:50**	**5:12**	**5:19**	**5:35**	**5:38**	**5:51**	**5:56**
4:31	**4:42**	**4:50**	**5:06**	**5:28**	**5:35**	**5:51**	**5:54**	**6:07**	**6:12**
4:44	**4:55**	**5:03**	**5:19**	**5:41**	**5:48**	**6:04**	**6:07**	**6:20**	**6:25**
5:00	**5:11**	**5:19**	**5:35**	**5:56**	**6:02**	**6:17**	**6:20**	**6:33**	**6:38**
5:15	**5:26**	**5:34**	**5:50**	**6:11**	**6:17**	**6:32**	**6:35**	**6:48**	**6:53**
5:31	**5:42**	**5:49**	**6:05**	**6:26**	**6:32**	**6:47**	**6:50**	**7:03**	**7:07**
5:47	**5:58**	**6:05**	**6:20**	**6:41**	**6:47**	**7:02**	**7:05**	**7:17**	**7:21**
6:03	**6:13**	**6:20**	**6:35**	**6:55**	**7:01**	**7:16**	—	—	—
6:18	**6:28**	**6:35**	**6:50**	**7:10**	**7:16**	**7:31**			
6:33	**6:43**	**6:50**	**7:05**	**7:25**	**7:31**	**7:46**			
6:50	**7:00**	**7:07**	**7:21**	**7:41**	**7:47**	**8:01**			
7:06	**7:16**	**7:23**	**7:37**	**7:56**	**8:02**	**8:16**			
7:21	**7:31**	**7:38**	**7:52**	**8:11**	**8:17**	**8:31**			
7:54	**8:04**	**8:11**	**8:24**	**8:42**	**8:48**	**9:01**			
8:29	**8:38**	**8:44**	**8:56**	**9:13**	**9:18**	**9:31**			
8:59	**9:08**	**9:14**	**9:26**	**9:43**	**9:48**	**10:01**			
9:31	**9:39**	**9:45**	**9:57**	**10:13**	**10:19**	**10:31**			
10:03	**10:11**	**10:17**	**10:29**	**10:44**	**10:49**	**11:01**			
10:33	**10:41**	**10:47**	**10:59**	**11:14**	**11:19**	**11:31**			
11:04	**11:12**	**11:18**	**11:30**	**11:44**	**11:49**	12:01a	—	—	—
11:35	**11:43**	**11:49**	12:00a	12:14a	12:19a	12:31	12:31a	12:40a	—

Trips end at Old Town. Alternate service to Downtown available on the Green Line.

Viajes terminan en Old Town. Servicio alterno al centro en la Green Line.

Route 30 – Sunday / *domingo*

Downtown ➡ Old Town ➡ Pacific Beach ➡ La Jolla ➡ UTC

City College Transit Center	Ⓓ Old Town Transit Center **DEPART**	Ⓔ Grand Ave. & Mission Bay Dr.	Ⓖ Mission Bl. & Felspar St.	Ⓗ Mission Bl. & Sapphire St.	Ⓘ Silverado St. & Herschel	Ⓙ N. Torrey Pines & LJ Shores	Ⓚ VA Medical Center	Ⓛ UTC Transit Ctr. **ARRIVE**
▲ 5:46a	5:58a	6:07a	6:16a	—	6:32a	6:43a	6:51a	6:59a
▲ 6:16	6:28	6:37	6:46	—	7:02	7:13	7:21	7:29
▲ 6:46	6:58	7:07	7:17	—	7:33	7:44	7:52	8:00
▲ 7:16	7:28	7:37	7:48	—	8:05	8:17	8:26	8:35
▲ 7:46	7:58	8:08	8:20	—	8:38	8:51	9:00	9:09
—	8:30	8:40	8:53	—	9:12	9:26	9:35	9:44
	9:00	9:10	9:23	—	9:42	9:56	10:05	10:14
	9:15	9:25	9:38	9:43a	—	—	—	—
	9:30	9:40	9:53	—	10:12	10:26	10:35	10:44
	9:45	9:55	10:08	10:14	—	—	—	—
	10:00	10:10	10:25	—	10:45	11:00	11:09	11:19
	10:15	10:25	10:40	10:46	—	—	—	—
	10:30	10:40	10:55	—	11:15	11:30	11:39	11:49
	10:45	10:55	11:10	11:16	—	—	—	—
	11:00	11:10	11:25	—	11:45	**12:00p**	**12:09p**	**12:19p**
	11:15	11:25	11:40	11:46	—	—	—	—
	11:28	11:38	11:53	—	**12:13p**	**12:28**	**12:37**	**12:47**
	11:43	11:53	**12:08p**	**12:14p**	—	—	—	—
	11:58	**12:08p**	**12:23**	—	**12:43**	**12:58**	**1:07**	**1:17**
	AND THEN EVERY 15 OR 30 MINUTES AT: / *Y LUEGO CADA 15 O 30 MINUTOS A LA:*							
	:13	**:23**	**:38**	**:44**	—	—	—	—
	:28	**:38**	**:53**	—	**:13**	**:28**	**:37**	**:47**
	:43	**:53**	**:08**	**:14**	—	—	—	—
	:58	**:08**	**:23**	—	**:43**	**:58**	**:07**	**:17**
	UNTIL: / *HASTA:*							
	3:58p	**4:08**	**4:23**	—	**4:43**	**4:58**	**5:07**	**5:17**
	4:15	**4:25**	**4:40**	**4:46**	—	—	—	—
	4:30	**4:40**	**4:55**	—	**5:15**	**5:30**	**5:39**	**5:49**
	4:45	**4:55**	**5:10**	**5:16**	—	—	—	—
	5:00	**5:10**	**5:25**	—	**5:45**	**6:00**	**6:09**	**6:19**
	5:15	**5:25**	**5:38**	**5:44**	—	—	—	—
	5:30	**5:40**	**5:53**	—	**6:12**	**6:26**	**6:35**	**6:45**
	5:45	**5:55**	**6:08**	**6:14**	—	—	—	—
	6:00	**6:10**	**6:23**	—	**6:42**	**6:56**	**7:05**	**7:15**
	6:30	**6:40**	**6:52**	—	**7:10**	**7:23**	**7:32**	**7:41**
	7:00	**7:10**	**7:22**	—	**7:40**	**7:53**	**8:02**	**8:11**
	7:30	**7:39**	**7:50**	—	**8:06**	**8:18**	**8:26**	**8:35**
	8:00	**8:09**	**8:20**	—	**8:36**	**8:48**	**8:56**	**9:05**
	8:30	**8:39**	**8:50**	—	**9:06**	**9:18**	**9:26**	**9:35**
	9:00	**9:09**	**9:20**	—	**9:36**	**9:48**	**9:56**	**10:05**
	9:30	**9:38**	**9:48**	—	**10:03**	**10:14**	**10:22**	**10:31**
—	**10:00**	**10:08**	**10:18**	—	**10:33**	**10:44**	**10:52**	**11:01**
	11:00	**11:08**	**11:18**	—	**11:33**	**11:44**	**11:52**	12:01a

Alternate Sunday service from Downtown available on the Green Line. *Servicio de domingo alterno del centro en la Green Line.*

UTC ➡ La Jolla ➡ Pacific Beach ➡ Old Town

Ⓛ UTC Transit Center **DEPART**	Ⓚ VA Medical Center	Ⓙ N. Torrey Pines & LJ Shores	Ⓘ Silverado St. & Herschel	Ⓗ Mission Bl. & Sapphire St.	Ⓖ Mission Bl. & Felspar St.	Ⓕ Grand Ave. & Ingraham St.	Ⓓ Old Town Transit Center **ARRIVE**	Ⓑ Ⓐ
6:21a	6:29a	6:34a	6:45a	—	6:59a	7:03a	7:15a	—
7:18	7:26	7:32	7:43	—	7:58	8:03	8:15	
7:48	7:56	8:02	8:13	—	8:28	8:33	8:45	
8:12	8:21	8:27	8:39	—	8:56	9:01	9:15	
8:33	8:43	8:49	9:01	—	9:19	9:25	9:40	
8:52	9:02	9:08	9:21	—	9:40	9:46	10:02	
—	—	—	—	9:54a	9:58	10:04	10:20	
9:22	9:32	9:38	9:51	—	10:10	10:16	10:32	
—	—	—	—	10:20	10:25	10:33	10:50	
9:52	10:02	10:08	10:21	—	10:40	10:46	11:02	
—	—	—	—	10:50	10:55	11:03	11:20	
10:18	10:28	10:34	10:47	—	11:07	11:15	11:32	
—	—	—	—	11:20	11:25	11:33	11:50	
10:48	10:58	11:04	11:17	—	11:37	11:45	**12:02p**	
—	—	—	—	11:50	11:55	**12:03p**	**12:20**	
11:18	11:28	11:34	11:47	—	**12:07p**	**12:15**	**12:32**	
—	—	—	—	**12:20p**	**12:25**	**12:33**	**12:50**	
11:48	11:58	**12:04p**	**12:17p**	—	**12:37**	**12:45**	**1:02**	
—	—	—	—	**12:49**	**12:54**	**1:03**	**1:20**	
12:18p	**12:28p**	**12:34**	**12:47**	—	**1:07**	**1:15**	**1:32**	
—	—	—	—	**1:20**	**1:25**	**1:34**	**1:51**	
12:46	**12:56**	**1:03**	**1:17**	—	**1:37**	**1:46**	**2:03**	
—	—	—	—	**1:50**	**1:55**	**2:04**	**2:21**	
1:16	**1:26**	**1:33**	**1:47**	—	**2:07**	**2:16**	**2:33**	
AND THEN EVERY 15 OR 30 MINUTES AT: / *Y LUEGO CADA 15 O 30 MINUTOS A LA:*								
—	—	—	—	**:20**	**:25**	**:34**	**:51**	
:46	**:56**	**:03**	**:17**	—	**:37**	**:46**	**:03**	
—	—	—	—	**:50**	**:55**	**:04**	**:21**	
:16	**:26**	**:33**	**:47**	—	**:07**	**:16**	**:33**	
UNTIL: / *HASTA:*								
—	—	—	—	**5:50**	**5:55**	**6:04**	**6:21**	
5:16	**5:26**	**5:33**	**5:47**	—	**6:07**	**6:16**	**6:33**	
5:46	**5:56**	**6:03**	**6:17**	—	**6:37**	**6:46**	**7:03**	
6:21	**6:30**	**6:36**	**6:49**	—	**7:08**	**7:17**	**7:33**	
6:51	**7:00**	**7:06**	**7:19**	—	**7:38**	**7:47**	**8:03**	
7:25	**7:34**	**7:40**	**7:52**	—	**8:10**	**8:18**	**8:33**	—
8:06	**8:15**	**8:21**	**8:33**	—	**8:50**	**8:57**	**9:11**	—
8:44	**8:53**	**8:59**	**9:11**	—	**9:28**	**9:33**	**9:46**	—
9:14	**9:23**	**9:29**	**9:41**	—	**9:58**	**10:03**	**10:16**	—
9:48	**9:56**	**10:02**	**10:14**	—	**10:29**	**10:34**	**10:46**	—

Alternate Sunday service to Downtown available on the Green Line. *Servicio de domingo alterno al centro en la Green Line.*

▲ = Trip departs City College Transit Center on 11th Av. and operates non-stop to Old Town via MCRD. / *Viaje sale del City College Transit Center en avenida 11 y opera sin paradas a Old Town vía MCRD.*

CASH FARES / *Tarifas en efectivo*

Exact fare, please / *Favor de pagar la cantidad exacta*

Day Pass (Regional) / *Pase diario (Regional)* Compass Card required ($2) / *Se requiere un Compass Card ($2)*	$5.00
One-Way Fare / *Tarifa de una direccíon*	$2.25
Senior (60+)/Disabled/Medicare *Mayores de 60 años/Discapacitados/Medicare*	$1.10*
Children 5 & under / *Niños de 5 años o menos* Up to two children ride free per paying adult / *Máximo dos niños viajan gratis por cada adulto*	FREE / *GRATIS*

MONTHLY PASSES / *Pases mensual*

Adult / *Adulto*	$72.00
Senior (60+)/Disabled/Medicare *Mayores de 60 años/Discapacitados/Medicare*	$18.00*
Youths (18 and under) *Jóvenes (18 años o menos)*	$36.00*

*I.D. required for discount fare or pass.
**Se requiere identificación para tarifas o pases de descuento.*

DAY PASS (REGIONAL) / *Pase diario (Regional)*

All passes are sold on Compass Card, which can be reloaded and reused for up to five years. Compass Cards are available for $2 at select outlets. A $5 Day Pass requires a Compass Card. A paper Day Pass can be purchased on board buses for an additional $2 fee.

Todos los pases se venden en el Compass Card, el cual puede ser recargado y reutilizado por hasta cinco años. Compass Cards están disponibles por $2 en selectas sucursales. Un pase de un día por $5 requiere un Compass Card. Un pase de un día de papel se puede obtener a bordo los autobuses por un costo adicional de $2.

DIRECTORY / *Directorio*

Regional Transit Information *Información de transporte público regional*	**511** or/ó **(619) 233-3004**
TTY/TDD (teletype for hearing impaired) *Teletipo para sordos*	**(619) 234-5005** or/ó **(888) 722-4889**
InfoExpress (24-hour info via Touch-Tone phone) *Información las 24 horas (via teléfono de teclas)*	**(619) 685-4900**
Customer Service / Suggestions *Servicio al cliente / Sugerencias*	**(619) 557-4555**
SafeWatch	**(619) 557-4500**
Lost & Found *Objetos extraviados*	Route 31 **(619) 234-1060** Route 921 Weekday **(619) 409-4601** Route 921 Weekend **(877) 841-3278**
The Transit Store	**(619) 234-1060** 1st & Broadway, Downtown San Diego M–F 9am–5pm
For MTS online trip planning *Planificación de viajes por Internet*	**www.sdmts.com**

For more information on riding MTS services, pick up a Rider's Guide on a bus or at The Transit Store, or visit **www.sdmts.com**.

*Para obtener más información sobre el uso de los servicios de MTS, recoja un 'Rider's Guide' en un autobús o en The Transit Store, o visita a **www.sdmts.com**.*

Thank you for riding MTS! ***¡Gracias por viajar con MTS!***

Effective JUNE 7, 2015

31
UTC – Mira Mesa
via Miramar Rd.

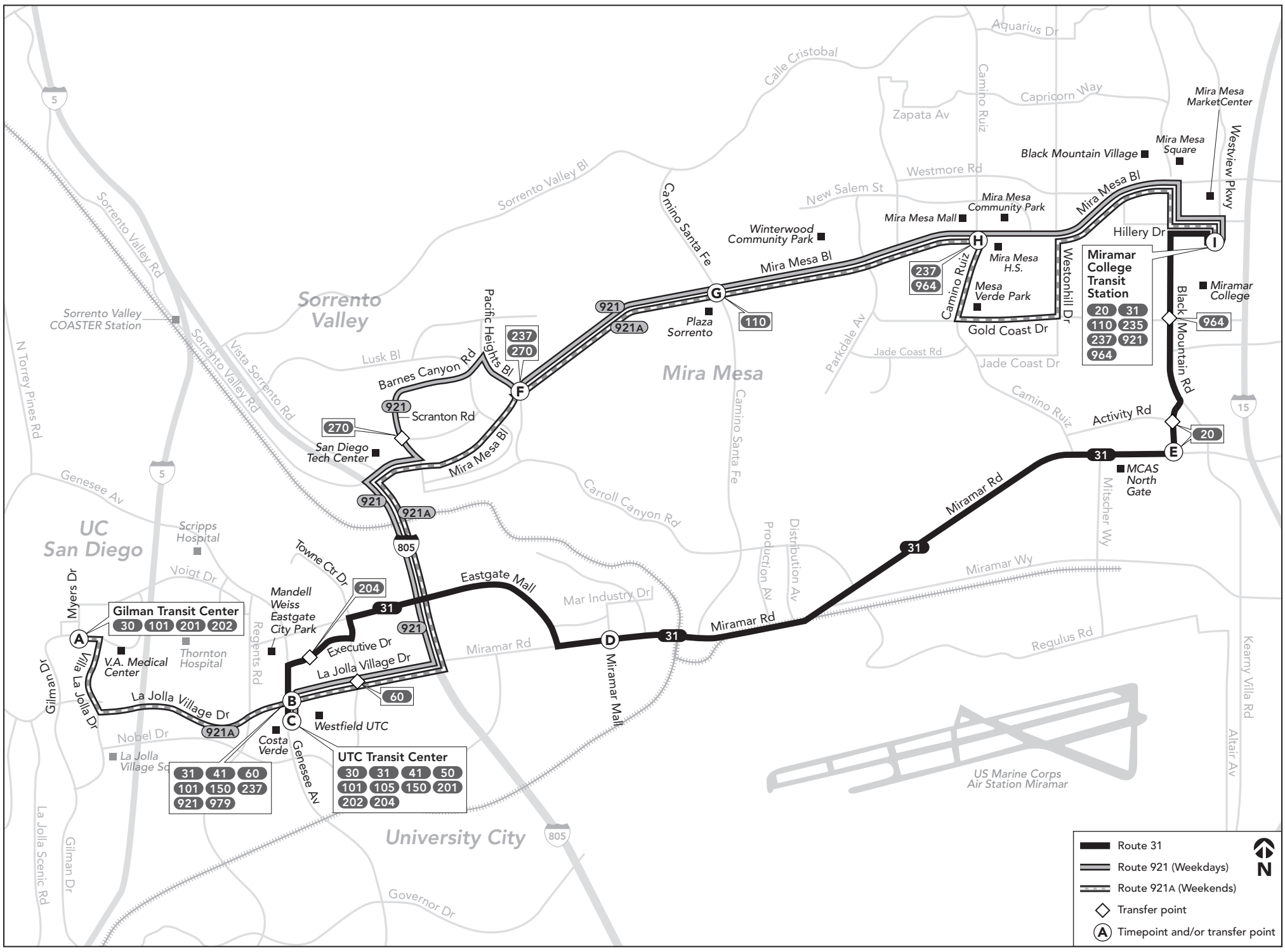
921
UTC – Mira Mesa
via Mira Mesa Bl.

DESTINATIONS

- MCAS Miramar - North Gate (31)
- Miramar College
- Mira Mesa High School (921)
- Mira Mesa Mall (921)
- Mira Mesa MarketCenter
- VA Medical Center (921)
- Westfield UTC
- Sorrento Mesa (921)
- Sorrento Valley (921)
- Miramar College Transit Station

MTS Metropolitan Transit System

Alternative formats available upon request. Please call: (619) 557-4555 / *Formato alternativo disponible al preguntar. Favor de llamar: (619) 557-4555*



The schedules and other information shown in this timetable are subject to change. MTS does not assume responsibility for errors in timetables nor for any inconvenience caused by delayed buses.
Los horarios e información que se indican en este itinerario están sujetos a cambios. MTS no asume responsabilidad por errores en los itinerarios, ni por ningún perjuicio que se origine por los autobuses demorados.

Route 31 – Monday through Friday / *lunes a viernes*

University City ➡ Miramar ➡ Mira Mesa

Ⓒ UTC Transit Center **DEPART**	Ⓓ Miramar Rd. & Miramar Mall	Ⓔ Black Mountain Rd. & Miramar Rd.	Ⓘ Miramar College Transit Station **ARRIVE**
5:37a	5:46a	5:55a	6:04a
6:07	6:16	6:25	6:34
6:37	6:48	6:59	7:08
7:02	7:13	7:24	7:33
7:30	7:41	7:52	8:01
8:00	8:11	8:22	8:31
8:30	8:41	8:52	9:01
2:58p	**3:08p**	**3:19p**	**3:30p**
3:28	**3:38**	**3:49**	**4:00**
3:58	**4:08**	**4:19**	**4:30**
4:30	**4:41**	**4:53**	**5:04**
5:00	**5:11**	**5:23**	**5:34**
5:30	**5:41**	**5:53**	**6:04**
6:00	**6:10**	**6:20**	**6:31**
6:30	**6:40**	**6:50**	**7:01**

Mira Mesa ➡ Miramar ➡ University City

Ⓘ Miramar College Transit Station **DEPART**	Ⓔ Miramar Rd. & Black Mountain Rd.	Ⓓ Miramar Rd. & Miramar Mall	Ⓒ UTC Transit Center **ARRIVE**
6:19a	6:25a	6:35a	6:46a
6:44	6:52	7:03	7:15
7:14	7:22	7:33	7:45
7:43	7:51	8:02	8:14
8:13	8:21	8:32	8:44
8:44	8:52	9:03	9:15
9:14	9:22	9:33	9:45
2:14p	**2:21p**	**2:31p**	**2:43p**
2:44	**2:51**	**3:01**	**3:13**
3:11	**3:19**	**3:30**	**3:43**
3:41	**3:49**	**4:00**	**4:13**
4:11	**4:19**	**4:30**	**4:43**
4:41	**4:49**	**5:00**	**5:13**
5:11	**5:19**	**5:30**	**5:43**
5:44	**5:52**	**6:03**	**6:16**

Route 31 does not operate on weekends or on the following holidays and observed holidays >>> New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving, Christmas

La ruta 31 no ofrece servicio durante el fin de semana o durante los siguientes días festivos y feriados observados

Route 921 – Monday through Friday / *lunes a viernes*

University City ➡ Sorrento Valley ➡ Mira Mesa

Ⓒ La Jolla Village Dr. & Genesee Av. **DEPART**	Ⓕ Mira Mesa Bl. & Pacific Heights Bl.	Ⓖ Mira Mesa Bl. & Camino Santa Fe	Ⓗ Mira Mesa Bl. & Camino Ruiz	Ⓘ Miramar College Transit Station **ARRIVE**
6:10a	6:23a	6:28a	6:34a	6:43a
6:40	6:54	6:59	7:05	7:15
7:10	7:24	7:29	7:35	7:45
7:36	7:53	7:59	8:05	8:15
8:07	8:24	8:30	8:36	8:46
8:37	8:54	9:00	9:06	9:16
9:13	9:27	9:32	9:38	9:48
9:43	9:57	10:02	10:08	10:18
10:13	10:27	10:32	10:38	10:48
10:43	10:57	11:02	11:08	11:18
11:13	11:27	11:32	11:38	11:48
11:43	11:57	**12:02p**	**12:08p**	**12:18p**
12:13p	**12:27p**	**12:32**	**12:38**	**12:48**
12:45	**12:59**	**1:04**	**1:10**	**1:20**
1:15	**1:29**	**1:34**	**1:40**	**1:50**
1:47	**2:01**	**2:06**	**2:12**	**2:22**
2:18	**2:32**	**2:37**	**2:43**	**2:53**
2:48	**3:02**	**3:07**	**3:13**	**3:23**
3:16	**3:31**	**3:36**	**3:43**	**3:54**
3:46	**4:01**	**4:06**	**4:13**	**4:24**
4:12	**4:28**	**4:34**	**4:42**	**4:54**
4:42	**4:58**	**5:04**	**5:12**	**5:24**
5:12	**5:28**	**5:34**	**5:42**	**5:54**
5:42	**5:58**	**6:04**	**6:12**	**6:24**
6:07	**6:23**	**6:28**	**6:35**	**6:46**
6:37	**6:53**	**6:58**	**7:04**	**7:14**
7:07	**7:23**	**7:28**	**7:34**	**7:44**

Mira Mesa ➡ Sorrento Valley ➡ University City

Ⓘ Miramar College Transit Station **DEPART**	Ⓗ Mira Mesa Bl. & Camino Ruiz	Ⓖ Mira Mesa Bl. & Camino Santa Fe	Ⓕ Pacific Heights Bl. & Mira Mesa Bl.	Ⓒ Genesee Av. & La Jolla Village Dr. **ARRIVE**
5:45a	5:54a	5:59a	6:04a	6:16a
6:15	6:25	6:31	6:36	6:49
6:45	6:55	7:01	7:06	7:19
7:15	7:25	7:32	7:37	7:52
7:45	7:55	8:02	8:07	8:22
8:15	8:25	8:32	8:37	8:52
8:45	8:55	9:02	9:07	9:22
9:15	9:25	9:32	9:37	9:52
9:43	9:53	9:59	10:04	10:18
10:10	10:20	10:26	10:31	10:45
10:40	10:50	10:56	11:01	11:15
11:10	11:20	11:26	11:31	11:45
11:40	11:50	11:56	**12:01p**	**12:15p**
12:10p	**12:20p**	**12:26p**	**12:31**	**12:45**
12:40	**12:50**	**12:56**	**1:01**	**1:15**
1:10	**1:20**	**1:26**	**1:31**	**1:45**
1:40	**1:50**	**1:56**	**2:01**	**2:15**
2:10	**2:20**	**2:26**	**2:31**	**2:45**
2:40	**2:50**	**2:56**	**3:01**	**3:18**
3:08	**3:18**	**3:24**	**3:29**	**3:46**
3:38	**3:48**	**3:54**	**3:59**	**4:20**
4:08	**4:18**	**4:24**	**4:29**	**4:50**
4:38	**4:48**	**4:54**	**4:59**	**5:20**
5:08	**5:18**	**5:24**	**5:29**	**5:50**
5:38	**5:48**	**5:54**	**5:59**	**6:20**
6:08	**6:18**	**6:24**	**6:29**	**6:46**
6:38	**6:48**	**6:54**	**6:59**	**7:16**

Route 921A – Saturday and Sunday / *sábado y domingo*

University City ➡ Sorrento Valley ➡ Mira Mesa

	Ⓐ Gilman Transit Center (UCSD) **DEPART**	Ⓑ La Jolla Village Dr. & Genesee Av.	Ⓕ Mira Mesa Bl. & Pacific Heights Bl.	Ⓖ Mira Mesa Bl. & Camino Santa Fe	Ⓗ Camino Ruiz & Mira Mesa Bl.	Ⓘ Miramar College Transit Station **ARRIVE**
A	7:11a	7:20a	7:29a	7:31a	7:36a	7:48a
A	8:11	8:20	8:29	8:31	8:36	8:48
A	9:08	9:18	9:27	9:29	9:35	9:48
A	10:09	10:19	10:28	10:30	10:36	10:49
A	11:10	11:20	11:29	11:31	11:37	11:50
A	**12:10p**	**12:20p**	**12:29p**	**12:31p**	**12:37p**	**12:50p**
A	**1:10**	**1:20**	**1:29**	**1:31**	**1:37**	**1:50**
A	**2:10**	**2:20**	**2:29**	**2:31**	**2:37**	**2:50**
A	**3:10**	**3:20**	**3:29**	**3:31**	**3:37**	**3:50**
A	**4:10**	**4:20**	**4:29**	**4:31**	**4:37**	**4:50**
A	**5:10**	**5:20**	**5:29**	**5:31**	**5:37**	**5:50**
A	**6:09**	**6:19**	**6:28**	**6:30**	**6:36**	**6:49**
A	**7:08**	**7:17**	**7:26**	**7:28**	**7:33**	**7:45**

Mira Mesa ➡ Sorrento Valley ➡ University City

	Ⓘ Miramar College Transit Station **DEPART**	Ⓗ Mira Mesa Bl. & Camino Ruiz	Ⓖ Mira Mesa Bl. & Camino Santa Fe	Ⓕ Mira Mesa Bl. & Pacific Heights Bl.	Ⓑ La Jolla Village Dr. & Genesee Av.	Ⓐ Gilman Transit Center (UCSD) **ARRIVE**
A	7:07a	7:19a	7:24a	7:26a	7:35a	7:43a
A	8:07	8:19	8:24	8:26	8:35	8:43
A	9:07	9:21	9:26	9:29	9:38	9:48
A	10:07	10:21	10:26	10:29	10:38	10:48
A	11:07	11:21	11:26	11:29	11:38	11:48
A	**12:07p**	**12:21p**	**12:26p**	**12:29p**	**12:38p**	**12:48p**
A	**1:07**	**1:21**	**1:26**	**1:29**	**1:38**	**1:48**
A	**2:07**	**2:21**	**2:26**	**2:29**	**2:38**	**2:48**
A	**3:07**	**3:21**	**3:26**	**3:29**	**3:38**	**3:48**
A	**4:07**	**4:21**	**4:26**	**4:29**	**4:38**	**4:48**
A	**5:07**	**5:21**	**5:26**	**5:29**	**5:38**	**5:48**
A	**6:07**	**6:21**	**6:26**	**6:29**	**6:38**	**6:48**
A	**7:07**	**7:20**	**7:25**	**7:27**	**7:36**	**7:44**

A = Saturday trips have an alternate routing in Mira Mesa & Sorrento Valley. See map. / *Viajes de sábado tienen ruta alternativa en Mira Mesa y Sorrento Valley. Vea el mapa.*

A Saturday or Sunday schedule will be operated on the following holidays and observed holidays >>> New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving, Christmas

Se operará con horario de sábado o domingo durante los siguientes días festivos y feriados observados

CASH FARES / *Tarifas en efectivo*

Exact fare, please / *Favor de pagar la cantidad exacta*

Day Pass (Regional) / *Pase diario (Regional)* Compass Card required ($2) / *Se requiere un Compass Card ($2)*	$5.00
One-Way Fare / *Tarifa de una direccíon*	$2.25
Senior (60+)/Disabled/Medicare *Mayores de 60 años/Discapacitados/Medicare*	$1.10*
Children 5 & under / *Niños de 5 años o menos* Up to two children ride free per paying adult / *Máximo dos niños viajan gratis por cada adulto*	FREE / *GRATIS*

MONTHLY PASSES / *Pases mensual*

Adult / *Adulto*	$72.00
Senior (60+)/Disabled/Medicare *Mayores de 60 años/Discapacitados/Medicare*	$18.00*
Youths (18 and under) *Jóvenes (18 años o menos)*	$36.00*

*I.D. required for discount fare or pass.
**Se requiere identificación para tarifas o pases de descuento.*

DAY PASS (REGIONAL) / *Pase diario (Regional)*

All passes are sold on Compass Card, which can be reloaded and reused for up to five years. Compass Cards are available for $2 at select outlets. A $5 Day Pass requires a Compass Card. A paper Day Pass can be purchased on board buses for an additional $2 fee.

Todos los pases se venden en el Compass Card, el cual puede ser recargado y reutilizado por hasta cinco años. Compass Cards están disponibles por $2 en selectas sucursales. Un pase de un día por $5 requiere un Compass Card. Un pase de un día de papel se puede obtener a bordo los autobuses por un costo adicional de $2.

DIRECTORY / *Directorio*

Regional Transit Information *Información de transporte público regional*	**511** or/ó **(619) 233-3004**
TTY/TDD (teletype for hearing impaired) *Teletipo para sordos*	**(619) 234-5005** or/ó **(888) 722-4889**
InfoExpress (24-hour info via Touch-Tone phone) *Información las 24 horas (via teléfono de teclas)*	**(619) 685-4900**
Customer Service / Suggestions *Servicio al cliente / Sugerencias*	**(619) 557-4555**
SafeWatch	**(619) 557-4500**
The Transit Store / Lost & Found *The Transit Store / Objetos extraviados*	**(619) 234-1060**
Articles found on the bus are turned in at The Transit Store *Artículos encontrados en los autobuses son entregados a The Transit Store*	1st & Broadway Downtown San Diego M–F 9am–5pm
For MTS online trip planning *Planificación de viajes por Internet*	**www.sdmts.com**

For more information on riding MTS services, pick up a Rider's Guide on a bus or at The Transit Store, or visit **www.sdmts.com**.
*Para obtener más información sobre el uso de los servicios de MTS, recoja un 'Rider's Guide' en un autobús o en The Transit Store, o visita a **www.sdmts.com**.*

Thank you for riding MTS! ***¡Gracias por viajar con MTS!***

Effective JUNE 7, 2015

41

Fashion Valley – UCSD / VA Medical Ctr.

via Genesee Av.

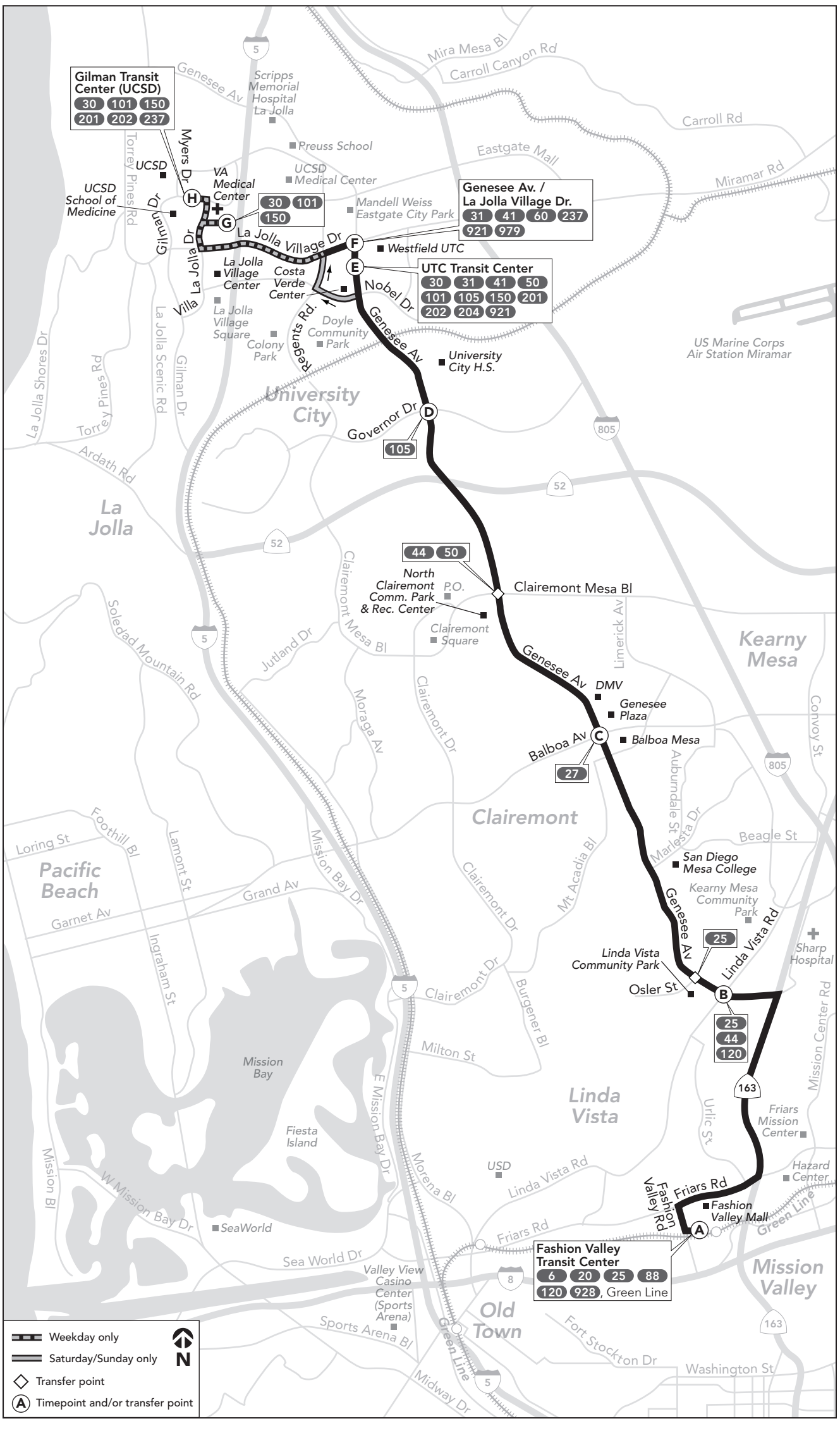
DESTINATIONS

- Costa Verde Center
- Fashion Valley Mall
- Genesee Plaza
- Linda Vista Community Park
- Mesa College
- University City High School
- Westfield UTC

TROLLEY CONNECTIONS
Fashion Valley

MTS Metropolitan Transit System

Alternative formats available upon request. Please call: (619) 557-4555 / *Formato alternativo disponible al preguntar. Favor de llamar: (619) 557-4555*



A Saturday or Sunday schedule will be operated on the following holidays and observed holidays:
Se operará con horario de sábado o domingo durante los siguientes días festivos y feriados observados:

New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving, Christmas

Plan your trip!

On the web
Visit **www.sdmts.com** and click on ***Travel Planner***

On the phone
Dial 511 and say "public transportation"

On the go
Use the Google Maps app on your smartphone

The schedules and other information shown in this timetable are subject to change. MTS does not assume responsibility for errors in timetables nor for any inconvenience caused by delayed buses.
Los horarios e información que se indican en este itinerario están sujetos a cambios. MTS no asume responsabilidad por errores en los itinerarios, ni por ningún perjuicio que se origine por los autobuses demorados.

Route 41 – Monday through Friday / *lunes a viernes*

Fashion Valley ➡ Clairemont ➡ UCSD / VA Medical Center

Ⓐ Fashion Valley Transit Center **DEPART**	Ⓑ Genesee Av. & Linda Vista Rd.	Ⓒ Genesee Av. & Balboa Av.	Ⓓ Genesee Av. & Governor Dr.	Ⓕ La Jolla Village Dr. & Genesee Av.	Ⓖ V.A. Medical Center	Ⓗ Gilman Transit Center (UCSD) **ARRIVE**
5:21a	5:30a	5:36a	5:45a	5:50a	5:56a	5:59a
5:36	5:45	5:51	6:00	6:05	6:11	6:14
5:52	6:01	6:07	6:16	6:21	6:27	6:30
6:06	6:15	6:22	6:32	6:37	6:43	6:46
6:21	6:31	6:38	6:48	6:54	7:00	7:02
—	—	**T** 6:49	7:00	7:06	7:12	7:15
6:36	6:46	6:53	7:04	7:10	7:16	7:19
—	—	**T** 7:04	7:15	7:21	7:27	7:30
6:51	7:01	7:08	7:19	7:25	7:31	7:34
—	—	**T** 7:18	7:30	7:37	7:43	7:46
7:05	7:15	7:22	7:34	7:41	7:47	7:50
—	—	**T** 7:33	7:45	7:52	7:59	8:03
7:20	7:30	7:37	7:49	7:56	8:03	8:07
—	—	**T** 7:48	8:00	8:07	8:14	8:18
7:35	7:45	7:52	8:04	8:11	8:18	8:22
—	—	**T** 8:03	8:15	8:22	8:29	8:33
7:50	8:00	8:07	8:19	8:26	8:33	8:37
—	—	**T** 8:18	8:30	8:37	8:44	8:48
8:05	8:15	8:22	8:34	8:41	8:48	8:52
—	—	**T** 8:33	8:45	8:52	8:59	9:03
8:20	8:30	8:37	8:49	8:56	9:03	9:07
—	—	**T** 8:48	9:00	9:07	9:14	9:18
8:35	8:45	8:52	9:04	9:11	9:18	9:22
—	—	**T** 9:03	9:15	9:22	9:29	9:33
8:50	9:00	9:07	9:19	9:26	9:33	9:37
—	—	**T** 9:19	9:30	9:36	9:43	9:47
9:06	9:16	9:23	9:34	9:40	9:47	9:51
—	—	**T** 9:34	9:44	9:50	9:57	10:01
9:21	9:31	9:38	9:48	9:54	10:01	10:05
9:36	9:46	9:53	10:03	10:09	10:16	10:20
9:51	10:01	10:08	10:18	10:24	10:31	10:35
AND THEN EVERY 15 MINUTES AT: / *Y LUEGO CADA 15 MINUTOS A LA:*						
:06	:16	:23	:33	:39	:46	:50
:21	:31	:38	:48	:54	:01	:05
:36	:46	:53	:03	:09	:16	:20
:51	:01	:08	:18	:24	:31	:35
UNTIL: / *HASTA:*						
2:06p	**2:16p**	**2:23p**	**2:33p**	**2:39p**	**2:46p**	**2:50p**
2:22	**2:32**	**2:39**	**2:49**	**2:55**	**3:02**	**3:06**
2:37	**2:47**	**2:55**	**3:06**	**3:12**	**3:19**	**3:23**
2:52	**3:02**	**3:10**	**3:21**	**3:27**	**3:34**	**3:38**
3:07	**3:17**	**3:25**	**3:36**	**3:42**	**3:49**	**3:53**
3:22	**3:32**	**3:40**	**3:51**	**3:57**	**4:04**	**4:08**
3:37	**3:47**	**3:55**	**4:06**	**4:12**	**4:19**	**4:23**
3:51	**4:02**	**4:10**	**4:21**	**4:28**	**4:35**	**4:40**
4:05	**4:16**	**4:24**	**4:35**	**4:42**	**4:49**	**4:54**
4:20	**4:31**	**4:39**	**4:50**	**4:57**	**5:04**	**5:09**
4:35	**4:46**	**4:54**	**5:05**	**5:12**	**5:19**	**5:24**
4:50	**5:01**	**5:09**	**5:20**	**5:27**	**5:34**	**5:39**
5:05	**5:16**	**5:24**	**5:35**	**5:42**	**5:49**	**5:54**
5:20	**5:31**	**5:39**	**5:50**	**5:57**	**6:04**	**6:09**
5:35	**5:46**	**5:54**	**6:05**	**6:12**	**6:19**	**6:24**
5:50	**6:00**	**6:08**	**6:19**	**6:25**	**6:32**	**6:37**
6:05	**6:15**	**6:23**	**6:33**	**6:39**	**6:46**	**6:50**
6:21	**6:31**	**6:39**	**6:49**	**6:55**	**7:02**	**7:06**
6:37	**6:47**	**6:54**	**7:03**	**7:09**	**7:16**	**7:20**
7:07	**7:17**	**7:24**	**7:33**	**7:39**	**7:45**	**7:48**
7:37	**7:47**	**7:54**	**8:03**	**8:09**	**8:15**	**8:18**
8:07	**8:16**	**8:22**	**8:30**	**8:35**	**8:41**	**8:44**
8:37	**8:46**	**8:52**	**9:00**	**9:05**	**9:11**	**9:14**
9:07	**9:16**	**9:22**	**9:30**	**9:35**	**9:41**	**9:44**
9:37	**9:46**	**9:52**	**10:00**	**10:05**	**10:11**	**10:14**
10:07	**10:16**	**10:22**	**10:30**	**10:35**	**10:41**	**10:44**
10:37	**10:46**	**10:52**	**11:00**	**11:05**	**11:11**	**11:14**
11:07	**11:16**	**11:22**	**11:30**	**11:35**	**11:41**	**11:44**

UCSD / VA Medical Center ➡ Clairemont ➡ Fashion Valley

Ⓗ Gilman Transit Center (UCSD) **DEPART**	Ⓖ V.A. Medical Center	Ⓕ Genesee Av. & La Jolla Village Dr.	Ⓓ Genesee Av. & Governor Dr.	Ⓒ Genesee Av. & Balboa Av.	Ⓑ Genesee Av. & Linda Vista Rd.	Ⓐ Fashion Valley Transit Center **ARRIVE**
5:48a	5:52a	5:58a	6:03a	6:11a	6:18a	6:25a
6:03	6:07	6:13	6:18	6:26	6:33	6:40
6:18	6:22	6:28	6:33	6:41	6:48	6:55
6:33	6:37	6:43	6:48	6:56	7:03	7:10
6:44	6:48	6:55	7:01	7:10	7:17	7:25
6:59	7:03	7:10	7:16	7:25	7:32	7:40
7:14	7:18	7:25	7:31	7:40	7:47	7:55
7:29	7:33	7:40	7:46	7:55	8:02	8:10
7:44	7:48	7:55	8:01	8:10	8:17	8:25
7:59	8:03	8:10	8:16	8:25	8:32	8:40
8:14	8:18	8:25	8:31	8:40	8:47	8:55
8:29	8:33	8:40	8:46	8:55	9:02	9:10
8:44	8:48	8:55	9:01	9:11	9:18	9:25
8:59	9:03	9:10	9:16	9:26	9:33	9:40
9:14	9:18	9:25	9:31	9:41	9:48	9:55
9:29	9:33	9:40	9:46	9:56	10:03	10:10
9:44	9:48	9:55	10:01	10:11	10:18	10:25
9:59	10:03	10:10	10:16	10:26	10:33	10:40
10:14	10:18	10:25	10:31	10:41	10:48	10:55
10:29	10:33	10:40	10:46	10:56	11:03	11:10
10:44	10:48	10:55	11:01	11:11	11:18	11:25
10:59	11:03	11:10	11:16	11:26	11:33	11:40
11:12	11:16	11:23	11:30	11:40	11:47	11:55
AND THEN EVERY 15 MINUTES AT: / *Y LUEGO CADA 15 MINUTOS A LA:*						
:27	:31	:38	:45	:55	:02	:10
:42	:46	:53	:00	:10	:17	:25
:57	:01	:08	:15	:25	:32	:40
:12	:16	:23	:30	:40	:47	:55
UNTIL: / *HASTA:*						
2:27p	**2:31p**	**2:38p**	**2:45p**	**2:55p**	**3:02p**	**3:10p**
2:42	**2:46**	**2:53**	**3:00**	**3:10**	**3:17**	**3:25**
2:54	**2:58**	**3:06**	**3:14**	**3:24**	**3:31**	**3:39**
T 3:01	**3:05**	**3:12**	**3:20**	**3:30**	—	—
3:08	**3:14**	**3:21**	**3:28**	**3:38**	**3:45**	**3:53**
T 3:15	**3:19**	**3:27**	**3:35**	**3:44**	—	—
3:21	**3:25**	**3:32**	**3:40**	**3:51**	**3:58**	**4:08**
T 3:28	**3:32**	**3:40**	**3:48**	**3:59**	—	—
3:34	**3:38**	**3:46**	**3:54**	**4:05**	**4:13**	**4:23**
T 3:41	**3:45**	**3:53**	**4:01**	**4:12**	—	—
3:49	**3:53**	**4:01**	**4:09**	**4:20**	**4:28**	**4:38**
T 3:56	**4:00**	**4:08**	**4:16**	**4:27**	—	—
4:04	**4:08**	**4:16**	**4:24**	**4:35**	**4:43**	**4:53**
T 4:11	**4:15**	**4:23**	**4:31**	**4:42**	—	—
4:19	**4:23**	**4:31**	**4:39**	**4:50**	**4:58**	**5:08**
T 4:26	**4:30**	**4:38**	**4:46**	**4:57**	—	—
4:34	**4:38**	**4:46**	**4:54**	**5:05**	**5:13**	**5:23**
T 4:41	**4:45**	**4:53**	**5:01**	**5:12**	—	—
4:49	**4:53**	**5:01**	**5:09**	**5:20**	**5:28**	**5:38**
T 4:56	**5:00**	**5:08**	**5:16**	**5:27**	—	—
5:04	**5:08**	**5:16**	**5:24**	**5:35**	**5:43**	**5:53**
T 5:11	**5:15**	**5:23**	**5:31**	**5:42**	—	—
5:19	**5:23**	**5:31**	**5:39**	**5:50**	**5:58**	**6:08**
T 5:26	**5:30**	**5:38**	**5:46**	**5:57**	—	—
5:34	**5:38**	**5:46**	**5:54**	**6:05**	**6:13**	**6:23**
5:52	**5:56**	**6:04**	**6:11**	**6:21**	**6:29**	**6:38**
6:07	**6:11**	**6:19**	**6:26**	**6:36**	**6:44**	**6:53**
6:22	**6:26**	**6:34**	**6:41**	**6:51**	**6:59**	**7:08**
6:40	**6:44**	**6:51**	**6:58**	**7:08**	**7:15**	**7:23**
6:57	**7:01**	**7:08**	**7:15**	**7:24**	**7:30**	**7:38**
7:14	**7:18**	**7:25**	**7:31**	**7:40**	**7:46**	**7:53**
7:44	**7:48**	**7:55**	**8:01**	**8:10**	**8:16**	**8:23**
8:14	**8:18**	**8:25**	**8:31**	**8:40**	**8:46**	**8:53**
8:44	**8:48**	**8:55**	**9:01**	**9:10**	**9:16**	**9:23**
9:18	**9:22**	**9:29**	**9:34**	**9:43**	**9:49**	**9:55**
9:48	**9:52**	**9:59**	**10:04**	**10:13**	**10:19**	**10:25**
10:18	**10:22**	**10:29**	**10:34**	**10:43**	**10:49**	**10:55**
10:48	**10:52**	**10:59**	**11:04**	**11:13**	**11:19**	**11:25**

T = Trip operates September through June when UCSD is in session. Trip does not operate during summer session. / *Viaje que opera de septiembre a junio en los días escolares de UCSD. Viaje no opera durante la sesión de verano.*

Route 41 – Saturday / *sábado*

Fashion Valley ➡ Clairemont ➡ UTC

Ⓐ Fashion Valley Transit Center **DEPART**	Ⓑ Genesee Av. & Linda Vista Rd.	Ⓒ Genesee Av. & Balboa Av.	Ⓓ Genesee Av. & Governor Dr.	Ⓔ UTC Transit Center **ARRIVE**	Ⓕ Ⓖ Ⓗ
6:07a	6:16a	6:22a	6:30a	6:38a	Alternate service available on Routes 30, 150, 201, and 202 / *Servicio alterno por las rutas 30, 150, 201, y 202*
6:37	6:46	6:52	7:00	7:08	
7:07	7:16	7:22	7:31	7:40	
7:37	7:46	7:52	8:01	8:10	
8:07	8:16	8:22	8:31	8:40	
8:37	8:46	8:52	9:01	9:10	
9:07	9:16	9:22	9:31	9:40	
9:37	9:47	9:54	10:04	10:13	
AND THEN EVERY 30 MINUTES AT: / *Y LUEGO CADA 30 MINUTOS A LA:*					
:07	:17	:24	:34	:43	
:37	:47	:54	:04	:13	
UNTIL: / *HASTA:*					
5:07p	**5:17p**	**5:24p**	**5:34p**	**5:43p**	
5:37	**5:47**	**5:54**	**6:03**	**6:12**	
6:09	**6:19**	**6:26**	**6:35**	**6:44**	
6:39	**6:49**	**6:56**	**7:05**	**7:14**	
7:09	**7:19**	**7:26**	**7:35**	**7:44**	
7:39	**7:48**	**7:54**	**8:02**	**8:10**	
8:09	**8:18**	**8:24**	**8:32**	**8:40**	
8:39	**8:48**	**8:54**	**9:02**	**9:10**	
9:09	**9:18**	**9:24**	**9:32**	**9:40**	
10:09	**10:18**	**10:24**	**10:32**	**10:40**	

UTC ➡ Clairemont ➡ Fashion Valley

Ⓗ Ⓖ Ⓕ	Ⓔ UTC Transit Center **DEPART**	Ⓓ Genesee Av. & Governor Dr.	Ⓒ Genesee Av. & Balboa Av.	Ⓑ Genesee Av. & Linda Vista Rd.	Ⓐ Fashion Valley Transit Center **ARRIVE**
Alternate service available on Routes 30, 150, 201, and 202 / *Servicio alterno por las rutas 30, 150, 201, y 202*	6:28a	6:32a	6:40a	6:47a	6:53a
	6:58	7:02	7:10	7:17	7:23
	7:26	7:30	7:39	7:46	7:53
	7:55	8:00	8:09	8:16	8:23
	8:25	8:30	8:39	8:46	8:53
	8:55	9:00	9:09	9:16	9:23
	9:25	9:30	9:39	9:46	9:53
	9:50	9:55	10:06	10:14	10:23
	10:21	10:26	10:37	10:45	10:54
	10:51	10:56	11:07	11:15	11:24
	11:21	11:27	11:38	11:46	11:55
	AND THEN EVERY 30 MINUTES AT: / *Y LUEGO CADA 30 MINUTOS A LA:*				
	:51	:57	:08	:16	:25
	:21	:27	:38	:46	:55
	UNTIL: / *HASTA:*				
	5:51p	**5:57p**	**6:08p**	**6:16p**	**6:25p**
	6:19	**6:25**	**6:36**	**6:44**	**6:53**
	6:55	**7:00**	**7:09**	**7:15**	**7:23**
	7:25	**7:30**	**7:39**	**7:45**	**7:53**
	7:57	**8:02**	**8:10**	**8:16**	**8:23**
	8:27	**8:32**	**8:40**	**8:46**	**8:53**
	8:57	**9:02**	**9:10**	**9:16**	**9:23**
	9:27	**9:32**	**9:40**	**9:46**	**9:53**
	9:57	**10:02**	**10:10**	**10:16**	**10:23**

Route 41 – Sunday / *domingo*

Fashion Valley ➡ Clairemont ➡ UTC

Ⓐ Fashion Valley Transit Center **DEPART**	Ⓑ Genesee Av. & Linda Vista Rd.	Ⓒ Genesee Av. & Balboa Av.	Ⓓ Genesee Av. & Governor Dr.	Ⓔ UTC Transit Center **ARRIVE**	Ⓕ Ⓖ Ⓗ
6:39a	6:48a	6:54a	7:02a	7:10a	Alternate service available on Routes 30, 201, and 202 / *Servicio alterno por las rutas 30, 201, y 202*
7:09	7:18	7:24	7:33	7:42	
7:39	7:48	7:54	8:03	8:12	
8:09	8:18	8:24	8:33	8:42	
8:39	8:48	8:54	9:03	9:12	
9:09	9:18	9:24	9:33	9:42	
9:38	9:48	9:55	10:05	10:14	
AND THEN EVERY 30 MINUTES AT: / *Y LUEGO CADA 30 MINUTOS A LA:*					
:08	:18	:25	:35	:44	
:38	:48	:55	:05	:14	
UNTIL: / *HASTA:*					
5:08p	**5:18p**	**5:25p**	**5:35p**	**5:44p**	
5:38	**5:48**	**5:55**	**6:04**	**6:13**	
6:09	**6:19**	**6:26**	**6:35**	**6:44**	
6:39	**6:49**	**6:56**	**7:05**	**7:14**	
7:09	**7:19**	**7:26**	**7:35**	**7:44**	
7:39	**7:48**	**7:54**	**8:02**	**8:10**	
8:09	**8:18**	**8:24**	**8:32**	**8:40**	
9:09	**9:18**	**9:24**	**9:32**	**9:40**	

UTC ➡ Clairemont ➡ Fashion Valley

Ⓗ Ⓖ Ⓕ	Ⓔ UTC Transit Center **DEPART**	Ⓓ Genesee Av. & Governor Dr.	Ⓒ Genesee Av. & Balboa Av.	Ⓑ Genesee Av. & Linda Vista Rd.	Ⓐ Fashion Valley Transit Center **ARRIVE**
Alternate service available on Routes 30, 201, and 202 / *Servicio alterno por las rutas 30, 201, y 202*	6:28a	6:32a	6:40a	6:47a	6:53a
	6:58	7:02	7:10	7:17	7:23
	7:26	7:30	7:39	7:46	7:53
	7:55	8:00	8:09	8:16	8:23
	8:25	8:30	8:39	8:46	8:53
	8:55	9:00	9:09	9:16	9:23
	9:25	9:30	9:39	9:46	9:53
	9:51	9:56	10:07	10:15	10:24
	10:21	10:26	10:37	10:45	10:54
	10:52	10:57	11:08	11:16	11:25
	11:21	11:27	11:38	11:46	11:55
	AND THEN EVERY 30 MINUTES AT: / *Y LUEGO CADA 30 MINUTOS A LA:*				
	:51	:57	:08	:16	:25
	:21	:27	:38	:46	:55
	UNTIL: / *HASTA:*				
	5:21p	**5:27p**	**5:38p**	**5:46p**	**5:55p**
	5:50	**5:56**	**6:07**	**6:15**	**6:24**
	6:19	**6:25**	**6:36**	**6:44**	**6:53**
	6:55	**7:00**	**7:09**	**7:15**	**7:23**
	7:25	**7:30**	**7:39**	**7:45**	**7:53**
	7:57	**8:02**	**8:10**	**8:16**	**8:23**
	8:27	**8:32**	**8:40**	**8:46**	**8:53**
	9:27	**9:32**	**9:40**	**9:46**	**9:53**

CASH FARES / Tarifas en efectivo

Exact fare, please / Favor de pagar la cantidad exacta

Day Pass (Regional) / Pase diario (Regional) Compass Card required ($2) / Se requiere un Compass Card ($2)	$5.00
One-Way Fare / Tarifa de una direccíon	$2.50
Senior (60+)/Disabled/Medicare Mayores de 60 años/Discapacitados/Medicare	$1.25*
Children 5 & under / Niños de 5 años o menos Up to two children ride free per paying adult / Máximo dos niños viajan gratis por cada adulto	FREE / GRATIS

MONTHLY PASSES / Pases mensual

Adult / Adulto	$72.00
Senior (60+)/Disabled/Medicare Mayores de 60 años/Discapacitados/Medicare	$18.00*
Youths (18 and under) Jóvenes (18 años o menos)	$36.00*

*I.D. required for discount fare or pass.
*Se requiere identificación para tarifas o pases de descuento.

DAY PASS (REGIONAL) / Pase diario (Regional)

All passes are sold on Compass Card, which can be reloaded and reused for up to five years. Compass Cards are available for $2 at select outlets. A $5 Day Pass requires a Compass Card. A paper Day Pass can be purchased on board buses for an additional $2 fee.

Todos los pases se venden en el Compass Card, el cual puede ser recargado y reutilizado por hasta cinco años. Compass Cards están disponibles por $2 en selectas sucursales. Un pase de un día por $5 requiere un Compass Card. Un pase de un día de papel se puede obtener a bordo los autobuses por un costo adicional de $2.

DIRECTORY / Directorio

Regional Transit Information Información de transporte público regional	511 or/ó (61 9) 233-3004
TTY/TDD (teletype for hearing impaired) Teletipo para sordos	(619) 234-5005 or/ó (88 8) 722-4 889
InfoExpress (24-hour info via Touch-Tone phone) Información las 24 horas (via teléfono de teclas)	(619) 685-4900
Customer Service / Suggestions Servicio al cliente / Sugerencias	(619) 557-4555
SafeWatch	(619) 557-4500
The Transit Store / Lost & Found The Transit Store / Objetos extraviados	(619) 234-1060
Articles found on the bus are turned in at The Transit Store Artículos encontrados en los autobuses son entregados a The Transit Store	1st & Broadway Downtown San Diego M–F 9am–5pm
For MTS online trip planning Planificación de viajes por Internet	www.sdmts.com

For more information on riding MTS services, pick up a Rider's Guide on a bus or at The Transit Store, or visit www.sdmts.com .
Para obtener más información sobre el uso de los servicios de MTS, recoja un 'Rider's Guide' en un autobús o en The Transit Store, o visita a www.sdmts.com .

Thank you for riding MTS! ¡Gracias por viajar con MTS!

Effective JUNE 7, 2015

50

Downtown – UTC Express

via Clairemont Dr.

