TRAFFIC IMPACT ANALYSIS

For

9455 TOWNE CENTRE DRIVE

Prepared for

KILROY REALTY

Final Submittal: December 19, 2016

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1. EXECUTIVE SUMMARY

This study was commissioned by Kilroy Realty, to determine potential transportation impacts and appropriate mitigation measures for the proposed 9455 Towne Centre Drive project (proposed project), which is Lot 9 of the Eastgate Technology Park (PID #90-0892). The proposed project is located on the south side of Eastgate Mall bound by Towne Centre Dr. and Judicial Dr. in the North University City Community of the City of San Diego. The proposed project plans to demolish the existing 47,091 square foot (SF) building that has been vacant since April of 2009 and construct a new 150,000 SF building. It is anticipated that the use of the building will be Scientific Research. However, Regional and Corporate Headquarters is allowed by zone. Although, Scientific Research use would have a lower trip generation (8 ADT per 1,000 sq. ft) than Regional and Corporate Headquarters use (10 ADT per 1,000 sq. ft.), this study evaluates the 150,000 SF building as a Regional and Corporate Headquarters use in order to provide the most conservative analysis.

The proposed 150,000 SF Regional and Corporate Headquarters facility would generate 1,500 average daily trips (ADT) with 225 (203 inbound / 23 outbound) trips in the AM peak hour and 225 trips (23 inbound / 203 outbound) in the PM peak hour. No trip credit has been taken for the existing building since it's been vacant for more than two years. For evaluation purposes, all trips have been assumed as "new" trips in order to provide a conservative analysis. A Community Plan Amendment is necessary to increase the density allocation of the site, located in Subarea 12 of the University City Community Plan.

In order to determine a scope of work for the Transportation Impact Study, staff of Urban Systems Associates, Inc. (USAI) completed a preliminary analysis and had discussions with City Transportation staff. Based on the evaluation, study area intersections and street segments were identified for the

analysis. The project's distribution was based on a San Diego Association of Governments (SANDAG) Series 12 Year 2035 travel forecast. New count data was obtained on June 4, 2015 which included both machine and manual traffic counts of the existing daily and peak hour traffic flow data for the study intersections and street segments.

The traffic generation of the Project was estimated based on trip generation rates in the City of San Diego's May 2003 Trip Generation Manual. The addition of project traffic was evaluated in Existing, Near Term (opening day Year 2017), and Horizon Year 2035 scenarios, and an impact analysis was completed in which six scenarios were analyzed. The following scenarios were included in the report: Existing, Existing With Project, Near Term Without Project, Near Term With Project, Horizon Year 2035 Without Project, and Horizon Year 2035 With Project. The term "Near Term" is meant to discuss a condition occurring at the project's estimated opening day (Year 2017) where traffic from other known development projects in the area is added onto existing traffic levels. This reflects the best information available for determining what traffic would be in the next several years. The term "Horizon Year 2035" is meant to discuss traffic conditions to the Year 2035. The analysis year used for Series 12 traffic modeling purposes is the Year 2035. A SANDAG Series 12 Year 2035 Select Zone analysis for TAZ 4683 dated November 3, 2015 was used to estimate the distribution of project traffic and project horizon year (Year 2035 With Project) traffic volumes.

Study Results:

Based upon this transportation impact analysis, it was determined that development of the proposed project would have the following impacts:

Impacts:

1. **Street Segments** – The proposed project is expected to have no direct project impacts to street segments in the Existing With Project scenario as shown in **Table 1-1**. The proposed project has no direct project impacts in the Near Term With Project (Opening Day 2017) scenario as shown in **Table 1-2**. The proposed project is expected to have no significant cumulative project impacts in the Horizon Year 2035 scenario as shown in **Table 1-3**.

2. **Intersections** – As shown in **Table 1-4**, the project is expected to have no direct project impacts to intersections in the Existing With Project comparison table. As shown in **Table 1-5**, the project is expected to have one (1) direct project impact at the intersection of Towne Centre Dr. / La Jolla Village Dr. in both the AM and PM peak hour in the Near Term With Project (Opening Day 2017) comparison table. The proposed project is expected to have one (1) significant cumulative impact in Horizon Year 2035 at the intersection of Towne Centre Drive / La Jolla Village Drive in both AM and PM peak hours as shown in **Table 1-6**.

3. **Freeway Main lanes** – No freeway segments were analyzed in this study since the project contributed about 26 Regional and Corporate Headquarters project PM peak trips (less than 50 required to study) to the freeway main lanes.

4. **Freeway Ramp Meters** – Ramp meters were analyzed in this study since the project contributed approximately 26 Regional and Corporate Headquarters project peak trips to the I-805 Southbound On-Ramp at La Jolla Village Drive. As shown in **Table 1-7**, there are no significant direct or cumulative significant impacts as a result of the proposed project.

PROPOSED MITIGATION:

STREET SEGMENTS:

The analysis shows no direct or cumulative significant street segment impacts would occur as a result of the proposed project. Therefore, no mitigation has been identified on any of the studied street segments.

INTERSECTIONS:

The project would have a direct and cumulative significant impact at the intersection of Towne Centre Dr. at La Jolla Village Dr. in both the AM and PM peak hour. To mitigate the direct and cumulative impact at this intersection, the project would widen the southbound approach to the intersection and construct a dedicated southbound to westbound right turn lane. As shown on **Table 1-8**, delays and levels of service are provided for both without mitigation and with mitigation conditions.

A design for this improvement is shown in **Appendix K**.

FREEWAY RAMP METER:

The analysis shows no direct or cumulative significant freeway ramp meter impact would occur as a result of the proposed project. Therefore, no mitigation is required.

TABLE 1-1

Existing With and Without Project Street Segment Significance

Road	Segment	Cap.	Class.	Existing			Existing + Project			Δ V/C	Is this impact Significant?
				LOS	Volume	V/C	LOS	Volume	V/C		
Genesee Ave.	Eastgate Mall to Executive Dr.	50,000	6-M	B	24,078	0.48	B	24,198	0.48	0.002	***NO***
Eastgate Mall	Genesee Ave. to Easter Way	30,000	4-C	B	12,932	0.43	B	13,427	0.45	0.017	***NO***
	Easter Way to Towne Centre Dr.	30,000	4-C	B	11,682	0.39	B	12,207	0.41	0.018	***NO***
	Towne Centre Dr. to Judicial Dr.	30,000	4-C	B	11,257	0.38	B	11,602	0.39	0.012	***NO***
	East of Judicial Dr.	30,000	4-C	B	10,356	0.35	B	10,506	0.35	0.005	***NO***
Towne Centre Dr.	Eastgate Mall to Executive Dr.	40,000	4-M	A	14,630	0.37	B	15,148	0.38	0.013	***NO***
	Executive Dr. to La Jolla Village Dr.	40,000	4-M	B	19,049	0.48	B	19,379	0.48	0.008	***NO***
Judicial Dr.	Eastgate Mall to Executive Dr.	40,000	4-M	A	6,000	0.15	A	6,638	0.17	0.016	***NO***
	Executive Dr. to Golden Haven Dr.	40,000	4-M	A	6,920	0.17	A	7,115	0.18	0.005	***NO***

Legend:

LOS= Level of Service
V/C= Volume to Capacity Ratio
ΔV/C= Change in V/C ratio
6-M= Six lane Major Road
4-C= Four lane Collector Road
4-M= Four lane Major Road

TABLE 1-2

Near Term With and Without Project Street Segment Significance (Opening Day – Year 2017)

Road	Segment	Cap.	Class.	Near Term			Near Term + Project			ΔV/C	Is this impact Significant?
				LOS	Volume	V/C	LOS	Volume	V/C		
Genesee Ave.	Eastgate Mall to Executive Dr.	50,000	6-M	B	26,730	0.53	B	26,850	0.54	0.002	***NO***
Eastgate Mall	Genesee Ave. to Easter Way	30,000	4-C	C	16,122	0.54	C	16,617	0.55	0.017	***NO***
	Easter Way to Towne Centre Dr.	30,000	4-C	C	14,860	0.50	C	15,385	0.51	0.018	***NO***
	Towne Centre Dr. to Judicial Dr.	30,000	4-C	B	13,392	0.45	B	13,737	0.46	0.012	***NO***
	East of Judicial Dr.	30,000	4-C	B	11,537	0.38	B	11,687	0.39	0.005	***NO***
Towne Centre Dr.	Eastgate Mall to Executive Dr.	40,000	4-M	B	15,643	0.39	B	16,161	0.40	0.013	***NO***
	Executive Dr. to La Jolla Village Dr.	40,000	4-M	C	24,745	0.62	C	25,075	0.63	0.008	***NO***
Judicial Dr.	Eastgate Mall to Executive Dr.	40,000	4-M	A	8,572	0.21	A	9,210	0.23	0.016	***NO***
	Executive Dr. to Golden Haven Dr.	40,000	4-M	A	10,885	0.27	A	11,080	0.28	0.005	***NO***

Legend:

LOS= Level of Service
V/C= Volume to Capacity Ratio
ΔV/C= Change in V/C ratio
6-M= Six lane Major Road
4-C= Four lane Collector Road
4-M= Four lane Major Road

TABLE 1-3

Horizon Year 2035 and Horizon Year 2035 + Project Street Segment Significance

Road	Segment	Cap.	Class.	Year 2035			Year 2035 + Project			ΔV/C	Is this impact Significant?
				LOS	Volume	V/C	LOS	Volume	V/C		
Genesee Ave.	Eastgate Mall to Executive Dr.	50,000	6-M	C	33,880	0.68	C	34,000	0.68	0.002	***NO***
Eastgate Mall	Genesee Ave. to Easter Way	30,000	4-C	D	20,605	0.69	D	21,100	0.70	0.017	***NO***
	Easter Way to Towne Centre Dr.	30,000	4-C	D	20,375	0.68	D	20,900	0.70	0.018	***NO***
	Towne Centre Dr. to Judicial Dr.	30,000	4-C	C	14,355	0.48	C	14,700	0.49	0.012	***NO***
	East of Judicial Dr.	30,000	4-C	C	16,150	0.54	C	16,300	0.54	0.005	***NO***
Towne Centre Dr.	Eastgate Mall to Executive Dr.	40,000	4-M	B	17,083	0.43	B	17,600	0.44	0.013	***NO***
	Executive Dr. to La Jolla Village Dr.	40,000	4-M	C	26,670	0.67	C	27,000	0.68	0.008	***NO***
Judicial Dr.	Eastgate Mall to Executive Dr.	40,000	4-M	A	7,763	0.19	A	8,400	0.21	0.016	***NO***
	Executive Dr. to Golden Haven Dr.	40,000	4-M	A	13,605	0.34	A	13,800	0.35	0.005	***NO***

Legend:

LOS= Level of Service
V/C= Volume to Capacity Ratio
ΔV/C= Change in V/C ratio
6-M= Six lane Major Road
4-C= Four lane Collector Road
4-M= Four lane Major Road

TABLE 1-4

Existing Without and Existing With Project Intersection Comparison

#	Intersection	Existing				Existing + Project							
		AM Peak Hour		PM Peak Hour		AM Peak Hour		Δ	S ?	PM Peak Hour		Δ	S ?
		Delay	LOS	Delay	LOS	Delay	LOS			Delay	LOS		
1	Genesee Ave. / Eastgate Mall	37.1	D	36.6	D	37.4	D	0.3	No	37.4	D	0.8	No
2	Eastgate Mall / Easter Way	18.9	B	18.7	B	19.7	B	0.8	No	19.5	B	0.8	No
3	Eastgate Mall / Towne Centre Dr.	23.1	C	27.6	C	23.1	C	0.0	No	29.5	C	1.9	No
4	Eastgate Mall / Judicial Dr.	28.7	C	24.1	C	47.8	D	19.1	No	24.7	C	0.6	No
5	Genesee Ave. / Executive Dr.	21.5	C	26.5	C	21.5	C	0.0	No	26.5	C	0.0	No
6	Towne Centre Dr. / Executive Dr.	24.6	C	39.7	D	25.7	C	1.1	No	48.4	D	8.7	No
7	Judicial Dr. / Executive Dr.	23.2	C	25.7	C	24.9	C	1.7	No	25.9	C	0.2	No
8	Towne Centre Dr. / La Jolla Village Dr.	42.2	D	53.4	D	43.7	D	1.5	No	54.4	D	1.0	No

Notes:

LOS = Level of Service
Δ = Change
S = Significant

Signal timing sheets obtained from the City of San Diego

TABLE 1-5

Near Term Without and Near Term With Project Intersection Comparison (Opening Day – Year 2017)

#	Intersection	Near Term				Near Term With Project							
		AM Peak Hour		PM Peak Hour		AM Peak Hour		Δ	S ?	PM Peak Hour		Δ	S ?
		Delay	LOS	Delay	LOS	Delay	LOS			Delay	LOS		
1	Genesee Ave. / Eastgate Mall	43.1	D	42.0	D	43.5	D	0.4	No	42.3	D	0.3	No
2	Eastgate Mall / Easter Way	19.7	B	19.7	B	20.3	C	0.6	No	20.7	C	1.0	No
3	Eastgate Mall / Towne Centre Dr.	25.0	C	31.0	C	25.3	C	0.3	No	32.5	C	1.5	No
4	Eastgate Mall / Judicial Dr.	41.6	D	28.2	C	42.0	D	0.4	No	30.9	C	2.7	No
5	Genesee Ave. / Executive Dr.	23.8	C	27.5	C	24.7	C	0.9	No	28.6	C	1.1	No
6	Towne Centre Dr. / Executive Dr.	33.3	C	51.6	D	35.2	D	1.9	No	54.8	D	3.2	No
7	Judicial Dr. / Executive Dr.	38.8	D	49.7	D	41.2	D	2.4	No	54.7	D	5.0	No
8	Towne Centre Dr. / La Jolla Village Dr.	95.9	F	93.7	F	100.6	F	4.7	Yes	97.3	F	3.6	Yes

Notes:

LOS = Level of Service
Δ = Change
S = Significant

TABLE 1-6

Horizon Year 2035 Without and Horizon Year 2035 + Project Intersection Summary

#	Intersection	Year 2035				Year 2035 + Project							
		AM Peak Hour		PM Peak Hour		AM Peak Hour		Δ	S ?	PM Peak Hour		Δ	S ?
		Delay	LOS	Delay	LOS	Delay	LOS			Delay	LOS		
1	Genesee Ave. / Eastgate Mall	47.9	D	47.6	D	48.7	D	0.8	No	48.6	D	1.0	No
2	Eastgate Mall / Easter Way	39.0	D	39.1	D	45.1	D	6.1	No	40.5	D	1.4	No
3	Eastgate Mall / Towne Centre Dr.	31.1	C	53.9	D	31.1	C	0.0	No	54.3	D	0.4	No
4	Eastgate Mall / Judicial Dr.	45.4	D	53.6	D	53.7	D	8.3	No	54.6	D	1.0	No
5	Genesee Ave. / Executive Dr.	26.6	C	27.8	C	27.2	C	0.6	No	27.9	C	0.1	No
6	Towne Centre Dr. / Executive Dr.	47.5	D	68.3	E	48.0	D	0.5	No	69.7	E	1.4	No
7	Judicial Dr. / Executive Dr.	45.8	D	85.7	F	46.9	D	1.1	No	86.4	F	0.7	No
8	Towne Centre Dr. / La Jolla Village Dr.	122.7	F	111.3	F	126.6	F	3.9	Yes	116.3	F	5.0	Yes

Notes:

LOS = Level of Service
Δ = Change
S = Significant

TABLE 1-7

Existing Without and Existing With Project Ramp Meter Summary

Most Restrictive Meter Rate

Location			Meter Rate (Veh/Hr)	Existing			Existing With Project			Freeway LOS	Δ	S
				Demand per Lane	Delay (Min)	Queue (Ft)	Demand per Lane	Delay (Min)	Queue (Ft)			
Eastbound La Jolla Village Dr. to	AM	2 SOV		Ramp Meter Not Turned On						D		
I-805 SB On Ramp (SOV lane)	PM	2 SOV	593	383	0.00	0	394	0.00	0		0.00	NO
Eastbound La Jolla Village Dr. to	AM	1 HOV		Ramp Meter Not Turned On						D		
I-805 SB On Ramp (HOV Lane)	PM	1 HOV	593	85	0.00	0	88	0.00	0		0.00	NO

Near Term Without and Near Term With Project Ramp Meter Summary (Opening Day – Year 2017)

Most Restrictive Meter Rate

Location			Meter Rate (Veh/Hr)	Near Term Without Project			Near Term With Project			Freeway LOS	Δ	S
				Demand per Lane	Delay (Min)	Queue (Ft)	Demand per Lane	Delay (Min)	Queue (Ft)			
Eastbound La Jolla Village Dr. to	AM	2 SOV		Ramp Meter Not Turned On						D		
I-805 SB On Ramp (SOV lane)	PM	2 SOV	593	474	0.00	0	486	0.00	0		0.00	NO
Eastbound La Jolla Village Dr. to	AM	1 HOV		Ramp Meter Not Turned On						D		
I-805 SB On Ramp (HOV Lane)	PM	1 HOV	593	105	0.00	0	108	0.00	0		0.00	NO

Horizon Year 2035 Without and Year 2035 With Project Ramp Meter Summary

Most Restrictive Meter Rate

Location			Meter Rate (Veh/Hr)	Year 2035 Without Project			Year 2035 With Project			Freeway LOS	Δ	S
				Demand per Lane	Delay (Min)	Queue (Ft)	Demand per Lane	Delay (Min)	Queue (Ft)			
Eastbound La Jolla Village Dr. to	AM	2 SOV		Ramp Meter Not Turned On						C		
I-805 SB On Ramp (SOV lane)	PM	2 SOV	593	767	17.59	5,040	779	18.77	5,380		1.18	NO
Eastbound La Jolla Village Dr. to	AM	1 HOV		Ramp Meter Not Turned On						C		
I-805 SB On Ramp (HOV Lane)	PM	1 HOV	593	170	0.00	0	173	0.00	0		0.00	NO

Notes:
Δ = Change in Delay (minutes)
S = Significant, if change in delay is greater than 2 minutes and Freeway LOS is E **OR** change in delay is greater than 1 minute and Freeway LOS is F.

TABLE 1-8

Proposed Mitigation Summary

Study Intersections	Without Mitigation		Impact	Recommended Mitigation	With Mitigation	
	AM Delay-LOS	PM Delay-LOS			AM Delay-LOS	PM Delay-LOS
YEAR 2035 WITH PROJECT						
La Jolla Village Dr. / Towne Centre Dr.	126.6 F	116.3 F	Direct and Cumulative	Widen SB approach to construct an exclusive SB right turn lane.	96.6 F	98.2 F

Synchro Worksheets for the Year 2035 With Project scenario can be found in Appendix L of this report.

2. INTRODUCTION

Urban Systems Associates, Inc. (USAI) was retained by Kilroy Realty to determine the potential transportation impacts and appropriate mitigation measures for a proposed Community Plan Amendment and rezone to redevelop the property at 9455 Towne Centre Drive in the North University City Community Plan area. The project site is lot 9 of the Eastgate Technology Park (PID #90-0892). The proposed project is located on the south side of Eastgate Mall between Towne Centre Drive and Judicial Drive (See **Figure 2-1**). The proposed project plans to demolish the existing 47,091 square foot (SF) building that has been vacant since April of 2009 and construct a new 150,000 SF building. The intended occupant would be a Research & Development user. However, Regional and Corporate Headquarters would also be allowed by zone. Although, Research and Development uses would have a lower trip generation than Regional and Corporate Headquarters uses, this study evaluates the 150,000 SF building as a Regional and Corporate Headquarters use in order to provide a conservative analysis.

The proposed 150,000 SF Regional and Corporate Headquarters facility would generate 1,500 average daily trips (ADT) with 225 (203 inbound / 23 outbound) trips in the AM peak hour and 225 trips (23 inbound / 203 outbound) in the PM peak hour. No trip credit has been taken for the existing building since it's been vacant for more than two years.

Figure 2-2 shows the proposed project site plan. **Figure 2-3** shows the project vicinity map. **Figure 2-4** shows the existing site.

In order to determine the project's trip distribution, USAI used a San Diego Association of Governments (SANDAG) Series 12 Year 2035 Select Zone model run, see **Appendix A**. For study area purposes, USAI used City and regional guidelines that 50 trips in one direction during a peak hour be used as a

threshold for study intersections and street segments. Also, based on the City and regional guidelines, USAI used 50 peak directional trips as the basis for studying freeway segments and 20 peak hour trips for studying metered freeway on ramps. Based on the study area criteria, no freeway segments were included in this study. **Figure 2-5** shows the study area boundary and the intersection key selected for the study. USAI then gathered information or oversaw the machine and manual traffic counts of the existing ADT and peak hour traffic flow data for the study intersections and street segments. Counts were completed on June 4, 2015 when schools (UCSD and La Jolla Country Day school) were still in session. **Table 2-1** shows the study area street segments and intersections.

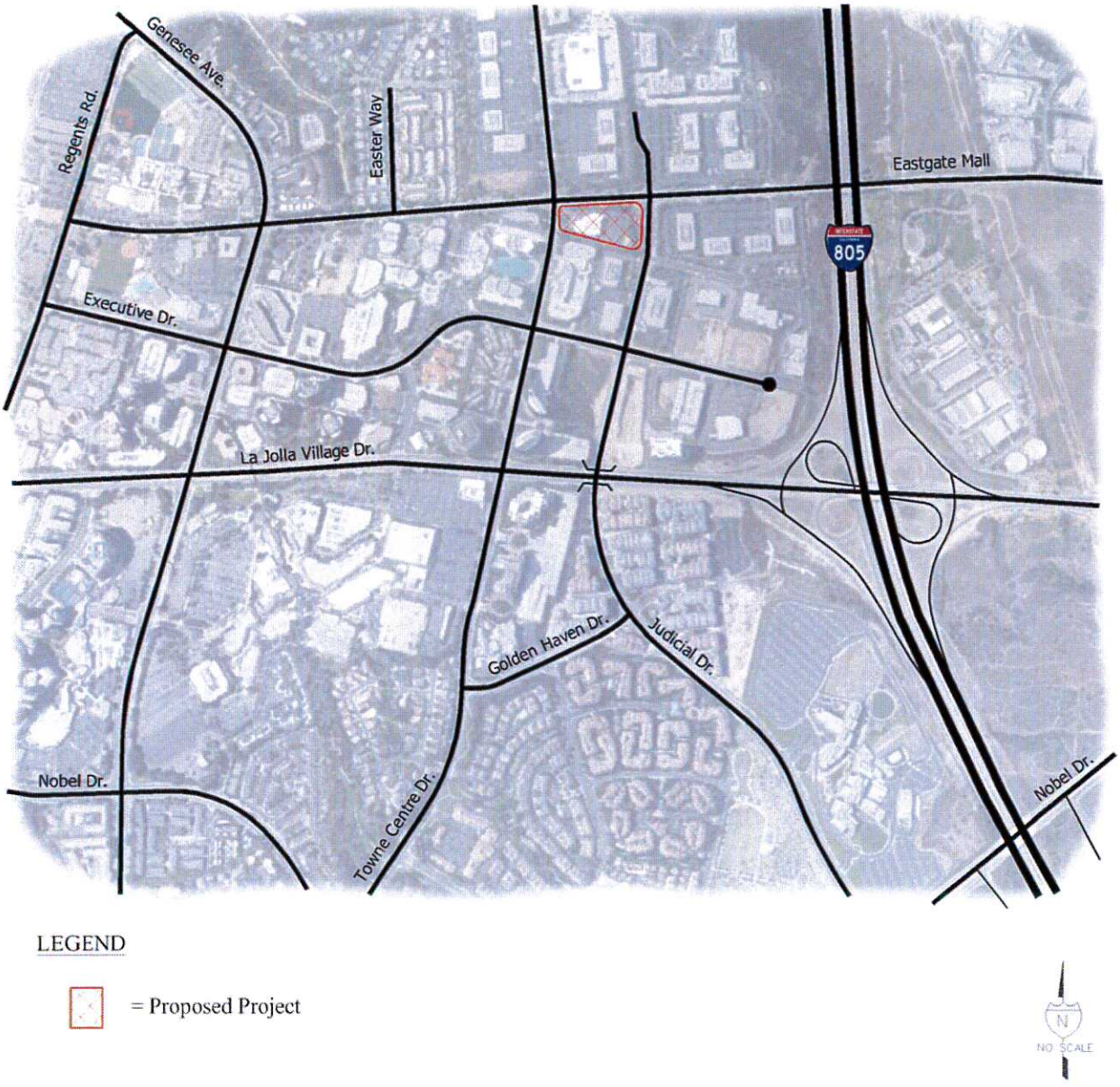


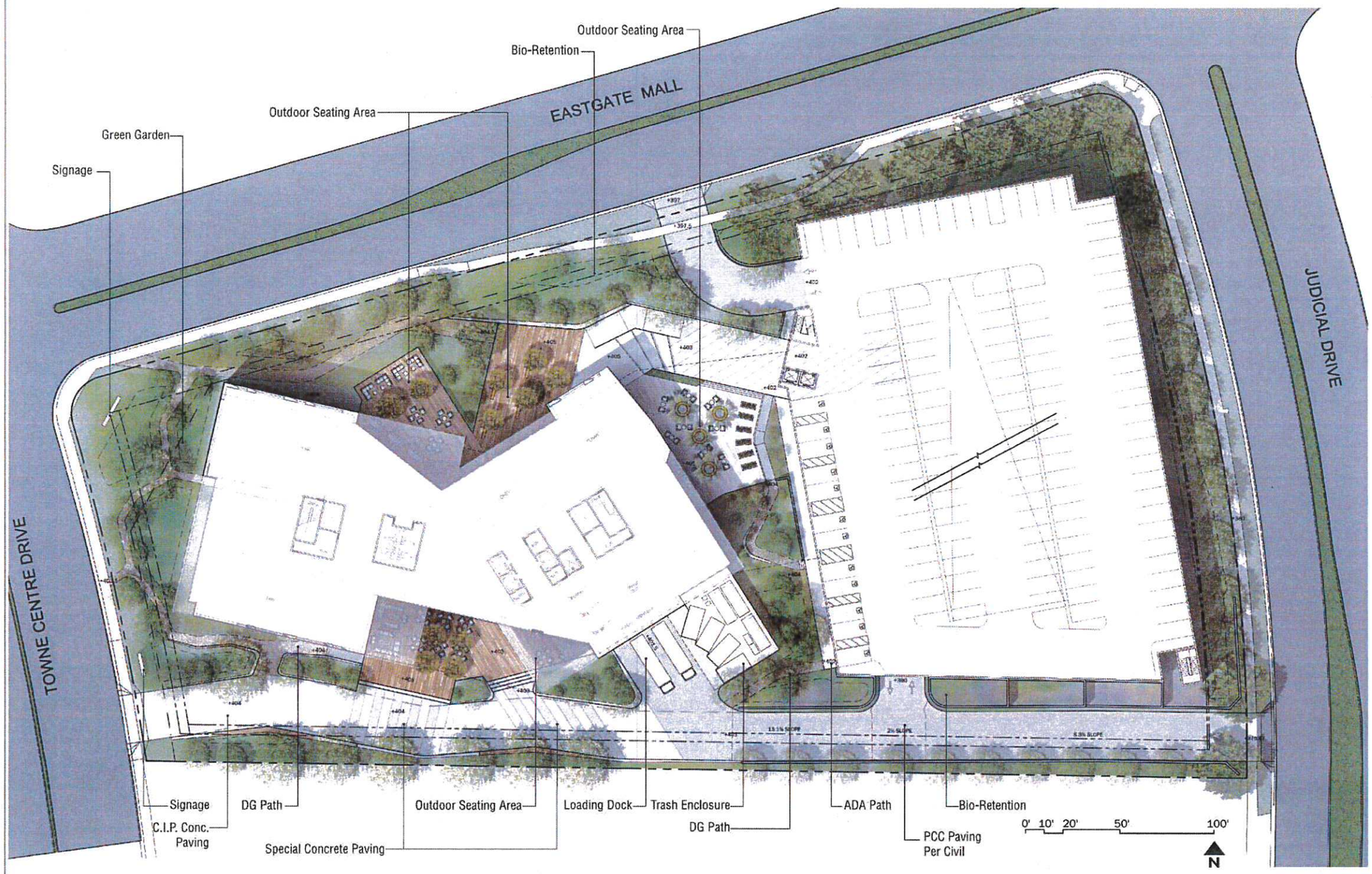
FIGURE 2-1

Project Location Map

The Proposed Project Site Plan is provided on the following sheet (11 x 17)

FIGURE 2-2

Project Site Plan



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REVISION 1	12-11-2012

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OFFICE BUILDING

9455 TOWNE CENTRE DRIVE
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FIGURE 2-3

Project Vicinity Map

FIGURE 2-4

Project Site Aerial

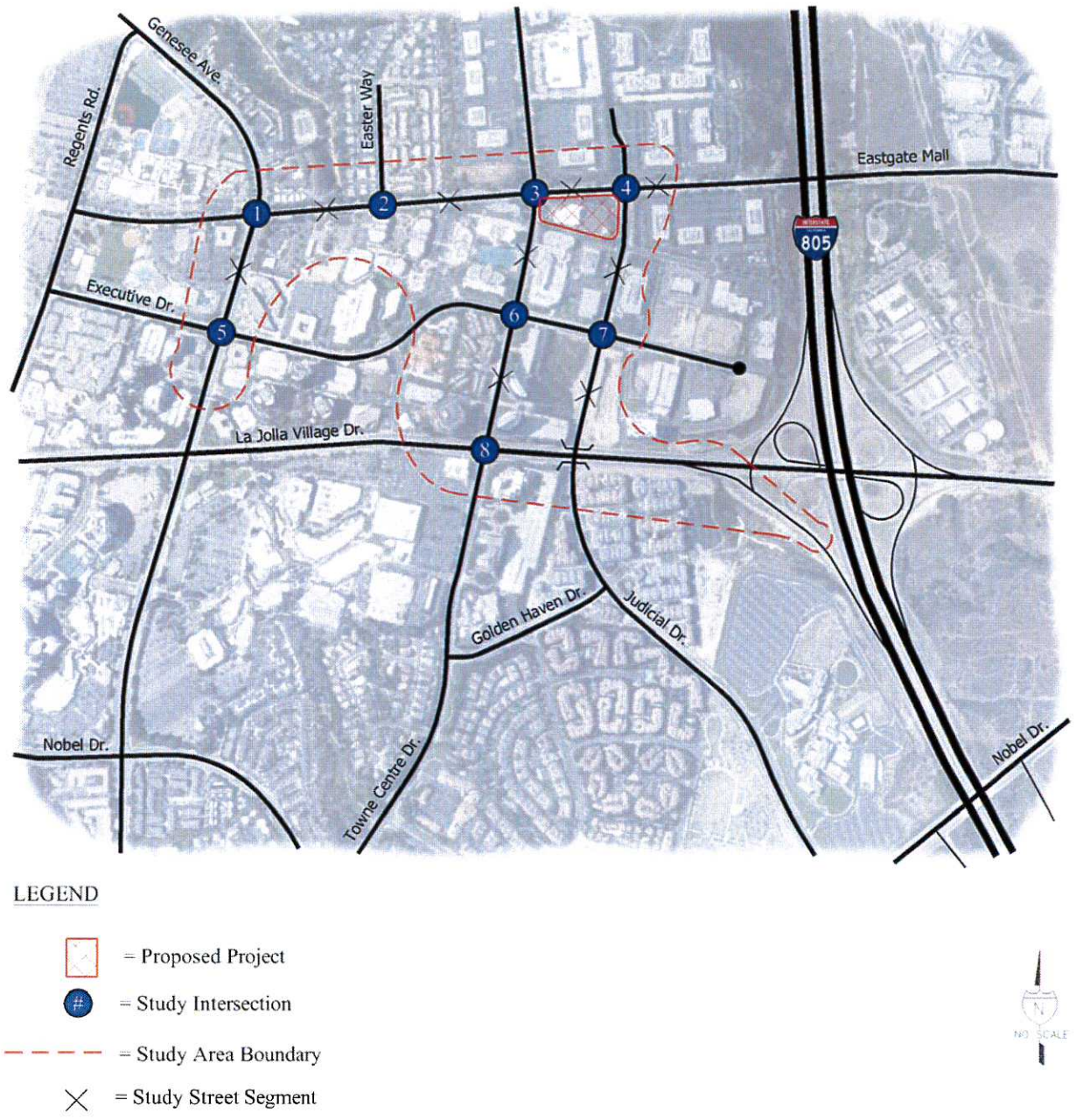


FIGURE 2-5

Study Area Boundary and Intersection Key

TABLE 2-1

Study Area Street Segments and Intersections

Street Segments	
Road	**Segment**
Genesee Ave.	Eastgate Mall to Executive Dr.
Eastgate Mall	Genesee Ave. to Easter Way Easter Way to Towne Centre Dr. Towne Centre Dr. to Judicial Dr. East of Judicial Dr.
Towne Centre Dr.	Eastgate Mall to Executive Dr. Executive Dr. to La Jolla Village Dr.
Judicial Dr.	Eastgate Mall to Executive Dr. Executive Dr. to Golden Haven Dr.

Intersections	
Number	**Intersection**
1	Genesee Ave. / Eastgate Mall
2	Eastgate Mall / Easter Way
3	Eastgate Mall / Towne Centre Dr.
4	Eastgate Mall / Judicial Dr.
5	Genesee Ave. / Executive Dr.
6	Towne Centre Dr. / Executive Dr.
7	Judicial Dr. / Executive Dr.
8	Towne Centre Dr. / La Jolla Village Dr.

In order to summarize project impacts and required mitigation, this report is divided into the following text sections:

1.0 Executive Summary

2.0 Introduction

3.0 Proposed Project

4.0 Methodology

5.0 Existing Conditions

6.0 Existing With Project

7.0 Other Projects

8.0 Near Term Without Project

9.0 Near Term With Project

10.0 Horizon Year 2035 Without Project

11.0 Horizon Year 2035 With Project

12.0 Access and Parking

13.0 Transit and Other Modes

14.0 Transportation Demand Management (TDM)

15.0 Conclusions and Recommendations

16.0 Community Plan Comparison

17.0 References

18.0 Urban Systems Associates, Inc., Preparers

3. PROPOSED PROJECT

The proposed project plans to demolish the existing 47,091 square foot building vacant since April of 2009 and construct a new 150,000 square foot building for Regional and Corporate Headquarters (office) uses. A Community Plan Amendment is required to increase the density allocated to the project site. A Planned Development Permit and Site Development Permit are also being processed to support the project.

3.1 TRIP GENERATION

The proposed 150,000 SF Regional and Corporate Headquarters facility would generate 1,500 average daily trips (ADT) with 225 (203 inbound / 23 outbound) trips in the AM peak hour and 225 trips (23 inbound / 203 outbound) in the PM peak hour as shown in **Table 3-1**. No trip credit was taken for the existing building since it's been vacant for more than two years.

3.2 TRIP DISTRIBUTION AND ASSIGNMENT

Figure 3-1 shows the project only trip distribution percentages which were derived from a select zone analysis using SANDAG's Series 12 Traffic Model (TAZ 4683). Project only average daily traffic volumes found in **Figure 3-1** are based on the daily new traffic generation from **Table 3-1** and distribution of project only traffic. This traffic model was adjusted to include land uses for the proposed project. Due to access points on three different streets (Eastgate Mall, Judicial Dr., and Towne Centre Dr.), the model's distributions on these streets fronting the project were manually adjusted since the traffic model loaded all project trips to Eastgate Mall. Project traffic onto Eastgate Mall would travel 35% to the west and 10% to the east. Approximately 42.5% would travel on Judicial Drive and 34.5% on Towne Centre Drive. The adjustments due to multiple access points can be found in **Appendix A** along with the SANDAG Series 12 Select Zone plot. **Figure 3-2** shows the project's distribution at study intersections. **Figure 3-3** shows the project only AM and PM peak hour traffic volumes.

TABLE 3-1

9455 Towne Centre Drive Project Trip Generation Table

Proposed Project

Use	Amount		Trip	ADT	AM Peak Hour						PM Peak Hour					
					% *	#	In	:	Out	In	Out	% *	#	In	:	Out	In	Out
Corporate Headquarters	150,000	SF	10 /1,000 SF	1,500	15%	225	9	:	1	203	23	15%	225	1	:	9	23	203
Total				1,500		225				203	23		225				23	203

Notes:

* = Source: City of San Diego Trip Generation Manual, May 2003

KSF = 1,000 Square Feet

FIGURE 3-1

Project Only Traffic Distribution & Average Daily Traffic Volumes

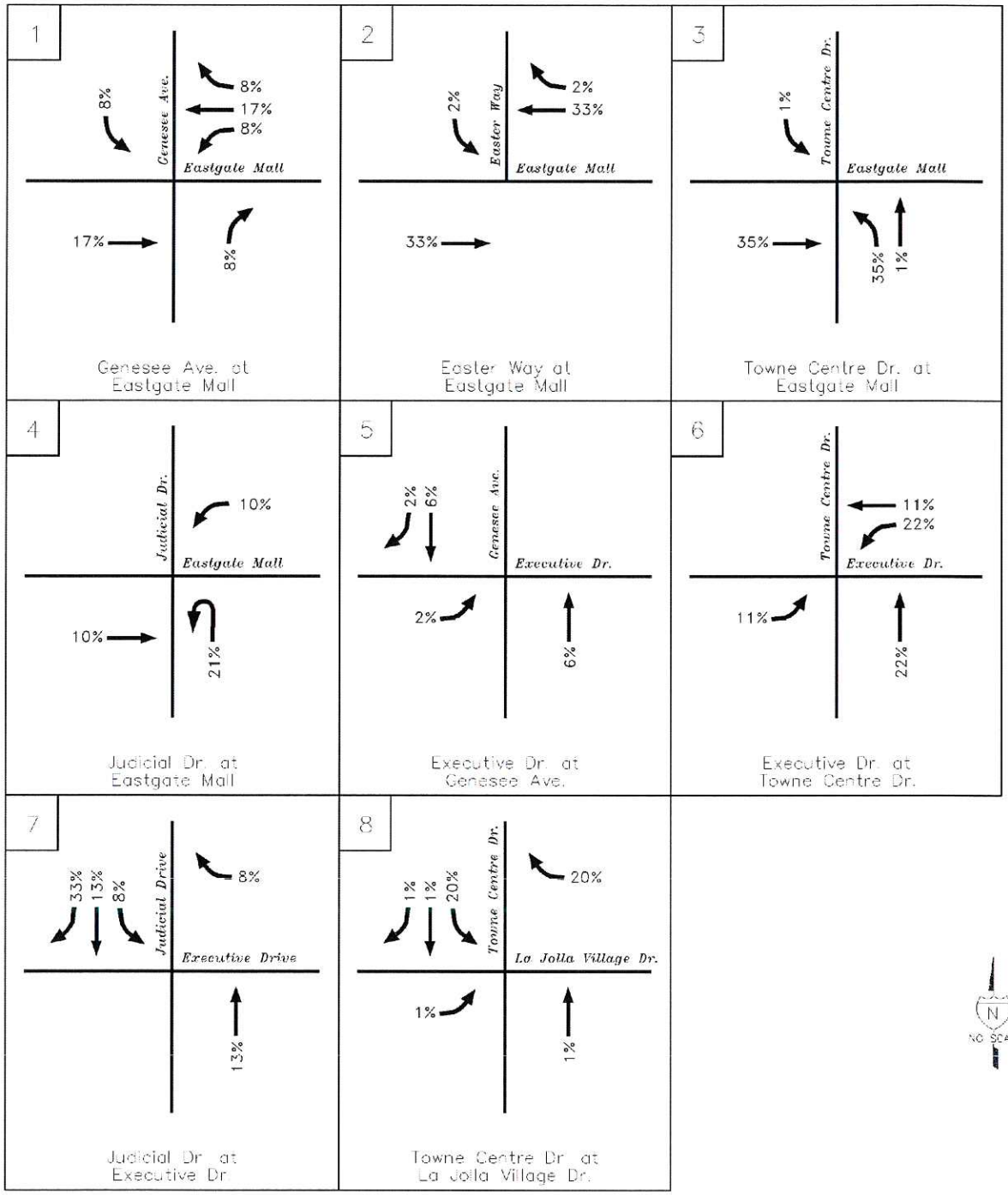


FIGURE 3-2

Project Only Traffic Distribution at Study Intersections

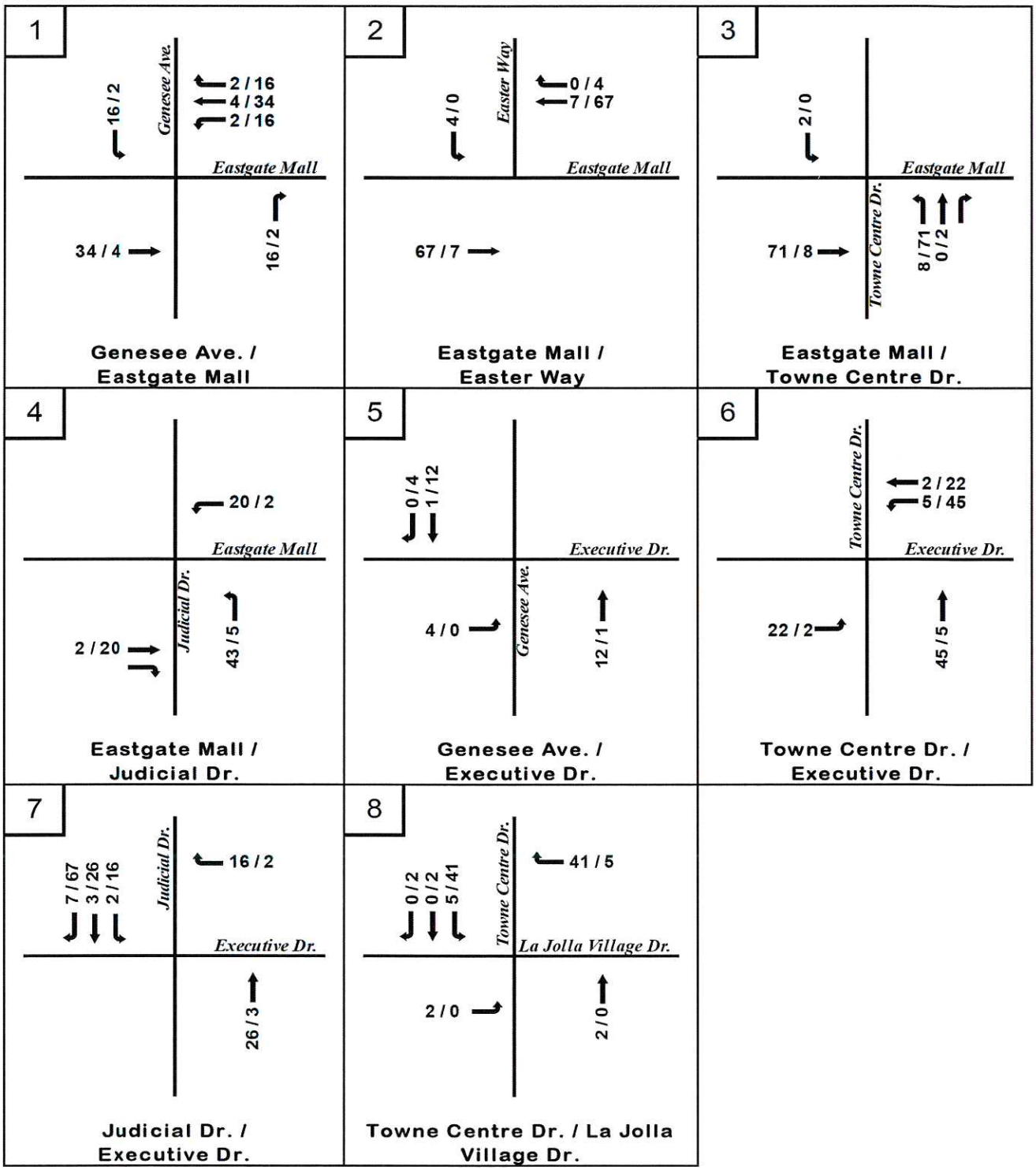


FIGURE 3-3

Project Only AM / PM Peak Hour Traffic

4. METHODOLOGY

This section of the report describes various analysis procedures and criteria that are used to determine if the proposed project has a significant impact and if mitigation is required. Mitigation may be either specific improvements by the project for a direct or cumulative impact or a financial contribution toward an improvement by others if a cumulative impact occurs. Two criteria must be met before project mitigation is required. First, the intersection or street segment must be projected to operate at an unacceptable LOS after project trips are added (i.e., "E" or "F" as discussed below). Second, the amount of project traffic must be significant based on the application of criteria also discussed below. For an intersection, if the change in delay anticipated due to the project is greater than 2 seconds or 1 second and the LOS is "E" or "F" respectively, then the project's intersection impacts would be considered significant. For a street segment, if the change in volume to capacity ratio (V/C ratio) anticipated due to the project exceeds 0.02 or 0.01, and the LOS is "E" or "F," respectively, then the project's street segment impact would be considered significant. If project traffic causes an intersection, roadway segment, or freeway segment to degrade from LOS "D" to LOS "E" or LOS "F," the project impact would be significant and project mitigation is required. For freeway segment impacts to be considered significant, the segment would need to operate at an unacceptable LOS and exceed a change in V/C ratio of 0.01 or 0.005 for LOS "E" and "F," respectively. A project ramp meter impact would be significant if the ramp meter calculations show 15 minutes of delay or greater and the change in delay due to the project is greater than 2 minutes or 1 minute and the freeway mainline segments are expected to operate at LOS "E" and "F," respectively, using the most restrictive meter rate method.