150

Downtown – UTC / VA Hospital Express

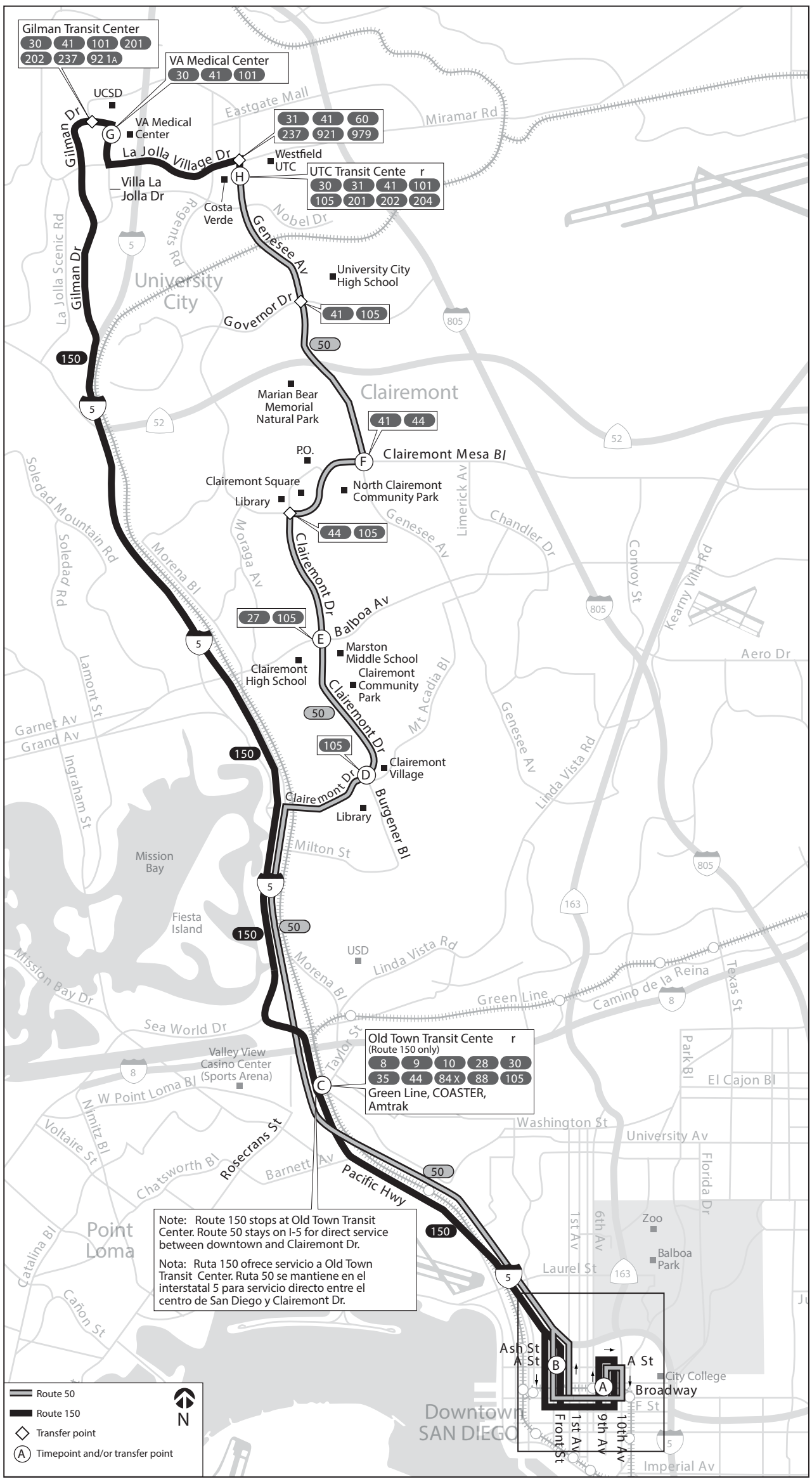
via Old Town / UCSD

DESTINATIONS
- Clairemont Square (50)
- Costa Verde Shopping Center
- UCSD (150)
- VA Medical Center (150)
- Westfield UTC

TROLLEY CONNECTIONS
Old Town (150)
Downtown

MTS Metropolitan Transit System

Alternative formats available upon request. Please call: (619) 557-4555 / Formato alternativo disponible al preguntar. Favor de llamar: (619) 557-4555



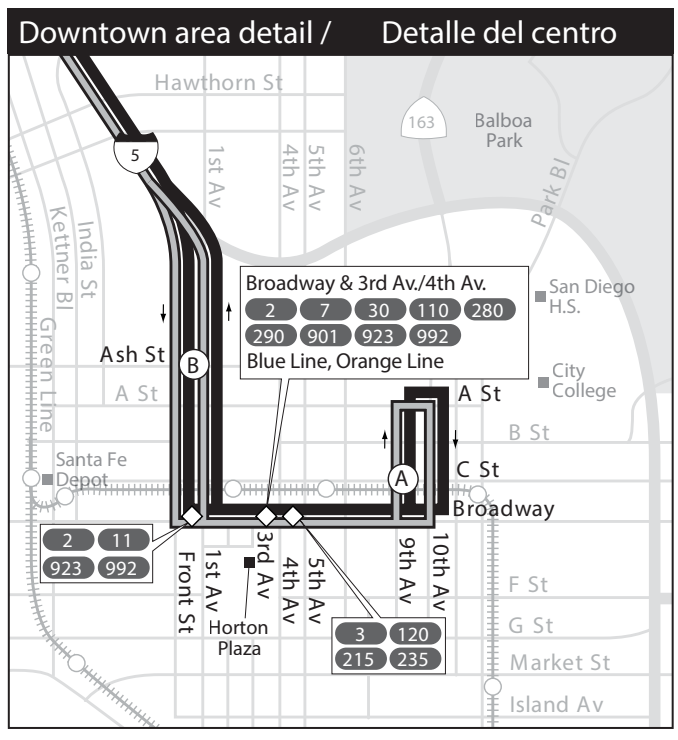
Plan your trip!

On the web
Visit www.sdmts.com and click on Travel Planner

On the phone
Dial 511 and say "public transportation"

On the go
Use the Google Maps app on your smartphone

Downtown area detail / Detalle del centro



Route 50 – Monday through Friday / *lunes a viernes*

Downtown ➡ Clairemont ➡ University City

Ⓐ 9th Av. & C St. **DEPART**	Ⓑ 1st Av. & Ash St.	Ⓓ Clairemont Dr. & Burgener Bl.	Ⓔ Clairemont Dr. & Balboa Av.	Ⓕ Genesee Av. & Clairemont Mesa Bl.	Ⓗ UTC Transit Center **ARRIVE**
4:58a	5:06a	5:16a	5:20a	5:27a	5:35a
5:28	5:36	5:46	5:50	5:57	6:05
5:55	6:05	6:15	6:20	6:27	6:35
6:28	6:39	6:50	6:56	7:04	7:13
6:58	7:10	7:22	7:28	7:36	7:46
7:28	7:40	7:54	8:00	8:09	8:20
7:58	8:10	8:24	8:30	8:39	8:50
8:28	8:40	8:54	9:00	9:09	9:20
8:58	9:10	9:22	9:28	9:37	9:47
9:58	10:10	10:22	10:28	10:37	10:47
10:58	11:10	11:22	11:28	11:37	11:47
11:58	**12:10p**	**12:22p**	**12:28p**	**12:37p**	**12:47p**
12:58p	**1:10**	**1:22**	**1:28**	**1:37**	**1:47**
1:58	**2:10**	**2:22**	**2:28**	**2:37**	**2:47**
2:58	**3:11**	**3:23**	**3:29**	**3:38**	**3:49**
3:28	**3:41**	**3:53**	**3:59**	**4:08**	**4:19**
3:58	**4:11**	**4:23**	**4:29**	**4:38**	**4:49**
4:28	**4:41**	**4:53**	**4:59**	**5:08**	**5:19**
4:43	**4:56**	**5:08**	**5:14**	**5:23**	**5:34**
5:00	**5:13**	**5:25**	**5:31**	**5:40**	**5:51**
5:15	**5:28**	**5:40**	**5:46**	**5:55**	**6:06**
5:30	**5:43**	**5:55**	**6:01**	**6:10**	**6:21**
6:00	**6:12**	**6:23**	**6:28**	**6:36**	**6:47**

University City ➡ Clairemont ➡ Downtown

Ⓗ UTC Transit Center **DEPART**	Ⓕ Clairemont Mesa Bl. & Genesee Av.	Ⓔ Clairemont Dr. & Balboa Av.	Ⓓ Clairemont Dr. & Burgener Bl.	Ⓑ Front St. & A St.	Ⓐ 9th Av. & C St. **ARRIVE**
5:43a	5:52a	5:59a	6:04a	6:14a	6:21a
6:13	6:22	6:29	6:34	6:44	6:51
6:28	6:37	6:44	6:49	6:59	7:06
6:43	6:53	7:02	7:07	7:18	7:26
6:58	7:08	7:17	7:22	7:33	7:41
7:13	7:23	7:32	7:37	7:48	7:56
7:28	7:38	7:47	7:52	8:03	8:11
7:43	7:53	8:02	8:07	8:18	8:26
7:58	8:08	8:17	8:22	8:33	8:41
8:28	8:38	8:47	8:52	9:03	9:11
8:58	9:08	9:17	9:22	9:33	9:41
9:58	10:09	10:18	10:24	10:35	10:43
10:58	11:09	11:18	11:24	11:35	11:43
11:58	**12:09p**	**12:18p**	**12:24p**	**12:35p**	**12:43p**
12:58p	**1:09**	**1:18**	**1:24**	**1:35**	**1:43**
1:58	**2:09**	**2:18**	**2:24**	**2:35**	**2:43**
2:28	**2:41**	**2:50**	**2:56**	**3:07**	**3:15**
2:58	**3:11**	**3:20**	**3:26**	**3:37**	**3:45**
3:28	**3:41**	**3:50**	**3:56**	**4:07**	**4:15**
3:58	**4:12**	**4:22**	**4:28**	**4:41**	**4:50**
4:28	**4:42**	**4:52**	**4:58**	**5:11**	**5:20**
4:58	**5:12**	**5:22**	**5:28**	**5:41**	**5:50**
5:28	**5:42**	**5:52**	**5:58**	**6:11**	**6:20**
6:28	**6:40**	**6:49**	**6:53**	**7:04**	**7:12**

Route 150 – Monday through Friday / *lunes a viernes*

Downtown ➡ Old Town ➡ University City

Ⓐ 9th Av. & C St. **DEPART**	Ⓑ 1st Av. & Ash St.	Ⓒ Old Town Transit Center **ARRIVE**	Ⓒ Old Town Transit Center **DEPART**	Ⓖ V.A. Medical Center	Ⓗ UTC Transit Center **ARRIVE**
5:55a	6:05a	6:11a	6:13a	6:34a	6:43a
6:08	6:19	6:26	6:28	6:51	7:00
6:23	6:34	6:41	6:43	7:06	7:15
6:38	6:49	6:56	6:58	7:21	7:30
—	—	6:50	—	7:15	—
6:51	7:03	7:11	7:13	7:38	7:48
—	—	7:05	—	7:30	—
7:06	7:18	7:26	7:28	7:53	8:03
—	—	7:20	—	7:45	—
7:21	7:33	7:41	7:43	8:08	8:18
—	—	7:35	—	8:00	—
7:36	7:48	7:56	7:58	8:23	8:33
—	—	7:50	—	8:15	—
7:51	8:03	8:11	8:13	8:38	8:48
—	—	8:05	—	8:30	—
8:06	8:18	8:26	8:28	8:53	9:03
—	—	8:20	—	8:45	—
8:21	8:33	8:41	8:43	9:08	9:18
—	—	8:35	—	9:00	—
8:36	8:48	8:56	8:58	9:23	9:33
—	—	8:50	—	9:13	—
8:51	9:03	9:11	9:13	9:36	9:46
9:21	9:33	9:41	9:43	10:06	10:16
9:51	10:03	10:11	10:13	10:36	10:46
10:51	11:03	11:11	11:13	11:36	11:46
11:51	**12:03p**	**12:11p**	**12:13p**	**12:36p**	**12:46p**
12:51p	**1:03**	**1:11**	**1:13**	**1:36**	**1:46**
1:51	**2:03**	**2:11**	**2:13**	**2:36**	**2:46**
2:21	**2:33**	**2:41**	**2:43**	**3:06**	**3:16**
2:51	**3:03**	**3:11**	**3:13**	**3:36**	**3:46**
3:21	**3:33**	**3:41**	**3:43**	**4:06**	**4:16**
3:51	**4:03**	**4:11**	**4:13**	**4:36**	**4:46**
4:21	**4:34**	**4:43**	**4:45**	**5:09**	**5:19**
4:51	**5:04**	**5:13**	**5:15**	**5:39**	**5:49**
5:21	**5:34**	**5:43**	**5:45**	**6:09**	**6:19**
5:53	**6:05**	**6:13**	**6:15**	**6:38**	**6:48**

University City ➡ Old Town ➡ Downtown

Ⓗ UTC Transit Center **DEPART**	Ⓖ V.A. Medical Center	Ⓒ Old Town Transit Center **ARRIVE**	Ⓒ Old Town Transit Center **DEPART**	Ⓑ Front St. & A St.	Ⓐ 9th Av. & C St. **ARRIVE**
5:59a	6:07a	6:26a	6:28a	6:35a	6:42a
6:29	6:37	6:56	6:58	7:05	7:12
6:59	7:08	7:28	7:30	7:37	7:44
7:29	7:38	7:58	8:00	8:07	8:14
7:59	8:09	8:30	8:32	8:39	8:47
8:29	8:39	9:00	9:02	9:09	9:17
8:59	9:09	9:30	9:32	9:39	9:47
9:59	10:09	10:30	10:32	10:39	10:47
10:59	11:09	11:30	11:32	11:39	11:47
11:59	**12:09p**	**12:30p**	**12:32p**	**12:39p**	**12:47p**
12:59p	**1:09**	**1:32**	**1:34**	**1:42**	**1:50**
1:29	**1:39**	**2:02**	**2:04**	**2:12**	**2:20**
1:59	**2:09**	**2:32**	**2:34**	**2:42**	**2:50**
—	**2:23**	**2:46**	**—**	**—**	**—**
2:28	**2:38**	**3:01**	**3:03**	**3:11**	**3:19**
2:43	**2:53**	**3:16**	**3:18**	**3:26**	**3:34**
2:58	**3:08**	**3:31**	**3:33**	**3:41**	**3:49**
—	**3:01**	**3:24**	**—**	**—**	**—**
3:13	**3:23**	**3:46**	**3:48**	**3:56**	**4:04**
—	**3:16**	**3:39**	**—**	**—**	**—**
3:28	**3:38**	**4:01**	**4:03**	**4:11**	**4:19**
—	**3:31**	**3:54**	**—**	**—**	**—**
3:43	**3:53**	**4:16**	**4:18**	**4:26**	**4:34**
—	**3:46**	**4:09**	**—**	**—**	**—**
3:58	**4:08**	**4:33**	**4:35**	**4:44**	**4:53**
—	**4:01**	**4:25**	**—**	**—**	**—**
4:13	**4:23**	**4:48**	**4:50**	**4:59**	**5:08**
—	**4:16**	**4:41**	**—**	**—**	**—**
4:28	**4:38**	**5:03**	**5:05**	**5:14**	**5:23**
—	**4:31**	**4:56**	**—**	**—**	**—**
4:43	**4:53**	**5:18**	**5:20**	**5:29**	**5:38**
—	**4:46**	**5:11**	**—**	**—**	**—**
4:58	**5:08**	**5:33**	**5:35**	**5:44**	**5:53**
—	**5:01**	**5:26**	**—**	**—**	**—**
5:13	**5:23**	**5:48**	**5:50**	**5:59**	**6:08**
5:28	**5:38**	**6:03**	**6:05**	**6:14**	**6:23**
5:43	**5:53**	**6:16**	**6:18**	**6:26**	**6:35**
5:59	**6:09**	**6:32**	**6:34**	**6:42**	**6:51**
6:30	**6:39**	**7:01**	**7:03**	**7:10**	**7:18**

Routes 150 do not operate on Sunday and Rt. 50 doesn't operate on Weekends or on the following holidays and observed holidays.
Las ruta 150 no opera en los domingos, y la ruta 50 no opera los fines de semana ó durante los siguientes días festivos y feriados observados

>>>

New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving, Christmas

Route 150 – Saturday / *sábado*

Old Town ➡ University City

Ⓒ Old Town Transit Center **DEPART**	Ⓖ VA Medical Center	Ⓗ UTC Transit Center **ARRIVE**
7:15a	7:37a	7:48a
7:45	8:07	8:18
8:15	8:37	8:48
8:45	9:07	9:18
9:15	9:38	9:49
9:45	10:08	10:19
10:15	10:38	10:49
10:45	11:08	11:19
11:15	11:38	11:50
11:45	**12:08p**	**12:20p**
12:15p	**12:38**	**12:50**
12:45	**1:08**	**1:20**
1:15	**1:38**	**1:50**
1:45	**2:08**	**2:20**
2:15	**2:38**	**2:50**
2:45	**3:08**	**3:20**
3:15	**3:38**	**3:50**
3:45	**4:08**	**4:20**
4:15	**4:38**	**4:50**
4:45	**5:08**	**5:20**
5:15	**5:38**	**5:50**
5:45	**6:07**	**6:18**
6:15	**6:37**	**6:48**
6:45	**7:07**	**7:18**
7:15	**7:36**	**7:47**
7:45	**8:06**	**8:17**
8:15	**8:36**	**8:47**
8:45	**9:06**	**9:17**

University City ➡ Old Town

Ⓗ UTC Transit Center **DEPART**	Ⓖ VA Medical Center	Ⓒ Old Town Transit Center **ARRIVE**
8:02a	8:10a	8:30a
8:32	8:40	9:00
9:00	9:09	9:30
9:30	9:39	10:00
10:00	10:09	10:30
10:30	10:39	11:00
11:00	11:09	11:30
11:30	11:39	**12:00p**
12:00p	**12:09p**	**12:30**
12:30	**12:39**	**1:00**
1:00	**1:09**	**1:30**
1:30	**1:39**	**2:00**
2:00	**2:09**	**2:30**
2:30	**2:39**	**3:00**
3:00	**3:09**	**3:30**
3:30	**3:39**	**4:00**
4:00	**4:09**	**4:30**
4:30	**4:39**	**5:00**
5:00	**5:09**	**5:30**
5:30	**5:39**	**6:00**
6:02	**6:10**	**6:30**
6:32	**6:40**	**7:00**
7:04	**7:11**	**7:30**
7:34	**7:41**	**8:00**
8:04	**8:11**	**8:30**
8:34	**8:41**	**9:00**
9:04	**9:11**	**9:30**

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CASH FARES / *Tarifas en efectivo*

Exact fare, please / *Favor de pagar la cantidad exacta*

Day Pass (Regional) / *Pase diario (Regional)* Compass Card required ($2) / *Se requiere un Compass Card ($2)*	$5.00
One-Way Fare / *Tarifa de una direccíon*	$2.50
Senior (60+)/Disabled/Medicare *Mayores de 60 años/Discapacitados/Medicare*	$1.25*
Children 5 & under / *Niños de 5 años o menos* Up to two children ride free per paying adult / *Máximo dos niños viajan gratis por cada adulto*	FREE / *GRATIS*

MONTHLY PASSES / *Pases mensual*

Adult / *Adulto*	$72.00
Senior (60+)/Disabled/Medicare *Mayores de 60 años/Discapacitados/Medicare*	$18.00*
Youths (18 and under) *Jóvenes (18 años o menos)*	$36.00*

*I.D. required for discount fare or pass.
**Se requiere identificación para tarifas o pases de descuento.*

DAY PASS (REGIONAL) / *Pase diario (Regional)*

All passes are sold on Compass Card, which can be reloaded and reused for up to five years. Compass Cards are available for $2 at select outlets. A $5 Day Pass requires a Compass Card. A paper Day Pass can be purchased on board buses for an additional $2 fee.

Todos los pases se venden en el Compass Card, el cual puede ser recargado y reutilizado por hasta cinco años. Compass Cards están disponibles por $2 en selectas sucursales. Un pase de un día por $5 requiere un Compass Card. Un pase de un día de papel se puede obtener a bordo los autobuses por un costo adicional de $2.

DIRECTORY / *Directorio*

Regional Transit Information *Información de transporte público regional*	**511** or/ó **(619) 233-3004**
TTY/TDD (teletype for hearing impaired) *Teletipo para sordos*	**(619) 234-5005** or/ó **(888) 722-4889**
InfoExpress (24-hour info via Touch-Tone phone) *Información las 24 horas (via teléfono de teclas)*	**(619) 685-4900**
Customer Service / Suggestions *Servicio al cliente / Sugerencias*	**(619) 557-4555**
SafeWatch	**(619) 557-4500**
The Transit Store / Lost & Found *The Transit Store / Objetos extraviados*	**(619) 234-1060**
Articles found on the bus are turned in at The Transit Store *Artículos encontrados en los autobuses son entregados a The Transit Store*	1st & Broadway Downtown San Diego M–F 9am–5pm
For MTS online trip planning *Planificación de viajes por Internet*	**www.sdmts.com**

For more information on riding MTS services, pick up a Rider's Guide on a bus or at The Transit Store, or visit **www.sdmts.com**.

*Para obtener más información sobre el uso de los servicios de MTS, recoja un 'Rider's Guide' en un autobús o en The Transit Store, o visita a **www.sdmts.com**.*

Thank you for riding MTS! ***¡Gracias por viajar con MTS!***

Effective JUNE 7, 2015

60

Euclid Transit Center – UTC

via I-15 Mid City / Kearny Mesa

DESTINATIONS

- The Boulevard Transit Plaza
- City Heights Transit Plaza
- Market Creek Plaza
- Westfield UTC

TROLLEY CONNECTIONS
Euclid Av.

MTS Metropolitan Transit System

Alternative formats available upon request. Please call: (619) 557-4555 / *Formato alternativo disponible al preguntar. Favor de llamar: (619) 557-4555*

Route 60 – Monday through Friday / *lunes a viernes*

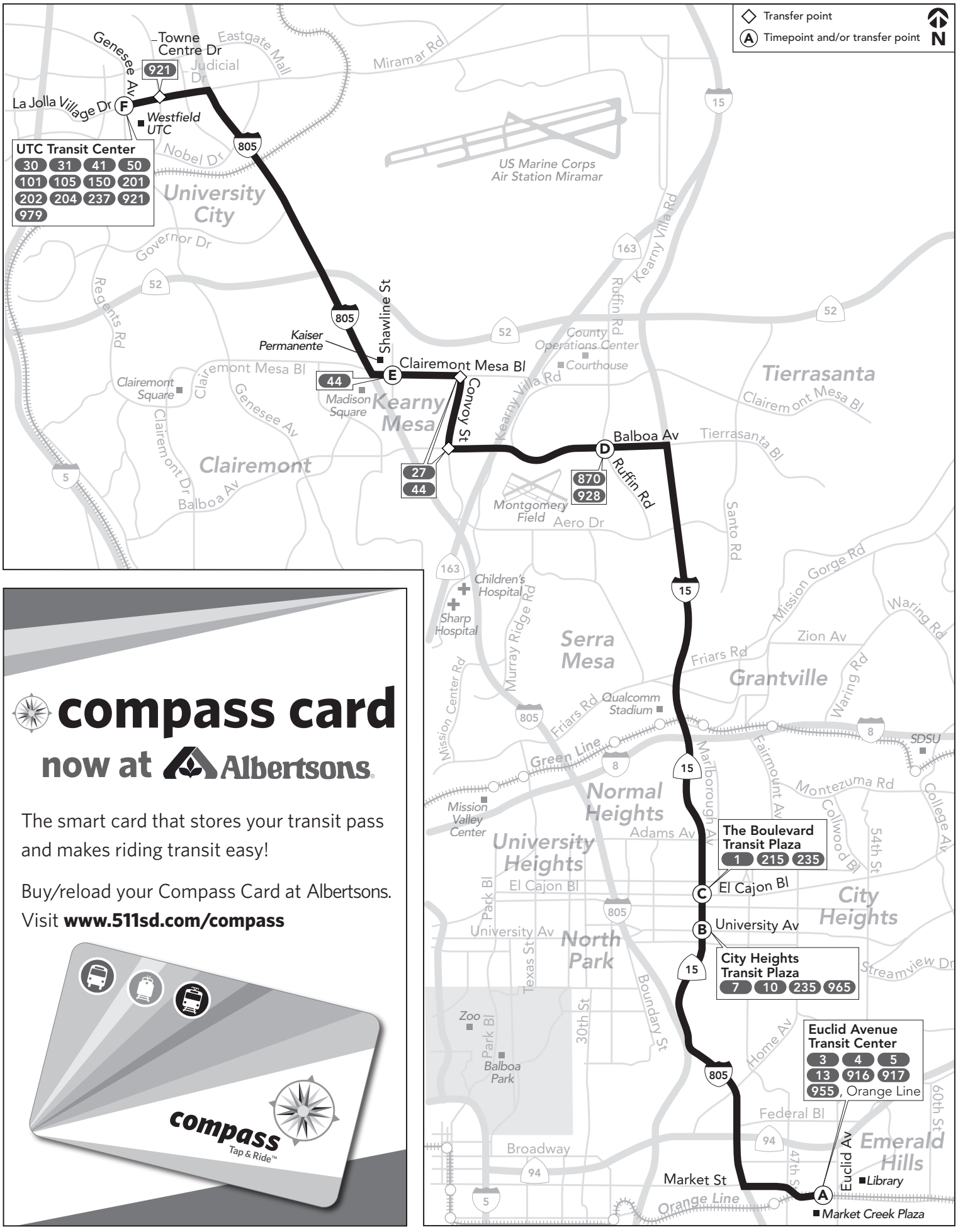
Euclid Trolley ➡ City Heights ➡ Kearny Mesa ➡ University City

Ⓐ Euclid Ave. Transit Center **DEPART**	Ⓑ City Heights Transit Plaza (University Av.)	Ⓒ The Boulevard Transit Plaza (El Cajon Bl.)	Ⓓ Balboa Av. & Ruffin Rd.	Ⓔ Clairemont Mesa Bl. & Shawline St.	Ⓕ Genesee & La Jolla Village Dr. **ARRIVE**
5:08a	5:15a	5:17a	5:24a	5:34a	5:48a
5:23	5:30	5:32	5:39	5:49	—
5:38	5:45	5:47	5:54	6:04	6:18
5:53	6:01	6:03	6:11	6:21	—
6:08	6:16	6:18	6:26	6:36	6:51
6:23	6:32	6:34	6:43	6:54	—
6:38	6:47	6:49	6:58	7:09	7:25
7:08	7:17	7:19	7:30	7:42	8:00

University City ➡ Kearny Mesa ➡ City Heights ➡ Euclid Transit Center

Ⓕ La Jolla Village Dr. & Genesee **DEPART**	Ⓔ Clairemont Mesa Bl. & Shawline St.	Ⓓ Balboa Av. & Ruffin Rd.	Ⓒ The Boulevard Transit Plaza (El Cajon Bl.)	Ⓑ City Heights Transit Plaza (University Av.)	Ⓐ Euclid Ave. Transit Center **ARRIVE**
3:26p	**3:42p**	**3:55p**	**4:04p**	**4:06p**	**4:18p**
3:54	**4:11**	**4:26**	**4:35**	**4:37**	**4:49**
4:25	**4:42**	**4:57**	**5:06**	**5:08**	**5:20**
4:57	**5:14**	**5:29**	**5:38**	**5:40**	**5:52**
5:27	**5:44**	**5:59**	**6:08**	**6:10**	**6:22**
5:58	**6:14**	**6:27**	**6:36**	**6:38**	**6:50**

Route 60 does not operate on weekends or on the following holidays and observed holidays
La ruta 60 no ofrece servicio durante el fin de semana ó durante los siguientes días festivos y feriados observados >>> New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving, Christmas



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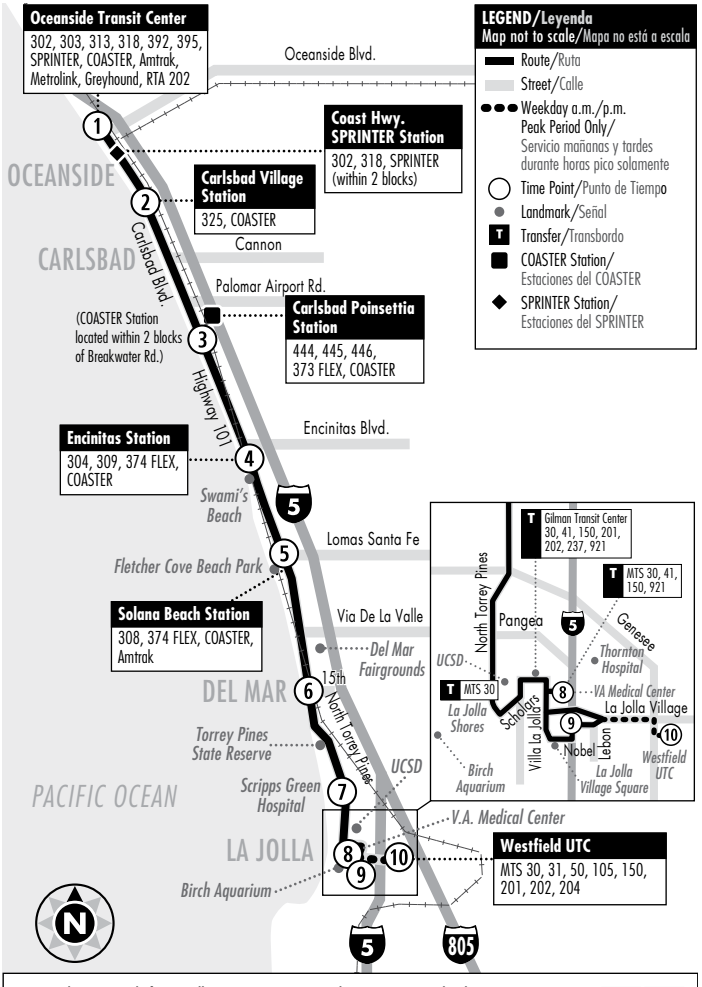
101 | Oceanside to V.A./UCSD via Highway 101

M-F • SA • SU • H

Destinations/Destinos
- Coast Hwy. SPRINTER Station
- University of California, San Diego
- V.A. Medical Center
- Scripps Green Hospital
- Carlsbad State Beach
- Del Mar Fairgrounds & Racetrack
- Cedros Design District, Solana Beach
- Birch Aquarium
- Salk Institute



UCSD students may ride free on all NCTD BREEZE routes and SPRINTER service by showing a valid UCSD ID and qualifying media (U-PASS sticker within expiration date printed on sticker). UCSD Faculty and Staff may ride with a ECO Pass Regional Transit Pass on a Compass Card. This program is sponsored by UCSD's Transportation and Parking Services Department. Contact UCSD for more information.

Transportation & Parking Services
University of California, San Diego
parking.ucsd.edu
Moving in the right direction.

Los estudiantes de UCSD podrán viajar gratis en todas las rutas de NCTD BREEZE y servicio de SPRINTER al mostrar una identificación válida de UCSD, que tenga medios de tarifas calicativos (Calcomanía U-PASS dentro de la fecha de vencimiento imprimida en la calcomanía). Facultad y Personal de UCSD pueden viajar con un pase de Transito Regional ECO Pass en una tarjeta Compass. Este programa está patrocinado por el Departamento de Servicios de Transporte y Estacionamientos de UCSD. Póngase en contacto con UCSD para más información.

101 Oceanside to V.A./UCSD via Highway 101

Bold denotes P.M. times/Horarios en negritas son en la tarde

Monday - Friday
Southbound to V.A. Medical Center/UTC

Oceanside Transit Center	Carlsbad Village Station	Carlsbad Blvd. & Poinsettia Ln.	Encinitas Station	Highway 101 & Lomas Santa Fe Dr.	Camino Del Mar & 15th St.	Torrey Pines & Scripps	V.A. Medical Center	University Center Ln. & Nobel Dr.	Westfield UTC
1	2	3	4	5	6	7	8	9	10
5:05	5:16	5:30	5:46	5:58	6:07	6:19	6:34	–	6:44a
5:35	5:47	6:01	6:17	6:29	6:38	6:50	7:05	–	7:15
6:05	6:17	6:32	6:48	7:01	7:10	7:22	7:37	–	7:47
6:35	6:47	7:02	7:18	7:31	7:40	7:52	8:07	–	8:17
7:05	7:19	7:35	7:52	8:07	8:16	8:29	8:46	–	8:56
7:37	7:51	8:07	8:24	8:39	8:48	9:01	9:18	9:25	–
8:05	8:19	8:35	8:52	9:07	9:16	9:29	9:46	9:53	–
8:35	8:50	9:05	9:21	9:36	9:47	10:00	10:17	10:24	–
9:05	9:20	9:35	9:51	10:06	10:17	10:30	10:47	10:54	–
9:35	9:50	10:05	10:21	10:36	10:47	11:00	11:17	11:24	–
10:05	10:20	10:35	10:51	11:06	11:17	11:30	11:47	11:54	–
10:35	10:51	11:06	11:22	11:37	11:47	**12:00**	**12:18**	**12:26p**	**–**
11:05	11:21	11:36	11:52	**12:07**	**12:17**	**12:30**	**12:48**	**12:56**	**–**
11:35	11:51	**12:06**	**12:22**	**12:37**	**12:47**	**1:00**	**1:18**	**1:26**	**–**
12:05	**12:21**	**12:36**	**12:52**	**1:07**	**1:17**	**1:30**	**1:48**	**1:56**	**–**
12:35	**12:51**	**1:06**	**1:22**	**1:37**	**1:47**	**2:00**	**2:18**	**–**	**2:29**
1:05	**1:21**	**1:36**	**1:52**	**2:07**	**2:16**	**2:29**	**2:47**	**–**	**2:59**
1:35	**1:51**	**2:06**	**2:22**	**2:37**	**2:46**	**2:59**	**3:17**	**–**	**3:29**
2:05	**2:21**	**2:36**	**2:52**	**3:07**	**3:16**	**3:29**	**3:47**	**–**	**3:59**
2:35	**2:51**	**3:06**	**3:23**	**3:38**	**3:48**	**4:02**	**4:22**	**–**	**4:34**
3:05	**3:21**	**3:36**	**3:53**	**4:08**	**4:18**	**4:32**	**4:52**	**–**	**5:04**
3:35	**3:51**	**4:06**	**4:23**	**4:38**	**4:48**	**5:02**	**5:22**	**–**	**5:34**
4:05	**4:21**	**4:36**	**4:53**	**5:08**	**5:18**	**5:32**	**5:52**	**–**	**6:04**
4:35	**4:50**	**5:06**	**5:23**	**5:39**	**5:50**	**6:03**	**6:25**	**6:33**	**–**
5:05	**5:20**	**5:36**	**5:53**	**6:09**	**6:20**	**6:33**	**6:55**	**7:03**	**–**
5:35	**5:50**	**6:06**	**6:23**	**6:39**	**6:50**	**7:03**	**7:25**	**7:33**	**–**
6:05	**6:19**	**6:34**	**6:49**	**7:04**	**7:15**	**7:28**	**7:49**	**7:57**	**–**
6:35	**6:49**	**7:04**	**7:19**	**7:34**	**7:45**	**7:58**	**8:19**	**8:27**	**–**
7:35	**7:48**	**8:01**	**8:15**	**8:30**	**8:38**	**8:50**	**9:08**	**9:16**	**–**
8:39	**8:52**	**9:05**	**9:19**	**9:34**	**9:42**	**9:54**	**10:12**	**10:20**	**–**
9:54	**10:07**	**10:20**	**10:34**	**–**	**–**	**–**	**–**	**–**	**–**

101 | Oceanside to V.A./UCSD via Highway 101

Bold denotes P.M. times/Horarios en negritas son en la tarde

Monday - Friday
Northbound to Oceanside

Westfield UTC	University Center Ln. & Nobel Dr.	V.A. Medical Center	Torrey Pines & Scripps	Camino Del Mar & 15th St.	Highway 101 & Lomas Santa Fe Dr.	Encinitas Station	Carlsbad Blvd. & Poinsettia Ln.	Carlsbad Village Station	Oceanside Transit Center
10	**9**	**8**	**7**	**6**	**5**	**4**	**3**	**2**	**1**
–	–	–	–	–	–	5:47	5:59	6:12	6:22a
5:32	–	5:40	5:51	6:01	6:10	6:28	6:40	6:53	7:03
5:51	–	5:59	6:10	6:20	6:29	6:47	6:59	7:12	7:22
6:21	–	6:29	6:40	6:50	6:59	7:17	7:29	7:42	7:52
6:40	–	6:51	7:05	7:16	7:26	7:44	7:56	8:09	8:22
7:10	–	7:21	7:35	7:46	7:56	8:14	8:26	8:39	8:52
7:40	–	7:51	8:05	8:16	8:26	8:44	8:56	9:09	9:22
7:57	–	8:10	8:27	8:41	8:53	9:10	9:24	9:38	9:52
8:27	–	8:40	8:57	9:11	9:23	9:40	9:54	10:08	10:22
8:57	–	9:10	9:27	9:41	9:53	10:10	10:24	10:38	10:52
–	9:34	9:42	9:57	10:10	10:22	10:39	10:53	11:07	11:22
–	10:04	10:12	10:27	10:40	10:52	11:09	11:23	11:37	11:52
–	10:34	10:42	10:57	11:10	11:22	11:39	11:53	**12:07**	**12:22p**
–	11:04	11:12	11:27	11:40	11:52	**12:09**	**12:23**	**12:37**	**12:52**
–	11:34	11:42	11:57	**12:10**	**12:22**	**12:39**	**12:53**	**1:07**	**1:22**
–	11:59	**12:08**	**12:23**	**12:36**	**12:49**	**1:06**	**1:20**	**1:36**	**1:52**
–	**12:29**	**12:38**	**12:53**	**1:06**	**1:19**	**1:36**	**1:50**	**2:06**	**2:22**
–	**12:59**	**1:08**	**1:23**	**1:36**	**1:49**	**2:06**	**2:20**	**2:36**	**2:52**
–	**1:29**	**1:38**	**1:53**	**2:06**	**2:19**	**2:36**	**2:50**	**3:06**	**3:22**
–	**1:57**	**2:05**	**2:21**	**2:34**	**2:48**	**3:05**	**3:20**	**3:36**	**3:53**
2:22	**–**	**2:34**	**2:50**	**3:03**	**3:17**	**3:34**	**3:49**	**4:05**	**4:22**
2:52	**–**	**3:04**	**3:20**	**3:33**	**3:47**	**4:04**	**4:19**	**4:35**	**4:52**
3:08	**–**	**3:20**	**3:37**	**3:54**	**4:11**	**4:29**	**4:46**	**5:04**	**5:22**
3:38	**–**	**3:50**	**4:07**	**4:24**	**4:41**	**4:59**	**5:16**	**5:34**	**5:52**
4:08	**–**	**4:20**	**4:37**	**4:54**	**5:11**	**5:29**	**5:46**	**6:04**	**6:22**
4:38	**–**	**4:50**	**5:07**	**5:24**	**5:41**	**5:59**	**6:16**	**6:34**	**6:52**
5:02	**–**	**5:14**	**5:31**	**5:48**	**6:05**	**6:23**	**6:40**	**6:58**	**7:16**
5:38	**–**	**5:50**	**6:07**	**6:24**	**6:41**	**6:59**	**7:16**	**7:34**	**7:52**
–	**6:12**	**6:21**	**6:36**	**6:49**	**7:05**	**7:23**	**7:38**	**7:55**	**8:11**
–	**7:26**	**7:34**	**7:48**	**8:01**	**8:14**	**8:32**	**8:46**	**9:02**	**9:17**
–	**8:14**	**8:21**	**8:34**	**8:45**	**8:56**	**9:10**	**9:24**	**9:39**	**9:52**
–	**9:20**	**9:27**	**9:40**	**9:51**	**10:00**	**10:13**	**10:26**	**10:40**	**10:52**

101 Oceanside to V.A./UCSD via Highway 101

Bold denotes P.M. times/Horarios en negritas son en la tarde

Saturday, Sunday & Holidays
Southbound to V.A. Medical Center

Oceanside Transit Center	Carlsbad Village Station	Carlsbad Blvd. & Poinsettia Ln.	Encinitas Station	Highway 101 & Lomas Santa Fe Dr.	Camino Del Mar & 15th St.	Torrey Pines & Scripps	V.A. Medical Center	University Center Ln. & Nobel Dr.
1	2	3	4	5	6	7	8	9
5:05	5:13	5:24	5:38	5:50	5:58	6:08	6:19	6:24a
5:40	5:50	6:01	6:15	6:27	6:35	6:45	6:56	7:01
6:35	6:46	6:57	7:12	7:25	7:33	7:44	7:55	8:00
7:05	7:16	7:29	7:44	7:57	8:05	8:16	8:27	8:32
7:35	7:47	8:00	8:15	8:28	8:36	8:47	9:00	9:05
8:05	8:17	8:31	8:46	9:00	9:08	9:19	9:32	9:37
8:35	8:47	9:01	9:16	9:30	9:38	9:49	10:02	10:07
9:05	9:17	9:31	9:46	10:00	10:08	10:19	10:32	10:38
9:35	9:48	10:02	10:17	10:32	10:40	10:52	11:05	11:11
10:05	10:18	10:32	10:47	11:02	11:10	11:22	11:35	11:41
10:35	10:50	11:04	11:20	11:36	11:44	11:56	**12:09**	**12:15p**
11:05	11:20	11:35	11:51	**12:07**	**12:15**	**12:27**	**12:41**	**12:47**
11:35	11:52	**12:07**	**12:23**	**12:39**	**12:47**	**12:59**	**1:13**	**1:19**
12:05	**12:22**	**12:38**	**12:54**	**1:10**	**1:18**	**1:30**	**1:44**	**1:50**
12:35	**12:52**	**1:08**	**1:24**	**1:40**	**1:48**	**2:00**	**2:15**	**2:21**
1:05	**1:22**	**1:38**	**1:54**	**2:10**	**2:18**	**2:30**	**2:45**	**2:51**
1:35	**1:51**	**2:07**	**2:23**	**2:39**	**2:47**	**2:59**	**3:14**	**3:20**
2:05	**2:21**	**2:37**	**2:53**	**3:09**	**3:18**	**3:30**	**3:45**	**3:51**
2:35	**2:51**	**3:07**	**3:22**	**3:38**	**3:47**	**3:59**	**4:14**	**4:20**
3:05	**3:21**	**3:37**	**3:52**	**4:08**	**4:17**	**4:29**	**4:44**	**4:50**
3:35	**3:50**	**4:06**	**4:21**	**4:37**	**4:46**	**4:58**	**5:13**	**5:19**
4:05	**4:20**	**4:35**	**4:50**	**5:05**	**5:14**	**5:26**	**5:41**	**5:47**
4:35	**4:50**	**5:05**	**5:20**	**5:35**	**5:44**	**5:56**	**6:11**	**6:17**
5:05	**5:20**	**5:35**	**5:50**	**6:05**	**6:14**	**6:26**	**6:41**	**6:47**
5:35	**5:48**	**6:03**	**6:18**	**6:33**	**6:42**	**6:54**	**7:09**	**7:15**
6:05	**6:18**	**6:32**	**6:47**	**7:02**	**7:11**	**7:23**	**7:39**	**7:45**
6:35	**6:48**	**7:02**	**7:17**	**7:32**	**7:42**	**7:53**	**8:09**	**8:15**
7:35	**7:47**	**8:01**	**8:15**	**8:30**	**8:40**	**8:51**	**9:07**	**9:13**
8:35	**8:47**	**9:00**	**9:14**	**9:29**	**9:39**	**9:50**	**10:06**	**10:12**

101 | Oceanside to V.A./UCSD via Highway 101

Bold denotes P.M. times/Horarios en negritas son en la tarde

Saturday, Sunday & Holidays Northbound to Oceanside								
University Center Ln. & Nobel Dr.	V.A. Medical Center	Torrey Pines & Scripps	Camino Del Mar & 15th St.	Highway 101 & Lomas Santa Fe Dr.	Encinitas Station	Carlsbad Blvd. & Poinsettia Ln.	Carlsbad Village Station	Oceanside Transit Center
9	**8**	**7**	**6**	**5**	**4**	**3**	**2**	**1**
–	–	–	–	–	5:49	5:59	6:12	6:25a
–	–	–	–	–	6:45	6:56	7:09	7:22
6:20	6:24	6:36	6:46	6:58	7:15	7:26	7:39	7:52
6:50	6:54	7:06	7:16	7:28	7:45	7:56	8:09	8:22
7:20	7:24	7:36	7:46	7:58	8:15	8:26	8:39	8:52
7:49	7:53	8:05	8:16	8:28	8:45	8:56	9:09	9:22
8:14	8:18	8:30	8:44	8:56	9:13	9:26	9:39	9:52
8:43	8:47	9:00	9:13	9:25	9:42	9:55	10:09	10:22
9:09	9:13	9:26	9:39	9:53	10:11	10:24	10:38	10:52
9:39	9:43	9:56	10:09	10:22	10:40	10:53	11:08	11:22
10:07	10:11	10:24	10:37	10:50	11:08	11:22	11:37	11:52
10:38	10:42	10:55	11:08	11:21	11:38	11:52	**12:07**	**12:22p**
11:07	11:11	11:24	11:37	11:50	**12:07**	**12:21**	**12:36**	**12:52**
11:35	11:40	11:54	**12:07**	**12:20**	**12:36**	**12:50**	**1:06**	**1:22**
12:03	**12:08**	**12:22**	**12:36**	**12:50**	**1:06**	**1:20**	**1:36**	**1:52**
12:36	**12:41**	**12:55**	**1:08**	**1:20**	**1:36**	**1:50**	**2:06**	**2:22**
1:05	**1:10**	**1:24**	**1:37**	**1:49**	**2:05**	**2:20**	**2:36**	**2:52**
1:35	**1:40**	**1:54**	**2:07**	**2:19**	**2:35**	**2:50**	**3:06**	**3:22**
2:03	**2:08**	**2:22**	**2:35**	**2:49**	**3:05**	**3:20**	**3:36**	**3:52**
2:32	**2:37**	**2:51**	**3:04**	**3:18**	**3:34**	**3:49**	**4:06**	**4:22**
3:02	**3:07**	**3:21**	**3:34**	**3:48**	**4:04**	**4:19**	**4:36**	**4:52**
3:32	**3:37**	**3:51**	**4:04**	**4:18**	**4:34**	**4:49**	**5:06**	**5:22**
4:02	**4:07**	**4:21**	**4:34**	**4:48**	**5:04**	**5:19**	**5:36**	**5:52**
4:32	**4:37**	**4:51**	**5:04**	**5:18**	**5:34**	**5:49**	**6:06**	**6:22**
5:03	**5:08**	**5:22**	**5:35**	**5:49**	**6:05**	**6:19**	**6:36**	**6:52**
5:32	**5:37**	**5:51**	**6:04**	**6:18**	**6:35**	**6:49**	**7:06**	**7:22**
6:01	**6:06**	**6:20**	**6:33**	**6:48**	**7:05**	**7:19**	**7:36**	**7:52**
7:05	**7:10**	**7:24**	**7:37**	**7:50**	**8:07**	**8:21**	**8:37**	**8:52**
8:12	**8:17**	**8:31**	**8:43**	**8:53**	**9:09**	**9:23**	**9:38**	**9:52**
9:15	**9:19**	**9:32**	**9:43**	**9:53**	**10:10**	**10:23**	**10:38**	**10:52**

CASH FARES / *Tarifas en efectivo*

Exact fare, please / *Favor de pagar la cantidad exacta*

Day Pass (Regional) / *Pase diario (Regional)*	**$5.00**
One-Way Fare / *Tarifa de una direccíon*	**$2.25**
Senior (60+)/Disabled/Medicare *Mayores de 60 años/Discapacitados/Medicare*	**$1.10***
Children 5 & under / *Niños de 5 años o menos* Up to two children ride free per paying adult / *Máximo dos niños viajan gratis por cada adulto*	**FREE** / ***GRATIS***

MONTHLY PASSES / *Pases mensual*

Adult / *Adulto*	**$72.00**
Senior (60+)/Disabled/Medicare *Mayores de 60 años/Discapacitados/Medicare*	**$18.00***
Youths (18 and under) *Jóvenes (18 años o menos)*	**$36.00***

*I.D. required for discount fare or pass.
**Se requiere identificación para tarifas o pases de descuento.*

DAY PASS (REGIONAL) / *Pase diario (Regional)*

Valid for unlimited travel for one person on Trolley, most MTS buses, NCTD BREEZE and SPRINTER. Valid for a discount on COASTER fares. Not valid on Premium Express, Rural, Access, or special service buses.

Válidos para viajes ilimitados de una sola persona para: el Trolley, la mayoría de los autobuses de MTS, y los servicios del NCTD de BREEZE y SPRINTER. Válidos para acceder a descuentos en el COASTER, pero no para las rutas Premium Express, rurales, Access, ni los servicios especiales.

DIRECTORY / *Directorio*

Regional Transit Information *Información de transporte público regional*	**511** or/ó **(619) 233-3004**
TTY/TDD (teletype for hearing impaired) *Teletipo para sordos*	**(619) 234-5005** or/ó **(888) 722-4889**
InfoExpress (24-hour info via Touch-Tone phone) *Información las 24 horas (via teléfono de teclas)*	**(619) 685-4900**
Customer Service / Suggestions *Servicio al cliente / Sugerencias*	**(619) 557-4555**
SafeWatch	**(619) 557-4500**
The Transit Store / Lost & Found *The Transit Store / Objetos extraviados*	**(619) 234-1060**
Articles found on the bus are turned in at The Transit Store *Artículos encontrados en los autobuses son entregados a The Transit Store*	1st & Broadway Downtown San Diego M–F 9am–5pm
For MTS online trip planning *Planificación de viajes por Internet*	**www.sdmts.com**

For more information on riding MTS services, pick up a Rider's Guide on a bus or at The Transit Store, or visit **www.sdmts.com**.
*Para obtener más información sobre el uso de los servicios de MTS, recoja un 'Rider's Guide' en un autobús o en The Transit Store, o visita a **www.sdmts.com**.*

Thank you for riding MTS! ***¡Gracias por viajar con MTS!***

Effective SEPTEMBER 2, 2012

105

Old Town – UTC

via Morena Bl. / Clairemont Dr.

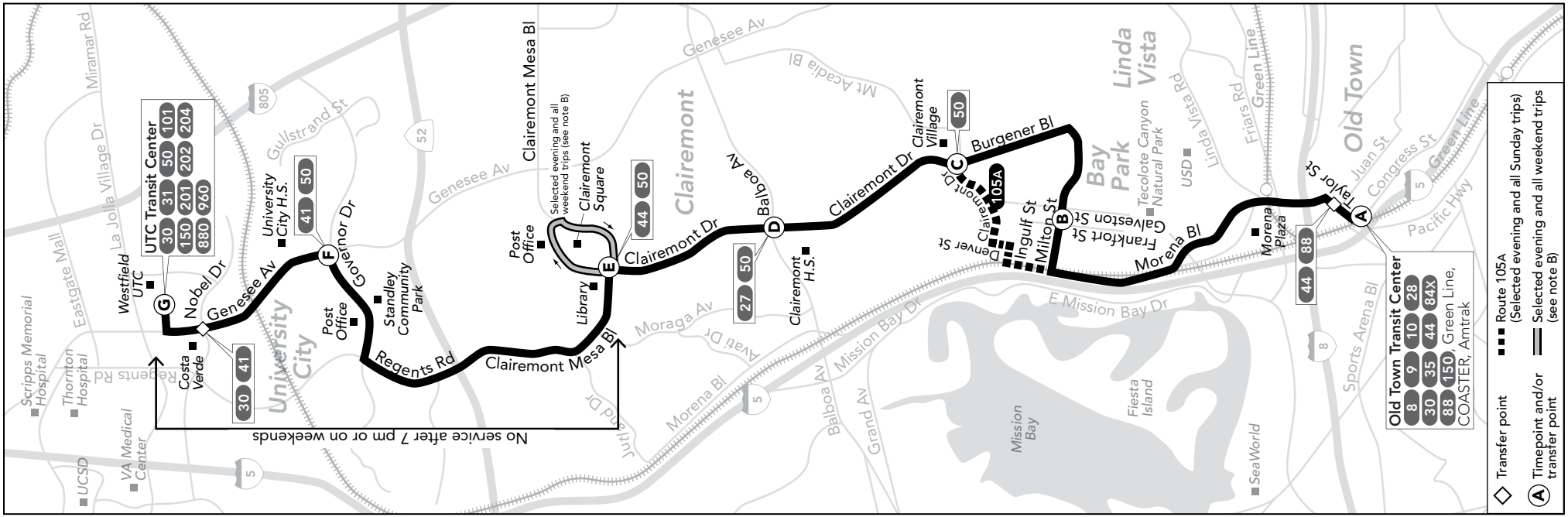
DESTINATIONS

- Bay Park
- Clairemont High School
- Clairemont Square
- University City High School

TROLLEY CONNECTIONS
Old Town

MTS Metropolitan Transit System

Alternative formats available upon request. Please call: (619) 557-4555 / *Formato alternativo disponible al preguntar. Favor de llamar: (619) 557-4555*



The schedules and other information shown in this timetable are subject to change. MTS does not assume responsibility for errors in timetables nor for any inconvenience caused by delayed buses.
Los horarios e información que se indican en este itinerario están sujetos a cambios. MTS no asume responsabilidad por errores en los itinerarios, ni por ningún perjuicio que se origine por los autobuses demorados.

Route 105 – Monday through Friday / *lunes a viernes*

Old Town ➡ Clairemont ➡ University City

Ⓐ Old Town Transit Ctr. **DEPART**	Ⓑ Milton St. & Galveston St.	Ⓒ Clairemont Dr. & Burgener Bl.	Ⓓ Clairemont Dr. & Balboa Av.	Ⓔ Clairemont Mesa Bl. & Clairemt. Dr.	Ⓕ Genesee Av. & Governor Dr.	Ⓖ UTC Transit Ctr. **ARRIVE**
5:13a	5:22a	5:28a	5:33a	5:37a	5:43a	5:48a
5:43	5:52	5:58	6:03	6:07	6:13	6:18
6:13	6:23	6:29	6:35	6:40	6:48	6:55
6:43	6:53	6:59	7:05	7:10	7:18	7:25
7:13	7:23	7:29	7:35	7:40	7:48	7:55
7:43	7:53	7:59	8:05	8:10	8:18	8:25
8:13	8:23	8:29	8:35	8:40	8:48	8:55
8:43	8:53	8:59	9:05	9:10	9:18	9:25
9:13	9:23	9:29	9:35	9:40	9:48	9:55
9:43	9:53	9:59	10:04	10:09	10:16	10:22
AND THEN EVERY 30 MINUTES AT: / *Y LUEGO CADA 30 MINUTOS A LA:*						
:13	:23	:29	:34	:39	:46	:52
:43	:53	:59	:04	:09	:16	:22
UNTIL: / *HASTA:*						
1:13p	**1:23p**	**1:29p**	**1:34p**	**1:39p**	**1:46p**	**1:52p**
1:43	**1:53**	**1:59**	**2:05**	**2:10**	**2:18**	**2:24**
2:13	**2:23**	**2:29**	**2:35**	**2:40**	**2:48**	**2:54**
2:43	**2:53**	**2:59**	**3:05**	**3:10**	**3:18**	**3:24**
3:13	**3:23**	**3:29**	**3:35**	**3:40**	**3:48**	**3:54**
3:43	**3:53**	**4:00**	**4:06**	**4:12**	**4:20**	**4:27**
4:13	**4:23**	**4:30**	**4:36**	**4:42**	**4:50**	**4:57**
4:43	**4:53**	**5:00**	**5:06**	**5:12**	**5:20**	**5:27**
5:13	**5:23**	**5:30**	**5:36**	**5:42**	**5:50**	**5:57**
5:43	**5:53**	**6:00**	**6:06**	**6:12**	**6:20**	**6:27**
6:13	**6:22**	**6:29**	**6:34**	**6:40**	**6:47**	**6:53**
6:43	**6:52**	**6:59**	**7:04**	**7:10**	**7:17**	**7:23**
A 7:13	**—**	**7:23**	**7:28**	**7:32**	**—**	**—**
A 8:13	**—**	**8:22**	**8:26**	**8:30**	**—**	**—**
A 9:13	**—**	**9:22**	**9:26**	**9:30**	**—**	**—**
A 10:13	**—**	**10:22**	**10:26**	**10:30**	**—**	**—**

University City ➡ Clairemont ➡ Old Town

Ⓖ UTC Transit Ctr. **DEPART**	Ⓕ Genesee Av. & Governor Dr.	Ⓔ Clairemt. Dr. & Clairemont Mesa Bl.	Ⓓ Clairemont Dr. & Balboa Av.	Ⓒ Burgener Bl. & Clairemont Dr.	Ⓑ Milton St. & Galveston St.	Ⓐ Old Town Transit Ctr. **ARRIVE**
—	—	—	5:11a	5:16a	5:21a	5:31a
5:23a	5:28a	5:37a	5:41	5:46	5:51	6:01
5:53	5:58	6:07	6:11	6:16	6:21	6:31
6:18	6:24	6:35	6:39	6:45	6:50	7:01
6:48	6:54	7:05	7:09	7:15	7:20	7:31
7:18	7:24	7:35	7:39	7:45	7:50	8:01
7:48	7:54	8:05	8:09	8:15	8:20	8:31
8:18	8:24	8:35	8:39	8:45	8:50	9:01
8:48	8:54	9:05	9:09	9:15	9:20	9:31
9:19	9:25	9:35	9:39	9:44	9:49	10:00
9:49	9:55	10:05	10:09	10:14	10:19	10:30
AND THEN EVERY 30 MINUTES AT: / *Y LUEGO CADA 30 MINUTOS A LA:*						
:19	:25	:35	:39	:44	:49	:00
:49	:55	:05	:09	:14	:19	:30
UNTIL: / *HASTA:*						
1:47p	**1:54p**	**2:04p**	**2:08p**	**2:14p**	**2:19p**	**2:30p**
2:17	**2:24**	**2:34**	**2:38**	**2:44**	**2:49**	**3:00**
2:48	**2:55**	**3:05**	**3:09**	**3:15**	**3:20**	**3:31**
3:18	**3:25**	**3:35**	**3:39**	**3:45**	**3:50**	**4:01**
3:46	**3:54**	**4:05**	**4:09**	**4:15**	**4:20**	**4:32**
4:16	**4:24**	**4:35**	**4:39**	**4:45**	**4:50**	**5:02**
4:46	**4:54**	**5:05**	**5:09**	**5:15**	**5:20**	**5:32**
5:16	**5:24**	**5:35**	**5:39**	**5:45**	**5:50**	**6:02**
5:46	**5:54**	**6:05**	**6:09**	**6:15**	**6:20**	**6:32**
6:20	**6:27**	**6:37**	**6:41**	**6:46**	**6:51**	**7:02**
6:53	**6:59**	**7:08**	**7:12**	**7:17**	**7:21**	**7:31**
—	**—**	**AB 7:43**	**7:47**	**7:51**	**—**	**8:01**
—	**—**	**AB 8:43**	**8:47**	**8:51**	**—**	**9:01**
—	**—**	**AB 9:43**	**9:47**	**9:51**	**—**	**10:01**

Route 105 – Saturday / *sábado*

Old Town ➡ Clairemont

Ⓐ Old Town Transit Ctr. **DEPART**	Ⓑ Milton St. & Galveston St.	Ⓒ Clairemont Dr. & Burgener Bl.	Ⓓ Clairemont Dr. & Balboa Av.	Ⓔ Clairemont Mesa Bl. & Clairemt. Dr.	Ⓕ Genesee Av. & Governor Dr.	Ⓖ UTC Transit Ctr. **ARRIVE**
6:14a	6:22a	6:28a	6:32a	6:36a	—	—
7:13	7:21	7:27	7:31	7:35	—	—
8:13	8:21	8:27	8:31	8:36	—	—
9:13	9:21	9:27	9:31	9:36	—	—
10:13	10:22	10:28	10:33	10:38	—	—
11:13	11:22	11:28	11:33	11:38	—	—
12:13p	**12:22p**	**12:28p**	**12:33p**	**12:38p**	**—**	**—**
1:13	**1:22**	**1:28**	**1:33**	**1:38**	**—**	**—**
2:13	**2:22**	**2:28**	**2:33**	**2:38**	**—**	**—**
3:13	**3:22**	**3:28**	**3:33**	**3:38**	**—**	**—**
4:13	**4:22**	**4:28**	**4:33**	**4:38**	**—**	**—**
5:13	**5:22**	**5:28**	**5:33**	**5:37**	**—**	**—**
6:13	**6:22**	**6:28**	**6:33**	**6:37**	**—**	**—**
A 7:13	**—**	**7:23**	**7:28**	**7:32**	**—**	**—**
A 8:30	**—**	**8:39**	**8:43**	**8:47**	**—**	**—**

Clairemont ➡ Old Town

Ⓖ UTC Transit Ctr. **DEPART**	Ⓕ Genesee Av. & Governor Dr.	Ⓔ Clairemt. Dr. & Clairemont Mesa Bl.	Ⓓ Clairemont Dr. & Balboa Av.	Ⓒ Burgener Bl. & Clairemont Dr.	Ⓑ Milton St. & Galveston St.	Ⓐ Old Town Transit Ctr. **ARRIVE**
—	—	**B** 6:56a	7:00a	7:04a	7:08a	7:17a
—	—	**B** 7:56	8:00	8:04	8:08	8:17
—	—	**B** 8:54	8:58	9:03	9:08	9:17
—	—	**B** 9:54	9:58	10:03	10:08	10:17
—	—	**B** 10:54	10:58	11:03	11:08	11:17
—	—	**B** 11:54	11:58	**12:03p**	**12:08p**	**12:17p**
—	**—**	**B 12:54p**	**12:58p**	**1:03**	**1:08**	**1:17**
—	**—**	**B 1:54**	**1:58**	**2:03**	**2:08**	**2:17**
—	**—**	**B 2:54**	**2:58**	**3:03**	**3:08**	**3:17**
—	**—**	**B 3:53**	**3:57**	**4:02**	**4:07**	**4:17**
—	**—**	**B 4:53**	**4:57**	**5:02**	**5:07**	**5:17**
—	**—**	**B 5:54**	**5:58**	**6:03**	**6:08**	**6:17**
—	**—**	**B 6:54**	**6:58**	**7:03**	**7:08**	**7:17**
—	**—**	**AB 7:59**	**8:03**	**8:07**	**—**	**8:17**

Route 105A – Sunday / *domingo*

Old Town ➡ Clairemont

Ⓐ Old Town Transit Ctr. **DEPART**	Ⓑ Milton St. & Galveston St.	Ⓒ Clairemont Dr. & Burgener Bl.	Ⓓ Clairemont Dr. & Balboa Av.	Ⓔ Clairemont Mesa Bl. & Clairemt. Dr.	Ⓕ Genesee Av. & Governor Dr.	Ⓖ UTC Transit Ctr. **ARRIVE**
A 7:28a	—	7:37a	7:41a	7:45a	—	—
A 8:28	—	8:37	8:41	8:46	—	—
A 9:28	—	9:37	9:41	9:46	—	—
A 10:28	—	10:38	10:43	10:48	—	—
A 11:28	—	11:38	11:43	11:48	—	—
A 12:28p	**—**	**12:38p**	**12:43p**	**12:48p**	**—**	**—**
A 1:28	**—**	**1:38**	**1:43**	**1:48**	**—**	**—**
A 2:28	**—**	**2:38**	**2:43**	**2:48**	**—**	**—**
A 3:28	**—**	**3:38**	**3:43**	**3:48**	**—**	**—**
A 4:28	**—**	**4:38**	**4:43**	**4:48**	**—**	**—**
A 5:28	**—**	**5:38**	**5:43**	**5:47**	**—**	**—**
A 6:28	**—**	**6:38**	**6:43**	**6:47**	**—**	**—**
A 7:28	**—**	**7:38**	**7:43**	**7:47**	**—**	**—**
A 8:30	**—**	**8:39**	**8:43**	**8:47**	**—**	**—**

Clairemont ➡ Old Town

Ⓖ UTC Transit Ctr. **DEPART**	Ⓕ Genesee Av. & Governor Dr.	Ⓔ Clairemt. Dr. & Clairemont Mesa Bl.	Ⓓ Clairemont Dr. & Balboa Av.	Ⓒ Clairemont Dr. & Burgener Bl.	Ⓑ Milton St. & Galveston St.	Ⓐ Old Town Transit Ctr. **ARRIVE**
—	—	**AB** 6:59a	7:03a	7:07a	—	7:17a
—	—	**AB** 7:59	8:03	8:07	—	8:17
—	—	**AB** 8:57	9:01	9:06	—	9:17
—	—	**AB** 9:57	10:01	10:06	—	10:17
—	—	**AB** 10:58	11:02	11:07	—	11:18
—	—	**AB** 11:58	**12:02p**	**12:07p**	**—**	**12:18p**
—	**—**	**AB 12:58p**	**1:02**	**1:07**	**—**	**1:18**
—	**—**	**AB 1:58**	**2:02**	**2:07**	**—**	**2:18**
—	**—**	**AB 2:58**	**3:02**	**3:07**	**—**	**3:18**
—	**—**	**AB 3:57**	**4:01**	**4:06**	**—**	**4:18**
—	**—**	**AB 4:57**	**5:01**	**5:06**	**—**	**5:18**
—	**—**	**AB 5:57**	**6:01**	**6:06**	**—**	**6:17**
—	**—**	**AB 6:57**	**7:01**	**7:06**	**—**	**7:17**
—	**—**	**AB 7:59**	**8:03**	**8:07**	**—**	**8:17**

A = Route 105A: Operates via Denver St. Does not serve Milton St. or Burgener Bl. / *Ruta 105A: Opera a través de Denver St. No ofrece servicio a Milton St. o Burgener Bl.*
B = Trip begins 3 minutes earlier on Clairemont Dr. north of Clairemont Mesa Bl. (Clairemont Square) / *Viaje comienza 3 minutos antes en Clairemont Dr. al norte de Clairemont Mesa Bl. (Clairemont Square)*

A Saturday or Sunday schedule will be operated on the following holidays and observed holidays
Se operará con horario de sábado o domingo durante los siguientes días festivos y feriados observados
>>> New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving, Christmas

CASH FARES / *Tarifas en efectivo*

Exact fare, please / *Favor de pagar la cantidad exacta*

Day Pass (Regional) / *Pase diario (Regional)* Compass Card required ($2) / *Se requiere un Compass Card ($2)*	$5.00
One-Way Fare / *Tarifa de una direccíon*	$2.25
Senior (60+)/Disabled/Medicare *Mayores de 60 años/Discapacitados/Medicare*	$1.10*
Children 5 & under / *Niños de 5 años o menos* Up to two children ride free per paying adult / *Máximo dos niños viajan gratis por cada adulto*	FREE / *GRATIS*

MONTHLY PASSES / *Pases mensual*

Adult / *Adulto*	$72.00
Senior (60+)/Disabled/Medicare *Mayores de 60 años/Discapacitados/Medicare*	$18.00*
Youths (18 and under) *Jóvenes (18 años o menos)*	$36.00*

*I.D. required for discount fare or pass.
**Se requiere identificación para tarifas o pases de descuento.*

DAY PASS (REGIONAL) / *Pase diario (Regional)*

All passes are sold on Compass Card, which can be reloaded and reused for up to five years. Compass Cards are available for $2 at select outlets. A $5 Day Pass requires a Compass Card. A paper Day Pass can be purchased on board buses for an additional $2 fee.

Todos los pases se venden en el Compass Card, el cual puede ser recargado y reutilizado por hasta cinco años. Compass Cards están disponibles por $2 en selectas sucursales. Un pase de un día por $5 requiere un Compass Card. Un pase de un día de papel se puede obtener a bordo los autobuses por un costo adicional de $2.

DIRECTORY / *Directorio*

Regional Transit Information *Información de transporte público regional*	**511** *or/ó* **(619) 233-3004**
TTY/TDD (teletype for hearing impaired) *Teletipo para sordos*	**(619) 234-5005** *or/ó* **(888) 722-4889**
InfoExpress (24-hour info via Touch-Tone phone) *Información las 24 horas (via teléfono de tedas)*	**(619) 685-4900**
Customer Service / Suggestions *Servicio al cliente / Sugerencias*	**(619) 557-4555**
SafeWatch	**(619) 557-4500**
The Transit Store / Lost & Found *The Transit Store / Objetos extraviados* Articles found on the bus are turned in at The Transit Store *Artículos encontrados en los autobuses son entregados a The Transit Store*	**(619) 234-1060** 1st & Broadway Downtown San Diego M–F 9am–5pm
For MTS online trip planning *Planificación de viajes por Internet*	**www.sdmts.com**

For more information on riding MTS services, pick up a Rider's Guide on a bus or at The Transit Store, or visit **www.sdmts.com**.
*Para obtener más información sobre el uso de los servicios de MTS, recoja un 'Rider's Guide' en un autobús o en The Transit Store, o visita a **www.sdmts.com**.*

Thank you for riding MTS! ***¡Gracias por viajar con MTS!***

Effective JANUARY 26, 2014

SuperLoop

201/202

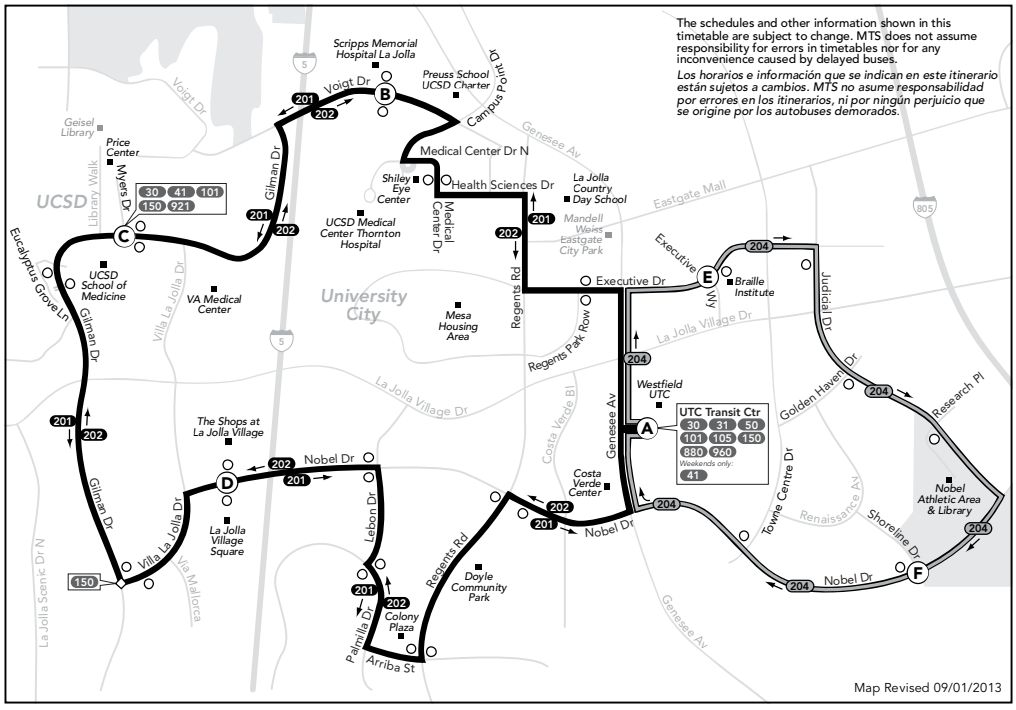
UTC Transit Center – UCSD
via UCSD Medical Center or Nobel Dr.

204

UTC East Loop
via Executive Dr. / Judicial Dr. / Nobel Dr.

DESTINATIONS
- Colony Plaza
- Costa Verde Center
- La Jolla Village Square/Shops at La Jolla Village
- Nobel Athletic Area & Library
- Scripps Memorial Hospital
- UCSD Medical Center (La Jolla)
- Westfield UTC

MTS Metropolitan Transit System



AM: Rte 204 to Rte 201

- A UTC Transit Center
- E Braille Institute (Executive Dr. & Executive Wy.)
- F Nobel Dr. & Shoreline Dr.
- A UTC Transit Center
- B Scripps Memorial Hospital
- C UCSD (Gilman Dr. & Myers Dr.)
- D La Jolla Village Square (Nobel Dr. & Villa La Jolla Dr.)
- A UTC Transit Center

PM: Rte 202 to Rte 204

- A UTC Transit Center
- D La Jolla Village Square (Nobel Dr. & Villa La Jolla Dr.)
- C UCSD (Gilman Dr. & Myers Dr.)
- B Scripps Memorial Hospital
- A UTC Transit Center
- E Braille Institute (Executive Dr. & Executive Wy.)
- F Nobel Dr. & Shoreline Dr.
- A UTC Transit Center

Alternative formats available upon request. Please call: (619) 557-4555 / *Formato alternativo disponible al preguntar. Favor de llamar: (619) 557-4555*

Route 204 – Monday through Friday / *lunes a viernes*

UTC ➡ Executive Dr. ➡ Judicial Dr. ➡ Nobel Dr. ➡ UTC

(A) UTC Transit Center DEPART	(E) Executive Dr. & Executive Wy.	(F) Nobel Dr. & Shoreline Dr.	(A) UTC Transit Center ARRIVE	
5:49a	5:52a	5:57a	6:03a	A
6:04	6:07	6:12	6:18	A
6:19	6:22	6:27	6:33	A
6:34	6:37	6:42	6:48	A
6:47	6:51	6:56	7:03	A
AND THEN EVERY 10 MINUTES UNTIL: / *Y LUEGO CADA 10 MINUTOS HASTA:*				A
10:17	10:21	10:26	10:33	A
10:32	10:36	10:41	10:48	
10:47	10:51	10:56	11:03	A
11:02	11:06	11:11	11:18	A
11:17	11:21	11:26	11:33	A
11:32	11:36	11:41	11:48	A
11:47	11:51	11:56	**12:03p**	A
12:04p	**12:08p**	**12:13p**	**12:20**	
12:19	**12:23**	**12:28**	**12:35**	
12:34	**12:38**	**12:43**	**12:50**	
12:49	**12:53**	**12:58**	**1:05**	
AND THEN EVERY 15 MINUTES AT: / *Y LUEGO CADA 15 MINUTOS HASTA:*				
:04	**:08**	**:13**	**:20**	
:19	**:23**	**:28**	**:35**	
:34	**:38**	**:43**	**:50**	
:49	**:53**	**:58**	**:05**	
UNTIL: / *HASTA:*				
3:06	**3:10**	**3:15**	**3:22**	
AND THEN EVERY 10 MINUTES UNTIL: / *Y LUEGO CADA 10 MINUTOS HASTA:*				
6:06	**6:10**	**6:15**	**6:22**	
6:20	**6:24**	**6:29**	**6:36**	
6:34	**6:38**	**6:43**	**6:50**	
6:49	**6:53**	**6:57**	**7:03**	
7:04	**7:08**	**7:12**	**7:18**	
7:19	**7:23**	**7:27**	**7:33**	
7:31	**7:35**	**7:39**	**7:45**	
7:46	**7:50**	**7:54**	**8:00**	
8:01	**8:05**	**8:09**	**8:15**	
8:16	**8:20**	**8:24**	**8:30**	
8:30	**8:34**	**8:38**	**8:44**	
8:45	**8:49**	**8:53**	**8:59**	
9:00	**9:04**	**9:08**	**9:14**	
9:15	**9:19**	**9:23**	**9:29**	
9:30	**9:34**	**9:38**	**9:44**	
9:45	**9:49**	**9:53**	**9:59**	
10:00	**10:04**	**10:08**	**10:14**	

Route 204 – Saturday and Sunday / *sábado y domingo*

UTC ➡ Executive Dr. ➡ Judicial Dr. ➡ Nobel Dr. ➡ UTC

(A) UTC Transit Center DEPART	(E) Executive Dr. Executive Wy.	(F) Nobel Dr. & Shoreline Dr.	(A) UTC Transit Center ARRIVE	
5:49a	5:52a	5:57a	6:03a	A
6:04	6:07	6:12	6:18	A
6:19	6:22	6:27	6:33	A
6:34	6:37	6:42	6:48	A
6:49	6:52	6:57	7:03	A
7:04	7:07	7:12	7:18	A
7:19	7:22	7:27	7:33	A
7:34	7:37	7:42	7:48	A
7:49	7:52	7:57	8:03	A
8:04	8:07	8:12	8:18	A
8:17	8:21	8:26	8:33	A
8:32	8:36	8:41	8:48	A
8:47	8:51	8:56	9:03	A
9:02	9:06	9:11	9:18	A
9:17	9:21	9:26	9:33	A
9:32	9:36	9:41	9:48	A
9:47	9:51	9:56	10:03	A
10:02	10:06	10:11	10:18	A
10:17	10:21	10:26	10:33	A
10:32	10:36	10:41	10:48	A
10:47	10:51	10:56	11:03	A
11:02	11:06	11:11	11:18	A
11:17	11:21	11:26	11:33	A
11:32	11:36	11:41	11:48	A
11:47	11:51	11:56	**12:03p**	
AND THEN EVERY 15 MINUTES AT: / *Y LUEGO CADA 15 MINUTOS HASTA:*				
:04	**:08**	**:13**	**:20**	
:19	**:23**	**:28**	**:35**	
:34	**:38**	**:43**	**:50**	
:49	**:53**	**:58**	**:05**	
UNTIL: / *HASTA:*				
6:49p	**6:53p**	**6:57p**	**7:03**	
7:04	**7:08**	**7:12**	**7:18**	
7:19	**7:23**	**7:27**	**7:33**	
7:31	**7:35**	**7:39**	**7:45**	
7:46	**7:50**	**7:54**	**8:00**	
8:01	**8:05**	**8:09**	**8:15**	
8:16	**8:20**	**8:24**	**8:30**	
8:30	**8:34**	**8:38**	**8:44**	
8:45	**8:49**	**8:53**	**8:59**	
9:00	**9:04**	**9:08**	**9:14**	
9:15	**9:19**	**9:23**	**9:29**	
9:30	**9:34**	**9:38**	**9:44**	
9:45	**9:49**	**9:53**	**9:59**	
10:00	**10:04**	**10:08**	**10:14**	

A = Trip continues as Route 201, departing UTC Transit Center two minutes after the Route 204 arrival time.
Viaje continúa como la ruta 201, con salida del UTC Transit Center dos minutos después de la llegada de la ruta 204.

A Saturday or Sunday schedule will be operated on the following holidays and observed holidays >>> New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving, Christmas

Se operará con horario de sábado o domingo durante los siguientes días festivos y feriados observados

Route 201 – Monday through Friday / *lunes a viernes*

UTC ➡ UCSD Med. Ctr. ➡ UCSD ➡ La Jolla Village Square ➡ UTC

Ⓐ UTC Transit Center **DEPART**	Ⓑ Scripps Memorial Hospital	Ⓒ Gilman Dr. & Myers Dr. (UCSD)	Ⓓ Nobel Dr. & La Jolla Village Square	Ⓐ UTC Transit Center **ARRIVE**
5:50a	5:58a	6:01a	6:06a	6:15a
6:05	6:13	6:16	6:21	6:30
6:20	6:28	6:31	6:36	6:45
6:35	6:43	6:47	6:52	7:02
6:50	6:58	7:02	7:07	7:17
7:05	7:14	7:18	7:23	7:33
7:15	7:24	7:29	7:35	7:45
7:25	7:34	7:39	7:45	7:55
7:35	7:44	7:49	7:55	8:05
7:45	7:54	7:59	8:05	8:15
7:55	8:04	8:09	8:15	8:25
8:05	8:14	8:19	8:25	8:35
8:15	8:24	8:29	8:35	8:45
8:25	8:34	8:39	8:45	8:55
8:35	8:44	8:49	8:55	9:05
8:45	8:54	8:59	9:05	9:15
8:55	9:04	9:09	9:15	9:25
9:05	9:14	9:19	9:25	9:35
9:15	9:24	9:29	9:35	9:45
9:25	9:34	9:39	9:45	9:55
9:35	9:44	9:49	9:55	10:05
9:45	9:54	9:59	10:05	10:15
9:55	10:04	10:09	10:15	10:25
10:05	10:14	10:19	10:25	10:35
10:15	10:24	10:29	10:35	10:45
10:25	10:34	10:39	10:45	10:55
10:35	10:44	10:49	10:55	11:05
10:50	10:59	11:04	11:10	11:20
11:05	11:14	11:19	11:25	11:36
11:20	11:29	11:34	11:40	11:52
11:35	11:44	11:49	11:55	**12:07p**
11:50	11:59	**12:04p**	**12:10p**	**12:22**
12:05p	**12:14p**	**12:19**	**12:25**	**12:37**
12:20	**12:29**	**12:34**	**12:40**	**12:52**
12:35	**12:44**	**12:49**	**12:55**	**1:07**
12:50	**12:59**	**1:04**	**1:10**	**1:22**
1:05	**1:14**	**1:19**	**1:25**	**1:37**
1:20	**1:29**	**1:34**	**1:40**	**1:52**
1:35	**1:44**	**1:49**	**1:55**	**2:07**
1:50	**1:59**	**2:04**	**2:10**	**2:22**
2:05	**2:14**	**2:19**	**2:25**	**2:37**
2:15	**2:24**	**2:29**	**2:35**	**2:47**
2:25	**2:34**	**2:39**	**2:45**	**2:57**
2:35	**2:44**	**2:50**	**2:56**	**3:08**
2:45	**2:54**	**3:00**	**3:06**	**3:18**
2:55	**3:04**	**3:10**	**3:16**	**3:28**
3:05	**3:14**	**3:20**	**3:26**	**3:38**
3:15	**3:24**	**3:30**	**3:36**	**3:48**
3:25	**3:34**	**3:40**	**3:46**	**3:58**
3:35	**3:44**	**3:50**	**3:56**	**4:08**
3:45	**3:54**	**4:00**	**4:06**	**4:18**
3:55	**4:04**	**4:10**	**4:16**	**4:28**
4:05	**4:14**	**4:20**	**4:26**	**4:38**
4:15	**4:24**	**4:30**	**4:36**	**4:48**
4:25	**4:34**	**4:40**	**4:46**	**4:58**
4:35	**4:44**	**4:50**	**4:56**	**5:08**
4:45	**4:54**	**5:00**	**5:06**	**5:18**
4:55	**5:04**	**5:10**	**5:16**	**5:28**
5:05	**5:14**	**5:20**	**5:26**	**5:38**
5:15	**5:24**	**5:30**	**5:36**	**5:48**
5:25	**5:34**	**5:40**	**5:46**	**5:58**
5:35	**5:44**	**5:50**	**5:56**	**6:08**
5:45	**5:54**	**6:00**	**6:06**	**6:18**
5:55	**6:04**	**6:10**	**6:16**	**6:28**
6:05	**6:14**	**6:20**	**6:26**	**6:38**
6:15	**6:24**	**6:30**	**6:36**	**6:48**
6:25	**6:34**	**6:40**	**6:46**	**6:58**
6:35	**6:44**	**6:50**	**6:56**	**7:08**
6:45	**6:54**	**6:59**	**7:05**	**7:16**
6:55	**7:04**	**7:09**	**7:15**	**7:26**
7:05	**7:14**	**7:19**	**7:25**	**7:36**
7:20	**7:29**	**7:34**	**7:40**	**7:51**
7:35	**7:43**	**7:48**	**7:54**	**8:04**
7:50	**7:58**	**8:03**	**8:09**	**8:19**
8:05	**8:13**	**8:18**	**8:24**	**8:34**
8:20	**8:28**	**8:33**	**8:39**	**8:49**
8:35	**8:43**	**8:48**	**8:54**	**9:04**
8:50	**8:58**	**9:02**	**9:07**	**9:17**
9:05	**9:13**	**9:17**	**9:22**	**9:32**
9:20	**9:28**	**9:32**	**9:37**	**9:47**
9:35	**9:43**	**9:47**	**9:52**	**10:02**
9:50	**9:58**	**10:02**	**10:07**	**10:17**
10:05	**10:13**	**10:17**	**10:22**	**10:32**

Route 201 – Saturday and Sunday / *sábado y domingo*

UTC ➡ UCSD Med. Ctr. ➡ UCSD ➡ La Jolla Village Square ➡ UTC

Ⓐ UTC Transit Center **DEPART**	Ⓑ Scripps Memorial Hospital	Ⓒ Gilman Dr. & Myers Dr. (UCSD)	Ⓓ Nobel Dr. & La Jolla Village Square	Ⓐ UTC Transit Center **ARRIVE**
5:50a	5:58a	6:01a	6:06a	6:15a
6:05	6:13	6:16	6:21	6:30
6:20	6:28	6:31	6:36	6:45
6:35	6:43	6:46	6:51	7:00
6:50	6:58	7:01	7:06	7:15
7:05	7:13	7:16	7:21	7:30
7:20	7:28	7:31	7:36	7:45
7:35	7:43	7:46	7:51	8:00
7:50	7:58	8:01	8:06	8:15
8:05	8:13	8:16	8:21	8:30
8:20	8:28	8:31	8:36	8:45
8:35	8:43	8:46	8:51	9:00
8:50	8:59	9:02	9:08	9:18
9:05	9:14	9:17	9:23	9:33
9:20	9:29	9:32	9:38	9:48
9:35	9:44	9:47	9:53	10:03
9:50	9:59	10:02	10:08	10:18
10:05	10:14	10:17	10:23	10:33
10:20	10:29	10:32	10:38	10:48
10:35	10:44	10:47	10:53	11:03
10:50	10:59	11:02	11:08	11:18
11:05	11:14	11:18	11:24	11:35
11:20	11:29	11:33	11:39	11:50
11:35	11:44	11:48	11:54	**12:05p**
11:50	11:59	**12:03p**	**12:09p**	**12:20**
12:05p	**12:14p**	**12:18**	**12:24**	**12:35**
12:20	**12:29**	**12:33**	**12:39**	**12:50**
12:35	**12:44**	**12:48**	**12:54**	**1:05**
12:50	**12:59**	**1:03**	**1:09**	**1:20**
AND THEN EVERY 15 MINUTES AT: / *Y LUEGO CADA 15 MINUTOS HASTA:*				
:05	**:14**	**:18**	**:24**	**:35**
:20	**:29**	**:33**	**:39**	**:50**
:35	**:44**	**:48**	**:54**	**:05**
:50	**:59**	**:03**	**:09**	**:20**
UNTIL: / *HASTA:*				
6:50	**6:58**	**7:02**	**7:08**	**7:19**
7:05	**7:13**	**7:17**	**7:23**	**7:34**
7:20	**7:28**	**7:32**	**7:38**	**7:49**
7:35	**7:43**	**7:47**	**7:53**	**8:04**
7:50	**7:58**	**8:02**	**8:08**	**8:19**
8:05	**8:13**	**8:17**	**8:23**	**8:34**
8:20	**8:28**	**8:32**	**8:38**	**8:49**
8:35	**8:43**	**8:47**	**8:53**	**9:04**
8:50	**8:58**	**9:02**	**9:07**	**9:17**
9:05	**9:13**	**9:17**	**9:22**	**9:32**
9:20	**9:28**	**9:32**	**9:37**	**9:47**
9:35	**9:43**	**9:47**	**9:52**	**10:02**
9:50	**9:58**	**10:02**	**10:07**	**10:17**
10:05	**10:13**	**10:17**	**10:22**	**10:32**

Route 202 – Monday through Friday / *lunes a viernes*

UTC ➡ La Jolla Village Square ➡ UCSD ➡ UCSD Med. Ctr. ➡ UTC

Ⓐ UTC Transit Center **DEPART**	Ⓓ Nobel Dr. & La Jolla Village Square	Ⓒ Gilman Dr. & Myers Dr. (UCSD)	Ⓑ Scripps Memorial Hospital	Ⓐ UTC Transit Center **ARRIVE**	
5:45a	5:56a	6:00a	6:03a	6:11a	
6:00	6:11	6:15	6:18	6:26	
6:15	6:26	6:30	6:33	6:41	
6:30	6:42	6:46	6:49	6:58	
6:45	6:57	7:02	7:05	7:14	
7:00	7:13	7:18	7:21	7:30	
7:10	7:23	7:29	7:32	7:42	
7:20	7:33	7:39	7:42	7:52	
7:30	7:43	7:49	7:52	8:02	
7:40	7:53	7:59	8:02	8:12	
7:50	8:03	8:09	8:12	8:22	
8:00	8:13	8:19	8:22	8:32	
8:10	8:23	8:29	8:32	8:42	
8:20	8:33	8:39	8:42	8:52	
8:30	8:43	8:49	8:52	9:02	
8:40	8:53	8:59	9:02	9:12	
8:50	9:03	9:09	9:12	9:22	
9:00	9:13	9:19	9:22	9:32	
9:10	9:23	9:29	9:32	9:42	
9:20	9:33	9:39	9:42	9:52	
9:30	9:43	9:49	9:52	10:02	
9:40	9:53	9:59	10:02	10:12	
9:50	10:03	10:09	10:12	10:22	
10:00	10:13	10:19	10:22	10:32	
10:10	10:23	10:29	10:32	10:42	
10:20	10:33	10:39	10:42	10:52	
10:30	10:43	10:49	10:52	11:02	
10:45	10:58	11:04	11:07	11:17	
11:00	11:13	11:19	11:22	11:32	
11:15	11:28	11:34	11:37	11:47	
11:30	11:43	11:49	11:52	**12:02p**	**B**
11:45	11:58	**12:04p**	**12:07p**	**12:17**	**B**
12:00p	**12:13p**	**12:19**	**12:22**	**12:32**	**B**
12:15	**12:28**	**12:34**	**12:37**	**12:47**	**B**
12:30	**12:43**	**12:49**	**12:52**	**1:02**	**B**
12:45	**12:58**	**1:04**	**1:07**	**1:17**	**B**
1:00	**1:13**	**1:19**	**1:22**	**1:32**	**B**
1:15	**1:28**	**1:34**	**1:37**	**1:47**	**B**
1:30	**1:43**	**1:49**	**1:52**	**2:02**	**B**
1:45	**1:58**	**2:04**	**2:07**	**2:17**	
2:00	**2:13**	**2:19**	**2:22**	**2:32**	**B**
2:15	**2:28**	**2:34**	**2:37**	**2:47**	**B**
2:30	**2:43**	**2:49**	**2:53**	**3:04**	**B**
2:40	**2:53**	**2:59**	**3:03**	**3:14**	**B**
2:50	**3:03**	**3:09**	**3:13**	**3:24**	**B**
3:00	**3:13**	**3:19**	**3:23**	**3:34**	**B**
3:10	**3:23**	**3:29**	**3:33**	**3:44**	**B**
3:20	**3:33**	**3:39**	**3:43**	**3:54**	**B**
3:30	**3:43**	**3:49**	**3:53**	**4:04**	**B**
3:40	**3:53**	**3:59**	**4:03**	**4:14**	**B**
3:50	**4:03**	**4:09**	**4:13**	**4:24**	**B**
4:00	**4:13**	**4:19**	**4:23**	**4:34**	**B**
4:10	**4:23**	**4:29**	**4:33**	**4:44**	**B**
4:20	**4:33**	**4:39**	**4:43**	**4:54**	**B**
4:30	**4:43**	**4:49**	**4:53**	**5:04**	**B**
4:40	**4:53**	**4:59**	**5:03**	**5:14**	**B**
4:50	**5:03**	**5:09**	**5:13**	**5:24**	**B**
5:00	**5:13**	**5:19**	**5:23**	**5:34**	**B**
5:10	**5:23**	**5:29**	**5:33**	**5:44**	**B**
5:20	**5:33**	**5:39**	**5:43**	**5:54**	**B**
5:30	**5:43**	**5:49**	**5:53**	**6:04**	**B**
5:45	**5:58**	**6:04**	**6:08**	**6:18**	**B**
6:00	**6:13**	**6:19**	**6:22**	**6:32**	**B**
6:15	**6:28**	**6:34**	**6:37**	**6:47**	**B**
6:30	**6:43**	**6:49**	**6:52**	**7:02**	**B**
6:45	**6:58**	**7:04**	**7:07**	**7:17**	**B**
7:00	**7:12**	**7:17**	**7:20**	**7:29**	**B**
7:15	**7:27**	**7:32**	**7:35**	**7:44**	**B**
7:30	**7:42**	**7:47**	**7:50**	**7:59**	**B**
7:45	**7:57**	**8:02**	**8:05**	**8:14**	**B**
8:00	**8:12**	**8:16**	**8:19**	**8:28**	**B**
8:15	**8:27**	**8:31**	**8:34**	**8:43**	**B**
8:30	**8:42**	**8:46**	**8:49**	**8:58**	**B**
8:45	**8:57**	**9:01**	**9:04**	**9:13**	**B**
9:00	**9:12**	**9:16**	**9:19**	**9:28**	**B**
9:15	**9:26**	**9:30**	**9:33**	**9:41**	**B**
9:30	**9:41**	**9:45**	**9:48**	**9:56**	**B**
9:45	**9:56**	**10:00**	**10:03**	**10:11**	
10:00	**10:11**	**10:15**	**10:18**	**10:26**	

Route 202 – Saturday and Sunday / *sábado y domingo*

UTC ➡ La Jolla Village Square ➡ UCSD ➡ UCSD Med. Ctr. ➡ UTC

Ⓐ UTC Transit Center **DEPART**	Ⓓ Nobel Dr. & La Jolla Village Square	Ⓒ Gilman Dr. & Myers Dr. (UCSD)	Ⓑ Scripps Memorial Hospital	Ⓐ UTC Transit Center **ARRIVE**	
5:45a	5:55a	5:59a	6:02a	6:10a	
6:00	6:10	6:14	6:17	6:25	
6:15	6:25	6:29	6:32	6:40	
6:30	6:40	6:44	6:47	6:55	
6:45	6:55	6:59	7:02	7:10	
7:00	7:10	7:14	7:17	7:25	
7:15	7:26	7:31	7:34	7:42	
7:30	7:41	7:46	7:49	7:57	
7:45	7:56	8:01	8:04	8:12	
8:00	8:11	8:16	8:19	8:27	
8:15	8:26	8:31	8:34	8:42	
8:30	8:41	8:46	8:49	8:57	
8:45	8:56	9:01	9:04	9:12	
9:00	9:11	9:16	9:19	9:27	
9:15	9:27	9:32	9:35	9:44	
9:30	9:42	9:47	9:50	9:59	
9:45	9:57	10:02	10:05	10:14	
10:00	10:12	10:17	10:20	10:29	
10:15	10:27	10:32	10:35	10:44	
10:30	10:42	10:47	10:50	10:59	
10:45	10:57	11:03	11:06	11:16	
11:00	11:12	11:18	11:21	11:31	
11:15	11:27	11:33	11:36	11:46	
11:30	11:42	11:48	11:51	**12:01p**	**B**
11:45	11:57	**12:03p**	**12:06p**	**12:16**	**B**
AND THEN EVERY 15 MINUTES AT: / *Y LUEGO CADA 15 MINUTOS HASTA:*					
:00	**:12**	**:18**	**:21**	**:31**	**B**
:15	**:27**	**:33**	**:36**	**:46**	**B**
:30	**:42**	**:48**	**:51**	**:01**	**B**
:45	**:57**	**:03**	**:06**	**:16**	**B**
UNTIL: / *HASTA:*					
5:45p	**5:57p**	**6:03**	**6:06**	**6:16**	**B**
6:00p	**6:12p**	**6:18**	**6:21**	**6:31**	**B**
6:15	**6:27**	**6:33**	**6:36**	**6:46**	**B**
6:30	**6:42**	**6:48**	**6:51**	**7:01**	**B**
6:45	**6:57**	**7:02**	**7:05**	**7:14**	**B**
7:00	**7:12**	**7:17**	**7:20**	**7:29**	**B**
7:15	**7:27**	**7:32**	**7:35**	**7:44**	**B**
7:30	**7:42**	**7:47**	**7:50**	**7:59**	**B**
7:45	**7:57**	**8:02**	**8:05**	**8:14**	**B**
8:00	**8:12**	**8:16**	**8:19**	**8:28**	**B**
8:15	**8:27**	**8:31**	**8:34**	**8:43**	**B**
8:30	**8:42**	**8:46**	**8:49**	**8:58**	**B**
8:45	**8:57**	**9:01**	**9:04**	**9:13**	**B**
9:00	**9:12**	**9:16**	**9:19**	**9:28**	**B**
9:15	**9:26**	**9:30**	**9:33**	**9:41**	**B**
9:30	**9:41**	**9:45**	**9:48**	**9:56**	**B**
9:45	**9:56**	**10:00**	**10:03**	**10:11**	
10:00	**10:11**	**10:15**	**10:18**	**10:26**	

B = Trip continues as Route 204, departing UTC Transit Center two to three minutes after the Route 202 arrival time.

Viaje continúa como la ruta 204, con salida del UTC Transit Center de dos a tres minutos después de la llegada de la ruta 202.

CASH FARES / *Tarifas en efectivo*

Exact fare, please / *Favor de pagar la cantidad exacta*

Day Pass (Regional) / *Pase diario (Regional)* Compass Card required ($2) / *Se requiere un Compass Card ($2)*	$5.00
One-Way Fare / *Tarifa de una direccíon*	$2.50
Senior (60+)/Disabled/Medicare *Mayores de 60 años/Discapacitados/Medicare*	$1.25*
Children 5 & under / *Niños de 5 años o menos* Up to two children ride free per paying adult / *Máximo dos niños viajan gratis por cada adulto*	FREE / *GRATIS*

MONTHLY PASSES / *Pases mensual*

Adult / *Adulto*	$72.00
Senior (60+)/Disabled/Medicare *Mayores de 60 años/Discapacitados/Medicare*	$18.00*
Youths (18 and under) *Jóvenes (18 años o menos)*	$36.00*

*I.D. required for discount fare or pass.
**Se requiere identificación para tarifas o pases de descuento.*

DAY PASS (REGIONAL) / *Pase diario (Regional)*

All passes are sold on Compass Card, which can be reloaded and reused for up to five years. Compass Cards are available for $2 at select outlets. A $5 Day Pass requires a Compass Card. A paper Day Pass can be purchased on board buses for an additional $2 fee.

Todos los pases se venden en el Compass Card, el cual puede ser recargado y reutilizado por hasta cinco años. Compass Cards están disponibles por $2 en selectas sucursales. Un pase de un día por $5 requiere un Compass Card. Un pase de un día de papel se puede obtener a bordo los autobuses por un costo adicional de $2.

DIRECTORY / *Directorio*

Regional Transit Information *Información de transporte público regional*	**511** or/ó **(619) 233-3004**
TTY/TDD (teletype for hearing impaired) *Teletipo para sordos*	**(619) 234-5005** or/ó **(888) 722-4889**
InfoExpress (24-hour info via Touch-Tone phone) *Información las 24 horas (via teléfono de teclas)*	**(619) 685-4900**
Customer Service / Suggestions *Servicio al cliente / Sugerencias*	**(619) 557-4555**
SafeWatch	**(619) 557-4500**
The Transit Store / Lost & Found *The Transit Store / Objetos extraviados*	**(619) 234-1060**
Articles found on the bus are turned in at The Transit Store *Artículos encontrados en los autobuses son entregados a The Transit Store*	1st & Broadway Downtown San Diego M–F 9am–5pm
For MTS online trip planning *Planificación de viajes por Internet*	**www.sdmts.com**

For more information on riding MTS services, pick up a Rider's Guide on a bus or at The Transit Store, or visit **www.sdmts.com**.
*Para obtener más información sobre el uso de los servicios de MTS, recoja un 'Rider's Guide' en un autobús o en The Transit Store, o visita a **www.sdmts.com**.*

Thank you for riding MTS! ***¡Gracias por viajar con MTS!***

Effective JANUARY 25, 2015

Rapid 237

Rancho Bernardo – UC San Diego

via Mira Mesa Bl.

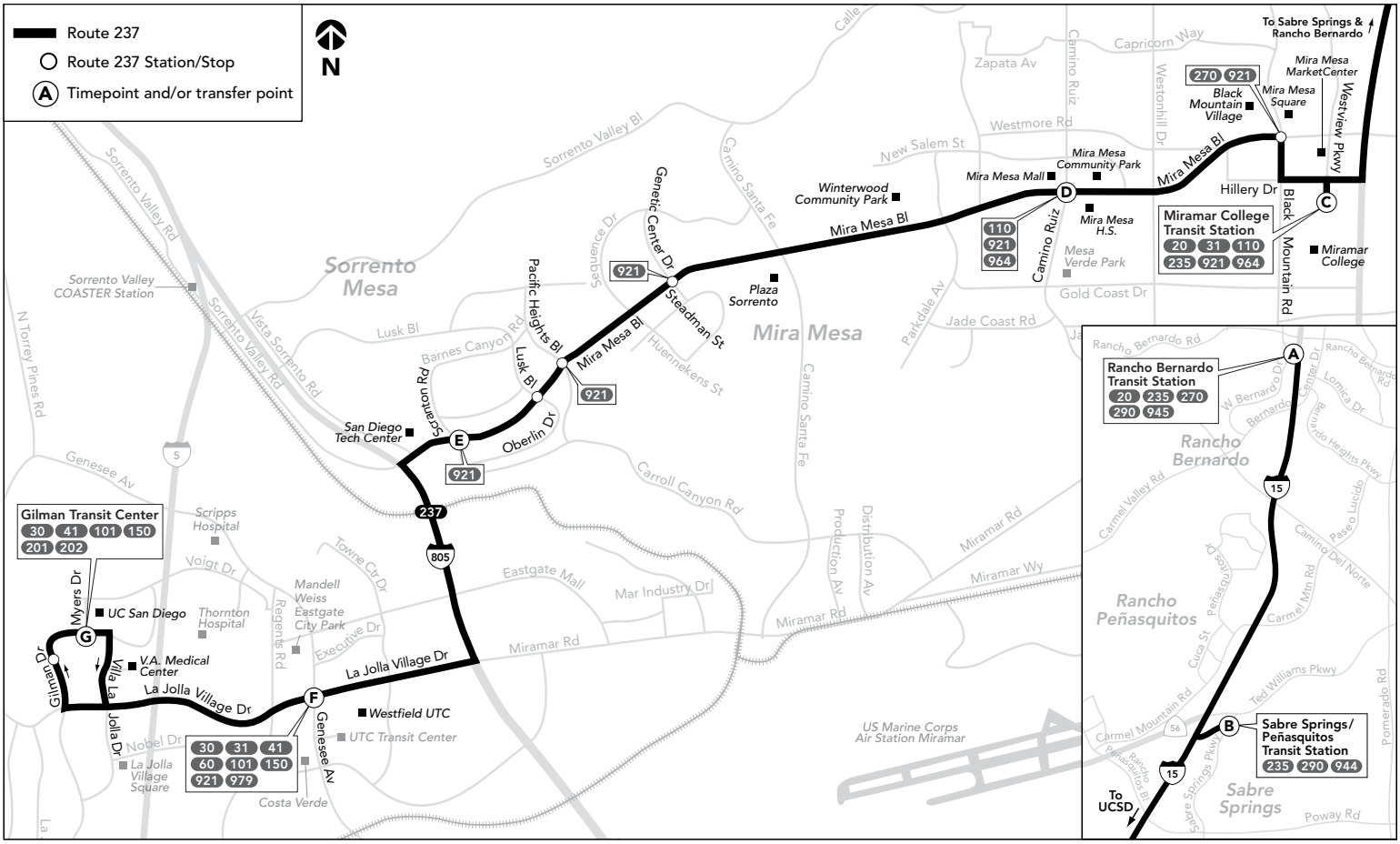
DESTINATIONS

- Sabre Springs / Peñasquitos Transit Station
- Miramar College Transit Station
- Mira Mesa High School
- Mira Mesa Mall
- Sorrento Mesa
- Westfield UTC

MTS® Metropolitan Transit System

Alternative formats available upon request. Please call: (619) 557-4555 / *Formato alternativo disponible al preguntar. Favor de llamar: (619) 557-4555*

The schedules and other information shown in this timetable are subject to change. MTS does not assume responsibility for errors in timetables nor for any inconvenience caused by delayed buses.
Los horarios e información que se indican en este itinerario están sujetos a cambios. MTS no asume responsabilidad por errores en los itinerarios, ni por ningún perjuicio que se origine por los autobuses demorados.



Route 237 – Monday through Friday / *lunes a viernes*

Rancho Bernardo ➡ UC San Diego

A R.B. Transit Station **DEPART**	B Sabre Springs Transit Station	C Miramar College Transit Station	D Mira Mesa Bl. & Camino Ruiz	E Mira Mesa Bl. & Scranton Rd.	F La Jolla Village Dr. & Genesee Av.	G Gilman T. C. (UCSD) **ARRIVE**
5:27a	5:34a	5:42a	5:49a	5:59a	6:06a	6:13a
5:57	6:04	6:12	6:19	6:29	6:36	6:43
6:12	6:19	6:27	6:34	6:44	6:51	6:58
6:27	6:34	6:42	6:49	6:59	7:06	7:13
6:42	6:49	6:57	7:05	7:16	7:24	7:31
6:57	7:04	7:12	7:20	7:31	7:39	7:46
7:12	7:19	7:27	7:36	7:49	7:57	8:05
7:27	7:34	7:42	7:51	8:04	8:12	8:20
7:42	7:49	7:57	8:06	8:19	8:27	8:35
7:57	8:04	8:12	8:21	8:34	8:42	8:50
8:12	8:19	8:27	8:36	8:49	8:57	9:05
8:27	8:34	8:42	8:51	9:04	9:12	9:20
8:42	8:49	8:57	9:06	9:19	9:27	9:35
8:57	9:04	9:12	9:21	9:34	9:42	9:50
9:27	9:34	9:42	9:50	10:01	10:10	10:18
2:25p	**2:32p**	**2:40p**	**2:48p**	**3:01p**	**3:12p**	**3:20p**
2:55	**3:02**	**3:10**	**3:18**	**3:31**	**3:42**	**3:50**
3:25	**3:32**	**3:40**	**3:48**	**4:01**	**4:12**	**4:20**
3:55	**4:02**	**4:10**	**4:19**	**4:32**	**4:45**	**4:54**
4:10	**4:17**	**4:25**	**4:34**	**4:47**	**5:00**	**5:09**
4:25	**4:32**	**4:40**	**4:49**	**5:02**	**5:15**	**5:24**
4:40	**4:47**	**4:55**	**5:04**	**5:17**	**5:30**	**5:39**
4:55	**5:02**	**5:10**	**5:19**	**5:32**	**5:45**	**5:54**
5:10	**5:17**	**5:25**	**5:34**	**5:47**	**6:00**	**6:09**
5:25	**5:32**	**5:40**	**5:49**	**6:02**	**6:15**	**6:24**
5:57	**6:04**	**6:12**	**6:20**	**6:32**	**6:44**	**6:52**

UC San Diego ➡ Rancho Bernardo

G Gilman T. C. (UCSD) **DEPART**	F La Jolla Village Dr. & Genesee Av.	E Mira Mesa Bl. & Scranton Rd.	D Mira Mesa Bl. & Camino Ruiz	C Miramar College Transit Station	B Sabre Springs Transit Station	A R.B. Transit Station **ARRIVE**
5:57a	6:03a	6:09a	6:19a	6:27a	6:35a	6:42a
6:27	6:33	6:39	6:49	6:57	7:05	7:12
6:57	7:04	7:11	7:22	7:31	7:39	7:46
7:12	7:19	7:26	7:37	7:46	7:54	8:01
7:27	7:34	7:41	7:52	8:01	8:09	8:16
7:42	7:49	7:56	8:07	8:16	8:24	8:31
7:57	8:04	8:11	8:22	8:31	8:39	8:46
8:12	8:19	8:26	8:37	8:46	8:54	9:01
8:27	8:34	8:41	8:52	9:01	9:09	9:16
8:57	9:04	9:11	9:22	9:31	9:39	9:46
2:10p	**2:17p**	**2:23p**	**2:34p**	**2:42p**	**2:50p**	**2:57p**
2:40	**2:47**	**2:53**	**3:04**	**3:12**	**3:20**	**3:27**
3:06	**3:13**	**3:20**	**3:32**	**3:42**	**3:50**	**3:57**
3:21	**3:28**	**3:35**	**3:47**	**3:57**	**4:05**	**4:12**
3:36	**3:43**	**3:50**	**4:02**	**4:12**	**4:20**	**4:27**
3:51	**3:58**	**4:05**	**4:17**	**4:27**	**4:35**	**4:42**
4:06	**4:13**	**4:20**	**4:34**	**4:44**	**4:52**	**4:59**
4:21	**4:28**	**4:35**	**4:49**	**5:00**	**5:08**	**5:15**
4:36	**4:43**	**4:50**	**5:04**	**5:15**	**5:23**	**5:30**
4:51	**4:58**	**5:05**	**5:19**	**5:30**	**5:38**	**5:45**
5:06	**5:13**	**5:20**	**5:34**	**5:45**	**5:53**	**6:00**
5:21	**5:28**	**5:35**	**5:49**	**6:00**	**6:08**	**6:15**
5:36	**5:43**	**5:50**	**6:04**	**6:15**	**6:23**	**6:30**
5:51	**5:58**	**6:05**	**6:19**	**6:30**	**6:38**	**6:45**
6:06	**6:13**	**6:20**	**6:32**	**6:42**	**6:50**	**6:57**
6:22	**6:29**	**6:36**	**6:48**	**6:58**	**7:06**	**7:13**
6:37	**6:44**	**6:51**	**7:03**	**7:13**	**7:21**	**7:28**
7:07	**7:13**	**7:19**	**7:30**	**7:39**	**7:47**	**7:54**

Route 237 does not operate on weekends or on the following holidays and observed holidays
La ruta 237 no ofrece servicio durante el fin de semana o durante los siguientes días festivos y feriados observados

>>>

New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving, Christmas

Effective JUNE 8, 2014

COASTER CONNECTION

Sorrento Valley COASTER Station

- 972 Sorrento Mesa
- 973 Carroll Canyon
- 978 Torrey Pines
- 979 North University City

CASH FARES / Tarifas en efectivo

The Sorrento Valley COASTER Connection is a free service for COASTER passengers! This service is provided as a courtesy by the Metropolitan Transit System and the North County Transit District.

¡El Sorrento Valley COASTER Connection es un servicio gratuito para los pasajeros del COASTER! Este servicio es proveído como cortesía por el Metropolitan Transit System y el North County Transit District.

DIRECTORY / Directorio

Regional Transit Information Información de transporte público regional	511 or/ó (61 9) 233-3004
TTY/TDD (teletype for hearing impaired) Teletipo para sordos	(619) 234-5005 or/ó (88 8) 722-4 889
InfoExpress (24-hour info via Touch-Tone phone) Información las 24 horas (via teléfono de teclas)	(619) 685-4900
Customer Service / Suggestions Servicio al cliente / Sugerencias	(619) 238-0100
SafeWatch	(619) 557-4500
Lost & Found Objetos extraviados	(877) 841-3278
The Transit Store	(619) 234-1060 1st & Broadway, Downtown San Diego M–F 9am–5pm
For MTS online trip planning Planificación de viajes por Internet	www.sdmts.com

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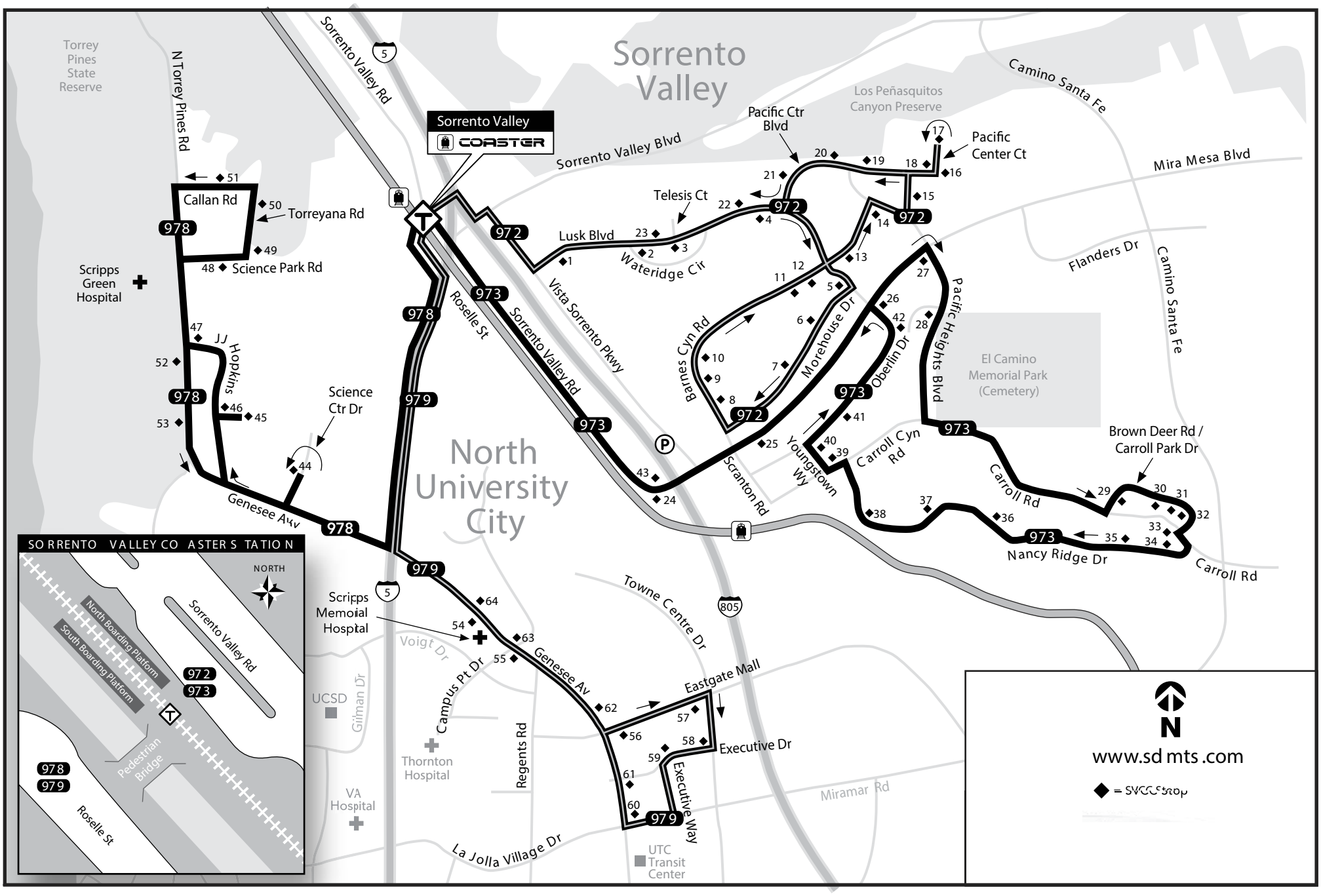
Thank you for riding MTS! ¡Gracias por viajar con MTS!

MTS® Metropolitan Transit System



COASTER — Monday through Friday / lunes a viernes

Oceanside → San Diego

	Morning (AM)				Afternoon/Evening (PM)		
Oceanside	6:00a	6:41a	7:17a	7:42a	3:34p	5:04p	5:40p
Carlsbad Village	6:05	6:45	7:21	7:47	3:40	5:09	5:45
Carlsbad Poinsettia	6:11	6:51	7:27	7:53	3:47	5:16	5:51
Encinitas	6:17	6:56	7:33	7:58	3:52	5:21	5:57
Solana Beach	6:23	7:02	7:39	8:05	3:58	5:29	6:03
Sorrento Valley	6:32	7:12	7:50	8:15	4:08	5:38	6:17
Old Town	6:53	7:34	8:13	8:38	4:30	6:01	6:42
San Diego	7:00	7:42	8:19	8:45	4:37	6:08	6:49

San Diego → Oceanside

	Morning (AM)		⊛	Afternoon/Evening (PM)				
San Diego	6:28a	7:46a	8:24a	3:45p	4:27p	4:52p	5:34p	6:25p
Old Town	6:34	7:52	8:30	3:51	4:34	4:58	5:40	6:32
Sorrento Valley	6:55	8:15	8:51	4:12	4:54	5:19	6:02	6:52
Solana Beach	7:04	8:24	9:00	4:23	5:05	5:28	6:12	7:04
Encinitas	7:09	8:29	9:07	4:29	5:11	5:34	6:18	7:10
Carlsbad Poinsettia	7:17	8:35	9:11	4:35	5:17	5:42	6:27	7:16
Carlsbad Village	7:25	8:42	9:17	4:42	5:23	5:50	6:33	7:22
Oceanside	7:30	8:48	9:25	4:48	5:29	5:55	6:39	7:27

COASTER schedule shown is effective April 7, 2014 and is subject to change without notice. This may not reflect the most current schedule. Only trips that connect with the Sorrento Valley COASTER Connection are shown. Additional days and times of service can be found at www.gonctd.com.
COASTER calendario que se muestra es a partir del 7 de abril de 2014 y está sujeto a cambios sin previo aviso. Esto puede no reflejar el calendario más actual. Sólo los viajes que conectan con el Sorrento Valley COASTER Connection se muestran. Días adicionales y las horas de servicio se pueden encontrar en www.gonctd.com.

*Operated by Amtrak / Operado por Amtrak

PASSENGERS WITH DISABILITIES / Pasajeros con incapacidades

The SVCC is a demand-response service that will provide a route deviation of up to 3/4 of a mile off an operating SVCC route for passengers with disabilities traveling to or from the Sorrento Valley COASTER Station. This service is provided anywhere in the SVCC service area during the corresponding hours that the SVCC service operates. Lift-equipped buses are available. To ensure availability, please call (877) 841-3278 at least one hour before your trip to schedule a curb-to-curb trip in a wheelchair-equipped vehicle.

El SVCC es un servicio de demanda-respuesta que proveerá una desviación de ruta de hasta 3/4 de milla de una ruta SVCC operativa a pasajeros con incapacidades que viajen a y de Sorrento Valley COASTER Station. Este servicio es proveído en cualquier parte del la área de servicio del SVCC, durante las horas correspondientes a al servicio que SVCC opera. Autobuses equipados para levantar sillas también están disponibles. Para asegurarse de su disponibilidad, por favor hable al (877) 841-3278 por lo menos una hora antes de su viaje para fijar el horario de su viaje de banqueta-a-banqueta o de un vehículo equipado para sillas de ruedas.