4.1 CITY OF SAN DIEGO GUIDELINES

The City of San Diego has developed a Traffic Impact Study Manual (July 1998). The stated purpose of the Traffic Impact Study Manual is "....to ensure consistency with all applicable City and State regulations." The Traffic Impact Study Manual provides guidance regarding preparation of traffic impact reports in the City of San Diego. Since the proposed project is located in the City of San Diego, this traffic impact report follows the procedures outlined in their traffic manual. The manual includes guidelines for forecasting, trip generation and assignment, and analysis procedures.

The City's Significance Determination Thresholds (2011) establish criteria that identify the allowable change in delay or V/C ratio due to project impacts. This publication also establishes criteria for measuring project impacts at intersections. This method establishes an allowable increase in delay at intersections due to the addition of project trips. The City Traffic Impact Study Manual specifies use of the most current Highway Capacity Manual (HCM) operational method for studying intersections. For analyzing intersections, a software package called Synchro is used. This software package is a direct and faithful application of the HCM methodology.

4.2 TRIP DISTRIBUTION

The projected trips were distributed based on a select zone (TAZ 4683) analysis from the SANDAG Series 12 Year 2035 transportation model. It should be noted TAZ 4683 includes 150,000 SF of Scientific Research and Development (intended user) but due to the similarity in uses, for analysis purposes an identical distribution is used for the Regional & Corporate Headquarters Office use. See **Appendix A** for select zone information.

4.3 STREET LOS THRESHOLD

When analyzing street segments, the LOS must be determined. LOS is a measure used to describe the conditions of traffic flow. LOS is expressed using letter designations from "A" to "F." LOS "A" represents the best case, and LOS "F" represents the worst case. Generally LOS "A" through "C" represents free-flowing traffic conditions with little or no delay. LOS "D" represents limited congestion and some delay. However, the duration of periods of delay is acceptable to most people. LOS "E" and "F" represent significant delays on local streets, which are generally unacceptable for urban design purposes. The LOS descriptions are from Chapter 14 of the HCM (Transportation Research Board 2010).

The City of San Diego has developed LOS threshold tables based on the different functional street classifications and their ability to carry traffic. For the City of San Diego, LOS "D" is the acceptable LOS standard for roadways and intersections.

4.4 INTERSECTION LOS PROCEDURES

The City and Regional Congestion Management Program (CMP) guidelines, as adopted by SANDAG (2006), determine the procedures to be used for intersection peak hour analysis. To determine an intersection peak hour LOS, the CMP guidelines require use of the most recent procedure from Chapters 18-20 of the HCM (Transportation Research Board 2010). The procedure in Chapters 18-20, which is used to analyze signalized intersections, is the "operational method." This method determines LOS based on average control delay expressed in seconds. **Table 4-1** shows the LOS based upon the delay. A computer program is used to complete the analysis. As discussed above, the City and CMP guidelines have established LOS "D" or better as the objective for intersections and street segments.

4.5 CONGESTION MANAGEMENT PROGRAM

Federal Highway Administration 23 CFR 450.320 requires that each transportation management area (TMA) address congestion management through a process involving an analysis of multimodal metropolitan wide strategies that are cooperatively developed to foster safety and integrated management of new and existing transportation facilities eligible for federal funding.

SANDAG has been designated as the TMA for the San Diego region. The 2050 Regional Transportation Plan meets the requirements of 23 CFR 450.320 by incorporating the following federal congestion management process: performance monitoring and measurement of the regional transportation system, multimodal alternatives and non-SOV analysis, land us impact analysis, the provision of congestion management tools, and integration with the regional transportation improvement program process.

California State Proposition 111, passed by voters in 1990, established a requirement that urbanized areas prepare and regularly update a Congestion Management Program (CMP). The requirements within the State CMP were developed to monitor the performance of the transportation system, develop programs to address near-term and long-term congestion, and better integrate transportation and land use planning. SANDAG provided regular updates for the State CMP, and since this decision, SANDAG has been abiding by 23 CFR 450.320 to ensure the region's continued compliance with the federal congestion management process. Therefore, the City of San Diego has been exempted from the requirements of the State CMP

TABLE 4-1

Level of Service Criteria for Signalized Intersections

Level of Service	Control Delay Per Vehicle (sec)
A	≤10
B	>10 and ≤20
C	>20 and ≤35
D	>35 and ≤55
E	>55 and ≤80
F	>80

Source: Transportation Research Board 2010, Table 18-4

Level of Service Criteria for Un-signalized Intersections

Level of Service	Control Delay Per Vehicle (sec)
A	≤10
B	>10 and ≤15
C	>15 and ≤25
D	>25 and ≤35
E	>35 and ≤50
F	>50

Source: Transportation Research Board 2010, Table 20-2

.4.6 FREEWAY SEGMENT LOS PROCEDURES

As discussed in Section 2.0, no freeway segments were included in this analysis since project traffic (26 trips) is less than the 50 peak hour trip threshold per the City's *Traffic Impact Study Guidelines*.

4.7 SIGNIFICANCE THRESHOLDS

As discussed above, two criteria must be met before project traffic mitigation is required. First, an unacceptable LOS (i.e., "E" or "F") must occur, and second, significance thresholds for only project traffic must be exceeded. Alternatively, if project traffic causes a facility to degrade from LOS "D" to "E," a significant impact would occur. The City's significance thresholds are summarized in **Table 4-2**. These thresholds are used in this analysis along with LOS to determine if project mitigation is required. **Table 4-3** shows the roadway classifications for the City of San Diego.

TABLE 4-2

Significance Thresholds

Level of Service with Project*	Allowable Increase Due to Project Impacts**					
	Freeways		Roadway Segments		Intersections	Ramp Metering
	V/C	*Speed (mph)*	*V/C*	*Speed (mph)*	*Delay (sec.)*	*Delay (min.)*
E (or ramp meter delays above 15 minutes)	0.010	1.0	0.02	1.0	2.0	2.0
F (or ramp meter delays above 15 minutes)	0.005	0.5	0.01	0.5	1.0	1.0

Note 1: The allowable increase in delay at a ramp meter with more than 15 minutes delay and freeway LOS E is 2 minutes.
Note 2: The allowable increase in delay at a ramp meter with more than 15 minutes delay and freeway LOS F is 1 minute.
* All LOS measurements are based upon Highway Capacity Manual procedures for peak-hour conditions. However, V/C ratios for roadway segments are estimated on an ADT/24-hour traffic volume basis (using Table 2 of the City's Traffic Impact Study Manual). The acceptable LOS for freeways, roadways, and intersections is generally "D" ("C" for undeveloped locations). For metered freeway ramps, LOS does not apply. However,ramp meter delays above 15 minutes are considered excessive.

** If a proposed project's traffic causes the values shown in the table to be exceeded, the impacts are determined to be significant. The project applicant shall then identify feasible improvements (within the Traffic Impact Study) that will restore/ and maintain the traffic facility at an acceptable LOS. If the LOS with the proposed project becomes unacceptable (see above * note), or if the project adds a significant amount of peak hour trips to cause any traffic queues to exceed on- or off-ramp storage capacities, the project applicant shall be responsible for mitigating the project's direct significant and / or cumulatively considerable traffic impacts.

Key:
1. V/C =Volume to Capacity Ratio
2. Speed =Arterial speed measured in miles per hour
3. Delay =Average control delay per vehicle measured in seconds for intersections, or minutes for ramp meters
4. LOS =Level of Service

TABLE 4-3

Roadway Classifications

Street Classification	Lanes	Level of Service W/ADT				
		A	B	C	D	E
Freeway	8 lanes	60,000	84,000	120,000	140,000	150,000
Freeway	6 lanes	45,000	63,000	90,000	110,000	120,000
Freeway	4 lanes	30,000	42,000	60,000	70,000	80,000
Expressway	6 Lanes	30,000	42,000	60,000	70,000	80,000
Prime Arterial	6 Lanes	25,000	35,000	50,000	55,000	60,000
Major Arterial	6 Lanes	20,000	28,000	40,000	45,000	50,000
Major Arterial	4 Lanes	15,000	21,000	30,000	35,000	40,000
Collector	4 Lanes	10,000	14,000	20,000	25,000	30,000
Collector (no center lane) (continuous left-turn lane)	4 Lanes 2 Lanes	5,000	7,000	10,000	13,000	15,000
Collector (no fronting property)	2 Lanes	4,000	5,500	7,500	9,000	10,000
Collector (commercial-industrial fronting)	2 Lanes	2,500	3,500	5,000	6,500	8,000
Collector (multi-family)	2 Lanes	2,500	3,500	5,000	6,500	8,000
Sub-Collector (single-family)	2 Lanes	---	---	2,200	---	---

Legend

XXX/XXX =Approximate recommended ADT based on the City of San Diego Street Design Manual

Notes:

1. The volumes and the average daily level of service listed above are only intended as a general planning guideline.
2. Levels of service are not applied to residential streets since their primary purpose is to serve abutting lots, not carry through traffic. Levels of service normally apply to roads carrying through traffic between major trip generators and attractors.

5. EXISTING CONDITIONS

The proposed project is located on the south side of Eastgate Mall between Towne Centre Drive and Judicial Drive. See **Figure 2-1** for details.

5.1 EXISTING ROADWAY FACILITIES

Genesee Avenue – is oriented in a north-south direction and is functionally classified as a six lane Major Arterial from Eastgate Mall to Executive Drive. This portion of Genesee Avenue is currently built to its ultimate classification as shown in the University Community Plan. A raised median is currently provided on Genesee Avenue and on-street parking is prohibited. The posted speed limit is 45 miles per hour on this segment. Class II bike lanes are provided on both sides of the roadway.

Eastgate Mall – is oriented in an east-west direction and is functionally classified as a four lane Collector from Genesee Avenue to just east of Judicial Drive within the project study area. The posted speed limit ranges from 40 mph to 45 mph. The speed limit is 45 mph east of Towne Centre Drive and 40 mph west of Towne Centre Drive. Based on the University City Community Plan Circulation Element, this road is ultimately classified as a four lane Major Arterial between Genesee Ave. and Towne Centre Dr., and as a four lane Collector between Towne Centre Drive and La Jolla Village Drive-Miramar Road. Direct access to the project is provided off of this roadway. Parking is prohibited on Eastgate Mall within the study area and no bike lanes are provided.

Towne Center Drive - is oriented in a north-south direction and is functionally classified as a four lane Major Arterial between Eastgate Mall and La Jolla Village Drive. This is consistent with the ultimate classification as shown in the University City Community Plan Circulation Element. The posted speed

limit is 40 mph and Class II bike lanes (south of Executive Drive) are provided on both sides of the roadway. Parking is prohibited on Towne Centre Drive within the study area.

Judicial Drive – is oriented in a north-south direction and is functionally classified as a four lane Major Arterial between Eastgate Mall and Golden Haven Drive. The road is constructed at its ultimate Community Plan classification. Parking is allowed along some portions of Judicial Drive North of Executive Drive. The posted speed limit is 40 mph. Class II bike lanes are currently provided on both sides of the roadway south of Executive Drive. The Community Plan currently calls for Class II bike lanes on Judicial Drive from Eastgate Mall to Executive Drive, however, the existing parking would need to be removed. Please see Chapter 13.0 of this report for additional information.

5.2 EXISTING TRAFFIC VOLUMES

Figure 5-1 shows the existing average weekday 24-hour traffic volumes for street segments in the project study area. These counts were conducted on June 4, 2015. Please refer to **Appendix B** for existing count sheets. Local schools including UCSD and La Jolla Country Day School were in session at the time of the counts. Existing street segment functional classifications were used for purposes of this analysis. **Figure 5-2** shows the functional classification of the existing roadway network. The ultimate roadway classifications are shown in the University Community Plan Circulation Element provided in **Appendix B**.

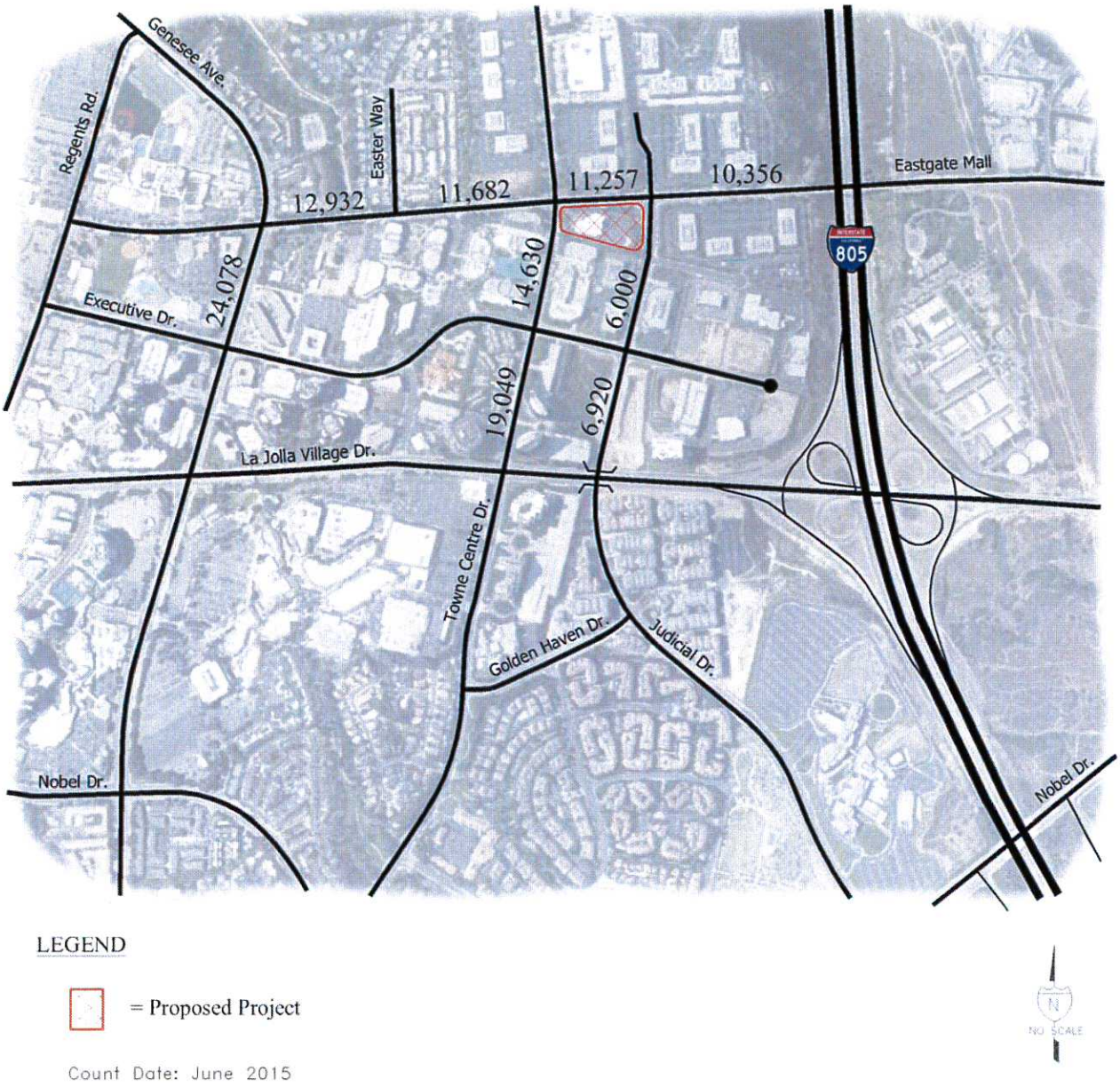


FIGURE 5-1

Existing Average Daily Traffic

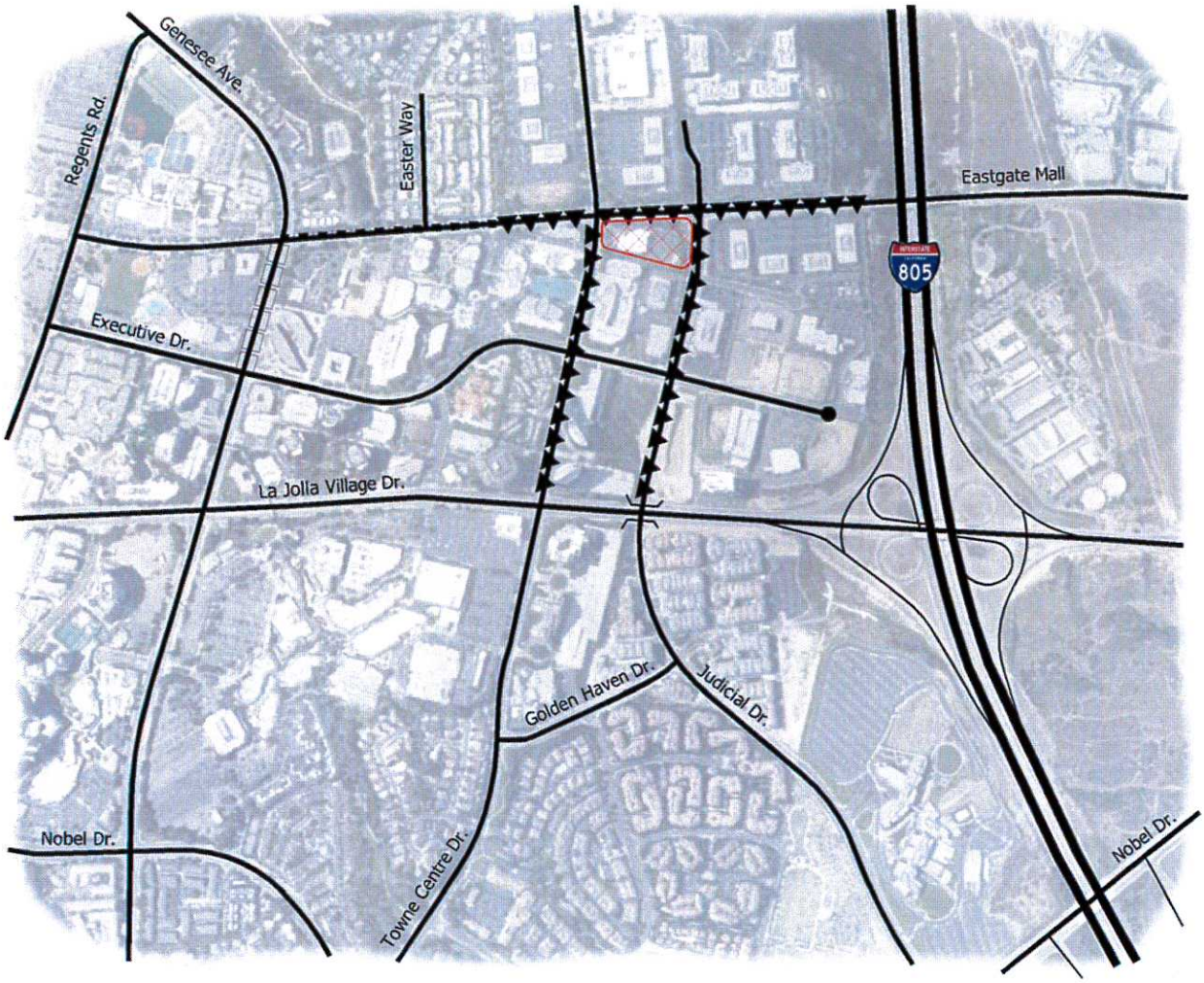


FIGURE 5-2

Existing Road Classification

Traffic counts summarized on **Figure 5-1** were counted on June 4, 2015. As discussed previously, counts were completed while school was in session. **Appendix B** includes the existing count data for study street segments and study intersections.

5.3 STREET SEGMENT ANALYSIS

As shown on **Table 5-1**, all street segments are projected to operate at acceptable LOS in the existing condition.

5.4 EXISTING INTERSECTIONS

Figure 5-3 shows the existing lane configurations for the intersections in the study area.

5.5 EXISTING INTERSECTION PEAK HOUR VOLUMES AND LOS

Figure 5-4 shows the existing AM and PM peak hour intersection traffic data, which was collected at the intersections. As required by the City of San Diego, the analysis of peak hour intersection performance was based on the HCM using operational analysis procedures. A computer program (Synchro), which is based on the HCM, was used to complete the analysis. As shown on **Table 5-2**, all intersections currently operate at a LOS "D" or better during the AM and PM peak hour periods. LOS calculation worksheets for existing conditions may be found in **Appendix C**.

5.6 EXISTING FREEWAY RAMP METER ANALYSIS

The eastbound La Jolla Village Drive to I-805 southbound on-ramp was analyzed in this report since the project adds 26 PM peak hour trips for the Regional and Corporate Headquarters Office use. **Table 5-3** shows the ramp meter analysis in the existing condition using the most restrictive rate provided by Caltrans.

TABLE 5-1

Existing Street Segment Levels of Service

Road	Segment	Class.	Cap.	Volume	V/C	LOS
Genesee Ave.	Eastgate Mall to Executive Dr.	6-M	50,000	24,078	0.48	B
Eastgate Mall	Genesee Ave. to Easter Way	4-C	30,000	12,932	0.43	B
	Easter Way to Towne Centre Dr.	4-C	30,000	11,682	0.39	B
	Towne Centre Dr. to Judicial Dr.	4-C	30,000	11,257	0.38	B
	East of Judicial Dr.	4-C	30,000	10,356	0.35	B
Towne Centre Dr.	Eastgate Mall to Executive Dr.	4-M	40,000	14,630	0.37	A
	Executive Dr. to La Jolla Village Dr.	4-M	40,000	19,049	0.48	B
Judicial Dr.	Eastgate Mall to Executive Dr.	4-M	40,000	6,000	0.15	A
	Executive Dr. to Golden Haven Dr.	4-M	40,000	6,920	0.17	A

Legend:

Class. = Functional Class

Cap. = Capacity

LOS = Level of Service

6-M = 6 Lane Major Arterial

4-M = 4 Lane Major Arterial

4-C = 4 Lane Collector

Count Date: June 4, 2015

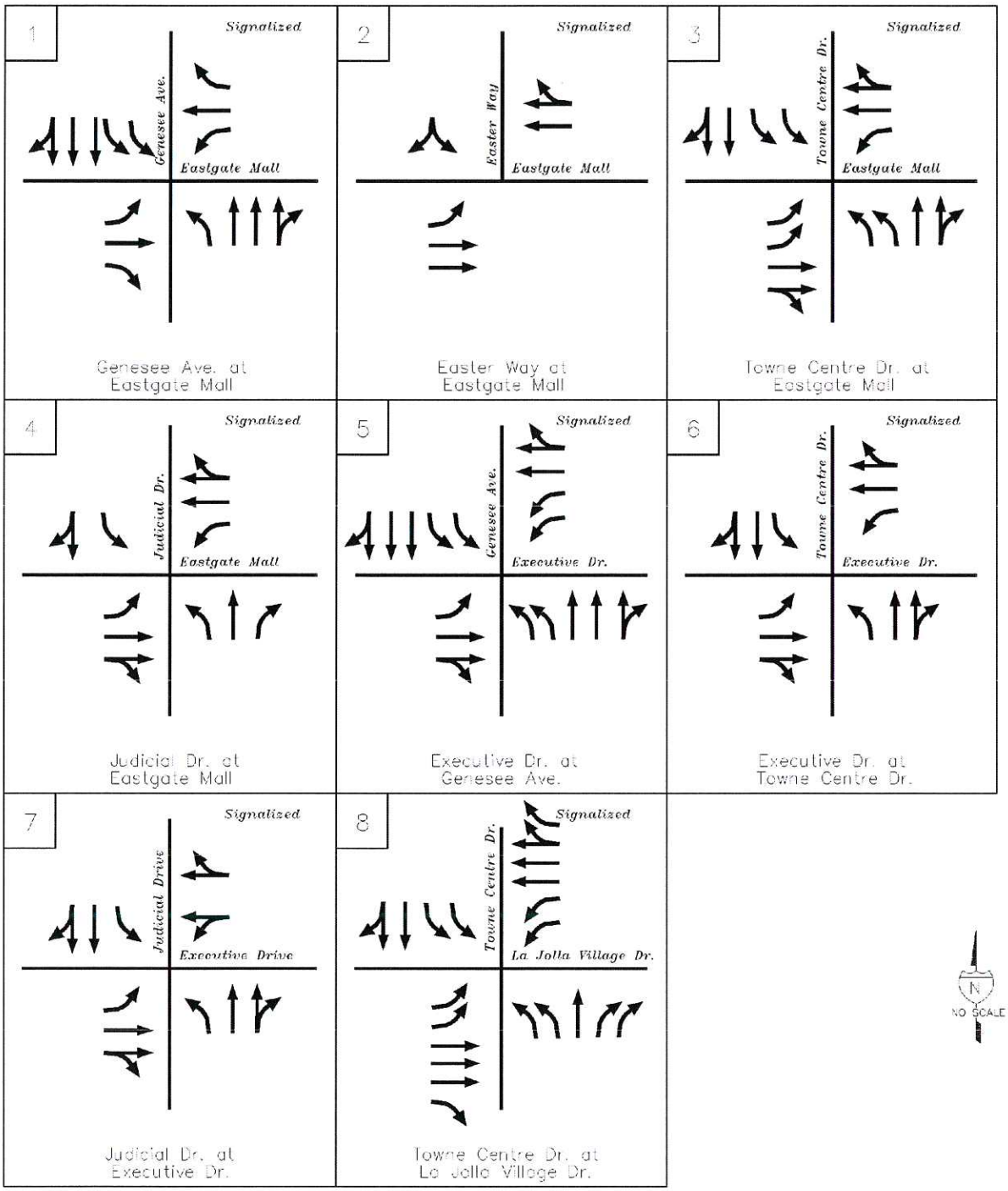


FIGURE 5-3

Existing Lane Configurations

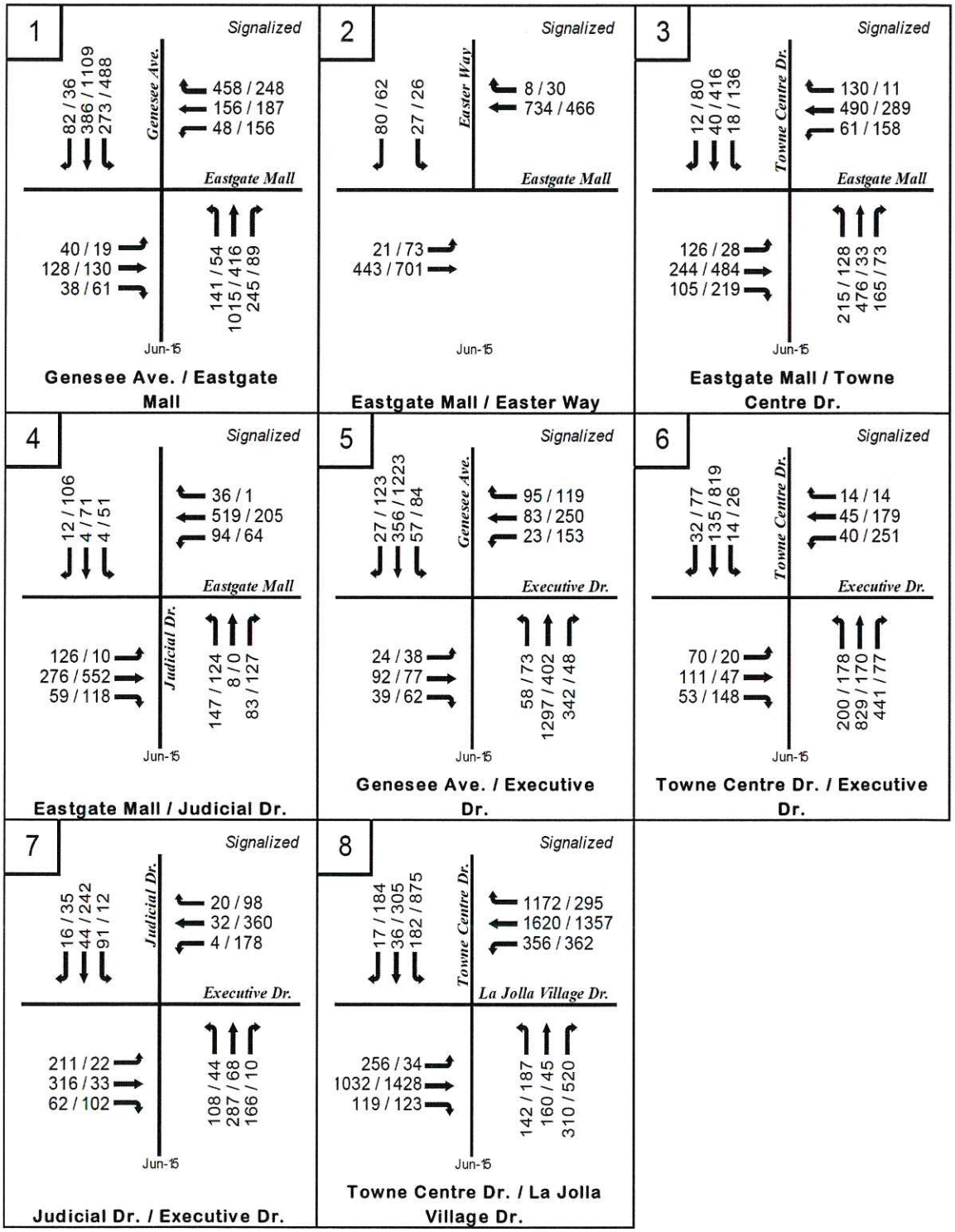


FIGURE 5-4

Existing AM/PM Peak Hour Traffic

TABLE 5-2

Existing Intersection Levels of Service

Number	Intersection	Control	AM Peak Hour		PM Peak Hour	
			Delay	LOS	Delay	LOS
1	Genesee Ave. / Eastgate Mall	Signalized	37.1	D	36.6	D
2	Eastgate Mall / Easter Way	Signalized	18.9	B	18.7	B
3	Eastgate Mall / Towne Centre Dr.	Signalized	23.1	C	27.6	C
4	Eastgate Mall / Judicial Dr.	Signalized	28.7	C	24.1	C
5	Genesee Ave. / Executive Dr.	Signalized	21.5	C	26.5	C
6	Towne Centre Dr. / Executive Dr.	Signalized	24.6	C	39.7	D
7	Judicial Dr. / Executive Dr.	Signalized	23.2	C	25.7	C
8	Towne Centre Dr. / La Jolla Village Dr.	Signalized	42.2	D	53.4	D

Notes:

Signal timing sheets obtained from the City of San Diego

LOS = Level of Service

TABLE 5-3

Existing Ramp Meter Analysis

Most Restrictive Meter Rate

Location		Lanes On Ramp	Total Demand (Veh/Hr)	Demand Per Lane (Veh/Hr/Ln)	Meter Rate* (Veh/Hr/Ln)	Excess Demand (Veh/Hr/Ln)	Delay (Min)	Queue (Feet)
Eastbound La Jolla Village Dr. to I-805 SB On Ramp	AM	2 SOV	Ramp Meter is not turned on in the AM Peak Hour					
	PM	2 SOV	850	383	593	0	0	0
Eastbound La Jolla Village Dr. to I-805 SB On Ramp	AM	1 HOV	Ramp Meter is not turned on in the AM Peak Hour					
	PM	1 HOV	850	85	593	0	0	0

NOTE:
Delay = (Demand - Meter Rate) / Meter Rate * 60 minutes/hour
Queue = Excess Demand * 29 feet/vehicle
SOV = Single Occupancy Vehicle assumed at 90%
HOV = High Occupancy Vehicle assumed at 10%
*Ramp Meter Rates provided by Caltrans, see Appendix B.

6. EXISTING WITH PROJECT

The purpose of this chapter is to evaluate the impacts of the Existing With Project analysis. This analysis evaluates the project's "direct impacts" by comparing existing conditions without the proposed project to existing conditions with the Regional and Corporate Headquarters use. **Appendix D** includes the Existing With Project Synchro worksheets.

6.1 STREET SEGMENTS

Street segments LOS with project traffic were determined by adding expected project only daily volumes to the counted existing daily volumes. **Figure 6-1** shows the Existing With Project average daily traffic volumes. **Table 6-1** shows street segment LOS with the addition of the SR use traffic. As shown, all study street segments are currently operating at acceptable levels of service.

6.2 INTERSECTIONS

Project traffic for the AM and PM peaks were added to existing traffic as shown in **Figure 6-2**. Intersection delays and LOS for the Existing With Project peak hour traffic is provided in **Table 6-2**. As shown, all intersections analyzed within the study area are projected to operate at acceptable LOS "D" or better.

6.3 FREEWAY RAMP METER

Table 6-3 shows the ramp meter analysis in the Existing With Project condition using the most restrictive rate provided by Caltrans.

FIGURE 6-1

Existing With Project Average Daily Traffic

TABLE 6-1

Existing With Project Street Segment Levels of Service

Road	Segment	Class.	Cap.	Volume	V/C	LOS
Genesee Ave.	Eastgate Mall to Executive Dr.	6-M	50,000	24,198	0.48	B
Eastgate Mall	Genesee Ave. to Easter Way	4-C	30,000	13,427	0.45	B
	Easter Way to Towne Centre Dr.	4-C	30,000	12,207	0.41	B
	Towne Centre Dr. to Judicial Dr.	4-C	30,000	11,602	0.39	B
	East of Judicial Dr.	4-C	30,000	10,506	0.35	B
Towne Centre Dr.	Eastgate Mall to Executive Dr.	4-M	40,000	15,148	0.38	B
	Executive Dr. to La Jolla Village Dr.	4-M	40,000	19,379	0.48	B
Judicial Dr.	Eastgate Mall to Executive Dr.	4-M	40,000	6,638	0.17	A
	Executive Dr. to Golden Haven Dr.	4-M	40,000	7,115	0.18	A

Legend:

Class. = Functional Class

Cap. = Capacity

LOS = Level of Service

6-M = 6 Lane Major Arterial

4-M = 4 Lane Major Arterial

4-C = 4 Lane Collector

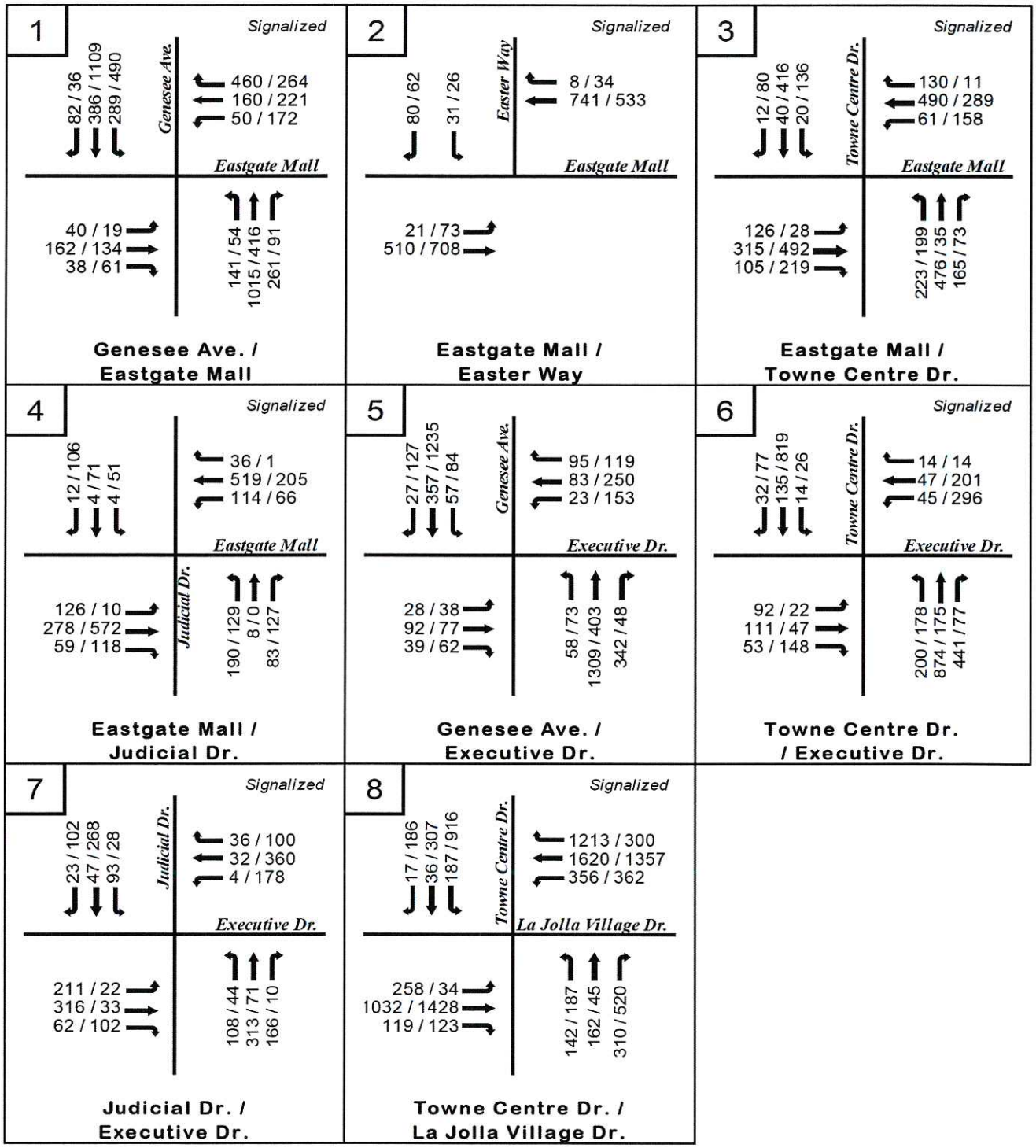


FIGURE 6-2

Existing With Project AM/PM Peak Hour Traffic

TABLE 6-2

Existing With Project Intersection Levels of Service

Number	Intersection	Control	AM Peak Hour		PM Peak Hour	
			Delay	LOS	Delay	LOS
1	Genesee Ave. / Eastgate Mall	Signalized	37.4	D	37.4	D
2	Eastgate Mall / Easter Way	Signalized	19.7	B	19.5	B
3	Eastgate Mall / Towne Centre Dr.	Signalized	23.1	C	29.5	C
4	Eastgate Mall / Judicial Dr.	Signalized	47.8	D	24.7	C
5	Genesee Ave. / Executive Dr.	Signalized	21.5	C	26.5	C
6	Towne Centre Dr. / Executive Dr.	Signalized	25.7	C	48.4	D
7	Judicial Dr. / Executive Dr.	Signalized	24.9	C	25.9	C
8	Towne Centre Dr. / La Jolla Village Dr.	Signalized	43.7	D	54.4	D

Notes:

Delay = seconds per vehicle

LOS = Level of Service

TABLE 6-3

Existing With Project Ramp Meter Analysis

Most Restrictive Meter Rate

Location		Lanes On Ramp	Total Demand (Veh/Hr)	Demand Per Lane (Veh/Hr/Ln)	Meter Rate* (Veh/Hr/Ln)	Excess Demand (Veh/Hr/Ln)	Delay (Min)	Queue (Feet)
Eastbound La Jolla Village Dr. to I-805 SB On Ramp	AM	2 SOV	Ramp Meter is not turned on in the AM Peak Hour					
	PM	2 SOV	876	394	593	0	0	0
Eastbound La Jolla Village Dr. to I-805 SB On Ramp	AM	1 HOV	Ramp Meter is not turned on in the AM Peak Hour					
	PM	1 HOV	876	88	593	0	0	0

NOTE:
Delay = (Demand - Meter Rate) / Meter Rate * 60 minutes/hour
Queue = Excess Demand * 29 feet/vehicle
SOV = Single Occupancy Vehicle assumed at 90%
HOV = High Occupancy Vehicle assumed at 10%
*Ramp Meter Rates provided by Caltrans, see Appendix B.

7. OTHER PROJECTS

To find the Near Term (Existing + Other Projects) traffic volumes, USAI contacted City staff to determine other proposed or approved projects that are expected to be completed and occupied after the date of existing traffic counts but prior to the project's expected opening day (Year 2017) and have impacts within the project study area. From this contact, USAI determined there are seventeen (17) other projects that may have impacts within the project study area. However, thirteen (13) of the Near Term "other projects" were found to add traffic in the vicinity of the project, see **Table 7-1**.

Trip distribution, trip generation, and project only data for the cumulative projects can be found in **Appendix E.**

Project only volumes from the approved other projects were extracted from other traffic studies, and manually added to existing traffic volumes to get Near Term "other project" volumes. **Figure 7-1** shows the other projects average daily traffic volumes. **Figure 7-2** shows the other projects AM/PM peak hour traffic volumes.

TABLE 7-1

Other Projects List

#	Project	Land Use		ADT	Status
Projects Included in Near Term Analysis					
1	La Jolla Commons III	120 DU	Residential	10,319	Approved
		325 Rooms	Hotel		
		162,000 SF	Office		
		106,000 SF	Research & Development / Office		
2	Nexus Tech Center	67,000 SF	Research & Development / Office	1,915	Approved
3	Scripps Memorial Hospital La Jolla[1]	198,180 SF	Medical Office (Phase 1)	3,097	Approved
4	Genesee Executive Plaza	29,000 SF	Medical Office Conversion	788	Approved
5	UCSD East Campus Bed Tower	245 Beds	Medical	4,900	Approved
6	Coast Income Properties	100,000 SF	Office	1,688	Pending
7	UTC Revitalization Project[1]	251,454 SF	Regional Retail (Phase 2A)	5,541	Under Construction
8	La Jolla Centre 3	278,800 SF	Commercial Office	4,162	Approved
9	Monte Verde	560 DU (HD)	Residential	3,360	Approved
10	Bio Med Innovation Center	250,000 SF	Scientific Research & Development	585	Approved
11	La Jolla Crossroads IV	472 DU	Multi-Family Residential	2,832	Under Construction
12	Alexandria Campus Point	740,000 SF	Scientific Research	2,224	Under Review
13	Salk Institute	12 DU	Residential Quarters	1,788	Approved
		96,400 SF	Science Complex		
		1115,182 SF	Community Center		
Projects Considered but Not Included in Near Term Analysis[2]					
14	Scripps Green Hospital	39,024 SF	Hospital	780	Included in Existing Counts
15	University City Village	464 DU	Retirement Housing	1,856	Not included in project study area
16	Illumina Campus	123,375 SF	Scientific Research	987	Not included in project study area
17	La Jolla Country Day	1,050 Students	Replacement of Existing School	65	Included in Existing Counts

Notes:
(1) = The buildout phases of these projects are included in the Year 2035 forcast.
(2) = These projects are currently built and counts include these projects and/or traffic from these projects are outside the study area for 9455 Towne Centre Dr.

Legend:
SF = square feet
DU = dwelling unit
HD = high density
ADT = Average Daily Traffic

FIGURE 7-1

Other Projects Average Daily Traffic Volumes

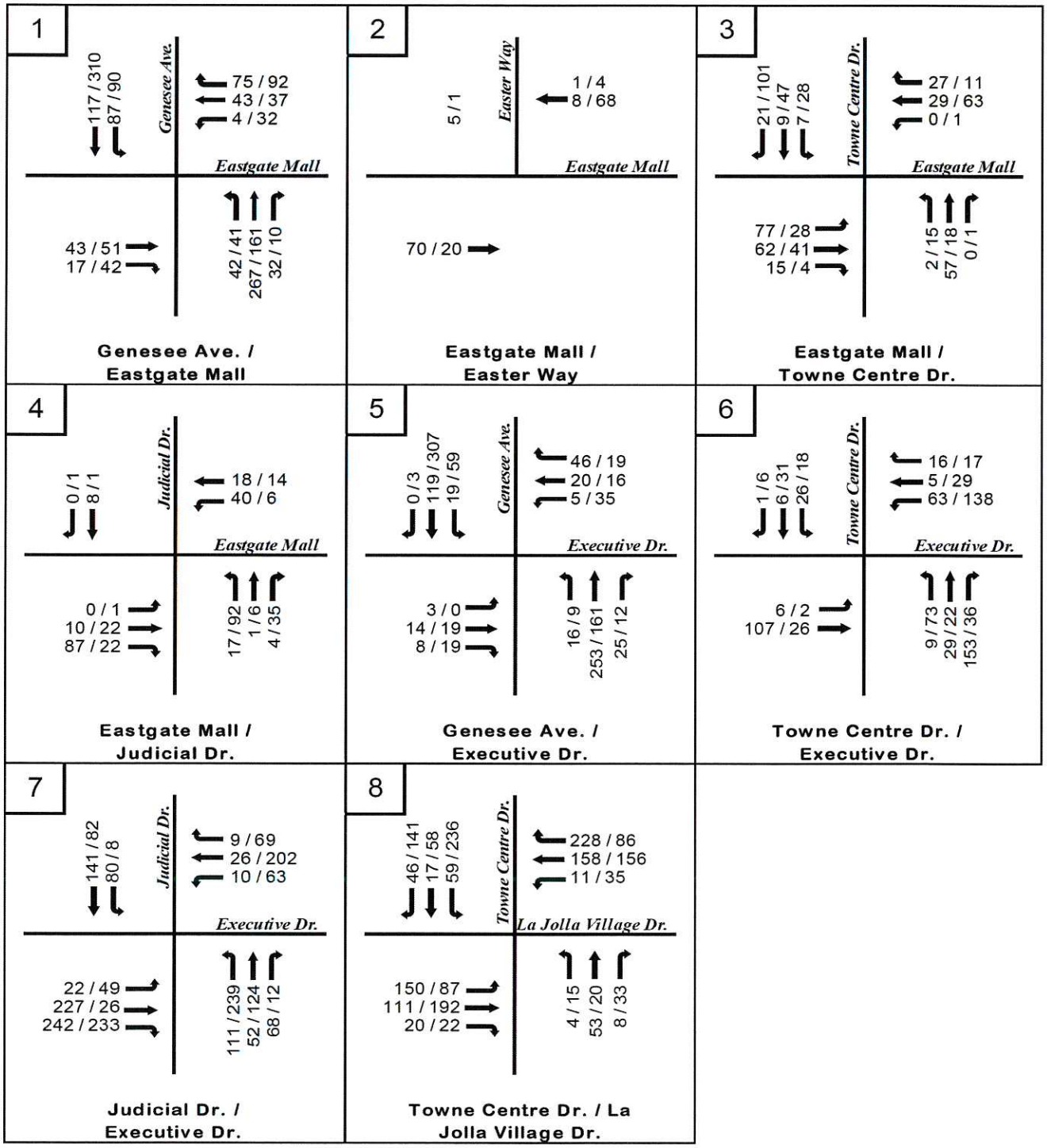


FIGURE 7-2

Other Projects AM/PM Peak Hour Traffic Volumes

8. NEAR TERM WITHOUT PROJECT (OPENING DAY – YEAR 2017)

In order to determine Near Term traffic, USAI followed the methodology outlined in the City of San Diego Traffic Impact Study Manual. An examination of the immediate area surrounding the project to include projects that were approved, pending approval, or planned in the area and assumed to be constructed and occupied at the project's opening day (2017) were evaluated, as shown in the previous section of this report. The project only traffic for these projects was manually added to the existing traffic to reflect an "existing plus other project" or Near Term scenario. No changes to the existing roadway network were assumed.

8.1 STREET SEGMENTS

Figure 8-1 shows average daily traffic volumes from the other projects added to existing average daily traffic volumes.

Table 8-1 shows street segment LOS without project traffic. As shown in the table, all street segments are projected to operate at acceptable levels of service.

FIGURE 8-1

Near Term Without Project Average Daily Traffic

TABLE 8-1

Near Term Without Project Street Segment Levels of Service

(Opening Day – Year 2017)

Road	Segment	Class.	Cap.	Volume	V/C	LOS
Genesee Ave.	Eastgate Mall to Executive Dr.	6-M	50,000	26,730	0.53	B
Eastgate Mall	Genesee Ave. to Easter Way	4-C	30,000	16,122	0.54	C
	Easter Way to Towne Centre Dr.	4-C	30,000	14,860	0.50	C
	Towne Centre Dr. to Judicial Dr.	4-C	30,000	13,392	0.45	B
	East of Judicial Dr.	4-C	30,000	11,537	0.38	B
Towne Centre Dr.	Eastgate Mall to Executive Dr.	4-M	40,000	15,643	0.39	B
	Executive Dr. to La Jolla Village Dr.	4-M	40,000	24,745	0.62	C
Judicial Dr.	Eastgate Mall to Executive Dr.	4-M	40,000	8,572	0.21	A
	Executive Dr. to Golden Haven Dr.	4-M	40,000	10,885	0.27	A

Legend:

Class. = Functional Class

Cap. = Capacity

LOS = Level of Service

6-M = 6 Lane Major Arterial

4-M = 4 Lane Major Arterial

4-C = 4 Lane Collector

8.2 INTERSECTIONS

Figure 8-2 shows the peak hour traffic volumes from the other projects when added to existing peak hour volumes at the study area intersections. **Table 8-2** shows the resulting AM and PM peak hour LOS. As shown in **Table 8-2**, all study intersections are projected to operate at acceptable levels of service except at:

Towne Center Drive. / La Jolla Village Drive LOS F in the AM & PM peak hour

Appendix F includes the Near Term Without Project Synchro worksheets.

8.3 FREEWAY RAMP METER

Table 8-3 shows the ramp meter analysis in the Near Term Without Project condition using the most restrictive rate provided by Caltrans.

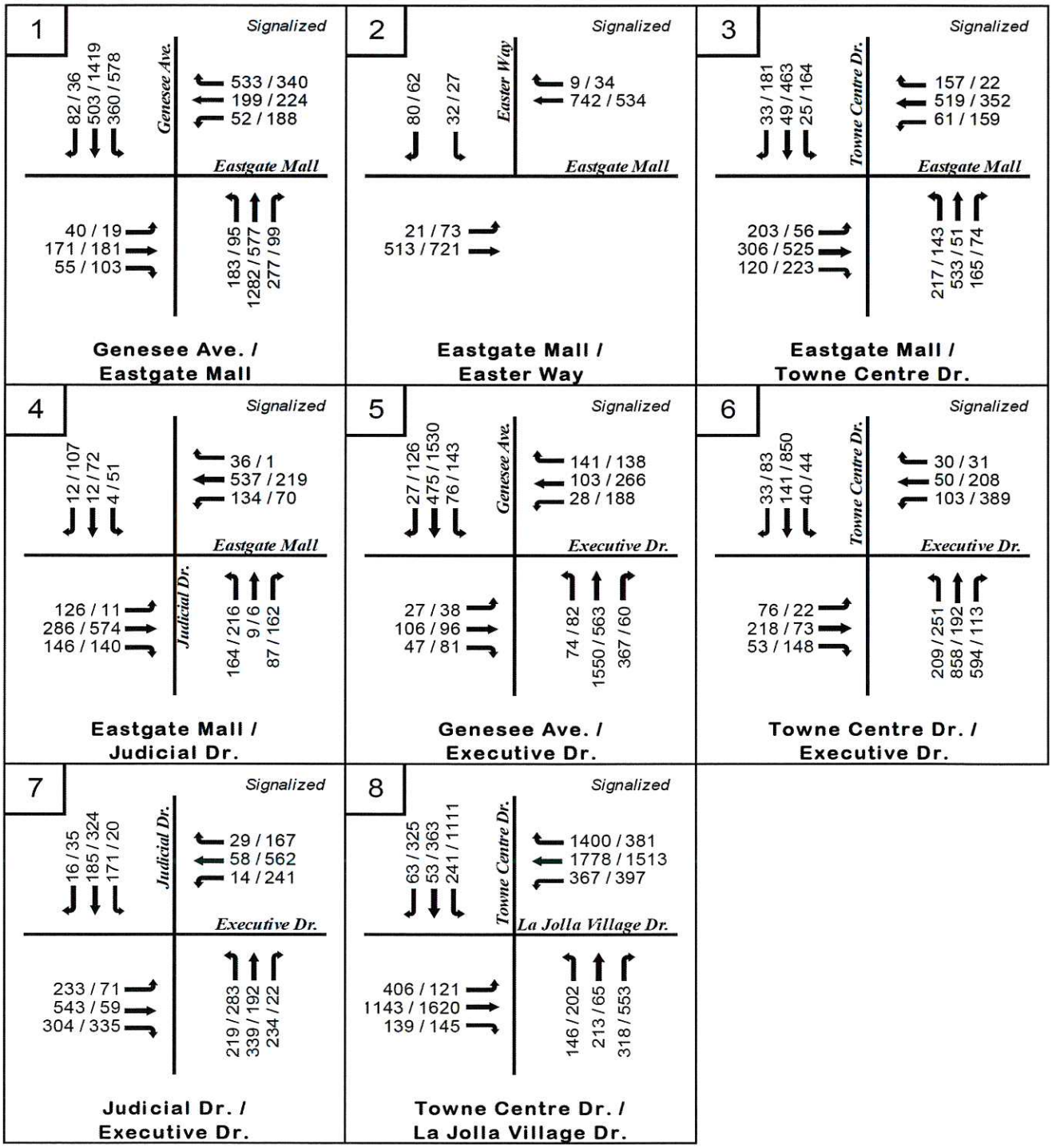


FIGURE 8-2

Near Term Without Project AM/PM Peak Hour Traffic – Opening Day (2017)

TABLE 8-2

Near Term Without Project Intersection Levels of Service

(Opening Day – Year 2017)

Number	Intersection	Control	AM Peak Hour		PM Peak Hour	
			Delay	LOS	Delay	LOS
1	Genesee Ave. / Eastgate Mall	Signalized	43.1	D	42.0	D
2	Eastgate Mall / Easter Way	Signalized	19.7	B	19.7	B
3	Eastgate Mall / Towne Centre Dr.	Signalized	25.0	C	31.0	C
4	Eastgate Mall / Judicial Dr.	Signalized	41.6	D	28.2	C
5	Genesee Ave. / Executive Dr.	Signalized	23.8	C	27.5	C
6	Towne Centre Dr. / Executive Dr.	Signalized	33.3	C	51.6	D
7	Judicial Dr. / Executive Dr.	Signalized	38.8	D	49.7	D
8	Towne Centre Dr. / La Jolla Village Dr.	Signalized	95.9	F	93.7	F

Notes:

Delay = seconds per vehicle

LOS = Level of Service

TABLE 8-3

Near Term Without Project Ramp Meter Analysis

(Opening Day – Year 2017)

Most Restrictive Meter Rate

Location		Lanes On Ramp	Total Demand (Veh/Hr)	Demand Per Lane (Veh/Hr/Ln)	Meter Rate* (Veh/Hr/Ln)	Excess Demand (Veh/Hr/Ln)	Delay (Min)	Queue (Feet)
Eastbound La Jolla Village Dr. to I-805 SB On Ramp	AM	2 SOV	Ramp Meter is not turned on in the AM Peak Hour					
	PM	2 SOV	1053	474	593	0	0.00	0
Eastbound La Jolla Village Dr. to I-805 SB On Ramp	AM	1 HOV	Ramp Meter is not turned on in the AM Peak Hour					
	PM	1 HOV	1053	105	593	0	0	0

NOTE:
Delay = (Demand - Meter Rate) / Meter Rate * 60 minutes/hour
Queue = Excess Demand * 29 feet/vehicle
SOV = Single Occupancy Vehicle assumed at 90%
HOV = High Occupancy Vehicle assumed at 10%
*Ramp Meter Rates provided by Caltrans, see Appendix B.

9. NEAR TERM WITH PROJECT

This section of the report evaluates the Near Term With Project traffic conditions by adding the other projects plus the Regional and Corporate Headquarters use traffic to existing volumes and evaluating project traffic impacts from the proposed project.

9.1 STREET SEGMENTS

Figure 9-1 shows average daily traffic volumes with project traffic added to existing plus other projects traffic volumes.

Table 9-1 shows street segment levels of service with project traffic.

As shown in **Table 9-1**, all street segments analyzed in the study area are projected to operate at acceptable levels of service.

FIGURE 9-1

Near Term With Project Average Daily Traffic – Opening Day (Year 2017)

TABLE 9-1

Near Term With Project Street Segment Levels of Service

(Opening Day – Year 2017)

Road	Segment	Class.	Cap.	Volume	V/C	LOS
Genesee Ave.	Eastgate Mall to Executive Dr.	6-M	50,000	26,850	0.54	B
Eastgate Mall	Genesee Ave. to Easter Way	4-C	30,000	16,617	0.55	C
	Easter Way to Towne Centre Dr.	4-C	30,000	15,385	0.51	C
	Towne Centre Dr. to Judicial Dr.	4-C	30,000	13,737	0.46	B
	East of Judicial Dr.	4-C	30,000	11,687	0.39	B
Towne Centre Dr.	Eastgate Mall to Executive Dr.	4-M	40,000	16,161	0.40	B
	Executive Dr. to La Jolla Village Dr.	4-M	40,000	25,075	0.63	C
Judicial Dr.	Eastgate Mall to Executive Dr.	4-M	40,000	9,210	0.23	A
	Executive Dr. to Golden Haven Dr.	4-M	40,000	11,080	0.28	A

Legend:

Class. = Functional Class

Cap. = Capacity

LOS = Level of Service

6-M = 6 Lane Major Arterial

4-M = 4 Lane Major Arterial

4-C = 4 Lane Collector

9.2 INTERSECTIONS

Figure 9-2 shows existing plus other projects plus project combined traffic volumes during AM/PM peak hours at study area intersections.

Table 9-2 includes study area intersection LOS with the project traffic added. As shown in **Table 9-2**, all intersections are projected to operate at acceptable levels of service except at:

- Towne Centre Drive / La Jolla Village Drive LOS F in the AM & PM peak hour

Appendix G includes the Near Term With Project Synchro worksheets.

9.3 FREEWAY RAMP METER

Table 9-3 shows the ramp meter analysis in the Near Term With Project condition using the most restrictive rate provided by Caltrans.

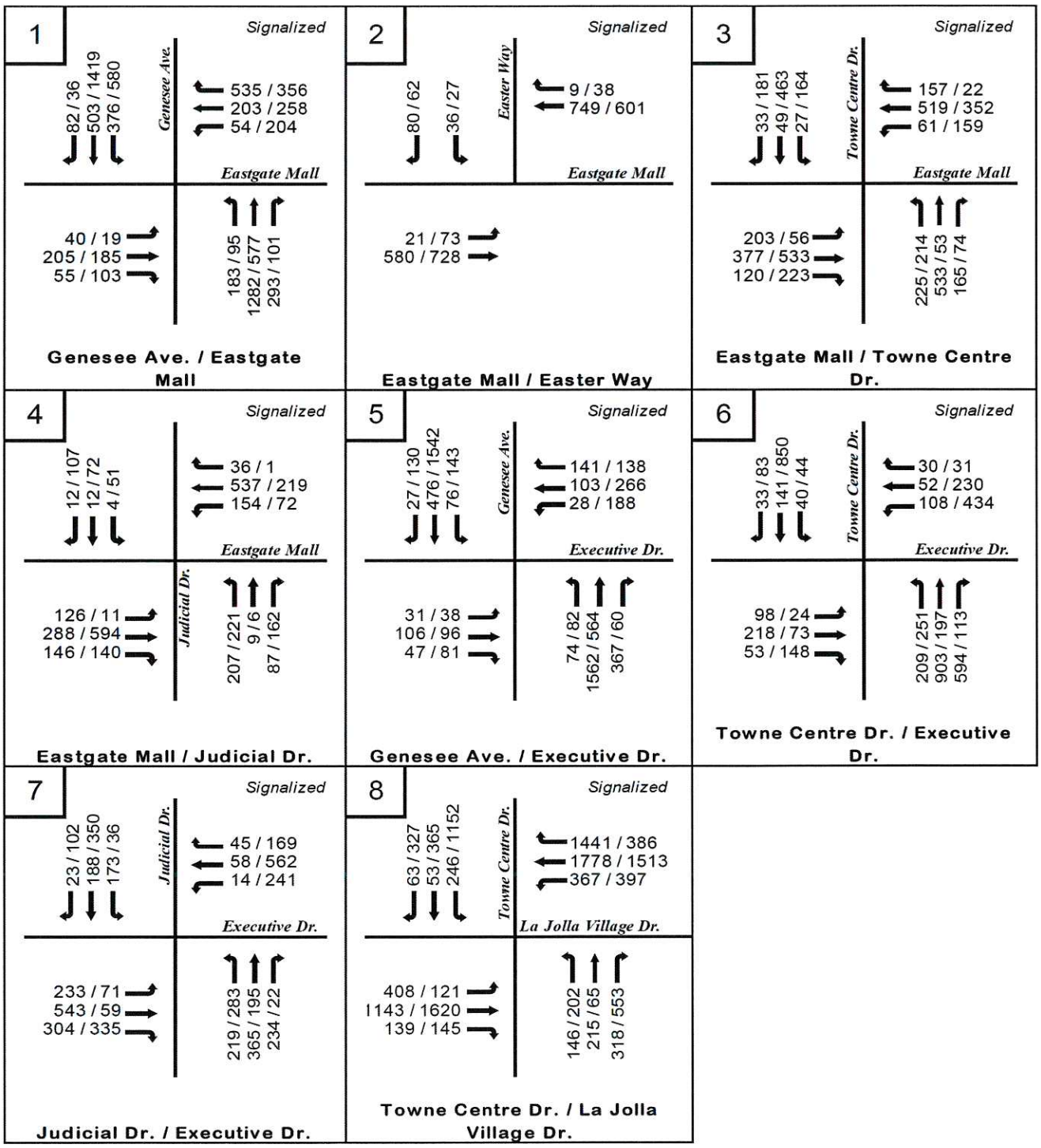


FIGURE 9-2

Near Term With Project AM/PM Peak Hour Traffic – Opening Day (Year 2017)

TABLE 9-2

Near Term With Project Intersection Levels of Service

(Opening Day – Year 2017)

Number	Intersection	Control	AM Peak Hour		PM Peak Hour	
			Delay	LOS	Delay	LOS
1	Genesee Ave. / Eastgate Mall	Signalized	43.5	D	42.3	D
2	Eastgate Mall / Easter Way	Signalized	20.3	C	20.7	C
3	Eastgate Mall / Towne Centre Dr.	Signalized	25.3	C	32.5	C
4	Eastgate Mall / Judicial Dr.	Signalized	42	D	30.9	C
5	Genesee Ave. / Executive Dr.	Signalized	24.7	C	28.6	C
6	Towne Centre Dr. / Executive Dr.	Signalized	35.2	D	54.8	D
7	Judicial Dr. / Executive Dr.	Signalized	41.2	D	54.7	D
8	Towne Centre Dr. / La Jolla Village Dr.	Signalized	100.6	F	97.3	F

Notes:

Delay = seconds per vehicle

LOS = Level of Service

TABLE 9-3

Near Term With Project Ramp Meter Analysis

(Opening Day – Year 2017)

Most Restrictive Meter Rate

Location		Lanes On Ramp	Total Demand (Veh/Hr)	Demand Per Lane (Veh/Hr/Ln)	Meter Rate* (Veh/Hr/Ln)	Excess Demand (Veh/Hr/Ln)	Delay (Min)	Queue (Feet)
Eastbound La Jolla Village Dr. to I-805 SB On Ramp	AM	2 SOV	Ramp Meter is not turned on in the AM Peak Hour					
	PM	2 SOV	1079	486	593	0	0.00	0
Eastbound La Jolla Village Dr. to I-805 SB On Ramp	AM	1 HOV	Ramp Meter is not turned on in the AM Peak Hour					
	PM	1 HOV	1079	108	593	0	0	0

NOTE:
Delay = (Demand - Meter Rate) / Meter Rate * 60 minutes/hour
Queue = Excess Demand * 29 feet/vehicle
SOV = Single Occupancy Vehicle assumed at 90%
HOV = High Occupancy Vehicle assumed at 10%
*Ramp Meter Rates provided by Caltrans, see Appendix B.

10. HORIZON YEAR 2035 WITHOUT PROJECT

This section of the report evaluates the Horizon Year 2035 Without Project condition. As discussed in Chapter 3.0, no trip credit was taken for the existing building. The SANDAG Series 12 Year 2035 regional traffic forecast model is based on planning efforts involving all jurisdictions within the County of San Diego. SANDAG, as the regional planning agency, collects data from these plans and collates this data within a traffic model. SANDAG also prepared the regional transportation plan utilized by the traffic model as a basis for estimating future traffic. The 150,000-square-foot scientific research and development project was incorporated in this traffic model with a specific project zone created and a "select-zone" forecast plot obtained. Although the intended use is Regional and Corporate Headquarters, the analysis in this report uses the Select Zone traffic model which includes R & D due to the similarity in uses. The land-uses in the traffic model were modified to reflect the proposed project (refer to **Appendix A** for land use inputs). Year 2035 with project daily volumes were taken from the traffic model and reviewed with City staff. Three of the volumes in the Year 2035 model were lower than Near Term volumes and manually adjusted to be higher. Volume adjustments occurred on study roadway segments of Genesee Avenue, Towne Centre Drive, and Judicial Drive. For more information on the adjusted volumes, refer to **Appendix A**.

A factoring method was used to derive the Year 2035 with project peak hour traffic volumes. Since the traffic model included project volumes, the project was subtracted from Year 2035 with project volumes to calculate the Year 2035 without project condition. This had the effect of removing project traffic from future volumes to reflect the existing vacant condition. No road network changes were assumed in the analysis of the Year 2035 conditions with the exception of the I-805 Managed Lanes project which is currently under construction.

FIGURE 10-1

Horizon Year 2035 Without Project Average Daily Traffic Volumes

TABLE 10-1

Horizon Year 2035 Without Project Street Segment Levels of Service

Road	Segment	Class.	Cap.	Volume	V/C	LOS
Genesee Ave.	Eastgate Mall to Executive Dr.	6-M	50,000	33,880	0.68	C
Eastgate Mall	Genesee Ave. to Easter Way	4-C	30,000	20,605	0.69	D
	Easter Way to Towne Centre Dr.	4-C	30,000	20,375	0.68	D
	Towne Centre Dr. to Judicial Dr.	4-C	30,000	14,355	0.48	C
	East of Judicial Dr.	4-C	30,000	16,150	0.54	C
Towne Centre Dr.	Eastgate Mall to Executive Dr.	4-M	40,000	17,083	0.43	B
	Executive Dr. to La Jolla Village Dr.	4-M	40,000	26,670	0.67	C
Judicial Dr.	Eastgate Mall to Executive Dr.	4-M	40,000	7,763	0.19	A
	Executive Dr. to Golden Haven Dr.	4-M	40,000	13,605	0.34	A

Legend:

Class. = Functional Class

Cap. = Capacity

LOS = Level of Service

6-M = 6 Lane Major Arterial

4-M = 4 Lane Major Arterial

4-C = 4 Lane Collector

10.1 STREET SEGMENTS

Street segment volumes for Horizon Year 2035 conditions without the project are shown in **Figure 10-1**. The street segments LOS for Horizon Year 2035 conditions without the project are shown in **Table 10-1**. All street segments within the study area are projected to operate at an acceptable level of service.

10.2 INTERSECTIONS

AM/PM peak hour turn volumes were established by using a factoring method based on Near Term With Project volumes and Horizon Year 2035 With Project daily volumes. All study intersections AM/PM peak hour turn volumes used the factoring method to develop Horizon Year 2035 With Project volumes. Project only peak hour volumes were subtracted from Horizon Year 2035 With Project volumes. The factoring worksheets for all study intersections can be found in **Appendix H**. **Figure 10-2** shows the expected Horizon Year 2035 Without Project peak hour volumes at the intersections analyzed. **Table 10-2** shows the peak hour intersection level of service.

As shown, three (3) intersections are projected to operate at unacceptable levels of service.

- Towne Centre Dr. / Executive Dr. LOS E in the PM
- Judicial Dr. / Executive Dr. LOS F in the PM
- Towne Centre Dr. / La Jolla Village Dr. LOS F in the AM & PM

The Synchro worksheets for the Horizon Year 2035 Without Project condition may be found in **Appendix I**.

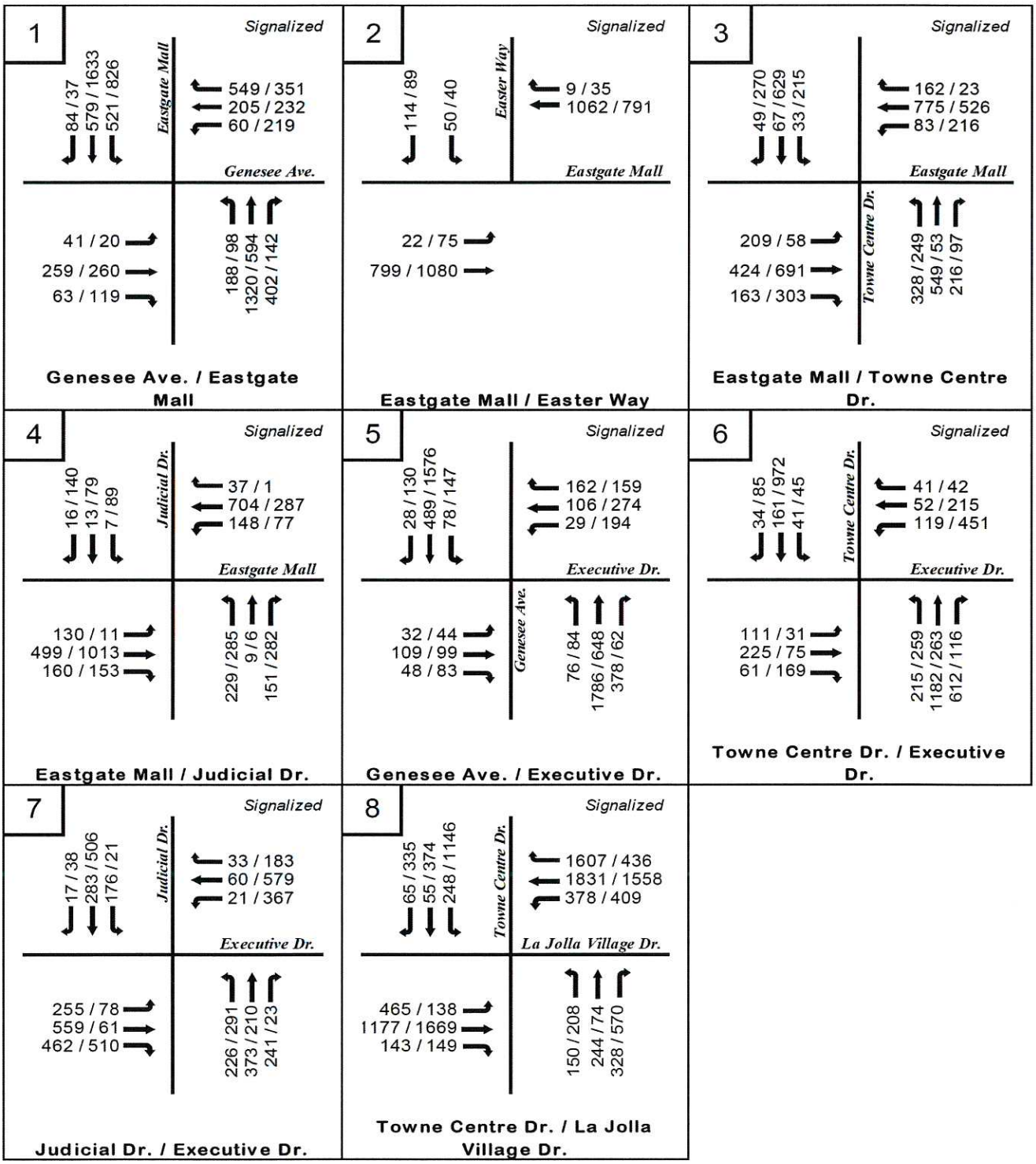


FIGURE 10-2

Horizon Year 2035 Without Project AM/PM Peak Hour Traffic Volumes

TABLE 10-2

Horizon Year 2035 Without Project Intersection Levels of Service

Number	Intersection	Control	AM Peak Hour		PM Peak Hour	
			Delay	LOS	Delay	LOS
1	Genesee Ave. / Eastgate Mall	Signalized	47.9	D	47.6	D
2	Eastgate Mall / Easter Way	Signalized	39	D	39.1	D
3	Eastgate Mall / Towne Centre Dr.	Signalized	31.1	C	53.9	D
4	Eastgate Mall / Judicial Dr.	Signalized	45.4	D	53.6	D
5	Genesee Ave. / Executive Dr.	Signalized	26.6	C	27.8	C
6	Towne Centre Dr. / Executive Dr.	Signalized	47.5	D	68.3	E
7	Judicial Dr. / Executive Dr.	Signalized	45.8	D	85.7	F
8	Towne Centre Dr. / La Jolla Village Dr.	Signalized	122.7	F	111.3	F

Notes:

Delay = seconds per vehicle

LOS = Level of Service

10.3 FREEWAY RAMP METER

Table 10-3 shows the ramp meter analysis in the Year 2035 Without Project condition using the most restrictive rate provided by Caltrans.

TABLE 10-3

Horizon Year 2035 Without Project Ramp Meter Analysis

Most Restrictive Meter Rate

Location		Lanes On Ramp	Total Demand (Veh/Hr)	Demand Per Lane (Veh/Hr/Ln)	Meter Rate* (Veh/Hr/Ln)	Excess Demand (Veh/Hr/Ln)	Delay (Min)	Queue (Feet)
Eastbound La Jolla Village Dr. to I-805 SB On Ramp	AM	2 SOV	Ramp Meter is not turned on in the AM Peak Hour					
	PM	2 SOV	1704	767	593	173.8	17.59	5040.2
Eastbound La Jolla Village Dr. to I-805 SB On Ramp	AM	1 HOV	Ramp Meter is not turned on in the AM Peak Hour					
	PM	1 HOV	1704	170	593	0	0	0

NOTE:
Delay = (Demand - Meter Rate) / Meter Rate * 60 minutes/hour
Queue = Excess Demand * 29 feet/vehicle
SOV = Single Occupancy Vehicle assumed at 90%
HOV = High Occupancy Vehicle assumed at 10%
*Ramp Meter Rates provided by Caltrans, see Appendix B.

11. HORIZON YEAR 2035 WITH PROJECT

As previously discussed, Horizon Year 2035 With Project volumes were taken from the SANDAG Series 12 Year 2035 traffic model and manually adjusted at a few segments within the study area as discussed in Chapter 10.0. Also as discussed, the project land uses were inserted in the traffic model to obtain a forecast of traffic conditions in the future with the project. Street segment volumes were read directly from the traffic model except for some minor adjustments. Intersection volumes were developed by increasing Near Term with Project volumes by the growth factors predicted by the traffic model

11.1 STREET SEGMENTS

Figure 11-1 shows the Horizon Year 2035 With Project street segment traffic volumes.

An analysis was completed for street segments in the Horizon Year 2035 With Project condition. As shown on **Table 11-1**, all street segments are expected to operate at acceptable levels of service.

FIGURE 11-1

Horizon Year 2035 With Project Average Daily Traffic Volumes

TABLE 11-1

Horizon Year 2035 With Project Street Segment Levels of Service

Road	Segment	Class.	Cap.	Volume	V/C	LOS
Genesee Ave.	Eastgate Mall to Executive Dr.	6-M	50,000	34,000	0.68	C
Eastgate Mall	Genesee Ave. to Easter Way	4-C	30,000	21,100	0.70	D
	Easter Way to Towne Centre Dr.	4-C	30,000	20,900	0.70	D
	Towne Centre Dr. to Judicial Dr.	4-C	30,000	14,700	0.49	C
	East of Judicial Dr.	4-C	30,000	16,300	0.54	C
Towne Centre Dr.	Eastgate Mall to Executive Dr.	4-M	40,000	17,600	0.44	B
	Executive Dr. to La Jolla Village Dr.	4-M	40,000	27,000	0.68	C
Judicial Dr.	Eastgate Mall to Executive Dr.	4-M	40,000	8,400	0.21	A
	Executive Dr. to Golden Haven Dr.	4-M	40,000	13,800	0.35	A

Legend:

Class. = Functional Class

Cap. = Capacity

LOS = Level of Service

6-M = 6 Lane Major Arterial

4-M = 4 Lane Major Arterial

4-C = 4 Lane Collector

11.2 HORIZON YEAR 2035 WITH PROJECT INTERSECTIONS

Figure 11-2 shows the expected peak hour volumes at Horizon Year 2035 With Project for the intersections analyzed. **Table 11-2** shows the AM and PM peak hour LOS for the Horizon Year 2035 With Project condition.

As shown, three (3) intersections are projected to operate at unacceptable levels of service.

- Towne Centre Dr. / Executive Dr. LOS E in the PM
- Judicial Dr. / Executive Dr. LOS F in the PM
- Towne Centre Dr. / La Jolla Village Dr. LOS F in the AM & PM

Although the intersections above are projected to operate at an unacceptable level of service, project impacts are only anticipated at the intersection of Towne Centre Drive and La Jolla Village Drive. Significant project impacts are further discussed in Section 15.0 of this study.

Appendix J includes Synchro worksheets for Horizon Year 2035 With Project condition.

11.3 HORIZON YEAR 2035 WITH PROJECT RAMP METER

Table 11-3 shows the ramp meter analysis in the Year 2035 Without Project condition using the most restrictive rate provided by Caltrans.

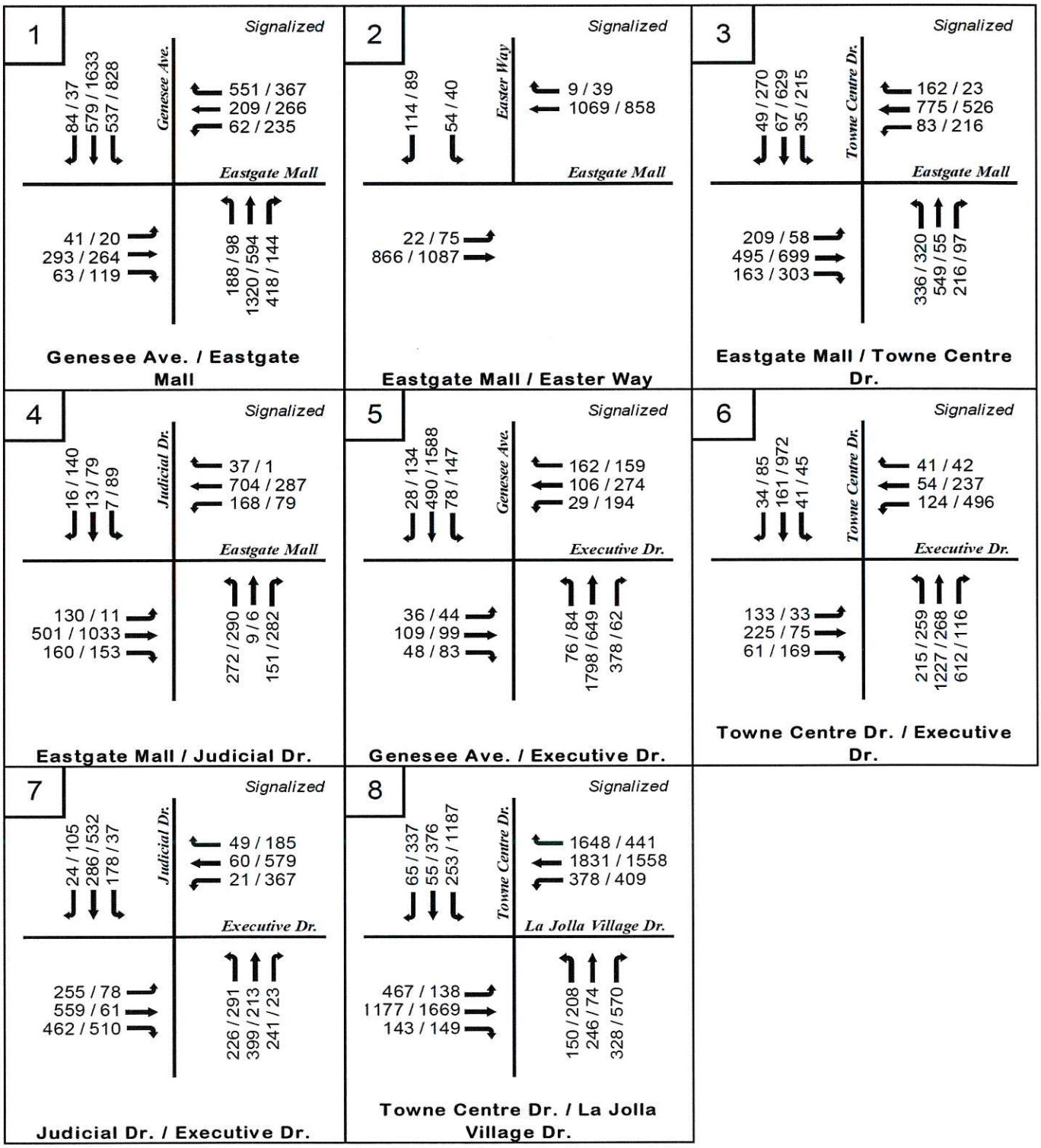


FIGURE 11-2

Horizon Year 2035 With Project AM/PM Peak Hour Traffic Volumes

TABLE 11-2

Horizon Year 2035 With Project Intersection Levels of Service

Number	Intersection	Control	AM Peak Hour		PM Peak Hour	
			Delay	LOS	Delay	LOS
1	Genesee Ave. / Eastgate Mall	Signalized	48.7	D	48.6	D
2	Eastgate Mall / Easter Way	Signalized	45.1	D	40.5	D
3	Eastgate Mall / Towne Centre Dr.	Signalized	31.1	C	54.3	D
4	Eastgate Mall / Judicial Dr.	Signalized	53.7	D	54.6	D
5	Genesee Ave. / Executive Dr.	Signalized	27.2	C	27.9	C
6	Towne Centre Dr. / Executive Dr.	Signalized	48	D	69.7	E
7	Judicial Dr. / Executive Dr.	Signalized	46.9	D	86.4	F
8	Towne Centre Dr. / La Jolla Village Dr.	Signalized	126.6	F	116.3	F

Notes:

Delay = seconds per vehicle

LOS = Level of Service

TABLE 11-3

Horizon Year 2035 With Project Ramp Meter Analysis

Most Restrictive Meter Rate

Location		Lanes On Ramp	Total Demand (Veh/Hr)	Demand Per Lane (Veh/Hr/Ln)	Meter Rate* (Veh/Hr/Ln)	Excess Demand (Veh/Hr/Ln)	Delay (Min)	Queue (Feet)
Eastbound La Jolla Village Dr. to I-805 SB On Ramp	AM	2 SOV	Ramp Meter is not turned on in the AM Peak Hour					
	PM	2 SOV	1730	779	593	186	18.77	5380
Eastbound La Jolla Village Dr. to I-805 SB On Ramp	AM	1 HOV	Ramp Meter is not turned on in the AM Peak Hour					
	PM	1 HOV	1730	173	593	0	0	0

NOTE:
Delay = (Demand - Meter Rate) / Meter Rate * 60 minutes/hour
Queue = Excess Demand * 29 feet/vehicle
SOV = Single Occupancy Vehicle assumed at 90%
HOV = High Occupancy Vehicle assumed at 10%
*Ramp Meter Rates provided by Caltrans, see Appendix B.

12. ACCESS AND PARKING

12.1 ACCESS

The proposed project site will be accessed via Eastgate Mall, Towne Centre Drive and Judicial Drive, see **Figure 12-1**. The proposed parking garage will provide direct right in/out access via Judicial Drive and also connect to Eastgate Mall and Towne Centre Drive via right in/out driveways. A drop-off/ loading area is provided in front of the proposed office building and located convenient to the driveway from Eastgate Mall. Onsite queuing distances are shown in the figure. Based on the anticipated trip generation for the project site (225 AM in trips and 225 PM out trips), it is anticipated that the project access will operate acceptably.