COMMUTER TAX BENEFIT PROGRAM FOR EMPLOYERS / Programa de Asistencia de Tránsito del Empleador

Employers can provide their employees a payroll tax deduction for riding transit to work of up to $125 per month. Employers benefit from this program through reduced payroll taxes and other business deductions. For more information about this and other free commuter services for employers visit iCommuteSD.com or call 511 and say "iCommute."

Los empleadores pueden proporcionar a sus empleados una deducción de los impuestos sobre nóminas de hasta $125 dólares al mes por trasladarse al trabajo usando el transporte interurbano. Los empleadores sacan provecho de este programa mediante menores impuestos sobre nómina y otras deducciones empresariales. Para mayores informes sobre éste y otros servicios gratuitos para pasajeros interurbanos para los empleadores, favor de visitar iCommuteSD.com o llamar al 511 y decir 'iCommute'.

Alternative formats available upon request. Please call: (619) 557-4555 / *Formato alternativo disponible al preguntar. Favor de llamar: (619) 557-4555*

Route 972 – Monday through Friday / *lunes a viernes*

Sorrento Mesa ➡ Sorrento Valley COASTER Station

		Morning (AM)					Afternoon/Evening (PM)				
ⓣ	Sorrento Valley COASTER Station **DEPART***	6:38a	7:18a	7:52a	8:18a	8:54a		**4:04p**	**4:37p**	**5:11p**	**6:06p**
1	10525 Vista Sorrento						**3:35p**				
2	EB Lusk Blvd & Wateridge Circle (after intersection)										
3	EB Lusk Blvd & Telesis Ct. (after intersection)										
4	Across from 6455 Lusk Blvd.	6:45	7:25	7:59	8:25	9:01	**3:36**	**4:13**	**4:46**	**5:20**	**6:15**
5	10225 Lusk Blvd. (electrical boxes)										
6	Across from 5525 Morehouse Drive										
7	5510 Morehouse Drive										
8	5424 Scranton Road										
9	9605 Scranton Road										
10	9805 Scranton Road										
11	10055 Barnes Canyon Road										
12	10225 Barnes Canyon Road										
13	EB Barnes Canyon Road & Lusk Blvd. (after intersection)	6:51	7:31	8:05	8:31	9:07	**3:42**	**4:19**	**4:52**	**5:26**	**6:21**
14	EB Barnes Canyon Road & Pacific Heights Blvd. (before turn)										
15	10211 Pacific Mesa Blvd.										
16	10309 Pacific Center Ct.										
17	10450 Pacific Center Ct.										
18	5910 Pacific Center Blvd.										
19	5788 Pacific Center Blvd.										
20	5764 Pacific Center Blvd.										
21	WB Pacific Center Blvd & McKellar Ct. (after intersection)										
22	Qualcomm Design Center (45 mph sign)	6:59	7:39	8:13	8:39	9:15	**3:50**	**4:27**	**5:00**	**5:34**	**6:29**
23	WB Lush Blvd & Telesis Ct. (after intersection)										
ⓣ	Sorrento Valley COASTER Station **ARRIVE**	7:05	7:45	8:18	8:44	—	**3:59**	**4:36**	**5:09**	**5:45**	**6:38**

Route 973 – Monday through Friday / *lunes a viernes*

Carroll Canyon ➡ Sorrento Valley COASTER Station

		Morning (AM)					Afternoon/Evening (PM)				
ⓣ	Sorrento Valley COASTER Station **DEPART***	6:38a	7:18a	7:52a	8:21a	8:54a		**4:06p**	**4:38p**	**5:14p**	**6:07p**
24	10240 Sorrento Valley Road										
25	EB Mira Mesa Blvd & Scranton Road (after intersection)						**3:35p**				
26	EB Mira Mesa Blvd & Oberlin Drive (after intersection)										
27	Pacific Heights Blvd & Mira Mesa Blvd. (after turn, electrical boxes)	6:46	7:26	8:00	8:29	9:02	**3:36**	**4:14**	**4:46**	**5:22**	**6:15**
28	Pacific Heights Blvd & Cornerstone Ct. (after intersection)										
29	Brown Deer Road & Ferris Square (at pedestrian crossing sign)										
30	9215 Brown Deer Road										
31	9339 Carroll Park Drive										
32	9449 Carroll Park Drive										
33	Nancy Ridge Drive & Carroll Road (after turn, Carroll Ridge Bus. Park)	6:55	7:35	8:08	8:37	9:11	**3:45**	**4:23**	**4:55**	**5:31**	**6:24**
34	Phage Biotechnology										
35	6650 Nancy Ridge Drive										
36	6310 Nancy Ridge Drive (electrical boxes in front of Nancy Ridge Technology Park)										
37	6150 Nancy Ridge Drive (Sorrento Ridge Business Park)										
38	5960 Nancy Ridge Drive (Sorrento Vista Industrial Park)										
39	5280 Carroll Canyon Road										
40	Youngstown Way & Oberlin Drive (before turn, at fire hydrant)										
41	5807 Oberlin Drive										
42	5871 Oberlin Drive (mailboxes)	6:59	7:39	8:12	8:41	9:15	**3:49**	**4:27**	**4:59**	**5:35**	**6:28**
43	45mph sign across street from Websense										
ⓣ	Sorrento Valley COASTER Station **ARRIVE**	7:08	7:48	8:21	8:50	—	**3:59**	**4:37**	**5:09**	**5:45**	**6:38**

Route 978 – Monday through Friday / *lunes a viernes*

Torrey Pines ➡ Sorrento Valley COASTER Station

		Morning (AM)				Afternoon/Evening (PM)				
ⓣ	Sorrento Valley COASTER Station **DEPART***	6:39a	7:19a	7:53a	8:22a		**4:10p**	**4:39p**	**5:10p**	**6:02p**
44	10240 Science Center Drive	6:45	7:25	7:59	8:28	**3:40p**	**4:16**	**4:47**	**5:20**	**6:12**
45	General Atomics Court (at end of turnaround)									
46	General Aromics Court & John Hopkins Drive (before turn)									
47	John Hopkins Drive & North Torrey Pines Road (before turn)									
48	3033 Science Park Road (driveway to L3 Communications)									
49	Torreyana Rd & Road to the Cure (before intersection)	6:52	7:32	8:05	8:35	**3:47**	**4:23**	**4:54**	**5:27**	**6:19**
50	Torreyana Rd & Callan Road (before turn)									
51	11099 Callan Road									
52	10666 North Torrey Pines Road	6:55	7:35	8:08	8:38	**3:50**	**4:26**	**4:57**	**5:30**	**6:22**
53	3366 North Torrey Pines Road									
ⓣ	Sorrento Valley COASTER Station **ARRIVE**	7:13	7:51	8:22	—	**3:59**	**4:37**	**5:09**	**5:42**	**6:33**

Route 979 – Monday through Friday / *lunes a viernes*

University City ➡ Sorrento Valley COASTER Station

		Morning (AM)				Afternoon/Evening (PM)				
ⓣ	Sorrento Valley COASTER Station **DEPART***	6:39a	7:19a	7:53a	8:16a		**4:12p**	**4:44p**	**5:18p**	**6:09p**
54	SB Genesee Ave & Scripps Driveway (after intersection)									
55	SB Genesee Ave & Campus Point Drive (after intersection)	6:46	7:26	8:00	8:23	**3:41p**	**4:19**	**4:51**	**5:25**	**6:16**
56	EB Eastgate Mall & Easter Way (before intersection)									
57	EB Eastgate Mall & Towne Centre Way (before turn)									
58	Towne Centre Way & Executive Drive (before turn)									
59	Executive Way & Executive Drive (before turn)									
60	NB Genesee Ave & La Jolla Village Drive (after turn)	6:51	7:31	8:05	8:28	**3:46**	**4:24**	**4:56**	**5:30**	**6:21**
61	NB Genesee Ave & Executive Drive (before intersection)									
62	NB Genesee Ave & Eastgate Mall (after intersection)									
63	NB Genesee Ave & Campus Point Drive (after intersection)									
64	NB Genesee Ave & Scripps Driveway (after intersection)									
ⓣ	Sorrento Valley COASTER Station **ARRIVE**	7:01	7:41	8:15	—	**3:59**	**4:37**	**5:09**	**5:43**	**6:34**

Routes 972, 973, 978, and 979 do not operate on weekends or on the observation of the following holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving, and Christmas
Las rutas 972, 973, 978 y 979 no ofrecen servicio durante el fin de semana ó durante los siguientes días festivos: Año Nuevo, Memorial Day, Día de la Independencia (E.E.U.U.), Labor Day, Día de Acción de Gracias, y Navidad
* = All morning departures from Sorrento Valley COASTER Station wait for the arriving southbound train. Afternoon departures from Sorrento Valley COASTER Station may leave up to ten minutes earlier than shown.
Todas las salidas de Sorrento Valley COASTER Station en la mañana esperan la llegada del tren hacia el sur. En la tarde, las salidas de Sorrento Valley COASTER Station pueden salir hasta diez minutos antes de lo mostrado.

Coastal Rail Closure
MAY 2-3
NO COASTER, AMTRAK, or METROLINK service between Oceanside and Santa Fe Depot

COASTER SCHEDULE

EFFECTIVE April 6, 2015 - October 4, 2015/VÁLIDO del 6 de Abril, 2015 a 4 de octubre, 2015

NEW! PADRES COASTER SCHEDULE

SOUTHBOUND — MONDAY-FRIDAY

OCEANSIDE TO SAN DIEGO	READ DOWN	COASTER	COASTER	COASTER	COASTER	COASTER	COASTER	COASTER	COASTER	COASTER	COASTER	COASTER	AMTRAK Pacific Surfliner	AMTRAK Pacific Surfliner	AMTRAK Pacific Surfliner
TRAIN SERVICE NO.		630	634	636	638	640	644	648	654	656	660	662	784	790	796
Oceanside	↓	5:13a	6:00a	6:39a	7:18a	7:42a	9:42a	11:05a	2:32p	3:34p	5:04p	5:40p	7:03p	9:19p	11:53p
Carlsbad Village	↓	5:17a	6:05a	6:43a	7:22a	7:47a	9:47a	11:10a	2:37p	3:40p	5:09p	5:45p	7:09p	9:24p	11:58p
Carlsbad Poinsettia	↓	5:23a	6:11a	6:49a	7:28a	7:53a	9:53a	11:16a	2:43p	3:47p	5:16p	5:51p	7:15p	9:30p	12:04a
Encinitas	↓	5:29a	6:17a	6:54a	7:34a	7:58a	9:58a	11:21a	2:49p	3:52p	5:21p	5:57p	7:20p	9:36p	12:10a
Solana Beach	↓	5:35a	6:23a	7:00a	7:40a	8:05a	10:02a	11:29a	2:54p	3:58p	5:29p	6:03p	7:26p	9:42p	12:16a
Sorrento Valley	↓	5:44a*	6:32a	7:10a	7:51a	8:15a	10:12a*	11:39a*	3:05p*	4:08p	5:38p	6:17p	7:36p*	9:54p*	12:26a*
San Diego-Old Town	↓	6:05a	6:53a	7:32a	8:14a	8:38a	10:34a	11:59a	3:28p	4:30p	6:01p	6:42p	7:58p	10:17p	12:52a
San Diego-SF Depot	↓	6:13a	7:00a	7:40a	8:20a	8:45a	10:43a	12:06p	3:36p	4:37p	6:08p	6:49p	8:07p	10:25p	1:00a

SOUTHBOUND — FRI NIGHT ONLY

COASTER	COASTER
664	672
6:35p	9:49p
6:40p	9:54p
6:46p	10:00p
6:52p	10:06p
7:02p	10:11p
7:12p*	10:21p*
7:33p	10:42p
7:41p	10:50p

SOUTHBOUND — PADRES 3:40 PM COASTER

COASTER
652
1:51p
1:56p
2:02p
2:08p
2:13p
2:23p*
2:43p
2:50p

NORTHBOUND — MONDAY-FRIDAY

SAN DIEGO TO OCEANSIDE	READ DOWN	COASTER	COASTER	AMTRAK Pacific Surfliner	COASTER	AMTRAK Pacific Surfliner	COASTER	COASTER	COASTER	COASTER	COASTER	COASTER	COASTER	COASTER	AMTRAK Pacific Surfliner
TRAIN SERVICE NO.		631	635	567	639	573	645	651	653	655	657	661	663	665	595
San Diego-SF Depot	↓	6:28a	7:46a	8:22a	9:48a	10:42a	12:37p	2:16p	3:45p	4:27p	4:52p	5:34p	6:25p	7:10p	9:00p
San Diego-Old Town	↓	6:34a	7:52a	8:29a	9:54a	10:49a	12:44p	2:22p	3:51p	4:34p	4:58p	5:40p	6:32p	7:16p	9:07p
Sorrento Valley	↓	6:55a	8:15a	8:50a	10:14a	11:12a*	1:04p*	2:42p*	4:12p	4:54p	5:19p	6:02p	6:52p	7:36p*	9:27p*
Solana Beach	↓	7:04a	8:24a	8:59a	10:23a	11:21a	1:14p	2:55p	4:23p	5:05p	5:28p	6:12p	7:04p	7:46p	9:36p
Encinitas	↓	7:09a	8:29a	9:06a	10:31a	11:28a	1:23p	3:03p	4:29p	5:11p	5:34p	6:18p	7:10p	7:53p	9:43p
Carlsbad Poinsettia	↓	7:17a	8:35a	9:13a	10:37a	11:32a	1:29p	3:08p	4:35p	5:17p	5:42p	6:27p	7:16p	7:59p	9:47p
Carlsbad Village	↓	7:25a	8:42a	9:19a	10:43a	11:38a	1:36p	3:14p	4:42p	5:23p	5:50p	6:33p	7:22p	8:05p	9:53p
Oceanside	↓	7:30a	8:48a	9:25a	10:50a	11:46a	1:42p	3:20p	4:48p	5:29p	5:55p	6:39p	7:27p	8:13p	9:59p

NORTHBOUND — FRI NIGHT ONLY

COASTER	COASTER
671	675
8:15p	11:15p
8:20p	11:20p
8:40p*	11:40p*
8:48p	11:48p
8:56p	11:56p
9:02p	12:02a
9:09p	12:09a
9:15p	12:15a

NORTHBOUND — PADRES COASTER

COASTER
699

Train departs 60 minutes (1 hour) after end of game or fireworks show with an absolute departure of midnight.

SOUTHBOUND — SATURDAY

OCEANSIDE TO SAN DIEGO	READ DOWN	COASTER	COASTER	COASTER	COASTER	COASTER	COASTER	AMTRAK Pacific Surfliner	AMTRAK Pacific Surfliner	AMTRAK Pacific Surfliner
TRAIN SERVICE NO.		680	684	688	690	692	696	784	1790	796
Oceanside	↓	8:36a	11:07a	1:50p	3:34p	5:15p	6:35p	7:03p	9:21p	11:53p
Carlsbad Village	↓	8:41a	11:12a	1:55p	3:39p	5:20p	6:40p	7:09p	9:26p	11:58p
Carlsbad Poinsettia	↓	8:47a	11:18a	2:01p	3:45p	5:26p	6:46p	7:15p	9:32p	12:04a
Encinitas	↓	8:53a	11:24a	2:07p	3:51p	5:32p	6:52p	7:20p	9:38p	12:10a
Solana Beach	↓	8:59a	11:30a	2:13p	3:57p	5:38p	6:59p	7:26p	9:46p	12:16a
Sorrento Valley	↓	9:09a*	11:40a*	2:23p*	4:07p*	5:48p*	7:10p*	7:36p*	9:58p*	12:26a*
San Diego-Old Town	↓	9:30a	12:02p	2:45p	4:28p	6:09p	7:31p	7:58p	10:21p	12:52a
San Diego-SF Depot	↓	9:36a	12:10p	2:53p	4:34p	6:17p	7:37p	8:07p	10:29p	1:00a

SOUTHBOUND — SUNDAY & HOLIDAYS

COASTER	COASTER	COASTER	COASTER	AMTRAK Pacific Surfliner	AMTRAK Pacific Surfliner	AMTRAK Pacific Surfliner
680	684	688	692	784	1790	796
8:36a	11:07a	1:50p	5:15p	7:03p	9:21p	11:53p
8:41a	11:12a	1:55p	5:20p	7:09p	9:26p	11:58p
8:47a	11:18a	2:01p	5:26p	7:15p	9:32p	12:04a
8:53a	11:24a	2:07p	5:32p	7:20p	9:38p	12:10a
8:59a	11:30a	2:13p	5:38p	7:26p	9:46p	12:16a
9:09a*	11:40a*	2:23p*	5:48p*	7:36p*	9:58p*	12:26a*
9:30a	12:02p	2:45p	6:09p	7:58p	10:21p	12:52a
9:36a	12:10p	2:53p	6:17p	8:07p	10:25p	1:00a

Tickets sold at vending machines VALID ONLY for the SAME DAY of purchase - **NO REFUNDS**. One-way tickets valid for 2 hours from time of purchase. Tickets may be purchased online **@GoNCTD.com** and via smartphones.

Boletos adquiridos en las máquinas son VÁLIDOS SOLAMENTE EL MISMO DÍA DE SU COMPRA. **NO REEMBOLSOS**. Boletos de viaje sencillo son válidos por 2 horas desde el momento de compra. Se pueden comprar boletos por internet **@GoNCTD.com** y vía teléfono inteligente.

NORTHBOUND — SATURDAY

SAN DIEGO TO OCEANSIDE	READ DOWN	AMTRAK Pacific Surfliner	COASTER	AMTRAK Pacific Surfliner	COASTER	COASTER	COASTER	COASTER	AMTRAK Pacific Surfliner	COASTER
TRAIN SERVICE NO.		567	681	573	685	689	691	693	595	697
San Diego-SF Depot	↓	8:22a	9:48a	10:42a	12:27p	3:18p	5:00p	7:10p	9:00p	11:15p
San Diego-Old Town	↓	8:29a	9:54a	10:49a	12:33p	3:25p	5:06p	7:16p	9:07p	11:20p
Sorrento Valley	↓	8:50a*	10:17a*	11:12a*	12:54p*	3:47p*	5:26p*	7:36p*	9:27p*	11:40p*
Solana Beach	↓	8:59a	10:25a	11:21a	1:02p	3:56p	5:37p	7:46p	9:36p	11:48p
Encinitas	↓	9:06a	10:31a	11:28a	1:08p	4:02p	5:43p	7:53p	9:43p	11:56p
Carlsbad Poinsettia	↓	9:13a	10:36a	11:32a	1:14p	4:08p	5:48p	7:59p	9:47p	12:02a
Carlsbad Village	↓	9:19a	10:43a	11:38a	1:22p	4:15p	5:55p	8:05p	9:53p	12:09a
Oceanside	↓	9:25a	10:48a	11:46a	1:28p	4:20p	6:03p	8:13p	9:59p	12:15a

NORTHBOUND — SUNDAY & HOLIDAYS

AMTRAK Pacific Surfliner	COASTER	AMTRAK Pacific Surfliner	COASTER	COASTER	COASTER	AMTRAK Pacific Surfliner
567	681	573	685	689	693	595
8:22a	9:48a	10:42a	12:27p	3:18p	7:10p	9:00p
8:29a	9:54a	10:49a	12:33p	3:25p	7:16p	9:07p
8:50a*	10:17a*	11:12a*	12:54p*	3:47p*	7:36p*	9:27p*
8:59a	10:25a	11:21a	1:02p	3:56p	7:46p	9:36p
9:06a	10:31a	11:28a	1:08p	4:02p	7:53p	9:43p
9:13a	10:36a	11:32a	1:14p	4:08p	7:59p	9:47p
9:19a	10:43a	11:38a	1:22p	4:15p	8:05p	9:53p
9:25a	10:48a	11:46a	1:28p	4:20p	8:13p	9:59p

★COASTER 652 operates *ONLY* for Weekday Padres games beginning at 3:40 p.m. (April 9 and October 1).

● October 1 *ONLY:* 3:40 p.m. Padres game time. COASTER Northbound train #665, scheduled to depart San Diego 7:10 p.m., may be held until an absolute departure of 7:30 p.m.

■ COASTER 699 will now depart 60 minutes (1 hour) after end of game or reworks show, with an absolute departure of midnight. This train will run for all Padres home games EXCEPT the games on April 29, June 16, July 1, July 22, August 12, August 19, and October 1.

* Sorrento Valley COASTER Connection shuttle service not available for this train.

Padres game times are subject to change. Check **GoNCTD.com** for service updates.

★El COASTER 652 da servicio *SOLO* cuando hay juego de los Padres en casa entre semana comenzando a las 3:40 p.m. (9 de abril y 1° de octubre).

● *SOLO* el 1ro de octubre: 3:40 p.m. tiempo de juego de los Padres. Tren COASTER #665 hacia al norte, programado para partir San Diego 7:10 p.m., podra ser detenido hasta una salida absoluta de 7:30 p.m.

■ El COASTER 699 ahora saldrá 60 minutes después de que termine el juego o juegos articiales, y a media noche a más tardar. Este tren dará servicio los días que los Padres juegan en casa CON EXCEPCIÓN del 29 de abril, 16 de junio, 1 de julio, 22 de julio, 12 de agosto, 19 de agosto y 1° de octubre.

* El shuttle Sorrento Valley COASTER Connection no está disponible en este tren.

Los horarios de los juegos de los Padres están sujetos a cambios. Visite GoNCTD.com para notificaciones sobre cambios.

COASTER operates on a Holiday (Sunday) schedule on Memorial Day, Labor Day, Thanksgiving Day, Christmas Day and New Year's Day. Independence Day, July 4, operates on a Saturday schedule. **Schedule subject to change**.

El COASTER opera en horarios de domingo el Día de Conmemoración, Día del Trabajo, Día de Acción de Gracias, Navidad y Año Nuevo. El Día de la Independencia, 4 de julio, opera en horarios de sábado. **Horario sujeto a cambios**.

AMTRAK Pacific Surfliner®

COASTER passengers may ride 6 selected Amtrak Pacific Surfliner trains, 7 days/week - 567, 573, 595, 784, 790/1790, 796 and Thruway bus 5811 with any valid COASTER fare media, within the trip limits printed on their COASTER ticket. **NOT VALID - WED-SUN OF THANKSGIVING WEEK AND OPENING WEEK OF THE *SUMMER* DEL MAR RACES.**

All Amtrak policies and terms of travel apply and may differ from NCTD policies including photo ID requirements, unaccompanied minors, accessibility, baggage restrictions and pets. Please visit **Amtrak.com/train-travel-plan**.

Passengers are not allowed to bring alcohol on board Amtrak.

Amtrak fares, schedules, route, equipment and services subject to change without notice. Other policies and restrictions apply. Amtrak and Pacific Surfliner are service marks of the National Railroad Passenger Corporation. **Amtrak.com/pacific-surfliner-train**.

AMTRAK 1-800-872-7245

BIKES: RESERVATIONS & AMTRAK ticket REQUIRED for BIKES on ALL AMTRAK trains.
Amtrak.com/bring-your-bicycle-onboard.

NORTH COUNTY TRANSIT DISTRICT
GoNCTD.com (760) 966-6500

Southern California Passenger Rail **SYSTEM MAP and TIMETABLES**

Schedule information for trains between

- *San Luis Obispo*
- *Santa Barbara*
- *Ventura*
- *Los Angeles*
- *Orange County*
- *San Diego*

Effective April 6, 2015

AMTRAK

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METROLINK

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Passenger Rail Station

- Amtrak Coast Starlight®
- Amtrak Pacific Surfliner®
- COASTER
- Metrolink
- SPRINTER (Light Rail)

Passenger Rail Service

- Amtrak Coast Starlight®
- Amtrak Pacific Surfliner®(LOSSAN Corridor)
- COASTER
- Metrolink Ventura County Line
- Metrolink Antelope Valley Line
- Metrolink San Bernardino Line
- Metrolink Riverside Line
- Metrolink 91 Line
- Metrolink Orange County Line
- Metrolink Inland Empire-Orange County Line
- SPRINTER (Light Rail)
- Amtrak San Joaquin®
- San Joaquin Thruway Bus
- Amtrak Southwest Chief®
- Amtrak Sunset Limited®

LOSSAN **TRAIN INFORMATION**

Effective April 6, 2015

Amtrak.com | Amtrak California AmtrakCalifornia.com | COASTER GoNCTD.com | METROLINK. metrolinktrains.com

Amtrak Coast Starlight®

Amtrak long distance train service between Los Angeles,Oakland, Portland, Seattle and intermediate stations.

Amtrak Ticket Information

Advanced reservations required. Tickets may be purchased by visiting Amtrak.com, by calling 1-800-USA-RAIL, or by visiting any staffed Amtrak station.

Amtrak accepts cash, MasterCard, Visa, American Express, Discover, and debit cards with a credit card logo at all staffed ticket offices. Debit cards requiring a PIN are not accepted.

Amtrak Coast Starlight Holiday Service

The Amtrak Coast Starlight operates daily including all holidays.

Amtrak routes, schedules and services subject to change without notice. Amtrak, Pacific Surfliner, Coast Starlight, Sunset Limited and Southwest Chief are service marks of the National Railroad Passenger Corporation.

Amtrak Pacific Surfliner®

Amtrak intercity train service between San Diego, Los Angeles, Santa Barbara, San Luis Obispo and intermediate stations.

Amtrak Ticket Information

Amtrak tickets may be purchased by visiting Amtrak.com, at Amtrak Quik-Trak™ self-serve kiosks, Metrolink/Amtrak ticket vending machines (for Pacific Surfliner only, advance reservations required for all other Amtrak trains), by calling 1-800-USA-RAIL, or by visiting any staffed Amtrak station.

Amtrak accepts cash, MasterCard, Visa, American Express, Discover and debit cards with a credit card logo at all staffed ticket offices. Debit cards requiring a PIN are not accepted. Credit cards are also accepted at Quik-Trak™ kiosks and by Metrolink/Amtrak ticket vending machines.

Amtrak eTickets

eTickets offer Amtrak passengers the convenience of skipping the ticket line and going straight to the gate by printing tickets anytime, anywhere or by using a smartphone to present the eTicket to the conductor. eTickets also can be printed at Amtrak ticket offices and Quik-Trak™ kiosks. Passengers purchasing group tickets will continue to receive paper value tickets.

Amtrak Pacific Surfliner Holiday Service

Trains 790 and 761 will not operate on May 25, 2015, July 3, 2015 and September 7, 2015. Instead, trains 1790 and 1761 will operate on these holidays.

COASTER

Commuter train service between Oceanside and San Diego and intermediate stations.

COASTER Ticket Information

Passengers must have a valid ticket prior to boarding the train. Tickets may be purchased at Oceanside Transit Center Customer Service, or at vending machines located at each station with cash, credit or debit card.

COASTER E-Ticketing

Avoid the lines on the platform by purchasing your COASTER tickets ahead of time! NCTD offers two easy ways to buy your COASTER tickets before you ride; online or with the NCTD mobile app. Use your credit or debit card and pay the same fare you would pay at a ticket vending machine. Store your payment information and your tickets – you can purchase up to two months in advance! It's the easiest way to beat the lines. Round trip, one way and special event tickets are now available for online and mobile purchasing. To purchase online visit GoNCTD.com/eticket and to download the mobile app visit the iTunes store or Google Play and search for NCTD.

COASTER Holiday Service

COASTER operates on a holiday (Sunday) schedule on the following dates: May 25, 2015 and September 7, 2015. A Saturday schedule will be operated on July 3, 2015.

Metrolink

Commuter train service with seven routes serving Los Angeles, Orange, Ventura, Riverside, San Bernardino, and San Diego counties.

100 series trains travel via the Ventura County Line.

200 series trains travel via the Antelope Valley Line.

600 series trains travel via the Orange County Line.

700 series trains travel via the 91 Line.

800 series trains travel via the Inland Empire-Orange County Line.

900 series trains travel via between L.A. Union Station and Burbank-Bob Hope Airport.

Metrolink Ticket Information

Passengers must have a valid ticket prior to boarding the train. Tickets may be purchased at the vending machines located at each station with cash, debit card, Visa®, MasterCard®, American Express®, or Discover®, or at the ticket window at L.A. Union Station.

Use your Metrolink ticket to transfer to most connecting buses, shuttles, or rail lines for free. Metrolink tickets are valid on most connecting transit services at Metrolink Stations.

Metrolink Holiday Service

Limited service will be operated on May 25, 2015, July 3, 2015 and September 7, 2015.

RAIL 2 RAIL® PROGRAM – Amtrak/Metrolink

The Rail 2 Rail® program allows Metrolink Monthly Pass holders along the Orange and Ventura County corridors to travel on Amtrak Pacific Surfliner trains within the station pairs of their pass at no additional charge, including Saturday and Sunday. Metrolink passengers simply show their Monthly Pass and board any Amtrak Pacific Surfliner train or bus to their destination. These additional trains are not available to holders of One-Way and Round-Trip tickets or 7-Day Passes. The Rail 2 Rail® program does NOT include travel on Coast Starlight trains.

All Metrolink ticket types are accepted on Amtrak trains between Burbank-Bob Hope Airport and Los Angeles Union Station.

Amtrak Pacific Surfliner Monthly Pass holders may ride any Metrolink train within the station pairs on their pass at no additional charge. Amtrak 10-Trip tickets are not accepted on Metrolink trains effective July 1, 2012.

LOSSAN Rail Corridor Agency

The Los Angeles-San Diego-San Luis Obispo (LOSSAN) Rail Corridor Agency seeks to increase ridership, revenue, capacity, reliability, and safety on the coastal rail corridor from San Diego to Los Angeles and San Luis Obispo. LOSSAN members include the rail owners and operators and regional transportation planning agencies along the six-county 351 mile corridor. Visit **www.lossan.org** for more information about LOSSAN.

LOSSAN

RAIL 2 RAIL® PROGRAM – Amtrak/COASTER

All valid COASTER fare media will be accepted on board Pacific Surfliner trains 784, 790/1790, 796, 567, 573, and 595. These six select Pacific Surfliner trains operate every day and will stop at all eight COASTER stations. This special 'all stop' service is not available on the Wednesday through Sunday of Thanksgiving week or the Friday, Saturday, and Sunday of Del Mar Races Opening Week.

Amtrak tickets must be purchased for travel north of Oceanside.

Bikes on Board

Bike reservations are required on the Pacific Surfliner. Bike reservations may be booked at Amtrak.com by clicking the "Add Bike to Trip" tab after selecting your departure and class of service. Passengers are required to properly secure bicycles on bike racks. Book early as reserved bike space is limited and may not be available on all trains or departures. Bikes are allowed without a reservation on all Metrolink and COASTER trains.

Amtrak Thruway Bus Connections

Amtrak Thruway buses are convenient, dedicated motor coaches designed exclusively for Amtrak train passengers with connections to more than 175 additional destinations in California and Nevada that are not served by rail. For more information visit Amtrak.com.

Amtrak Pacific Surfliner Del Mar Service

Effective weekends (Saturdays and Sundays) starting July 18, 2015 through September 7, 2015, trains 768, 572, 583, and 591 will run on adjusted schedules to better serve passengers throughout the Del Mar Racing Season.

For more information and adjusted schedules visit Amtrak.com.

LOSSAN **NORTHBOUND** TIMETABLE

Effective April 6, 2015

Amtrak.com · AmtrakCalifornia.com · GoNCTD.com · metrolinktrains.com

MONDAY THROUGH FRIDAY (PAGE 1 OF 3)

San Diego to San Luis Obispo	TRANSIT CONNECTIONS	DEPARTURE/ ARRIVAL	METROLINK	METROLINK	METROLINK	METROLINK	METROLINK	METROLINK	METROLINK	METROLINK	METROLINK	METROLINK	PACIFIC SURFLINER	METROLINK	METROLINK	METROLINK	METROLINK	METROLINK	METROLINK	METROLINK	METROLINK	PACIFIC SURFLINER	COASTER	METROLINK	METROLINK	METROLINK	PACIFIC SURFLINER	METROLINK	METROLINK	METROLINK	COASTER	METROLINK	COAST STARLIGHT	San Diego to San Luis Obispo
TRAIN SERVICE NUMBER			681	901	201	601	101	701	103	603	203	703	761	605	903	705	683	205	905	607	907	763	631	685	207	800	565	107	687	633	635	802	14	TRAIN SERVICE NUMBER
San Diego-Santa Fe Depot		DP																				6:00a	6:28a				7:05a				7:46a			San Diego-Santa Fe Depot
San Diego-Old Town																						R 6:07a	6:34a				R 7:12a				7:52a			San Diego-Old Town
Sorrento Valley																						–	6:55a				–				8:15a			Sorrento Valley
Solana Beach																						6:38a	7:04a				7:41a				8:24a			Solana Beach
Encinitas																						–	7:09a				–				8:29a			Encinitas
Carlsbad Poinsettia																						–	7:17a				–				8:35a			Carlsbad Poinsettia
Carlsbad Village																						–	7:25a				–				8:42a			Carlsbad Village
Oceanside						4:37a				5:16a				5:45a						6:39a		6:58a	7:30a			7:37a	7:56a				8:48a			Oceanside
San Clemente Pier						–				–				–						–		–				–	–							San Clemente Pier
San Clemente North Beach						5:00a				5:39a				6:09a						7:02a		–				8:00a	–							San Clemente North Beach
San Juan Capistrano						5:09a				5:48a				6:18a						7:11a		7:30a				8:09a	8:30a							San Juan Capistrano
Laguna Niguel/Mission Viejo			4:05a			5:15a				5:54a				6:24a						7:17a		–		7:55a		8:15a	–		8:40a	8:55a		9:05a		Laguna Niguel/Mission Viejo
Irvine			4:14a			5:24a				6:03a				6:33a			7:10a			7:26a		7:44a		8:04a		8:24a	8:45a		8:49a	9:04a		9:14a		Irvine
Tustin			4:22a			5:31a				6:10a				6:40a			7:17a			7:34a		–		8:12a		8:31a	–		8:56a	9:10a		9:21a		Tustin
Santa Ana			4:28a			5:38a				6:17a			Ⓑ5:25a	6:47a			7:24a			7:40a		7:55a		8:18a		8:38a	8:56a		9:02a	9:16a		9:27a		Santa Ana
Orange			4:33a			5:43a				6:22a				6:52a			7:29a			7:45a		–		8:23a		8:43a	–		9:07a	9:21a		9:32a		Orange
Anaheim			4:37a			5:47a				6:26a				6:56a			7:33a			7:49a		8:04a		8:27a			9:05a		9:11a	9:25a				Anaheim
Fullerton			4:46a			5:56a		•6:16a		6:35a		•6:43a	Ⓑ5:50a	7:05a		•7:29a	7:41a			7:58a		8:13a		8:36a			9:14a		9:19a	9:40a				Fullerton
Buena Park			•4:53a			•6:02a		•6:23a		•6:41a		•6:50a		•7:11a		•7:37a	•7:48a			•8:05a		–		•8:42a			–		•9:24a					Buena Park
Norwalk/Santa Fe Springs			•5:00a			•6:10a		•6:31a		•6:49a		•6:58a		•7:19a		•7:44a	•7:55a			•8:12a		–		•8:50a			–		•9:31a					Norwalk/Santa Fe Springs
Commerce		↓	–			–		–		•6:59a		–		•7:29a		–	–			•8:22a		–		•9:01a			–		–					Commerce
Los Angeles Union Station		AR	5:28a			6:40a		7:05a		7:20a		7:32a	Ⓑ6:35a	7:50a		8:18a	8:20a			8:45a		8:46a		9:27a			9:50a		10:10a					Los Angeles Union Station
		DP		5:38a	6:30a		6:52a		7:15a		7:30a		7:35a		8:00a			8:25a	8:30a		8:55a	9:05a			9:40a			9:50a						10:10a	
Glendale				•5:48a	6:41a		7:01a		7:25a		7:40a		7:48a		•8:10a			8:36a	•8:40a		•9:05a	9:17a			9:50a			10:00a						–	Glendale
Downtown Burbank				•5:54a	6:47a		7:07a		7:31a		7:46a		–		•8:16a			8:42a	•8:46a		•9:11a	–			9:56a			10:06a						–	Downtown Burbank
Burbank-Bob Hope Airport				6:01a			7:12a		7:36a				8:00a		8:25a				8:55a		9:20a	9:27a						10:11a						R 10:29a	Burbank-Bob Hope Airport
Van Nuys							•7:23a		•7:43a				8:10a									9:37a						•10:19a						R 10:40a	Van Nuys
Northridge							•7:31a		•8:00a				–									–						•10:28a						–	Northridge
Chatsworth							•7:38a		8:10a				8:32a									9:49a						10:35a						–	Chatsworth
Simi Valley							•7:52a						8:45a									10:01a												R 11:11a	Simi Valley
Moorpark							8:10a						8:57a									–												–	Moorpark
Camarillo													9:10a									10:25a												–	Camarillo
Oxnard													9:21a									10:38a												11:44a	Oxnard
East Ventura	¹												–									–												–	East Ventura
Ventura	¹												9:35a									10:54a												–	Ventura
Carpinteria													10:06a									11:16a												–	Carpinteria
Santa Barbara													10:22a									D 11:40a												12:40p	Santa Barbara
Goleta	¹												10:34a									11:53a												–	Goleta
Lompoc-Surf													11:40a																					–	Lompoc-Surf
Guadalupe-Santa Maria	²												12:16p																					–	Guadalupe-Santa Maria
Grover Beach		↓											12:35p									Ⓑ1:40p												–	Grover Beach
San Luis Obispo		AR											1:00p									Ⓑ2:20p												3:35p	San Luis Obispo

NOTES

Boarding information is available at each station.

- Amtrak Coast Starlight®
- Amtrak Pacific Surfliner®
- COASTER
- METROLINK

- Bus
- Bus Rapid Transit
- LAX Flyaway
- Light Rail Transit
- Subway

– Train does not stop at this station
R Stops only to receive passengers
D Stops only to discharge passengers
COASTER fares and passes are accepted on Pacific Surfliner for travel between San Diego and Oceanside

DP Departure time
AR Arrival time
a AM times
p PM times

• Train may leave up to five minutes ahead of schedule.
⋆ Sorrento Valley COASTER Connection shuttle service not available for this train.
Ⓑ Amtrak California Thruway Bus Service: Advanced reservations required.
Amtrak California Thruway Bus Service: Arrives/departs from Santa Barbara. There is no bus service to Goleta.

↳ Connecting trains: connections between Amtrak, Metrolink, and COASTER are not guaranteed.
¹ Transit is within walking distance to the train station.
² On demand transit service. Call transit operator for service.

Northbound Monday-Friday schedule continued on next page.

LOSSAN **NORTHBOUND** TIMETABLE

Effective April 6, 2015

Amtrak.com · AmtrakCalifornia.com · GoNCTD.com · metrolinktrains.com

MONDAY THROUGH FRIDAY (PAGE 2 OF 3)

San Diego to San Luis Obispo	TRANSIT CONNECTIONS	DEPARTURE/ ARRIVAL	METROLINK	PACIFIC SURFLINER	METROLINK	PACIFIC SURFLINER	COASTER	METROLINK	METROLINK	PACIFIC SURFLINER	METROLINK	METROLINK	PACIFIC SURFLINER	COASTER	METROLINK	METROLINK	METROLINK	METROLINK	METROLINK	PACIFIC SURFLINER	METROLINK	METROLINK	COASTER	METROLINK	METROLINK	METROLINK	METROLINK	METROLINK	METROLINK	METROLINK	PACIFIC SURFLINER	San Diego to San Luis Obispo
TRAIN SERVICE NUMBER			209	567	211	769	639	635	109	573	213	804	777	645	909	155	115	215	217	579	806	641	651	117	911	219	119	285	808	609	583	TRAIN SERVICE NUMBER
San Diego-Santa Fe Depot		DP		8:22a		9:25a	9:48a			10:42a			12:00p	12:37p						1:40p			2:16p								2:40p	San Diego-Santa Fe Depot
San Diego-Old Town				R 8:29a		R 9:32a	9:54a			R 10:49a			–	12:44p						–			2:22p								R 2:47p	San Diego-Old Town
Sorrento Valley				8:50a		–	10:14a			11:12a			–	1:04p*						–			2:42p*								–	Sorrento Valley
Solana Beach				8:59a		10:03a	10:23a			11:21a			12:34p	1:14p						2:14p			2:55p								3:20p	Solana Beach
Encinitas				9:06a		–	10:31a			11:28a			–	1:23p						–			3:03p								–	Encinitas
Carlsbad Poinsettia				9:13a		–	10:37a			11:32a			–	1:29p						–			3:08p								–	Carlsbad Poinsettia
Carlsbad Village				9:19a		–	10:43a			11:38a			–	1:36p						–			3:14p								–	Carlsbad Village
Oceanside				9:25a		10:18a	10:50a			11:46a			12:53p	1:42p						2:31p		3:00p	3:20p							3:26p	3:41p	Oceanside
San Clemente Pier				–		–				–			–							–		–								–	4:03p	San Clemente Pier
San Clemente North Beach				–		–				–			–							–		3:24p								3:49p	–	San Clemente North Beach
San Juan Capistrano				9:58a		10:48a				12:18p			1:25p							3:05p		3:34p								3:59p	4:20p	San Juan Capistrano
Laguna Niguel/Mission Viejo				–		–		11:30a		–		12:30p	–							–	3:25p	3:40p							4:00p	4:10p	–	Laguna Niguel/Mission Viejo
Irvine				10:14a		11:03a		11:39a		12:35p		12:39p	1:40p							3:20p	3:34p	3:49p							4:09p	4:19p	4:35p	Irvine
Tustin				–		–		11:45a		–		12:46p	–							–	3:41p	3:56p							4:16p	4:27p	–	Tustin
Santa Ana				10:24a		11:15a		11:51a		12:45p		12:53p	1:51p							3:30p	3:47p	4:02p							4:22p	4:32p	4:46p	Santa Ana
Orange				–		–		11:56a		–		12:58p	–							–	3:52p	4:07p							4:27p	4:37p	–	Orange
Anaheim				10:34a		11:24a		12:00p		12:53p			2:00p							3:38p		4:11p								4:41p	4:55p	Anaheim
Fullerton				10:43a		11:34a		12:15p		1:03p			2:10p							3:49p		4:25p								4:49p	5:05p	Fullerton
Buena Park				–		–				–			–							–										•4:57p	–	Buena Park
Norwalk/Santa Fe Springs				–		–				–			–							–										•5:03p	–	Norwalk/Santa Fe Springs
Commerce		↓		–		–				–			–							–										–	–	Commerce
Los Angeles Union Station		AR		11:20a		12:10p				1:40p			2:45p							4:25p				4:25p	4:33p	4:45p	5:10p	5:35p		5:35p	5:40p	Los Angeles Union Station
		DP	11:20p		12:00p	12:25p			12:50p		1:55p		3:00p		3:05p	3:15p	3:35p	3:45p	4:00p					4:35p	•4:43p	4:55p	5:20p	–				
Glendale			11:30p		12:11p	12:37p			1:00p		2:05p		3:12p		•3:15p	3:25p	3:45p	3:55p	4:10p					4:41p	•4:49p	5:01p	5:26p	5:49p				Glendale
Downtown Burbank			11:36p		12:17p	–			1:06p		2:11p		–		•3:21p	3:31p	3:51p	4:01p	4:16p					4:46p	4:58p		5:31p					Downtown Burbank
Burbank-Bob Hope Airport						12:47p			1:11p				3:22p		3:30p	3:36p	3:56p							4:53p			5:38p					Van Nuys
Van Nuys						12:57p			1:18p				3:32p			•3:43p	4:03p							5:01p			5:46p					Northridge
Northridge						–			1:26p				–			•3:51p	4:11p							5:08p			5:53p					Chatsworth
Chatsworth						1:09p			1:33p				3:44p			4:05p	4:18p							5:20p			6:05p					Simi Valley
Simi Valley						1:21p			•1:45p				4:00p				•4:30p							5:32p			6:17p					Moorpark
Moorpark						1:34p			2:05p				–				4:47p							5:43p			6:28p					Camarillo
Camarillo						1:49p							4:22p											5:53p			6:38p					Oxnard
Oxnard						2:00p							4:33p											6:12p			6:57p					East Ventura
East Ventura	[1]					–							–																			Ventura
Ventura	[1]					2:14p							4:57p																			Carpinteria
Carpinteria						2:42p							5:21p																			Santa Barbara
Santa Barbara						D *3:00p*							5:43p																			Goleta
Goleta	[1]					3:13p							5:55p																			Lompoc-Surf
Lompoc-Surf													7:01p																			Guadalupe-Santa Maria
Guadalupe-Santa Maria	[2]					Ⓑ5:05p							7:37p																			Grover Beach
Grover Beach		↓				Ⓑ5:30p							7:54p																			San Luis Obispo
San Luis Obispo		AR				Ⓑ5:15p							8:30p																			

NOTES

Boarding information is available at each station.

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- Amtrak Pacific Surfliner®
- COASTER
- METROLINK

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- Bus Rapid Transit
- LAX Flyaway
- Light Rail Transit
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D Stops only to discharge passengers
COASTER fares and passes are accepted on Pacific Surfliner for travel between San Diego and Oceanside

DP Departure time
AR Arrival time
a AM times
p PM times

• Train may leave up to five minutes ahead of schedule.
* Sorrento Valley COASTER Connection shuttle service not available for this train.
Ⓑ Amtrak California Thruway Bus Service: Advanced reservations required.
Amtrak California Thruway Bus Service: Arrives/departs from Santa Barbara. There is no bus service to Goleta.

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[2] On demand transit service. Call transit operator for service.

Northbound Monday-Friday schedule continued on next page.

LOSSAN **NORTHBOUND** TIMETABLE

Effective April 6, 2015

Amtrak.com | AmtrakCalifornia.com | GoNCTD.com | metrolinktrains.com

MONDAY THROUGH FRIDAY (PAGE 3 OF 3)

San Diego to San Luis Obispo	TRANSIT CONNECTIONS	DEPARTURE/ ARRIVAL	METROLINK	METROLINK	METROLINK	METROLINK	METROLINK	COASTER	METROLINK	METROLINK	PACIFIC SURFLINER	COASTER	METROLINK	COASTER	COASTER	METROLINK	METROLINK	METROLINK	METROLINK	COASTER	PACIFIC SURFLINER	COASTER	METROLINK	COASTER Friday Only	PACIFIC SURFLINER	COASTER Friday Only	San Diego to San Luis Obispo
TRAIN SERVICE NUMBER			221	121	810	689	812	653	223	123	785	655	643	657	661	707	225	814	227	663	591	665	645	671	595	675	TRAIN SERVICE NUMBER
San Diego-Santa Fe Depot		DP						3:45p			4:00p	4:27p		4:52p	5:34p					6:25p	6:45p	7:10p		8:15p	9:00p	11:15p	San Diego-Santa Fe Depot
San Diego-Old Town								3:51p			R 4:07p	4:34p		4:58p	5:40p					6:32p	R 6:52p	7:16p		8:20p	R 9:07p	11:20p	San Diego-Old Town
Sorrento Valley								4:12p			–	4:54p		5:19p	6:02p					6:52p	–	7:36p*		8:40p*	9:27p*	11:40p*	Sorrento Valley
Solana Beach								4:23p			4:40p	5:05p		5:28p	6:12p					7:04p	7:22p	7:46p		8:48p	9:36p	11:48p	Solana Beach
Encinitas								4:29p			–	5:11p		5:34p	6:18p					7:10p	–	7:53p		8:56p	9:43p	11:56p	Encinitas
Carlsbad Poinsettia								4:35p			–	5:17p		5:42p	6:27p					7:16p	–	7:59p		9:02p	9:47p	12:02a	Carlsbad Poinsettia
Carlsbad Village								4:42p			–	5:23p		5:50p	6:33p					7:22p	–	8:05p		9:09p	9:53p	12:09a	Carlsbad Village
Oceanside							4:27p	4:48p	→	→	5:00p	5:29p		5:55p	6:39p					7:27p	→7:38p	8:13p		9:15p	9:59p	12:15a	Oceanside
San Clemente Pier							–				5:22p										–				–		San Clemente Pier
San Clemente North Beach							4:50p				–										–				–		San Clemente North Beach
San Juan Capistrano							4:59p				5:33p										8:08p				10:29p		San Juan Capistrano
Laguna Niguel/Mission Viejo					4:45p		5:20p				–		5:50p					6:35p			–	8:50p			–		Laguna Niguel/Mission Viejo
Irvine					4:55p	5:10p	5:29p				5:49p		5:59p					6:44p			8:28p	9:01p			10:45p		Irvine
Tustin					5:01p	5:17p	5:36p				–		6:05p					6:51p			–	9:08p			–		Tustin
Santa Ana					5:07p	5:22p	5:43p				6:00p		6:11p					6:57p			8:39p	9:13p			10:56p		Santa Ana
Orange				Connects from Metrolink 609 & Pacific Surfliner 583	5:12p	5:27p	5:48p				–		6:16p					7:02p			–	9:18p			–		Orange
Anaheim						5:31p					6:08p		6:20p								8:48p	9:22p			11:04p		Anaheim
Fullerton						5:39p					6:17p		6:35p	→	→	•6:49p					8:58p	9:35p			11:13p		Fullerton
Buena Park						•5:46p					–					•6:55p					–				–		Buena Park
Norwalk/Santa Fe Springs						•5:53p					–					•7:01p					–				–		Norwalk/Santa Fe Springs
Commerce		↓				–					–					–					–				–		Commerce
Los Angeles Union Station		AR		→		6:20p			↓	↓	6:55p					7:40p					9:35p			11:50p		Los Angeles Union Station
		DP	→5:50p	5:55p					6:30p	6:40p	7:10p						7:40p		9:25p		Ⓑ9:50p					
Glendale			6:00p	6:05p					6:40p	6:50p	7:22p						7:50p		9:35p		Ⓑ10:05p					Glendale
Downtown Burbank			6:06p	6:11p					6:46p	6:56p	–						7:56p		9:41p							Downtown Burbank
Burbank-Bob Hope Airport				6:16p						7:01p	7:32p															Burbank-Bob Hope Airport
Van Nuys				6:23p						7:08p	7:42p										Ⓑ10:30p					Van Nuys
Northridge				6:31p						7:16p	–															Northridge
Chatsworth				6:38p						7:23p	7:54p										Ⓑ10:50p					Chatsworth
Simi Valley				•6:50p						•7:35p	8:06p										Ⓑ11:10p					Simi Valley
Moorpark				7:08p						•7:47p	–										Ⓑ11:25p					Moorpark
Camarillo										7:58p	8:30p										Ⓑ11:35p					Camarillo
Oxnard										8:14p	8:41p										Ⓑ11:45p					Oxnard
East Ventura	1									8:37p	–															East Ventura
Ventura	1										9:00p										Ⓑ11:59p					Ventura
Carpinteria											9:22p										Ⓑ12:15p					Carpinteria
Santa Barbara											D 9:45p										Ⓑ12:35a					Santa Barbara
Goleta	1										9:58p										Ⓑ12:50a					Goleta
Lompoc-Surf																										Lompoc-Surf
Guadalupe-Santa Maria	2																									Guadalupe-Santa Maria
Grover Beach		↓									Ⓑ11:50p															Grover Beach
San Luis Obispo		AR									Ⓑ12:15a															San Luis Obispo

Boarding information is available at each station.

NOTES

- Amtrak Coast Starlight®
- Amtrak Pacific Surfliner®
- COASTER
- METROLINK

- Bus
- Bus Rapid Transit
- LAX Flyaway
- Light Rail Transit
- Subway

– Train does not stop at this station
R Stops only to receive passengers
D Stops only to discharge passengers
COASTER fares and passes are accepted on Pacific Surfliner for travel between San Diego and Oceanside

DP Departure time
AR Arrival time
a AM times
p PM times

• Train may leave up to five minutes ahead of schedule.
* Sorrento Valley COASTER Connection shuttle service not available for this train.
Ⓑ Amtrak California Thruway Bus Service: Advanced reservations required.
Amtrak California Thruway Bus Service: Arrives/departs from Santa Barbara. There is no bus service to Goleta.

↳ Connecting trains: connections between Amtrak, Metrolink, and COASTER are not guaranteed.
1 Transit is within walking distance to the train station.
2 On demand transit service. Call transit operator for service.

Northbound Saturday and Sunday schedule on next page.

LOSSAN **NORTHBOUND** TIMETABLE

Effective April 6, 2015

Amtrak.com · AmtrakCalifornia.com · GoNCTD.com · metrolinktrains.com

SATURDAY & SUNDAY

San Diego to San Luis Obispo	TRANSIT CONNECTIONS	DEPARTURE/ ARRIVAL	PACIFIC SURFLINER	METROLINK	PACIFIC SURFLINER	METROLINK	PACIFIC SURFLINER	COAST STARLIGHT	METROLINK	METROLINK	PACIFIC SURFLINER	METROLINK	PACIFIC SURFLINER	COASTER	METROLINK	PACIFIC SURFLINER	METROLINK	PACIFIC SURFLINER	METROLINK	COASTER	METROLINK	PACIFIC SURFLINER	METROLINK	METROLINK	PACIFIC SURFLINER	COASTER	METROLINK	PACIFIC SURFLINER	METROLINK	COASTER Saturday Only	METROLINK	PACIFIC SURFLINER	COASTER	PACIFIC SURFLINER	COASTER Saturday Only	San Diego to San Luis Obispo
TRAIN SERVICE NUMBER			1761	261	763	751	565	14	661	753	567	263	769	681	663	573	265	777	665	685	267	579	858	269	583	689	860	785	667	691	271	591	693	595	697	TRAIN SERVICE NUMBER
San Diego-Santa Fe Depot		DP			6:00a		7:05a				8:22a		9:25a	9:48a		10:42a		12:00p		12:27p		1:40p			2:40p	3:18p		4:00p		5:00p		6:45p	7:10p	9:00p	11:15p	San Diego-Santa Fe Depot
San Diego-Old Town					R 6:07a		R 7:12a				R 8:29a		R 9:32a	9:54a		R 10:49a		–		12:33p		–			R 2:47p	3:25p		R 4:07p		5:06p		R 6:52p	7:16p	R 9:07p	11:20p	San Diego-Old Town
Sorrento Valley					–		–				8:50a*		–	10:17a*		11:12a*		–		12:54p*		–			–	3:47p*		–		5:26p*		–	7:36p*	9:27p*	11:40p*	Sorrento Valley
Solana Beach					6:38a		7:41a				8:59a		10:03a	10:25a		11:21a		12:34p		1:02p		2:14p			3:20p	3:56p		4:40p		5:37p		7:22p	7:46p	9:36p	11:48p	Solana Beach
Encinitas					–		–				9:06a		–	10:31a		11:28a		–		1:08p		–			–	4:02p		–		5:43p		–	7:53p	9:43p	11:56p	Encinitas
Carlsbad Poinsettia					–		–				9:13a		–	10:36a		11:32a		–		1:14p		–			–	4:08p		–		5:48p		–	7:59p	9:47p	12:02a	Carlsbad Poinsettia
Carlsbad Village					–		–				9:19a		–	10:43a		11:38a		–		1:22p		–			–	4:15p		–		5:55p		–	8:05p	9:53p	12:09a	Carlsbad Village
Oceanside					6:58a		7:56a		8:15a		9:25a		10:18a	10:48a→	11:22a	11:46a		12:53p	1:20p	1:28p		2:31p	2:50p		3:41p	4:20p→	4:30p	5:00p	5:30p	6:03p		7:38p	8:13p	9:59p	12:15a	Oceanside
San Clemente Pier					–		–		8:34a		–		–		11:42a	–		–	1:40p			–	3:09p		4:03p		4:49p	5:22p	5:51p				–		San Clemente Pier
San Clemente North Beach					–		–		8:37a		–		–		11:44a	–		–	1:42p			–	3:14p		–		4:54p	–	5:53p		–		–		San Clemente North Beach
San Juan Capistrano					7:30a		8:30a		8:46a		9:58a		10:48a		11:54a	12:18p		1:25p	1:52p			3:05p	3:23p		4:20p		5:03p	5:33p	6:03p		8:08p		10:29p		San Juan Capistrano
Laguna Niguel/Mission Viejo					–		–		8:51a		–		–		12:00p	–		–	1:57p			–	3:28p		–		5:08p	–	6:10p		–		–		Laguna Niguel/Mission Viejo
Irvine					7:44a		8:45a		9:00a		10:14a		11:03a		12:10p	12:35p		1:40p	2:06p			3:20p	3:37p		4:35p		5:17p	5:49p	6:20p		8:28p		10:45p		Irvine
Tustin					–		–		9:06a		–		–		12:16p	–		–	2:12p			–	3:43p		–		5:23p	–	6:26p		–		–		Tustin
Santa Ana			B5:25a		7:55a		8:56a		9:12a		10:24a		11:15a		12:23p	12:45p		1:51p	2:18p			3:30p	3:50p		4:46p		5:30p	6:00p	6:33p		8:39p		10:56p		Santa Ana
Orange					–		–		9:17a		–		–		12:28p	–		–	2:23p			–	3:55p		–		5:35p	–	6:38p		–		–		Orange
Anaheim					8:04a		9:05a		9:21a		10:34a		11:24a		12:33p	12:53p		2:00p	2:27p			3:38p			4:55p			6:08p	6:45p		8:48p		11:04p		Anaheim
Fullerton			B5:50a		8:13a	•8:29a	9:14a		9:29a	•9:49a	10:43a		11:34a		12:41p	1:03p		2:10p	2:35p			3:49p			5:05p			6:17p	6:53p		8:58p		11:13p		Fullerton
Buena Park					–	•8:36a	–		9:36a	•9:56a	–		–		12:47p	–		–	2:40p			–			–			–	7:00p		–		–		Buena Park
Norwalk/Santa Fe Springs					–	•8:44a	–		9:44a	•10:04a	–		–		12:54p	–		–	2:47p			–			–			–	7:07p		–		–		Norwalk/Santa Fe Springs
Commerce		↓			–	–	–		–	–	–		–		–	–		–	–			–			–			–	–		–		–		Commerce
Los Angeles Union Station		AR	B6:35a		8:46a	9:20a	9:50a		10:30a	10:40a	11:20a		12:10p		1:35p	1:40p		2:45p	3:35p			4:25p			5:40p			6:55p	7:50p		9:35p		11:50p		Los Angeles Union Station
		DP	7:50a	8:45a	9:05a			10:10a				11:40a	12:25p				2:15p	3:00p					5:25p					7:10p		8:55p	B9:50p				
Glendale			8:02a	8:55a	9:17a			–				11:50a	12:37p				2:25p	3:12p			4:00p		5:35p					7:22p		9:05p	B10:05p				Glendale
Downtown Burbank			–	9:02a	–			–				11:57a	–				2:32p	–			4:07p		5:42p					–		9:12p					Downtown Burbank
Burbank-Bob Hope Airport			8:12a		9:27a			R 10:29a					12:47p					3:22p										7:32p							Burbank-Bob Hope Airport
Van Nuys			8:21a		9:37a			R 10:40a					12:57p					3:32p										7:42p			B10:30p				Van Nuys
Northridge			–		–			–					–					–										–							Northridge
Chatsworth			8:33a		9:49a			–					1:09p					3:44p										7:54p			B10:50p				Chatsworth
Simi Valley			8:45a		10:01a			R 11:11a					1:21p					4:00p										8:06p			B11:10p				Simi Valley
Moorpark			8:57a		–			–					1:34p					–										–			B11:25p				Moorpark
Camarillo			9:10a		10:25a			–					1:49p					4:22p										8:30p			B11:35p				Camarillo
Oxnard			9:21a		10:38a			11:44a					2:00p					4:33p										8:41p			B11:45p				Oxnard
East Ventura	1		–		–			–					–					–										–							East Ventura
Ventura	1		9:35a		10:54a			–					2:14p					4:57p										9:00p			B11:59p				Ventura
Carpinteria			10:06a		11:16a			–					2:42p					5:21p										9:22p			B12:15a				Carpinteria
Santa Barbara			10:22a		D11:40a			12:40p					D 3:00p					5:43p										D9:45p			B12:35a				Santa Barbara
Goleta	1		10:34a		11:53a			–					3:13p					5:55p										9:58p			B12:50a				Goleta
Lompoc-Surf			11:40a					–										7:01p																	Lompoc-Surf
Guadalupe-Santa Maria	2		12:16p					–					B5:05p					7:37p																	Guadalupe-Santa Maria
Grover Beach		↓	12:35p		B1:40p			–					B5:30p					7:54p										B11:50p							Grover Beach
San Luis Obispo		AR	1:00p		B2:10p			3:35p					B5:15p					8:30p										B12:15a							San Luis Obispo

NOTES

Boarding information is available at each station.

- Amtrak Coast Starlight®
- Amtrak Pacific Surfliner®
- COASTER
- METROLINK

- Bus
- Bus Rapid Transit
- LAX Flyaway
- Light Rail Transit
- Subway

– Train does not stop at this station
R Stops only to receive passengers
D Stops only to discharge passengers
COASTER fares and passes are accepted on Pacific Surfliner for travel between San Diego and Oceanside

DP Departure time
AR Arrival time
a AM times
p PM times

• Train may leave up to five minutes ahead of schedule.
* Sorrento Valley COASTER Connection shuttle service not available for this train.
B Amtrak California Thruway Bus Service: Advanced reservations required.
Amtrak California Thruway Bus Service: Arrives/departs from Santa Barbara. There is no bus service to Goleta.
Effective weekends starting July 18, 2015 through September 7, 2015, Pacific Surfliner trains 583 and 591 will run on adjusted schedules. Visit Amtrak.com for the Del Mar Racing Season schedule.

↳ Connecting trains: connections between Amtrak, Metrolink, and COASTER are not guaranteed.
1 Transit is within walking distance to the train station.
2 On demand transit service. Call transit operator for service.

Southbound Monday-Friday schedule on next page.

LOSSAN **SOUTHBOUND** TIMETABLE

Effective April 6, 2015

Amtrak.com | AmtrakCalifornia.com | GoNCTD.com | metrolinktrains.com

MONDAY THROUGH FRIDAY (PAGE 1 OF 3)

San Luis Obispo to San Diego	TRANSIT CONNECTIONS	DEPARTURE/ ARRIVAL	COASTER	COASTER	METROLINK	COASTER	METROLINK	METROLINK	COASTER	COASTER	METROLINK	PACIFIC SURFLINER	METROLINK	METROLINK	METROLINK	METROLINK	METROLINK	METROLINK	PACIFIC SURFLINER	METROLINK	METROLINK	METROLINK	METROLINK	METROLINK	COASTER	METROLINK	METROLINK	METROLINK	PACIFIC SURFLINER	METROLINK	METROLINK	METROLINK	San Luis Obispo to San Diego
TRAIN SERVICE NUMBER			630	634	700	636	803	200	638	640	805	562	100	900	807	682	202	102	564	204	282	104	809	811	644	600	206	106	566	208	902	108	TRAIN SERVICE NUMBER
San Luis Obispo		DP																															San Luis Obispo
Grover Beach																																	Grover Beach
Guadalupe-Santa Maria	2																																Guadalupe-Santa Maria
Lompoc-Surf																																	Lompoc-Surf
Goleta	1																																Goleta
Santa Barbara																																	Santa Barbara
Carpinteria																																	Carpinteria
Ventura	1																																Ventura
East Ventura	1																	5:25a				6:03a						6:42a					East Ventura
Oxnard																		5:39a				6:17a						6:56a					Oxnard
Camarillo																		5:49a				6:27a						7:06a					Camarillo
Moorpark													5:04a					6:00a				6:38a						7:17a					Moorpark
Simi Valley													5:17a					6:13a				6:51a						7:30a					Simi Valley
Chatsworth													5:28a					6:24a				7:02a						7:41a			8:25a		Chatsworth
Northridge													5:33a					6:29a				7:07a						7:46a			8:30a		Northridge
Van Nuys													5:41a					6:37a				7:15a						7:54a			8:38a		Van Nuys
Burbank-Bob Hope Airport													5:49a	6:13a				6:45a				7:23a						8:02a		8:35a	8:46a		Burbank-Bob Hope Airport
Downtown Burbank								•5:30a					•5:55a	•6:17a			•6:31a	•6:52a		•7:03a	•7:25a	•7:30a					•7:51a	•8:08a		•8:27a	•8:39a	•8:52a	Downtown Burbank
Glendale		↓						•5:37a					•6:02a	•6:23a			•6:38a	•6:59a		•7:09a	–	•7:37a					•7:58a	•8:15a		•8:33a	•8:45a	•8:59a	Glendale
Los Angeles Union Station		AR						5:53a					6:15a	6:38a			6:55a	7:14a		7:26a	7:42a	7:50a					8:17a	8:30a		8:55a	9:02a	9:17a	Los Angeles Union Station
		DP			5:45a							6:15a				6:45a			7:25a						8:00a			8:30a				
Commerce					–							–				–			–						–			–				Commerce
Norwalk/Santa Fe Springs					6:06a							–				7:06a			–						8:21a			–				Norwalk/Santa Fe Springs
Buena Park					6:12a							–				7:12a			–						8:27a			–				Buena Park
Fullerton					•6:19a							6:44a				7:19a			7:55a						8:34a			9:00a				Fullerton
Anaheim												6:52a				•7:28a			8:03a						8:43a			9:09a				Anaheim
Orange							•5:57a				•6:29a	–			•7:05a	•7:33a			–				•7:51a	•8:16a	8:47a			–				Orange
Santa Ana							•6:03a				•6:35a	7:00a			•7:11a	•7:39a			8:11a				•7:57a	•8:22a	8:53a			9:20a				Santa Ana
Tustin							•6:09a				•6:41a	–			•7:17a	•7:45a			–				•8:03a	•8:28a	8:59a			–				Tustin
Irvine							•6:18a				6:55a	7:12a			•7:26a	•7:54a			8:26a				•8:12a	•8:37a	•9:08a			9:30a				Irvine
Laguna Niguel/Mission Viejo							•6:26a					–			7:40a	8:15a			–				8:25a	8:50a	•9:17a			–				Laguna Niguel/Mission Viejo
San Juan Capistrano							•6:32a					7:25a							8:42a						•9:23a			9:49a				San Juan Capistrano
San Clemente North Beach							•6:43a					–							–						•9:33a			–				San Clemente North Beach
San Clemente Pier							–					–							–						–			10:00a				San Clemente Pier
Oceanside			5:13a	6:00a		6:39a	7:13a		7:18a	7:42a		8:05a							9:14a						9:42a	10:10a		10:25a				Oceanside
Carlsbad Village			5:17a	6:05a		6:43a			7:22a	7:47a		–							–						9:47a			–				Carlsbad Village
Carlsbad Poinsettia			5:23a	6:11a		6:49a			7:28a	7:53a		–							–						9:53a			–				Carlsbad Poinsettia
Encinitas			5:29a	6:17a		6:54a			7:34a	7:58a		–							–						9:58a			–				Encinitas
Solana Beach			5:35a	6:23a		7:00a			7:40a	8:05a		8:19a							9:28a						10:02a			10:42a				Solana Beach
Sorrento Valley			5:44a*	6:32a		7:10a			7:51a	8:15a		–							–						10:12a*			–				Sorrento Valley
San Diego-Old Town		↓	6:05a	6:53a		7:32a			8:14a	8:38a		–							D 10:02a						10:34a			D11:12a				San Diego-Old Town
San Diego-Santa Fe Depot		AR	6:13a	7:00a		7:40a			8:20a	8:45a		9:00a							10:10a						10:43a			11:22a				San Diego-Santa Fe Depot

NOTES

Boarding information is available at each station.

- Amtrak Coast Starlight®
- Amtrak Pacific Surfliner®
- COASTER
- METROLINK

- Bus
- Bus Rapid Transit
- LAX Flyaway
- Light Rail Transit
- Subway

– Train does not stop at this station
R Stops only to receive passengers
D Stops only to discharge passengers
COASTER fares and passes are accepted on Pacific Surfliner for travel between San Diego and Oceanside

DP Departure time
AR Arrival time
a AM times
p PM times

• Train may leave up to five minutes ahead of schedule.
* Sorrento Valley COASTER Connection shuttle service not available for this train.
Ⓑ Amtrak California Thruway Bus Service: Advanced reservations required.
Amtrak California Thruway Bus Service: Arrives/departs from Santa Barbara. There is no bus service to Goleta.

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Southbound Monday-Friday schedule continued on next page.

LOSSAN **SOUTHBOUND** TIMETABLE

Effective April 6, 2015

Amtrak.com · AmtrakCalifornia.com · GoNCTD.com · metrolinktrains.com

MONDAY THROUGH FRIDAY (PAGE 2 OF 3)

San Luis Obispo to San Diego	TRANSIT CONNECTIONS	DEPARTURE/ ARRIVAL	COASTER	METROLINK	PACIFIC SURFLINER	METROLINK	METROLINK	METROLINK	METROLINK	PACIFIC SURFLINER	METROLINK	PACIFIC SURFLINER	METROLINK	METROLINK	METROLINK	COASTER	COASTER	METROLINK	METROLINK	METROLINK	PACIFIC SURFLINER	METROLINK	COASTER	METROLINK	METROLINK	METROLINK	METROLINK	METROLINK	METROLINK	COASTER	PACIFIC SURFLINER	METROLINK	METROLINK	San Diego to San Luis Obispo
TRAIN SERVICE NUMBER			648	632	768	110	210	212	813	572	112	774	815	634	214	654	656	216	684	218	580	817	660	602	220	116	702	686	904	662	582	704	640	TRAIN SERVICE NUMBER
San Luis Obispo		DP			Ⓑ3:50a							6:55a																						San Luis Obispo
Grover Beach					Ⓑ4:15a							7:15a																						Grover Beach
Guadalupe-Santa Maria	2											7:31a																						Guadalupe-Santa Maria
Lompoc-Surf												8:05a																						Lompoc-Surf
Goleta	1				6:35a							9:13a																						Goleta
Santa Barbara					6:49a							9:27a																			Ⓑ12:55p			Santa Barbara
Carpinteria					7:04a							9:42a																						Carpinteria
Ventura	1				7:29a							10:04a																			Ⓑ1:25p			Ventura
East Ventura	1				–							–																						East Ventura
Oxnard					7:43a							10:18a																			Ⓑ1:50p			Oxnard
Camarillo					7:54a							10:37a																						Camarillo
Moorpark					8:08a	8:25a						–														2:25p								Moorpark
Simi Valley					8:23a	8:38a						11:02a														2:38p								Simi Valley
Chatsworth					8:40a	8:49a					10:50a	11:14a														2:49p								Chatsworth
Northridge					–	8:54a					10:55a	–														2:54p								Northridge
Van Nuys					8:56a	9:02a					11:03a	11:28a														3:02p								Van Nuys
Burbank-Bob Hope Airport					9:04a	9:10a					11:11a	11:35a														3:10p			3:37p					Burbank-Bob Hope Airport
Downtown Burbank					–	•9:16a	•9:45a	•10:36a			•11:17a	–			•12:16p			•1:15p		•2:28p					•3:10p	•3:16p			•3:41p					Downtown Burbank
Glendale		↓			9:16a	•9:23a	•9:54a	•10:42a			•11:26a	11:45a			•12:22p			•1:22p		•2:34p					•3:17p	•3:23p			•3:47p					Glendale
Los Angeles Union Station		AR			9:35a	9:42a	10:11a	11:00a			11:40a	12:15p			12:40p			1:40p		2:50p					3:35p	3:40p			4:00p		Ⓑ3:35p			Los Angeles Union Station
		DP			9:50a					11:15a		12:30p							2:15p		3:00p			3:20p			3:40p	3:50p			4:10p	4:20p		
Commerce					–					–		–							–		–			3:34p			–	4:04p			–	–		Commerce
Norwalk/Santa Fe Springs					–					–		–							2:38p		–			3:44p			4:03p	4:14p			–	4:41p		Norwalk/Santa Fe Springs
Buena Park					–					–		–							2:44p		–			3:51p			4:09p	4:20p			–	4:47p		Buena Park
Fullerton				10:00a	10:20a					11:45a		1:00p		1:35p					2:50p		3:30p			3:57p			•4:15p	4:27p			4:40p	•4:54p	4:50p	Fullerton
Anaheim				10:08a	10:31a					11:54a		1:09p		1:43p					•2:55p		3:38p			4:06p				•4:36p			4:48p		4:59p	Anaheim
Orange				10:12a	–				•11:21a	–		–	•1:29p	1:47p					•2:59p		–	•3:51p		4:10p				•4:41p			–		5:03p	Orange
Santa Ana				10:17a	10:40a				•11:27a	12:03p		1:18p	•1:35p	1:52p					•3:05p		3:46p	•3:57p		4:16p				•4:47p			4:56p		5:09p	Santa Ana
Tustin				10:23a	–				•11:33a	–		–	•1:41p	1:58p					•3:11p		–	•4:03p		4:22p				•4:53p			–		5:15p	Tustin
Irvine				10:30a	10:53a				•11:41a	12:18p		1:29p	•1:49p	2:05p					•3:19p		3:56p	•4:12p		•4:33p				5:00p			5:07p		5:23p	Irvine
Laguna Niguel/Mission Viejo				10:45a	–				12:00p	–		–	•1:57p	2:20p					3:40p		–	4:25p		•4:41p							–		5:35p	Laguna Niguel/Mission Viejo
San Juan Capistrano					11:08a					12:34p		1:44p	•2:03p								4:12p			•4:48p							5:23p			San Juan Capistrano
San Clemente North Beach					–					–		–	•2:17p								–			•5:02p							–			San Clemente North Beach
San Clemente Pier					11:18a					–		–	–								–			–							–			San Clemente Pier
Oceanside			11:05a		11:42a					1:09p		2:19p	2:50p			2:32p	3:34p				4:45p		5:04p	5:35p						5:40p	5:56p			Oceanside
Carlsbad Village			11:10a		–					–		–				2:37p	3:40p				–		5:09p							5:45p	–			Carlsbad Village
Carlsbad Poinsettia			11:16a		–					–		–				2:43p	3:47p				–		5:16p							5:51p	–			Carlsbad Poinsettia
Encinitas			11:21a		–					–		–				2:49p	3:52p				–		5:21p							5:57p	–			Encinitas
Solana Beach			11:29a		11:56a					1:24p		2:33p				2:54p	3:58p				5:02p		5:29p							6:03p	6:12p			Solana Beach
Sorrento Valley			11:39a*		–					–		–				3:05p*	4:08p				–		5:38p							6:17p	–			Sorrento Valley
San Diego-Old Town		↓	11:59a		D 12:27p					D 1:55p		D 3:07p				3:28p	4:30p				–		6:01p							6:42p	D 6:55p			San Diego-Old Town
San Diego-Santa Fe Depot		AR	12:06p		12:35p					2:03p		3:15p				3:36p	4:37p				5:47p		6:08p							6:49p	7:03p			San Diego-Santa Fe Depot

NOTES

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DP Departure time
AR Arrival time
a AM times
p PM times

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Ⓑ Amtrak California Thruway Bus Service: Advanced reservations required.
Amtrak California Thruway Bus Service: Arrives/departs from Santa Barbara. There is no bus service to Goleta.

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Southbound Monday-Friday schedule continued on next page.

LOSSAN **SOUTHBOUND** TIMETABLE

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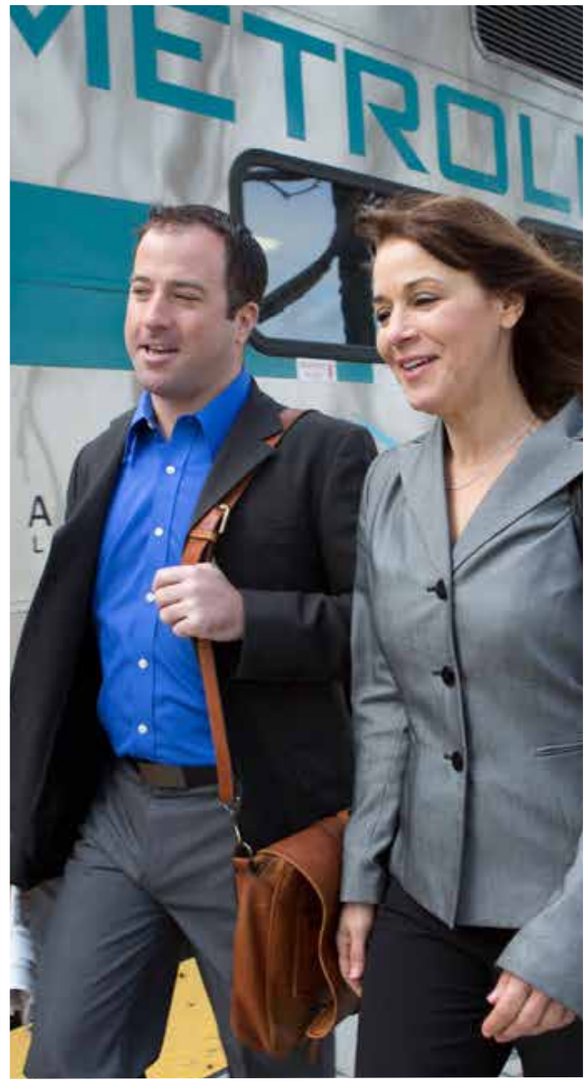
MONDAY THROUGH FRIDAY (PAGE 3 OF 3)

San Luis Obispo to San Diego	TRANSIT CONNECTIONS	DEPARTURE/ ARRIVAL	METROLINK	COASTER Friday Only	METROLINK	METROLINK	METROLINK	PACIFIC SURFLINER	METROLINK	METROLINK	METROLINK	METROLINK	METROLINK	METROLINK	METROLINK	METROLINK	METROLINK	METROLINK	PACIFIC SURFLINER	COASTER Friday Only	METROLINK	COAST STARLIGHT	METROLINK	PACIFIC SURFLINER	San Luis Obispo to San Diego
TRAIN SERVICE NUMBER			222	664	604	906	688	784	150	910	706	606	224	118	608	708	642	790	672	226	11	644	796	TRAIN SERVICE NUMBER
San Luis Obispo		DP						Ⓑ 10:30a										1:35p			3:20p		Ⓑ 3:40p	San Luis Obispo
Grover Beach								Ⓑ 10:55a										1:55p			–		Ⓑ 4:10p	Grover Beach
Guadalupe-Santa Maria	2																	2:11p			–			Guadalupe-Santa Maria
Lompoc-Surf																		2:51p			–			Lompoc-Surf
Goleta	1							1:50p										3:57p			–		6:45p	Goleta
Santa Barbara								2:04p										4:12p			6:02p		6:59p	Santa Barbara
Carpinteria								2:19p										4:27p			–		7:15p	Carpinteria
Ventura	1							2:41p										4:49p			–		7:37p	Ventura
East Ventura	1							–										–			–		–	East Ventura
Oxnard								2:57p										5:07p			D 7:05p		7:51p	Oxnard
Camarillo								3:08p										–			–		8:02p	Camarillo
Moorpark								3:20p						4:57p				5:36p			–		–	Moorpark
Simi Valley								3:35p						5:10p				5:54p			D 7:48p		8:38p	Simi Valley
Chatsworth								3:52p	4:30p					5:27p				6:12p			–		8:50p	Chatsworth
Northridge								–	4:35p					5:32p				–			–		–	Northridge
Van Nuys								4:14p	4:43p					5:45p				6:31p			D 8:22p		9:06p	Van Nuys
Burbank-Bob Hope Airport						4:15p		4:22p	4:55p	5:05p			•5:41p	5:53p				6:39p			D 8:31p		9:13p	Burbank-Bob Hope Airport
Downtown Burbank			• 3:56p			• 4:19p		–	• 5:00p	• 5:10p			•5:48p	• 5:59p				–		• 7:53p	–		–	Downtown Burbank
Glendale		↓	• 4:02p			• 4:25p		4:32p	• 5:06p	• 5:15p			6:10p	• 6:06p				6:50p		• 8:00p	–		9:23p	Glendale
Los Angeles Union Station		AR	4:20p			4:40p		4:55p	5:20p	5:30p				6:20p				7:10p		8:25p	9:00p		9:45p	Los Angeles Union Station
		DP			4:30p		4:50p	5:10p			5:30p	5:45p			6:35p	6:45p		7:30p					10:10p	
Commerce					4:44p		–	–			–	5:59p			–	–		–					–	Commerce
Norwalk/Santa Fe Springs					4:54p		5:11p	–			5:51p	6:09p			6:58p	7:06p		–					–	Norwalk/Santa Fe Springs
Buena Park					5:00p		5:17p	–			5:57p	6:15p			7:04p	7:12p		–					–	Buena Park
Fullerton					5:07p		5:24p	5:40p			• 6:04p	6:22p			7:10p	• 7:19p	7:35p	8:00p				10:10p	10:40p	Fullerton
Anaheim					5:16p		• 5:33p	5:49p				6:31p			7:18p		7:44p	8:11p				10:19p	10:49p	Anaheim
Orange					5:20p		• 5:38p	–				6:35p			7:22p		7:48p	–				10:23p	–	Orange
Santa Ana					5:26p		• 5:44p	5:57p				6:41p			7:28p		7:54p	8:20p				10:29p	10:58p	Santa Ana
Tustin					5:32p		• 5:50p	–				6:47p			7:34p		8:00p	–				10:35p	–	Tustin
Irvine					• 5:41p		• 5:59p	6:09p				• 6:56p			• 7:42p		8:08p	8:32p				10:44p	11:08p	Irvine
Laguna Niguel/Mission Viejo					• 5:49p		6:15p	–				• 7:04p			• 7:51p		8:20p	–				10:53p	–	Laguna Niguel/Mission Viejo
San Juan Capistrano					• 5:56p			6:23p				• 7:11p			• 7:58p			8:48p				10:58p	11:21p	San Juan Capistrano
San Clemente North Beach					• 6:08p			–				• 7:23p			• 8:08p			–				11:08p	–	San Clemente North Beach
San Clemente Pier					–			–				–			–			–				–	–	San Clemente Pier
Oceanside				6:35p	6:37p			7:03p				7:51p			8:40p			9:19p	9:49p			11:37p	11:53p	Oceanside
Carlsbad Village				6:40p				7:09p										9:24p	9:54p			–	11:58p	Carlsbad Village
Carlsbad Poinsettia				6:46p				7:15p										9:30p	10:00p			–	12:04a	Carlsbad Poinsettia
Encinitas				6:52p				7:20p										9:36p	10:06p			–	12:10a	Encinitas
Solana Beach				7:02p				7:26p										9:42p	10:11p			–	12:16a	Solana Beach
Sorrento Valley				7:12p*				7:36p*										9:54p*	10:21p*			–	12:26a*	Sorrento Valley
San Diego-Old Town		↓		7:33p				D 7:58p										D 10:17p	10:42p			–	12:52a	San Diego-Old Town
San Diego-Santa Fe Depot		AR		7:41p				8:07p										10:25p	10:50p			–	1:00a	San Diego-Santa Fe Depot



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NOTES

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AR Arrival time
a AM times
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⋆ Sorrento Valley COASTER Connection shuttle service not available for this train.
Ⓑ Amtrak California Thruway Bus Service: Advanced reservations required.
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Southbound Saturday and Sunday schedule on next page.

LOSSAN **SOUTHBOUND** TIMETABLE

Effective April 6, 2015

Amtrak.com · AmtrakCalifornia.com · GoNCTD.com · metrolinktrains.com

SATURDAY & SUNDAY

San Luis Obispo to San Diego	TRANSIT CONNECTIONS	DEPARTURE/ ARRIVAL	PACIFIC SURFLINER	COASTER	PACIFIC SURFLINER	METROLINK	METROLINK	PACIFIC SURFLINER	METROLINK	COASTER	METROLINK	PACIFIC SURFLINER	METROLINK	METROLINK	PACIFIC SURFLINER	COASTER	PACIFIC SURFLINER	COASTER Saturday Only	METROLINK	METROLINK	METROLINK	PACIFIC SURFLINER	METROLINK	COASTER	PACIFIC SURFLINER	COASTER Saturday Only	METROLINK	METROLINK	PACIFIC SURFLINER	METROLINK	PACIFIC SURFLINER	METROLINK	COAST STARLIGHT	PACIFIC SURFLINER	San Luis Obispo to San Diego
TRAIN SERVICE NUMBER			562	680	564	260	857	566	660	684	859	768	662	262	572	688	774	690	264	664	266	580	752	692	582	692	268	666	784	754	1790	270	11	796	TRAIN SERVICE NUMBER
San Luis Obispo		DP										Ⓑ3:50a					6:55a												Ⓑ10:30a		2:00p		3:20p	Ⓑ3:40p	San Luis Obispo
Grover Beach												Ⓑ4:15a					7:15a												Ⓑ10:55a		2:20p		–	Ⓑ4:10p	Grover Beach
Guadalupe-Santa Maria	2																7:31a														2:36p		–		Guadalupe-Santa Maria
Lompoc-Surf																	8:05a														3:16p		–		Lompoc-Surf
Goleta	1											6:35a					9:13a												1:50p		4:22p		–	6:45p	Goleta
Santa Barbara												6:49a					9:27a								Ⓑ12:55p				2:04p		4:40p		6:02p	6:59p	Santa Barbara
Carpinteria												7:04a					9:42a												2:19p		4:55p		–	7:15p	Carpinteria
Ventura	1											7:29a					10:04a								Ⓑ1:25p				2:41p		5:21p		–	7:37p	Ventura
East Ventura	1											–					–												–		–		–	–	East Ventura
Oxnard												7:43a					10:18a								Ⓑ1:50p				2:57p		5:35p		D 7:05p	7:51p	Oxnard
Camarillo												7:54a					10:37a												3:08p		–		–	8:02p	Camarillo
Moorpark												8:08a					–												3:20p		6:04p			–	Moorpark
Simi Valley												8:23a					11:02a												3:35p		6:20p		D 7:48p	8:38p	Simi Valley
Chatsworth												8:40a					11:14a												3:52p		6:33p		–	8:50p	Chatsworth
Northridge												–					–												–		–		–	–	Northridge
Van Nuys												8:56a					11:28a												4:14p		6:45p		D 8:22p	9:06p	Van Nuys
Burbank-Bob Hope Airport												9:04a					11:35a												4:22p		6:53p		D 8:31p	9:13p	Burbank-Bob Hope Airport
Downtown Burbank						•8:00a						–		•10:35a			–		•12:48p		•2:13p						•3:59p		–		–	•7:53p	–	–	Downtown Burbank
Glendale		↓				•8:07a						9:16a		•10:42a			11:45a		•12:55p		•2:20p						•4:05p		4:32p		7:04p	•8:00p	–	9:23p	Glendale
Los Angeles Union Station		AR				8:25a						9:35a		11:00a			12:15p		1:15p		2:40p				Ⓑ3:35p		4:30p		4:55p		7:20p	8:20p	9:00p	9:45p	Los Angeles Union Station
		DP	6:15a		7:25a			8:30a	8:50a			9:50a	10:45a		11:15a		12:30p			2:00p		3:00p	3:15p		4:10p			4:40p	5:10p	7:15p	7:35p			10:10p	
Commerce			–		–			–	–			–	–		–		–			–		–	–		–			–	–	–	–			–	Commerce
Norwalk/Santa Fe Springs			–		–			–	9:11a			–	11:06a		–		–			2:21p		–	3:36p		–			5:01p	–	7:36p	–			–	Norwalk/Santa Fe Springs
Buena Park			–		–			–	9:17a			–	11:12a		–		–			2:27p		–	3:42p		–			5:07p	–	7:42p	–			–	Buena Park
Fullerton			6:44a		7:55a			9:00a	9:23a			10:20a	11:18a		11:45a		1:00p			2:33p		3:30p	•3:49p		4:40p			5:13p	5:40p	•7:49p	8:05p			10:40p	Fullerton
Anaheim			6:52a		8:03a			9:09a	9:31a			10:31a	11:26a		11:54a		1:09p			2:41p		3:38p			4:48p			5:21p	5:49p		8:16p			10:49p	Anaheim
Orange			–		–		•8:43a	–	9:35a		• 10:08a	–	11:30a		–		–			2:45p		–			–			5:25p	–		–			–	Orange
Santa Ana			7:00a		8:11a		•8:48a	9:20a	9:40a		• 10:13a	10:40a	11:35a		12:03p		1:18p			2:50p		3:46p			4:56p			5:30p	5:57p		8:25p			10:58p	Santa Ana
Tustin			–		–		•8:54a	–	9:46a		• 10:19a	–	11:41a		–		–			2:56p		–			–			5:36p	–		–			–	Tustin
Irvine			7:12a		8:26a		•9:01a	9:30a	9:53a		• 10:26a	10:53a	11:48a		12:18p		1:29p			3:03p		3:56p			5:07p			5:43p	6:09p		8:37p			11:08p	Irvine
Laguna Niguel/Mission Viejo			–		–		•9:10a	–	10:03a		• 10:35a	–	11:57a		–		–			3:12p		–			–			5:52p	–		–			–	Laguna Niguel/Mission Vijeo
San Juan Capistrano			7:25a		8:42a		•9:16a	9:49a	10:08a		• 10:40a	11:08a	12:02p		12:34p		1:44p			3:17p		4:12p			5:23p			5:57p	6:23p		8:50p			11:21p	San Juan Capistrano
San Clemente North Beach			–		–		•9:34a	–	• 10:20a		• 10:55a	–	•12:16p		–		–			•3:26p		–			–			• 6:07p	–		–			–	San Clemente North Beach
San Clemente Pier			–		–		•9:39a	10:00a	•10:25a		• 11:00a	11:18a	•12:19p		–		–			•3:28p		–			–			• 6:10p	–		–			–	San Clemente Pier
Oceanside			8:05a	8:36a	9:14a		10:20a→	10:25a	11:02a→	11:07a	11:45a	11:42a	12:55p		1:09p	1:50p	2:19p	3:34p		4:15p		4:45p		5:15p	5:56p→	6:35p			6:55p→	7:03p		9:21p			11:53p	Oceanside
Carlsbad Village			–	8:41a	–			–		11:12a		–			–	1:55p	–	3:39p				–		5:20p	–	6:40p				7:09p		9:26p			11:58p	Carlsbad Village
Carlsbad Poinsettia			–	8:47a	–			–		11:18a		–			–	2:01p	–	3:45p				–		5:26p	–	6:46p				7:15p		9:32p			12:04a	Carlsbad Poinsettia
Encinitas			–	8:53a	–			–		11:24a		–			–	2:07p	–	3:51p				–		5:32p	–	6:52p				7:20p		9:38p			12:10a	Encinitas
Solana Beach			8:19a	8:59a	9:28a			10:42a		11:30a		11:56a			1:24p	2:13p	2:33p	3:57p				5:02p		5:38p	6:12p	6:59p				7:26p		9:46p			12:16a	Solana Beach
Sorrento Valley			–	9:09a*	–			–		11:40a*		–			–	2:23p*	–	4:07p*				–		5:48p*	–	7:10p*				7:36p*		9:58p*			12:26a*	Sorrento Valley
San Diego-Old Town		↓	–	9:30a	D 10:02a			D11:12a		12:02p		D12:27p			D 1:55p	2:45p	D 3:07p	4:28p				–		6:09p	D 6:55p	7:31p				D 7:58p		D 10:21p			D 12:52a	San Diego-Old Town
San Diego-Santa Fe Depot		AR	9:00a	9:36a	10:10a			11:22a		12:10p		12:35p			2:03p	2:53p	3:15p	4:34p				5:47p		6:17p	7:03p	7:37p				8:07p		10:29p			1:00a	San Diego-Santa Fe Depot

NOTES

Boarding information is available at each station.

- Amtrak Coast Starlight®
- Amtrak Pacific Surfliner®
- COASTER
- METROLINK

- Bus
- Bus Rapid Transit
- LAX Flyaway
- Light Rail Transit
- Subway

– Train does not stop at this station
R Stops only to receive passengers
D Stops only to discharge passengers
COASTER fares and passes are accepted on Pacific Surfliner for travel between San Diego and Oceanside

DP Departure time
AR Arrival time
a AM times
p PM times

• Train may leave up to five minutes ahead of schedule.
* Sorrento Valley COASTER Connection shuttle service not available for this train.
Ⓑ Amtrak California Thruway Bus Service: Advanced reservations required.
Amtrak California Thruway Bus Service: Arrives/departs from Santa Barbara. There is no bus service to Goleta.
Effective weekends starting July 18, 2015 through September 7, 2015, Pacific Surfliner trains 768 and 572 will run on adjusted schedules. Visit Amtrak.com for the Del Mar Racing Season schedule.

↳ Connecting trains: connections between Amtrak, Metrolink, and COASTER are not guaranteed.
1 Transit is within walking distance to the train station.
2 On demand transit service. Call transit operator for service.

11

LOSSAN **CONNECTING TRANSIT**

Effective April 6, 2015

Amtrak.com | AmtrakCalifornia.com | GoNCTD.com | metrolinktrains.com

STATION	TRANSIT CONNECTIONS	OPERATOR
Anaheim	Bus	OCTA, ART
Buena Park	Bus	OCTA
Burbank-Bob Hope Airport	Bus	Metro
Camarillo	Bus	VISTA
Carlsbad Poinsettia	Bus	NCTD
Carlsbad Village	Bus	NCTD
Carpinteria	Bus	SBMTD
Chatsworth	Bus, Bus Rapid Transit	Metro, Santa Clarita Transit, Simi Valley Transit
Commerce	Bus	Commerce Bus
Downtown Burbank	Bus	Burbank Bus, Glendale Beeline, Metro
East Ventura	Bus[1]	Gold Coast Transit
Encinitas	Bus	NCTD
Fullerton	Bus	OCTA
Glendale	Bus	Glendale Beeline, Metro
Goleta	Bus[1]	SBMTD
Grover Beach	Bus	SCAT
Guadalupe-Santa Maria	Bus[2]	SMOOTH Inc.
Irvine	Bus	OCTA, Irvine Shuttle
Laguna Niguel/Mission Viejo	Bus	OCTA
Lompoc-Surf		
Los Angeles Union Station	Bus, LAX Flyaway, Light Rail Transit, Subway	AVTA, Foothill Transit, LADOT, LAWA, Metro, Santa Clarita Transit, Santa Monica Big Blue Bus, Torrance Transit
Moorpark	Bus	VISTA
Northridge	Bus	LADOT, Metro
Norwalk/Santa Fe Springs	Bus	Norwalk Transit
Oceanside	Bus, Light Rail Transit	NCTD, RTA
Orange	Bus	OCTA
Oxnard	Bus	Gold Coast Transit, VISTA
San Clemente North Beach	Bus	OCTA
San Clemente Pier	Bus	OCTA
San Diego-Old Town	Bus, Light Rail Transit	MTS
San Diego-Santa Fe Depot	Bus, Light Rail Transit, Bus Rapid Transit	MTS
San Juan Capistrano	Bus	OCTA
San Luis Obispo	Bus	SLO Transit
Santa Ana	Bus	OCTA
Santa Barbara	Bus	SBMTD
Simi Valley	Bus	Simi Valley Transit
Solana Beach	Bus	NCTD
Sorrento Valley	Bus	MTS
Tustin	Bus	OCTA, Irvine Shuttle
Van Nuys	Bus	LADOT, Metro
Ventura	Bus[1]	Gold Coast Transit

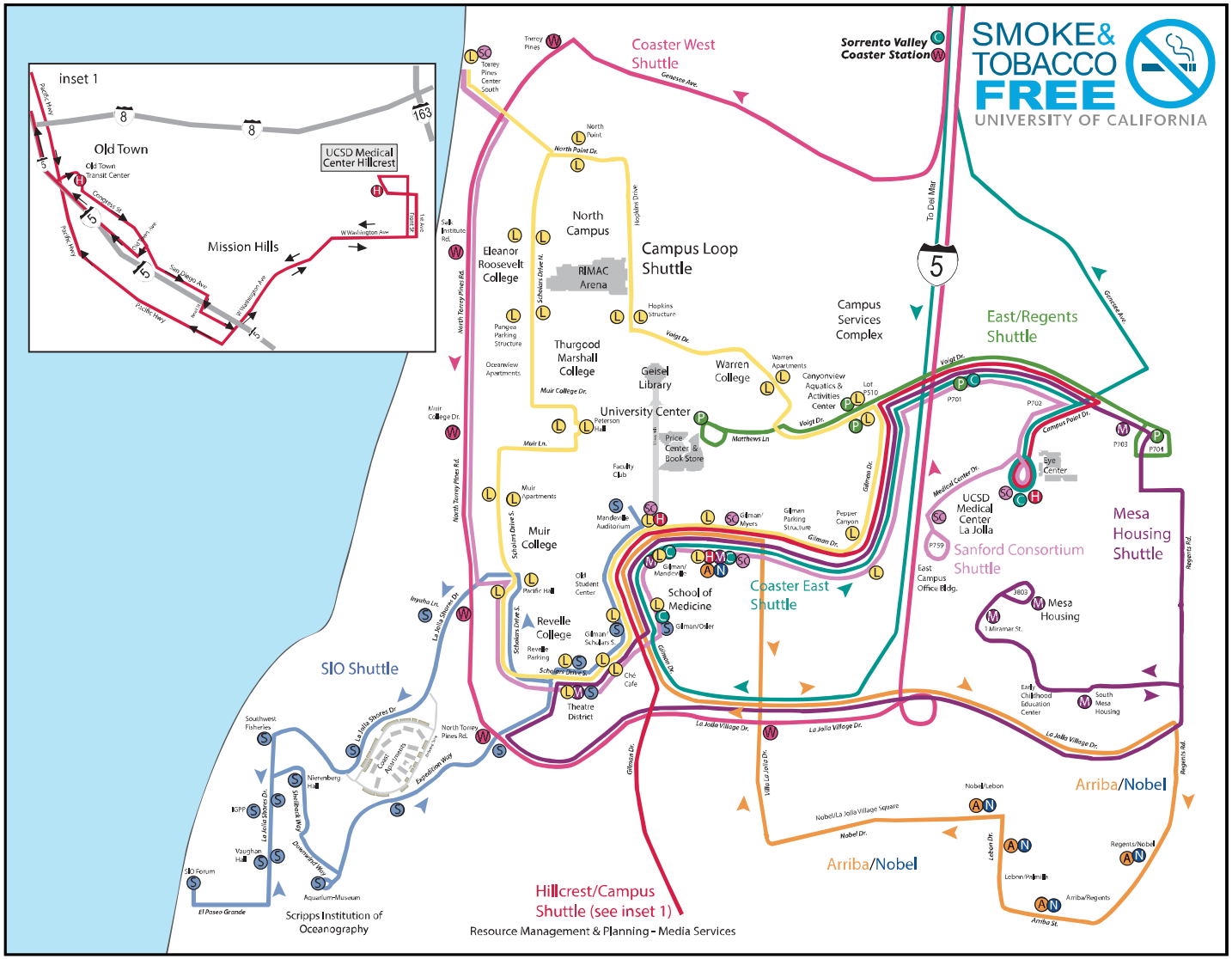
Bus Bus Rapid Transit LAX Flyaway Light Rail Transit Subway

[1] Transit is within walking distance to the train station. [2] On demand transit service. Call transit operator for service.

OPERATOR	WEBSITE	PHONE
ART (Anaheim Resort Transit)	rideart.org	(888) 364-2787
AVTA (Antelope Valley Transit Authority)	avta.com	(661) 945-9445
Burbank Bus	burbankbus.org	(818) 246-4258
Commerce Bus	ci.commerce.ca.us	(323) 722-4805
Foothill Transit	foothilltransit.org	1(800) RIDE-INFO (800-743-3463)
Glendale Beeline	glendalebeeline.com	(818) 548-3960
Gold Coast Transit District	goldcoasttransit.org	(805) 487-4222
Irvine Shuttle	irvineshuttle.net	(949) 72-GOBUS (46287)
LADOT (Los Angeles Department of Transportation)	ladottransit.com	(213, 310, 323 or 818) 808-2273
LAWA (Los Angeles World Airports)	lawa.org	(310) 646-5252
Metro (Los Angeles County Metropolitan Transportation Authority)	metro.net	(323) GO-METRO (323) 466-3876)
MTS (San Diego Metropolitan Transit System)	sdmts.com	(619) 233-3004
NCTD (North County Transit District)	gonctd.com	(760) 966-6500
Norwalk Transit	ci.norwalk.ca.us	(562) 929-5700
OCTA (Orange County Transportation Authority)	octa.net	(714) 636-RIDE (7433)
RTA (Riverside Transit Agency)	riversidetransit.com	(951) 565-5002
Santa Clarita Transit	santaclaritatransit.com	(661) 294-1BUS (1287)
Santa Monica Big Blue Bus	bigbluebus.com	(310) 451-5444
SBMTD (Santa Barbara Metropolitan Transit District)	sbmtd.gov	(805) 963-3366
SCT (South Coast Transit)	slorta.org	(805) 541-2228
Simi Valley Transit	simivalley.org	(805) 583-6700
SLO Transit (City of San Luis Obispo)	slotransit.org	(805) 541-2877
SMOOTH Inc.	smoothinc.org	(805) 922-8476
Torrance Transit	torranceca.gov	(310) 618-6266
VISTA (Ventura County Transportation Commission)	goventura.org	(800) 438-1112

UC San Diego
Transportation Services

Shuttle Routes



Operate year-round (excluding university holidays):

Coaster Shuttle runs between the Sorrento Valley Coaster Station and campus

Hillcrest/Campus Shuttle travels between UC San Diego Medical Center in Hillcrest, Old Town Transit Center, and UC San Diego Medical Center in La Jolla

Sanford Consortium Shuttle runs between Torrey Pines Center South and UC San Diego Medical Center in La Jolla

Operate during academic quarters (with reduced or suspended service during academic breaks and summer sessions):

Campus Loop travels clockwise and counterclockwise around campus

Cityshuttle runs between campus and the Regents and Nobel areas

East/Regents Shuttle runs between Lot P704 and Price Center

Mesa Housing Shuttle runs in a clockwise loop between campus and the Mesa Housing complex off Regents Road

Scripps Institution of Oceanography Shuttle runs between Mandeville Lane and SIO

Route details: shuttles.ucsd.edu
Live tracking: ucsdbus.com

Schedule Questions/Lost & Found: 858-534-7422

* University Shuttle Service provided for students,faculty and staff.

TSP Intersections Operated by the City

1. Regents Road & Health Center Drive/Country Day Lane
2. Executive Drive & Judicial Drive
3. Judicial Drive & Golden Haven Drive
4. Judicial Drive & Sydney Court
5. Judicial Drive & Research Plaza/Illumina Drive
6. Nobel Drive & Judicial Drive
7. Nobel Drive & Shoreline Drive
8. Nobel Drive & Lombard Plaza
9. Nobel Drive & Costa Verde Boulevard / Cargill Avenue
10. Nobel Drive & Caminto Plaza Centro
11. Nobel Drive & La Jolla Village Square Driveway
12. Villa La Jolla Drive & La Jolla Village Square Driveway
13. Villa La Jolla Drive & Via Mallorca
14. Gilman Drive & La Jolla Village Drive WB Ramps
15. Regents Road & Eastgate Mall
16. Regents Road & Executive Drive
17. Executive Drive & Regents Park Row
18. Executive Drive & Genesee Avenue
19. Executive Drive & Executive Way
20. Executive Drive & Towne Center Drive
21. Towne Center Drive & Nobel Drive
22. Nobel Drive & Genesee Avenue
23. Nobel Drive & Regents Road
24. Regents Road & Berino Court
25. Regents Road & Arrriba Street
26. Arriba Street & Palmilla Drive
27. Palmilla Drive & Lebon Drive
28. Nobel Drive & Lebon Drive
29. Nobel Drive & Villa La Jolla Drive
30. Gilman Drive & Villa La Jolla Drive
31. Gilman Drive & La Jolla Village Drive

TSP Intersections Operated by UCSD

1. Gilman Drive & Osler Lane – Scholars Drive
2. Gilman Drive & Mandeville Lane
3. Gilman Drive & Myers Drive
4. Gilman Drive & Russell Drive
5. Gilman Drive & Villa La Jolla Drive
6. Voight Drive at Scripps Hospital
7. Voight Drive & Campus Point Drive

TSP Intersections Operated by Caltrans

1. Nobel Drive & I-5 NB Offramp
2. Nobel Drive & I-5 SB Offramp

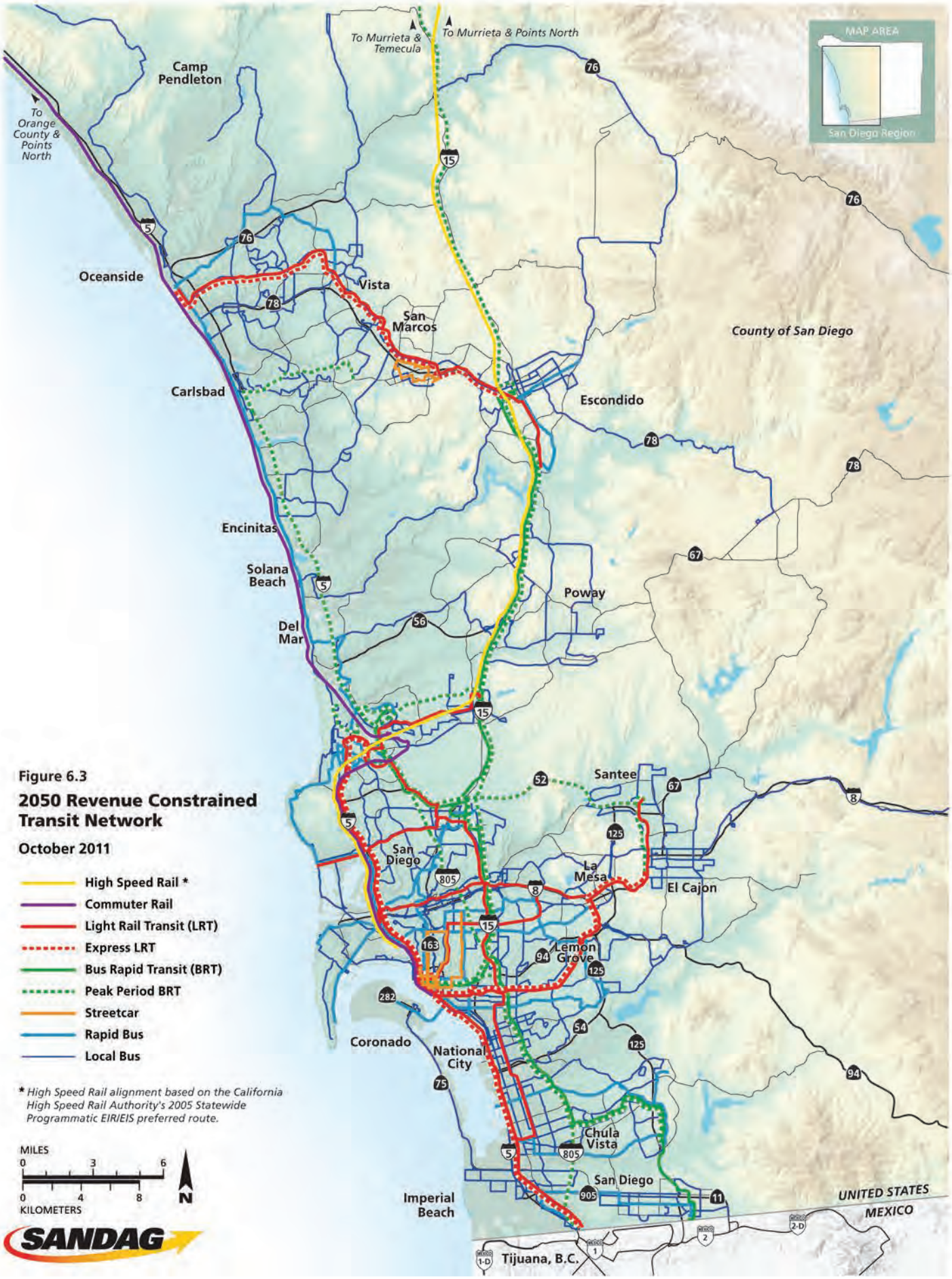

To Murrieta & Temecula
To Murrieta & Points North
MAP AREA
San Diego Region
Camp Pendleton
To Orange County & Points North
Oceanside
Vista
San Marcos
County of San Diego
Carlsbad
Escondido
Encinitas
Solana Beach
Del Mar
Poway
Santee
San Diego
La Mesa
El Cajon
Lemon Grove
Coronado
National City
Chula Vista
Imperial Beach
UNITED STATES
MEXICO
Tijuana, B.C.
Figure 6.3
2050 Revenue Constrained Transit Network
October 2011
High Speed Rail *
Commuter Rail
Light Rail Transit (LRT)
Express LRT
Bus Rapid Transit (BRT)
Peak Period BRT
Streetcar
Rapid Bus
Local Bus
* High Speed Rail alignment based on the California High Speed Rail Authority's 2005 Statewide Programmatic EIR/EIS preferred route.
MILES
0 3 6
0 4 8
KILOMETERS
N
SANDAG

Table 6.2 – Phased Transit Services – Revenue Constrained Plan

Decade	Service	Route	Description	Peak Headway (Minutes)	Off-Peak Headway (Minutes)
2018	COASTER	398	Double trackin g/Increased Frequency between Oceanside and downtown San Diego with extension to Convention Center/Petco Park	20	current
2018	Trolley	510	Mid-Coast LRT Extension (peak frequencies 7.5 to downtown/15 to UTC)	7.5/15	15
2018	Trolley	530	Green Line Extend to downtown - Bayside	15	15
2018	BRT	470	Escondido-UTC/UCSD via Mira Mesa Blvd	10	-
2018	BRT	607	Rancho Bernardo - downtown Express	10	-
2018	BRT	608	Escondido - downtown Express	10	-
2018	BRT	610	Temecula (Peak Only)/E scondido - downtown	10	10
2018	BRT	628	South Bay BRT (Otay Mesa - downtown) via Otay Ranch/Millenia	15	-
2018	BRT	680	Otay Mesa to Sorrento Mesa via I-805 Corridor, Otay Ranch/Millenia, National City, Southeastern San Diego, Kearny Mesa	15	15
2018	BRT	688	San Ysidro to Sorrento Mesa Express	15	-
2018	BRT	689	Millenia/Otay Ranch to UTC/Torrey Pines Express	15	-
2018	Rapid	15	Mid-City Rapid (SDSU - downtown) via Mid-City, El Cajon and Park Blvds	10	10
2018	Rapid	201/202	UTC Area Super Loop	10	15
2018	Rapid	350	Escondido to Del Lago via Escondido Blvd and Bear Valley	10	10
2020	Streetcar	554	Hillcrest/Balboa Par k/downtown San Diego Loop	10	10
2020	BRT	90	Santee/El Cajon Transit Centers to downtown via SR 94	15	-
2020	BRT	640	I-5 - San Ysidro to downtown and Kearny Mesa via I-5 shoulder lane/HOV lanes, downtown, Hillcrest, Mission Valley	15	15
2020	BRT	870	El Cajon to UTC/Campus Point via Santee, SR 52, I-805 (Peak only)	10	-
2020	Rapid	10	La Mesa to Ocean Beach via Mid-City, Hillcrest, Old Town	10	10
2020	Shuttle	448/449	San Marcos Shuttle	15	15
2020	Airport Express		I-5 from McClellan-Palomar Airport to San Diego International Airport	30	30
2020	Airport Express		I-15 from Escondido Transit Center to San Diego International Airport	30	30
2020	Airport Express		I-15 from Escondido Transit Center to Crossborder Facility	30	30
2020			Local Bus Routes - 15 minutes in key corridors	15	15

Table 6.2 – Phased Transit Services – Revenue Constrained Plan (Continued)

Decade	Service	Route	Description	Peak Headway (Minutes)	Off-Peak Headway (Minutes)
2030	COASTER	398	Additional double track ing/Increased Frequency	20	60
2030	SPRINTER	399	Double tracking (Oceanside-Escondido) Increased Frequencies)	10	10
2030	Trolley	561	UTC to Mira Mesa via Sorrento Mesa/Carroll Canyon (extension of route 510)	7.5	7.5
2030	Trolley	520	Orange Line - Increased Frequency	7.5	15
2030	Streetcar	553	Downtown San Diego: Little Italy to East Village	10	10
2030	SPRINTER	588	SPRINTER Express	10	15
2030	BRT	890	El Cajon to Sorrento Mesa via SR 52, Kearny Mesa	10	-
2030	Rapid	2	North Park to downtown San Diego via North Park, Golden Hill	10	10
2030	Rapid	28	Point Loma to Kearny Mesa via Old Town, Linda Vista	10	10
2030	Rapid	30	Old Town to Sorrento Mesa via Pacific Beach, La Jolla, UTC	10	10
2030	Rapid	120	Kearny Mesa to downtown via Mission Valley	10	10
2030	Rapid	473	Oceanside to UTC via Hwy 101 Coastal Communities, Carmel Valley	10	10
2030	Rapid	709	H Street Trolley to Otay Ranch/Millenia via H Street Corridor, Southwestern College	10	10
2030	Rapid	910	Coronado to downtown via Coronado Bridge	10	10
2035	Trolley	520	Orange Line - Extend to Airport Intermodal Transit Center	7.5	15
2035	Streetcar	555	30th St to downtown San Diego via North Park/Golden Hill	10	10
2035	Trolley	560	Mid-City to downtown (Phase 1) via El Cajon and Park Blvds	7.5	7.5
2035	Trolley	563	Pacific Beach to El Cajon via Clairemont, Kearny Mesa, Mission Valley, SDSU	7.5	10
2035	BRT	653	Mid-City to Palomar Airport Road via Kearny Mesa/I-805/I-5	15	-
2035	Rapid	11	Spring Valley to SDSU via Southeastern San Diego, downtown, Hillcrest, Mid-City	10	10
2035	Rapid	180	UTC Area Super Loop - Increase Frequencies	10	10
2035	Rapid	471	Downtown Escondido to East Escondido	10	10
2035	Rapid	474	Oceanside to Vist a via Mission Ave/Santa Fe Road Corridor	10	10
2035	Rapid	635	Eastlake/EUC to Palomar Tro lley via Main Street Corridor	10	10
2035	Rapid	636	SDSU to Spring Valley via East San Diego, Lemon Grove, Skyline	10	10

Table 6.2 – Phased Transit Services – Revenue Constrained Plan (Continued)

Decade	Service	Route	Description	Peak Headway (Minutes)	Off-Peak Headway (Minutes)
2035	Rapid	637	North Park to 32nd Street Trolley via Golden Hill	10	10
2035	Rapid	638	San Ysidro to Otay Mesa via Otay, SR 905 Corridor	10	10
2035	Shuttle	448/449	San Marcos - Increase Frequencies	10	10
2035			Local Bus Routes - 10 minutes in key corridors	10	10
2040	Trolley	520	Orange Line - Increased Frequencies	7.5	7.5
2040	Trolley	522	Orange Line Express - El Cajon to downtown San Diego	10	10
2040	Trolley	530	Green Line Exte nd to downtown - Bayside	7.5	7.5
2040	Trolley	540	Blue Line Express - UTC to San Ysidro via downtown	10	10
2050	Trolley	560	SDSU to downtown (Phase 2) via Mid-City, El Cajon and Park Blvds	7.5	7.5
2050	Trolley	562	UTC to San Ysidro via Kearny Mesa, Mission Valley, Mid-City, Southeastern San Diego, National City, Chula Vista via Highland Ave/4th Avenue	7.5	10

APPENDIX M

EMERGENCY RESPONSE SUPPORTING INFORMATION

South of Rose Canyon, East of I5, West of 805, North of SR52
2-Year Data (CY 2014 and 2015)

First Unit At Scene					
Call Category	Number of Incident	Average	Median (50% Fractile)	90% Fractile	% Fractile at 07:30
FIRE	68	0:07:24	0:07:16	0:09:26	55%
RESCUE	11	0:05:19	0:06:49	0:08:25	70%
Emergency Medical Response	1,293	0:07:02	0:07:03	0:09:07	62%
Urgent Medical Response	106	0:09:30	0:09:26	0:12:45	19%
Non-Emergency Medical Response	5	0:07:13	0:08:19	0:10:55	41%
HAZARD	145	0:07:12	0:07:07	0:09:46	60%
Cumulative	**1,628**	**0:07:12**	**0:07:10**	**0:09:38**	**58%**

Effective Fire Force of first 17 Personnel				
Fire Category	Number of Incident	Average	Median (50% Fractile)	90% Fractile
Structure Fire - Comm / Apt	2	0:09:27	0:09:27	0:10:53
Structure Residential	3	0:10:24	0:10:53	0:11:02
Cumulative	**5**	**0:10:01**	**0:10:53**	**0:11:10**

Effective Fire Force of first 13 Personnel				
Fire Category	Number of Incident	Average	Median (50% Fractile)	90% Fractile
Structure Fire - Comm / Apt	2	0:07:12	0:07:12	0:07:42
Structure Residential	3	0:09:49	0:10:47	0:10:50
Cumulative	**5**	**0:08:46**	**0:07:49**	**0:10:49**

Notes:

Unit Types in these calculations are Engine, Truck, Battalion Chief only. No Ambulance included
Effective Fire Force are Fire Categories of Structure Fires only. Vegetation etc. are excluded