12.2 PARKING

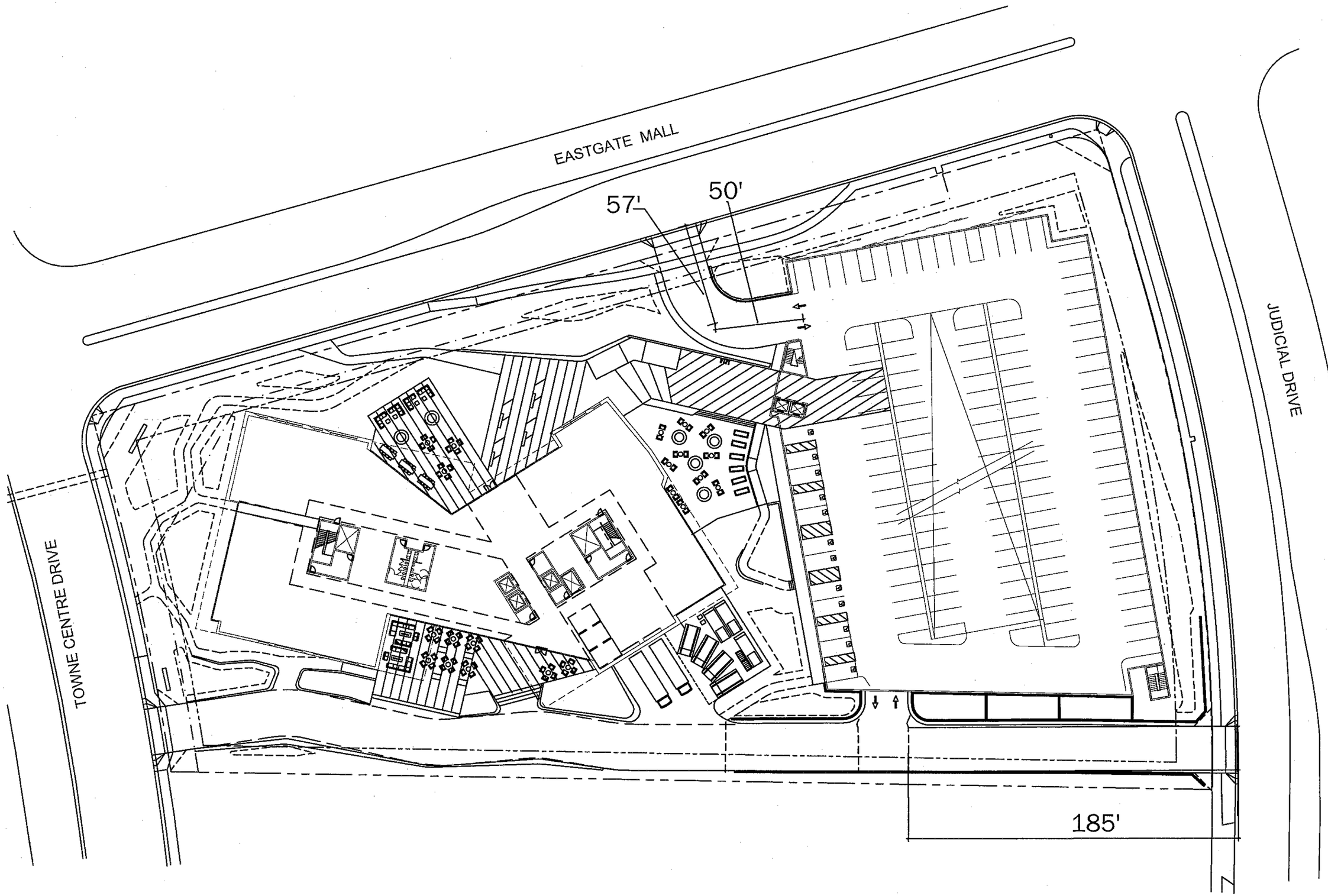
Parking at the site will comply with City of San Diego Municipal Code requirements. According to the City's Municipal Code, the minimum parking spaces required for the proposed 150,000 SF Regional and Corporate Headquarters use is 495 based on a rate of 3.3 spaces per 1,000 SF. However, the project is providing 600 spaces based on a rate of 4.0 spaces per 1,000 SF.

As can be seen on **Figure 12-1**, the parking structure is proposed to be located along the eastern boundary of the site. The 5 level structure is planned to provide 600 total spaces (at a rate of 4.0 spaces/ 1,000 square feet) with 12 accessible parking spaces, 7 motorcycle spaces, and 60 carpool/zero emission vehicle spaces.

The Proposed Parking and Access Plan is provided on the following sheet (11 x 17)

FIGURE 12-1

Parking & Access Plan



Project Access and Parking

TABLE 12-1

Parking Calculations

Parking Space Summary @ Approx. 4.0 spaces / 1,000 SF	Number of Spaces
Total Parking Spaces	600
Accessible Parking Spaces: CBC 11B-208.2	12
Van Accessible Parking Spaces: CBC 11B-208.2.4	3
Carpool & Zero Emission Vehicles: 142.0530(d)	60
Other Non-Car Spaces	
Motorcycle Parking: 142.0530(g)	7
Bicycle Parking, Short Term: 142.0530(e)	35
Bicycle Parking, Long Term: 142.0530(e)	35

Note: Parking ratio may vary from a minimum of 3.5 cars per thousand to a maximum of 4.0 cars per thousand

Parking Information Source: Flad Architects

13. TRANSIT AND OTHER MODES

13.1 PEDESTRIAN AND BICYCLES

Pedestrian and bicycle access are provided through existing sidewalks and bike lanes on Eastgate Mall. Sidewalks are also provided on Towne Centre Drive as well as Judicial Dr. The Community Plan currently calls for Class II bike lanes on Judicial Drive from Eastgate Mall to Nobel Drive. However, the bike lane has only been completed south of Executive Drive. In order to complete the bike lane, existing parking would need to be removed. The bike lane is not part of this project. Please refer to **Figure 13-1** for the pedestrian circulation plan.

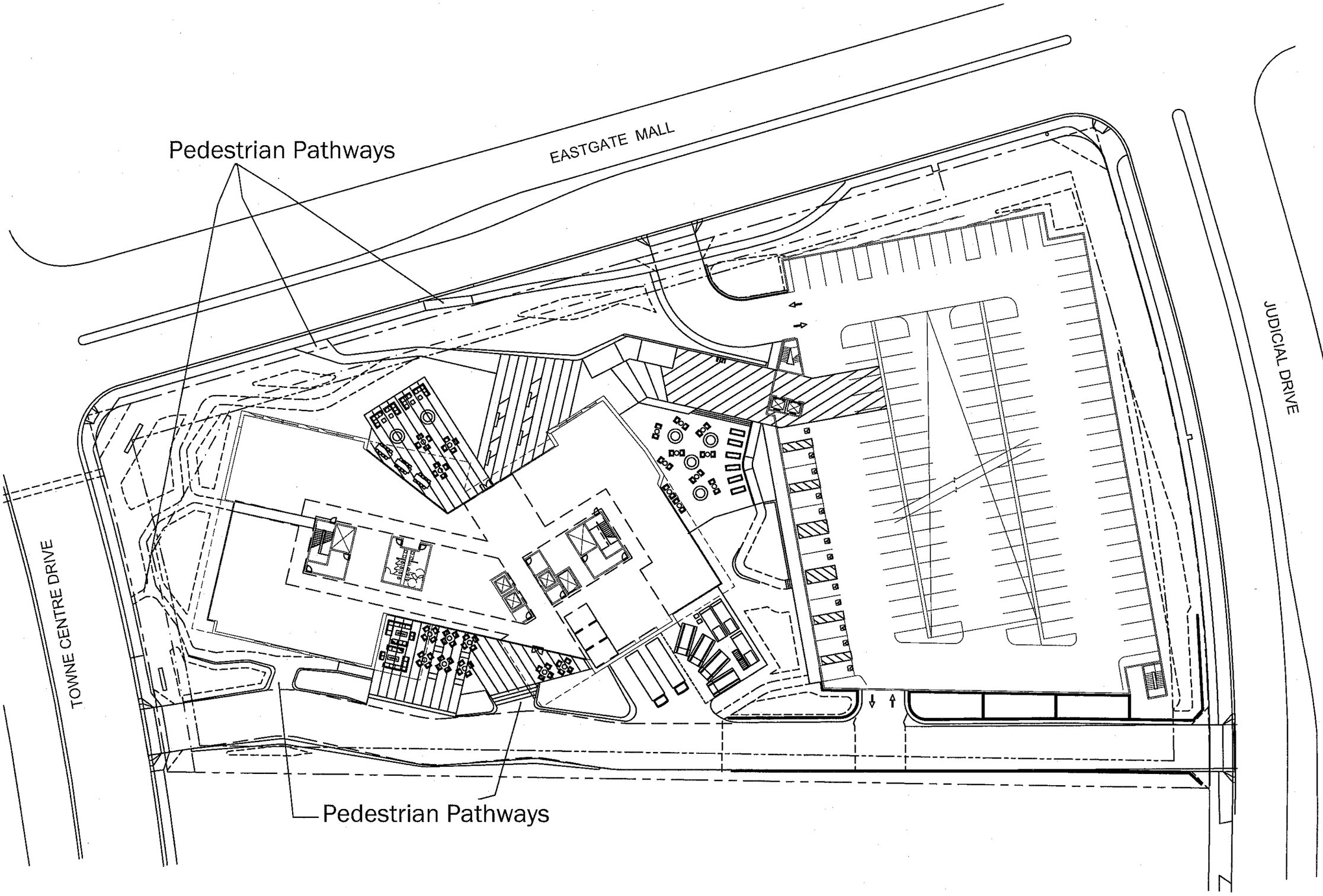
13.2 TRANSIT

As depicted on **Figure 13-2**, the site is currently served by MTS bus service via bus Route 31. Bus Route 31 travels on Eastgate Mall along the project frontage with a stop just west of the intersection of Towne Centre Drive and Judicial Drive. Bus route 979 travels along Eastgate Mall near the project site which stops near the intersection of Eastgate Mall and Towne Centre Drive across Towne Centre Drive from the project site. Route 979 connects to the UTC Transit Center as shown in **Figure 13-3**. Route 204 (Superloop) also travels in the project vicinity on Executive Drive and Judicial Drive. Please see **Figure 13-4**. The nearest stops are near the Intersection of Executive Way at Executive Drive and Judicial Drive at Executive Drive. No trip reductions for transit service were assumed as part of this analysis.

The Proposed Pedestrian Access Plan is provided on the following sheet (11 x 17)

FIGURE 13-1

Pedestrian Circulation Plan



Pedestrian Access

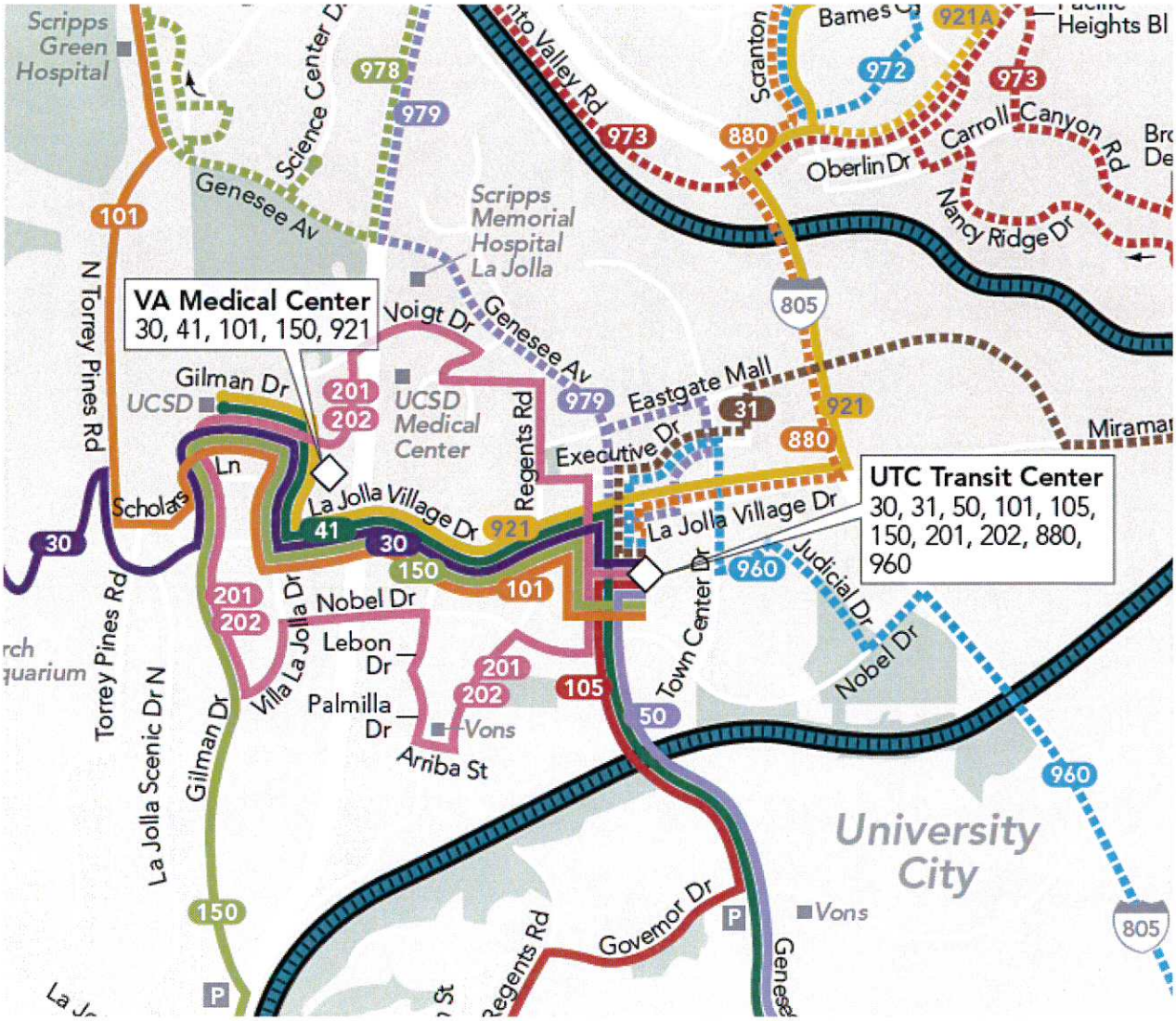


FIGURE 13-2

Transit Service North Central Region

Route 979 — Monday through Friday / *lunes a viernes*

UTC ➡ Sorrento Valley COASTER Station

		Morning (AM)					Afternoon/Evening (PM)				
◈	Sorrento Valley COASTER Station **DEPART***	6:39a	7:19a	7:53a	8:16a	8:54a		4:12p	4:44p	5:18p	6:09p
54	SB Genesee Ave & Scripps Driveway (after intersection)										
55	SB Genesee Ave & Campus Point Drive (after intersection)	6:46	7:26	8:00	8:23	9:01	3:41p	4:19	4:51	5:25	6:16
56	EB Eastgate Mall & Easter Way (before intersection)										
57	EB Eastgate Mall & Towne Centre Way (before turn)										
58	Towne Centre Way & Executive Drive (before turn)										
59	Executive Way & Executive Drive (before turn)										
60	NB Genesee Ave & La Jolla Village Drive (after turn)	6:51	7:31	8:05	8:28	9:06	3:46	4:24	4:56	5:30	6:21
61	NB Genesee Ave & Executive Drive (before intersection)										
62	NB Genesee Ave & Eastgate Mall (after intersection)										
63	NB Genesee Ave & Campus Point Drive (after intersection)										
64	NB Genesee Ave & Scripps Driveway (after intersection)										
◈	Sorrento Valley COASTER Station **ARRIVE**	7:01	7:41	8:15	8:38	—	3:59	4:37	5:09	5:43	6:34

FIGURE 13-3

Bus Route 979

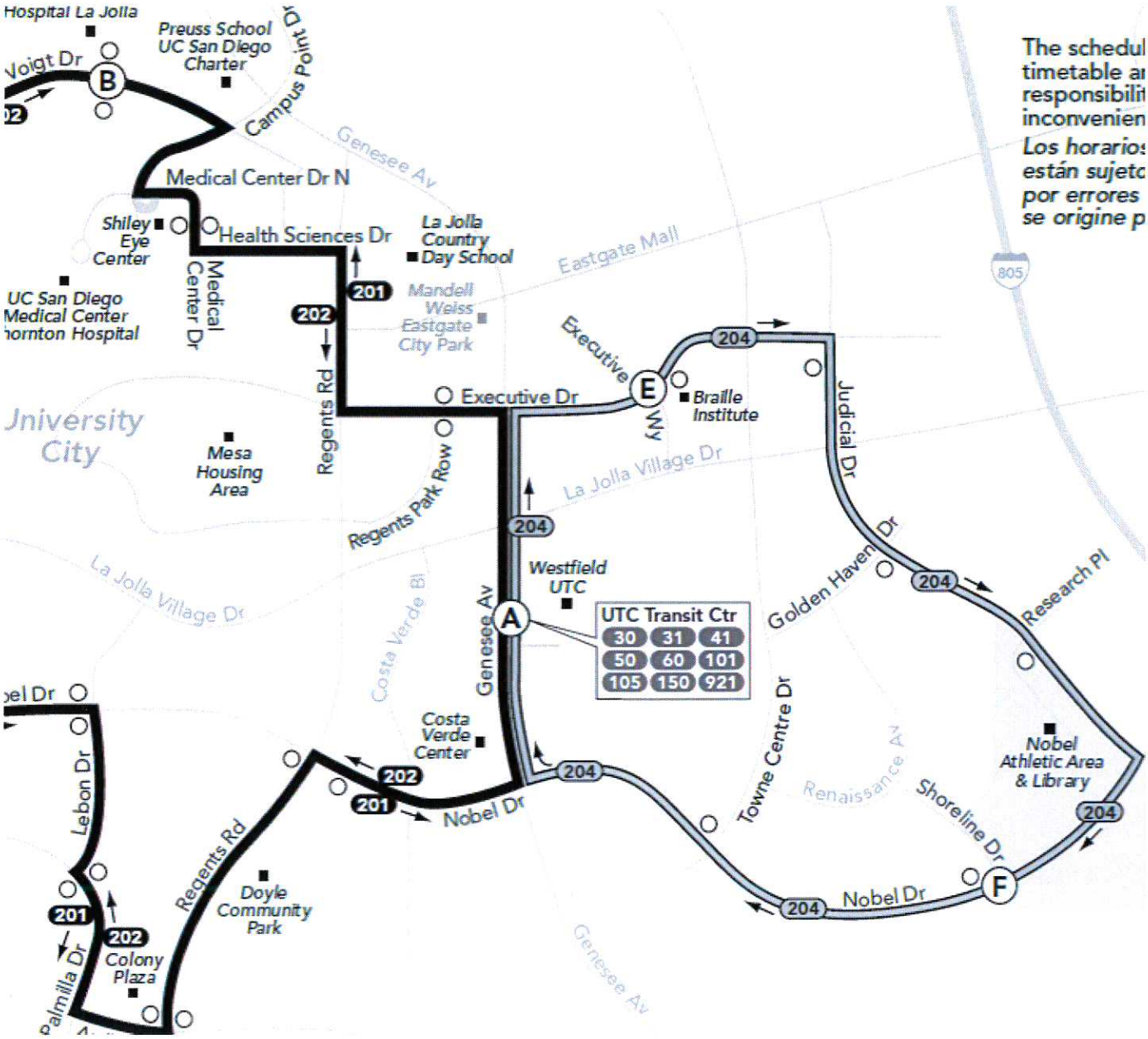


FIGURE 13-4

Bus Route 204 (Superloop)

14. TRANSPORTATION DEMAND MANAGEMENT (TDM)

14.1 TDM

Transportation Demand Management, called "TDM" for short, is a strategy designed to reduce single occupant vehicle trips during the AM and PM peak weekday hours. Since most commuting and congestion occur during weekday peak periods, TDM seeks to shift commuters to transportation modes other than cars as well as reduce peak hour trips by encouraging commuting in non-peak periods and other strategies.

The project will include the following Climate Action Plan TDM Strategies:

- A Parking Management Plan including charging market-rate for single-rate for single-occupancy vehicle parking and providing reserved, discounted, or free spaces for registered carpools or vanpools
- Participation in the Sandag iCommute program in order to create an employer network and promote its RideMatcher service to tenants/employees
- Allow employees to work flexible or alternative hours in order to reduce the number of employees commuting during the peak hours
- Provide access to services through locating the project within 1,320 feet (1/4 mile) to services that reduce the need to drive, such as cafes, commercial stores, banks, post offices, restaurants, gyms, or childcare. **Figure 14-1** shows services which are available within a quarter mile radius.

FIGURE 14-1

Services Within ¼ Mile

The following features are in addition to the measures required by the Climate Action Plan TDM strategies and will serve to further reduce peak hour traffic from the 9455 Towne Centre Drive site:

- Bulletin boards, video screens or other communication medium, which encourage alternative transportation programs
- A TDM association/coordinator for the office tenants to facilitate publication and distribution of information as well as ensure it remains current
- Informational quarterly newsletters to tenants discussing iCommute and other tools for carpooling, bicycling, and alternative modes of transportation
- Bike lockers will be provided on-site
- Showers will be provided on-site
- Carpooling priority parking
- Carpool Association
- Charging Stations for Electric Vehicles

15. CONCLUSIONS AND RECOMMENDATIONS

15.1 PROJECT TRIP GENERATION

The project of 150,000 SF Regional and Corporate Headquarters use is expected to generate approximately 1,500 average daily vehicle trips with 225 AM (203 inbound / 23 outbound) peak hour trips and 225 PM (23 inbound / 203 outbound) peak hour trips.

15.2 EXISTING CONDITIONS

Street Segments:

All street segments are shown to operate at LOS "D" or better in the Existing condition.

Intersections:

All intersections are expected to operate at LOS "D" or better in the Existing condition.

15.3 EXISTING WITH PROJECT

When project traffic is added to existing traffic, the following results occur.

Street Segments:

All street segments are anticipated to operate at acceptable levels of service in the Existing With Project scenario.

Intersections:

- All intersections are projected to operate at LOS "D" or better in the Existing With Project scenario.

15.4 NEAR TERM WITHOUT PROJECT

Street Segments:

All street segments are anticipated to operate at LOS "C" or better in the Near Term Without Project scenario.

Intersections:

All intersections are projected to operate at LOS "D" or better in Near Term Without Project scenario except for these locations:

- Towne Centre Dr. / La Jolla Village Dr. LOS F in the AM & PM

15.5 NEAR TERM WITH PROJECT

When the existing plus the other projects plus the proposed project is added, the following results occur.

Street Segments:

All street segments are projected to operate at LOS "C" or better in the Near Term With Project condition.

Intersections:

All intersections are projected to operate at LOS "D" or better in this condition with the project except for the following intersections:

- Towne Centre Dr. / La Jolla Village Dr. LOS F in the AM and PM

DIRECT IMPACTS:

Street Segments:

Table 15-1 shows the summary of the direct impacts in the Existing Plus Project scenario for street segments within the study area. As shown, there are no significant direct street segment impacts expected as a result of the project. A summary of direct impacts in the Near Term Plus Project scenario for street segments within the study area is shown in **Table 15-2**. As shown, there are no significant direct street segment impacts expected as a result of the project.

Intersections:

Table 15-3 shows the summary of the direct impacts in the Existing with Project scenario for intersections within the study area. As shown in the table, there are no significant impacts. A summary of direct impacts in the Near Term with Project scenario for intersections within the study area are shown in **Table 15-4**. As shown, there is one (1) significant direct impact expected as a result of the project.

TABLE 15-1

Existing With and Without Project Street Segment Significance

Road	Segment	Cap.	Class.	Existing			Existing + Project			ΔV/C	Is this impact Significant?
				LOS	Volume	V/C	LOS	Volume	V/C		
Genesee Ave.	Eastgate Mall to Executive Dr.	50,000	6-M	B	24,078	0.48	B	24,198	0.48	0.002	***NO***
Eastgate Mall	Genesee Ave. to Easter Way	30,000	4-C	B	12,932	0.43	B	13,427	0.45	0.017	***NO***
	Easter Way to Towne Centre Dr.	30,000	4-C	B	11,682	0.39	B	12,207	0.41	0.018	***NO***
	Towne Centre Dr. to Judicial Dr.	30,000	4-C	B	11,257	0.38	B	11,602	0.39	0.012	***NO***
	East of Judicial Dr.	30,000	4-C	B	10,356	0.35	B	10,506	0.35	0.005	***NO***
Towne Centre Dr.	Eastgate Mall to Executive Dr.	40,000	4-M	A	14,630	0.37	B	15,148	0.38	0.013	***NO***
	Executive Dr. to La Jolla Village Dr.	40,000	4-M	B	19,049	0.48	B	19,379	0.48	0.008	***NO***
Judicial Dr.	Eastgate Mall to Executive Dr.	40,000	4-M	A	6,000	0.15	A	6,638	0.17	0.016	***NO***
	Executive Dr. to Golden Haven Dr.	40,000	4-M	A	6,920	0.17	A	7,115	0.18	0.005	***NO***

Legend:

LOS= Level of Service
V/C= Volume to Capacity Ratio
ΔV/C= Change in V/C ratio
6-M= Six lane Major Road
4-C= Four lane Collector Road
4-M= Four lane Major Road

TABLE 15-2

Near Term With and Without Project Street Segment Significance

(Opening Day – Year 2017)

Road	Segment	Cap.	Class.	Near Term			Near Term + Project			Δ V/C	Is this impact Significant?
				LOS	Volume	V/C	LOS	Volume	V/C		
Genesee Ave.	Eastgate Mall to Executive Dr.	50,000	6-M	B	26,730	0.53	B	26,850	0.54	0.002	***NO***
Eastgate Mall	Genesee Ave. to Easter Way	30,000	4-C	C	16,122	0.54	C	16,617	0.55	0.017	***NO***
	Easter Way to Towne Centre Dr.	30,000	4-C	C	14,860	0.50	C	15,385	0.51	0.018	***NO***
	Towne Centre Dr. to Judicial Dr.	30,000	4-C	B	13,392	0.45	B	13,737	0.46	0.012	***NO***
	East of Judicial Dr.	30,000	4-C	B	11,537	0.38	B	11,687	0.39	0.005	***NO***
Towne Centre Dr.	Eastgate Mall to Executive Dr.	40,000	4-M	B	15,643	0.39	B	16,161	0.40	0.013	***NO***
	Executive Dr. to La Jolla Village Dr.	40,000	4-M	C	24,745	0.62	C	25,075	0.63	0.008	***NO***
Judicial Dr.	Eastgate Mall to Executive Dr.	40,000	4-M	A	8,572	0.21	A	9,210	0.23	0.016	***NO***
	Executive Dr. to Golden Haven Dr.	40,000	4-M	A	10,885	0.27	A	11,080	0.28	0.005	***NO***

Legend:

LOS= Level of Service
V/C= Volume to Capacity Ratio
ΔV/C= Change in V/C ratio
6-M= Six lane Major Road
4-C= Four lane Collector Road
4-M= Four lane Major Road

TABLE 15-3

Existing With and Without Project Intersection Comparison

#	Intersection	Existing				Existing + Project							
		AM Peak Hour		PM Peak Hour		AM Peak Hour		Δ	S ?	PM Peak Hour		Δ	S ?
		Delay	LOS	Delay	LOS	Delay	LOS			Delay	LOS		
1	Genesee Ave. / Eastgate Mall	37.1	D	36.6	D	37.4	D	0.3	No	37.4	D	0.8	No
2	Eastgate Mall / Easter Way	18.9	B	18.7	B	19.7	B	0.8	No	19.5	B	0.8	No
3	Eastgate Mall / Towne Centre Dr.	23.1	C	27.6	C	23.1	C	0.0	No	29.5	C	1.9	No
4	Eastgate Mall / Judicial Dr.	28.7	C	24.1	C	47.8	D	19.1	No	24.7	C	0.6	No
5	Genesee Ave. / Executive Dr.	21.5	C	26.5	C	21.5	C	0.0	No	26.5	C	0.0	No
6	Towne Centre Dr. / Executive Dr.	24.6	C	39.7	D	25.7	C	1.1	No	48.4	D	8.7	No
7	Judicial Dr. / Executive Dr.	23.2	C	25.7	C	24.9	C	1.7	No	25.9	C	0.2	No
8	Towne Centre Dr. / La Jolla Village Dr.	42.2	D	53.4	D	43.7	D	1.5	No	54.4	D	1.0	No

Notes:

LOS = Level of Service
Δ = Change
S = Significant

Signal timing sheets obtained from the City of San Diego

TABLE 15-4

Near Term With and Without Project Intersection Comparison

(Opening Day – Year 2017)

#	Intersection	Near Term				Near Term With Project							
		AM Peak Hour		PM Peak Hour		AM Peak Hour		Δ	S ?	PM Peak Hour		Δ	S ?
		Delay	LOS	Delay	LOS	Delay	LOS			Delay	LOS		
1	Genesee Ave. / Eastgate Mall	43.1	D	42.0	D	43.5	D	0.4	No	42.3	D	0.3	No
2	Eastgate Mall / Easter Way	19.7	B	19.7	B	20.3	C	0.6	No	20.7	C	1.0	No
3	Eastgate Mall / Towne Centre Dr.	25.0	C	31.0	C	25.3	C	0.3	No	32.5	C	1.5	No
4	Eastgate Mall / Judicial Dr.	41.6	D	28.2	C	42.0	D	0.4	No	30.9	C	2.7	No
5	Genesee Ave. / Executive Dr.	23.8	C	27.5	C	24.7	C	0.9	No	28.6	C	1.1	No
6	Towne Centre Dr. / Executive Dr.	33.3	C	51.6	D	35.2	D	1.9	No	54.8	D	3.2	No
7	Judicial Dr. / Executive Dr.	38.8	D	49.7	D	41.2	D	2.4	No	54.7	D	5.0	No
8	Towne Centre Dr. / La Jolla Village Dr.	95.9	F	93.7	F	100.6	F	4.7	Yes	97.3	F	3.6	Yes

Notes:

LOS = Level of Service
Δ = Change
S = Significant

15.6 HORIZON YEAR 2035 WITHOUT PROJECT

When the project traffic is subtracted from future model volumes, the following results occur.

Street Segments:

All street segments are projected to operate at LOS "C" or better in the Horizon Year 2035 Without Project condition.

Intersections:

All intersections are projected to operate at LOS "D" or better in this condition without the project except at the following locations:

- Towne Centre Dr. / Executive Dr. LOS E in the PM
- Judicial Dr. / Executive Dr. LOS F in the PM
- Towne Centre Dr. / La Jolla Village Dr. LOS F in the AM & PM

15.7 HORIZON YEAR 2035 WITH PROJECT

When future model volumes including project traffic are evaluated, the following results occur.

Street Segments:

All street segments are projected to operate at LOS "C" or better in the Horizon Year 2035 With Project condition.

Intersections:

All intersections are projected to operate at LOS "D" or better in this condition with the project except at the following locations:

- Towne Centre Dr. / Executive Dr. LOS E in the PM
- Judicial Dr. / Executive Dr. LOS F in the PM
- Towne Centre Dr. / La Jolla Village Dr. LOS F in the AM & PM

Although Towne Centre Drive at Executive Drive and Judicial Drive at Executive Drive would operate at an unacceptable level of service in this condition, as shown in **Table 15-6**, the change in delay caused by the project is less than the threshold required to cause a significant impact. Information regarding impact thresholds can be found in Section 4.0 of this report.

15.8 CUMULATIVE LONG TERM (YEAR 2035) IMPACTS

Street Segments:

Table 15-5 shows the summary of the cumulative impacts in the Horizon Year 2035 With Project scenario for street segments within the study area. As shown, there are no significant street segment impacts as a result of the project.

Intersections:

Table 15-6 shows the summary of the cumulative impacts in the Horizon Year 2035 With Project scenario for intersections within the study area. As shown in the table, there is one (1) significant impact at the intersection Towne Centre Dr. / La Jolla Village Dr.

TABLE 15-5

Horizon Year 2035 With and Without Project Street Segment Significance

Road	Segment	Cap.	Class.	Year 2035			Year 2035 + Project			Δ V/C	Is this impact Significant?
				LOS	Volume	V/C	LOS	Volume	V/C		
Genesee Ave.	Eastgate Mall to Executive Dr.	50,000	6-M	C	33,880	0.68	C	34,000	0.68	0.002	***NO***
Eastgate Mall	Genesee Ave. to Easter Way	30,000	4-C	D	20,605	0.69	D	21,100	0.70	0.017	***NO***
	Easter Way to Towne Centre Dr.	30,000	4-C	D	20,375	0.68	D	20,900	0.70	0.018	***NO***
	Towne Centre Dr. to Judicial Dr.	30,000	4-C	C	14,355	0.48	C	14,700	0.49	0.012	***NO***
	East of Judicial Dr.	30,000	4-C	C	16,150	0.54	C	16,300	0.54	0.005	***NO***
Towne Centre Dr.	Eastgate Mall to Executive Dr.	40,000	4-M	B	17,083	0.43	B	17,600	0.44	0.013	***NO***
	Executive Dr. to La Jolla Village Dr.	40,000	4-M	C	26,670	0.67	C	27,000	0.68	0.008	***NO***
Judicial Dr.	Eastgate Mall to Executive Dr.	40,000	4-M	A	7,763	0.19	A	8,400	0.21	0.016	***NO***
	Executive Dr. to Golden Haven Dr.	40,000	4-M	A	13,605	0.34	A	13,800	0.35	0.005	***NO***

Legend:

LOS= Level of Service
V/C= Volume to Capacity Ratio
ΔV/C= Change in V/C ratio
6-M= Six lane Major Road
4-C= Four lane Collector Road
4-M= Four lane Major Road

TABLE 15-6

Horizon Year 2035 Without and With Project Intersection Summary

#	Intersection	Year 2035				Year 2035 + Project							
		AM Peak Hour		PM Peak Hour		AM Peak Hour		Δ	S ?	PM Peak Hour		Δ	S ?
		Delay	LOS	Delay	LOS	Delay	LOS			Delay	LOS		
1	Genesee Ave. / Eastgate Mall	47.9	D	47.6	D	48.7	D	0.8	No	48.6	D	1.0	No
2	Eastgate Mall / Easter Way	39.0	D	39.1	D	45.1	D	6.1	No	40.5	D	1.4	No
3	Eastgate Mall / Towne Centre Dr.	31.1	C	53.9	D	31.1	C	0.0	No	54.3	D	0.4	No
4	Eastgate Mall / Judicial Dr.	45.4	D	53.6	D	53.7	D	8.3	No	54.6	D	1.0	No
5	Genesee Ave. / Executive Dr.	26.6	C	27.8	C	27.2	C	0.6	No	27.9	C	0.1	No
6	Towne Centre Dr. / Executive Dr.	47.5	D	68.3	E	48.0	D	0.5	No	69.7	E	1.4	No
7	Judicial Dr. / Executive Dr.	45.8	D	85.7	F	46.9	D	1.1	No	86.4	F	0.7	No
8	Towne Centre Dr. / La Jolla Village Dr.	122.7	F	111.3	F	126.6	F	3.9	Yes	116.3	F	5.0	Yes

Notes:

LOS = Level of Service
Δ = Change
S = Significant

15.9 FREEWAY RAMP METERS

Ramp meters were analyzed in this study since the project contributed approximately 20 SR and 26 Regional and Corporate Headquarters project peak trips to the I-805 Southbound On-Ramp at La Jolla Village Drive. As shown in **Table 15-7**, there are no significant direct or cumulative significant impacts as a result of the proposed project.

15.10 MITIGATION

STREET SEGMENTS:

The analysis shows no direct or cumulative significant impacts occur as a result of the proposed project. Therefore, no mitigation has been identified on any of the studied street segments.

INTERSECTIONS:

One intersection has been identified as being significantly impacted due to the proposed project: La Jolla Village Dr. at Towne Centre Dr. As shown on **Table 15-8**, delays and levels of service are provided for the one impacted intersection without mitigation and with mitigation.

At La Jolla Village Drive and Towne Centre Drive, the project would widen the southbound approach to the intersection to construct a dedicated southbound to westbound right turn lane.

Also included in **Appendix K** is a design which shows the planned improvements.

TABLE 15-7

Existing Without and Existing With Project Ramp Meter Summary

Most Restrictive Meter Rate

Location			Meter Rate (Veh/Hr)	Existing			Existing With Project			Freeway LOS	Δ	S
				Demand per Lane	Delay (Min)	Queue (Ft)	Demand per Lane	Delay (Min)	Queue (Ft)			
Eastbound La Jolla Village Dr. to	AM	2 SOV		Ramp Meter Not Turned On						D		
I-805 SB On Ramp (SOV lane)	PM	2 SOV	593	383	0.00	0	394	0.00	0		0.00	NO
Eastbound La Jolla Village Dr. to	AM	1 HOV		Ramp Meter Not Turned On						D		
I-805 SB On Ramp (HOV Lane)	PM	1 HOV	593	85	0.00	0	88	0.00	0		0.00	NO

Notes:
Δ = Change in Delay (minutes)
S = Significant, if change in delay is greater than 2 minutes and Freeway LOS is E **OR** change in delay is greater than 1 minute and Freeway LOS is F.

Near Term Without and Near Term With Project Ramp Meter Summary (Opening Day – Year 2017)

Most Restrictive Meter Rate

Location			Meter Rate (Veh/Hr)	Near Term Without Project			Near Term With Project			Freeway LOS	Δ	S
				Demand per Lane	Delay (Min)	Queue (Ft)	Demand per Lane	Delay (Min)	Queue (Ft)			
Eastbound La Jolla Village Dr. to	AM	2 SOV		Ramp Meter Not Turned On						D		
I-805 SB On Ramp (SOV lane)	PM	2 SOV	593	474	0.00	0	486	0.00	0		0.00	NO
Eastbound La Jolla Village Dr. to	AM	1 HOV		Ramp Meter Not Turned On						D		
I-805 SB On Ramp (HOV Lane)	PM	1 HOV	593	105	0.00	0	108	0.00	0		0.00	NO

Notes:
Δ = Change in Delay (minutes)
S = Significant, if change in delay is greater than 2 minutes and Freeway LOS is E **OR** change in delay is greater than 1 minute and Freeway LOS is F.

Horizon Year 2035 Without and Year 2035 With Project Ramp Meter Summary

Most Restrictive Meter Rate

Location			Meter Rate (Veh/Hr)	Year 2035 Without Project			Year 2035 With Project			Freeway LOS	Δ	S
				Demand per Lane	Delay (Min)	Queue (Ft)	Demand per Lane	Delay (Min)	Queue (Ft)			
Eastbound La Jolla Village Dr. to	AM	2 SOV		Ramp Meter Not Turned On						C		
I-805 SB On Ramp (SOV lane)	PM	2 SOV	593	767	17.59	5,040	779	18.77	5,380		1.18	NO
Eastbound La Jolla Village Dr. to	AM	1 HOV		Ramp Meter Not Turned On						C		
I-805 SB On Ramp (HOV Lane)	PM	1 HOV	593	170	0.00	0	173	0.00	0		0.00	NO

Notes:
Δ = Change in Delay (minutes)
S = Significant, if change in delay is greater than 2 minutes and Freeway LOS is E **OR** change in delay is greater than 1 minute and Freeway LOS is F.

TABLE 15-8

Proposed Mitigation Summary

Study Intersections	Without Mitigation		Impact	Recommended Mitigation	With Mitigation	
	AM Delay-LOS	PM Delay-LOS			AM Delay-LOS	PM Delay-LOS
YEAR 2035 WITH PROJECT						
La Jolla Village Dr. / Towne Centre Dr.	126.6 F	116.3 F	Direct and Cumulative	Widen SB approach to construct an exclusive SB right turn lane.	96.6 F	98.2 F

Synchro Worksheets for the Year 2035 With Project scenario can be found in Appendix L of this report.

16. COMMUNITY PLAN COMPARISON

As previously discussed, the 9455 Towne Centre Drive site has an existing vacant building with 47,091 square feet of Scientific Research and Development uses (at a rate of 8 ADT/1,000 SF). This intensity of use would be expected to generate 377 ADT. All of the improvements associated with this intensity land use have already been constructed. Facilities Financing fees have already been paid as all building permits had been issued with the existing building constructed. However, the proposed development is more intense than what was previously approved.

16.1 Transfer of ADT

As part of the Community Plan Amendment being requested for the proposed project, the development intensity in Subarea 12 would be increased to reflect the project's proposed increase in development intensity. As part of this process, some ADT would be transferred from other development sites within the community to the project site.

Specifically, the Community Plan Amendment proposes the transfer of 293 ADT from 9,785 and 9,791 Towne Centre Drive (Lots 5A, 5B, and 5C of the Eastgate Technology Center) within the Community Plan's Development Intensity Subarea 12 to the project site. The Community Plan Amendment would also transfer 396 ADT from Subarea 37 into Subarea 12. Subarea 37 is located in the southeast area of the University community, south of La Jolla Village Drive, adjacent to and west of I-805, and bisected by Nobel Drive. (See Figure 16-1.) As a result of the ADT transfers, the project site would receive a net increase of 689 ADT.

16.2 Transportation Phasing Plan

Pursuant to the current North University City Public Facilities Financing Plan (PFFP), this traffic analysis considered the project's potential direct and cumulative impacts without the construction of NUC-A (Genesee Ave. – Nobel Drive to SR-52) and NUC-18 (Regents Road Bridge). The project is therefore exempt from the Transportation Threshold requirement of Table 8 to the PFFP.

Notwithstanding, the 9455 Towne Centre Drive project will be responsible for facilities benefit assessment (FBA) fees to fund infrastructure improvements identified in the PFFP.

FIGURE 16-1

Transfer Sites

17. REFERENCES

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18. URBAN SYSTEMS ASSOCIATES, INC., PREPARERS

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Stephanie Cosman

This report is site and time specific and is intended for a one-time use for this intended project under the conditions described as "Proposed Project." Any changes or delay in implementation may require re-analysis and re-consideration by the public agency granting approvals. California land development planning involves subjective political considerations as well as frequently re-interpreted principals of law as well as changes in regulations, policies, guidelines and procedures. Urban Systems and their professionals make no warrant, either express or implied, regarding our findings, recommendations, or professional advice as to the ability to successfully accomplish this land development project.

Traffic is a consequence of human behavior and as such is predictable only in a gross cumulative methodology of user opportunities, using accepted standards and following patterns of past behavior and physical constraints attempting to project into a future window of circumstances. Any counts or existing conditions cited are only as reliable as to the time and conditions under which they were recorded. As such the preparer of this analysis is unable to warrant, either express or implied, that any forecasts are statements of actual true conditions which will in fact exist at any future date.