SR12
UTC CPA Modeling

2035rc11A
6 Lanes on Genesee with Bridge

AM Travel Time From Fire Station

Bridge

Road way

Zone Connector

Road way

fire station 1

1 minute

2 minutes

3 minutes

4 minutes

5 minutes

6 minutes

7 minutes

8 minutes

9 minutes

10 minutes

11 minutes

12+ minutes

N

0 0.2 0.4 0.6

Miles

SANDAG

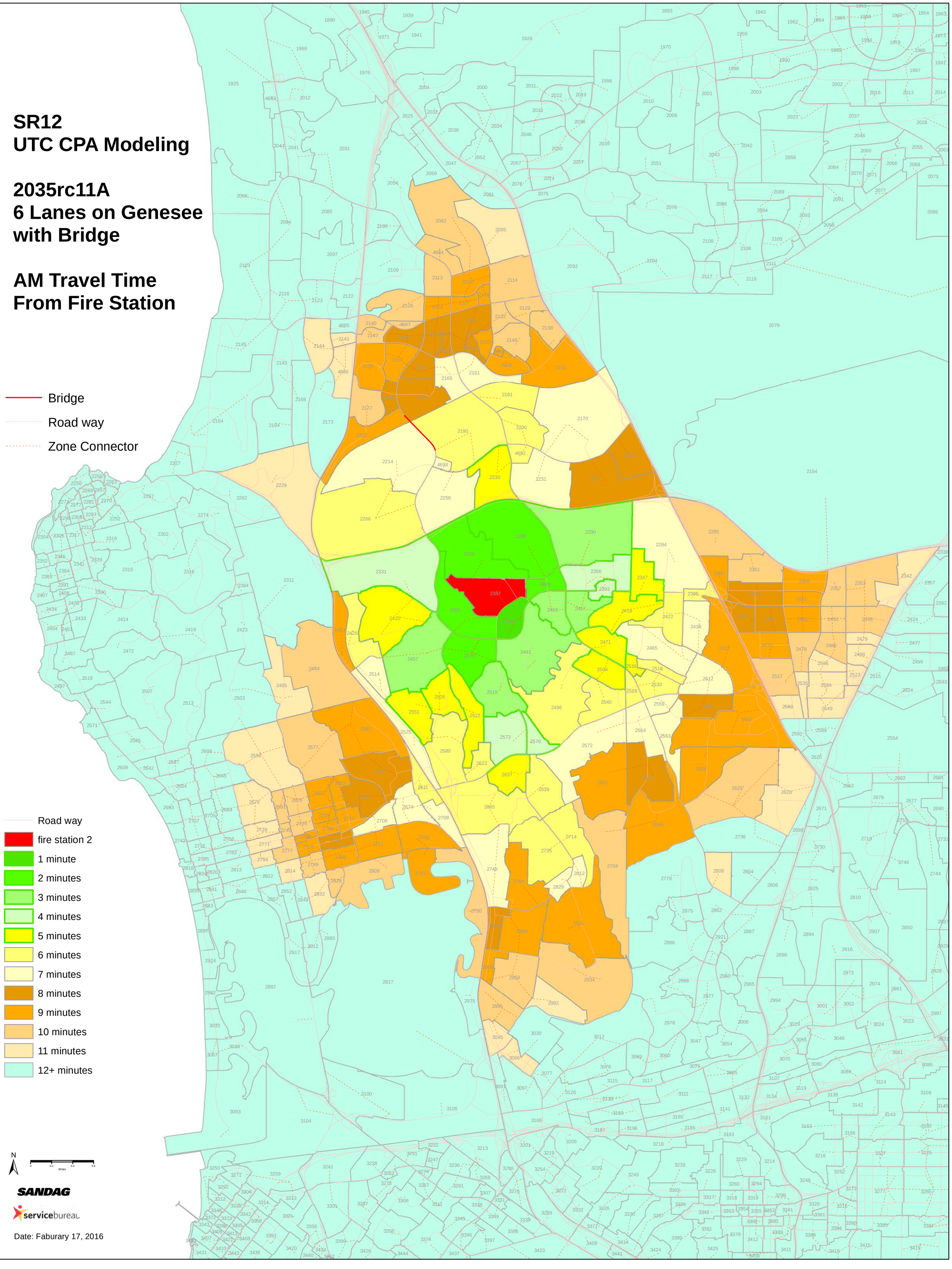
servicebureau

Date: Faburary 17, 2016

SR12
UTC CPA Modeling

2035rc11A
6 Lanes on Genesee with Bridge

AM Travel Time From Fire Station



Date: Faburary 17, 2016

SR12
UTC CPA Modeling

2035rc11A
6 Lanes on Genesee with Bridge

AM Travel Time From Fire Station

Bridge

Road way

Zone Connector

Road way

fire station 3

1 minute

2 minutes

3 minutes

4 minutes

5 minutes

6 minutes

7 minutes

8 minutes

9 minutes

10 minutes

11 minutes

12+ minutes

N

0 0.2 0.4 0.6 Miles

SANDAG

servicebureau

Date: Faburary 18, 2016

SR12
UTC CPA Modeling

2035rc11A
6 Lanes on Genesee with Bridge

Off Peak Period
Travel Time
From Fire Station Zone

Bridge
Road way
Zone Connector

Road way
Fire Station 1
1 minutes
2 minutes
3 minutes
4 minutes
5 minutes
6 minutes
7 minutes
8 minutes
9 minutes
10 minutes
11 m inutes
12+ minutes

N
0 0.3 0.6 0.9
Miles

SANDAG

servicebureau

Date: Faburary 18, 2016

SR12
UTC CPA Modeling

2035rc11A
6 Lanes on Genesee with Bridge

Off Peak Period Travel Time From Fire Station

Bridge

Road way

Zone Connector

Road way

Fire Station 2

1 minute

2 minutes

3 minutes

4 minutes

5 minutes

6 minutes

7 minutes

8 minutes

9 minutes

10 minutes

11 minurtes

12+ minutes

N

0 0.25 0.5 0.75 Miles

SANDAG

servicebureau

Date: Faburary 19, 2016

SR12
UTC CPA Modeling

2035rc11A
6 Lanes on Genesee with Bridge

Off Peak Period Travel Time From Fire Station

Bridge

Road way

Zone Connector

Road way

Station 3

2 minutes

3 minutes

5 minutes

6 minutes

7 minutes

8 minutes

9 minutes

10 minutes

11 minutes

12+ minutes

N

0 0.25 0.5 0.75

Miles

SANDAG

servicebureau

Date: Faburary 18, 2016

SR12
UTC CPA Modeling

2035rc11A
6 Lanes on Genesee with Bridge

PM Peak Period
Travel Time
From Fire Station Zone

Bridge

Road way

Zone Connector

Road way

Fire Station 1

1 minute

2 minutes

3 minutes

4 minutes

5 minutes

6 minutes

7 minutes

8 minutes

9 minutes

10 minutes

11 minutes

12+ minutes

N

0 0.2 0.4 0.6 Miles

SANDAG

servicebureau

Date: Faburary 18, 2016

SR12
UTC CPA Modeling

2035rc11A
6 Lanes on Genesee with Bridge

PM Peak Period
Travel Time
From Fire Station Zone

Bridge

Road way

Zone Connector

Road way

Fire Station 2

1 minute

2 minutes

3 minutes

4 minutes

5 minutes

6 minutes

7 minutes

8 minutes

9 minutes

10 minutes

11 minutes

12+ minutes

N

0 0.2 0.4 0.6 Miles

SANDAG

servicebureau

Date: Faburary 19, 2016

SR12
UTC CPA Modeling

2035rc11A
6 Lanes on Genesee with Bridge

PM Peak Period
Travel Time
From Fire Station Zone

Bridge

Road way

Zone Connector

Road way

Frie Station 3

2 minutes

3 minutes

4 to 5 minutes

6 minutes

7 minutes

8 minutes

9 minutes

10 minutes

11 minutes

12+ minutes

N

0 0.15 0.3 0.45

Miles

SANDAG

servicebureau

Date: Faburary 18, 2016

SR12
UTC CPA Modeling

2035rc11B
4 Lanes on Genesee with Bridge

AM Peak Period
Travel Time
From Fire Station Zone

Bridge

Road way

Zone Connector

Road way

fire station 1

1 minute

2 minutes

3 minutes

4 minutes

5 minutes

6 minutes

7 minutes

8 minutes

9 minutes

10 minutes

11 minutes

12+ minutes

N

0 0.25 0.5 0.75

Miles

SANDAG

servicebureau

Date: Faburary 22, 2016

SR12
UTC CPA Modeling

2035rc11B
4 Lanes on Genesee with Bridge

AM Peak Period
Travel Time
From Fire Station Zone

Bridge

Road way

Zone Connector

Road way

Fire Station 2

1 minute

2 minutes

3 minutes

4 minutes

5 minutes

6 minutes

7 minutes

8 minutes

9 minutes

10 minutes

11 minutes

12+ minutes

N

0 0.25 0.5 0.75

Miles

SANDAG

servicebureau

Date: Faburary 22, 2016

SR12
UTC CPA Modeling

2035rc11B
4 Lanes on Genesee with Bridge

AM Peak Period
Travel Time
From Fire Station Zone

Bridge

Road way

Zone Connector

Road way
fire station 3
1 minute
2 minutes
3 minutes
4 minutes
5 minutes
6 minutes
7 minutes
8 minutes
9 minutes
10 minutes
11 minutes
12+ minutes

N

0 0.25 0.5 0.75
Miles

SANDAG

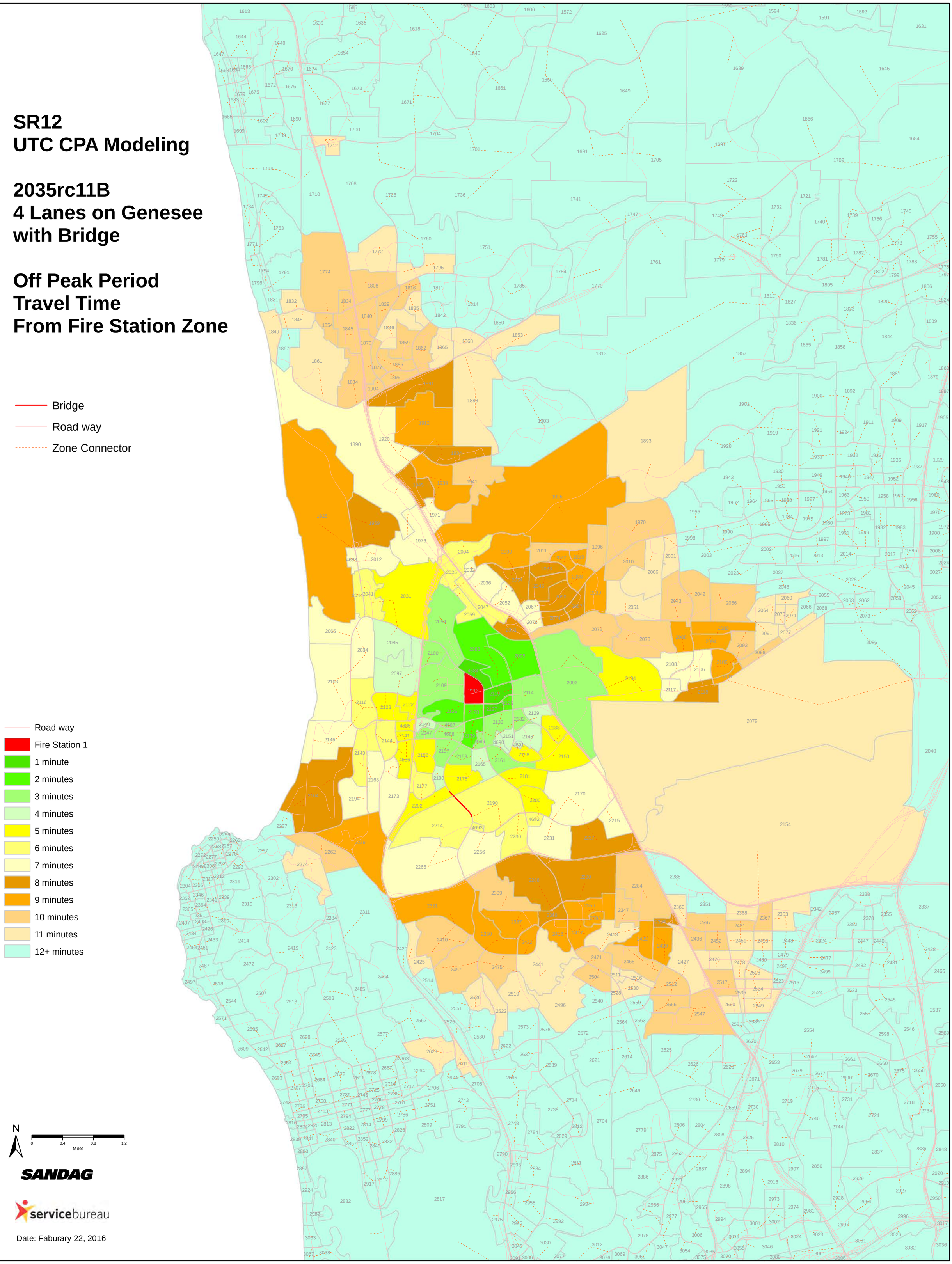
servicebureau

Date: Faburary 22, 2016

SR12
UTC CPA Modeling

2035rc11B
4 Lanes on Genesee with Bridge

Off Peak Period
Travel Time
From Fire Station Zone



SANDAG

servicebureau

Date: Faburary 22, 2016

SR12
UTC CPA Modeling

2035rc11B
4 Lanes on Genesee with Bridge

Off Peak Period
Travel Time
From Fire Station Zone

Bridge

Road way

Zone Connector

Road way

Fire Station 2

1 minute

2 minutes

3 minutes

4 minutes

5 minutes

6 minutes

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8 minutes

9 minutes

10 minutes

11 minutes

12+ minutes

N

0 0.35 0.7 1.05

Miles

SANDAG

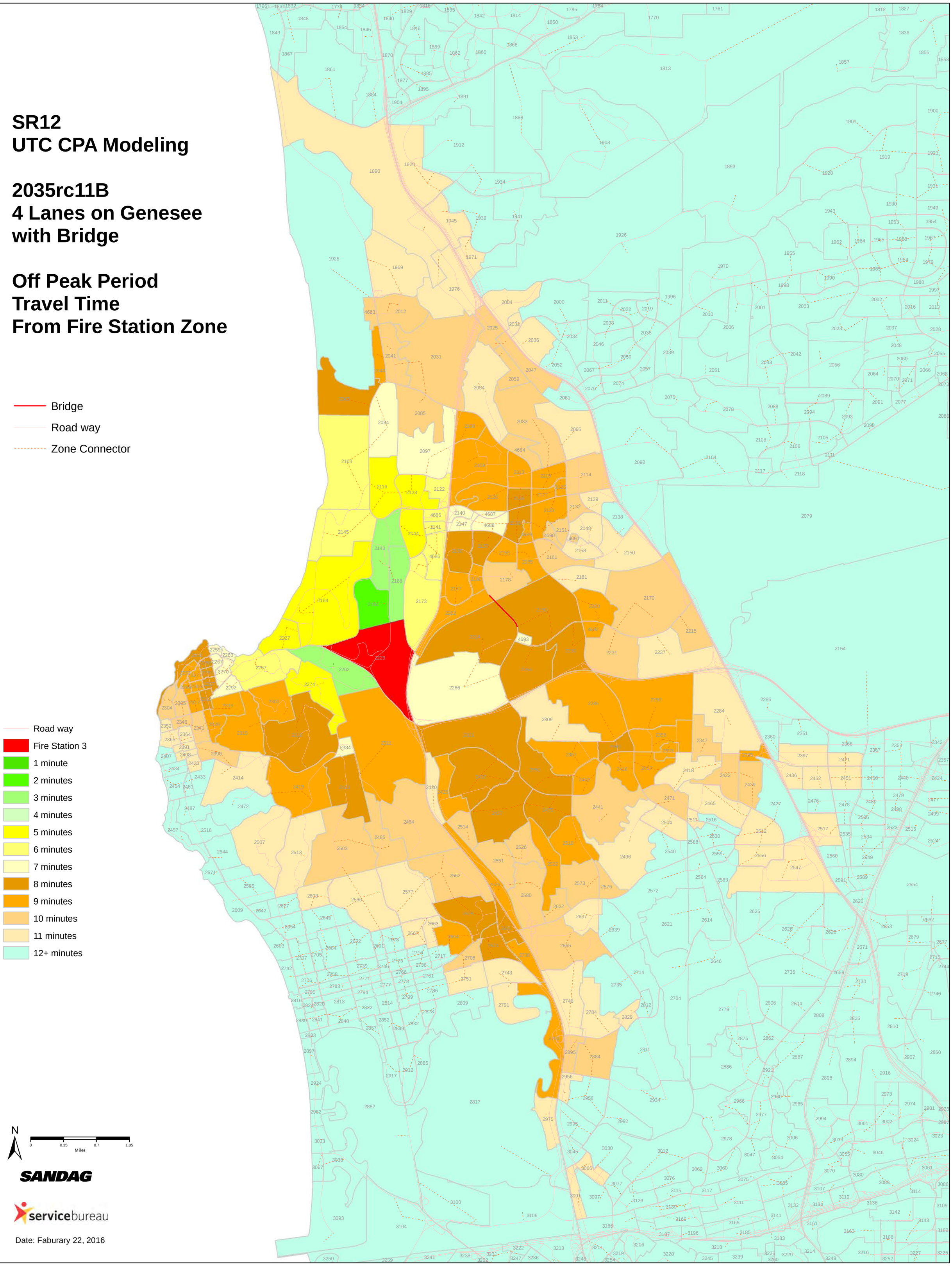
servicebureau

Date: Faburary 22, 2016

SR12
UTC CPA Modeling

2035rc11B
4 Lanes on Genesee with Bridge

Off Peak Period
Travel Time
From Fire Station Zone



SANDAG

servicebureau

Date: Faburary 22, 2016

SR12
UTC CPA Modeling

2035rc11B
4 Lanes on Genesee with Bridge

PM Peak Period
Travel Time
From Fire Station Zone

Bridge

Road way

Zone Connector

Road way

Fire Station 1

1 minute

2 minutes

3 minutes

4 minutes

5 minutes

6 minutes

7 minutes

8 minutes

9 minutes

10 minutes

11 minutes

12+ minutes

N

0 0.3 0.6 0.9

Miles

SANDAG

servicebureau

Date: Faburary 22, 2016

SR12
UTC CPA Modeling

2035rc11B
4 Lanes on Genesee with Bridge

PM Peak Period
Travel Time
From Fire Station Zone

Bridge

Road way

Zone Connector

Road way

Fire Station 2

1 minute

2 minutes

3 minutes

4 minutes

5 minutes

6 minutes

7 minutes

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9 minutes

10 minutes

11 minutes

12+ minutes

N

0 0.3 0.6 0.9

Miles

SANDAG

servicebureau

Date: Faburary 22, 2016

SR12
UTC CPA Modeling

2035rc11B
4 Lanes on Genesee with Bridge

PM Peak Period
Travel Time
From Fire Station Zone

Bridge

Road way

Zone Connector

Road way

Fire Station 3

1 minute

2 minutes

3 minutes

4 minutes

5 minutes

6 minutes

7 minutes

8 minutes

9 minutes

10 minutes

11 minutes

12+ minutes

N

0 0.2 0.4 0.6

Miles

SANDAG

servicebureau

Date: Faburary 22, 2016

SR12
UTC CPA Modeling

2035rc11C
6 Lanes on Genesee
No Bridge

AM Peak Period
Travel Time
From Fire Station Zone

Road way

Zone Connector

Road way
fire station 1
1 minute
2 minutes
3 minutes
4 minutes
5 minutes
6 minutes
7 minutes
8 minutes
9 minutes
10 minutes
11 minutes
12+ minutes

N

0 0.25 0.5 0.75
Miles

SANDAG

servicebureau

Date: Faburary 23, 2016

SR12
UTC CPA Modeling

2035rc11C
6 Lanes on Genesee
No Bridge

AM Peak Period
Travel Time
From Fire Station Zone

Road way

Zone Connector

Road way

fire station 2

1 minute

2 minutes

3 minutes

4 minutes

5 minutes

6 minutes

7 minutes

8 minutes

9 minutes

10 minutes

11 minutes

12+ minutes

N

0 0.2 0.4 0.6

Miles

SANDAG

servicebureau

Date: Faburary 23, 2016

SR12
UTC CPA Modeling

2035rc11C
6 Lanes on Genesee
No Bridge

AM Peak Period
Travel Time
From Fire Station Zone

Road way

Zone Connector

Road way
fire station 3
1 minute
2 minutes
3 minutes
4 minutes
5 minutes
6 minutes
7 minutes
8 minutes
9 minutes
10 minutes
11 minutes
12+ minutes

N

0 0.2 0.4 0.6
Miles

SANDAG

servicebureau

Date: Faburary 23, 2016

SR12
UTC CPA Modeling

2035rc11C
6 Lanes on Genesee
No Bridge

Off Peak Period
Travel Time
From Fire Station Zone

Road way

Zone Connector

Road way

OPFR

- Fire Station 1
- 1 minute
- 2 minutes
- 3 minutes
- 4 minutes
- 5 minutes
- 6 minutes
- 7 minutes
- 8 minutes
- 9 minutes
- 10 minutes
- 11 minutes
- 12+ minutes

N

0 0.25 0.5 0.75 Miles

SANDAG

servicebureau

Date: Faburary 23, 2016

SR12
UTC CPA Modeling

2035rc11C
6 Lanes on Genesee
No Bridge

Off Peak Period
Travel Time
From Fire Station Zone

Road way

Zone Connector

Road way

Station 2

1 minute

2 minutes

3 minutes

4 minutes

5 minutes

6 minutes

7 minutes

8 minutes

9 minutes

10 minutes

11 minutes

12+ minutes

N

0 0.25 0.5 0.75

Miles

SANDAG

servicebureau

Date: Faburary 23, 2016

SR12
UTC CPA Modeling

2035rc11C
6 Lanes on Genesee
No Bridge

Off Peak Period
Travel Time
From Fire Station Zone

Road way

Zone Connector

Road way

Fire Station3

1 to 2 minutes

3 minutes

4 to 5 minutes

6 minutes

7 minutes

8 minutes

9 minutes

10 minutes

11 minutes

12+ minutes

N

0 0.25 0.5 0.75

Miles

SANDAG

servicebureau

Date: Faburary 23, 2016

SR12
UTC CPA Modeling

2035rc11C
6 Lanes on Genesee
No Bridge

PM Peak Period
Travel Time
From Fire Station Zone

Road way

Zone Connector

Road way
Fire Station 1
1 minute
2 minutes
3 minutes
4 minutes
5 minutes
6 minutes
7 minutes
8 minutes
9 minutes
10 minutes
11 minutes
12+ minutes

N

0 0.2 0.4 0.6
Miles

SANDAG

servicebureau

Date: Faburary 23, 2016

SR12
UTC CPA Modeling

2035rc11C
6 Lanes on Genesee
No Bridge

PM Peak Period
Travel Time
From Fire Station Zone

Road way

Zone Connector

Road way

Fire Station 2

1 minute

2 minutes

3 minutes

4 minutes

5 minutes

6 minutes

7 minutes

8 minutes

9 minutes

10 minutes

11 minutes

12+ minutes

N

0 0.2 0.4 0.6

Miles

SANDAG

servicebureau

Date: Faburary 23, 2016

SR12
UTC CPA Modeling

2035rc11C
6 Lanes on Genesee
No Bridge

PM Peak Period
Travel Time
From Fire Station Zone

Road way

Zone Connector

Road way

Fire Station 3

1 to 2 minutes2

3 to 4 minutes

5 minutes

6 minutes

7 minutes

8 minutes

9 minutes

10 minutes

11 minutes

12+ minutes

N

0 0.15 0.3 0.45

Miles

SANDAG

servicebureau

Date: Faburary 23, 2016

SR12
UTC CPA Modeling

2035rc11D
No Bridge

AM Travel Time
From Fire Station

Road Way

Zone Connector

fire station 2

1 minute

2 minutes

3 minutes

4 minutes

5 minutes

6 minutes

7 minutes

8 minutes

9 minutes

10 minutes

11 minutes

12+ minutes

N

0 0.2 0.4 0.6

Miles

SANDAG

servicebureau

Date: Faburary 3, 2016

SR12
UTC CPA Modeling

2035rc11D
4 Lanes on Genesee
No Bridge

AM Travel Time
From Fire Station

Road way

Zone Connector

Road way

fire station 1

1 minute

2 minutes

3 minutes

4 minutes

5 minutes

6 minutes

7 minutes

8 minutes

9 minutes

10 minutes

11 minutes

12+ minutes

N

0 0.2 0.4 0.6 Miles

SANDAG

servicebureau

Date: Faburary 17, 2016

SR12
UTC CPA Modeling

2035rc11D
4 Lanes on Genesee
No Bridge

AM Travel Time
From Fire Station

Road way

Zone Connector

Road way

fire station 2

1 minute

2 minutes

3 minutes

4 minutes

5 minutes

6 minutes

7 minutes

8 minutes

9 minutes

10 minutes

11 minutes

12+ minutes

N

0 0.2 0.4 0.6

Miles

SANDAG

servicebureau

Date: Faburary 17, 2016

SR12
UTC CPA Modeling

2035rc11D
4 Lanes on Genesee
No Bridge

AM Travel Time
From Fire Station Zone

Road way

Zone Connector

Road way

fire station 3

1 minute

2 minutes

3 minutes

4 minutes

5 minutes

6 minutes

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8 minutes

9 minutes

10 minutes

11 minutes

12+ minutes

N

0 0.2 0.4 0.6

Miles

SANDAG

servicebureau

Date: Faburary 17, 2016

SR12
UTC CPA Modeling

2035rc11D
4 Lanes on Genesee
No Bridge

Off Peak Period
Travel Time
From Fire Station Zone

Road way

Zone Connector

Road way

Fire Station 1

1 minute

2 minutes

3 minutes

4 minutes

5 minutes

6 minutes

7 minutes

8 minutes

9 minutes

10 minutes

11 minutes

12+ minutes

N

0 0.3 0.6 0.9

Miles

SANDAG

servicebureau

Date: Faburary 19, 2016

SR12
UTC CPA Modeling

2035rc11D
4 Lanes on Genesee
No Bridge

Off Peak Peak Period
Travel Time
From Fire Station Zone

Road way
Zone Connector

Road way
0
1 minute
2 minutes
3 minutes
4 minutes
5 minutes
6 minutes
7 minutes
8 minutes
9 minutes
10 minutes
11 minutes
12+ minutes

N
0 0.25 0.5 0.75
Miles

SANDAG

servicebureau

Date: Faburary 19, 2016

SR12
UTC CPA Modeling

2035rc11D
4 Lanes on Genesee
No Bridge

Off Peak Period
Travel Time
From Fire Station Zone

Road way

Zone Connector

Road way

Fire Station 3

1 to 2 minutes

3 minutes

4 to 5 minutes

6 minutes

7 minutes

8 minutes

9 minutes

10 minutes

11 minutes

12+ minutes

N

0 0.2 0.4 0.6 Miles

SANDAG

servicebureau

Date: Faburary 19, 2016

SR12
UTC CPA Modeling

2035rc11D
4 Lanes on Genesee
No Bridge

PM Peak Period
Travel Time
From Fire Station Zone

Road way
Zone Connector

Road way
Fire Station 1
1 minute
2 minutes
3 minutes
4 minutes
5 minutes
6 minutes
7 minutes
8 minutes
9 minutes
10 minutes
11 minutes
12+ minutes

N

0 0.2 0.4 0.6
Miles

SANDAG

servicebureau

Date: Faburary 19, 2016

SR12
UTC CPA Modeling

2035rc11D
4 Lanes on Genesee
No Bridge

PM Peak Period
Travel Time
From Fire Station

Road way

Zone Connector

Road way

Fire Station 2

1 minute

2 minutes

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4 minutes

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6 minutes

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11 m9inutes

12+ minutes

N

0 0.25 0.5 0.75

Miles

SANDAG

servicebureau

Date: Faburary 19, 2016

SR12
UTC CPA Modeling

2035rc11D
4 Lanes on Genesee
No Bridge

PM Peak Period
Travel Time
From Fire Station Zone

Road way

Zone Connector

Road way

Fire Station 3

1 to 2 minutes

3 minutes

4 to 5 minutes

6 minutes

7 minutes

8 minutes

9 minutes

10 minutes

11 minutes

12+ minutes

N

0 0.2 0.4 0.6

Miles

SANDAG

servicebureau

Date: Faburary 19, 2016

APPENDIX N

ALTERNATIVES COMPARISON

INTERSECTIONS

Genesee Avenue & John Hopkins Drive (Intersection 2):

- Alternatives B, C and D compared to Alternative A: No significant impact. This improvement project is not identified in the NUC PFFP or Public Facility Summary (PFS). The project would be added to the NUC PFFP or PFS for each of these alternatives.

Genesee Avenue & Scripps Hospital (Intersection 6):

- Alternatives B, C and D compared to Alternative A: No significant impact. This improvement project is not identified in the NUC PFFP or PFS and would not be added for any of these alternatives.

Genesee Avenue & La Jolla Village Drive (Intersection 12):

- Alternative B compared to Alternative A: No significant impact. This improvement project is not identified in the NUC PFFP or PFS and would not be added for this alternative.

- Alternatives C and D compared to Alternative A: In comparison to Alternative A, the implementation of Alternatives C or D may be considered a significant (new) impact. This improvement project is not identified in the NUC PFFP or PFS and would not be added for any of these alternatives.

Genesee Avenue & Esplanade Court (Intersection 13):

- Alternatives B, C and D compared to Alternative A: In comparison to Alternative A, the implementation of Alternatives B, C or D may be considered a significant impact. This improvement project is not identified in the NUC PFFP or PFS and would not be added for any of these alternatives.

Genesee Avenue & Nobel Drive (Intersection 14):

- Alternative B compared to Alternative A: No significant impact. Constructing a third westbound through-lane along Nobel Drive is not identified in the NUC PFFP or PFS and would not be added for either of these alternatives. Construct a third northbound and southbound lane on Genesee Avenue is identified in the University PFFP (NUC-A) and would be implemented either as is (Alternative C) or in a modified format (Alternative B). As a result, the significant traffic impacts to this intersection would be partially mitigated with the implementation of these measures and; therefore, impact to this intersection would remain significant and unmitigated.

- Alternative C compared to Alternative A: No significant impact. Constructing a third westbound through-lane along Nobel Drive is not identified in the NUC PFFP or PFS and would not be added for either of these alternatives. As a result, the significant traffic impacts to this intersection would be partially mitigated and; therefore, impact to this intersection would remain significant and unmitigated.

- Alternative D compared to Alternative A: In comparison to Alternative A, the implementation of Alternative B may be considered a significant impact. Constructing a third westbound through-lane along Nobel Drive is not identified in the NUC PFFP or PFS and would not be added for either of these alternatives. Addition of a third northbound through lane is included in the NUC PFFP; however, Alternative D analyzes the network without that project in place. As a result, under Alternative D the significant traffic impact to this intersection would remain significant and unmitigated.

Genesee Avenue & Decoro Street (Intersection 15):

- Alternatives B and C compared to Alternative A: No significant impact. Stripe eastbound and westbound right-turn lanes on Decoro Street is not identified in the University PFFP or FBA and would be added under these alternatives. Construct a third northbound and southbound lane on Genesee Avenue is identified in the University PFFP (NUC-A) and would be implemented either as is (Alternative C) or in a modified format (Alternative B). As a result, the significant traffic impacts to this intersection would be fully mitigated.

- Alternative D compared to Alternative A: In comparison to Alternative A, the implementation of Alternative D may be considered a significant (new) impact. Stripe eastbound and westbound right-turn lanes on Decoro Street is not identified in the University PFFP or FBA and would be added under these alternatives. Construct a third northbound and southbound lane on Genesee Avenue is identified in the University PFFP (NUC-A) and will no longer be applicable under this alternative. As a result, the significant traffic impacts to this intersection would be partially mitigated with the implementation of these measures and; therefore, impact to this segment would remain significant and unmitigated.

Genesee Avenue & Centurion Square (Intersection 16):

- Alternative C compared to Alternative A: In comparison to Alternative A, the implementation of Alternative C may be considered a significant (new) impact. Addition of a second westbound left-turn lane would be required to address this plan-to-plan impact but is not recommended. Addition of a second westbound left-turn lane is not identified in the University PFFP or FBA and would not be included in the University PFFP or FBA for this alternative.

- Alternative D compared to Alternative A: In comparison to Alternative A, the implementation of Alternative D may be considered a significant (new) impact. Construct a third northbound and southbound lane on Genesee Avenue is identified in the University PFFP (NUC-A) and will no longer be applicable. As a result, the significant traffic impacts to this intersection would remain significant and unmitigated.

Genesee Avenue & Governor Drive (Intersection 17):

- Alternative B compared to Alternative A: No significant impact. Addition of a third northbound and southbound through-lane is identified in the University PFFP or FBA under NUC-A and would be modified for this alternative.

- Alternatives C and D compared to Alternative A: No significant impact. Construct a grade separated intersection (removing northbound and southbound through-movements), with one northbound and southbound through-lane required in the undercrossing is not identified in the University PFFP or FBA and would be added under these alternatives.

Genesee Avenue & SR-52 Westbound Ramps (Intersection 18):

- Alternatives B, C and D compared to Alternative A: No significant impact. Signalize the intersection and square up ramps, adding a protected phase for northbound left-turns from Genesee Avenue to the SR-52 ramp, and add a second right-turn lane on the exit ramp is not identified in the University PFFP or FBA and would not be added under these alternatives since it's a State facility under Caltrans District 11 jurisdiction.

Genesee Avenue & SR-52 Eastbound Ramps (Intersection 19):

- Alternatives C and D compared to Alternative A: In comparison to Alternative A, the implementation of Alternatives C or D may be considered a significant (new) impact. Construct a second southbound left-turn lane from Genesee Avenue to the eastbound SR-52 entrance ramp is not identified in the University PFFP or FBA and would not be added for any of these alternatives.

Genesee Avenue & Appleton Street/Lehrer Drive (Intersection 20):

- Alternatives B, C and D compared to Alternative A: No significant impact. This intersection is outside of the University community and no project would be included in the University PFFP or FBA for any of these alternatives.

La Jolla Village Drive & Torrey Pines Road (Intersection 21):

- Alternatives B, C and D compared to Alternative A: No significant impact. Relocate the pedestrian crossing from the east leg to the west leg of the intersection and implement signal phasing modification to improve operation is not identified in the University PFFP or FBA and would be added for any of these alternatives.

La Jolla Village Drive Eastbound Ramps & Gilman Drive (Intersection 23b):

- Alternatives B, C and D compared to Alternative A: No significant impact. Signalize the intersection and install a protected southbound left turn phase, re-stripe eastbound ramp approach to have a shared left-right lane, and an exclusive right-turn lane is not identified in the University PFFP or FBA and would be added for any of these alternatives.

La Jolla Village Drive & Villa La Jolla Drive (Intersection 24):

- Alternatives C and D compared to Alternative A: No significant impact. Construct a second westbound right-turn lane from La Jolla Village Drive to Villa La Jolla Drive is not identified in the University PFFP or FBA and would be added for any of these alternatives.

La Jolla Village Drive & I-5 Southbound Off-Ramps (Intersection 25):

- Alternatives C and D compared to Alternative A: In comparison to Alternative A, the implementation of Alternatives C or D may be considered a significant (new) impact. Modify one of the westbound through lanes to be a shared through-right lane, creating dual right-turns is not identified in the University PFFP or FBA and would not be added under either of these alternatives.

La Jolla Village Drive & Regents Road (Intersection 28):

- Alternatives B, C and D compared to Alternative A: No significant impact. Constructing a fourth eastbound and westbound through lane along La Jolla Village Drive and a second southbound left turn lane from Regents Road to La Jolla Village Drive are not identified in the University PFFP or FBA and would not be added under any of these alternatives.

La Jolla Village Drive & Executive Way (Intersection 29):

- Alternatives B, C and D compared to Alternative A: No significant impact. Constructing a fourth eastbound and westbound through lane along La Jolla Village Drive and modifying the northbound and southbound approach of Executive Way to have two left-turn lanes, one through lane, and one right-turn lane with an overlap phase are not identified in the University PFFP or FBA and would not be added under any of these alternatives.

La Jolla Village Drive & Towne Centre Drive (Intersection 30):

- Alternatives B, C and D compared to Alternative A: No significant impact. Constructing a fourth eastbound through lane on La Jolla Village Drive (maintaining the exclusive right turn lane), converting westbound right-turn lane to a shared through-right lane, add an exclusive southbound right-turn lane, and removing the pedestrian crossing on the east leg are not identified in the University PFFP or FBA and would not be added under any of these alternatives.

La Jolla Village Drive & I-805 Southbound Ramps (Intersection 31):

- Alternatives B, C and D compared to Alternative A: No significant impact. Constructing a fourth eastbound and westbound through lane along La Jolla Village Drive and modifying the ramp to provide a third southbound right-turn lane is not identified in the University PFFP or FBA and would not be added under any of these alternatives.

Miramar Road & Eastgate Mall (Intersection 34):

- Alternatives B, C and D compared to Alternative A: No significant impact. Modify the southbound Eastgate Mall approach to have two left-turn lanes and one right-turn lane is not identified in the University PFFP or FBA and would be added under each of these alternatives.

Miramar Road & Camino Santa Fe (Intersection 37):

- Alternatives B, C and D compared to Alternative A: No significant impact. Construct a fourth eastbound and westbound through lane along Miramar Road, re-stripe the southbound leg to have a left-turn lane, shared left-through-right, and two exclusive rights, and maintain a right-turn overlap is not identified in the University PFFP or FBA and would not be added for any of these alternatives.

Nobel Drive & La Jolla Village Square Driveway (Intersection 39):

- Alternatives B, C and D compared to Alternative A: No significant impact. Construct a second northbound right-turn lane from La Jolla Village Square to Nobel Drive and a third westbound left-turn lane from Nobel Drive to La Jolla Village Square is not identified in the University PFFP or FBA and would not be added for any of these alternatives.

Nobel Drive & I-5 Southbound On-Ramp (Intersection 40):

- Alternatives B, C and D compared to Alternative A: No significant impact. Construct an exclusive eastbound right-turn lane on Nobel Drive is not identified in the University PFFP or FBA and would not be added under these alternatives.

Nobel Drive & Regents Road (Intersection 44):

- Alternatives B, C and D compared to Alternative A: No significant impact. Restripe to add a third westbound through lane on Nobel Drive, add an eastbound right-turn lane on Nobel Drive, and remove the pedestrian crossing on the east leg is not identified in the University PFFP or FBA and would not be added for any of these alternatives.

Regents Road & Arriba Street (Intersection 59):

- Alternative B compared to Alternative A: No significant impact. Construct a second northbound left-turn lane on Regents Road is not identified in the University PFFP or FBA and would be added under both of these alternatives.

- Alternatives C and D compared to Alternative A: In comparison to Alternative A, the implementation of Alternatives C or D would avoid an impact at this intersection. No project related improvements would be required under these two alternatives.

Regents Road & Governor Drive (Intersection 60):

- Alternative B compared to Alternative A: No significant impact. Construct a second southbound left-turn lane on Regents Road and add a second westbound left-turn lane on Governor Drive is not identified in the University PFFP or FBA and would be added under both of these alternatives.

- Alternatives C and D compared to Alternative A: In comparison to Alternative A, the implementation of Alternatives C or D would avoid an impact at this intersection. No project related improvements would be required under these two alternatives.

Regents Road & Luna Avenue (Intersection 63):

- Alternatives B, C and D compared to Alternative A: No significant impact. This intersection is outside of the University community and no project would be included in the University PFFP or FBA for any of these alternatives.

North Torrey Pines Road & La Jolla Shores Drive (Intersection 66):

- Alternatives B, C and D compared to Alternative A: No significant impact. Restriping to add a third southbound through lane on North Torrey Pines Road, modify eastbound and westbound La Jolla Shores Drive approaches to utilize “protected left-turn” phasing instead of “split phasing” in the traffic signal, and remove the pedestrian crossing on the north leg is not identified in the University PFFP or FBA and would not be added for any of these alternatives.

Gilman Drive & I-5 Southbound Ramps (Intersection 69):

- Alternative B compared to Alternative A: No significant impact. No project is identified as a need since operations are expected to operate at acceptable levels.

- Alternatives C and D compared to Alternative A: In comparison to Alternative A, the implementation of Alternatives C or D may be considered a significant (new) impact. To improve operations to acceptable conditions during all peak periods, convert one westbound through lane to a left-turn lane, creating dual left-turns at this intersection. This improvement project is not identified in the University PFFP or FBA and would not be added for either of these alternatives.

Towne Center Drive & Eastgate Mall (Intersection 73):

- Alternatives B, C and D compared to Alternative A: No significant impact. Construct a second westbound left-turn lane from Eastgate Mall to Towne Centre Drive is not identified in the University PFFP or FBA and would be added under these alternatives.

Executive Way & Executive Drive (Intersection 76):

- Alternatives B, C and D compared to Alternative A: No significant impact. This traffic signal improvement project is not identified in the University PFFP or FBA and would be added under these alternatives.

Judicial Drive & Eastgate Mall (Intersection 77):

- Alternatives B, C and D compared to Alternative A: No significant impact. This traffic signal improvement project is not identified in the University PFFP or FBA and would be added under these alternatives.

Governor Drive and I-805 Northbound Ramps (Intersection 79):

- Alternatives B, C and D compared to Alternative A: No significant impact. Install roundabout control at this roadway intersection is not identified in the University PFFP or FBA and would not be added under these alternatives since it's a State facility under Caltrans District 11 jurisdiction.

SEGMENTS

Eastgate Mall from Genesee Avenue to Easter Way:

- Alternatives B and C compared to Alternative A: No significant impact. This improvement project is not identified in the University PFFP or FBA and would not be added for any of these alternatives.

Eastgate Mall from Judicial Drive to Eastgate Drive (Freeway Overpass):

- Alternatives B, C, and D compared to Alternative A: No significant impact. This improvement project is identified in the University FBA (NUC-34a and NUC-34b) and would remain in the University FBA.

Eastgate Mall from Eastgate Drive to Miramar Road:

- Alternatives B, C and D compared to Alternative A: No significant impact. This improvement project is identified in the University FBA (NUC-34) and would be updated to extend to Miramar Road.

Genesee Avenue from La Jolla Village Drive to Esplanade Court:

- Alternative B compared to Alternative A: No significant impact. No project is identified as a need since operations are expected to operate at acceptable levels.

- Alternatives C and D compared to Alternative A: In comparison to Alternative A, the implementation of Alternatives C or D may be considered a significant (new) impact. Repurposing the right-of-way to provide for a 6-lane Prime arterial with Class II bike facility with buffers is not identified in the University PFFP or FBA and would be added.

Genesee Avenue from Nobel Drive to Centurion Square:

- Alternative B compared to Alternative A: No significant impact. NUC-A project will modified to repurpose the existing right-of-way to provide a modified 6 lane major between Nobel Drive and Decoro Street and modified 6 lane prime between Decoro Street and Centurion Square with bike facilities that include a shared pedestrian bicycle facility accommodated on widened sidewalks or Class II bicycle facility as right-of-way permits.

- Alternative C compared to Alternative A: No significant impact. NUC-A project will be modified to repurpose the existing right-of-way to provide a modified 6 lane major between Nobel Drive and Centurion Square with bike facilities that include a shared pedestrian bicycle facility accommodated on widened sidewalks or Class II bicycle facility as right-of-way permits.

- Alternative D compared to Alternative A: In comparison to Alternative A, the implementation of Alternative D may be considered a significant (new) impact. No proposed mitigation is recommended as part of the University Community Plan Amendment under this alternative. As a result, NUC-A project will be removed from University FBA.

Genesee Avenue from Centurion Square to Governor Drive:

- Alternative B compared to Alternative A: No significant impact. NUC-A project will modified to repurpose the existing right-of-way to provide a modified 6 lane major between Centurion Square and Governor Drive with bike facilities that include a shared pedestrian bicycle facility accommodated on widened sidewalks or Class II bicycle facility as right-of-way permits.

- Alternative C compared to Alternative A: In comparison to Alternative A, the implementation of Alternative C may be considered a significant (new) impact. No mitigation is proposed for the impacts to this roadway segment under Alternative C. Implementing NUC-A project currently included in University FBA is recommended and included as a baseline condition for this alternative; therefore, would still be included in the University FBA.

- Alternative D compared to Alternative A: In comparison to Alternative A, the implementation of Alternative D may be considered a significant (new) impact. No proposed mitigation is recommended as part of the University Community Plan Amendment under this alternative. As a result, NUC-A project will be removed from University FBA.

Genesee Avenue from Governor Drive to SR-52 Westbound Ramps:

- Alternative B compared to Alternative A: No significant impact. NUC-A project will be modified to include the repurposing of the existing right-of-way along this segment to provide a modified 6 lane major between Governor Drive and SR-52 Westbound Ramps with bike facilities that include a shared pedestrian bicycle facility accommodated on widened sidewalks or Class II bicycle facility as right-of-way permits.

- Alternative C compared to Alternative A: No significant impact. Implementing NUC-A project currently included in University FBA is recommended and included as a baseline condition for this alternative; therefore, would still be included in the University FBA.

- Alternative D compared to Alternative A: In comparison to Alternative A, the implementation of Alternative D may be considered a significant (new) impact. No proposed mitigation is recommended as part of the University Community Plan Amendment under this alternative. As a result, NUC-A project will be removed from University FBA.

Genesee Avenue from SR-52 Westbound Ramps to SR-52 Eastbound Ramps:

- Alternatives B, C and D compared to Alternative A: No significant impact. This roadway segment is outside of the University Community Planning Area and no project would be included in the University PFFP or FBA for any of these alternatives.

Genesee Avenue from SR-52 Eastbound Ramps to Lehrer Drive:

- Alternatives B, C and D compared to Alternative A: No significant impact. This roadway segment is outside of the University Community Planning Area and no project would be included in the University PFFP or FBA for any of these alternatives.

La Jolla Village Drive from Revelle College Drive to Villa La Jolla Drive:

- Alternative B compared to Alternative A: No significant impact. No project is identified as a need since operations are expected to operate at acceptable levels.

- Alternatives C and D compared to Alternative A: In comparison to Alternative A, the implementation of Alternatives C or D may be considered a significant (new) impact. Widening the roadway to an 8-lane Prime arterial is not identified in the University PFFP or FBA and would not be added for any of these alternatives.

La Jolla Village Drive from Villa La Jolla Drive to I-5 Northbound Ramps:

- Alternatives B, C, and D compared to Alternative A: No significant impact. Widening the roadway to an 8-lane Prime arterial is not identified in the University PFFP or FBA and would not be added for any of these alternatives.

La Jolla Village Drive from I-5 Northbound Ramps to Towne Centre Drive:

- Alternatives B, C and D compared to Alternative A: No significant impact. Repurposing to a 6-lane Prime arterial is not identified in the University PFFP or FBA and would be added under these alternatives.

Miramar Road from Miramar Mall to Camino Santa Fe:

- Alternatives B, C and D compared to Alternative A: No significant impact. Widening to an 8-lane Prime arterial is not identified in the University PFFP or FBA and would not be added for any of these alternatives.

Nobel Drive from Villa La Jolla Drive to I-5 Southbound On-Ramp:

- Alternatives B, C and D compared to Alternative A: No significant impact. Widening to a 6-lane Prime arterial is not identified in the University PFFP or FBA and would not be added for any of these alternatives.

Nobel Drive from I-5 Southbound On-Ramp to I-5 Northbound Off-Ramp/University Center Lane:

- Alternatives B, C and D compared to Alternative A: No significant impact. Widening to a 6-lane Major arterial is not identified in the University PFFP or FBA and would not be added for any of these alternatives.

Regents Road from SR-52 Westbound Ramps to SR-52 Eastbound Ramps:

- Alternative B compared to Alternative A: No significant impact. Widening to a 6-lane Major arterial is not identified in the University PFFP or FBA and would not be added for any of these alternatives.

- Alternatives C and D compared to Alternative A: In comparison to Alternative A, the implementation of Alternatives C or D would avoid an impact at this roadway location. No project related improvements would be required under these two alternatives.

Regents Road from SR-52 Eastbound Ramps to Luna Avenue:

- Alternative B compared to Alternative A: No significant impact. This roadway segment is outside of the University community and no project would be included in the University PFFP or FBA for any of these alternatives.

- Alternatives C and D compared to Alternative A: In comparison to Alternative A, the implementation of Alternatives C or D would avoid an impact at this roadway location. No project related improvements would be required under these two alternatives.

Torrey Pines Road from La Jolla Village Drive to Community Boundary:

- Alternatives B, C and D compared to Alternative A: No significant impact. Widening to a 6-lane Major arterial is not identified in the University PFFP or FBA and would not be added for any of these alternatives.

CORRIDORS

Genesee Avenue between SR-52 and North Torrey Pines Road

- Alternatives B, C and D compared to Alternative A: No significant impact. No specific improvement project is identified for corridor improvements in the University PFFP or FBA. Implementation of adaptive traffic control and transit signal priority measures would be added for these alternatives.

La Jolla Village Drive between Torrey Pines Road and Interstate 805

- Alternatives B, C and D compared to Alternative A: No significant impact. No specific improvement project is identified for corridor improvements in the University PFFP or FBA. Implementation of adaptive traffic control and transit signal priority measures would be added for these alternatives.

Nobel Drive between La Jolla Village Square and Miramar Road

- Alternatives B, C and D compared to Alternative A: No significant impact. No specific improvement project is identified for corridor improvements in the University PFFP or FBA. Implementation of adaptive traffic control and transit signal priority measures would be added for these alternatives.

Regents Road between Luna Avenue and Genesee Avenue

- Alternative B compared to Alternative A: No significant impact. No specific improvement project is identified for corridor improvements in the University PFFP or FBA. Implementation of adaptive traffic control and transit signal priority measures would be added for these alternatives.

- Alternatives C and D compared to Alternative A: In comparison to Alternative A, the implementation of Alternatives C or D would avoid an impact at this roadway location. No project related improvements would be required under these two alternatives.

FREEWAY

Interstate 5, between SR-52 and Gilman Drive

- Alternatives B, C and D compared to Alternative A: No significant impact. Widen Interstate 5 to have five lanes in each direction is an improvement identified in the SANDAG RTP and would not be included in the University PFFP or FBA.

Interstate 805, between SR-52 and Mira Mesa Boulevard

- Alternatives B, C and D compared to Alternative A: No significant impact. Widen Interstate 805 to have five lanes in each direction is an improvement identified in the SANDAG RTP and would not be included in the University PFFP or FBA.

State Route 52, between I-5 and I-805

- Alternatives B, C and D compared to Alternative A: No significant impact. Widen State Route 52 to have three lanes in each direction is an improvement identified in the SANDAG RTP and would not be included in the University PFFP or FBA.

Interstate 5 Southbound Entrance Ramp from Gilman Drive

- Alternatives B, C and D compared to Alternative A: No significant impact. Adjust ramp meter rate to process more vehicles is an operational improvement made by Caltrans and would not be included in the University PFFP or FBA.

Interstate 5 Southbound Entrance Ramp from Nobel Drive

- Alternatives B, C and D compared to Alternative A: No significant impact. Adjust ramp meter rate to process more vehicles is an operational improvement made by Caltrans and would not be included in the University PFFP or FBA.

Interstate 5 Northbound Entrance Ramp from Westbound La Jolla Village Drive

- Alternatives B, C and D compared to Alternative A: No significant impact. Adjust ramp meter rate to process more vehicles is an operational improvement made by Caltrans and would not be included in the University PFFP or FBA.

Interstate 5 Northbound Entrance Ramp from Eastbound La Jolla Village Drive

- Alternatives B, C and D compared to Alternative A: No significant impact. Adjust ramp meter rate to process more vehicles is an operational improvement made by Caltrans and would not be included in the University PFFP or FBA.

Interstate 5 Southbound Entrance Ramp from Westbound La Jolla Village Drive

- Alternatives B, C and D compared to Alternative A: No significant impact. Adjust ramp meter rate to process more vehicles is an operational improvement made by Caltrans and would not be included in the University PFFP or FBA.

Interstate 5 Southbound Entrance Ramp from Eastbound La Jolla Village Drive

- Alternatives B, C and D compared to Alternative A: No significant impact. Adjust ramp meter rate to process more vehicles is an operational improvement made by Caltrans and would not be included in the University PFFP or FBA.

Interstate 5 Northbound Entrance Ramp from Genesee Avenue

- Alternatives B, C and D compared to Alternative A: No significant impact. Adjust ramp meter rate to process more vehicles is an operational improvement made by Caltrans and would not be included in the University PFFP or FBA.

Interstate 805 Southbound Entrance Ramp from Nobel Drive

- Alternatives B, C and D compared to Alternative A: No significant impact. Adjust ramp meter rate to process more vehicles is an operational improvement made by Caltrans and would not be included in the University PFFP or FBA.

ID	Intersection	Control	Peak Hour	Alt A Regents Bridge 6-lane Genesee		Alt B Regents Bridge 4-lane Genesee			Change to Network Impact
				Delay (a)	LOS (b)	Delay (a)	LOS (b)	Plan-to-Plan Impact?	
1	Genesee Ave & N. Torrey Pines Rd	Signal	AM	22.2	C	22.2	C		
			MID	22.2	C	22.2	C		
			PM	36.2	D	36.5	D		
2	Genesee Ave & John Hopkins Dr (S)	Signal	AM	132.3	**F**	128.9	**F**		Similar impact for Alts A & B
			MID	47.7	D	46.9	D		
			PM	44.2	D	43.4	D		
3	Genesee Ave & Science Center Dr	Signal	AM	17.4	B	17.5	B		
			MID	8.3	A	8.4	A		
			PM	15.9	B	15.9	B		
4	Genesee Ave & I-5 SB Ramps	Signal	AM	39.3	D	39.4	D		
			MID	30.0	C	30.3	C		
			PM	35.2	D	35.2	D		
5	Genesee Ave & I-5 NB Ramps	Signal	AM	48.8	D	48.5	D		
			MID	35.2	D	34.5	C		
			PM	29.0	C	28.7	C		
6	Genesee Ave & Scripps Hospital	Signal	AM	60.7	**E**	60.2	**E**		Similar impact for Alts A & B
			MID	63.3	**E**	62.2	**E**		
			PM	74.8	**E**	72.3	**E**		
7	Genesee Ave & Campus Point Dr	Signal	AM	39.0	D	39.0	D		
			MID	31.9	C	32.0	C		
			PM	48.4	D	47.7	D		
8	Genesee Ave & Regents Road	Signal	AM	28.3	C	29.1	C		
			MID	14.0	B	14.1	B		
			PM	27.9	C	28.1	C		
9	Genesee Ave & Eastgate Mall	Signal	AM	50.5	D	49.9	D		
			MID	35.9	D	36.5	D		
			PM	36.5	D	36.8	D		
10	Genesee Ave & Executive Dr	Signal	AM	22.9	C	22.6	C		
			MID	19.4	B	19.5	B		
			PM	37.2	D	37.1	D		
11	Genesee Ave & Executive Square	Signal	AM	13.3	B	13.6	B		
			MID	33.5	C	33.4	C		
			PM	50.7	D	48.4	D		
12	Genesee Ave & La Jolla Village Dr	Signal	AM	121.5	**F**	120.0	**F**		Similar impact for Alts A & B
			MID	48.5	D	48.4	D		
			PM	48.8	D	48.5	D		

Notes:

Bold values indicate intersections operating at LOS E or F.

(a) Delay refers to the average control delay for the entire intersection, measured in seconds per vehicle. At a two-way stop-controlled intersection, delay refers to the worst movement.

(b) LOS calculations are based on the methodology outlined in the *2010 Highway Capacity Manual* and performed using Synchro 9.0

ID	Intersection	Control	Peak Hour	Alt A Regents Bridge 6-lane Genesee		Alt B Regents Bridge 4-lane Genesee			Change to Network Impact
				Delay (a)	LOS (b)	Delay (a)	LOS (b)	Plan-to-Plan Impact?	
13	Genesee Ave and Esplanade Ct	Signal	AM	36.8	D	40.9	D		Similar impact for Alts A & B
			MID	79.2	**E**	84.5	**F**	**Yes**	
			PM	86.4	**F**	93.8	**F**	**Yes**	
14	Genesee Ave & Nobel Dr	Signal	AM	36.1	D	65.1	**E**	**Yes**	Worse Impact for Alt B
			MID	39.6	D	40.0	D		
			PM	60.6	**E**	59.5	**E**		
15	Genesee Ave & Decoro St	Signal	AM	24.0	C	38.0	D		Worse Impact for Alt B
			MID	22.9	C	21.3	C		
			PM	69.0	**E**	161.2	**F**	**Yes**	
16	Genesee Ave & Centurion Square	Signal	AM	30.3	C	42.0	D		
			MID	20.2	C	11.6	B		
			PM	9.2	A	16.5	B		
17	Genesee Ave & Governor Dr	Signal	AM	102.0	**F**	93.7	**F**		Similar impact for Alts A & B
			MID	31.9	C	29.7	C		
			PM	51.4	D	86.1	**F**	**Yes**	
18	Genesee Ave & SR-52 WB Ramps	SSSC	AM	27.7	D	36.9	**E**	**Yes**	Worse Impact for Alt B
			MID	15.4	C	14.7	B		
			PM	783.3	**F**	640.3	**F**		
19	Genesee Ave & SR-52 EB Ramps	Signal	AM	53.2	D	49.9	D		
			MID	42.1	D	40.2	D		
			PM	50.0	D	48.3	D		
20	Genesee Ave & Appleton St/Lehrer Dr	Signal	AM	166.2	**F**	161.5	**F**		Similar impact for Alts A & B
			MID	32.5	C	32.8	C		
			PM	60.9	**E**	59.5	**E**		
21	La Jolla Village Dr & Torrey Pines Rd	Signal	AM	49.1	D	49.3	D		Similar impact for Alts A & B
			MID	30.8	C	30.9	C		
			PM	178.2	**F**	178.4	**F**		
22	La Jolla Village Dr & La Jolla Scenic Dr	Signal	AM	49.1	D	46.8	D		
			MID	15.3	B	15.2	B		
			PM	54.3	D	54.1	D		
23a	La Jolla Village Dr WB & Gilman Dr	Signal	AM	15.7	B	15.5	B		
			MID	10.7	B	10.6	B		
			PM	16.6	B	16.5	B		
23b	La Jolla Village Dr EB & Gilman Dr	SSSC	AM	16.5	C	16.6	C		Similar impact for Alts A & B
			MID	12.3	B	12.4	B		
			PM	141.8	**F**	145.0	**F**	**Yes**	
24	La Jolla Village Dr & Villa La Jolla Dr	Signal	AM	123.0	**F**	123.9	**F**		Similar impact for Alts A & B
			MID	378.5	**F**	379.0	**F**		
			PM	328.4	**F**	328.6	**F**		

Notes:

Bold values indicate intersections operating at LOS E or F.

SSSC = Side Street Stop Control

(a) Delay refers to the average control delay for the entire intersection, measured in seconds per vehicle. At a two-way stop-controlled intersection, delay refers to the worst movement.