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Appendix A

SANDAG Series 12 Year 2035 Forecast / Model Adjustments / Trip Generation

SANDAG
Series 12
2035rc11

University City

Select Zone Run

TAZ 4683

Functional Classifications

- Freeway
- Prime
- Major
- Collector
- Light Collector
- Rural Collector
- Local
- Freeway Ramp
- Local Ramp
- Zone Connector

Traffic Analysis Zones

\# Selz Volumes & Percentage

\# Unadjusted ADT(x1000)

SAN DIEGO ASSOCIATION OF GOVERNMENTS
401 B STREET, SUITE 800
SAN DIEGO, CALIFORNIA 92101 USA
(619) 699-1900
E-mail: sandag@sandag.org
Web site: www.sandag.org

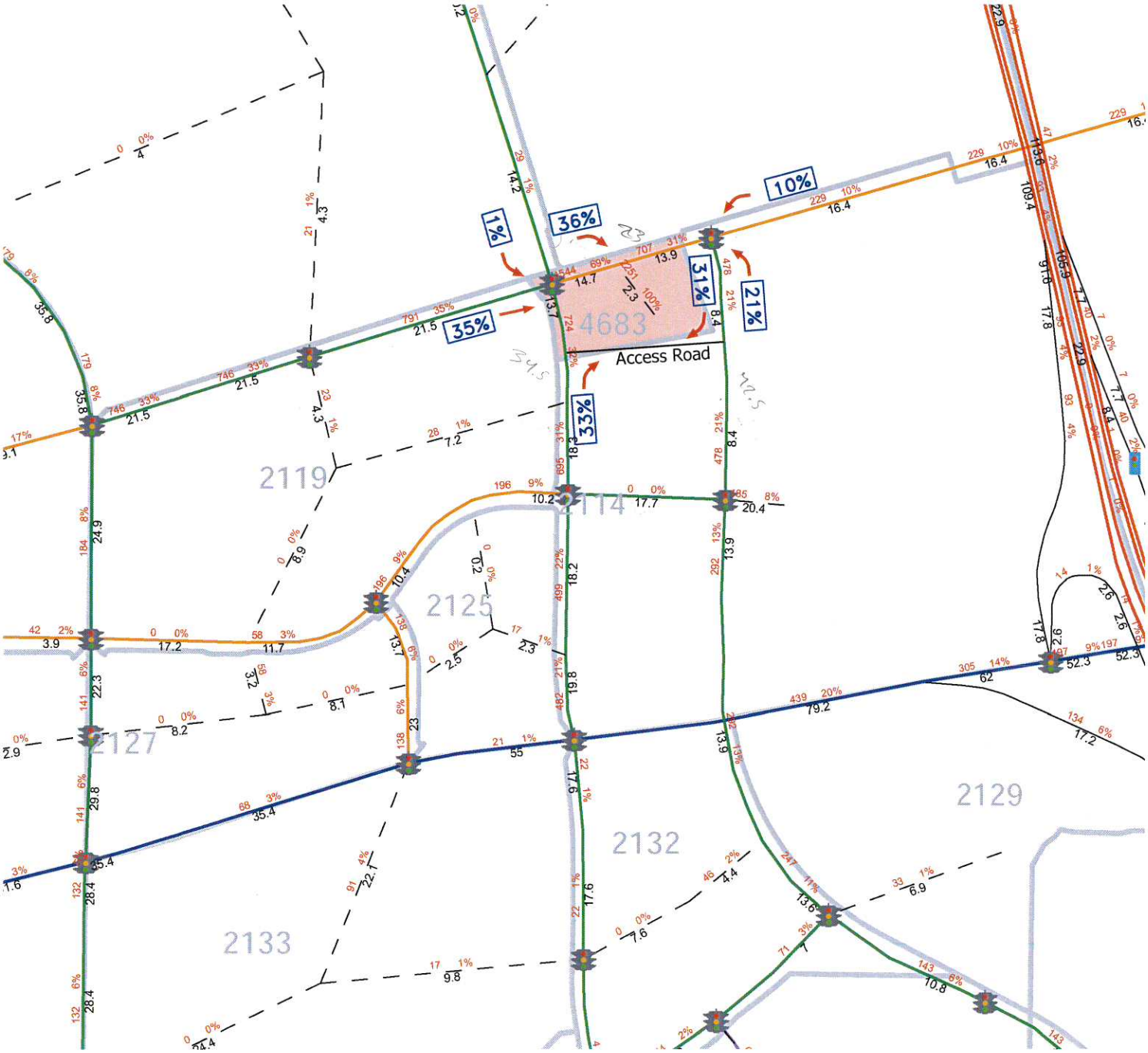
N

0 0.045 0.09 0.135
Miles

SANDAG

servicebureau

November 3, 2015



In Bound Project Traffic Distribution Percentages

Out Bound Project Traffic Distribution Percentages

Note: Reported person and vehicle trips are only estimates. The difference between generated and loaded vehicle trips can be attributed to regional trip balancing, the mode choice model, and/or intrazonal trips.

Land Use					Trips	
Zone	Code	Name	Type	Amount	Person	Vehicle
4683	6005	SCIENTIFIC RESEARCH	ksf	150.0	3000.	2310.
4683		TOTAL			3000.	2310.

10nov15/08:38:00/tgm.pr

Appendix B

Existing Traffic Counts / Signal Timing Sheets / Caltrans Ramp Meter Data / CP Circulation Element

(1)

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: PACIFIC TECHNICAL DATA

DATE:	LOCATION:	UTC	PROJECT #:	PDT15-0605-02
6/4/15	NORTH & SOUTH:	GENESEE	LOCATION #:	1
THURSDAY	EAST & WEST:	EASTGATE MALL	CONTROL:	SIGNAL

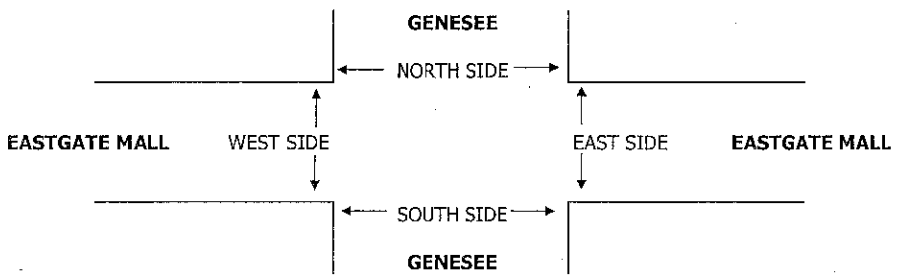
NOTES:

AM PM MD OTHER

N ▲ S ▼ ◄ W E ►

		NORTHBOUND GENESEE			SOUTHBOUND GENESEE			EASTBOUND EASTGATE MALL			WESTBOUND EASTGATE MALL			
	LANES:	NL 1	NT 3	NR 0	SL 1	ST 2	SR 0	EL 1	ET 1	ER 1	WL 1	WT 1	WR 1	TOTAL
AM	7:00 AM	10	151	60	33	55	4	6	10	7	10	18	77	441
	7:15 AM	12	195	50	30	53	5	6	18	8	8	33	91	509
	7:30 AM	33	262	61	51	89	18	10	21	10	12	41	111	719
	7:45 AM	41	260	55	88	121	33	8	26	8	11	50	116	817
	8:00 AM	38	251	68	78	106	20	11	33	12	16	32	105	770
	8:15 AM	29	242	61	56	70	11	11	48	8	9	33	126	704
	8:30 AM	34	231	54	40	71	5	8	41	5	18	38	138	683
	8:45 AM	44	229	71	41	77	4	4	33	5	20	39	125	692
	VOLUMES	241	1,821	480	417	642	100	64	230	63	104	284	889	5,335
	APPROACH %	9%	72%	19%	36%	55%	9%	18%	64%	18%	8%	22%	70%	
	APP/DEPART	2,542	/	2,774	1,159	/	809	357	/	1,127	1,277	/	625	0
	BEGIN PEAK HR		7:30 AM											
	VOLUMES	141	1,015	245	273	386	82	40	128	38	48	156	458	3,010
	APPROACH %	10%	72%	17%	37%	52%	11%	19%	62%	18%	7%	24%	69%	
	PEAK HR FACTOR		0.981			0.765			0.769			0.935		0.921
	APP/DEPART	1,401	/	1,513	741	/	472	206	/	646	662	/	379	0
PM	4:00 PM	28	90	11	105	305	12	7	25	16	28	30	50	707
	4:15 PM	20	88	18	121	306	11	5	33	11	30	38	61	742
	4:30 PM	16	101	21	80	321	8	4	31	15	33	44	66	740
	4:45 PM	11	94	22	121	242	9	4	27	19	44	54	68	715
	5:00 PM	15	116	21	131	269	9	6	30	16	41	48	54	756
	5:15 PM	12	105	25	156	277	10	5	42	11	38	41	60	782
	5:30 PM	18	111	20	111	243	8	4	41	8	37	44	55	700
	5:45 PM	22	101	33	101	222	6	8	33	9	40	40	68	683
	VOLUMES	142	806	171	926	2,185	73	43	262	105	291	339	482	5,825
	APPROACH %	13%	72%	15%	29%	69%	2%	10%	64%	26%	26%	30%	43%	
	APP/DEPART	1,119	/	1,331	3,184	/	2,581	410	/	1,359	1,112	/	554	0
	BEGIN PEAK HR		4:30 PM											
	VOLUMES	54	416	89	488	1,109	36	19	130	61	156	187	248	2,993
	APPROACH %	10%	74%	16%	30%	68%	2%	9%	62%	29%	26%	32%	42%	
	PEAK HR FACTOR		0.919			0.922			0.905			0.890		0.957
	APP/DEPART	559	/	683	1,633	/	1,326	210	/	707	591	/	277	0

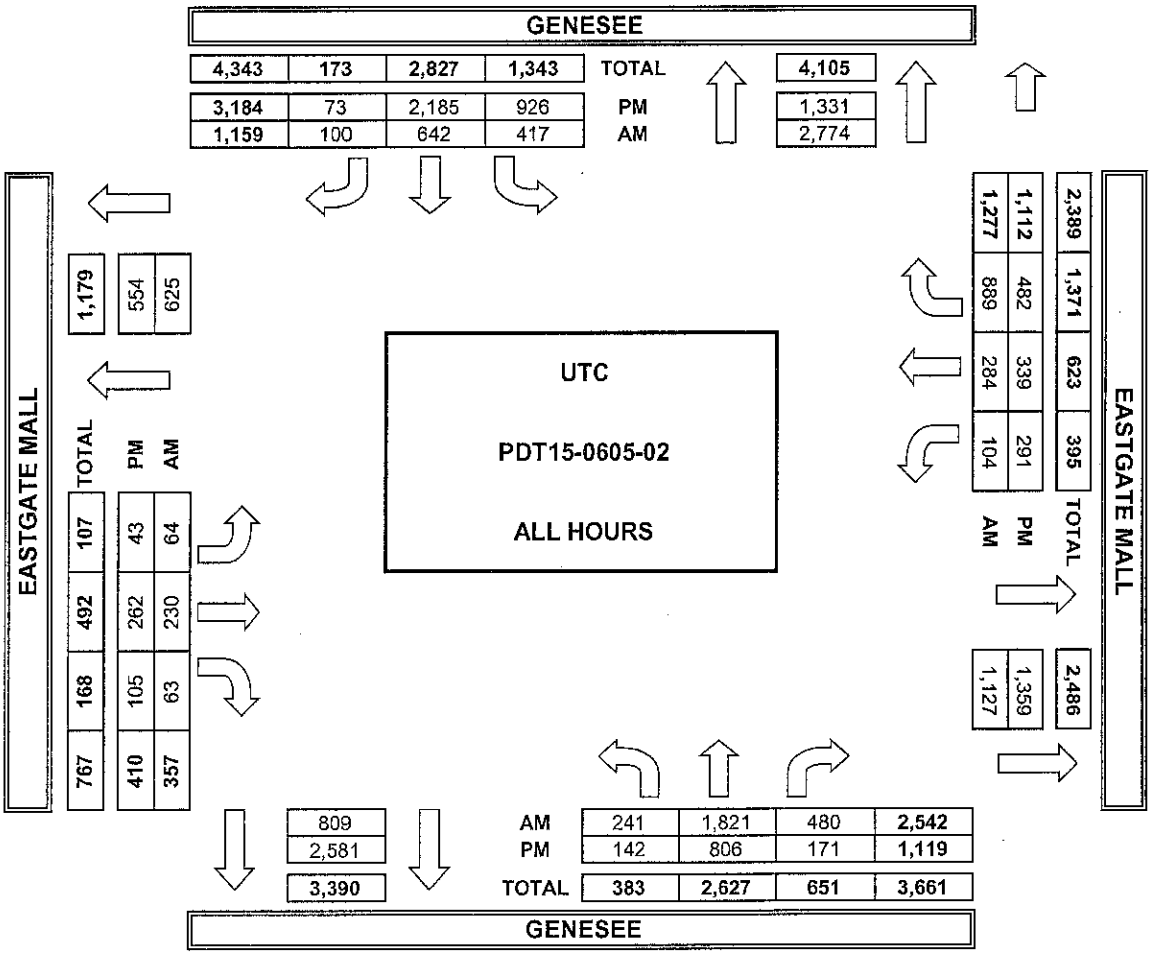
U-TURNS				
NB X	SB X	EB X	WB X	TTL
1		1		2
4	1		1	6
2	19	2	1	24
6	28	2		36
7	22	1		30
8	5			13
11	6	1	1	19
18	4	1		23
57	85	8	3	153
16	12	1		29
10	8	1		19
11	4			15
5	5		1	11
6	8			14
7	12	1	1	21
7	12			19
9	10	2	1	22
71	71	5	3	150

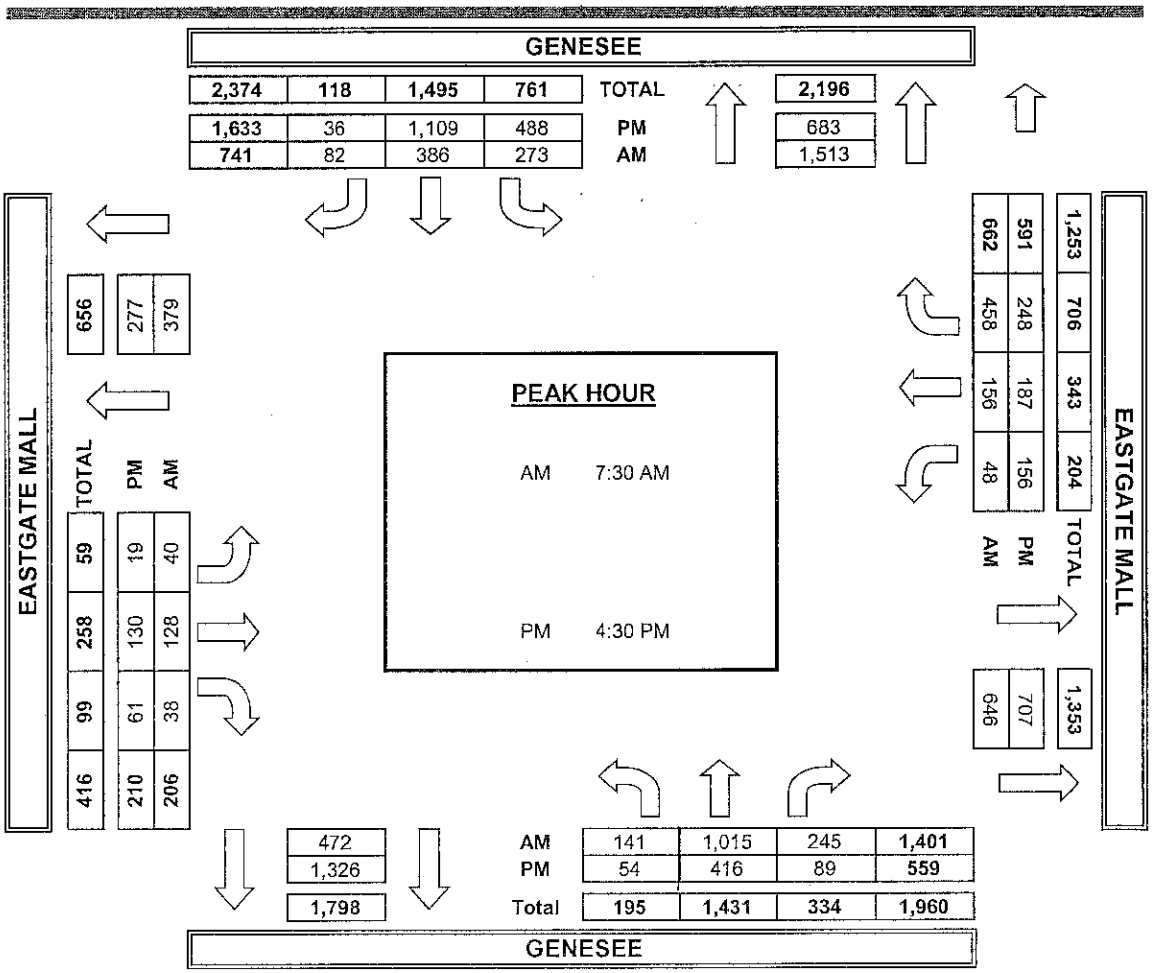


		PEDESTRIAN CROSSINGS					PEDESTRIAN ACTIVATIONS					BICYCLE CROSSINGS				
		N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	NS	SS	ES	WS	TOTAL
AM	7:00 AM	3	2	1	3	9					0	1	2	2		5
	7:15 AM	2	1	2	5	10					0	1	1	1	1	4
	7:30 AM	4	3	3	2	12					0	1	3		1	5
	7:45 AM	4		1		5					0		1	3	2	6
	8:00 AM	5	4		2	11					0	3			2	5
	8:15 AM	8	3	1		12					0	2	2			4
	8:30 AM	3	5	6	2	16					0	2	1		1	4
	8:45 AM	5	7	2		14					0		2	1		3
	TOTAL	34	25	16	14	89	0	0	0	0	0	10	12	7	7	36
PM	4:00 PM	6		1	3	10					0	6	1		3	10
	4:15 PM	4	4	3		11					0		1		2	3
	4:30 PM	3	2	1		6					0			2	3	5
	4:45 PM	4	2	1	3	10					0	4				4
	5:00 PM	6	3		4	13					0	1	3	2	5	11
	5:15 PM	4	2			6					0	3	2	1		6
	5:30 PM	4	3	3	4	14					0	4	3	2	3	12
	5:45 PM	6	4	2	1	13					0	4	2		6	12
	TOTAL	37	20	11	15	83	0	0	0	0	0	22	12	7	22	63

PACIFIC TECHNICAL DATA

TURNING MOVEMENT COUNTS





INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: PACIFIC TECHNICAL DATA

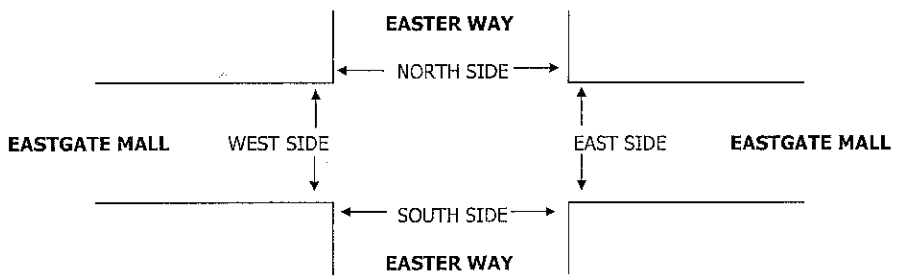
DATE:	LOCATION:	UTC	PROJECT #:	PDT15-0605-02
6/4/15	NORTH & SOUTH:	EASTER WAY	LOCATION #:	2
THURSDAY	EAST & WEST:	EASTGATE MALL	CONTROL:	SIGNAL

NOTES:

◄ W | N ▲ | S ▼ | E ►

		NORTHBOUND EASTER WAY			SOUTHBOUND EASTER WAY			EASTBOUND EASTGATE MALL			WESTBOUND EASTGATE MALL			
	LANES:	NL X	NT X	NR X	SL 0.5	ST X	SR 0.5	EL 1	ET 2	ER 0	WL X	WT 2	WR 0	TOTAL
AM	7:00 AM				7		14	1	78			85	1	186
	7:15 AM				7		18	4	81			106	5	221
	7:30 AM				9		23	12	85			173	3	305
	7:45 AM				13		17	6	132			164	1	333
	8:00 AM				5		21	5	110			153	3	297
	8:15 AM				10		11	5	114			179	3	322
	8:30 AM				8		16	4	109			197	0	334
	8:45 AM				4		32	7	110			205	2	360
	VOLUMES	0	0	0	63	0	152	44	819	0	0	1,262	18	2,358
	APPROACH %	0%	0%	0%	29%	0%	71%	5%	95%	0%	0%	99%	1%	
	APP/DEPART	0	/	62	215	/	0	863	/	882	1,280	/	1,414	0
	BEGIN PEAK HR		8:00 AM											
	VOLUMES	0	0	0	27	0	80	21	443	0	0	734	8	1,313
	APPROACH %	0%	0%	0%	25%	0%	75%	5%	95%	0%	0%	99%	1%	
	PEAK HR FACTOR		0.000			0.743			0.975			0.896		0.912
	APP/DEPART	0	/	29	107	/	0	464	/	470	742	/	814	0
PM	4:00 PM				8		12	8	145			106	2	281
	4:15 PM				5		12	20	131			95	9	272
	4:30 PM				5		21	20	158			116	5	325
	4:45 PM				10		18	14	178			108	6	334
	5:00 PM				2		9	21	180			128	9	349
	5:15 PM				9		14	18	185			114	10	350
	5:30 PM				4		9	24	143			113	11	304
	5:45 PM				4		13	23	136			113	13	302
	VOLUMES	0	0	0	47	0	108	148	1,256	0	0	893	65	2,517
	APPROACH %	0%	0%	0%	30%	0%	70%	11%	89%	0%	0%	93%	7%	
	APP/DEPART	0	/	213	155	/	0	1,404	/	1,303	958	/	1,001	0
	BEGIN PEAK HR		4:30 PM											
	VOLUMES	0	0	0	26	0	62	73	701	0	0	466	30	1,358
	APPROACH %	0%	0%	0%	30%	0%	70%	9%	91%	0%	0%	94%	6%	
	PEAK HR FACTOR		0.000			0.786			0.953			0.905		0.970
	APP/DEPART	0	/	103	88	/	0	774	/	727	496	/	528	0

U-TURNS				
NB X	SB X	EB X	WB X	TTL
				0
				0
				0
				0
	1			1
				0
				0
				0
0	1	0	0	1
				0
				0
				0
				0
				0
				0
				0
				0
0	0	0	0	0



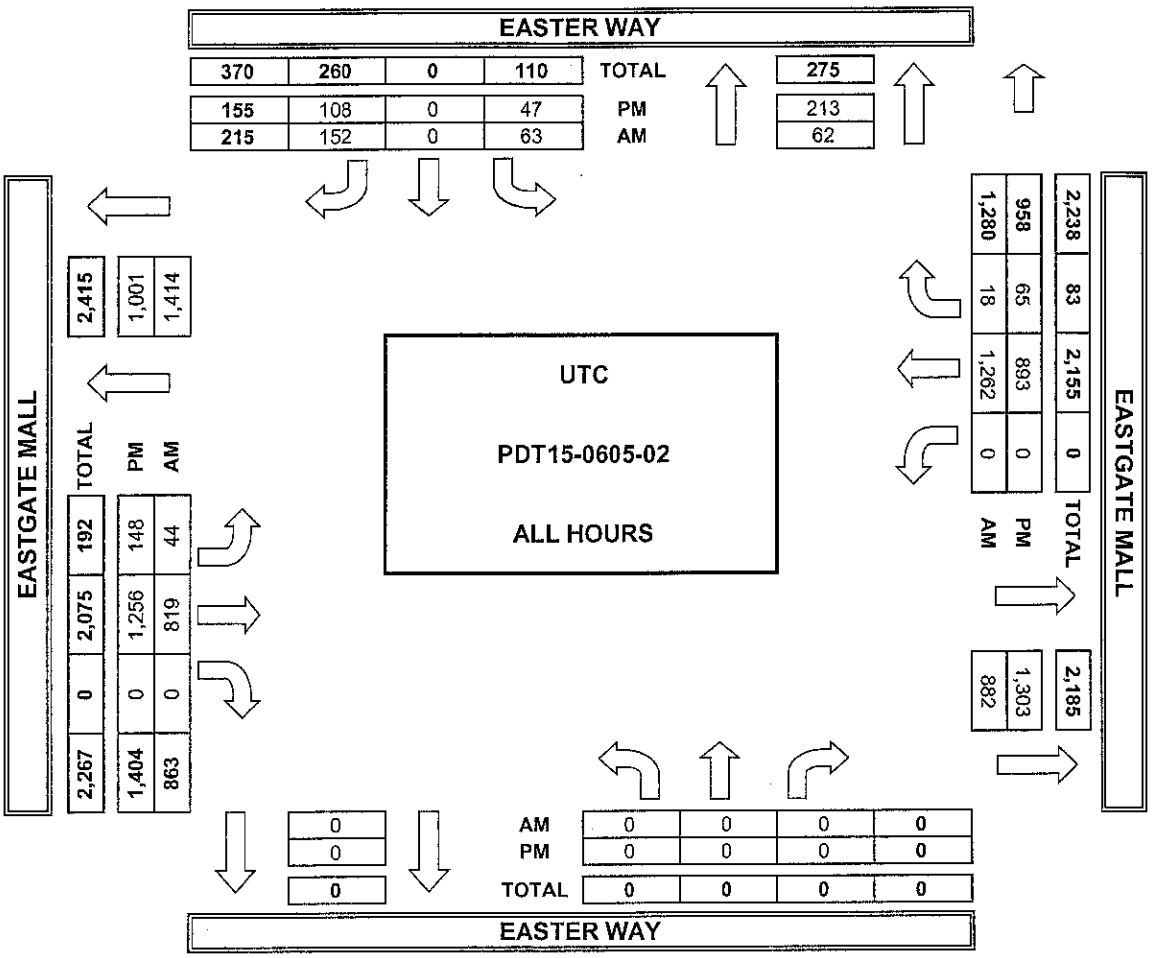
		PEDESTRIAN CROSSINGS				
		N SIDE	S SIDE	E SIDE	W SIDE	TOTAL
AM	7:00 AM					0
	7:15 AM					0
	7:30 AM	1				1
	7:45 AM					0
	8:00 AM					0
	8:15 AM	2				2
	8:30 AM	1				1
	8:45 AM	1				1
	TOTAL	5	0	0	0	5
PM	4:00 PM					0
	4:15 PM					0
	4:30 PM	1				1
	4:45 PM	1				1
	5:00 PM					0
	5:15 PM	1				1
	5:30 PM	2				2
	5:45 PM	3				3
	TOTAL	8	0	0	0	8

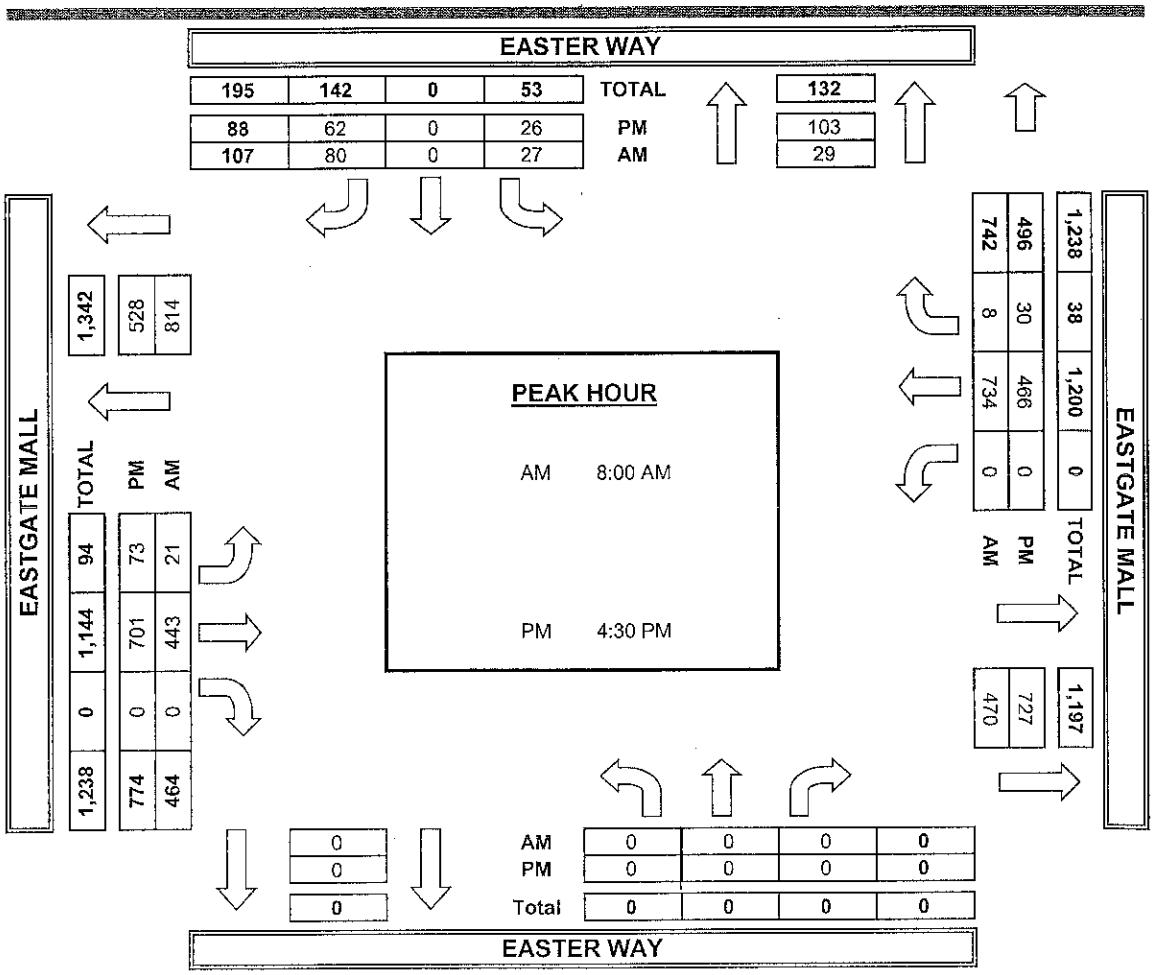
PEDESTRIAN ACTIVATIONS				
N SIDE	S SIDE	E SIDE	W SIDE	TOTAL
				0
				0
				0
				0
				0
				0
				0
				0
0	0	0	0	0
				0
				0
				0
				0
				0
				0
				0
0	0	0	0	0

BICYCLE CROSSINGS				
NS	SS	ES	WS	TOTAL
				0
				0
				0
				0
				0
1				1
				0
2				2
3	0	0	0	3
				0
1				1
1				1
1				1
				0
2				2
				0
1				1
6	0	0	0	6

PACIFIC TECHNICAL DATA

TURNING MOVEMENT COUNTS





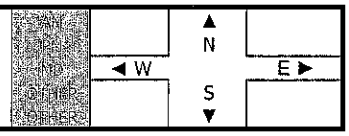
(3)

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: PACIFIC TECHNICAL DATA

DATE:	LOCATION:	UTC	PROJECT #:	PDT15-0605-02
6/4/15	NORTH & SOUTH:	TOWNE CENTRE	LOCATION #:	3
THURSDAY	EAST & WEST:	EASTGATE MALL	CONTROL:	SIGNAL

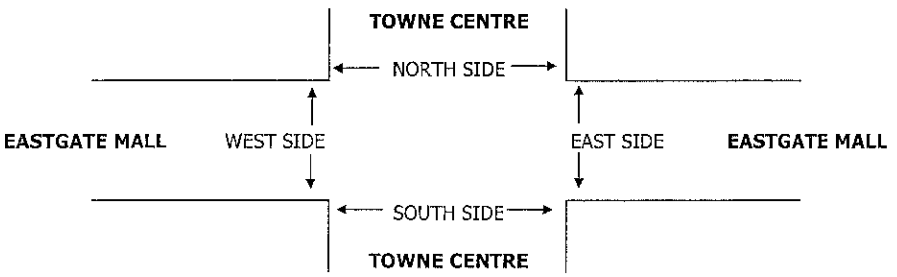
NOTES:



		NORTHBOUND TOWNE CENTRE			SOUTHBOUND TOWNE CENTRE			EASTBOUND EASTGATE MALL			WESTBOUND EASTGATE MALL			
	LANES:	NL 2	NT 2	NR 0	SL 2	ST 2	SR 0	EL 2	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
AM	7:00 AM	22	101	38	4	6	0	31	42	10	5	61	20	340
	7:15 AM	35	110	30	2	8	3	29	48	18	10	94	25	412
	7:30 AM	60	128	44	3	12	1	33	59	20	16	121	32	529
	7:45 AM	51	132	42	4	11	5	34	68	21	11	135	44	558
	8:00 AM	60	121	38	5	9	4	30	66	33	19	105	28	518
	8:15 AM	44	95	41	6	8	2	29	51	31	15	129	26	477
	8:30 AM	50	111	39	5	5	3	32	58	26	11	109	35	484
	8:45 AM	68	108	40	7	9	5	38	44	25	12	116	48	520
	VOLUMES	390	906	312	36	68	23	256	436	184	99	870	258	3,838
	APPROACH %	24%	56%	19%	28%	54%	18%	29%	50%	21%	8%	71%	21%	
	APP/DEPART	1,608	/	1,420	127	/	351	876	/	784	1,227	/	1,283	0
	BEGIN PEAK HR		7:30 AM											
	VOLUMES	215	476	165	18	40	12	126	244	105	61	490	130	2,082
	APPROACH %	25%	56%	19%	26%	57%	17%	27%	51%	22%	9%	72%	19%	
	PEAK HR FACTOR		0.922			0.875			0.921			0.896		0.933
	APP/DEPART	856	/	732	70	/	206	475	/	427	681	/	717	0
PM	4:00 PM	28	6	12	26	105	11	5	97	42	42	59	3	436
	4:15 PM	33	8	15	25	97	15	5	114	40	40	68	1	461
	4:30 PM	40	7	16	38	98	20	6	115	51	37	70	2	500
	4:45 PM	31	9	20	29	121	22	9	108	55	41	77	4	526
	5:00 PM	28	8	21	39	103	20	8	126	51	32	68	3	507
	5:15 PM	29	9	16	30	94	18	5	135	62	48	74	2	522
	5:30 PM	31	5	18	33	89	16	2	111	60	32	70	2	469
	5:45 PM	30	5	19	28	94	20	3	108	54	44	65	2	472
	VOLUMES	250	57	137	248	801	142	43	914	415	316	551	19	3,893
	APPROACH %	56%	13%	31%	21%	67%	12%	3%	67%	30%	36%	62%	2%	
	APP/DEPART	444	/	119	1,191	/	1,532	1,372	/	1,299	886	/	943	0
	BEGIN PEAK HR		4:30 PM											
	VOLUMES	128	33	73	136	416	80	28	484	219	158	289	11	2,055
	APPROACH %	55%	14%	31%	22%	66%	13%	4%	66%	30%	34%	63%	2%	
	PEAK HR FACTOR		0.929			0.919			0.905			0.923		0.977
	APP/DEPART	234	/	72	632	/	793	731	/	693	458	/	497	0

U-TURNS

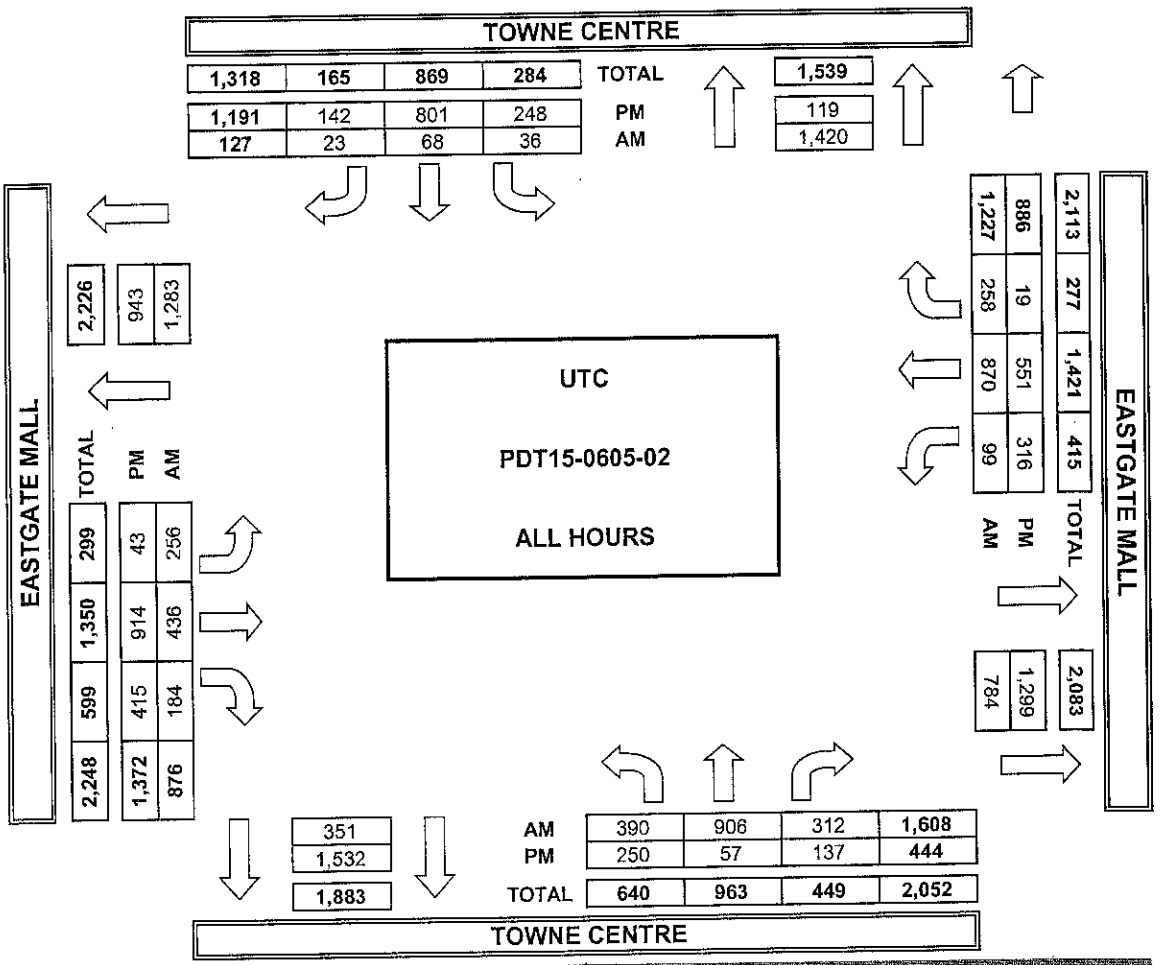
	NB X	SB X	EB X	WB X	TTL
7:00 AM	2				2
7:15 AM	4				4
7:30 AM	5				5
7:45 AM	5				5
8:00 AM	6				6
8:15 AM	3				3
8:30 AM	2				2
8:45 AM	4				4
AM	31	0	0	0	31
4:00 PM	2				2
4:15 PM	5		1		6
4:30 PM	4			1	5
4:45 PM	6		2		8
5:00 PM	3			1	4
5:15 PM	2		1		3
5:30 PM	2				2
5:45 PM			1		1
PM	24	0	5	2	31

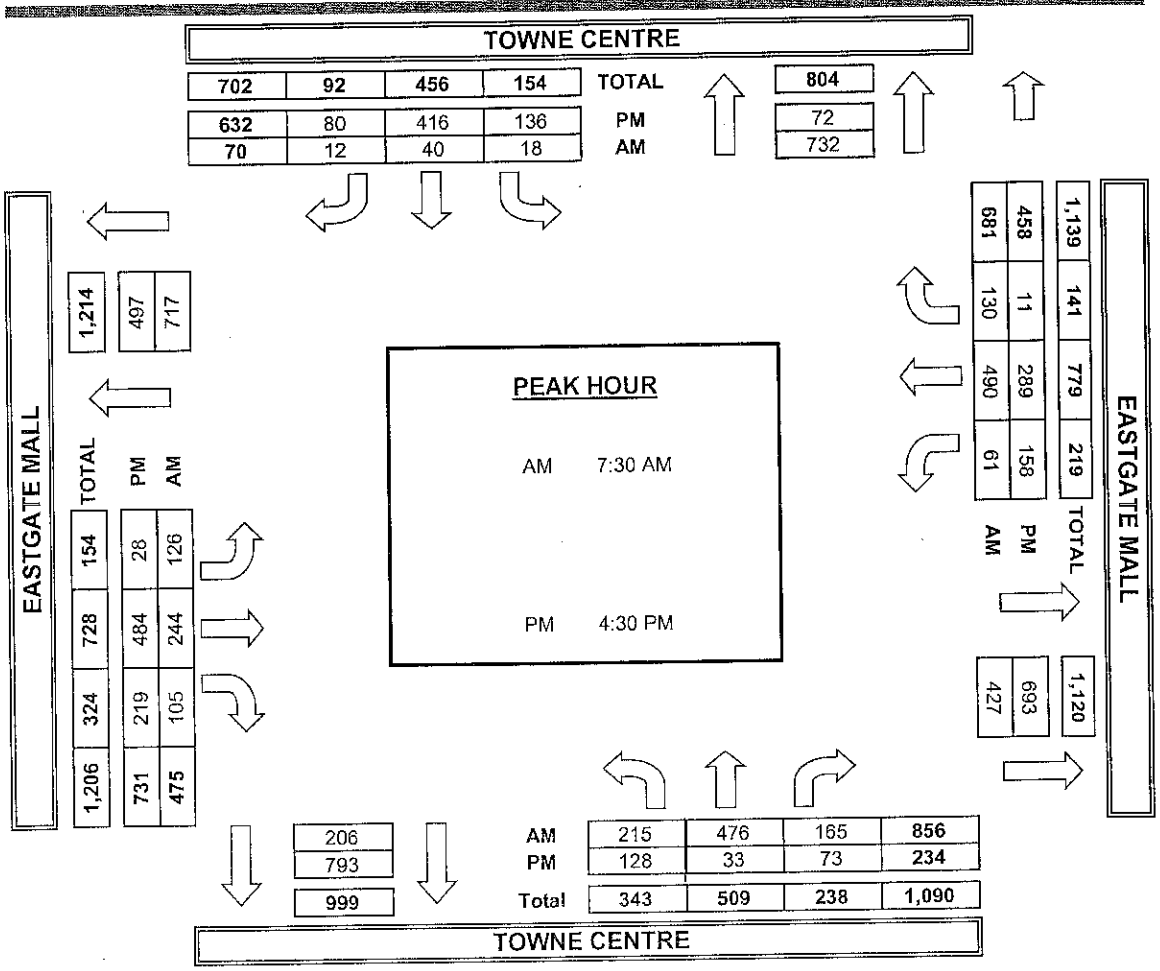


		PEDESTRIAN CROSSINGS					PEDESTRIAN ACTIVATIONS					BICYCLE CROSSINGS				
		N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	NS	SS	ES	WS	TOTAL
AM	7:00 AM	1				1					0					0
	7:15 AM				1	1					0					0
	7:30 AM			2		2					0					0
	7:45 AM	1			1	2					0					0
	8:00 AM			1		1					0	1			1	2
	8:15 AM			1		1					0					0
	8:30 AM	1	2			3					0				1	1
	8:45 AM	2	1	1		4					0					0
	TOTAL	5	3	5	2	15	0	0	0	0	0	1	0	0	2	3
PM	4:00 PM					0					0					0
	4:15 PM					0					0		1			1
	4:30 PM	1	2			3					0				1	1
	4:45 PM	1				1					0	1			1	2
	5:00 PM		1	1	1	3					0		1			1
	5:15 PM	2	1			3					0	1				1
	5:30 PM			1		1					0		1			1
	5:45 PM				1	1					0					0
	TOTAL	4	4	2	2	12	0	0	0	0	0	2	3	0	2	7