(b) LOS calculations are based on the methodology outlined in the *2010 Highway Capacity Manual* and performed using Synchro 9.0

ID	Intersection	Control	Peak Hour	Alt A Regents Bridge 6-lane Genesee		Alt B Regents Bridge 4-lane Genesee			Change to Network Impact
				Delay (a)	LOS (b)	Delay (a)	LOS (b)	Plan-to-Plan Impact?	
25	La Jolla Village Dr & I-5 SB Off-Ramps	Signal	AM	41.6	D	44.1	D		
			MID	52.7	D	53.8	D		
			PM	52.2	D	54.8	D		
26	La Jolla Village Dr & I-5 NB Off-Ramps	Signal	AM	41.2	D	40.9	D		
			MID	27.1	C	28.2	C		
			PM	31.5	C	31.2	C		
27	La Jolla Village Dr & Lebon Dr	Signal	AM	34.3	C	34.5	C		
			MID	29.6	C	30.1	C		
			PM	53.3	D	52.9	D		
28	La Jolla Village Dr & Regents Rd	Signal	AM	71.8	**E**	73.4	**E**		
			MID	53.4	D	53.6	D		Similar impact for Alts A & B
			PM	203.4	**F**	205.9	**F**	**Yes**	
29	La Jolla Village Dr & Executive Way	Signal	AM	83.0	**F**	80.2	**F**		
			MID	689.6	**F**	732.1	**F**	**Yes**	Similar impact for Alts A & B
			PM	233.6	**F**	239.5	**F**	**Yes**	
30	La Jolla Village Dr & Towne Center Dr	Signal	AM	156.6	**F**	163.3	**F**	**Yes**	
			MID	46.9	D	47.2	D		Similar impact for Alts A & B
			PM	167.8	**F**	170.2	**F**	**Yes**	
31	La Jolla Village Dr & I-805 SB Ramps	Signal	AM	173.3	**F**	167.8	**F**		Similar impact for Alts A & B
			PM	18.5	B	19.6	B		
32	La Jolla Village Dr & I-805 NB Ramps	Signal	AM	43.3	D	41.6	D		
			PM	39.1	D	37.1	D		
33	Miramar Rd & Nobel Dr	Signal	AM	20.4	C	21.0	C		
			MID	14.1	B	14.3	B		
			PM	53.2	D	31.2	C		
34	Miramar Rd & Eastgate Mall	Signal	AM	23.0	C	23.1	C		Similar impact for Alts A & B
			PM	104.0	**F**	105.5	**F**	**Yes**	
35	Miramar Rd & Miramar Mall	Signal	AM	25.2	C	23.1	C		
			PM	21.7	C	19.3	B		
36	Miramar Rd & Miramar Place	Signal	AM	21.1	C	19.5	B		
			PM	11.9	B	10.7	B		

Notes:

Bold values indicate intersections operating at LOS E or F.

(a) Delay refers to the average control delay for the entire intersection, measured in seconds per vehicle. At a two-way stop-controlled intersection, delay refers to the worst movement.

(b) LOS calculations are based on the methodology outlined in the *2010 Highway Capacity Manual* and performed using Synchro 9.0

ID	Intersection	Control	Peak Hour	Alt A Regents Bridge 6-lane Genesee		Alt B Regents Bridge 4-lane Genesee			Change to Network Impact
				Delay (a)	LOS (b)	Delay (a)	LOS (b)	Plan-to-Plan Impact?	
37	Miramar Rd & Camino Santa Fe	Signal	AM	43.0	D	43.1	D		Similar impact for Alts A & B
			PM	141.9	**F**	142.7	**F**		
38	Nobel Dr & Villa La Jolla Dr	Signal	AM	19.3	B	19.1	B		
			MID	20.3	C	20.1	C		
			PM	34.6	C	34.4	C		
39	Nobel Dr & La Jolla Village Square Dwy	Signal	AM	25.5	C	25.4	C		Similar impact for Alts A & B
			MID	224.5	**F**	222.2	**F**		
			PM	167.8	**F**	165.8	**F**		
40	Nobel Dr & I-5 SB On Ramp	Signal	AM	3.2	A	3.2	A		Similar impact for Alts A & B
			MID	29.9	C	28.4	C		
			PM	114.2	**F**	113.3	**F**		
41	Nobel Dr & University Center Ln/I-5 NB Off-Ramp	Signal	AM	16.2	B	15.6	B		
			MID	21.1	C	21.2	C		
			PM	45.2	D	49.7	D		
42	Nobel Dr & Caminito Plaza Centro	Signal	AM	14.5	B	14.3	B		
			MID	15.6	B	15.2	B		
			PM	21.0	C	20.8	C		
43	Nobel Dr & Lebon Dr	Signal	AM	30.0	C	30.0	C		
			MID	22.4	C	22.4	C		
			PM	37.3	D	37.4	D		
44	Nobel Dr & Regents Rd	Signal	AM	37.9	D	38.3	D		Similar impact for Alts A & B
			MID	36.7	D	36.9	D		
			PM	69.8	**E**	71.6	**E**		
45	Nobel Dr & Costa Verde Blvd/Cargill Ave	Signal	AM	34.9	C	34.9	C		
			MID	50.3	D	50.5	D		
			PM	45.7	D	46.2	D		
46	Nobel Dr & Lombard Place	Signal	AM	10.9	B	11.1	B		
			MID	24.7	C	24.7	C		
			PM	50.6	D	49.6	D		
47	Nobel Dr & Towne Center Dr	Signal	AM	28.5	C	28.5	C		
			MID	23.7	C	23.6	C		
			PM	44.6	D	54.8	D		
48	Nobel Dr & Shoreline Dr	Signal	AM	41.7	D	41.9	D		
			MID	19.4	B	19.5	B		
			PM	40.5	D	40.3	D		
49	Nobel Dr & Judicial Dr	Signal	AM	13.5	B	14.3	B		
			MID	13.1	B	13.7	B		
			PM	28.1	C	28.3	C		

Notes:

Bold values indicate intersections operating at LOS E or F.

(a) Delay refers to the average control delay for the entire intersection, measured in seconds per vehicle. At a two-way stop-controlled intersection, delay refers to the worst movement.

(b) LOS calculations are based on the methodology outlined in the *2010 Highway Capacity Manual* and performed using Synchro 9.0

ID	Intersection	Control	Peak Hour	Alt A Regents Bridge 6-lane Genesee		Alt B Regents Bridge 4-lane Genesee			Change to Network Impact
				Delay (a)	LOS (b)	Delay (a)	LOS (b)	Plan-to-Plan Impact?	
50	Nobel Dr & I-805 SB On-Ramp	Signal	AM	1.1	A	1.1	A		
			MID	18.8	B	18.1	B		
			PM	6.6	A	6.7	A		
51	Nobel Dr & I-805 N Off-Ramp	Signal	AM	23.8	C	22.3	C		
			MID	19.2	B	18.5	B		
			PM	21.3	C	19.6	B		
52	Nobel Dr & Avenue of Flags	Signal	AM	3.1	A	3.0	A		
			MID	8.4	A	8.4	A		
			PM	3.6	A	3.5	A		
53	Regents Rd & County Day Ln/ Health Science Dr	Signal	AM	54.6	D	54.7	D		
			MID	11.9	B	11.9	B		
			PM	28.6	C	29.0	C		
54	Regents Rd & Eastgate Mall	Signal	AM	15.4	B	15.6	B		
			MID	6.5	A	6.5	A		
			PM	17.0	B	17.4	B		
55	Regents Rd & Executive Dr	Signal	AM	12.7	B	12.7	B		
			MID	9.7	A	9.8	A		
			PM	26.6	C	26.7	C		
56	Regents Rd & Regents Park Row	Signal	AM	22.9	C	23.4	C		
			MID	15.1	B	15.2	B		
			PM	48.4	D	50.5	D		
57	Regents Rd & Plaza De Palmas	Signal	AM	13.1	B	13.1	B		
			MID	9.9	A	10.0	B		
			PM	53.6	D	53.9	D		
58	Regents Rd & Berino Ct	Signal	AM	50.3	D	53.8	D		
			MID	6.6	A	6.6	A		
			PM	16.6	B	16.7	B		
59	Regents Rd & Arriba St	Signal	AM	68.6	**E**	68.5	**E**		Similar impact for Alts A & B
			MID	27.8	C	27.8	C		
			PM	72.0	**E**	89.2	**F**	**Yes**	
60	Regents Rd & Governor Dr	Signal	AM	95.5	**F**	106.3	**F**	**Yes**	Similar impact for Alts A & B
			MID	43.1	D	51.3	D		
			PM	88.7	**F**	95.3	**F**	**Yes**	
61	Regents Rd & SR-52 WB Ramps	Signal	AM	43.2	D	45.6	D		
			MID	25.4	C	26.0	C		
			PM	41.3	D	42.4	D		
62	Regents Rd & SR-52 EB Ramps	Signal	AM	50.2	D	50.7	D		
			MID	21.3	C	21.7	C		
			PM	45.4	D	44.7	D		

Notes:

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(b) LOS calculations are based on the methodology outlined in the *2010 Highway Capacity Manual* and performed using Synchro 9.0

ID	Intersection	Control	Peak Hour	Alt A Regents Bridge 6-lane Genesee		Alt B Regents Bridge 4-lane Genesee			Change to Network Impact
				Delay (a)	LOS (b)	Delay (a)	LOS (b)	Plan-to-Plan Impact?	
63	Regents Rd & Luna Ave	Signal	AM	64.7	**E**	66.1	**E**		Similar impact for Alts A & B
			PM	95.2	**F**	96.9	**F**	**Yes**	
64	N. Torrey Pines Rd & UCSD Northpoint Dwy	Signal	AM	23.8	C	23.9	C		
			PM	32.1	C	32.2	C		
65	N. Torrey Pines Rd & Pangea Dr	Signal	AM	10.0	B	10.0	B		
			PM	20.8	C	20.9	C		
66	N. Torrey Pines Rd & La Jolla Shores Dr	Signal	AM	60.4	**E**	60.7	**E**		Similar impact for Alts A & B
			PM	167.1	**F**	168.7	**F**	**Yes**	
67	N. Torrey Pines Rd & Revelle College Dr	Signal	AM	23.6	C	23.4	C		
			PM	51.2	D	47.2	D		
68	Gilman Dr & Villa La Jolla Dr	Signal	AM	25.7	C	25.6	C		
			PM	47.2	D	45.6	D		
69	Gilman Dr & I-5 SB Ramps	Signal	AM	9.4	A	9.4	A		
			PM	50.9	D	51.8	D		
70	Gilman Dr & I-5 NB Ramps	Signal	AM	19.4	B	19.6	B		
			PM	19.7	B	19.8	B		
71	Palmilla Dr & Lebon Dr	Signal	AM	6.9	A	6.9	A		
			PM	8.2	A	8.2	A		
72	Palmilla Dr & Ariba St	Signal	AM	11.4	B	11.3	B		
			PM	18.3	B	17.9	B		
73	Towne Center Dr & Eastgate Mall	Signal	AM	31.3	C	31.5	C		Similar impact for Alts A & B
			PM	65.9	**E**	66.6	**E**		
74	Towne Center Dr & Executive Dr	Signal	AM	24.2	C	24.3	C		
			PM	50.3	D	50.9	D		
75	Towne Center Dr & Golden Haven Dr	Signal	AM	16.4	B	16.4	B		
			PM	15.5	B	14.4	B		
76	Executive Way & Executive Dr	Signal	AM	16.7	B	11.6	B		Similar impact for Alts A & B
			PM	362.0	**F**	98.0	**F**		
77	Judicial Dr & Eastgate Mall	Signal	AM	37.8	D	37.6	D		Similar impact for Alts A & B
			PM	75.8	**E**	74.6	**E**		
78	Governor Dr & I-805 SB Ramps	Future Signal	AM	12.5	B	12.6	B		
			PM	16.1	B	16.8	B		
79	Governor Dr & I-805 NB Ramps	SSSC	AM	ECL	**F**	ECL	**F**	**Yes**	Similar impact for Alts A & B
			PM	722.4	**F**	936.3	**F**	**Yes**	

Notes:

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ECL = Exceeds Calculable Limit. Reported when delay exceeds 180 seconds.

SSSC = Side Street Stop Control

(a) Delay refers to the average control delay for the entire intersection, measured in seconds per vehicle. At a two-way stop-controlled intersection, delay refers to the worst movement.

(b) LOS calculations are based on the methodology outlined in the *2010 Highway Capacity Manual* and performed using Synchro 9.0

ID	Intersection	Control	Peak Hour	Alt A Regents Bridge 6-lane Genesee		Alt C No Bridge 6-lane Genesee			Change to Network Impact
				Delay (a)	LOS (b)	Delay (a)	LOS (b)	Plan-to-Plan Impact?	
1	Genesee Ave & N. Torrey Pines Rd	Signal	AM	22.2	C	22.5	C		
			MID	22.2	C	21.8	C		
			PM	36.2	D	49.2	D		
2	Genesee Ave & John Hopkins Dr (S)	Signal	AM	132.3	**F**	115.9	**F**		Similar impact for Alts A & C
			MID	47.7	D	43.8	D		
			PM	44.2	D	39.4	D		
3	Genesee Ave & Science Center Dr	Signal	AM	17.4	B	17.4	B		
			MID	8.3	A	8.4	A		
			PM	15.9	B	15.7	B		
4	Genesee Ave & I-5 SB Ramps	Signal	AM	39.3	D	39.8	D		
			MID	30.0	C	30.4	C		
			PM	35.2	D	35.3	D		
5	Genesee Ave & I-5 NB Ramps	Signal	AM	48.8	D	49.7	D		
			MID	35.2	D	35.2	D		
			PM	29.0	C	29.2	C		
6	Genesee Ave & Scripps Hospital	Signal	AM	60.7	**E**	61.3	**E**		Similar impact for Alts A & C
			MID	63.3	**E**	62.2	**E**		
			PM	74.8	**E**	72.6	**E**		
7	Genesee Ave & Campus Point Dr	Signal	AM	39.0	D	40.2	D		
			MID	31.9	C	31.7	C		
			PM	48.4	D	43.6	D		
8	Genesee Ave & Regents Road	Signal	AM	28.3	C	24.4	C		
			MID	14.0	B	12.3	B		
			PM	27.9	C	26.0	C		
9	Genesee Ave & Eastgate Mall	Signal	AM	50.5	D	51.3	D		
			MID	35.9	D	37.6	D		
			PM	36.5	D	37.4	D		
10	Genesee Ave & Executive Dr	Signal	AM	22.9	C	23.6	C		
			MID	19.4	B	20.4	C		
			PM	37.2	D	39.1	D		
11	Genesee Ave & Executive Square	Signal	AM	13.3	B	14.9	B		
			MID	33.5	C	32.5	C		
			PM	50.7	D	43.1	D		
12	Genesee Ave & La Jolla Village Dr	Signal	AM	121.5	**F**	119.7	**F**		Worse Impact for Alt C
			MID	48.5	D	51.4	D		
			PM	48.8	D	59.0	**E**	**Yes**	

Notes:

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ID	Intersection	Control	Peak Hour	Alt A Regents Bridge 6-lane Genesee		Alt C No Bridge 6-lane Genesee			Change to Network Impact
				Delay (a)	LOS (b)	Delay (a)	LOS (b)	Plan-to-Plan Impact?	
13	Genesee Ave and Esplanade Ct	Signal	AM	36.8	D	40.6	D		Similar impact for Alts A & C
			MID	79.2	**E**	87.6	**F**	**Yes**	
			PM	86.4	**F**	102.4	**F**	**Yes**	
14	Genesee Ave & Nobel Dr	Signal	AM	36.1	D	36.2	D		Worse Impact for Alt C
			MID	39.6	D	39.7	D		
			PM	60.6	**E**	110.9	**F**	**Yes**	
15	Genesee Ave & Decoro St	Signal	AM	24.0	C	28.7	C		Worse Impact for Alt C
			MID	22.9	C	16.9	B		
			PM	69.0	**E**	184.1	**F**	**Yes**	
16	Genesee Ave & Centurion Square	Signal	AM	30.3	C	65.6	**E**	**Yes**	New Impact for Alt C
			MID	20.2	C	9.3	A		
			PM	9.2	A	20.5	C		
17	Genesee Ave & Governor Dr	Signal	AM	102.0	**F**	145.8	**F**	**Yes**	Similar impact for Alts A & C
			MID	31.9	C	40.0	D		
			PM	51.4	D	142.9	**F**	**Yes**	
18	Genesee Ave & SR-52 WB Ramps	SSSC	AM	27.7	D	40.5	**E**	**Yes**	Worse Impact for Alt C
			MID	15.4	C	15.1	C		
			PM	783.3	**F**	719.4	**F**		
19	Genesee Ave & SR-52 EB Ramps	Signal	AM	53.2	D	62.2	**E**	**Yes**	New Impact for Alt C
			MID	42.1	D	45.3	D		
			PM	50.0	D	52.8	D	**Yes**	
20	Genesee Ave & Appleton St/Lehrer Dr	Signal	AM	166.2	**F**	185.0	**F**	**Yes**	Similar impact for Alts A & C
			MID	32.5	C	34.9	C		
			PM	60.9	**E**	67.0	**E**	**Yes**	
21	La Jolla Village Dr & Torrey Pines Rd	Signal	AM	49.1	D	52.9	D		Similar impact for Alts A & C
			MID	30.8	C	31.1	C		
			PM	178.2	**F**	174.8	**F**		
22	La Jolla Village Dr & La Jolla Scenic Dr	Signal	AM	49.1	D	53.1	D		
			MID	15.3	B	16.2	B		
			PM	54.3	D	44.0	D		
23a	La Jolla Village Dr WB & Gilman Dr	Signal	AM	15.7	B	17.2	B		
			MID	10.7	B	12.0	B		
			PM	16.6	B	20.1	C		
23b	La Jolla Village Dr EB & Gilman Dr	SSSC	AM	16.5	C	17.4	C		Similar impact for Alts A & C
			MID	12.3	B	12.8	B		
			PM	141.8	**F**	78.9	**F**		
24	La Jolla Village Dr & Villa La Jolla Dr	Signal	AM	123.0	**F**	132.2	**F**	**Yes**	Similar impact for Alts A & C
			MID	378.5	**F**	373.4	**F**		
			PM	328.4	**F**	328.0	**F**		

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ID	Intersection	Control	Peak Hour	Alt A Regents Bridge 6-lane Genesee		Alt C No Bridge 6-lane Genesee			Change to Network Impact
				Delay (a)	LOS (b)	Delay (a)	LOS (b)	Plan-to-Plan Impact?	
25	La Jolla Village Dr & I-5 SB Off-Ramps	Signal	AM	41.6	D	46.3	D		New Impact for Alt C
			MID	52.7	D	61.7	**E**	**Yes**	
			PM	52.2	D	66.3	**E**	**Yes**	
26	La Jolla Village Dr & I-5 NB Off-Ramps	Signal	AM	41.2	D	32.2	C		
			MID	27.1	C	30.2	C		
			PM	31.5	C	34.3	C		
27	La Jolla Village Dr & Lebon Dr	Signal	AM	34.3	C	34.0	C		
			MID	29.6	C	30.4	C		
			PM	53.3	D	54.0	D		
28	La Jolla Village Dr & Regents Rd	Signal	AM	71.8	**E**	70.3	**E**		Similar impact for Alts A & C
			MID	53.4	D	50.8	D		
			PM	203.4	**F**	193.9	**F**		
29	La Jolla Village Dr & Executive Way	Signal	AM	83.0	**F**	76.0	**E**		Similar impact for Alts A & C
			MID	689.6	**F**	847.8	**F**	**Yes**	
			PM	233.6	**F**	266.3	**F**	**Yes**	
30	La Jolla Village Dr & Towne Center Dr	Signal	AM	156.6	**F**	164.0	**F**	**Yes**	Similar impact for Alts A & C
			MID	46.9	D	48.6	D		
			PM	167.8	**F**	166.3	**F**		
31	La Jolla Village Dr & I-805 SB Ramps	Signal	AM	173.3	**F**	162.6	**F**		Similar impact for Alts A & C
			PM	18.5	B	23.8	C		
32	La Jolla Village Dr & I-805 NB Ramps	Signal	AM	43.3	D	38.9	D		
			PM	39.1	D	39.6	D		
33	Miramar Rd & Nobel Dr	Signal	AM	20.4	C	21.8	C		
			MID	14.1	B	15.6	B		
			PM	53.2	D	42.5	D		
34	Miramar Rd & Eastgate Mall	Signal	AM	23.0	C	23.1	C		Similar impact for Alts A & C
			PM	104.0	**F**	104.2	**F**		
35	Miramar Rd & Miramar Mall	Signal	AM	25.2	C	25.1	C		
			PM	21.7	C	21.3	C		
36	Miramar Rd & Miramar Place	Signal	AM	21.1	C	21.1	C		
			PM	11.9	B	12.1	B		

Notes:

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ID	Intersection	Control	Peak Hour	Alt A Regents Bridge 6-lane Genesee		Alt C No Bridge 6-lane Genesee			Change to Network Impact
				Delay (a)	LOS (b)	Delay (a)	LOS (b)	Plan-to-Plan Impact?	
37	Miramar Rd & Camino Santa Fe	Signal	AM	43.0	D	44.5	D		Similar impact for Alts A & C
			PM	141.9	**F**	124.9	**F**		
38	Nobel Dr & Villa La Jolla Dr	Signal	AM	19.3	B	19.9	B		
			MID	20.3	C	21.7	C		
			PM	34.6	C	37.5	D		
39	Nobel Dr & La Jolla Village Square Dwy	Signal	AM	25.5	C	25.5	C		Similar impact for Alts A & C
			MID	224.5	**F**	202.3	**F**		
			PM	167.8	**F**	145.6	**F**		
40	Nobel Dr & I-5 SB On Ramp	Signal	AM	3.2	A	3.4	A		Similar impact for Alts A & C
			MID	29.9	C	31.5	C		
			PM	114.2	**F**	121.6	**F**	**Yes**	
41	Nobel Dr & University Center Ln/I-5 NB Off-Ramp	Signal	AM	16.2	B	16.8	B		
			MID	21.1	C	22.4	C		
			PM	45.2	D	38.1	D		
42	Nobel Dr & Caminito Plaza Centro	Signal	AM	14.5	B	14.5	B		
			MID	15.6	B	15.8	B		
			PM	21.0	C	21.1	C		
43	Nobel Dr & Lebon Dr	Signal	AM	30.0	C	28.1	C		
			MID	22.4	C	21.4	C		
			PM	37.3	D	35.4	D		
44	Nobel Dr & Regents Rd	Signal	AM	37.9	D	35.5	D		Worse Impact for Alt C
			MID	36.7	D	30.2	C		
			PM	69.8	**E**	86.6	**F**	**Yes**	
45	Nobel Dr & Costa Verde Blvd/Cargill Ave	Signal	AM	34.9	C	36.6	D		
			MID	50.3	D	47.3	D		
			PM	45.7	D	42.5	D		
46	Nobel Dr & Lombard Place	Signal	AM	10.9	B	11.1	B		
			MID	24.7	C	24.9	C		
			PM	50.6	D	52.2	D		
47	Nobel Dr & Towne Center Dr	Signal	AM	28.5	C	28.6	C		
			MID	23.7	C	23.8	C		
			PM	44.6	D	45.2	D		
48	Nobel Dr & Shoreline Dr	Signal	AM	41.7	D	42.7	D		
			MID	19.4	B	21.3	C		
			PM	40.5	D	40.5	D		
49	Nobel Dr & Judicial Dr	Signal	AM	13.5	B	14.4	B		
			MID	13.1	B	13.8	B		
			PM	28.1	C	28.7	C		

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ID	Intersection	Control	Peak Hour	Alt A Regents Bridge 6-lane Genesee		Alt C No Bridge 6-lane Genesee			Change to Network Impact
				Delay (a)	LOS (b)	Delay (a)	LOS (b)	Plan-to-Plan Impact?	
50	Nobel Dr & I-805 SB On-Ramp	Signal	AM	1.1	A	1.4	A		
			MID	18.8	B	37.9	D		
			PM	6.6	A	8.3	A		
51	Nobel Dr & I-805 N Off-Ramp	Signal	AM	23.8	C	22.4	C		
			MID	19.2	B	18.6	B		
			PM	21.3	C	20.2	C		
52	Nobel Dr & Avenue of Flags	Signal	AM	3.1	A	3.0	A		
			MID	8.4	A	8.9	A		
			PM	3.6	A	3.5	A		
53	Regents Rd & County Day Ln/ Health Science Dr	Signal	AM	54.6	D	47.3	D		
			MID	11.9	B	11.7	B		
			PM	28.6	C	26.4	C		
54	Regents Rd & Eastgate Mall	Signal	AM	15.4	B	15.4	B		
			MID	6.5	A	6.4	A		
			PM	17.0	B	16.0	B		
55	Regents Rd & Executive Dr	Signal	AM	12.7	B	13.7	B		
			MID	9.7	A	9.9	A		
			PM	26.6	C	25.1	C		
56	Regents Rd & Regents Park Row	Signal	AM	22.9	C	23.3	C		
			MID	15.1	B	14.3	B		
			PM	48.4	D	35.6	D		
57	Regents Rd & Plaza De Palmas	Signal	AM	13.1	B	12.2	B		
			MID	9.9	A	8.8	A		
			PM	53.6	D	15.6	B		
58	Regents Rd & Berino Ct	Signal	AM	50.3	D	27.2	C		
			MID	6.6	A	5.8	A		
			PM	16.6	B	12.0	B		
59	Regents Rd & Arriba St	Signal	AM	68.6	**E**	29.0	C		Removes impact for Alt C
			MID	27.8	C	15.0	B		
			PM	72.0	**E**	25.4	C		
60	Regents Rd & Governor Dr	Signal	AM	95.5	**F**	33.4	C		Removes impact for Alt C
			MID	43.1	D	16.9	B		
			PM	88.7	**F**	32.0	C		
61	Regents Rd & SR-52 WB Ramps	Signal	AM	43.2	D	43.1	D		
			MID	25.4	C	29.4	C		
			PM	41.3	D	43.2	D		
62	Regents Rd & SR-52 EB Ramps	Signal	AM	50.2	D	43.9	D		
			MID	21.3	C	20.8	C		
			PM	45.4	D	44.7	D		

Notes:

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ID	Intersection	Control	Peak Hour	Alt A Regents Bridge 6-lane Genesee		Alt C No Bridge 6-lane Genesee			Change to Network Impact
				Delay (a)	LOS (b)	Delay (a)	LOS (b)	Plan-to-Plan Impact?	
63	Regents Rd & Luna Ave	Signal	AM	64.7	**E**	52.3	D		Less severe impact for Alt C
			PM	95.2	**F**	65.5	**E**		
64	N. Torrey Pines Rd & UCSD Northpoint Dwy	Signal	AM	23.8	C	23.5	C		
			PM	32.1	C	32.6	C		
65	N. Torrey Pines Rd & Pangea Dr	Signal	AM	10.0	B	10.0	B		
			PM	20.8	C	20.9	C		
66	N. Torrey Pines Rd & La Jolla Shores Dr	Signal	AM	60.4	**E**	60.5	**E**		Similar impact for Alts A & C
			PM	167.1	**F**	167.3	**F**		
67	N. Torrey Pines Rd & Revelle College Dr	Signal	AM	23.6	C	23.5	C		
			PM	51.2	D	51.2	D		
68	Gilman Dr & Villa La Jolla Dr	Signal	AM	25.7	C	24.9	C		
			PM	47.2	D	46.7	D		
69	Gilman Dr & I-5 SB Ramps	Signal	AM	9.4	A	10.3	B		New Impact for Alt C
			PM	50.9	D	79.8	**E**	**Yes**	
70	Gilman Dr & I-5 NB Ramps	Signal	AM	19.4	B	21.7	C		
			PM	19.7	B	21.4	C		
71	Palmilla Dr & Lebon Dr	Signal	AM	6.9	A	7.4	A		
			PM	8.2	A	7.2	A		
72	Palmilla Dr & Ariba St	Signal	AM	11.4	B	7.1	A		
			PM	18.3	B	8.1	A		
73	Towne Center Dr & Eastgate Mall	Signal	AM	31.3	C	31.3	C		Similar impact for Alts A & C
			PM	65.9	**E**	68.3	**E**	**Yes**	
74	Towne Center Dr & Executive Dr	Signal	AM	24.2	C	24.5	C		
			PM	50.3	D	51.4	D		
75	Towne Center Dr & Golden Haven Dr	Signal	AM	16.4	B	16.8	B		
			PM	15.5	B	16.3	B		
76	Executive Way & Executive Dr	Signal	AM	16.7	B	17.1	B		Similar impact for Alts A & C
			PM	362.0	**F**	350.8	**F**		
77	Judicial Dr & Eastgate Mall	Signal	AM	37.8	D	33.6	C		Similar impact for Alts A & C
			PM	75.8	**E**	70.7	**E**		
78	Governor Dr & I-805 SB Ramps	Future Signal	AM	12.5	B	12.7	B		
			PM	16.1	B	16.4	B		
79	Governor Dr & I-805 NB Ramps	SSSC	AM	ECL	**F**	ECL	**F**	**Yes**	Similar impact for Alts A & C
			PM	722.4	**F**	332.9	**F**		

Notes:

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ID	Intersection	Control	Peak Hour	Alt A Regents Bridge 6-lane Genesee		Alt D No Bridge 4-lane Genesee			Change to Network Impact
				Delay (a)	LOS (b)	Delay (a)	LOS (b)	Plan-to-Plan Impact?	
1	Genesee Ave & N. Torrey Pines Rd	Signal	AM	22.2	C	22.3	C		
			MID	22.2	C	22.2	C		
			PM	36.2	D	38.5	D		
2	Genesee Ave & John Hopkins Dr (S)	Signal	AM	132.3	**F**	98.5	**F**		Similar impact for Alts A & D
			MID	47.7	D	40.2	D		
			PM	44.2	D	35.4	D		
3	Genesee Ave & Science Center Dr	Signal	AM	17.4	B	17.3	B		
			MID	8.3	A	8.3	A		
			PM	15.9	B	15.4	B		
4	Genesee Ave & I-5 SB Ramps	Signal	AM	39.3	D	40.9	D		
			MID	30.0	C	31.7	C		
			PM	35.2	D	35.4	D		
5	Genesee Ave & I-5 NB Ramps	Signal	AM	48.8	D	49.3	D		
			MID	35.2	D	35.3	D		
			PM	29.0	C	29.5	C		
6	Genesee Ave & Scripps Hospital	Signal	AM	60.7	**E**	61.3	**E**		Similar impact for Alts A & D
			MID	63.3	**E**	61.5	**E**		
			PM	74.8	**E**	71.5	**E**		
7	Genesee Ave & Campus Point Dr	Signal	AM	39.0	D	40.2	D		
			MID	31.9	C	31.8	C		
			PM	48.4	D	43.8	D		
8	Genesee Ave & Regents Road	Signal	AM	28.3	C	24.3	C		
			MID	14.0	B	12.4	B		
			PM	27.9	C	25.8	C		
9	Genesee Ave & Eastgate Mall	Signal	AM	50.5	D	53.0	D		
			MID	35.9	D	37.0	D		
			PM	36.5	D	38.2	D		
10	Genesee Ave & Executive Dr	Signal	AM	22.9	C	23.3	C		
			MID	19.4	B	20.7	C		
			PM	37.2	D	39.4	D		
11	Genesee Ave & Executive Square	Signal	AM	13.3	B	14.8	B		
			MID	33.5	C	32.9	C		
			PM	50.7	D	44.3	D		
12	Genesee Ave & La Jolla Village Dr	Signal	AM	121.5	**F**	121.4	**F**		Similar impact for Alts A & D
			MID	48.5	D	51.2	D		
			PM	48.8	D	59.5	**E**	**Yes**	

Notes:

Bold values indicate intersections operating at LOS E or F.

(a) Delay refers to the average control delay for the entire intersection, measured in seconds per vehicle. At a two-way stop-controlled intersection, delay refers to the worst movement.

(b) LOS calculations are based on the methodology outlined in the *2010 Highway Capacity Manual* and performed using Synchro 9.0

ID	Intersection	Control	Peak Hour	Alt A Regents Bridge 6-lane Genesee		Alt D No Bridge 4-lane Genesee			Change to Network Impact
				Delay (a)	LOS (b)	Delay (a)	LOS (b)	Plan-to-Plan Impact?	
13	Genesee Ave and Esplanade Ct	Signal	AM	36.8	D	54.5	D		Similar impact for Alts A & D
			MID	79.2	**E**	90.6	**F**	**Yes**	
			PM	86.4	**F**	97.9	**F**	**Yes**	
14	Genesee Ave & Nobel Dr	Signal	AM	36.1	D	97.9	**F**	**Yes**	Much Worse Impact for Alt D
			MID	39.6	D	40.0	D		
			PM	60.6	**E**	91.2	**F**	**Yes**	
15	Genesee Ave & Decoro St	Signal	AM	24.0	C	112.1	**F**	**Yes**	Much Worse Impact for Alt D
			MID	22.9	C	20.0	C		
			PM	69.0	**E**	314.4	**F**	**Yes**	
16	Genesee Ave & Centurion Square	Signal	AM	30.3	C	154.1	**F**	**Yes**	New Impact for Alt D
			MID	20.2	C	11.3	B		
			PM	9.2	A	95.2	**F**	**Yes**	
17	Genesee Ave & Governor Dr	Signal	AM	102.0	**F**	163.7	**F**	**Yes**	Similar impact for Alts A & D
			MID	31.9	C	38.3	D		
			PM	51.4	D	110.3	**F**		
18	Genesee Ave & SR-52 WB Ramps	SSSC	AM	27.7	D	45.9	**E**	**Yes**	Similar impact for Alts A & D
			MID	15.4	C	14.6	B		
			PM	783.3	**F**	603.8	**F**		
19	Genesee Ave & SR-52 EB Ramps	Signal	AM	53.2	D	69.6	**E**	**Yes**	New Impact for Alt D
			MID	42.1	D	54.0	D		
			PM	50.0	D	62.7	**E**	**Yes**	
20	Genesee Ave & Appleton St/Lehrer Dr	Signal	AM	166.2	**F**	184.1	**F**	**Yes**	Similar impact for Alts A & D
			MID	32.5	C	35.1	D		
			PM	60.9	**E**	66.4	**E**	**Yes**	
21	La Jolla Village Dr & Torrey Pines Rd	Signal	AM	49.1	D	53.1	D		Similar impact for Alts A & D
			MID	30.8	C	31.1	C		
			PM	178.2	**F**	183.9	**F**	**Yes**	
22	La Jolla Village Dr & La Jolla Scenic Dr	Signal	AM	49.1	D	54.3	D		
			MID	15.3	B	16.2	B		
			PM	54.3	D	43.4	D		
23a	La Jolla Village Dr WB & Gilman Dr	Signal	AM	15.7	B	17.1	B		
			MID	10.7	B	12.0	B		
			PM	16.6	B	20.2	C		
23b	La Jolla Village Dr EB & Gilman Dr	SSSC	AM	16.5	C	17.8	C		Similar impact for Alts A & D
			MID	12.3	B	12.9	B		
			PM	141.8	**F**	170.9	**F**	**Yes**	
24	La Jolla Village Dr & Villa La Jolla Dr	Signal	AM	123.0	**F**	127.0	**F**	**Yes**	Similar impact for Alts A & D
			MID	378.5	**F**	374.4	**F**		
			PM	328.4	**F**	330.0	**F**	**Yes**	

Notes:

Bold values indicate intersections operating at LOS E or F.

SSSC = Side Street Stop Control

(a) Delay refers to the average control delay for the entire intersection, measured in seconds per vehicle. At a two-way stop-controlled intersection, delay refers to the worst movement.

(b) LOS calculations are based on the methodology outlined in the *2010 Highway Capacity Manual* and performed using Synchro 9.0

ID	Intersection	Control	Peak Hour	Alt A Regents Bridge 6-lane Genesee		Alt D No Bridge 4-lane Genesee			Change to Network Impact
				Delay (a)	LOS (b)	Delay (a)	LOS (b)	Plan-to-Plan Impact?	
25	La Jolla Village Dr & I-5 SB Off-Ramps	Signal	AM	41.6	D	48.0	D		New Impact for Alt D
			MID	52.7	D	61.0	**E**	**Yes**	
			PM	52.2	D	68.6	**E**	**Yes**	
26	La Jolla Village Dr & I-5 NB Off-Ramps	Signal	AM	41.2	D	42.8	D		
			MID	27.1	C	29.9	C		
			PM	31.5	C	33.8	C		
27	La Jolla Village Dr & Lebon Dr	Signal	AM	34.3	C	34.1	C		
			MID	29.6	C	30.5	C		
			PM	53.3	D	52.9	D		
28	La Jolla Village Dr & Regents Rd	Signal	AM	71.8	**E**	64.9	**E**		Similar impact for Alts A & D
			MID	53.4	D	53.4	D		
			PM	203.4	**F**	202.1	**F**		
29	La Jolla Village Dr & Executive Way	Signal	AM	83.0	**F**	75.8	**E**		Similar impact for Alts A & D
			MID	689.6	**F**	874.7	**F**	**Yes**	
			PM	233.6	**F**	266.6	**F**	**Yes**	
30	La Jolla Village Dr & Towne Center Dr	Signal	AM	156.6	**F**	161.2	**F**	**Yes**	Similar impact for Alts A & D
			MID	46.9	D	49.6	D		
			PM	167.8	**F**	171.5	**F**	**Yes**	
31	La Jolla Village Dr & I-805 SB Ramps	Signal	AM	173.3	**F**	171.7	**F**		Similar impact for Alts A & D
			PM	18.5	B	20.4	C		
32	La Jolla Village Dr & I-805 NB Ramps	Signal	AM	43.3	D	42.2	D		
			PM	39.1	D	43.7	D		
33	Miramar Rd & Nobel Dr	Signal	AM	20.4	C	21.3	C		
			MID	14.1	B	15.3	B		
			PM	53.2	D	38.6	D		
34	Miramar Rd & Eastgate Mall	Signal	AM	23.0	C	23.0	C		Similar impact for Alts A & D
			PM	104.0	**F**	104.2	**F**		
35	Miramar Rd & Miramar Mall	Signal	AM	25.2	C	25.3	C		
			PM	21.7	C	21.5	C		
36	Miramar Rd & Miramar Place	Signal	AM	21.1	C	21.2	C		
			PM	11.9	B	12.2	B		

Notes:

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(b) LOS calculations are based on the methodology outlined in the *2010 Highway Capacity Manual* and performed using Synchro 9.0

ID	Intersection	Control	Peak Hour	Alt A Regents Bridge 6-lane Genesee		Alt D No Bridge 4-lane Genesee			Change to Network Impact
				Delay (a)	LOS (b)	Delay (a)	LOS (b)	Plan-to-Plan Impact?	
37	Miramar Rd & Camino Santa Fe	Signal	AM	43.0	D	44.4	D		Similar impact for Alts A & D
			PM	141.9	**F**	124.8	**F**		
38	Nobel Dr & Villa La Jolla Dr	Signal	AM	19.3	B	19.9	B		
			MID	20.3	C	21.6	C		
			PM	34.6	C	37.5	D		
39	Nobel Dr & La Jolla Village Square Dwy	Signal	AM	25.5	C	25.5	C		Similar impact for Alts A & D
			MID	224.5	**F**	209.9	**F**		
			PM	167.8	**F**	150.6	**F**		
40	Nobel Dr & I-5 SB On Ramp	Signal	AM	3.2	A	3.5	A		Similar impact for Alts A & D
			MID	29.9	C	21.7	C		
			PM	114.2	**F**	125.1	**F**	**Yes**	
41	Nobel Dr & University Center Ln/I-5 NB Off-Ramp	Signal	AM	16.2	B	17.8	B		
			MID	21.1	C	23.3	C		
			PM	45.2	D	40.0	D		
42	Nobel Dr & Caminito Plaza Centro	Signal	AM	14.5	B	14.3	B		
			MID	15.6	B	15.5	B		
			PM	21.0	C	20.2	C		
43	Nobel Dr & Lebon Dr	Signal	AM	30.0	C	28.2	C		
			MID	22.4	C	21.6	C		
			PM	37.3	D	35.7	D		
44	Nobel Dr & Regents Rd	Signal	AM	37.9	D	34.7	C		Much Worse Impact for Alt D
			MID	36.7	D	30.1	C		
			PM	69.8	**E**	89.9	**F**	**Yes**	
45	Nobel Dr & Costa Verde Blvd/Cargill Ave	Signal	AM	34.9	C	37.1	D		
			MID	50.3	D	48.1	D		
			PM	45.7	D	43.0	D		
46	Nobel Dr & Lombard Place	Signal	AM	10.9	B	11.1	B		
			MID	24.7	C	25.2	C		
			PM	50.6	D	54.9	D		
47	Nobel Dr & Towne Center Dr	Signal	AM	28.5	C	28.7	C		
			MID	23.7	C	24.0	C		
			PM	44.6	D	46.0	D		
48	Nobel Dr & Shoreline Dr	Signal	AM	41.7	D	45.9	D		
			MID	19.4	B	21.2	C		
			PM	40.5	D	42.2	D		
49	Nobel Dr & Judicial Dr	Signal	AM	13.5	B	13.9	B		
			MID	13.1	B	13.9	B		
			PM	28.1	C	29.1	C		

Notes:

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(b) LOS calculations are based on the methodology outlined in the *2010 Highway Capacity Manual* and performed using Synchro 9.0

ID	Intersection	Control	Peak Hour	Alt A Regents Bridge 6-lane Genesee		Alt D No Bridge 4-lane Genesee			Change to Network Impact
				Delay (a)	LOS (b)	Delay (a)	LOS (b)	Plan-to-Plan Impact?	
50	Nobel Dr & I-805 SB On-Ramp	Signal	AM	1.1	A	1.0	A		
			MID	18.8	B	26.2	C		
			PM	6.6	A	5.9	A		
51	Nobel Dr & I-805 N Off-Ramp	Signal	AM	23.8	C	23.2	C		
			MID	19.2	B	19.0	B		
			PM	21.3	C	20.6	C		
52	Nobel Dr & Avenue of Flags	Signal	AM	3.1	A	3.0	A		
			MID	8.4	A	8.9	A		
			PM	3.6	A	3.6	A		
53	Regents Rd & County Day Ln/ Health Science Dr	Signal	AM	54.6	D	45.3	D		
			MID	11.9	B	11.9	B		
			PM	28.6	C	26.2	C		
54	Regents Rd & Eastgate Mall	Signal	AM	15.4	B	14.7	B		
			MID	6.5	A	6.4	A		
			PM	17.0	B	16.2	B		
55	Regents Rd & Executive Dr	Signal	AM	12.7	B	13.7	B		
			MID	9.7	A	9.9	A		
			PM	26.6	C	25.2	C		
56	Regents Rd & Regents Park Row	Signal	AM	22.9	C	23.1	C		
			MID	15.1	B	15.1	B		
			PM	48.4	D	48.4	D		
57	Regents Rd & Plaza De Palmas	Signal	AM	13.1	B	12.3	B		
			MID	9.9	A	8.9	A		
			PM	53.6	D	15.6	B		
58	Regents Rd & Berino Ct	Signal	AM	50.3	D	27.3	C		
			MID	6.6	A	5.8	A		
			PM	16.6	B	12.0	B		
59	Regents Rd & Arriba St	Signal	AM	68.6	**E**	29.0	C		Removes impact for Alt D
			MID	27.8	C	15.0	B		
			PM	72.0	**E**	25.4	C		
60	Regents Rd & Governor Dr	Signal	AM	95.5	**F**	37.1	D		Removes impact for Alt D
			MID	43.1	D	18.1	B		
			PM	88.7	**F**	33.1	C		
61	Regents Rd & SR-52 WB Ramps	Signal	AM	43.2	D	43.9	D		
			MID	25.4	C	29.7	C		
			PM	41.3	D	43.7	D		
62	Regents Rd & SR-52 EB Ramps	Signal	AM	50.2	D	48.3	D		
			MID	21.3	C	22.1	C		
			PM	45.4	D	45.9	D		

Notes:

Bold values indicate intersections operating at LOS E or F.

(a) Delay refers to the average control delay for the entire intersection, measured in seconds per vehicle. At a two-way stop-controlled intersection, delay refers to the worst movement.

(b) LOS calculations are based on the methodology outlined in the *2010 Highway Capacity Manual* and performed using Synchro 9.0

ID	Intersection	Control	Peak Hour	Alt A Regents Bridge 6-lane Genesee		Alt D No Bridge 4-lane Genesee			Change to Network Impact
				Delay (a)	LOS (b)	Delay (a)	LOS (b)	Plan-to-Plan Impact?	
63	Regents Rd & Luna Ave	Signal	AM	64.7	**E**	54.5	D		Less severe impact for Alt D
			PM	95.2	**F**	66.6	**E**		
64	N. Torrey Pines Rd & UCSD Northpoint Dwy	Signal	AM	23.8	C	23.8	C		
			PM	32.1	C	32.2	C		
65	N. Torrey Pines Rd & Pangea Dr	Signal	AM	10.0	B	10.0	B		
			PM	20.8	C	21.0	C		
66	N. Torrey Pines Rd & La Jolla Shores Dr	Signal	AM	60.4	**E**	61.3	**E**		Similar impact for Alts A & D
			PM	167.1	**F**	169.9	**F**	**Yes**	
67	N. TorreyPines Rd & Revelle College Dr	Signal	AM	23.6	C	23.9	C		
			PM	51.2	D	51.6	D		
68	Gilman Dr & Villa La Jolla Dr	Signal	AM	25.7	C	24.6	C		
			PM	47.2	D	46.1	D		
69	Gilman Dr & I-5 SB Ramps	Signal	AM	9.4	A	10.5	B		New Impact for Alt D
			PM	50.9	D	82.9	**F**	**Yes**	
70	Gilman Dr & I-5 NB Ramps	Signal	AM	19.4	B	21.2	C		
			PM	19.7	B	20.9	C		
71	Palmilla Dr & Lebon Dr	Signal	AM	6.9	A	7.4	A		
			PM	8.2	A	7.2	A		
72	Palmilla Dr & Ariba St	Signal	AM	11.4	B	7.1	A		
			PM	18.3	B	8.1	A		
73	Towne Center Dr & Eastgate Mall	Signal	AM	31.3	C	31.7	C		Similar impact for Alts A & D
			PM	65.9	**E**	69.8	**E**	**Yes**	
74	Towne Center Dr & Executive Dr	Signal	AM	24.2	C	24.4	C		
			PM	50.3	D	51.0	D		
75	Towne Center Dr & Golden Haven Dr	Signal	AM	16.4	B	16.7	B		
			PM	15.5	B	15.2	B		
76	Executive Way & Executive Dr	Signal	AM	16.7	B	17.1	B		Similar impact for Alts A & D
			PM	362.0	**F**	355.9	**F**		
77	Judicial Dr & Eastgate Mall	Signal	AM	37.8	D	33.6	C		Similar impact for Alts A & D
			PM	75.8	**E**	67.6	**E**		
78	Governor Dr & I-805 SB Ramps	Future Signal	AM	12.5	B	13.4	B		
			PM	16.1	B	18.2	B		
79	Governor Dr & I-805 NB Ramps	SSSC	AM	ECL	**F**	ECL	**F**		Similar impact for Alts A & D
			PM	722.4	**F**	ECL	**F**	**Yes**	

Notes:

Bold values indicate intersections operating at LOS E or F.

ECL = Exceeds Calculable Limit. Reported when delay exceeds 180 seconds.

SSSC = Side Street Stop Control

(a) Delay refers to the average control delay for the entire intersection, measured in seconds per vehicle. At a two-way stop-controlled intersection, delay refers to the worst movement.

(b) LOS calculations are based on the methodology outlined in the *2010 Highway Capacity Manual* and performed using Synchro 9.0

ROADWAY SEGMENT	ROADWAY CLASSIFICATION (a)	LOS E CAPACITY	Alt A Regents Bridge 6-lane Genesee			Alt B Regents Bridge 4-lane Genesee				Change to Network Impact
			ADT (b)	V/C RATIO (c)	LOS	ADT (b)	V/C RATIO (c)	LOS	Plan-to-Plan Impact?	
Eastgate Mall										
Regents Rd to Genesee Ave	3 Lane Collector (continuous left-turn lane)	22,500	12,100	0.807	D	12,200	0.813	D		
Genesee Ave to Easter Way	4 Lane Collector	30,000	25,000	0.833	**E**	25,100	0.837	**E**	No	Similar impact for Alts A & B (New)
Easter Way to Judicial Dr	4 Lane Major Arterial	40,000	14,100	0.353	A	14,300	0.358	A		
Judicial Drive to Eastgate Dr (Freeway Overpass)	2 Lane Collector (no fronting property)	10,000	19,500	1.950	**F**	19,500	1.950	**F**	No	Similar impact for Alts A & B (New)
Eastgate Dr to Miramar Rd	2 Lane Collector (continuous left-turn lane)	15,000	28,800	1.920	**F**	28,700	1.913	**F**	No	NUC-34 (Similar impact for Alts A & B)
Executive Drive										
Regents Rd to Genesee Ave	4 Lane Collector (no center lane)	15,000	5,900	0.393	B	6,000	0.400	B		
Genesee Ave to Judicial Dr	4 Lane Collector	30,000	8,900	0.297	A	8,700	0.290	A		
Executive Way										
Executive Dr to La Jolla Village Dr	4 Lane Collector	30,000	11,400	0.380	B	11,100	0.370	B		
Genesee Avenue										
N. Torrey Pines Rd to I-5 SB Ramps	6 Lane Prime Arterial	60,000	46,100	0.768	C	46,100	0.768	C		
I-5 SB Ramps to I-5 NB Ramps	6 Lane Prime Arterial	60,000	62,100	0.776	C	62,200	0.778	C		
I-5 NB Ramps to Regents Rd	6 Lane Prime Arterial	60,000	54,300	0.905	D	54,700	0.912	D		
Regents Rd to La Jolla Village Dr	6 Lane Prime Arterial	60,000	40,600	0.812	D	40,300	0.806	D		
La Jolla Village to Esplande Ct	6 Lane Major Arterial	50,000	41,800	0.836	D	41,900	0.838	D		
Esplande Ct to Nobel Dr	6 Lane Major Arterial	50,000	27,300	0.546	B	27,400	0.548	B		
Nobel Dr to Centurion Square	4 Lane Major Arterial	40,000				39,600	0.990	**E**	**Yes**	New impact with Alt B
	6 Lane Major Arterial	50,000	39,600	0.792	C					
Centurion Square to Governor Dr	4 Lane Major Arterial	40,000				40,900	1.023	**F**	**Yes**	New impact with Alt B
	6 Lane Major Arterial	50,000	43,900	0.878	D					
Governor Dr to SR-52 WB Ramps	4 Lane Major Arterial	40,000				44,300	1.108	**F**	**Yes**	Similar impact for Alts A & B (New)
	6 Lane Major Arterial	50,000	48,700	0.974	**E**					
SR-52 WB Ramps to SR-52 EB Ramps	4 Lane Major Arterial	40,000	37,300	0.933	**E**	36,500	0.913	**E**	No	Similar impact for Alts A & B (New)
SR-52 EB Ramps to Lehrer Dr	4 Lane Major Arterial	40,000	37,100	0.928	**E**	36,600	0.915	**E**	No	Similar impact for Alts A & B (New)
Gilman Drive										
UCSD Campus to La Jolla Village Dr	4 Lane Collector	30,000	13,800	0.460	B	13,900	0.463	B		
La Jolla Village Dr to Via Alicante	4 Lane Collector	30,000	21,800	0.727	D	21,800	0.727	D		
Via Alicante to I-5 SB Ramps	4 Lane Major Arterial	40,000	24,300	0.608	C	24,500	0.613	C		
I-5 SB Ramps to I-5 NB Ramps	4 Lane Major Arterial	40,000	14,900	0.373	A	15,000	0.375	B		
Golden Haven Drive										
Towne Center Dr to Judicial Dr	4 Lane Major Arterial	40,000	7,500	0.188	A	7,300	0.183	A		

Notes:

Bold values indicate roadway segments operating at LOS E or F.

(a) Road classifications are based on existing conditions or changes identified in the FFP

(b) Average Daily Traffic (ADT) volumes for the roadway segments were determined from SANDAG Modeling

(c) The v/c Ratio is calculated by dividing the ADT volume by each respective roadway segment's capacity.

ROADWAY SEGMENT	ROADWAY CLASSIFICATION (a)	LOS E CAPACITY	Alt A Regents Bridge 6-lane Genesee			Alt B Regents Bridge 4-lane Genesee				Change to Network Impact
			ADT (b)	V/C RATIO (c)	LOS	ADT (b)	V/C RATIO (c)	LOS	Plan-to-Plan Impact?	
Governor Drive										
Regents Road to Genesee Ave	4 Lane Major Arterial	40,000	11,400	0.285	A	10,700	0.268	A		
Genesee Ave to I-805 SB Ramps	4 Lane Major Arterial	40,000	24,000	0.600	C	23,300	0.583	C		
I-805 SB Ramps to I-805 NB Ramps	4 Lane Major Arterial	40,000	9,900	0.248	A	10,600	0.265	A		
Judicial Drive										
Eastgate Mall to La Jolla Village Dr	4 Lane Major Arterial	40,000	10,600	0.265	A	10,400	0.260	A		
La Jolla Village Dr to Nobel Drive	4 Lane Major Arterial	40,000	9,300	0.233	A	9,300	0.233	A		
La Jolla Scenic Drive										
La Jolla Village Drive to South	4 Lane Major Arterial	40,000	12,900	0.323	A	12,900	0.323	A		
La Jolla Village Drive										
Revelle College Drive to Villa La Jolla	6 Lane Prime Arterial	60,000	54,300	0.905	D	54,100	0.902	D		
Villa La Jolla Drive to I-5 SB Ramps	6 Lane Prime Arterial	60,000	76,400	1.273	**F**	76,400	1.273	**F**	No	Similar impact for Alts A & B (New)
I-5 SB Ramps to I-5 NB Ramps	6 Lane Major Arterial	50,000	59,400	1.188	**F**	60,100	1.202	**F**	**Yes**	Similar impact for Alts A & B (New)
I-5 NB Ramps to Lebon Dr	6 Lane Major Arterial	50,000	52,000	1.040	**F**	52,500	1.050	**F**	**Yes**	Similar impact for Alts A & B (New)
Lebon Dr to Regents Road	6 Lane Major Arterial	50,000	49,900	0.998	**E**	50,100	1.002	**F**	No	Similar impact for Alts A & B (New)
Regents Road to Genesee Ave	6 Lane Major Arterial	50,000	52,400	1.048	**F**	52,400	1.048	**F**	No	Similar impact for Alts A & B (New)
Genesee Ave to Executive Way	6 Lane Major Arterial	50,000	49,400	0.988	**E**	49,600	0.992	**E**		Similar impact for Alts A & B (New)
Executive Way to Towne Center Dr	6 Lane Major Arterial	50,000	67,600	1.352	**F**	68,700	1.374	**F**	**Yes**	Similar impact for Alts A & B (New)
Towne Center Dr to I-805 SB Ramps	7 Lane Prime Arterial	70,000	67,600	0.845	C	68,700	0.859	C	**Yes**	Similar impact for Alts A & B (New)
Lebon Drive										
Palmilla Drive to Nobel Drive	4 Lane Major Arterial	40,000	16,100	0.403	B	16,000	0.400	B		
Nobel Drive to La Jolla Village Drive	5 Lane Major Arterial	45,000	13,600	0.302	A	13,600	0.302	A		
Miramar Road										
I-805 SB Ramps to I-805 NB Ramps	6 Lane Major Arterial	50,000	64,600	1.077	**F**	65,700	1.095	**F**	**Yes**	Similar impact for Alts A & B (New)
I-805 NB Ramps to Nobel Dr	8 Lane Prime Arterial	80,000	51,400	0.643	C	50,400	0.630	C		
Nobel Dr to Eastgate Mall	8 Lane Prime Arterial	80,000	69,000	0.863	C	69,000	0.863	C		
Eastgate Mall to Miramar Mall	7 Lane Prime Arterial	70,000	72,200	1.031	**F**	72,300	1.033	**F**	No	Similar impact for Alts A & B (New)
Miramar Mall to Camino Santa Fe	6 Lane Prime Arterial	60,000	72,200	1.203	**F**	72,300	1.205	**F**	No	Similar impact for Alts A & B (New)

Notes:

Bold values indicate roadway segments operating at LOS E or F.

(a) Road classifications are based on existing conditions or changes identified in the FFP

(b) Average Daily Traffic (ADT) volumes for the roadway segments were determined from SANDAG Modeling

(c) The v/c Ratio is calculated by dividing the ADT volume by each respective roadway segment's capacity.

ROADWAY SEGMENT	ROADWAY CLASSIFICATION (a)	LOS E CAPACITY	Alt A Regents Bridge 6-lane Genesee			Alt B Regents Bridge 4-lane Genesee				Change to Network Impact
			ADT (b)	V/C RATIO (c)	LOS	ADT (b)	V/C RATIO (c)	LOS	Plan-to-Plan Impact?	
North Torrey Pines Road										
Science Park Rd to Genesee Ave	6 Lane Prime Arterial	60,000	40,400	0.673	C	40,600	0.677	C		
Genesee Ave to Revelle College Dr	4 Lane Major Arterial	40,000	23,700	0.593	C	23,700	0.593	C		
Nobel Drive										
Villa La Jolla Dr to I-5 SB On Ramp	4 Lane Major Arterial	40,000	47,500	1.188	**F**	47,200	1.180	**F**	No	Similar impact for Alts A & B (New)
I-5 SB On Ramp to I-5 NB Off Ramp/University Center Lane	4 Lane Major Arterial	40,000	40,800	1.020	**F**	40,600	1.015	**F**	No	Similar impact for Alts A & B (New)
I-5 NB Off Ramp/University Center Lane to Lebon Dr	6 Lane Major Arterial	50,000	31,300	0.626	C	31,600	0.632	C		
Lebon Dr to Regents Rd	6 Lane Major Arterial	50,000	27,300	0.546	B	27,800	0.556	B		
Regents Rd to Genesee Ave	6 Lane Major Arterial	50,000	32,800	0.656	C	33,100	0.662	C		
Genesee Ave to Towne Center Dr	4 Lane Major Arterial	40,000	32,400	0.810	D	30,400	0.760	D		NUC-J (widening not identified as needed)
Towne Center Dr to Judicial Dr	6 Lane Prime Arterial	60,000	25,000	0.417	B	24,900	0.415	A		
Judicial Dr to Avenue of Flags	5 Lane Major Arterial	45,000	31,400	0.698	C	31,300	0.696	C		
Avenue of Flags to Miramar Rd	4 Lane Major Arterial	40,000	33,900	0.678	C	34,900	0.698	C		
Regents Road										
Genesee Ave to Eastgate Mall	4 Lane Collector	30,000	9,700	0.243	A	9,900	0.248	A		NUC-13 (widening not identified as needed)
Eastgate Mall to La Jolla Village Dr	4 Lane Collector	30,000	18,900	0.630	C	19,100	0.637	C		
La Jolla Village Dr to Nobel Dr	5 Lane Major Arterial	45,000	24,500	0.544	C	24,700	0.549	C		
Nobel Dr to Rose Canyon	4 Lane Major Arterial	40,000	27,000	0.675	C	27,100	0.678	C		
Rose Canyon to Governor Dr	2 Lane Collector (no fronting property)	10,000				29,900	0.748	C		
	4 Lane Major Arterial	40,000	30,000	0.750	D					
Governor Dr to SR-52 WB Ramps	4 Lane Major Arterial	40,000	30,300	0.758	D	30,900	0.773	D		
SR-52 WB Ramps to SR-52 EB Ramps	4 Lane Major Arterial	40,000	35,300	0.883	**E**	35,500	0.888	**E**	No	Similar impact for Alts A & B (New)
SR-52 EB Ramps to Luna Ave	4 Lane Major Arterial	40,000	40,600	1.015	**F**	40,800	1.020	**F**	No	Similar impact for Alts A & B (New)
Torrey Pines Road										
La Jolla Village Drive to South	4 Lane Major Arterial	40,000	35,600	0.890	**E**	35,700	0.893	**E**	No	Similar impact for Alts A & B (New)
Towne Center Drive										
End to La Jolla Village Dr	4 Lane Major Arterial	40,000	21,400	0.535	C	21,600	0.540	C		
La Jolla Village Dr to Nobel Dr	4 Lane Major Arterial	40,000	18,600	0.465	B	19,500	0.488	B		
Villa La Jolla Drive										
Gilman Dr (South) to Nobel Dr	4 Lane Major Arterial	40,000	12,300	0.308	A	12,300	0.308	A		
Nobel Dr to La Jolla Village Dr	4 Lane Major Arterial	40,000	24,300	0.608	C	24,100	0.603	C		
La Jolla Village Dr to VA Medical Center	4 Lane Major Arterial	40,000	33,400	0.835	D	33,300	0.833	D		

Notes:

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(c) The v/c Ratio is calculated by dividing the ADT volume by each respective roadway segment's capacity.