PACIFIC TECHNICAL DATA

TURNING MOVEMENT COUNTS





(4)

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: PACIFIC TECHNICAL DATA

DATE:	LOCATION:	UTC	PROJECT #:	PDT15-0605-02
6/4/15	NORTH & SOUTH:	JUDICIAL	LOCATION #:	4
THURSDAY	EAST & WEST:	EASTGATE MALL	CONTROL:	SIGNAL

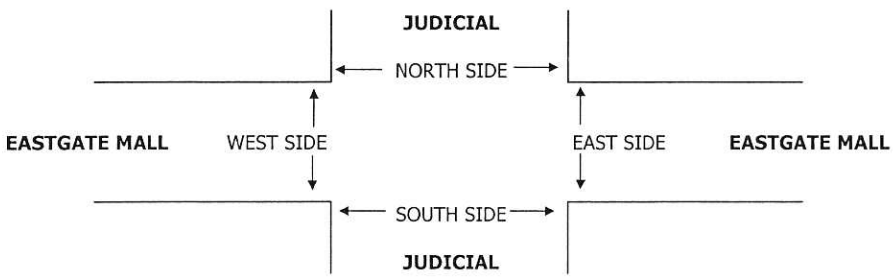
NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

		NORTHBOUND JUDICIAL			SOUTHBOUND JUDICIAL			EASTBOUND EASTGATE MALL			WESTBOUND EASTGATE MALL			
	LANES:	NL 1	NT 1	NR 1	SL 1	ST 1	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
AM	7:00 AM	26	18	13	0	0	4	32	56	9	30	80	5	273
	7:15 AM	31	21	24	0	0	6	27	54	3	28	106	6	306
	7:30 AM	42	18	21	1	0	4	32	66	20	24	121	12	361
	7:45 AM	36	19	24	2	2	4	32	70	17	20	133	8	367
	8:00 AM	34	21	18	0	1	0	29	72	10	24	127	7	343
	8:15 AM	35	22	20	1	1	4	33	68	12	26	138	9	369
	8:30 AM	28	26	15	2	2	2	31	70	18	30	128	5	357
	8:45 AM	29	20	12	0	1	1	28	54	10	22	141	8	326
	VOLUMES	261	165	147	6	7	25	244	510	99	204	974	60	2,702
	APPROACH %	46%	29%	26%	16%	18%	66%	29%	60%	12%	16%	79%	5%	
	APP/DEPART	573	/	469	38	/	310	853	/	663	1,238	/	1,260	0
	BEGIN PEAK HR		7:30 AM											
	VOLUMES	147	80	83	4	4	12	126	276	59	94	519	36	1,440
	APPROACH %	47%	26%	27%	20%	20%	60%	27%	60%	13%	14%	80%	6%	
	PEAK HR FACTOR		0.957			0.625			0.968			0.938		0.976
	APP/DEPART	310	/	242	20	/	157	461	/	363	649	/	678	0
PM	4:00 PM	33	0	40	17	26	35	1	138	26	19	44	0	379
	4:15 PM	33	0	49	19	16	22	6	196	33	18	66	0	458
	4:30 PM	27	0	20	8	12	21	2	126	37	19	46	1	319
	4:45 PM	31	0	18	7	17	28	1	92	22	8	49	0	273
	5:00 PM	23	1	31	10	8	9	1	100	22	18	77	0	300
	5:15 PM	28	1	28	15	6	19	3	138	33	15	80	1	367
	5:30 PM	27	2	33	10	8	16	4	142	27	11	66	2	348
	5:45 PM	22	0	27	9	9	11	1	111	30	16	71	0	307
	VOLUMES	224	4	246	95	102	161	19	1,043	230	124	499	4	2,751
	APPROACH %	47%	1%	52%	27%	28%	45%	1%	81%	18%	20%	80%	1%	
	APP/DEPART	474	/	27	358	/	456	1,292	/	1,384	627	/	884	0
	BEGIN PEAK HR		4:00 PM											
	VOLUMES	124	0	127	51	71	106	10	552	118	64	205	1	1,429
	APPROACH %	49%	0%	51%	22%	31%	46%	1%	81%	17%	24%	76%	0%	
	PEAK HR FACTOR		0.765			0.731			0.723			0.804		0.780
	APP/DEPART	251	/	11	228	/	253	680	/	730	270	/	435	0

U-TURNS

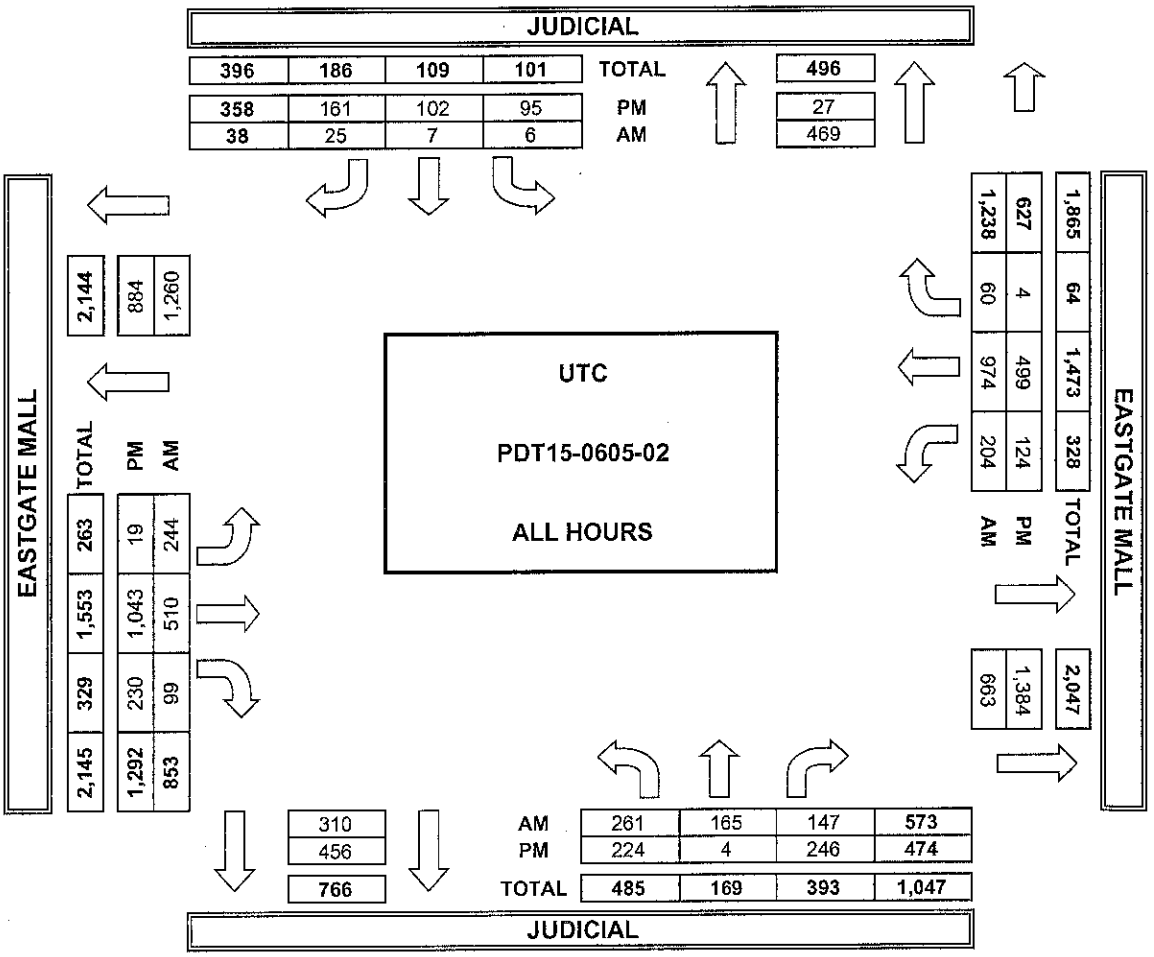
	NB	SB	EB	WB	TTL
	X	X	X	X	
AM	4				4
	2				2
	3				3
	2				2
	4				4
	2				2
	4				4
	1				1
	22	0	0	0	22
PM	3				3
	3				3
	4				4
	5				5
	6				6
	5				5
	4				4
	2				2
	32	0	0	0	32

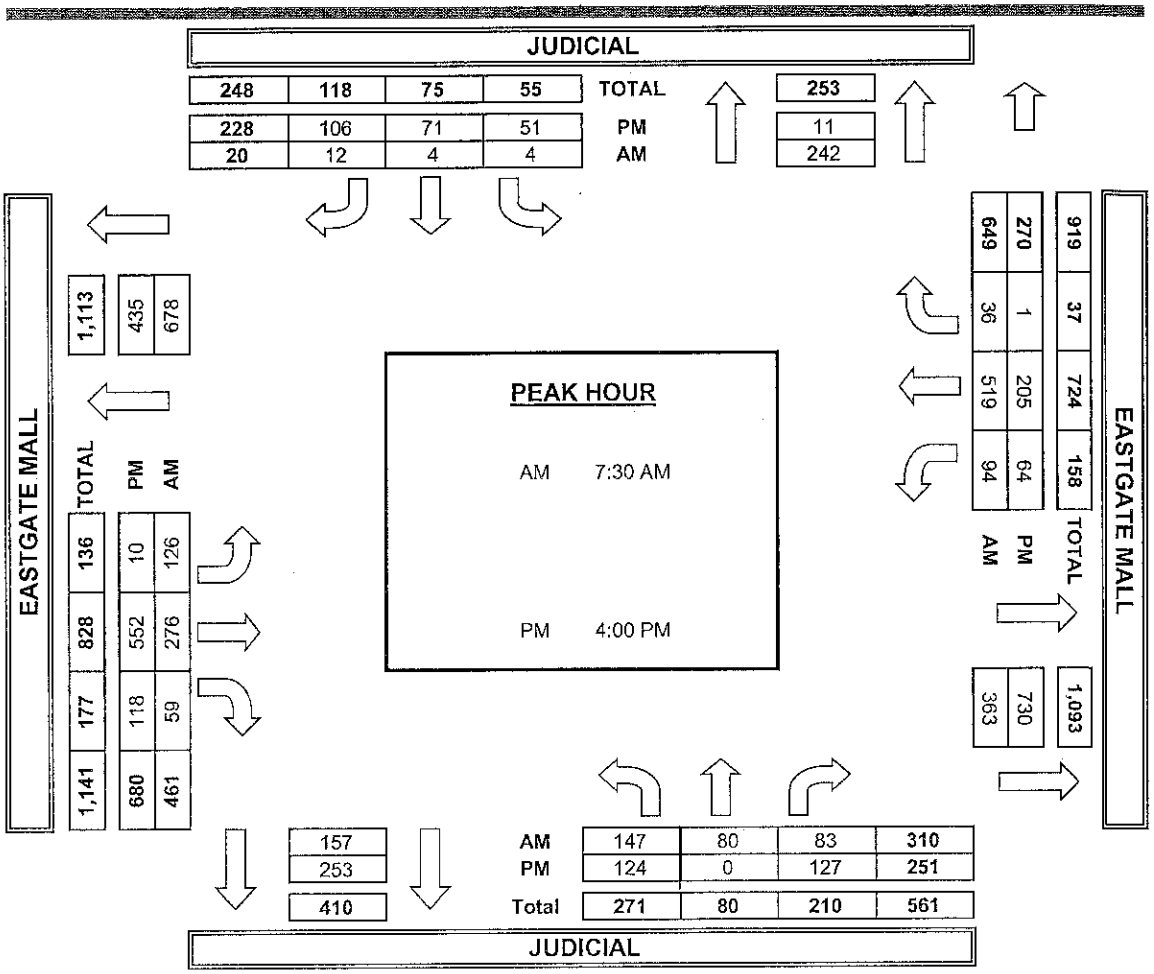


		PEDESTRIAN CROSSINGS					PEDESTRIAN ACTIVATIONS					BICYCLE CROSSINGS				
		N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	NS	SS	ES	WS	TOTAL
AM	7:00 AM				1	1					0					0
	7:15 AM		1	2		3					0					0
	7:30 AM	2				2					0					0
	7:45 AM	1			1	2					0					0
	8:00 AM		1	1	1	3					0					0
	8:15 AM					0					0					0
	8:30 AM	1	1	1		3					0	1				1
	8:45 AM				3	3					0					0
	TOTAL	4	3	4	6	17	0	0	0	0	0	1	0	0	0	1
PM	4:00 PM					0					0					0
	4:15 PM				2	2					0					0
	4:30 PM	1		2	1	4					0					0
	4:45 PM			1	1	2					0		1		1	2
	5:00 PM	1		1		2					0			1		1
	5:15 PM					0					0			1	1	2
	5:30 PM	2			1	3					0					0
	5:45 PM					0					0					0
	TOTAL	4	0	4	5	13	0	0	0	0	0	0	1	2	2	5

PACIFIC TECHNICAL DATA

TURNING MOVEMENT COUNTS





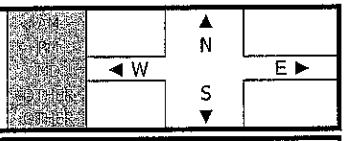
INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: PACIFIC TECHNICAL DATA

(5)

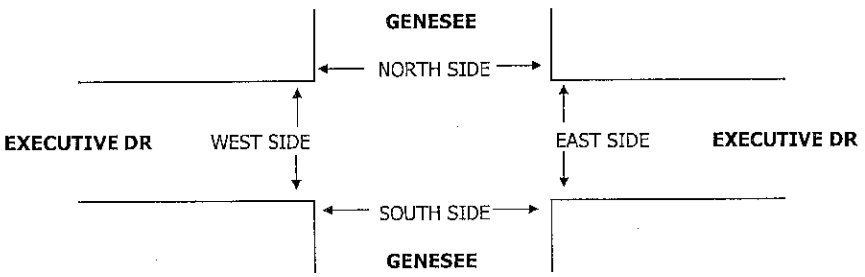
DATE:	LOCATION:	UTC	PROJECT #:	PDT15-0605-02
6/4/15	NORTH & SOUTH:	GENESEE	LOCATION #:	5
THURSDAY	EAST & WEST:	EXECUTIVE DR	CONTROL:	SIGNAL

NOTES:



		NORTHBOUND GENESEE			SOUTHBOUND GENESEE			EASTBOUND EXECUTIVE DR			WESTBOUND EXECUTIVE DR			
	LANES:	NL 2	NT 3	NR 0	SL 2	ST 3	SR 0	EL 1	ET 2	ER 0	WL 2	WT 2	WR 0	TOTAL
AM	7:00 AM	12	210	60	12	50	6	4	18	9	7	15	16	419
	7:15 AM	10	251	77	10	44	7	5	20	9	8	22	16	479
	7:30 AM	22	262	61	11	78	5	5	18	10	9	26	10	517
	7:45 AM	21	318	84	15	91	4	6	21	8	10	20	18	616
	8:00 AM	19	321	81	19	111	8	8	25	12	5	21	20	650
	8:15 AM	10	333	88	10	84	8	7	21	8	4	26	22	621
	8:30 AM	11	301	84	18	81	5	5	24	9	6	17	26	587
	8:45 AM	18	342	89	10	80	6	4	22	10	8	19	27	635
	VOLUMES	123	2,338	624	105	619	49	44	169	75	57	166	155	4,524
	APPROACH %	4%	76%	20%	14%	80%	6%	15%	59%	26%	15%	44%	41%	
	APP/DEPART	3,085	/	2,537	773	/	751	288	/	898	378	/	338	0
	BEGIN PEAK HR		8:00 AM											
	VOLUMES	58	1,297	342	57	356	27	24	92	39	23	83	95	2,493
	APPROACH %	3%	76%	20%	13%	81%	6%	15%	59%	25%	11%	41%	47%	
	PEAK HR FACTOR		0.945			0.797			0.861			0.931		0.959
	APP/DEPART	1,697	/	1,416	440	/	418	155	/	491	201	/	168	0
PM	4:00 PM	18	88	16	21	289	28	9	21	20	41	68	20	639
	4:15 PM	21	98	20	16	313	21	9	22	18	40	70	33	681
	4:30 PM	20	90	11	15	321	33	12	20	20	32	68	32	674
	4:45 PM	16	101	9	22	284	35	9	16	16	33	54	30	625
	5:00 PM	15	95	12	26	313	25	8	18	11	48	62	28	661
	5:15 PM	22	116	16	21	305	30	9	23	15	40	66	29	692
	5:30 PM	16	98	8	18	277	39	8	15	19	33	45	33	609
	5:45 PM	17	115	9	17	251	33	9	17	18	28	40	27	581
	VOLUMES	145	801	101	156	2,353	244	73	152	137	295	473	232	5,162
	APPROACH %	14%	77%	10%	6%	85%	9%	20%	42%	38%	30%	47%	23%	
	APP/DEPART	1,047	/	1,106	2,753	/	2,785	362	/	409	1,000	/	862	0
	BEGIN PEAK HR		4:30 PM											
	VOLUMES	73	402	48	84	1,223	123	38	77	62	153	250	119	2,652
	APPROACH %	14%	77%	9%	6%	86%	9%	21%	44%	35%	29%	48%	23%	
	PEAK HR FACTOR		0.849			0.969			0.851			0.946		0.958
	APP/DEPART	523	/	559	1,430	/	1,438	177	/	209	522	/	446	0

U-TURNS				
NB X	SB X	EB X	WB X	TTL
1	1			2
				0
1	1	1		3
				0
	4	2		6
1	3			4
	1			1
2				2
5	10	3	0	18
	1			1
				0
1	4	1		6
	5			5
	5			5
				0
1	1			2
				0
2	16	1	0	19



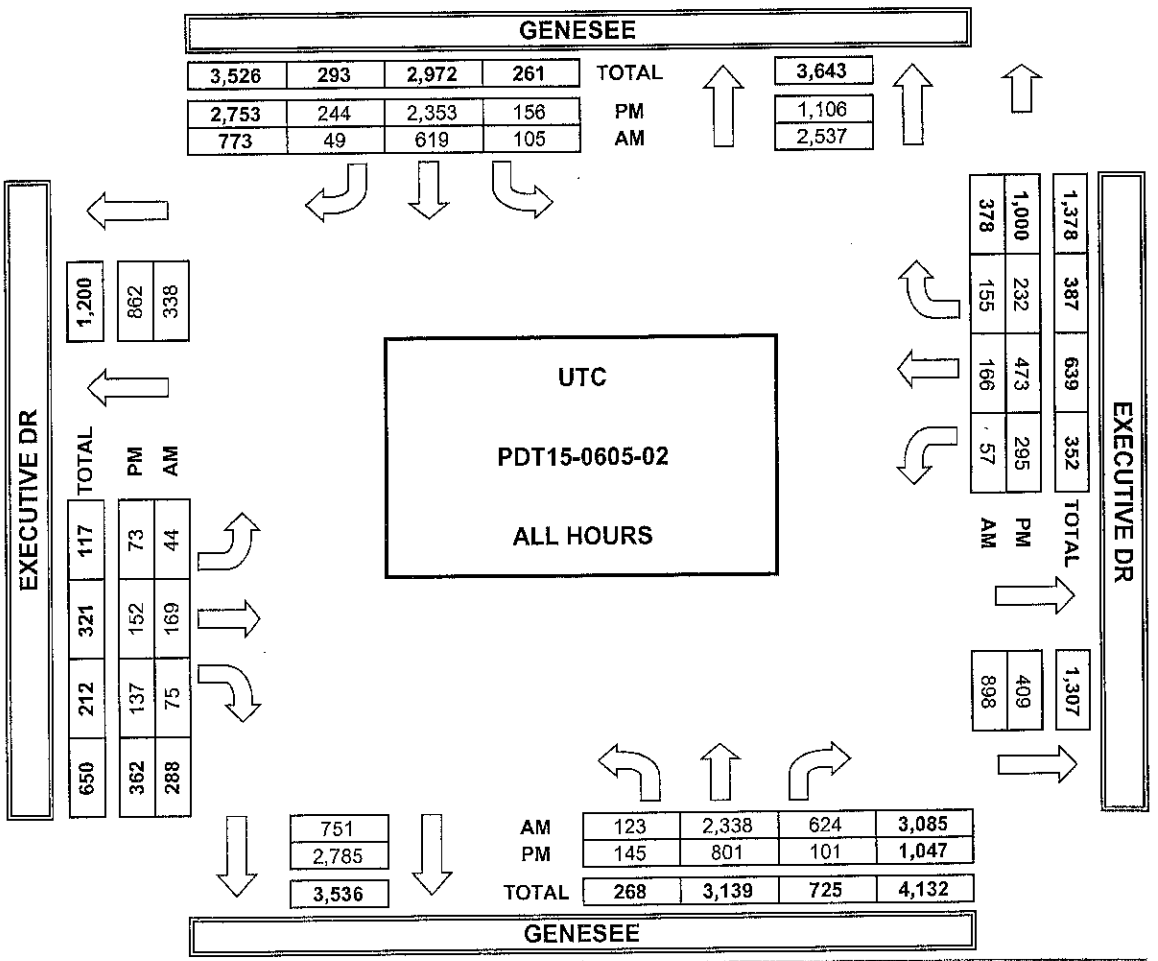
		PEDESTRIAN CROSSINGS				
		N SIDE	S SIDE	E SIDE	W SIDE	TOTAL
AM	7:00 AM				1	1
	7:15 AM					0
	7:30 AM	1	2	1	1	5
	7:45 AM	2			2	4
	8:00 AM		2	1	1	4
	8:15 AM	1	3		3	7
	8:30 AM		3	2		5
	8:45 AM				4	4
	TOTAL	4	10	4	12	30
PM	4:00 PM				1	1
	4:15 PM			1		1
	4:30 PM	2			1	3
	4:45 PM	1	1	1	1	4
	5:00 PM		1		2	3
	5:15 PM	1	2		1	4
	5:30 PM			1	3	4
	5:45 PM		3			3
	TOTAL	4	7	3	9	23

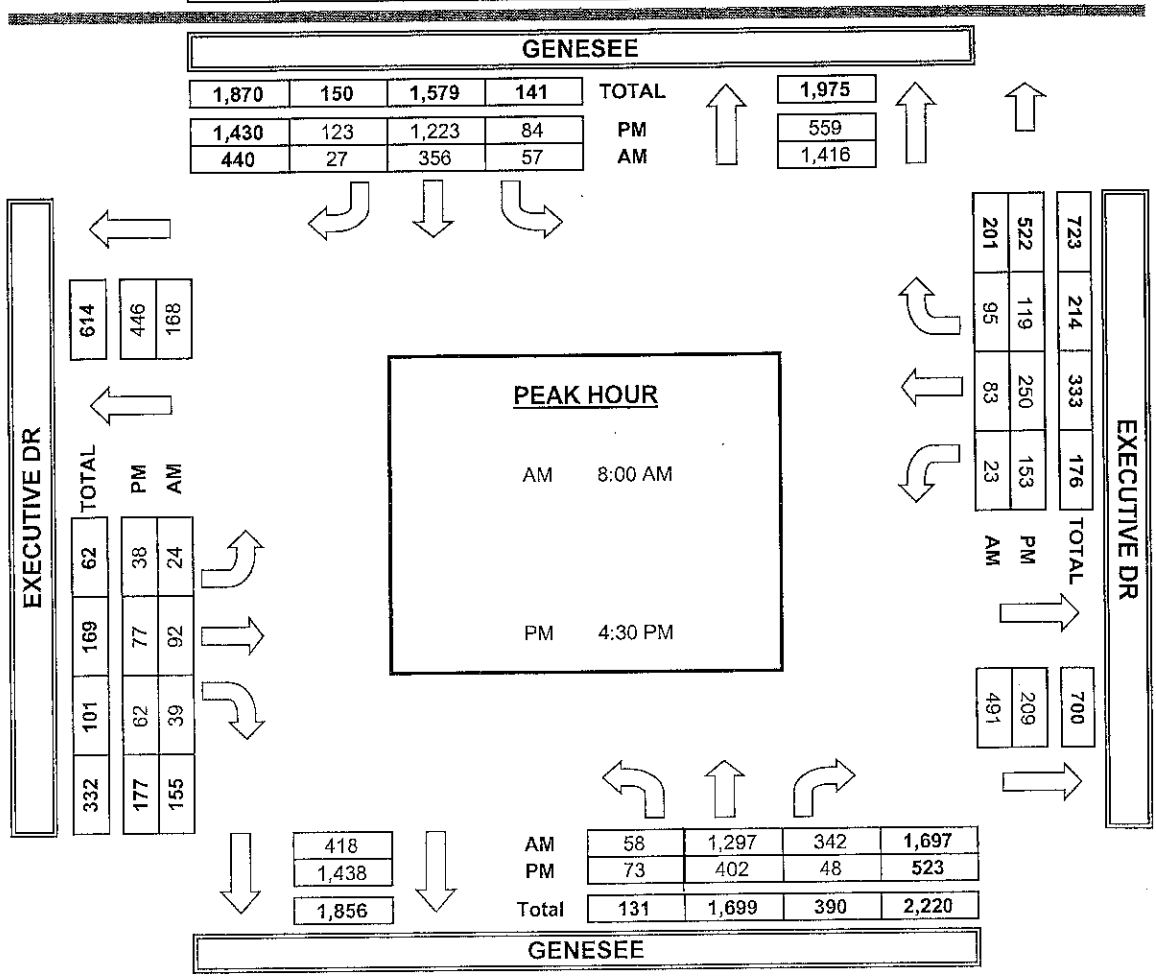
PEDESTRIAN ACTIVATIONS				
N SIDE	S SIDE	E SIDE	W SIDE	TOTAL
				0
				0
				0
				0
				0
				0
				0
				0
0	0	0	0	0
				0
				0
				0
				0
				0
				0
				0
0	0	0	0	0

BICYCLE CROSSINGS				
NS	SS	ES	WS	TOTAL
				0
	1	1		2
	1			1
			1	1
				0
		1	2	3
				0
	1	1		2
0	3	3	3	9
				0
		1	3	4
1			2	3
1				1
		1	2	3
		2		2
		1	1	2
				0
2	0	5	8	15

PACIFIC TECHNICAL DATA

TURNING MOVEMENT COUNTS





(6)

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: PACIFIC TECHNICAL DATA

DATE:	LOCATION:	UTC	PROJECT #:	PDT15-0605-02
6/4/15	NORTH & SOUTH:	TOWNE CENTRE	LOCATION #:	6
THURSDAY	EAST & WEST:	EXECUTIVE DR	CONTROL:	SIGNAL

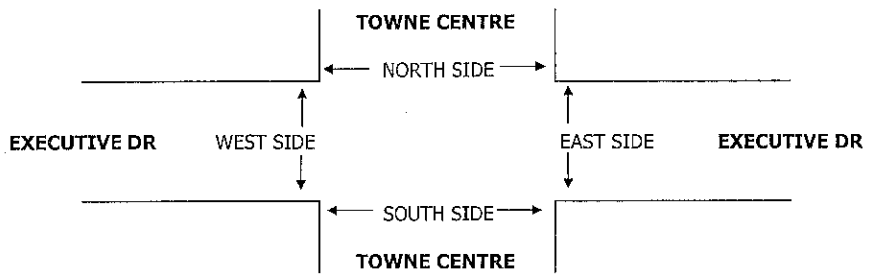
NOTES:

◄ W | N ▲ | S ▼ | E ►

		NORTHBOUND TOWNE CENTRE			SOUTHBOUND TOWNE CENTRE			EASTBOUND EXECUTIVE DR			WESTBOUND EXECUTIVE DR			
	LANES:	NL 2	NT 2	NR 1	SL 1	ST 2	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
AM	7:00 AM	29	161	97	3	18	7	8	12	19	8	7	4	373
	7:15 AM	30	195	91	2	20	9	10	11	20	16	9	5	418
	7:30 AM	44	199	121	4	22	8	16	21	16	11	12	2	476
	7:45 AM	40	206	126	2	28	10	22	26	18	15	16	2	511
	8:00 AM	65	219	103	5	41	5	17	31	9	6	8	4	513
	8:15 AM	51	205	91	3	44	9	15	33	10	8	9	6	484
	8:30 AM	44	184	88	2	32	9	19	28	12	5	12	3	438
	8:45 AM	41	194	91	4	30	12	16	21	8	10	7	5	439
	VOLUMES	344	1,563	808	25	235	69	123	183	112	79	80	31	3,652
	APPROACH %	13%	58%	30%	8%	71%	21%	29%	44%	27%	42%	42%	16%	
	APP/DEPART	2,715	/	1,717	329	/	426	418	/	1,016	190	/	493	0
	BEGIN PEAK HR		7:30 AM											
	VOLUMES	200	829	441	14	135	32	70	111	53	40	45	14	1,984
	APPROACH %	14%	56%	30%	8%	75%	18%	30%	47%	23%	40%	45%	14%	
	PEAK HR FACTOR		0.950			0.808			0.886			0.750		0.967
	APP/DEPART	1,470	/	913	181	/	228	234	/	566	99	/	277	0
PM	4:00 PM	29	31	18	4	181	15	4	10	25	50	41	6	414
	4:15 PM	34	44	20	6	165	19	2	9	28	68	44	6	445
	4:30 PM	40	38	16	8	216	16	6	10	33	61	51	5	500
	4:45 PM	41	42	19	9	203	18	5	5	30	66	38	4	480
	5:00 PM	55	40	20	5	184	21	4	11	41	70	45	4	500
	5:15 PM	42	50	22	4	216	22	5	21	44	54	45	1	526
	5:30 PM	35	42	16	5	184	16	6	11	33	66	30	2	446
	5:45 PM	31	44	19	3	161	15	4	9	35	50	33	4	408
	VOLUMES	307	331	150	44	1,510	142	36	86	269	485	327	32	3,719
	APPROACH %	39%	42%	19%	3%	89%	8%	9%	22%	69%	57%	39%	4%	
	APP/DEPART	788	/	399	1,696	/	2,264	391	/	280	844	/	776	0
	BEGIN PEAK HR		4:30 PM											
	VOLUMES	178	170	77	26	819	77	20	47	148	251	179	14	2,006
	APPROACH %	42%	40%	18%	3%	89%	8%	9%	22%	69%	57%	40%	3%	
	PEAK HR FACTOR		0.924			0.952			0.768			0.933		0.953
	APP/DEPART	425	/	204	922	/	1,218	215	/	150	444	/	434	0

U-TURNS

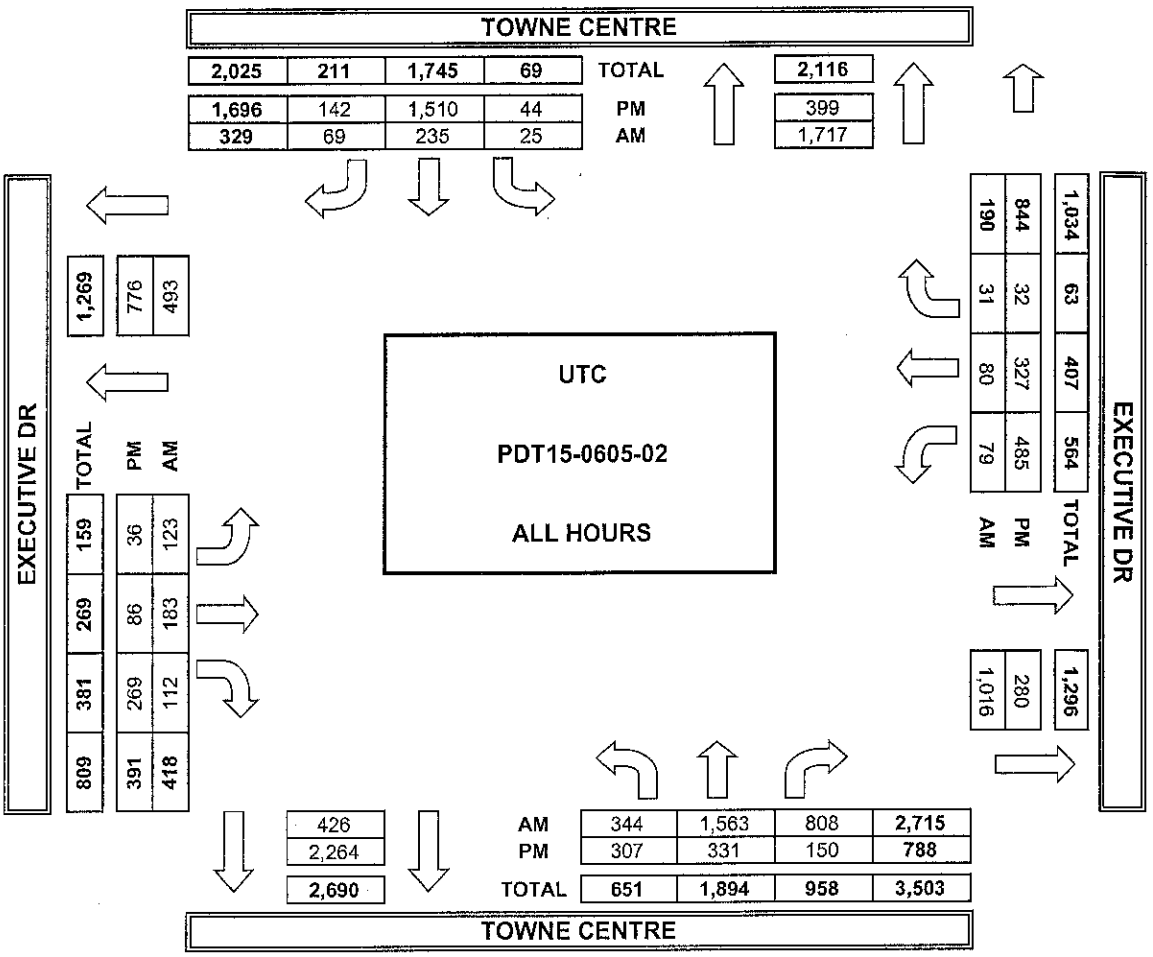
	NB X	SB X	EB X	WB X	TTL
AM	2				2
	2		1		3
					0
	2	2		1	5
	3	1			4
		3			3
	1	3			4
					0
	10	9	1	1	21
PM	8				8
	12	1	2		15
	15		1		16
	9	2	4		15
	16	1	2		19
	10		1		11
	8	1			9
	9				9
	87	5	10	0	102

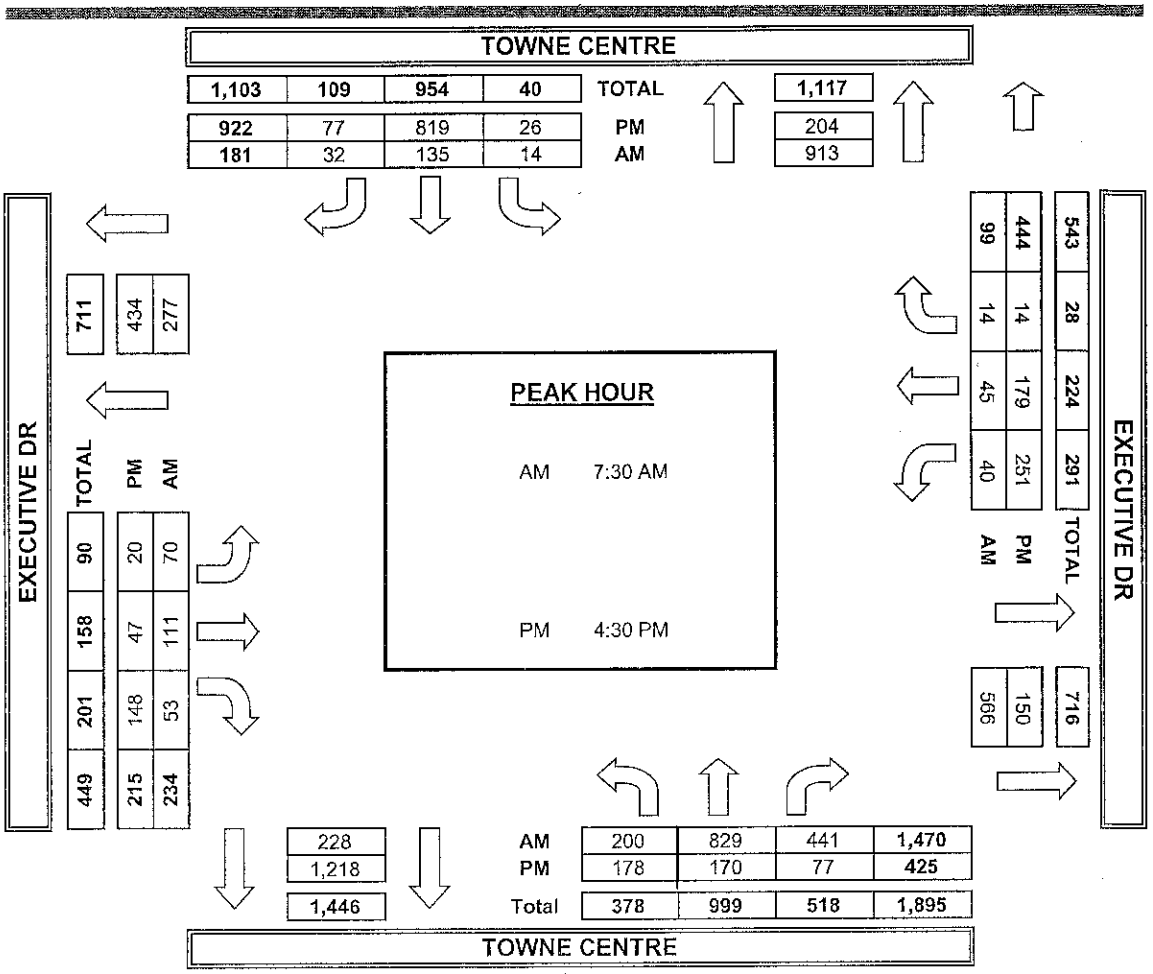


		PEDESTRIAN CROSSINGS					PEDESTRIAN ACTIVATIONS					BICYCLE CROSSINGS				
		N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	NS	SS	ES	WS	TOTAL
AM	7:00 AM					0					0					0
	7:15 AM				1	1					0					0
	7:30 AM			1		1					0			1		1
	7:45 AM		1		1	2					0		2			2
	8:00 AM		1	1		2					0		1			1
	8:15 AM		3			3					0					0
	8:30 AM	1	2			3					0					0
	8:45 AM					0					0		1			1
	TOTAL	1	7	2	2	12	0	0	0	0	0	0	4	1	0	5
PM	4:00 PM					0					0					0
	4:15 PM		1			1					0			1		1
	4:30 PM		1	1		2					0		1			1
	4:45 PM	1		1	1	3					0				1	1
	5:00 PM	1	2			3					0				1	1
	5:15 PM					0					0		1	2		3
	5:30 PM		2			2					0		2			2
	5:45 PM		3			3					0					0
	TOTAL	2	9	2	1	14	0	0	0	0	0	0	4	3	2	9

PACIFIC TECHNICAL DATA

TURNING MOVEMENT COUNTS





INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: PACIFIC TECHNICAL DATA

(7)

DATE:	LOCATION:	UTC	PROJECT #:	PDT15-0605-02
6/4/15	NORTH & SOUTH:	JUDICIAL	LOCATION #:	7
THURSDAY	EAST & WEST:	EXECUTIVE DR	CONTROL:	SIGNAL

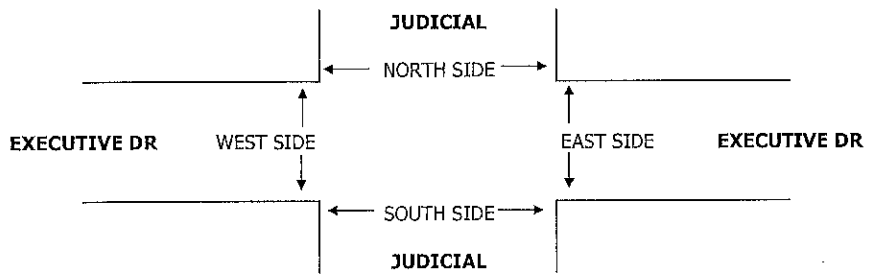
NOTES:

	▲ N	
◄ W		E ►
	S ▼	

		NORTHBOUND JUDICIAL			SOUTHBOUND JUDICIAL			EASTBOUND EXECUTIVE DR			WESTBOUND EXECUTIVE DR			
	LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
AM	7:00 AM	1	34	35	8	12	1	19	52	24	2	4	3	195
	7:15 AM	14	48	48	23	14	2	29	97	14	2	7	1	299
	7:30 AM	14	54	47	18	13	1	26	88	16	0	2	5	284
	7:45 AM	19	66	47	27	10	4	32	98	15	5	5	4	332
	8:00 AM	16	75	51	17	12	5	40	93	11	0	12	5	337
	8:15 AM	26	66	34	32	11	3	49	92	18	1	9	5	346
	8:30 AM	32	64	47	25	8	7	63	68	13	1	8	5	341
	8:45 AM	34	82	34	17	13	1	59	63	20	2	3	5	333
	VOLUMES	156	489	343	167	93	24	317	651	131	13	50	33	2,467
	APPROACH %	16%	49%	35%	59%	33%	8%	29%	59%	12%	14%	52%	34%	
	APP/DEPART	988	/	839	284	/	237	1,099	/	1,161	96	/	230	0
	BEGIN PEAK HR		8:00 AM											
	VOLUMES	108	287	166	91	44	16	211	316	62	4	32	20	1,357
	APPROACH %	19%	51%	30%	60%	29%	11%	36%	54%	11%	7%	57%	36%	
	PEAK HR FACTOR		0.935			0.821			0.926			0.824		0.980
	APP/DEPART	561	/	518	151	/	110	589	/	573	56	/	156	0
PM	4:00 PM	11	16	2	4	56	12	6	6	11	39	69	25	257
	4:15 PM	12	15	3	0	51	7	5	9	20	34	76	27	259
	4:30 PM	8	17	4	5	53	7	3	8	18	47	92	33	295
	4:45 PM	9	13	1	4	62	7	5	10	23	40	97	21	292
	5:00 PM	15	23	2	3	76	14	9	6	41	57	95	17	358
	5:15 PM	9	9	1	3	56	13	7	7	23	30	66	19	243
	5:30 PM	10	18	0	2	65	11	5	5	17	36	55	16	240
	5:45 PM	11	17	0	1	46	5	1	14	29	18	65	15	222
	VOLUMES	85	128	13	22	465	76	41	65	182	301	615	173	2,166
	APPROACH %	38%	57%	6%	4%	83%	13%	14%	23%	63%	28%	56%	16%	
	APP/DEPART	226	/	342	563	/	948	288	/	100	1,089	/	776	0
	BEGIN PEAK HR		4:15 PM											
	VOLUMES	44	68	10	12	242	35	22	33	102	178	360	98	1,204
	APPROACH %	36%	56%	8%	4%	84%	12%	14%	21%	65%	28%	57%	15%	
	PEAK HR FACTOR		0.763			0.777			0.701			0.924		0.841
	APP/DEPART	122	/	188	289	/	522	157	/	55	636	/	439	0

U-TURNS

NB X	SB X	EB X	WB X	TTL
1		4		5
2	1	4		7
	1	5		6
3	4	2	1	10
		6		6
1	7	1		9
	4	10		14
	3	9	1	13
7	20	41	2	70
5	4			9
	2	1		3
2	4	2		8
	1	2		3
1		1	1	3
1	2	2		5
	2	1	2	5
2		1		3
11	15	10	3	39