ROADWAY SEGMENT	ROADWAY CLASSIFICATION (a)	LOS E CAPACITY	Alt A Regents Bridge 6-lane Genesee			Alt C No Bridge 6-lane Genesee				Change to Network Impact
			ADT (b)	V/C RATIO (c)	LOS	ADT (b)	V/C RATIO (c)	LOS	Plan-to-Plan Impact?	
Eastgate Mall										
Regents Rd to Genesee Ave	3 Lane Collector (continuous left-turn lane)	22,500	12,100	0.807	D	12,300	0.820	D		
Genesee Ave to Easter Way	4 Lane Collector	30,000	25,000	0.833	**E**	24,900	0.830	D		Removes impact with Alt C
Easter Way to Judicial Dr	4 Lane Major Arterial	40,000	14,100	0.353	A	14,000	0.350	A		
Judicial Drive to Eastgate Dr (Freeway Overpass)	2 Lane Collector (no fronting property)	10,000	19,500	1.950	**F**	19,500	1.950	**F**	No	Similar impact for Alts A & C (New)
Eastgate Dr to Miramar Rd	2 Lane Collector (continuous left-turn lane)	15,000	28,800	1.920	**F**	29,000	1.933	**F**	**Yes**	NUC-34 (Similar impact for Alts A & C)
Executive Drive										
Regents Rd to Genesee Ave	4 Lane Collector (no center lane)	15,000	5,900	0.393	B	6,600	0.440	B		
Genesee Ave to Judicial Dr	4 Lane Collector	30,000	8,900	0.297	A	9,300	0.310	A		
Executive Way										
Executive Dr to La Jolla Village Dr	4 Lane Collector	30,000	11,400	0.380	B	11,000	0.367	B		
Genesee Avenue										
N. Torrey Pines Rd to I-5 SB Ramps	6 Lane Prime Arterial	60,000	46,100	0.768	C	46,100	0.768	C		
I-5 SB Ramps to I-5 NB Ramps	6 Lane Prime Arterial	60,000	62,100	0.776	C	62,300	0.779	C		
I-5 NB Ramps to Regents Rd	6 Lane Prime Arterial	60,000	54,300	0.905	D	54,800	0.913	D		
Regents Rd to La Jolla Village Dr	6 Lane Prime Arterial	60,000	40,600	0.812	D	40,700	0.814	D		
La Jolla Village to Esplande Ct	6 Lane Major Arterial	50,000	41,800	0.836	D	46,500	0.930	**E**	**Yes**	New impact with Alt C
Esplande Ct to Nobel Dr	6 Lane Major Arterial	50,000	27,300	0.546	B	30,300	0.606	C		
Nobel Dr to Centurion Square	4 Lane Major Arterial	40,000								
	6 Lane Major Arterial	50,000	39,600	0.792	C	49,400	0.988	**E**	**Yes**	New impact with Alt C
Centurion Square to Governor Dr	4 Lane Major Arterial	40,000								
	6 Lane Major Arterial	50,000	43,900	0.878	D	58,200	1.164	**F**	**Yes**	New impact with Alt C
Governor Dr to SR-52 WB Ramps	4 Lane Major Arterial	40,000								
	6 Lane Major Arterial	50,000	48,700	0.974	**E**	47,700	0.954	**E**	**Yes**	Similar impact for Alts A & C (New)
SR-52 WB Ramps to SR-52 EB Ramps	4 Lane Major Arterial	40,000	37,300	0.933	**E**	39,000	0.975	**E**	**Yes**	Similar impact for Alts A & C (New)
SR-52 EB Ramps to Lehrer Dr	4 Lane Major Arterial	40,000	37,100	0.928	**E**	38,900	0.973	**E**	**Yes**	Similar impact for Alts A & C (New)
Gilman Drive										
UCSD Campus to La Jolla Village Dr	4 Lane Collector	30,000	13,800	0.460	B	13,700	0.457	B		
La Jolla Village Dr to Via Alicante	4 Lane Collector	30,000	21,800	0.727	D	21,000	0.700	D		
Via Alicante to I-5 SB Ramps	4 Lane Major Arterial	40,000	24,300	0.608	C	24,000	0.600	C		
I-5 SB Ramps to I-5 NB Ramps	4 Lane Major Arterial	40,000	14,900	0.373	A	16,800	0.420	B		
Golden Haven Drive										
Towne Center Dr to Judicial Dr	4 Lane Major Arterial	40,000	7,500	0.188	A	7,700	0.193	A		

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(c) The v/c Ratio is calculated by dividing the ADT volume by each respective roadway segment's capacity.

ROADWAY SEGMENT	ROADWAY CLASSIFICATION (a)	LOS E CAPACITY	Alt A Regents Bridge 6-lane Genesee			Alt C No Bridge 6-lane Genesee				Change to Network Impact
			ADT (b)	V/C RATIO (c)	LOS	ADT (b)	V/C RATIO (c)	LOS	Plan-to-Plan Impact?	
Governor Drive										
Regents Road to Genesee Ave	4 Lane Major Arterial	40,000	11,400	0.285	A	23,200	0.580	C		
Genesee Ave to I-805 SB Ramps	4 Lane Major Arterial	40,000	24,000	0.600	C	23,900	0.598	C		
I-805 SB Ramps to I-805 NB Ramps	4 Lane Major Arterial	40,000	9,900	0.248	A	10,000	0.250	A		
Judicial Drive										
Eastgate Mall to La Jolla Village Dr	4 Lane Major Arterial	40,000	10,600	0.265	A	9,900	0.248	A		
La Jolla Village Dr to Nobel Drive	4 Lane Major Arterial	40,000	9,300	0.233	A	9,500	0.238	A		
La Jolla Scenic Drive										
La Jolla Village Drive to South	4 Lane Major Arterial	40,000	12,900	0.323	A	14,100	0.353	A		
La Jolla Village Drive										
Revelle College Drive to Villa La Jolla	6 Lane Prime Arterial	60,000	54,300	0.905	D	55,100	0.918	**E**	No	New impact with Alt C
Villa La Jolla Drive to I-5 SB Ramps	6 Lane Prime Arterial	60,000	76,400	1.273	**F**	76,600	1.277	**F**	No	Similar impact for Alts A & C (New)
I-5 SB Ramps to I-5 NB Ramps	6 Lane Major Arterial	50,000	59,400	1.188	**F**	61,200	1.224	**F**	**Yes**	Similar impact for Alts A & C (New)
I-5 NB Ramps to Lebon Dr	6 Lane Major Arterial	50,000	52,000	1.040	**F**	53,200	1.064	**F**	**Yes**	Similar impact for Alts A & C (New)
Lebon Dr to Regents Road	6 Lane Major Arterial	50,000	49,900	0.998	**E**	51,500	1.030	**F**	**Yes**	Similar impact for Alts A & C (New)
Regents Road to Genesee Ave	6 Lane Major Arterial	50,000	52,400	1.048	**F**	50,500	1.010	**F**	No	Similar impact for Alts A & C (New)
Genesee Ave to Executive Way	6 Lane Major Arterial	50,000	49,400	0.988	**E**	48,900	0.978	**E**	No	Similar impact for Alts A & C (New)
Executive Way to Towne Center Dr	6 Lane Major Arterial	50,000	67,600	1.352	**F**	69,300	1.386	**F**	**Yes**	Similar impact for Alts A & C (New)
Towne Center Dr to I-805 SB Ramps	7 Lane Prime Arterial	70,000	67,600	0.845	C	69,300	0.866	C	**Yes**	Similar impact for Alts A & C (New)
Lebon Drive										
Palmilla Drive to Nobel Drive	4 Lane Major Arterial	40,000	16,100	0.403	B	12,300	0.308	A		
Nobel Drive to La Jolla Village Drive	5 Lane Major Arterial	45,000	13,600	0.302	A	11,300	0.251	A		
Miramar Road										
I-805 SB Ramps to I-805 NB Ramps	6 Lane Major Arterial	50,000	64,600	1.077	**F**	65,400	1.090	**F**	**Yes**	Similar impact for Alts A & C (New)
I-805 NB Ramps to Nobel Dr	8 Lane Prime Arterial	80,000	51,400	0.643	C	49,600	0.620	B		
Nobel Dr to Eastgate Mall	8 Lane Prime Arterial	80,000	69,000	0.863	C	69,000	0.863	C		
Eastgate Mall to Miramar Mall	7 Lane Prime Arterial	70,000	72,200	1.031	**F**	72,200	1.031	**F**	No	Similar impact for Alts A & C (New)
Miramar Mall to Camino Santa Fe	6 Lane Prime Arterial	60,000	72,200	1.203	**F**	72,200	1.203	**F**	No	Similar impact for Alts A & C (New)

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ROADWAY SEGMENT	ROADWAY CLASSIFICATION (a)	LOS E CAPACITY	Alt A Regents Bridge 6-lane Genesee			Alt C No Bridge 6-lane Genesee				Change to Network Impact
			ADT (b)	V/C RATIO (c)	LOS	ADT (b)	V/C RATIO (c)	LOS	Plan-to-Plan Impact?	
North Torrey Pines Road										
Science Park Rd to Genesee Ave	6 Lane Prime Arterial	60,000	40,400	0.673	C	41,300	0.688	C		
Genesee Ave to Revelle College Dr	4 Lane Major Arterial	40,000	23,700	0.593	C	23,800	0.595	C		
Nobel Drive										
Villa La Jolla Dr to I-5 SB On Ramp	4 Lane Major Arterial	40,000	47,500	1.188	**F**	47,200	1.180	**F**	No	Similar impact for Alts A & C (New)
I-5 SB On Ramp to I-5 NB Off Ramp/University Center Lane	4 Lane Major Arterial	40,000	40,800	1.020	**F**	40,700	1.018	**F**	No	Similar impact for Alts A & C (New)
I-5 NB Off Ramp/University Center Lane to Lebon Dr	6 Lane Major Arterial	50,000	31,300	0.626	C	30,400	0.608	C		
Lebon Dr to Regents Rd	6 Lane Major Arterial	50,000	27,300	0.546	B	30,700	0.614	C		
Regents Rd to Genesee Ave	6 Lane Major Arterial	50,000	32,800	0.656	C	32,200	0.644	C		
Genesee Ave to Towne Center Dr	4 Lane Major Arterial	40,000	32,400	0.810	D	32,000	0.800	D		NUd-J (widening not identified as needed)
Towne Center Dr to Judicial Dr	6 Lane Prime Arterial	60,000	25,000	0.417	B	25,000	0.417	B		
Judicial Dr to Avenue of Flags	5 Lane Major Arterial	45,000	31,400	0.698	C	31,700	0.704	C		
Avenue of Flags to Miramar Rd	4 Lane Major Arterial	40,000	33,900	0.678	C	35,600	0.712	**C**		
Regents Road										
Genesee Ave to Eastgate Mall	4 Lane Collector	30,000	9,700	0.243	A	8,700	0.218	A		NUd-13 (widening not identified as needed)
Eastgate Mall to La Jolla Village Dr	4 Lane Collector	30,000	18,900	0.630	C	16,000	0.533	C		
La Jolla Village Dr to Nobel Dr	5 Lane Major Arterial	45,000	24,500	0.544	C	18,700	0.416	B		
Nobel Dr to Rose Canyon	4 Lane Major Arterial	40,000	27,000	0.675	C	11,600	0.290	A		
Rose Canyon to Governor Dr	2 Lane Collector (no fronting property)	10,000				2,400	0.240	A		
	4 Lane Major Arterial	40,000	30,000	0.750	D					
Governor Dr to SR-52 WB Ramps	4 Lane Major Arterial	40,000	30,300	0.758	D	17,800	0.445	B		
SR-52 WB Ramps to SR-52 EB Ramps	4 Lane Major Arterial	40,000	35,300	0.883	**E**	23,400	0.585	C		Removes impact with Alt C
SR-52 EB Ramps to Luna Ave	4 Lane Major Arterial	40,000	40,600	1.015	**F**	25,500	0.638	C		Removes impact with Alt C
Torrey Pines Road										
La Jolla Village Drive to South	4 Lane Major Arterial	40,000	35,600	0.890	**E**	36,600	0.915	**E**	**Yes**	Similar impact for Alts A & C (New)
Towne Center Drive										
End to La Jolla Village Dr	4 Lane Major Arterial	40,000	21,400	0.535	C	21,600	0.540	C		
La Jolla Village Dr to Nobel Dr	4 Lane Major Arterial	40,000	18,600	0.465	B	20,700	0.518	B		
Villa La Jolla Drive										
Gilman Dr (South) to Nobel Dr	4 Lane Major Arterial	40,000	12,300	0.308	A	12,300	0.308	A		
Nobel Dr to La Jolla Village Dr	4 Lane Major Arterial	40,000	24,300	0.608	C	23,700	0.593	C		
La Jolla Village Dr to VA Medical Center	4 Lane Major Arterial	40,000	33,400	0.835	D	33,600	0.840	D		

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ROADWAY SEGMENT	ROADWAY CLASSIFICATION (a)	LOS E CAPACITY	Alt A Regents Bridge 6-lane Genesee			Alt D No Bridge 4-lane Genesee				Change to Network Impact
			ADT (b)	V/C RATIO (c)	LOS	ADT (b)	V/C RATIO (c)	LOS	Plan-to-Plan Impact?	
Eastgate Mall										
Regents Rd to Genesee Ave	3 Lane Collector (continuous left-turn lane)	22,500	12,100	0.807	D	12,300	0.820	D		
Genesee Ave to Easter Way	4 Lane Collector	30,000	25,000	0.833	**E**	25,400	0.847	**E**		Similar impact for Alts A & D (New)
Easter Way to Judicial Dr	4 Lane Major Arterial	40,000	14,100	0.353	A	14,300	0.358	A		
Judicial Drive to Eastgate Dr (Freeway Overpass)	2 Lane Collector (no fronting property)	10,000	19,500	1.950	**F**	19,400	1.940	**F**		Similar impact for Alts A & D (New)
Eastgate Dr to Miramar Rd	2 Lane Collector (continuous left-turn lane)	15,000	28,800	1.920	**F**	29,200	1.947	**F**	**Yes**	NUC-34 (Similar impact for Alts A & D)
Executive Drive										
Regents Rd to Genesee Ave	4 Lane Collector (no center lane)	15,000	5,900	0.393	B	6,400	0.427	B		
Genesee Ave to Judicial Dr	4 Lane Collector	30,000	8,900	0.297	A	9,300	0.310	A		
Executive Way										
Executive Dr to La Jolla Village Dr	4 Lane Collector	30,000	11,400	0.380	B	11,100	0.370	B		
Genesee Avenue										
N. Torrey Pines Rd to I-5 SB Ramps	6 Lane Prime Arterial	60,000	46,100	0.768	C	46,000	0.767	C		
I-5 SB Ramps to I-5 NB Ramps	6 Lane Prime Arterial	60,000	62,100	0.776	C	62,100	0.776	C		
I-5 NB Ramps to Regents Rd	6 Lane Prime Arterial	60,000	54,300	0.905	D	54,600	0.910	D		
Regents Rd to La Jolla Village Dr	6 Lane Prime Arterial	60,000	40,600	0.812	D	40,800	0.816	D		
La Jolla Village to Esplande Ct	6 Lane Major Arterial	50,000	41,800	0.836	D	46,400	0.928	**E**	**Yes**	New impact with Alt D
Esplande Ct to Nobel Dr	6 Lane Major Arterial	50,000	27,300	0.546	B	29,700	0.594	C		
Nobel Dr to Centurion Square	4 Lane Major Arterial	40,000				46,500	1.163	**F**	**Yes**	New impact with Alt D
	6 Lane Major Arterial	50,000	39,600	0.792	C					
Centurion Square to Governor Dr	4 Lane Major Arterial	40,000				54,600	1.365	**F**	**Yes**	New impact with Alt D
	6 Lane Major Arterial	50,000	43,900	0.878	D					
Governor Dr to SR-52 WB Ramps	4 Lane Major Arterial	40,000				43,500	1.088	**F**	**Yes**	Similar impact for Alts A & D (New)
	6 Lane Major Arterial	50,000	48,700	0.974	**E**					
SR-52 WB Ramps to SR-52 EB Ramps	4 Lane Major Arterial	40,000	37,300	0.933	**E**	38,000	0.950	**E**		Similar impact for Alts A & D (New)
SR-52 EB Ramps to Lehrer Dr	4 Lane Major Arterial	40,000	37,100	0.928	**E**	38,400	0.960	**E**	**Yes**	Similar impact for Alts A & D (New)
Gilman Drive										
UCSD Campus to La Jolla Village Dr	4 Lane Collector	30,000	13,800	0.460	B	13,700	0.457	B		
La Jolla Village Dr to Via Alicante	4 Lane Collector	30,000	21,800	0.727	D	20,700	0.690	D		
Via Alicante to I-5 SB Ramps	4 Lane Major Arterial	40,000	24,300	0.608	C	23,400	0.585	C		
I-5 SB Ramps to I-5 NB Ramps	4 Lane Major Arterial	40,000	14,900	0.373	A	16,500	0.413	B		
Golden Haven Drive										
Towne Center Dr to Judicial Dr	4 Lane Major Arterial	40,000	7,500	0.188	A	7,600	0.190	A		

Notes:

Bold values indicate roadway segments operating at LOS E or F.

(a) Road classifications are based on existing conditions or changes identified in the FFP

(b) Average Daily Traffic (ADT) volumes for the roadway segments were determined from SANDAG Modeling

(c) The v/c Ratio is calculated by dividing the ADT volume by each respective roadway segment's capacity.

ROADWAY SEGMENT	ROADWAY CLASSIFICATION (a)	LOS E CAPACITY	Alt A Regents Bridge 6-lane Genesee			Alt D No Bridge 4-lane Genesee				Change to Network Impact
			ADT (b)	V/C RATIO (c)	LOS	ADT (b)	V/C RATIO (c)	LOS	Plan-to-Plan Impact?	
Governor Drive										
Regents Road to Genesee Ave	4 Lane Major Arterial	40,000	11,400	0.285	A	23,000	0.575	C		
Genesee Ave to I-805 SB Ramps	4 Lane Major Arterial	40,000	24,000	0.600	C	23,300	0.583	C		
I-805 SB Ramps to I-805 NB Ramps	4 Lane Major Arterial	40,000	9,900	0.248	A	10,700	0.268	A		
Judicial Drive										
Eastgate Mall to La Jolla Village Dr	4 Lane Major Arterial	40,000	10,600	0.265	A	9,700	0.243	A		
La Jolla Village Dr to Nobel Drive	4 Lane Major Arterial	40,000	9,300	0.233	A	9,400	0.235	A		
La Jolla Scenic Drive										
La Jolla Village Drive to South	4 Lane Major Arterial	40,000	12,900	0.323	A	14,100	0.353	A		
La Jolla Village Drive										
Revelle College Drive to Villa La Jolla	6 Lane Prime Arterial	60,000	54,300	0.905	D	55,000	0.917	**E**	**Yes**	New impact with Alt D
Villa La Jolla Drive to I-5 SB Ramps	6 Lane Prime Arterial	60,000	76,400	1.273	**F**	76,800	1.280	**F**		Similar impact for Alts A & D (New)
I-5 SB Ramps to I-5 NB Ramps	6 Lane Major Arterial	50,000	59,400	1.188	**F**	60,900	1.218	**F**	**Yes**	Similar impact for Alts A & D (New)
I-5 NB Ramps to Lebon Dr	6 Lane Major Arterial	50,000	52,000	1.040	**F**	53,200	1.064	**F**	**Yes**	Similar impact for Alts A & D (New)
Lebon Dr to Regents Road	6 Lane Major Arterial	50,000	49,900	0.998	**E**	51,500	1.030	**F**	**Yes**	Similar impact for Alts A & D (New)
Regents Road to Genesee Ave	6 Lane Major Arterial	50,000	52,400	1.048	**F**	50,700	1.014	**F**		Similar impact for Alts A & D (New)
Genesee Ave to Executive Way	6 Lane Major Arterial	50,000	49,400	0.988	**E**	49,200	0.984	**E**		Similar impact for Alts A & D (New)
Executive Way to Towne Center Dr	6 Lane Major Arterial	50,000	67,600	1.352	**F**	69,500	1.390	**F**	**Yes**	Similar impact for Alts A & D (New)
Towne Center Dr to I-805 SB Ramps	7 Lane Prime Arterial	70,000	67,600	0.845	C	69,500	0.869	C	**Yes**	Similar impact for Alts A & D (New)
Lebon Drive										
Palmilla Drive to Nobel Drive	4 Lane Major Arterial	40,000	16,100	0.403	B	12,400	0.310	A		
Nobel Drive to La Jolla Village Drive	5 Lane Major Arterial	45,000	13,600	0.302	A	11,800	0.262	A		
Miramar Road										
I-805 SB Ramps to I-805 NB Ramps	6 Lane Major Arterial	50,000	64,600	1.077	**F**	66,000	1.100	**F**	**Yes**	Similar impact for Alts A & D (New)
I-805 NB Ramps to Nobel Dr	8 Lane Prime Arterial	80,000	51,400	0.643	C	50,300	0.629	C		
Nobel Dr to Eastgate Mall	8 Lane Prime Arterial	80,000	69,000	0.863	C	69,100	0.864	C		
Eastgate Mall to Miramar Mall	7 Lane Prime Arterial	70,000	72,200	1.031	**F**	72,200	1.031	**F**		Similar impact for Alts A & D (New)
Miramar Mall to Camino Santa Fe	6 Lane Prime Arterial	60,000	72,200	1.203	**F**	72,200	1.203	**F**		Similar impact for Alts A & D (New)

Notes:

Bold values indicate roadway segments operating at LOS E or F.

(a) Road classifications are based on existing conditions or changes identified in the FFP

(b) Average Daily Traffic (ADT) volumes for the roadway segments were determined from SANDAG Modeling

(c) The v/c Ratio is calculated by dividing the ADT volume by each respective roadway segment's capacity.

ROADWAY SEGMENT	ROADWAY CLASSIFICATION (a)	LOS E CAPACITY	Alt A Regents Bridge 6-lane Genesee			Alt D No Bridge 4-lane Genesee				Change to Network Impact
			ADT (b)	V/C RATIO (c)	LOS	ADT (b)	V/C RATIO (c)	LOS	Plan-to-Plan Impact?	
North Torrey Pines Road										
Science Park Rd to Genesee Ave	6 Lane Prime Arterial	60,000	40,400	0.673	C	42,100	0.702	C		
Genesee Ave to Revelle College Dr	4 Lane Major Arterial	40,000	23,700	0.593	C	23,900	0.598	C		
Nobel Drive										
Villa La Jolla Dr to I-5 SB On Ramp	4 Lane Major Arterial	40,000	47,500	1.188	**F**	47,600	1.190	**F**		Similar impact for Alts A & D (New)
I-5 SB On Ramp to I-5 NB Off Ramp/University Center Lane	4 Lane Major Arterial	40,000	40,800	1.020	**F**	41,700	1.043	**F**	**Yes**	Similar impact for Alts A & D (New)
I-5 NB Off Ramp/University Center Lane to Lebon Dr	6 Lane Major Arterial	50,000	31,300	0.626	C	31,100	0.622	C		
Lebon Dr to Regents Rd	6 Lane Major Arterial	50,000	27,300	0.546	B	31,300	0.626	C		
Regents Rd to Genesee Ave	6 Lane Major Arterial	50,000	32,800	0.656	C	32,700	0.654	C		
Genesee Ave to Towne Center Dr	4 Lane Major Arterial	40,000	32,400	0.810	D	30,800	0.770	D		NUC-J (widening not identified as needed)
Towne Center Dr to Judicial Dr	6 Lane Prime Arterial	60,000	25,000	0.417	B	26,200	0.437	B		
Judicial Dr to Avenue of Flags	5 Lane Major Arterial	45,000	31,400	0.698	C	32,900	0.731	C		
Avenue of Flags to Miramar Rd	4 Lane Major Arterial	40,000	33,900	0.678	C	35,000	0.700	C		
Regents Road										
Genesee Ave to Eastgate Mall	4 Lane Collector	30,000	9,700	0.243	A	8,600	0.215	A		NUC-13 (widening not identified as needed)
Eastgate Mall to La Jolla Village Dr	4 Lane Collector	30,000	18,900	0.630	C	16,100	0.537	C		
La Jolla Village Dr to Nobel Dr	5 Lane Major Arterial	45,000	24,500	0.544	C	18,600	0.413	B		
Nobel Dr to Rose Canyon	4 Lane Major Arterial	40,000	27,000	0.675	C	11,600	0.290	A		
Rose Canyon to Governor Dr	2 Lane Collector (no fronting property)	10,000				2,400	0.240	A		
	4 Lane Major Arterial	40,000	30,000	0.750	D					
Governor Dr to SR-52 WB Ramps	4 Lane Major Arterial	40,000	30,300	0.758	D	17,800	0.445	B		
SR-52 WB Ramps to SR-52 EB Ramps	4 Lane Major Arterial	40,000	35,300	0.883	**E**	23,500	0.588	C		Removes impact with Alt D
SR-52 EB Ramps to Luna Ave	4 Lane Major Arterial	40,000	40,600	1.015	**F**	25,600	0.640	C		Removes impact with Alt D
Torrey Pines Road										
La Jolla Village Drive to South	4 Lane Major Arterial	40,000	35,600	0.890	**E**	36,800	0.920	**E**	**Yes**	Similar impact for Alts A & D (New)
Towne Center Drive										
End to La Jolla Village Dr	4 Lane Major Arterial	40,000	21,400	0.535	C	21,500	0.538	C		
La Jolla Village Dr to Nobel Dr	4 Lane Major Arterial	40,000	18,600	0.465	B	19,800	0.495	B		
Villa La Jolla Drive										
Gilman Dr (South) to Nobel Dr	4 Lane Major Arterial	40,000	12,300	0.308	A	12,200	0.305	A		
Nobel Dr to La Jolla Village Dr	4 Lane Major Arterial	40,000	24,300	0.608	C	23,700	0.593	C		
La Jolla Village Dr to VA Medical Center	4 Lane Major Arterial	40,000	33,400	0.835	D	33,500	0.838	D		

Notes:

Bold values indicate roadway segments operating at LOS E or F.

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(b) Average Daily Traffic (ADT) volumes for the roadway segments were determined from SANDAG Modeling

(c) The v/c Ratio is calculated by dividing the ADT volume by each respective roadway segment's capacity.

ARTERIAL SEGMENT	Urban Street Class	Typical Free-Flow Speed	PEAK HOUR	Alt A Regents Bridge 6-lane Genesee			Alt B Regents Bridge 4-lane Genesee				Change to Network Impact
				TIME (S)	SPEED (a)	LOS (b)	TIME (S)	SPEED (a)	LOS (b)	Plan to Plan Impact?	
Genesee Ave											
Northbound: SR-52 EB Ramps to N. Torrey Pines Rd	I	50 mph	AM	1,081	14.88	**F**	1,205	13.35	**F**	**Yes**	Similar impacts for Alts A & B
			MID	779	20.60	**E**	782	20.53	**E**		
			PM	811	19.74	**E**	857	18.69	**E**	**Yes**	
Southbound: N. Torrey Pines Rd to SR-52 EB Ramps	I	50 mph	AM	876	20.26	**E**	882	20.13	**E**		Worse Impact for Alt B (PM Peak)
			MID	759	23.33	D	749	23.64	D		
			PM	999	17.69	**E**	1,227	14.41	**F**	**Yes**	
La Jolla Village Dr / Miramar Rd											
Eastbound: Torrey Pines Rd to Camino Sante Fe	I	50 mph	AM	819	18.41	**E**	822	18.34	**E**		Similar impacts for Alts A & B
			MID (c)	482	16.57	**E**	484	16.52	**E**		
			PM	1,737	8.68	**F**	1,758	8.58	**F**		
Westbound: Camino Sante Fe to Torrey Pines Rd	I	50 mph	AM	1,568	9.62	**F**	1,596	9.45	**F**		Less severe impact for Alt B (MID Peak)
			MID (c)	537	14.15	**F**	1,184	16.78	**E**		
			PM	950	15.88	**F**	948	15.91	**F**		
Nobel Dr											
Eastbound: Villa La Jolla Dr to Miramar Rd	II	40 mph	AM	651	16.10	**E**	647	16.18	**E**		Similar impacts for Alts A & B
			MID	637	16.49	**E**	631	16.66	**E**		
			PM	978	10.79	**F**	990	10.66	**F**		
Westbound: Miramar Rd toLa Jolla Village Sq	II	40 mph	AM	590	16.91	**E**	591	16.87	**E**		Similar impacts for Alts A & B
			MID	627	15.95	**E**	627	15.97	**E**		
			PM	824	12.15	**F**	847	11.82	**F**		
Regents Rd											
Northbound: Luna Ave to Genesee Ave	II	40 mph	AM	877	15.35	**E**	898	14.95	**E**		Similar impacts for Alts A & B
			MID	638	21.01	D	641	20.89	D		
			PM	795	16.88	**E**	797	16.89	**E**		
Southbound: Genesee Ave to Luna Ave	II	40 mph	AM	654	20.59	D	636	21.11	D		Similar impacts for Alts A & B
			MID	592	22.62	C	593	22.60	C		
			PM	952	14.11	**E**	1,028	13.10	**E**	**Yes**	

Notes: (a) Speed is calculated as the roadway segment distance divided by the travel time in miles per hour (mph).

(b) The arterial LOS is based on average through-vehicle travel speed for the segment or for the entire street under consideration and is influenced both by the number of signals per mile and by the intersection control delay.

(c) Midday Peak La Jolla Village Dr arterial segment from Torrey Pines Rd to I-805 Southbound Ramps

ARTERIAL SEGMENT	Urban Street Class	Typical Free-Flow Speed	PEAK HOUR	Alt A Regents Bridge 6-lane Genesee			Alt C No Bridge 6-lane Genesee			Plan to Plan Impact?	Change to Network Impact
				TIME (S)	SPEED (a)	LOS (b)	TIME (S)	SPEED (a)	LOS (b)		
Genesee Ave											
Northbound: SR-52 EB Ramps to N. Torrey Pines Rd	I	50 mph	AM	1,081	14.88	**F**	1,265	12.72	**F**	**Yes**	Similar impacts for Alts A & C
			MID	779	20.60	**E**	797	20.14	**E**		
			PM	811	19.74	**E**	807	19.84	**E**		
Southbound: N. Torrey Pines Rd to SR-52 EB Ramps	I	50 mph	AM	876	20.26	**E**	888	19.99	**E**		Worse Impact for Alt C (PM Peak)
			MID	759	23.33	D	768	23.06	D		
			PM	999	17.69	**E**	1,409	12.55	**F**	**Yes**	
La Jolla Village Dr / Miramar Rd											
Eastbound: Torrey Pines Rd to Camino Sante Fe	I	50 mph	AM	819	18.41	**E**	865	17.45	**E**		Similar impacts for Alts A & C
			MID (c)	482	16.57	**E**	483	16.54	**E**		
			PM	1,737	8.68	**F**	1,732	8.71	**F**		
Westbound: Camino Sante Fe to Torrey Pines Rd	I	50 mph	AM	1,568	9.62	**F**	1,574	9.58	**F**		Less severe impact for Alt C (PM Peak)
			MID (c)	537	14.15	**F**	536	13.36	**F**		
			PM	950	15.88	**F**	909	16.59	**E**		
Nobel Dr											
Eastbound: Villa La Jolla Dr to Miramar Rd	II	40 mph	AM	651	16.10	**E**	657	15.95	**E**		Similar impacts for Alts A & C
			MID	637	16.49	**E**	636	16.53	**E**		
			PM	978	10.79	**F**	1,005	10.49	**F**		
Westbound: Miramar Rd to Villa La Jolla Dr	II	40 mph	AM	590	16.91	**E**	585	17.03	D		Removes impact for Alt C (AM Peak)
			MID	627	15.95	**E**	617	16.23	**E**		
			PM	824	12.15	**F**	804	12.45	**F**		

Notes: (a) Speed is calculated as the roadway segment distance divided by the travel time in miles per hour (mph).

(b) The arterial LOS is based on average through-vehicle travel speed for the segment or for the entire street under consideration and is influenced both by the number of signals per mile and by the intersection control delay.

(c) Midday Peak La Jolla Village Dr arterial segment from Torrey Pines Rd to I-805 Southbound Ramps

ARTERIAL SEGMENT	Urban Street Class	Typical Free-Flow Speed	PEAK HOUR	Alt A Regents Bridge 6-lane Genesee			Alt D No Bridge 4-lane Genesee				Change to Network Impact
				TIME (S)	SPEED (a)	LOS (b)	TIME (S)	SPEED (a)	LOS (b)	Plan to Plan Impact?	
Genesee Ave											
Northbound: SR-52 EB Ramps to N. Torrey Pines Rd	I	50 mph	AM	1,081	14.88	**F**	1,789	8.99	**F**	**Yes**	Similar impacts for Alts A & D
			MID	779	20.60	**E**	856	18.77	**E**	**Yes**	
			PM	811	19.74	**E**	874	18.34	**E**	**Yes**	
Southbound: N. Torrey Pines Rd to SR-52 EB Ramps	I	50 mph	AM	876	20.26	**E**	894	19.85	**E**		Worse Impact for Alt D (PM Peak)
			MID	759	23.33	D	777	22.79	D		
			PM	999	17.69	**E**	1,660	10.65	**F**	**Yes**	
La Jolla Village Dr / Miramar Rd											
Eastbound: Torrey Pines Rd to Camino Sante Fe	I	50 mph	AM	819	18.41	**E**	818	18.43	**E**		Similar impacts for Alts A & D
			MID (c)	482	16.57	**E**	484	16.52	**E**		
			PM	1,737	8.68	**F**	1,732	8.71	**F**		
Westbound: Camino Sante Fe to Torrey Pines Rd	I	50 mph	AM	1,568	9.62	**F**	1,562	9.66	**F**		Less severe impact for Alt D (PM Peak)
			MID (c)	537	14.15	**F**	535	13.40	**F**		
			PM	950	15.88	**F**	909	16.59	**E**		
Nobel Dr											
Eastbound: Villa La Jolla Dr to Miramar Rd	II	40 mph	AM	651	16.10	**E**	659	15.91	**E**		Similar impacts for Alts A & D
			MID	637	16.49	**E**	632	16.64	**E**		
			PM	978	10.79	**F**	1,024	10.30	**F**		
Westbound: Miramar Rd to Villa La Jolla Dr	II	40 mph	AM	590	16.91	**E**	589	16.93	**E**		Similar impacts for Alts A & D
			MID	627	15.95	**E**	628	15.95	**E**		
			PM	824	12.15	**F**	817	12.25	**F**		

Notes: (a) Speed is calculated as the roadway segment distance divided by the travel time in miles per hour (mph).

(b) The arterial LOS is based on average through-vehicle travel speed for the segment or for the entire street under consideration and is influenced both by the number of signals per mile and by the intersection control delay.

(c) Midday Peak La Jolla Village Dr arterial segment from Torrey Pines Rd to I-805 Southbound Ramps

	Freeway Segment	Dir	Lanes (One Direction)	Alt A Regents Bridge 6-Lane Genesee				Alt B Regents Bridge 4-Lane Genesee				
				Speed (mph)		LOS (a)		Speed (mph)		LOS (a)		
				AM	PM	AM	PM	AM	PM	AM	PM	Impact? (b)
I-5	SR-52 to Gilman Dr	NB	4	30.4	59.9	E	D	29.6	59.6	E	D	--
		SB	4	66.2	27.6	C	E	66.0	26.7	C	E	--
	Gilman Dr to Nobel Dr	NB	4	64.4	57.1	D	D	64.2	56.8	D	D	--
		SB	4	56.1	62.8	D	D	55.8	62.6	D	D	--
	Nobel Dr to La Jolla Village Dr	NB	4	67.1	62.2	C	D	67.0	62.0	C	D	--
		SB	4	61.5	66.1	D	C	61.3	66.0	D	C	--
	La Jolla Village Dr to Genesee Ave	NB	4	64.2	56.8	D	D	64.2	56.8	D	D	--
		SB	5	65.2	68.2	D	C	65.2	68.2	D	C	--
	La Jolla Village Dr to Genesee Ave HOV	NB	1	69.5	69.5	B	B	69.5	69.5	B	B	--
		SB	1	69.5	69.5	B	B	69.5	69.5	B	B	--
I-805	SR-52 to Governor Dr	NB	4	20.1	55.4	F	D	19.2	55.1	F	D	Yes
		SB	4	70.0	5.0	B	F	70.0	5.0	B	F	--
	SR-52 to Governor Dr HOV	NB	2	69.8	69.5	C	B	69.8	69.5	C	B	--
		SB	2	69.5	68.7	B	C	69.5	68.7	B	C	--
	Governor Dr to Nobel Dr	NB	4	7.4	59.9	F	D	6.9	59.8	F	D	--
		SB	4	69.4	22.2	C	F	69.4	21.7	C	F	--
	Governor Dr to Nobel Dr HOV	NB	2	69.2	69.5	C	B	69.1	69.5	C	B	--
		SB	2	69.5	69.7	B	C	69.5	69.7	B	C	--
	Nobel Dr to La Jolla Village Dr	NB	4	32.1	65.5	E	C	32.2	65.5	E	C	--
		SB	4	70.0	41.8	B	E	70.0	41.9	B	E	--
	Nobel Dr to La Jolla Village Dr HOV	NB	2	69.9	69.5	C	B	69.8	69.5	C	B	--
		SB	2	69.5	70.0	B	B	69.5	70.0	B	B	--
	La Jolla Village Dr to Mira Mesa Blvd	NB	4	35.1	66.1	E	C	35.1	66.1	E	C	--
		SB	4	70.0	44.2	B	E	70.0	44.2	B	E	--
	La Jolla Village Dr to Mira Mesa Blvd HOV	NB	2	69.9	69.5	C	B	69.8	69.5	C	B	--
		SB	2	69.5	70.0	B	B	69.5	70.0	B	B	--
SR-52	I-5 to Regents Rd	EB	2	65.0	16.7	D	F	64.9	16.5	D	F	--
		WB	2	39.9	60.6	E	D	39.7	60.6	E	D	--
	Regents Rd to Genesee Ave	EB	2	53.3	21.8	D	F	53.0	21.1	D	F	Yes
		WB	2	44.8	58.2	E	D	44.4	57.9	E	D	--
	Genesee Ave to I-805	EB	2	45.2	5.0	E	F	46.2	5.8	E	F	--
		WB	2	33.9	51.9	E	D	35.2	52.6	E	D	--

Notes:

(a) The LOS for the respective freeway segments were based on the methodologies contained in Chapter 23 of the *2000 Highway Capacity Manual.*

(b) A significant impact resulted in a decrease of speeds of more than 1.0 mph at LOS E and 0.5 mph and LOS F.

	Freeway Segment	Dir	Lanes (One Direction)	Alt A Regents Bridge 6-Lane Genesee				Alt C No Bridge 6-Lane Genesee				
				Speed (mph)		LOS (a)		Speed (mph)		LOS (a)		
				AM	PM	AM	PM	AM	PM	AM	PM	Impact? (b)
I-5	SR-52 to Gilman Dr	NB	4	30.4	59.9	E	D	25.7	58.2	E	D	Yes
		SB	4	66.2	27.6	C	E	65.3	22.6	D	F	Yes
	Gilman Dr to Nobel Dr	NB	4	64.4	57.1	D	D	63.6	55.7	D	D	--
		SB	4	56.1	62.8	D	D	54.6	61.9	D	D	--
	Nobel Dr to La Jolla Village Dr	NB	4	67.1	62.2	C	D	66.8	61.5	C	D	--
		SB	4	61.5	66.1	D	C	60.7	65.6	D	C	--
	La Jolla Village Dr to Genesee Ave	NB	4	64.2	56.8	D	D	64.3	57.0	D	D	--
		SB	5	65.2	68.2	D	C	65.3	68.2	D	C	--
	La Jolla Village Dr to Genesee Ave HOV	NB	1	69.5	69.5	B	B	69.5	69.5	B	B	--
		SB	1	69.5	69.5	B	B	69.5	69.5	B	B	--
I-805	SR-52 to Governor Dr	NB	4	20.1	55.4	F	D	18.2	54.7	F	D	Yes
		SB	4	70.0	5.0	B	F	70.0	5.0	B	F	--
	SR-52 to Governor Dr HOV	NB	2	69.8	69.5	C	B	69.7	69.5	C	B	--
		SB	2	69.5	68.7	B	C	69.5	68.5	B	C	--
	Governor Dr to Nobel Dr	NB	4	7.4	59.9	F	D	5.0	59.2	F	D	Yes
		SB	4	69.4	22.2	C	F	69.3	20.1	C	F	Yes
	Governor Dr to Nobel Dr HOV	NB	2	69.2	69.5	C	B	69.0	69.5	C	B	--
		SB	2	69.5	69.7	B	C	69.5	69.6	B	C	--
	Nobel Dr to La Jolla Village Dr	NB	4	32.1	65.5	E	C	30.7	65.2	E	D	Yes
		SB	4	70.0	41.8	B	E	70.0	40.7	B	E	Yes
	Nobel Dr to La Jolla Village Dr HOV	NB	2	69.9	69.5	C	B	69.8	69.5	C	B	--
		SB	2	69.5	70.0	B	B	69.5	70.0	B	B	--
	La Jolla Village Dr to Mira Mesa Blvd	NB	4	35.1	66.1	E	C	34.6	66.0	E	C	--
		SB	4	70.0	44.2	B	E	70.0	43.8	B	E	--
	La Jolla Village Dr to Mira Mesa Blvd HOV	NB	2	69.9	69.5	C	B	69.8	69.5	C	B	--
		SB	2	69.5	70.0	B	B	69.5	70.0	B	B	--
SR-52	I-5 to Regents Rd	EB	2	65.0	16.7	D	F	64.1	11.6	D	F	Yes
		WB	2	39.9	60.6	E	D	36.6	59.3	E	D	Yes
	Regents Rd to Genesee Ave	EB	2	53.3	21.8	D	F	54.1	23.8	D	F	--
		WB	2	44.8	58.2	E	D	46.0	58.8	E	D	--
	Genesee Ave to I-805	EB	2	45.2	5.0	E	F	46.1	5.6	E	F	--
		WB	2	33.9	51.9	E	D	35.0	52.5	E	D	--

Notes:

(a) The LOS for the respective freeway segments were based on the methodologies contained in Chapter 23 of the *2000 Highway Capacity Manual.*

(b) A significant impact resulted in a decrease of speeds of more than 1.0 mph at LOS E and 0.5 mph and LOS F.

	Freeway Segment	Dir	Lanes (One Direction)	Alt A Regents Bridge 6-Lane Genesee				Alt D No Bridge 4-Lane Genesee				
				Speed (mph)		LOS (a)		Speed (mph)		LOS (a)		
				AM	PM	AM	PM	AM	PM	AM	PM	Impact? (b)
I-5	SR-52 to Gilman Dr	NB	4	30.4	59.9	E	D	25.0	57.9	F	D	Yes
		SB	4	66.2	27.6	C	E	65.1	21.9	D	F	Yes
	Gilman Dr to Nobel Dr	NB	4	64.4	57.1	D	D	63.4	55.3	D	D	--
		SB	4	56.1	62.8	D	D	54.2	61.6	D	D	--
	Nobel Dr to La Jolla Village Dr	NB	4	67.1	62.2	C	D	66.8	61.5	C	D	--
		SB	4	61.5	66.1	D	C	60.8	65.7	D	C	--
	La Jolla Village Dr to Genesee Ave	NB	4	64.2	56.8	D	D	64.2	56.8	D	D	--
		SB	5	65.2	68.2	D	C	65.1	68.1	D	C	--
	La Jolla Village Dr to Genesee Ave HOV	NB	1	69.5	69.5	B	B	69.5	69.5	B	B	--
		SB	1	69.5	69.5	B	B	69.5	69.5	B	B	--
I-805	SR-52 to Governor Dr	NB	4	20.1	55.4	F	D	17.0	54.3	F	D	Yes
		SB	4	70.0	5.0	B	F	70.0	5.0	B	F	--
	SR-52 to Governor Dr HOV	NB	2	69.8	69.5	C	B	69.7	69.5	C	B	--
		SB	2	69.5	68.7	B	C	69.5	68.4	B	C	--
	Governor Dr to Nobel Dr	NB	4	7.4	59.9	F	D	5.0	59.0	F	D	Yes
		SB	4	69.4	22.2	C	F	69.3	19.3	C	F	Yes
	Governor Dr to Nobel Dr HOV	NB	2	69.2	69.5	C	B	68.9	69.5	C	B	--
		SB	2	69.5	69.7	B	C	69.5	69.6	B	C	--
	Nobel Dr to La Jolla Village Dr	NB	4	32.1	65.5	E	C	30.5	65.2	E	D	Yes
		SB	4	70.0	41.8	B	E	70.0	40.5	B	E	Yes
	Nobel Dr to La Jolla Village Dr HOV	NB	2	69.9	69.5	C	B	69.8	69.5	C	B	--
		SB	2	69.5	70.0	B	B	69.5	70.0	B	B	--
	La Jolla Village Dr to Mira Mesa Blvd	NB	4	35.1	66.1	E	C	35.0	66.1	E	C	--
		SB	4	70.0	44.2	B	E	70.0	44.1	B	E	--
	La Jolla Village Dr to Mira Mesa Blvd HOV	NB	2	69.9	69.5	C	B	69.8	69.5	C	B	--
		SB	2	69.5	70.0	B	B	69.5	70.0	B	B	--
SR-52	I-5 to Regents Rd	EB	2	65.0	16.7	D	F	63.9	10.8	D	F	Yes
		WB	2	39.9	60.6	E	D	36.1	59.1	E	D	Yes
	Regents Rd to Genesee Ave	EB	2	53.3	21.8	D	F	53.7	22.9	D	F	--
		WB	2	44.8	58.2	E	D	45.4	58.5	E	D	--
	Genesee Ave to I-805	EB	2	45.2	5.0	E	F	47.3	8.2	E	F	--
		WB	2	33.9	51.9	E	D	36.6	53.5	E	D	--

Notes:

(a) The LOS for the respective freeway segments were based on the methodologies contained in Chapter 23 of the *2000 Highway Capacity Manual.*

(b) A significant impact resulted in a decrease of speeds of more than 1.0 mph at LOS E and 0.5 mph and LOS F.

On Ramp	Peak Hour	Alt A Regents Bridge 6-lane Genesee					Alt B Regents Bridge 4-lane Genesee					
		Total General Purpose Peak Hour Volume (veh/hr/ln)	Ramp Meter Rate (veh/hr/ln) (a)	Excess Demand (veh/hr)	Delay (min)	Queue Length (ft/ln)	Total General Purpose Peak Hour Volume (veh/hr/ln)	Ramp Meter Rate (veh/hr/ln) (a)	Excess Demand (veh/hr)	Delay (min)	Queue Length (ft/ln)	Plan-to-Plan Impact? (b)
I-5 SB & Gilman Dr	AM	328	n/a	--	--	--	329	n/a	--	--	--	**Yes**
	PM	756	478	556	70	6950	760	478	564	71	7050	
I-5 SB & Nobel Dr	AM	226	n/a	--	--	--	227	n/a	--	--	--	--
	PM	676	528	296	34	3700	679	528	302	34	3775	
I-5 NB & La Jolla Village Dr (WB to NB)	AM	723	n/a	--	--	--	712	n/a	--	--	--	--
	PM	807	555	252	27	6300	795	555	240	26	6000	
I-5 NB & La Jolla Village Dr (EB to NB)	AM	766	n/a	--	--	--	770	n/a	--	--	--	--
	PM	1135	643	492	46	12300	1141	643	498	46	12450	
I-5 SB & La Jolla Village Dr (WB to SB)	AM	255	n/a	--	--	--	263	n/a	--	--	--	**Yes**
	PM	889	643	246	23	6150	913	643	270	25	6750	
I-5 SB & La Jolla Village Dr (EB to SB)	AM	291	n/a	--	--	--	295	n/a	--	--	--	**Yes**
	PM	1079	343	736	129	18400	1089	343	746	130	18650	
I-5 NB & Genesee Ave	AM	251	n/a	--	--	--	250	n/a	--	--	--	--
	PM	791	500	582	70	7275	791	500	582	70	7275	
I-5 SB & Genesee Ave	AM	116	n/a	--	--	--	117	n/a	--	--	--	--
	PM	437	500	0	0	0	439	500	0	0	0	
I-805 NB & La Jolla Village Dr (WB to NB)	AM	392	804	0	0	0	391	804	0	0	0	--
	PM	363	n/a	--	--	--	363	n/a	--	--	--	
I-805 NB & La Jolla Village Dr (EB to NB)	AM	637	746	0	0	0	630	746	0	0	0	--
	PM	1090	n/a	--	--	--	1079	n/a	--	--	--	
I-805 SB & La Jolla Village Dr (WB to SB)	AM	402	n/a	--	--	--	401	n/a	--	--	--	--
	PM	526	704	0	0	0	526	704	0	0	0	
I-805 SB & La Jolla Village Dr (EB to SB)	AM	209	n/a	--	--	--	209	n/a	--	--	--	--
	PM	491	593	0	0	0	492	593	0	0	0	
I-805 SB & Nobel Dr	AM	278	n/a	--	--	--	277	n/a	--	--	--	--
	PM	273	229	88	23	1100	272	229	86	23	1075	
I-805 NB Governor Dr	AM	303	385	0	0	0	310	385	0	0	0	--
	PM	260	n/a	--	--	--	266	n/a	--	--	--	
I-805 SB & Governor Dr	AM	219	n/a	--	--	--	220	n/a	--	--	--	--
	PM	459	768	0	0	0	464	768	0	0	0	

Notes:

(a) The ramp meter rate are based on the most restrictive rate obtained from Caltrans and assumed to be the same under the Future Year scenarios.

(b) A significant impact resulted in an increase in delay of more than 2 min with ramp delays less than 15 minutes or more than 1 min with ramp delays greater than 15 minutes.

On Ramp	Peak Hour	Alt A Regents Bridge 6-lane Genesee					Alt C No Bridge 6-lane Genesee					
		Total General Purpose Peak Hour Volume (veh/hr/ln)	Ramp Meter Rate (veh/hr/ln) (a)	Excess Demand (veh/hr)	Delay (min)	Queue Length (ft/ln)	Total General Purpose Peak Hour Volume (veh/hr/ln)	Ramp Meter Rate (veh/hr/ln) (a)	Excess Demand (veh/hr)	Delay (min)	Queue Length (ft/ln)	Plan-to-Plan Impact? (b)
I-5 SB & Gilman Dr	AM	328	n/a	--	--	--	361	n/a	--	--	--	**Yes**
	PM	756	478	556	70	6950	806	478	656	82	8200	
I-5 SB & Nobel Dr	AM	226	n/a	--	--	--	242	n/a	--	--	--	**Yes**
	PM	676	528	296	34	3700	721	528	386	44	4825	
I-5 NB & La Jolla Village Dr (WB to NB)	AM	723	n/a	--	--	--	644	n/a	--	--	--	**Yes**
	PM	807	555	252	27	6300	1191	555	636	69	15900	
I-5 NB & La Jolla Village Dr (EB to NB)	AM	766	n/a	--	--	--	788	n/a	--	--	--	**Yes**
	PM	1135	643	492	46	12300	1167	643	524	49	13100	
I-5 SB & La Jolla Village Dr (WB to SB)	AM	255	n/a	--	--	--	278	n/a	--	--	--	**Yes**
	PM	889	643	246	23	6150	953	643	310	29	7750	
I-5 SB & La Jolla Village Dr (EB to SB)	AM	291	n/a	--	--	--	310	n/a	--	--	--	**Yes**
	PM	1079	343	736	129	18400	1137	343	794	139	19850	
I-5 NB & Genesee Ave	AM	251	n/a	--	--	--	251	n/a	--	--	--	--
	PM	791	500	582	70	7275	789	500	578	69	7225	
I-5 SB & Genesee Ave	AM	116	n/a	--	--	--	118	n/a	--	--	--	--
	PM	437	500	0	0	0	444	500	0	0	0	
I-805 NB & La Jolla Village Dr (WB to NB)	AM	392	804	0	0	0	392	804	0	0	0	--
	PM	363	n/a	--	--	--	365	n/a	--	--	--	
I-805 NB & La Jolla Village Dr (EB to NB)	AM	637	746	0	0	0	661	746	0	0	0	--
	PM	1090	n/a	--	--	--	1131	n/a	--	--	--	
I-805 SB & La Jolla Village Dr (WB to SB)	AM	402	n/a	--	--	--	402	n/a	--	--	--	--
	PM	526	704	0	0	0	526	704	0	0	0	
I-805 SB & La Jolla Village Dr (EB to SB)	AM	209	n/a	--	--	--	221	n/a	--	--	--	--
	PM	491	593	0	0	0	518	593	0	0	0	
I-805 SB & Nobel Dr	AM	278	n/a	--	--	--	304	n/a	--	--	--	**Yes**
	PM	273	229	88	23	1100	299	229	140	37	1750	
I-805 NB Governor Dr	AM	303	385	0	0	0	310	385	0	0	0	--
	PM	260	n/a	--	--	--	264	n/a	--	--	--	
I-805 SB & Governor Dr	AM	219	n/a	--	--	--	222	n/a	--	--	--	--
	PM	459	768	0	0	0	464	768	0	0	0	

Notes:

(a) The ramp meter rate are based on the most restrictive rate obtained from Caltrans and assumed to be the same under the Future Year scenarios.

(b) A significant impact resulted in an increase in delay of more than 2 min with ramp delays less than 15 minutes or more than 1 min with ramp delays greater than 15 minutes.

On Ramp	Peak Hour	Alt A Regents Bridge 6-lane Genesee					Alt D No Bridge 4-lane Genesee					
		Total General Purpose Peak Hour Volume (veh/hr/ln)	Ramp Meter Rate (veh/hr/ln) (a)	Excess Demand (veh/hr)	Delay (min)	Queue Length (ft/ln)	Total General Purpose Peak Hour Volume (veh/hr/ln)	Ramp Meter Rate (veh/hr/ln) (a)	Excess Demand (veh/hr)	Delay (min)	Queue Length (ft/ln)	Plan-to-Plan Impact? (b)
I-5 SB & Gilman Dr	AM	328	n/a	--	--	--	363	n/a	--	--	--	**Yes**
	PM	756	478	556	70	6950	806	478	656	82	8200	
I-5 SB & Nobel Dr	AM	226	n/a	--	--	--	251	n/a	--	--	--	**Yes**
	PM	676	528	296	34	3700	746	528	436	50	5450	
I-5 NB & La Jolla Village Dr (WB to NB)	AM	723	n/a	--	--	--	669	n/a	--	--	--	--
	PM	807	555	252	27	6300	747	555	192	21	4800	
I-5 NB & La Jolla Village Dr (EB to NB)	AM	766	n/a	--	--	--	782	n/a	--	--	--	**Yes**
	PM	1135	643	492	46	12300	1160	643	517	48	12925	
I-5 SB & La Jolla Village Dr (WB to SB)	AM	255	n/a	--	--	--	272	n/a	--	--	--	**Yes**
	PM	889	643	246	23	6150	936	643	293	27	7325	
I-5 SB & La Jolla Village Dr (EB to SB)	AM	291	n/a	--	--	--	318	n/a	--	--	--	**Yes**
	PM	1079	343	736	129	18400	1166	343	823	144	20575	
I-5 NB & Genesee Ave	AM	251	n/a	--	--	--	250	n/a	--	--	--	--
	PM	791	500	582	70	7275	787	500	574	69	7175	
I-5 SB & Genesee Ave	AM	116	n/a	--	--	--	120	n/a	--	--	--	--
	PM	437	500	0	0	0	449	500	0	0	0	
I-805 NB & La Jolla Village Dr (WB to NB)	AM	392	804	0	0	0	394	804	0	0	0	--
	PM	363	n/a	--	--	--	364	n/a	--	--	--	
I-805 NB & La Jolla Village Dr (EB to NB)	AM	637	746	0	0	0	681	746	0	0	0	--
	PM	1090	n/a	--	--	--	1162	n/a	--	--	--	
I-805 SB & La Jolla Village Dr (WB to SB)	AM	402	n/a	--	--	--	408	n/a	--	--	--	--
	PM	526	704	0	0	0	535	704	0	0	0	
I-805 SB & La Jolla Village Dr (EB to SB)	AM	209	n/a	--	--	--	218	n/a	--	--	--	--
	PM	491	593	0	0	0	511	593	0	0	0	
I-805 SB & Nobel Dr	AM	278	n/a	--	--	--	299	n/a	--	--	--	**Yes**
	PM	273	229	88	23	1100	294	229	130	34	1625	
I-805 NB Governor Dr	AM	303	385	0	0	0	320	385	0	0	0	--
	PM	260	n/a	--	--	--	274	n/a	--	--	--	
I-805 SB & Governor Dr	AM	219	n/a	--	--	--	255	n/a	--	--	--	--
	PM	459	768	0	0	0	534	768	0	0	0	

Notes:

(a) The ramp meter rate are based on the most restrictive rate obtained from Caltrans and assumed to be the same under the Future Year scenarios.

(b) A significant impact resulted in an increase in delay of more than 2 min with ramp delays less than 15 minutes or more than 1 min with ramp delays greater than 15 minutes.