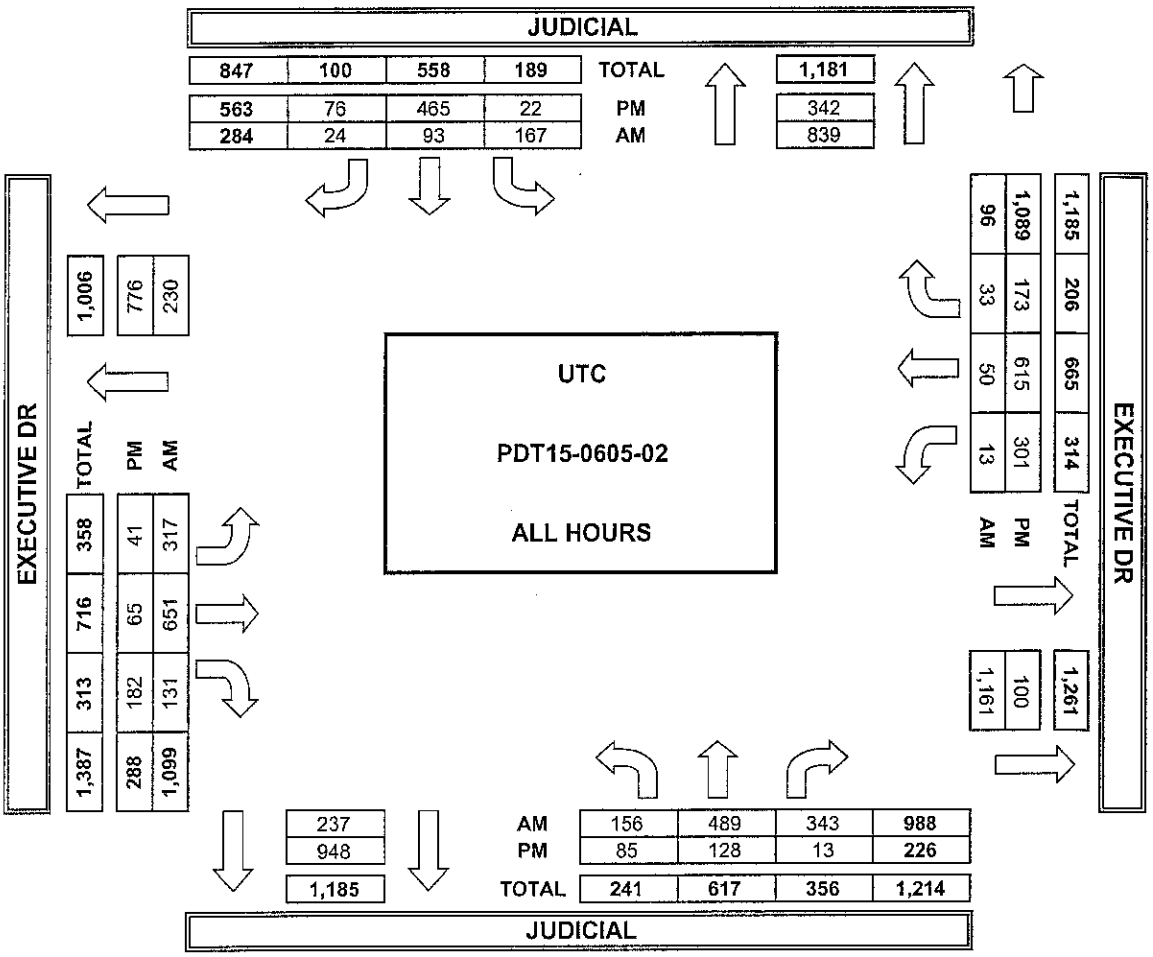
		PEDESTRIAN CROSSINGS				
		N SIDE	S SIDE	E SIDE	W SIDE	TOTAL
AM	7:00 AM					0
	7:15 AM	1				1
	7:30 AM		1	1		2
	7:45 AM					0
	8:00 AM			2		2
	8:15 AM	1				1
	8:30 AM	2	1		1	4
	8:45 AM				1	1
	TOTAL	4	2	3	2	11
PM	4:00 PM					0
	4:15 PM				1	1
	4:30 PM		1			1
	4:45 PM				1	1
	5:00 PM		1	1	2	4
	5:15 PM	1	2			3
	5:30 PM	1		1		2
	5:45 PM					0
	TOTAL	2	4	2	4	12

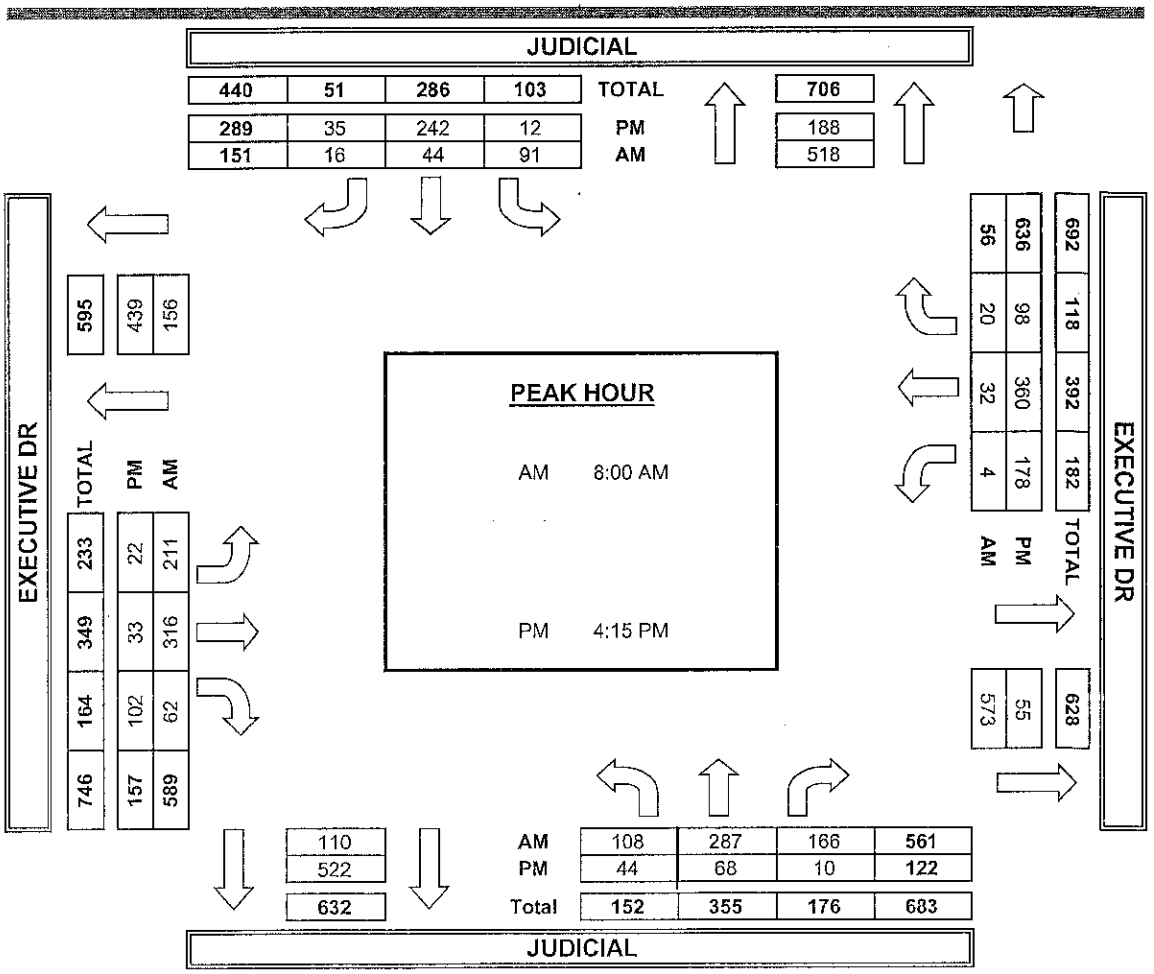
PEDESTRIAN ACTIVATIONS				
N SIDE	S SIDE	E SIDE	W SIDE	TOTAL
				0
				0
				0
				0
				0
				0
				0
				0
0	0	0	0	0
				0
				0
				0
				0
				0
				0
				0
0	0	0	0	0

BICYCLE CROSSINGS				
NS	SS	ES	WS	TOTAL
				0
1			1	2
				0
				0
			1	1
				0
				0
				0
1	0	0	2	3
				0
				0
				0
			2	2
1				1
		1		1
1		1		2
				0
2	0	2	2	6

PACIFIC TECHNICAL DATA

TURNING MOVEMENT COUNTS



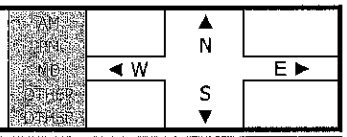


INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: PACIFIC TECHNICAL DATA

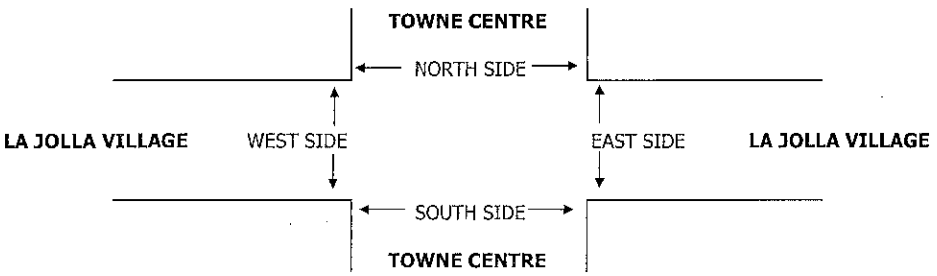
DATE:	LOCATION:	UTC	PROJECT #:	PDT15-0605-02
6/4/15	NORTH & SOUTH:	TOWNE CENTRE	LOCATION #:	8
THURSDAY	EAST & WEST:	LA JOLLA VILLAGE	CONTROL:	SIGNAL

NOTES:



		NORTHBOUND TOWNE CENTRE			SOUTHBOUND TOWNE CENTRE			EASTBOUND LA JOLLA VILLAGE			WESTBOUND LA JOLLA VILLAGE			
	LANES:	NL 2	NT 1	NR 2	SL 2	ST 2	SR 0	EL 2	ET 3	ER 1	WL 2	WT 3	WR 1	TOTAL
AM	7:00 AM	26	15	55	33	7	4	50	184	18	44	251	284	971
	7:15 AM	21	18	46	29	5	3	51	198	20	51	318	288	1,048
	7:30 AM	30	20	58	37	9	2	55	268	29	78	424	291	1,301
	7:45 AM	38	33	68	45	9	2	68	274	33	77	416	319	1,382
	8:00 AM	44	31	88	41	12	4	77	262	31	91	404	303	1,388
	8:15 AM	32	45	70	55	8	5	60	245	27	97	384	288	1,316
	8:30 AM	28	51	84	41	7	6	51	251	28	91	416	262	1,316
	8:45 AM	22	42	81	40	9	5	55	262	33	99	404	284	1,336
	VOLUMES	241	255	550	321	66	31	467	1,944	219	628	3,017	2,319	10,058
	APPROACH %	23%	24%	53%	77%	16%	7%	18%	74%	8%	11%	51%	39%	
	APP/DEPART	1,046	/	3,041	418	/	913	2,630	/	2,815	5,964	/	3,289	0
	BEGIN PEAK HR		7:45 AM											
	VOLUMES	142	160	310	182	36	17	256	1,032	119	356	1,620	1,172	5,402
	APPROACH %	23%	26%	51%	77%	15%	7%	18%	73%	8%	11%	51%	37%	
	PEAK HR FACTOR		0.939			0.864			0.938			0.969		0.973
	APP/DEPART	612	/	1,588	235	/	511	1,407	/	1,524	3,148	/	1,779	0
PM	4:00 PM	34	18	131	151	50	30	8	362	28	65	289	58	1,224
	4:15 PM	31	10	118	202	66	33	10	391	33	77	336	65	1,372
	4:30 PM	55	11	126	222	61	45	8	384	38	65	342	51	1,408
	4:45 PM	50	9	131	219	58	51	9	336	31	84	316	66	1,360
	5:00 PM	42	12	144	235	88	44	12	385	28	95	328	68	1,481
	5:15 PM	55	16	131	205	91	41	8	345	29	99	345	77	1,442
	5:30 PM	40	8	114	216	68	48	5	362	35	84	368	84	1,432
	5:45 PM	32	9	108	202	70	36	9	339	33	91	354	70	1,353
	VOLUMES	339	93	1,003	1,652	552	328	69	2,904	255	660	2,678	539	11,072
	APPROACH %	24%	6%	70%	65%	22%	13%	2%	90%	8%	17%	69%	14%	
	APP/DEPART	1,435	/	701	2,532	/	1,467	3,228	/	5,559	3,877	/	3,345	0
	BEGIN PEAK HR		4:45 PM											
	VOLUMES	187	45	520	875	305	184	34	1,428	123	362	1,357	295	5,715
	APPROACH %	25%	6%	69%	64%	22%	13%	2%	90%	8%	18%	67%	15%	
	PEAK HR FACTOR		0.931			0.929			0.932			0.939		0.965
	APP/DEPART	752	/	374	1,364	/	790	1,585	/	2,823	2,014	/	1,728	0

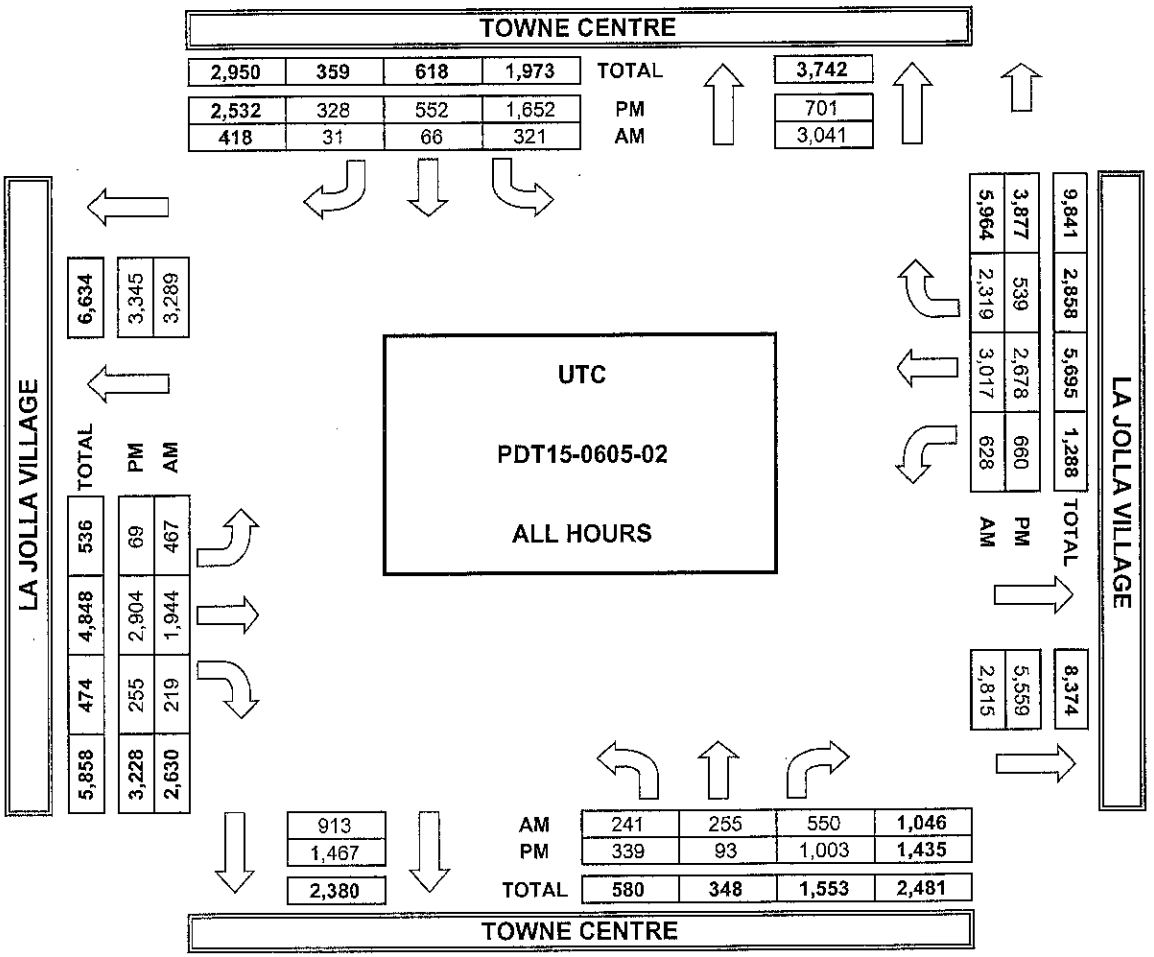
U-TURNS				
NB X	SB X	EB X	WB X	TTL
				0
				0
			1	1
				0
			2	2
				0
				0
				0
0	0	0	3	3
		2		2
		2		2
		3		3
				0
				0
			1	1
		1	1	2
				0
0	0	8	2	10

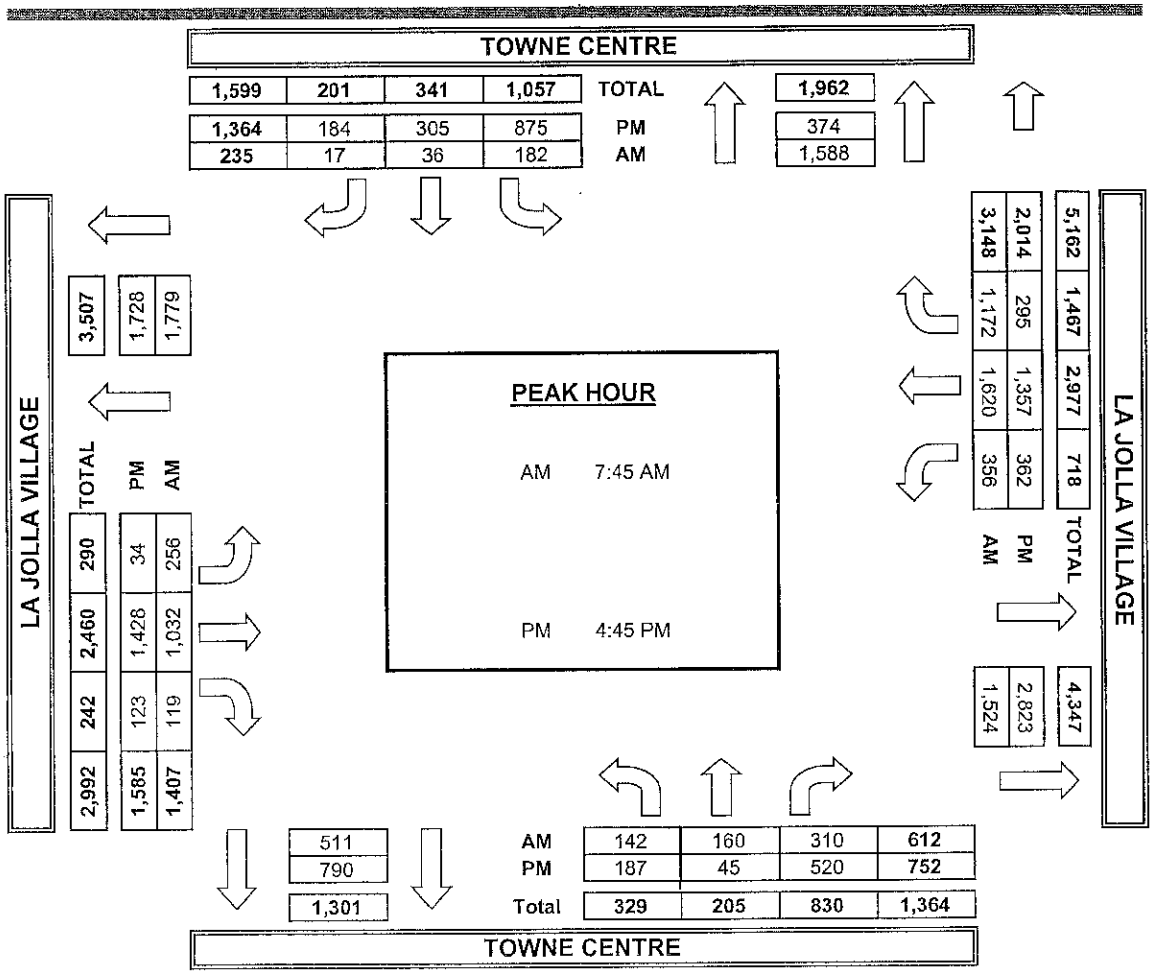


		PEDESTRIAN CROSSINGS					PEDESTRIAN ACTIVATIONS					BICYCLE CROSSINGS				
		N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	NS	SS	ES	WS	TOTAL
AM	7:00 AM	1		1		2					0					0
	7:15 AM	1		1	3	5					0			1		1
	7:30 AM	1		2	1	4					0					0
	7:45 AM	1			1	2					0	1				1
	8:00 AM	2		1	2	5					0			1	1	2
	8:15 AM	4		4	6	14					0					0
	8:30 AM	2	1	1	3	7					0					0
	8:45 AM	2		2	2	6					0	1		1		2
	TOTAL	14	1	12	18	45	0	0	0	0	0	2	0	3	1	6
PM	4:00 PM	2	1		3	6					0					0
	4:15 PM	2		1	5	8					0	1		1		2
	4:30 PM	2	1	4	2	9					0				1	1
	4:45 PM	2		1	2	5					0					0
	5:00 PM	1		3	4	8					0		1		1	2
	5:15 PM	1			5	6					0	1				1
	5:30 PM	1			1	2					0				1	1
	5:45 PM	3		2	4	9					0			1	2	3
	TOTAL	14	2	11	26	53	0	0	0	0	0	2	1	2	5	10

PACIFIC TECHNICAL DATA

TURNING MOVEMENT COUNTS





THURSDAY - JUNE 4TH, 2015 CITY: UTC PROJECT: PTD15-0605-02

GENESEE BTN EASTGATE MALL & EXECUTIVE DR

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	18		32					12:00	179		244				
00:15	17		18					12:15	225		215				
00:30	6		11					12:30	216		218				
00:45	6	47	10	71			118	12:45	210	830	187	864			1694
01:00	7		12					13:00	225		204				
01:15	13		13					13:15	233		182				
01:30	8		26					13:30	204		188				
01:45	9	37	14	65			102	13:45	199	861	174	748			1609
02:00	5		12					14:00	165		229				
02:15	10		4					14:15	180		180				
02:30	3		18					14:30	185		286				
02:45	6	24	10	44			68	14:45	168	698	229	924			1622
03:00	6		8					15:00	155		281				
03:15	9		11					15:15	145		283				
03:30	7		7					15:30	133		347				
03:45	6	28	5	31			59	15:45	155	588	313	1224			1812
04:00	10		5					16:00	131		351				
04:15	25		4					16:15	138		344				
04:30	18		11					16:30	312		368				
04:45	52	105	5	25			130	16:45	134	715	312	1375			2090
05:00	32		8					17:00	162		316				
05:15	62		8					17:15	144		332				
05:30	102		18					17:30	141		280				
05:45	166	362	22	56			418	17:45	150	597	262	1190			1787
06:00	142		36					18:00	116		229				
06:15	140		33					18:15	148		214				
06:30	176		49					18:30	117		157				
06:45	240	698	36	154			852	18:45	120	501	137	737			1238
07:00	230		80					19:00	97		123				
07:15	265		66					19:15	99		119				
07:30	351		121					19:30	92		139				
07:45	362	1208	131	398			1606	19:45	62	350	120	501			851
08:00	345		142					20:00	66		79				
08:15	339		88					20:15	72		92				
08:30	326		91					20:30	71		96				
08:45	341	1351	106	427			1778	20:45	77	286	75	342			628
09:00	251		137					21:00	70		89				
09:15	236		143					21:15	82		65				
09:30	239		151					21:30	71		68				
09:45	197	923	162	593			1516	21:45	57	280	61	283			563
10:00	181		159					22:00	42		58				
10:15	170		157					22:15	61		47				
10:30	202		154					22:30	40		58				
10:45	178	731	200	670			1401	22:45	32	175	46	209			384
11:00	160		211					23:00	26		30				
11:15	167		211					23:15	24		26				
11:30	166		204					23:30	29		34				
11:45	165	658	251	877			1535	23:45	27	106	21	111			217
Total Vol.		6172		3411			**9583**			5987		8508			**14495**

Daily Totals

NB	SB	EB	WB	**Combined**
12159	11919			**24078**

	AM			PM		
Split %	64.4%	35.6%	**39.8%**	41.3%	58.7%	**60.2%**
Peak Hour	07:30	11:45	**07:30**	12:30	15:45	**15:45**
Volume	1397	928	**1879**	884	1376	**2112**
P.H.F.	0.96	0.92	**0.95**	0.97	0.93	**0.78**

THURSDAY - JUNE 4TH, 2015 CITY: UTC PROJECT: PTD15-0605-02

EASTGATE MALL BTN GENESEE & EASTER

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
00:00			9		8			12:00			77		116		
00:15			13		4			12:15			100		105		
00:30			10		11			12:30			73		115		
00:45			6	38	6	29	67	12:45			76	326	108	444	770
01:00			10		8			13:00			87		117		
01:15			6		3			13:15			70		108		
01:30			15		12			13:30			71		89		
01:45			9	40	9	32	72	13:45			98	326	94	408	734
02:00			5		4			14:00			100		87		
02:15			3		2			14:15			86		92		
02:30			7		6			14:30			67		91		
02:45			10	25	2	14	39	14:45			90	343	100	370	713
03:00			2		3			15:00			103		77		
03:15			2		1			15:15			106		99		
03:30			5		5			15:30			106		99		
03:45			5	14	2	11	25	15:45			81	396	111	386	782
04:00			2		6			16:00			162		105		
04:15			1		16			16:15			168		111		
04:30			2		11			16:30			170		128		
04:45			7	12	22	55	67	16:45			184	684	121	465	1149
05:00			5		12			17:00			215		139		
05:15			8		28			17:15			202		142		
05:30			11		27			17:30			161		116		
05:45			16	40	46	113	153	17:45			168	746	120	517	1263
06:00			16		55			18:00			118		171		
06:15			41		60			18:15			92		149		
06:30			45		78			18:30			83		104		
06:45			61	163	96	289	452	18:45			59	352	92	516	868
07:00			81		91			19:00			50		71		
07:15			88		121			19:15			44		57		
07:30			91		198			19:30			51		45		
07:45			128	388	188	598	986	19:45			33	178	30	203	381
08:00			121		181			20:00			36		35		
08:15			126		194			20:15			30		46		
08:30			108		212			20:30			32		32		
08:45			115	470	221	808	1278	20:45			33	131	46	159	290
09:00			107		155			21:00			30		50		
09:15			108		157			21:15			37		33		
09:30			86		134			21:30			21		42		
09:45			80	381	119	565	946	21:45			42	130	22	147	277
10:00			73		98			22:00			21		21		
10:15			65		95			22:15			20		21		
10:30			70		99			22:30			30		20		
10:45			73	281	88	380	661	22:45			13	84	19	81	165
11:00			53		108			23:00			12		15		
11:15			94		83			23:15			27		14		
11:30			56		109			23:30			17		14		
11:45			58	261	109	409	670	23:45			8	64	17	60	124
Total Vol.				2113		3303	**5416**					3760		3756	**7516**

Daily Totals

NB	SB	EB	WB	Combined
		5873	7059	**12932**

	AM			PM		
Split %	39.0%	61.0%	**41.9%**	50.0%	50.0%	**58.1%**
Peak Hour	07:45	08:00	**08:00**	16:30	17:30	**16:30**
Volume	483	808	**1278**	771	556	**1301**
P.H.F.	0.94	0.91	**0.95**	0.90	0.81	**0.92**

THURSDAY - JUNE 4TH, 2015 CITY: UTC PROJECT: PTD15-0605-02

EASTGATE MALL BTN EASTER & TOWNE CENTRE

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
00:00			6		5			12:00			84		103		
00:15			9		7			12:15			101		89		
00:30			10		8			12:30			95		103		
00:45			4	29	1	21	50	12:45			92	372	98	393	765
01:00			9		7			13:00			97		97		
01:15			5		2			13:15			71		87		
01:30			14		4			13:30			81		77		
01:45			4	32	4	17	49	13:45			96	345	75	336	681
02:00			5		2			14:00			104		69		
02:15			3		3			14:15			83		73		
02:30			2		2			14:30			65		75		
02:45			3	13	3	10	23	14:45			89	341	76	293	634
03:00			3		2			15:00			100		60		
03:15			2		0			15:15			105		81		
03:30			5		2			15:30			112		89		
03:45			4	14	2	6	20	15:45			101	418	82	312	730
04:00			2		3			16:00			151		105		
04:15			2		12			16:15			144		111		
04:30			2		9			16:30			166		116		
04:45			8	14	22	46	60	16:45			170	631	128	460	1091
05:00			5		11			17:00			189		131		
05:15			8		22			17:15			191		128		
05:30			15		21			17:30			151		121		
05:45			19	47	40	94	141	17:45			144	675	122	502	1177
06:00			26		42			18:00			148		123		
06:15			42		48			18:15			91		110		
06:30			59		59			18:30			93		81		
06:45			67	194	75	224	418	18:45			62	394	72	386	780
07:00			91		88			19:00			50		47		
07:15			95		121			19:15			51		43		
07:30			91		168			19:30			51		39		
07:45			126	403	16	393	796	19:45			36	188	26	155	343
08:00			126		177			20:00			35		27		
08:15			121		184			20:15			38		25		
08:30			120		190			20:30			23		15		
08:45			111	478	202	753	1231	20:45			33	129	24	91	220
09:00			104		184			21:00			33		24		
09:15			117		129			21:15			29		22		
09:30			86		120			21:30			17		31		
09:45			67	374	97	530	904	21:45			25	104	15	92	196
10:00			82		91			22:00			18		14		
10:15			67		76			22:15			10		16		
10:30			60		72			22:30			22		9		
10:45			70	279	71	310	589	22:45			10	60	8	47	107
11:00			60		74			23:00			9		10		
11:15			82		70			23:15			14		13		
11:30			66		89			23:30			10		10		
11:45			70	278	86	319	597	23:45			5	38	9	42	80
Total Vol.				2155		2723	**4878**					3695		3109	**6804**

Daily Totals

NB	SB	EB	WB	Combined
		5850	5832	**11682**

	AM			PM		
Split %	44.2%	55.8%	**41.8%**	54.3%	45.7%	**58.2%**
Peak Hour	07:45	08:15	**08:00**	16:30	16:45	**16:30**
Volume	493	760	**1231**	716	508	**1219**
P.H.F.	0.98	0.94	**0.98**	0.94	0.97	**0.95**

THURSDAY - JUNE 4TH, 2015 CITY: UTC PROJECT: PTD15-0605-02

EASTGATE MALL BTN TOWNE CENTRE & JUDICIAL

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
00:00			5		10			12:00			98		102		
00:15			9		5			12:15			91		91		
00:30			6		7			12:30			92		110		
00:45			5	25	3	25	50	12:45			93	374	88	391	765
01:00			10		5			13:00			100		94		
01:15			3		1			13:15			79		71		
01:30			11		5			13:30			92		72		
01:45			4	28	1	12	40	13:45			100	371	67	304	675
02:00			5		2			14:00			90		70		
02:15			2		4			14:15			90		86		
02:30			6		1			14:30			71		81		
02:45			4	17	2	9	26	14:45			80	331	85	322	653
03:00			5		3			15:00			98		76		
03:15			0		1			15:15			103		82		
03:30			3		2			15:30			109		84		
03:45			8	16	2	8	24	15:45			104	414	84	326	740
04:00			4		2			16:00			160		112		
04:15			3		9			16:15			218		122		
04:30			10		9			16:30			184		98		
04:45			13	30	15	35	65	16:45			121	683	116	448	1131
05:00			7		7			17:00			119		121		
05:15			17		15			17:15			168		116		
05:30			27		20			17:30			175		105		
05:45			31	82	23	65	147	17:45			151	613	101	443	1056
06:00			42		38			18:00			135		111		
06:15			53		48			18:15			91		100		
06:30			60		60			18:30			72		66		
06:45			56	211	88	234	445	18:45			49	347	45	322	669
07:00			91		105			19:00			43		24		
07:15			88		151			19:15			43		26		
07:30			121		168			19:30			38		35		
07:45			126	426	184	608	1034	19:45			23	147	19	104	251
08:00			105		159			20:00			26		21		
08:15			124		175			20:15			24		14		
08:30			111		151			20:30			14		13		
08:45			95	435	162	647	1082	20:45			19	83	23	71	154
09:00			108		158			21:00			25		13		
09:15			90		131			21:15			18		11		
09:30			76		103			21:30			16		19		
09:45			71	345	85	477	822	21:45			19	78	6	49	127
10:00			77		78			22:00			10		10		
10:15			68		78			22:15			8		10		
10:30			64		58			22:30			14		13		
10:45			60	269	64	278	547	22:45			7	39	7	40	79
11:00			62		73			23:00			8		7		
11:15			81		74			23:15			11		8		
11:30			64		74			23:30			8		9		
11:45			88	295	94	315	610	23:45			7	34	7	31	65
Total Vol.				2179		2713	**4892**					3514		2851	**6365**

Daily Totals

NB	SB	EB	WB	Combined
		5693	5564	**11257**

	AM			PM		
Split %	44.5%	55.5%	**43.5%**	55.2%	44.8%	**56.5%**
Peak Hour	07:30	07:30	**07:30**	16:00	16:45	**16:00**
Volume	476	686	**1162**	683	458	**1131**
P.H.F.	0.94	0.93	**0.94**	0.78	0.95	**0.83**

THURSDAY - JUNE 4TH, 2015 CITY: UTC PROJECT: PTD15-0605-02

EASTGATE MALL E-O JUDICIAL

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
00:00			2		5			12:00			106		66		
00:15			5		2			12:15			72		63		
00:30			2		3			12:30			85		84		
00:45			3	12	2	12	24	12:45			66	329	67	280	609
01:00			8		4			13:00			60		81		
01:15			4		1			13:15			53		70		
01:30			9		5			13:30			67		65		
01:45			1	22	1	11	33	13:45			80	260	55	271	531
02:00			3		1			14:00			71		51		
02:15			1		2			14:15			92		45		
02:30			2		0			14:30			101		66		
02:45			3	9	2	5	14	14:45			85	349	54	216	565
03:00			4		2			15:00			141		70		
03:15			0		1			15:15			99		65		
03:30			2		1			15:30			138		51		
03:45			4	10	2	6	16	15:45			140	518	66	252	770
04:00			2		7			16:00			205		54		
04:15			2		5			16:15			262		94		
04:30			1		10			16:30			168		84		
04:45			5	10	15	37	47	16:45			121	756	77	309	1065
05:00			2		13			17:00			144		91		
05:15			9		22			17:15			175		98		
05:30			8		34			17:30			170		88		
05:45			11	30	40	109	139	17:45			151	640	81	358	998
06:00			16		42			18:00			170		77		
06:15			25		70			18:15			134		65		
06:30			30		81			18:30			89		54		
06:45			50	121	105	298	419	18:45			55	448	40	236	684
07:00			70		108			19:00			55		35		
07:15			88		151			19:15			49		44		
07:30			81		162			19:30			41		32		
07:45			105	344	184	605	949	19:45			29	174	32	143	317
08:00			94		169			20:00			25		22		
08:15			84		151			20:15			22		29		
08:30			81		188			20:30			15		16		
08:45			70	329	162	670	999	20:45			14	76	18	85	161
09:00			68		188			21:00			20		11		
09:15			70		143			21:15			22		12		
09:30			54		95			21:30			14		16		
09:45			66	258	95	521	779	21:45			10	66	10	49	115
10:00			45		69			22:00			9		15		
10:15			65		61			22:15			6		9		
10:30			70		51			22:30			8		12		
10:45			54	234	38	219	453	22:45			3	26	5	41	67
11:00			88		51			23:00			4		8		
11:15			95		47			23:15			9		6		
11:30			84		43			23:30			4		4		
11:45			88	355	62	203	558	23:45			4	21	5	23	44
Total Vol.				1734		2696	**4430**					3663		2263	**5926**

Daily Totals

NB	SB	EB	WB	Combined
		5397	4959	**10356**

	AM			PM		
Split %	39.1%	60.9%	**42.8%**	61.8%	38.2%	**57.2%**
Peak Hour	11:15	07:45	**07:45**	15:45	17:00	**15:45**
Volume	373	692	**1056**	775	358	**1073**
P.H.F.	0.88	0.92	**0.91**	0.74	0.91	**0.75**

THURSDAY - JUNE 4TH, 2015 CITY: UTC PROJECT: PTD15-0605-02

TOWNE CENTRE BTN EASTGATE MALL & EXECUTIVE DR

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	6		16					12:00	132		151				
00:15	5		10					12:15	105		142				
00:30	7		8					12:30	114		161				
00:45	3	21	9	43			64	12:45	121	472	142	596			1068
01:00	5		9					13:00	116		151				
01:15	6		10					13:15	135		144				
01:30	3		7					13:30	141		132				
01:45	2	16	1	27			43	13:45	111	503	141	568			1071
02:00	1		4					14:00	105		145				
02:15	4		9					14:15	105		162				
02:30	9		12					14:30	90		151				
02:45	3	17	6	31			48	14:45	107	407	170	628			1035
03:00	5		5					15:00	83		161				
03:15	2		4					15:15	90		190				
03:30	1		5					15:30	73		181				
03:45	7	15	4	18			33	15:45	82	328	210	742			1070
04:00	12		3					16:00	51		208				
04:15	18		2					16:15	66		191				
04:30	20		0					16:30	50		252				
04:45	42	92	1	6			98	16:45	62	229	235	886			1115
05:00	50		5					17:00	50		216				
05:15	69		4					17:15	51		258				
05:30	88		5					17:30	44		206				
05:45	98	305	8	22			327	17:45	52	197	188	868			1065
06:00	116		11					18:00	66		191				
06:15	125		15					18:15	70		155				
06:30	131		18					18:30	54		141				
06:45	141	513	21	65			578	18:45	55	245	151	638			883
07:00	190		30					19:00	40		111				
07:15	212		33					19:15	28		88				
07:30	208		41					19:30	33		90				
07:45	235	845	45	149			994	19:45	31	132	65	354			486
08:00	251		51					20:00	28		54				
08:15	232		66					20:15	20		40				
08:30	215		40					20:30	19		35				
08:45	216	914	41	198			1112	20:45	20	87	44	173			260
09:00	208		55					21:00	16		41				
09:15	219		60					21:15	18		28				
09:30	222		84					21:30	22		21				
09:45	215	864	70	269			1133	21:45	21	77	19	109			186
10:00	165		65					22:00	15		20				
10:15	141		55					22:15	14		16				
10:30	121		68					22:30	18		11				
10:45	107	534	91	279			813	22:45	11	58	18	65			123
11:00	116		111					23:00	9		20				
11:15	121		105					23:15	10		15				
11:30	116		121					23:30	5		11				
11:45	123	476	133	470			946	23:45	4	28	5	51			79
Total Vol.		4612		1577			**6189**			2763		5678			**8441**

Daily Totals

NB	SB	EB	WB	Combined
7375	7255			**14630**

	AM			PM		
Split %	74.5%	25.5%	**42.3%**	32.7%	67.3%	**57.7%**
Peak Hour	07:45	11:45	**07:45**	12:45	16:30	**16:30**
Volume	933	587	**1135**	513	961	**1174**
P.H.F.	0.93	0.91	**0.94**	0.94	0.93	**0.95**

THURSDAY - JUNE 4TH, 2015 CITY: UTC PROJECT: PTD15-0605-02

TOWNE CENTRE BTN EXECUTIVE DR & LA JOLLA VILLAGE

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	4		17					12:00	154		210				
00:15	5		3					12:15	177		162				
00:30	8		11					12:30	193		187				
00:45	2	19	5	36			55	12:45	215	739	137	696			1435
01:00	7		4					13:00	207		141				
01:15	5		13					13:15	180		136				
01:30	2		8					13:30	188		145				
01:45	1	15	0	25			40	13:45	144	719	122	544			1263
02:00	1		5					14:00	121		178				
02:15	5		10					14:15	132		178				
02:30	10		17					14:30	90		183				
02:45	2	18	5	37			55	14:45	107	450	186	725			1175
03:00	4		2					15:00	83		218				
03:15	2		4					15:15	90		209				
03:30	2		6					15:30	73		236				
03:45	8	16	5	17			33	15:45	82	328	249	912			1240
04:00	10		2					16:00	77		262				
04:15	12		4					16:15	91		288				
04:30	28		1					16:30	100		299				
04:45	62	112	0	7			119	16:45	105	373	310	1159			1532
05:00	43		6					17:00	121		302				
05:15	83		4					17:15	111		314				
05:30	138		6					17:30	88		289				
05:45	227	491	10	26			517	17:45	95	415	255	1160			1575
06:00	177		18					18:00	92		289				
06:15	213		18					18:15	68		215				
06:30	211		20					18:30	83		204				
06:45	296	897	30	86			983	18:45	59	302	149	857			1159
07:00	280		41					19:00	53		124				
07:15	315		55					19:15	50		99				
07:30	355		50					19:30	49		83				
07:45	384	1334	66	212			1546	19:45	34	186	52	358			544
08:00	381		61					20:00	34		54				
08:15	352		58					20:15	29		41				
08:30	322		45					20:30	17		50				
08:45	318	1373	44	208			1581	20:45	27	107	47	192			299
09:00	353		60					21:00	26		32				
09:15	273		76					21:15	27		28				
09:30	254		100					21:30	25		22				
09:45	217	1097	73	309			1406	21:45	23	101	23	105			206
10:00	165		60					22:00	15		40				
10:15	141		55					22:15	25		13				
10:30	136		97					22:30	11		24				
10:45	107	549	101	313			862	22:45	9	60	12	89			149
11:00	116		140					23:00	12		10				
11:15	141		125					23:15	16		15				
11:30	132		169					23:30	11		15				
11:45	156	545	201	635			1180	23:45	10	49	6	46			95
Total Vol.		6466		1911			**8377**			3829		6843			**10672**

Daily Totals

NB	SB	EB	WB	Combined
10295	8754			**19049**

	AM			PM		
Split %	77.2%	22.8%	**44.0%**	35.9%	64.1%	**56.0%**
Peak Hour	07:30	11:45	**07:30**	12:30	16:30	**16:30**
Volume	1472	760	**1707**	795	1225	**1662**
P.H.F.	0.96	0.90	**0.95**	0.96	0.98	**0.98**

THURSDAY - JUNE 4TH, 2015 CITY: UTC PROJECT: PTD15-0605-02

JUDICIAL BTN EASTGATE MALL & EXECUTIVE DR

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	2		6					12:00	58		58				
00:15	3		3					12:15	51		51				
00:30	2		8					12:30	59		55				
00:45	2	9	2	19			28	12:45	53	221	40	204			425
01:00	1		5					13:00	51		32				
01:15	1		0					13:15	46		33				
01:30	1		1					13:30	47		45				
01:45	0	3	3	9			12	13:45	48	192	48	158			350
02:00	0		3					14:00	38		41				
02:15	0		0					14:15	48		55				
02:30	0		0					14:30	70		46				
02:45	6	6	1	4			10	14:45	55	211	40	182			393
03:00	1		1					15:00	91		51				
03:15	0		0					15:15	49		44				
03:30	3		0					15:30	56		55				
03:45	1	5	2	3			8	15:45	42	238	68	218			456
04:00	0		0					16:00	51		77				
04:15	3		0					16:15	48		60				
04:30	4		7					16:30	51		61				
04:45	12	19	8	15			34	16:45	44	194	77	275			469
05:00	3		11					17:00	48		95				
05:15	13		6					17:15	40		80				
05:30	14		22					17:30	35		70				
05:45	26	56	24	63			119	17:45	36	159	55	300			459
06:00	25		21					18:00	44		59				
06:15	21		17					18:15	41		42				
06:30	28		16					18:30	32		39				
06:45	38	112	25	79			191	18:45	27	144	21	161			305
07:00	60		28					19:00	17		25				
07:15	77		33					19:15	17		13				
07:30	84		35					19:30	16		15				
07:45	106	327	44	140			467	19:45	11	61	7	60			121
08:00	121		40					20:00	10		9				
08:15	135		41					20:15	8		12				
08:30	130		50					20:30	10		4				
08:45	140	526	30	161			687	20:45	14	42	10	35			77
09:00	121		40					21:00	5		10				
09:15	116		44					21:15	9		6				
09:30	105		20					21:30	10		8				
09:45	88	430	28	132			562	21:45	2	26	7	31			57
10:00	65		38					22:00	4		4				
10:15	44		40					22:15	3		4				
10:30	35		44					22:30	1		6				
10:45	37	181	35	157			338	22:45	4	12	3	17			29
11:00	39		33					23:00	3		6				
11:15	38		41					23:15	3		4				
11:30	52		55					23:30	3		3				
11:45	54	183	60	189			372	23:45	4	13	5	18			31
Total Vol.		1857		971			**2828**			1513		1659			**3172**

Daily Totals

NB	SB	EB	WB	Combined
3370	2630			**6000**

	AM			PM		
Split %	65.7%	34.3%	**47.1%**	47.7%	52.3%	**52.9%**
Peak Hour	08:00	11:30	**08:00**	14:30	16:45	**16:30**
Volume	526	224	**687**	265	322	**496**
P.H.F.	0.94	0.93	**0.95**	0.84	0.85	**0.87**

THURSDAY - JUNE 4TH, 2015 CITY: UTC PROJECT: PTD15-0605-02

JUDICIAL BTN EXECUTIVE DR & GOLDEN HAVEN

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	7		9					12:00	36		77				
00:15	5		2					12:15	36		58				
00:30	4		9					12:30	51		54				
00:45	6	22	2	22			44	12:45	51	174	34	223			397
01:00	6		4					13:00	49		38				
01:15	2		0					13:15	43		48				
01:30	1		2					13:30	60		41				
01:45	1	10	3	9			19	13:45	40	192	43	170			362
02:00	3		3					14:00	40		68				
02:15	0		0					14:15	43		55				
02:30	2		3					14:30	40		69				
02:45	4	9	1	7			16	14:45	39	162	52	244			406
03:00	1		2					15:00	33		102				
03:15	1		2					15:15	30		64				
03:30	5		1					15:30	31		81				
03:45	2	9	2	7			16	15:45	44	138	80	327			465
04:00	0		0					16:00	31		111				
04:15	4		0					16:15	30		103				
04:30	7		4					16:30	33		126				
04:45	13	24	1	5			29	16:45	27	121	130	470			591
05:00	7		4					17:00	44		168				
05:15	30		1					17:15	28		105				
05:30	30		6					17:30	26		121				
05:45	52	119	9	20			139	17:45	27	125	98	492			617
06:00	55		7					18:00	35		109				
06:15	50		14					18:15	45		72				
06:30	63		16					18:30	44		70				
06:45	76	244	20	57			301	18:45	20	144	45	296			440
07:00	77		33					19:00	27		55				
07:15	116		31					19:15	18		34				
07:30	121		28					19:30	19		34				
07:45	130	444	35	127			571	19:45	29	93	31	154			247
08:00	141		30					20:00	29		28				
08:15	138		33					20:15	21		25				
08:30	136		26					20:30	17		21				
08:45	144	559	34	123			682	20:45	14	81	23	97			178
09:00	107		34					21:00	16		17				
09:15	90		49					21:15	25		22				
09:30	59		37					21:30	23		10				
09:45	70	326	47	167			493	21:45	19	83	14	63			146
10:00	43		37					22:00	19		8				
10:15	31		35					22:15	14		13				
10:30	35		46					22:30	15		13				
10:45	29	138	34	152			290	22:45	14	62	10	44			106
11:00	35		24					23:00	8		7				
11:15	25		45					23:15	8		7				
11:30	29		57					23:30	13		6				
11:45	32	121	57	183			304	23:45	6	35	6	26			61
Total Vol.		2025		879			**2904**			1410		2606			**4016**

Daily Totals

NB	SB	EB	WB	Combined
3435	3485			**6920**

	AM			PM		
Split %	69.7%	30.3%	**42.0%**	35.1%	64.9%	**58.0%**
Peak Hour	08:00	11:30	**08:00**	12:45	16:30	**16:15**
Volume	559	249	**682**	203	529	**661**
P.H.F.	0.97	0.81	**0.96**	0.91	0.79	**0.78**

INTERSECTION: EASTGATE MALL @ GENESEE AV

233 Program

Group Assignment:
Field Master Assignment:
System Reference Number:

N/S Street: Genesee Av
E/W Street: Eastgate Mall

Last Database Change:

Timing sheets by: DRH/REJ
Approved by: BC
Timing implemented on: 3/3/2010

Row	Phase Numbers →	1	2	3	4	5	6	7	8
		1+8							
			Genesee Av		Eastgate Mall		Genesee Av		Eastgate Mall
					Phase				
0	Ped Walk		7		7		7		7
1	Ped FDW		19		27		20		31
2	Min Green	4	10	4	7	4	10	4	7
3	Type 3 Disconnect								
4	Added per Vehicle								
5	Veh Extension	2.0	4.2	2.0	2.0	2.0	4.2	2.0	2.0
6	Max Gap	2.0	4.2	2.0	2.0	2.0	4.2	2.0	2.0
7	Min Gap	2.0	0.2	2.0	2.0	2.0	0.2	2.0	2.0
8	Max Limit	30	60	30	40	30	60	30	40
9	Max Limit 2								
A	Adv. / Delay Walk								
B	PE Min Ped FDW								
C	Cond Serv Check								
D	Reduce Every		0.8				0.8		
E	Yellow Change	3.4	4.5	3.4	3.9	3.4	4.4	3.4	3.9
F	Red Clear	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0

Phase Timing - Bank 1 <F/1+Phase+Row>

	E
RR-1 Delay	
RR-1 Clear	
EV-A Delay	0
EV-A Clear	0
EV-B Delay	0
EV-B Clear	0
EV-C Delay	0
EV-C Clear	0
EV-D Delay	0
EV-D Clear	0
RR-2 Delay	
RR-2 Clear	
View EV Delay	- - -
View EV Clear	- - -
View RR Delay	- - -
View RR Clear	- - -

Preempt Timing <F/1+E+Row>

Row		F
0	Permit	12345678
1	Red Lock	
2	Yellow Lock	
3	Min Recall	
4	Ped Recall	
5	View Sel Pods	
6	Rest In Walk	
7	Red Rest	
8	Double Entry	
9	Max Recall	
A	Soft Recall	2 6
B	Max 2	
C	Cond. Service	
D	Man Cntrl Calls	
E	Yellow Start	2 6
F	First Phases	3 7

Phase Functions <F/1+F+Row>

Current Calculated Cycle Length: C/0 + B + F

	9	A	B	C	F
	---	---	---	---	---
Phase 1					
Phase 2					
Phase 3					
Phase 4					
Phase 5					
Phase 6					
Phase 7					
Phase 8					
Max Initial					
Alternate Walk					
Alternate FDW					
Alternate Initial					
Alternate Extension					

Alternate Timing <F/1+Column+Phase>

Drop Number	8	<C/0+0+0>
Zone Number	8	<C/0+0+1>
Area Number	4	<C/0+0+2>
Area Address	63	<C/0+0+3>
QuicNet Channel	COM47	(QuicNet)

Communication Addresses

Flash Start	0	<F/1+0+E>
Red Revert	5.0	<F/1+0+F>
All Red Start	0.0	<F/1+C+0>

Start / Revert Times

Manual Plan: 0 = Automatic, 1-9 = Plan 1-9, 14 = Free, 15 = Flash

(Outputs specified in Assignable Outputs at E/127+A+E & F)

Exclusive Walk	0	<F/1+0+0>
Exclusive FDW	0	<F/1+0+1>
All Red Clear	0.0	<F/1+0+2>

Exclusive Ped Phase

Manual Offset: 0 = Automatic, 1 = Offset A, 2 = Offset B, 3 = Offset C

Manual Plan	0	<C/0+A+1>
Manual Offset	0	<C/0+B+1>

Manual Selection

Free Lag	2 4 6 8 <C/1+F+0>

How to Set Page Access Code:
F/1 + C + 0 + F = 1

Notes:
1- "No U Turn" sign connected to Phase 8 Ped Yellow (Pin 38)
2- TOD Function 1 ACTIVATES Overlap 1 & Blankout sign
3- Set TOD Function F/1 ON for time(s) when overlap is allowed and U-turns are restricted.
Overlap # Blankout Sign deactivated 6-1-10 FLG

Overlap Assignments <E/29+Column+Row>

Row		Overlap 1	2	3	4	5	6	7	8
0	Load Switch Number								
1	Veh Set 1 - Phases								
2	Veh Set 2 - Phases	1	8						
3	Veh Set 3 - Phases								
4	Neg Veh Phases	2	7						
5	Neg Ped Phases	2	8						
6	Green Omit Phases		8						
7	Green Clear Omit Phs.								
8									
9									
A									
B									
C									
D	Green Clear								
E	Yellow Change	3.4							
F	Red Clear	1.0							

Specials <F/2+F+Row>

Row		1
0	Fast Green Flash Phase	
1	Green Flash Phases	
2	Flashing Walk Phases	
3	Guaranteed Passage	
4	Simultaneous Gap Term	12345678
5	Sequential Timing	
6	Advance Walk Phases	
7	Delay Walk Phases	
8	External Recall	
9	Start-up Overlap Green	
A	Max Extension	
B	Inhibit Ped Reservice	
C	Semi Actuated	
D	Start-up Overlap Yellow	
E	Start-up Vehicle Calls	12345678
F	Start-up Ped Calls	12345678

Configuration <E/125+E+Row>

Row		1
0	Exclusive Phases	
1	RR-1 Clear Phases	
2	RR-2 Clear Phases	
3	RR-2 Limited Service	
4	Prot / Perm Phases	
5	Flash to PE Circuits	
6	Flash Entry Phases	
7	Disable Yellow Range	
8	Disable Ovp Yel Range	
9	Overlap Yellow Flash	
A	EV-A Phases	2 5
B	EV-B Phases	4 7
C	EV-C Phases	1 6
D	EV-D Phases	3 8
E	Extra 1 Config. Bits	1 345
F	IC Select (interconnect)	2

Configuration <E/125+F+Row>

	1
Ext. Permit 1 Phases	
Ext. Permit 2 Phases	
Exclusive Ped Assign	
Preempt Non-Lock	12345678
Ped for 2P Output	2
Ped for 6P Output	6
Ped for 4P Output	4
Ped for 8P Output	8
Yellow Flash Phases	
Low Priority A Phases	
Low Priority B Phases	
Low Priority C Phases	
Low Priority D Phases	
Restricted Phases	
Extra 2 Config. Bits	

Preemption Priority

(*RR-1 is always Highest, and RR-2 is always Second Highest)

<E/125+C+Row>

Row		0
0	EV-A	
1	EV-B	
2	EV-C	
3	EV-D	
4	RR-1 *	---
5	RR-2 *	---
6	SE-1	0
7	SE-2	0

Coordination Transition Minimums

<C/5+2+Row>

Row		2
0	Phase 1	0
1	Phase 2	0
2	Phase 3	0
3	Phase 4	0
4	Phase 5	0
5	Phase 6	0
6	Phase 7	0
7	Phase 8	0

Extra 1 Flags

1 = TBC Type 1
2 = NEMA Std. Coord
3 = Auto Daylight Savings
4 = EV Advance
5 = Extended Status
6 = International Ped
7 = Flash - Clear Outputs
8 = Split Ring

IC Select Flags

1 =
2 = Modem
3 = 7-Wire Slave
4 = Flash / Free
5 =
6 = Simplex Master
7 = 7-Wire Master
8 = Offset Interrupter

Extra 2 Flags

1 = AWB During Initial
2 = LMU Installed
3 = Disable Min Walk
4 = QuicNet/4 System
5 = Ignore P/P on EV
6 =
7 = Reserved
8 =

Flash to PE & PE Non-Lock

1 = EV A 5 = RR 1
2 = EV B 6 = RR 2
3 = EV C 7 = SE 1
4 = EV D 8 = SE 2

Time and Date

8-0 Hour, Minute, Day-of-Week
8-1 Day-of-Month, Year, Month
8-F Seconds

Daylight Savings Time

Begin Month	0	<C/5+2+A>
Begin Week	0	<C/5+2+B>
End Month	0	<C/5+2+C>
End Week	0	<C/5+2+D>

Daylight Savings Data:
If set to all zeros, standard dates will be used.

INTERSECTION: EASTGATE MALL @ GENESEE AV

233 Program

Row	Detector Name	C1 Pin Number	Attributes	Phase(s)	Assign	Delay	Carry-Over
0	2I2U	39	45_7_	2	123 8		1.8
1	6J2U	40	45_7_	6	123 8		1.8
2		41	45_7_	4	123 8		
3	6J6U	42	45_7_	8	123 8	12.0	
4	2I2L	43	45_7_	2	123 8		1.8
5	6J2L	44	45_7_	6	123 8		1.8
6		45	45_7_	4	123 8		
7		46	45_7_	8	123 8		
8		47	67_	2	123 8		
9		48	67_	6	123 8		
A		49	67_	4	123 8		
B		50	67_	8	123 8		
C		55	45_7_	5	123 8		
D		56	45_7_	1 7	123 8		
E		57	45_7_	7	123 8		
F		58	45_7_	3	123 8		

Program Type:

	Ped / Phase / Overlap 1	2	3	4	5	6	7	8
Walk								
Don't Walk								
Phase Green								
Phase Yellow								
Phase Red								
Overlap Green	35							
Overlap Yellow	37							
Overlap Red								

Row: 0 1 2 3 4 5 6 7

Redirect Phase Outputs <E/127+Column+Row>

Cabinet Type	30

<E/125+D+0>

Enable Redirection
(Enable Redirection = 30)

	D
Output Port 1	
Output Port 2	
Output Port 3	
Output Port 4	
Output Port 5	
Output Port 6	
Output Port 7	

Row: 0 1 2 3 4 5 6 7

Dimming <E/125+D+Row>

Max OFF (minutes)	5
Max ON (minutes)	60

<D/0+0+1>
<D/0+0+2>

Detector Failure Monitor

Row	Detector Name	C1 Pin Number	Attributes	Phase(s)	Assign	Delay	Carry-Over
0		59	45_7_	5	123 8		
1		60	45_7_	1 7	123 8		
2		61	45_7_	7	123 8		
3		62	45_7_	3	123 8		
4	2I3U	63	45_7_	2	123 8		1.8
5	6J3U	64	45_7_	6	123 8		1.8
6		65	45_7_	4	123 8		
7		66	45_7_	8	123 8		
8		67	2_	2	123 8		
9		68	2_	6	123 8		
A		69	2_	4	123 8		
B		70	2_	8	123 8		
C		76	45_7_	2	123 8		
D	Bike J3L	77	45_7_	6	123 8		1.8
E		78	45_7_	4	123 8		
F		79	45_7_	8	123 8		

Detector Assignments <E/126+Column+Row> <D/8+Column+Row>

Detector Attributes
1 = Full Time Delay
2 = Ped Call
3 =
4 = Count
5 = Extension
6 = Type 3
7 = Calling
8 = Alternate

Det. Assignments
1 = Det. Set 1
2 = Det. Set 2
3 = Det. Set 3
4 =
5 =
6 = Failure - Min Recall
7 = Failure - Max Recall
8 = Report on Failure

	6
Number of Digits	
1 st Digit	
2 ed Digit	
3 ed Digit	
4 th Digit	
5 th Digit	
6 th Digit	
7 th Digit	
8 th Digit	
9 th Digit	
10 th Digit	
11 th Digit	
12 th Digit	
13 th Digit	
14 th Digit	
15 th Digit	

<C/5+D+Row>

Dial-Back Telephone Number

Disable Alarms
1 = Stop Time
2 = Flash Sense
3 = Keyboard Entry
4 = Manual Plan
5 = Police Control
6 = External Alarm
7 = Detector Failure
8 =

	B
DELAY-A	1
DELAY-B	1
DELAY-C	0
DELAY-D	0
DELAY-E	0
DELAY-F	0

Row: A B C D E F

<D/0+B+Row> (Seconds)

Delay Logic Times

Omit Alarm	

<C/5+F+0>

Disable Alarm Reporting

Time	6

<C/5+C+0>

Redial Time (minutes)
(View Redial Timer at E/2+D+6)

INTERSECTION: EASTGATE MALL @ GENESEE AV

Row	Time	Plan	Offset	Day of Week
0	06:30	1	A	23456
1	10:00	2	A	23456
2	15:00	3	A	23456
3	19:00	E	A	1234567

TOD Coordination <9/0.1+Row> (Bank 1)

Time	Funct.	Day of Week
~~06:00~~	F	23456
~~09:00~~	F	23456

TOD Function <7/0.1+Row>

Column 4 Phases/Bits

<E/27+4+Row>

Day	Year	Month	Holiday Type

Holiday Dates <8/1.1+Row> (Bank 1)

Time	Plan	Offset	Holiday Type

Holiday Events <9/1.1+Row> (Bank 1)

T.O.D. Functions:
0 =
1 = Red Lock
2 = Yellow Lock
3 = Veh Min Recall
4 = Ped Recall
5 =
6 = Rest In Walk
7 = Red Rest
8 = Double Entry
9 = Veh Max Recall
A = Veh Soft Recall
B = Maximum 2
C = Conditional Service
D = Free Lag Phases
E = Bit 1 - Local Override
Bit 4 - Disable Detector OFF Monitor
Bit 7 - Detector Count Monitor
Bit 8 - Real Time Sp/R Monitor
F = Output Bits 1 thru 8

Plan Select:
1 thru 8 = Coordination Plan 1 thru 9
14 or E = Free
15 or F = Flash

Month Select:
1 = January
2 = February
3 = March
4 = April
5 = May
6 = June
7 = July
8 = August
9 = September
A = October
B = November
C = December

Cycle Timer:
Master: C/0 + A + 0
Ring A: C/0 + B + 0
Ring B: C/0 + D + 0

Interval Timer:
Ring A: F/0 + A + Interval Row
Ring B: F/0 + B + Interval Row

Master Plan: C/0 + A + 2
Current Plan: C/0 + A + 3
TOD Plan: C/0 + A + 5

Row	Time	Plan	Offset	Day of Week

TOD Coordination <9/0.2+Row> (Bank 2)

Time	Funct.	Holiday Type

Holiday TOD Function <7/0.2+Row>

Column 4 Phases/Bits

<E/28+Row>

Day	Year	Month	Holiday Type

Holiday Dates <8/1.2+Row> (Bank 2)

Time	Plan	Offset	Holiday Type

Holiday Events <9/1.2+Row> (Bank 2)

INTERSECTION: EASTGATE MALL @ GENESEE AV

233 Program

M25 05/01/10

Row	Plan Name -->	1	2	3	4	5	6	7	8	9
0	Cycle Length	135	146	150						
1	Phase 1 - ForceOff	96	95	119						
2	Phase 2 - ForceOff									
3	Phase 3 - ForceOff	25	24	25						
4	Phase 4 - ForceOff	70	54	59						
5	Phase 5 - ForceOff	94	90	100						
6	Phase 6 - ForceOff									
7	Phase 7 - ForceOff	25	20	25						
8	Phase 8 - ForceOff	70	54	59						
9	Ring Offset									
A	Offset 1	106	75	70						
B	Offset 2									
C	Offset 3									
D	Perm 1 - End	14	15	10						
E	Hold Release	255	255	255						
F	Zone Offset									

Coordination - Timing Plans <C/1+Plan+Row>

Coord Extra
1 = Programmed WALK Time for Sync Phases
2 = Always Terminate Sync Phase Pads

Row		E
0		
1	Plan 1 - Sync	2 6
2	Plan 2 - Sync	2 6
3	Plan 3 - Sync	2 6
4	Plan 4 - Sync	
5	Plan 5 - Sync	
6	Plan 6 - Sync	
7	Plan 7 - Sync	
8	Plan 8 - Sync	
9	Plan 9 - Sync	
A	NEMA Sync	
B	NEMA Hold	
C		
D		
E	Coord Extra	
F		

Sync Phases <C/1+E+Row>

Row		1	2	3	4	5	6	7	8	9
0	Ped Adjustment									
1	Perm 2 - Start									
2	Perm 2 - End									
3	Perm 3 - Start									
4	Perm 3 - End									
5	Reservice Time									
6	Reservice Phases									
7										
8	Prettimed Phases									
9	Max Recall									
A	Perm 1 Veh Phase									
B	Perm 1 Ped Phase									
C	Perm 2 Veh Phase									
D	Perm 2 Ped Phase									
E	Perm 3 Veh Phase									
F	Perm 3 Ped Phase									

Coordination - Parameters <C/2+Plan+Row>

Row		F
0	Free Lag	
1	Plan 1 - Lag	2 4 6 8
2	Plan 2 - Lag	2 4 6 8
3	Plan 3 - Lag	2 4 6 8
4	Plan 4 - Lag	
5	Plan 5 - Lag	
6	Plan 6 - Lag	
7	Plan 7 - Lag	
8	Plan 8 - Lag	
9	Plan 9 - Lag	
A	External Lag	
B		
C		
D		
E		
F		

Lag Phases <C/1+F+Row>

Coordination Timing By:

Row	Column 9		Column A		Column B		Column C		Column D		Column E		Column F		Row
0	Spec. Funct. 1		NOT-3		Max 2		Prefimed		Set Monday		Dial 2 (7-Wire)		Sim Term -		0
1	Spec. Funct. 2		NOT-4		System Det 1		Plan 1		Ext. Perm 1		Dial 3 (7-Wire)		EV-A	71	1
2	Spec. Funct. 3		OR-4 (a)		System Det 2		Plan 2		Ext. Perm 2		Offset 1 (7-Wire)		EV-B	72	2
3	Spec. Funct. 4		OR-4 (b)		System Det 3		Plan 3		Dimming		Offset 2 (7-Wire)		EV-C	73	3
4	NAND-3 (a)		OR-5 (a)		System Det 4		Plan 4		Set Clock		Offset 3 (7-Wire)		EV-D	74	4
5	NAND-3 (b)		OR-5 (b)		System Det 5		Plan 5		Stop Time	82	Free (7-Wire)		RR-1	51	5
6	NAND-4 (a)		OR-6 (a)		System Det 6		Plan 6		Flash Sense	81	Flash (7-Wire)		RR-2	52	6
7	NAND-4 (b)		OR-6 (b)		System Det 7		Plan 7		Manual Enable		Excl. Ped Omit		Spec. Event 1		7
8	OR-7 (a)		Fig 3 Diamond		System Det 8		Plan 8		Man. Advance		NOT-1		Spec. Event 2		8
9	OR-7 (b)		Fig 4 Diamond		Max Inhibit (nema)		Plan 9		External Alarm		NOT-2		External Lag		9
A	OR-7 (c)		AND-4 (a)		Force A (nema)		DELAY-A		Phase Bank 2		OR-1 (a)	201	AND-1 (a)		A
B	OR-7 (d)		AND-4 (b)		Force B (nema)		DELAY-B		Phase Bank 3		OR-1 (b)		AND-1 (b)		B
C	OR-8 (a)		NAND-1 (a)		C.N.A. (nema)		DELAY-C		Overlap Set 2	201	OR-2 (a)		AND-2 (a)		C
D	OR-8 (b)		NAND-1 (b)		Hold (nema)		DELAY-D		Overlap Set 3		OR-2 (b)		AND-2 (b)		D
E	OR-8 (c)		NAND-2 (a)		Max Recall		DELAY-E		Detector Set 2		OR-3 (a)		AND-3 (a)		E
F	OR-8 (d)		NAND-2 (b)		Min Recall		DELAY-F		Detector Set 3		OR-3 (b)		AND-3 (b)		F

Assignable Inputs <EM26+Column+Row>

Row	Column 9		Column A		Column B		Column C		Column D		Column E		Column F		Row
0	Phase ON - 1		Preempt Fail		Flasher 0		Free		NOT-1		TOD Out 1	201	Dial 2 (7-Wire)		0
1	Phase ON - 2		Sp Evnt Out 1		Flasher 1		Plan 1		OR-1	38	TOD Out 2		Dial 3 (7-Wire)		1
2	Phase ON - 3		Sp Evnt Out 2		Fast Flasher		Plan 2		OR-2		TOD Out 3		Offset 1 (7-Wire)		2
3	Phase ON - 4		Sp Evnt Out 3		Fig 3 Diamond		Plan 3		OR-3		TOD Out 4		Offset 2 (7-Wire)		3
4	Phase ON - 5		Sp Evnt Out 4		Fig 4 Diamond		Plan 4		AND-1		TOD Out 5		Offset 3 (7-Wire)		4
5	Phase ON - 6		Sp Evnt Out 5				Plan 5		AND-2		TOD Out 6		Free (7-Wire)		5
6	Phase ON - 7		Sp Evnt Out 6				Plan 6		AND-3		TOD Out 7		Flash (7-Wire)		6
7	Phase ON - 8		Sp Evnt Out 7				Plan 7		NOT-2		TOD Out 8		Preempt		7
8	Ph. Check - 1		Sp Evnt Out 8		NOT-3		Plan 8		EV-A		Adv. Warn - 1		Low Priority A		8
9	Ph. Check - 2				NOT-4		Plan 9		EV-B		Adv. Warn - 2		Low Priority B		9
A	Ph. Check - 3		Detector Fail		OR-4		Spec. Funct. 3		EV-C		DELAY-A		Low Priority C		A
B	Ph. Check - 4		Spec. Funct. 1		OR-5		Spec. Funct. 4		EV-D		DELAY-B		Low Priority D		B
C	Ph. Check - 5		Spec. Funct. 2		OR-6		NAND-3		RR-1		DELAY-C				C
D	Ph. Check - 6		Central Control		AND-4		NAND-4		RR-2		DELAY-D				D
E	Ph. Check - 7		Excl. Ped DW		NAND-1		OR-7		Spec. Event 1		DELAY-E				E
F	Ph. Check - 8		Excl. Ped WK		NAND-2		OR-8		Spec. Event 2		DELAY-F				F

Assignable Outputs <EM27+Column+Row>

II RSECTION: Easter Wy & Eastgate Mall

6/23/04 223 Pre m

Group Assignment:
Field Master Assignment: None

N/S Street Name: Easter Wy
E/W Street Name: Eastgate Mall

Last Change: 03/08/04 Drawing Number: 31630-2-D
Timing Sheet By: BL System Ref. Number:
Approved By: DH

Phase Timing - Bank 1
F + Phase + Row

Row	Column # →	Eastgate Mall		Easter Wy		Eastgate Mall		
	Phase # →	Phase						
		N	→		↓		←	
	Ped Walk				7		7	
	Ped FDW				17		10	
	Min Green		10		4		10	
	Type 3 Limit							
	Add/Veh							
	Veh Extn		3.5		2.0		3.5	
	Max Gap		3.5		2.0		3.5	
	Min Gap		0.2		2.0		0.2	
	Max Limit		60		40		60	
	Max Limit 2							
	Bus Adv							
	Call to Phs							
	Reduce By		0.1				0.1	
	Every		0.9				0.9	
	Yellow		4.2		3.9		4.2	
	Red Clear		1.0		1.0		1.0	

<F Page>

Preempt Timing
F + E + Row

RR-1 Delay	
RR-1 Clear	
EV-A Delay	0
EV-A Clear	0
EV-B Delay	0
EV-B Clear	0
EV-C Delay	0
EV-C Clear	0
EV-D Delay	
EV-D Clear	
RR-2 Delay	
RR-2 Clear	
View EV Delay	---
View EV Clear	---
View RR Delay	---
View RR Clear	---

Phase Functions
F + F + Row

<F Page>

Row		
	Permit	2 4 6
	Red Lock	
	Yellow Lock	
	Min Recall	
	Ped Recall	
	Peds (View)	4 6
	Rest In Walk	
	Red Rest	
	Dbl Entry	
	Max Recall	
	Soft Recall	2 6
	Max 2	
	Cond Serv	
	Ped Lock	12345678
	Yellow Start	2 6
	1st Phases	4

Max Initial	0 F+0+E
Red Revert	5.0 F+0+F
All Red Start	0.0 F+C+O

Start / Revert Times

Drop Number	15	C+0+0
Zone Number	15	C+0+1
Area Number	4	C+0+2
Area Address	152	C+0+3
QuicNet Channel	43	(QuicNet)

Communication Addresses
C+F+O

Free Lag	Row
2 6	

Lag Phases <C Page>

Row		Green Clear	Yellow Change	Red Clear	Load-Switch #
	Overlap A				
	Overlap B				
	Overlap C				
	Overlap D				

Overlap Timing <F Page> <D Page>
F+COLOR+ D+0+OVERLAP

Manual Plan	14 C+A+1
Manual Offset	0 C+B+1

Manual Selection

Manual Plan
0 = Automatic
1-9 = Plan 1-9
14 = Free
15 = Flash

Manual Offset 0
= Automatic
1 = Offset A
2 = Offset B
3 = Offset C

Downtime Flash	255	(minutes)

Downtime Before Auto Manual Flash
F+0+8

Disable Ports	234

Disable Communications Ports
D+D+9

I[illegible]RSECTION: Easter Wy & Eastgate Mall

223 Program

Row	Time	Function	Day of Week	Phases/Bits
0				
1				
2				
3				
4				
5				
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

TOD Function — 7 + ROW

<D Page> — D + F + ROW

T.O.D. Functions
0 = Permitted Phases
1 = Red Lock
2 = Yellow Lock
3 = Veh Min Recall
4 = Ped Recall
5 =
6 = Rest In Walk
7 = Red Rest
8 = Double Entry
9 = Veh Max Recall
A = Veh Soft Recall
B = Maximum 2
C = Conditional Service
D = Free Lag Phases
E = Bit 1 - Local Override
Bit 2 - Phase Bank 2
Bit 3 - Phase Bank 3
Bit 4 - Disable Detector OFF Monitor
Bit 7 - Detector Count Monitor
Bit 8 - Real Time Split Monitor
F = Output Bits 1 thru 4

Row		
0		
1	RR Overlap A - Phases	
2	RR Overlap B - Phases	
3	RR Overlap C - Phases	
4	RR Overlap D - Phases	
5	Ped 2P	
6	Ped 6P	6
7	Ped 4P	4
8	Ped 8P	
9	Yellow Flash Phases	
A	Overlap A - Phases	
B	Overlap B - Phases	
C	Overlap C - Phases	
D	Overlap D - Phases	
E	Restricted Phases	
F	Assign 5 Outputs	

Configuration — E + F + ROW

<E Page>

Row		
0	Exclusive Phases	
1	RR-1 Clear Phases	
2	RR-2 Clear Phases	
3	RR-2 Limited Service	
4	Prot / Perm Phases	
5	Overlap A - Green Omit	
6	Overlap B - Green Omit	
7	Overlap C - Green Omit	
8	Overlap D - Green Omit	
9	Overlap Yellow Flash	
A	EV-A Phases	2
B	EV-B Phases	4
C	EV-C Phases	6
D	EV-D Phases	
E	Extra 1 Config. Bits	1_345
F	IC Select (Interconnect)	2

Configuration

For access, set F + 9 + E = 1 — E + E + ROW

Extra 1 Flags
1 = TBC Type 1
2 = NEMA Ext. Coord
3 = Auto Daylight Savings
4 = EV Advance
5 = Remote Download
6 = Special Event
7 = Preempt Operation
8 = Split Ring Operation

IC Select Flags
1 =
2 = Modem
3 = 7-Wire Slave
4 = Flash / Free
5 =
6 = Simplex Master
7 = 7-Wire Master
8 = Offset Interrupter

Day of Week
1 = Sunday
2 = Monday
3 = Tuesday
4 = Wednesday
5 = Thursday
6 = Friday
7 = Saturday

Assign 5 Outputs
1 = Right Turn Overlap
2 = TOD Outputs
3 = EV Beacon - Steady
4 = EV Beacon - Flashing
5 = Special Event Outputs
6 = Phase 3 & 7 Ped
7 = Advanced Warning Sign
8 =

Time and Date
8-0 Hour, Minute, Day-of-Week
8-1 Day-of-Month, Year, Month
8-F Seconds

Disable Parity	0	D+B+0

Dial-Up Telephone Communications.
(If set to a non-zero value, parity will be disabled)

(This parameter is NOT downloaded)

Program Information
C + C + 0 = program
C + C + F = version

Remote Download
C + 0 + 4 = 1 -255
w/ E + E + E bit 5 on

I ERSECTION: Easter Wy & Eastgate Mall

223 Program

Row	Delay	Carry-over	Detector Name	332 Input File	Detector Number
1				1I1	14
2		1.8		2I2U	1
3		2.0		2I2L	5
4				2I3U	21
5				2I3L	25
6				2I4	9
7				3I5	16
8				4I6U	3
9	10.0			4I6L	7
A				4I7U	23
B				4I7L	27
C				4I8	11
D				1I9U	18
E				3I9L	20
F	---	---	---	---	---
G	---	---	---	---	---

Row	Delay	Carry-over	Detector Name	332 Input File	Detector Number
0				5J1	13
1		1.8		6J2U	2
2		2.0		6J2L	6
3				6J3U	22
4				6J3L	26
5				6J4	10
6				7J5	15
7				8J6U	4
8				8J6L	8
9				8J7U	24
A				8J7L	28
B				8J8	12
C				5J9U	17
D				7J9L	19
E	---	---	---	---	---
F	---	---	---	---	---

Detector Delay & Carryover <D Page>

D + X (across) ÷ ROW

Row	Detector Numbers	
1	1 2 3 4 5 6 7 8	12345678
2	9 10 11 12 – – – –	1234
3	13 14 15 16 17 18 19 20	12345678
4	– – – – 21 22 23 24	5678
5	– – – – – – – –	1234
6	– 25 26 27 28 – – –	2345

Active Detectors <D Page>

Row		Detector #
1	System Det. # 1	0
2	System Det. # 2	0
3	System Det. # 3	0
4	System Det. # 4	0
5	System Det. # 5	0
6	System Det. # 6	0
7	System Det. # 7	0
8	System Det. # 8	0

System Detectors <D Page>

Max ON (min)	5	D+A+E
Max OFF (min)	60	D+A+F

Detector Failure Monitor

Phase Number	0	F+C+1
Time Before Yellow	0.0	F+C+3

Advance Warning Beacon - Sign 1

Phase Number	0	F+D+1
Time Before Yellow	0.0	F+D+3

Advance Warning Beacon - Sign 2

Long Failure	0.5	F+0+6
Short Failure	0.5	F+0+7

Power Cycle Correction (Default = 0.5)
(These parameters are NOT downloaded.)

IN[illegible]SECTION: Eastgate Mall & Judicial Drive

223 Proc[illegible]n

Group Assignment: None
Field Master Assignment: None

N/S Street Name: Eastgate Mall
E/W Street Name: Judicial Drive

Last Change:
Timing Sheet By: GMS
Approved By: JLB
Drawing Number: 28286-99-D
System Ref. Num.:
Timing implemented on:

Phase Timing - Bank 1
F + Phase + Row

Row		Eastgate Mall		Judicial		Eastgate Mall		Judicial	
	Column # →	1	2	3	4	5	6	7	8
	Phase # →	7	2	4	1	3	6	5	8
		↓↱	→	↰	↓	←	↳	↑	↑
0	Ped Walk		7		7		7		7
1	Ped FDW		25		20		12		20
2	Min Green	4	7	4	4	4	7	4	4
3	Type 3 Limit								
4	Add/Veh								
5	Veh Extn	2.0	2.7	2.0	2.0	2.0	3.0	2.0	2.0
6	Max Gap	2.0	2.7	2.0	2.0	2.0	3.0	2.0	2.0
7	Min Gap	2.0	0.2	2.0	2.0	2.0	0.2	2.0	2.0
8	Max Limit	30	60	30	40	30	60	30	40
9	Max Limit 2								
A	Bus Adv								
B	Call to Phs								
C	Reduce By		0.1				0.1		
D	Every		1.2				1.1		
E	Yellow	3.0	5.1	3.0	3.0	3.0	4.6	3.0	3.0
F	Red Clear	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0

<F Page>

Preempt Timing
F + E + Row

Row		
0	RR-1 Delay	
1	RR-1 Clear	
2	EV-A Delay	0
3	EV-A Clear	0
4	EV-B Delay	0
5	EV-B Clear	0
6	EV-C Delay	0
7	EV-C Clear	0
8	EV-D Delay	0
9	EV-D Clear	0
A	RR-2 Delay	
B	RR-2 Clear	
C	View EV Delay	---
D	View EV Clear	---
E	View RR Delay	---
F	View RR Clear	---

Phase Functions
F + F + Row

Row		
0	Permit	12345678
1	Red Lock	
2	Yellow Lock	
3	Min Recall	
4	Ped Recall	
5	Peds (View)	2 4 6 8
6	Rest in Walk	
7	Red Rest	
8	Dbl Entry	
9	Max Recall	
A	Soft Recall	2 6
B	Max 2	
C	Cond Serv	
D	Ped Lock	12345678
E	Yellow Start	2 6
F	1st Phases	3 7

<F Page>

Max Initial	0	F + 0 + E
Red Revert	5.0	F + 0 + F
All Red Start	0.0	F + C + 0

Start / Revert Times

Drop Number		C + 0 + 0
Zone Number		C + 0 + 1
Area Number		C + 0 + 2
Area Address		C + 0 + 3
QuicNet Channel		(QuicNet)

Communication Addresses

C + F + 0'

Free Lag	Row
2 4 6 8	0

Lag Phases <0 Page>

Row		A Green Clear	B Yellow Change	C Red Clear	D Load-Switch #
A	Overlap A				
B	Overlap B				
C	Overlap C				
D	Overlap D				

Overlap Timing <F Page>
F + COLOR +

<D Page>
D + 0 + OVERLAP

Downtime Flash	60 (minutes)

Downtime Before Auto Manual Flash
F + 0 + 8

Manual Plan	14	C + A + 1
Manual Offset		C + B + 1

Manual Selection

Manual Plan
0 = Automatic
1-9 = Plan 1-9
14 = Free
15 = Flash

Manual Offset
0 = Automatic
1 = Offset A
2 = Offset B
3 = Offset C

Disable Ports	234

Disable Communications Ports
D + D + 9

INTERSECTION: Eastgate Mall & Judicial Drive

223 Program

Row	Time	Function	Day of Week	Column Phases/Bits
0				
1				
2				
3				
4				
5				
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

TOD Function

7 + ROW

<D Page>

D + F + ROW

T.O.D. Functions
0 = Permitted Phases
1 = Red Lock
2 = Yellow Lock
3 = Veh Min Recall
4 = Ped Recall
5 =
6 = Rest In Walk
7 = Red Rest
8 = Double Entry
9 = Veh Max Recall
A = Veh Soft Recall
B = Maximum 2
C = Conditional Service
D = Free Lag Phases
E = Bit 1 - Local Override
Bit 2 - Phase Bank 2
Bit 3 - Phase Bank 3
Bit 4 - Disable Detector OFF Monitor
Bit 7 - Detector Count Monitor
Bit 8 - Real Time Split Monitor
F = Output Bits 1 thru 4

Row		Column
0		
1	RR Overlap A - Phases	
2	RR Overlap B - Phases	
3	RR Overlap C - Phases	
4	RR Overlap D - Phases	
5	Ped 2P	2
6	Ped 6P	6
7	Ped 4P	4
8	Ped 8P	8
9	Yellow Flash Phases	
A	Overlap A - Phases	1 8
B	Overlap B - Phases	
C	Overlap C - Phases	
D	Overlap D - Phases	
E	Restricted Phases	
F	Assign 5 Outputs	1

Configuration

E + F + ROW

<E Page>

Day of Week
1 = Sunday
2 = Monday
3 = Tuesday
4 = Wednesday
5 = Thursday
6 = Friday
7 = Saturday

Assign 5 Outputs
1 = Right Turn Overlap
2 = TOD Outputs
3 = EV Beacon - Steady
4 = EV Beacon - Flashing
5 = Special Event Outputs
6 = Phase 3 & 7 Ped
7 = Advanced Warning Sign
8 =

Row		Column
0	Exclusive Phases	
1	RR-1 Clear Phases	
2	RR-2 Clear Phases	
3	RR-2 Limited Service	
4	Prot / Perm Phases	
5	Overlap A - Green Omit	8
6	Overlap B - Green Omit	
7	Overlap C - Green Omit	
8	Overlap D - Green Omit	
9	Overlap Yellow Flash	
A	EV-A Phases	2 5
B	EV-B Phases	4 7
C	EV-C Phases	1 6
D	EV-D Phases	3 8
E	Extra 1 Config. Bits	1 345
F	IC Select (Interconnect)	2

Configuration

For access, set F + 9 + E = 1

E + E + ROW

Extra 1 Flags
1 = TBC Type 1
2 = NEMA Ext. Coord
3 = Auto Daylight Savings
4 = EV Advance
5 = Remote Download
6 = Special Event
7 = Preempt Operation
8 = Split Ring Operation

IC Select Flags
1 =
2 = Modem
3 = 7-Wire Slave
4 = Flash / Free
5 =
6 = Simplex Master
7 = 7-Wire Master
8 = Offset Interrupter

Time and Date
8-0 Hour, Minute, Day-of-Week
8-1 Day-of-Month, Year, Month
8-F Seconds

Program Information
C + C + 0 = program.
C + C + F = version

Remote Download
C + 0 + 4 = 1 -256
w/ E + 6 + E bit 5 on

Disable Parity	0

D+B+0

Dial-Up Telephone Communications
(If set to a non-zero value, parity will be disabled)

(This parameter is NOT downloaded)

INTERSECTION: EXECUTIVE DRIVE & GENESEE AVENUE

233 Program

Group Assignment:
Field Master Assignment:
System Reference Number:

N/S Street: GENESEE
E/W Street: EXECUTIVE

Last Database Change:

Timing sheets by: KT
Approved by: PLG
Timing implemented on:

Row	Phase Numbers →	GENESEE	EXECUTIVE		GENESEE		EXECUTIVE		
		Phase							
		→	↑	↓	→	←	↑	↑	←
	Ped Walk		7		7		7		7
	Ped FDW		17		27		16		30
	Min Green	4	10	4	4	4	10	4	4
	Type 3 Disconnect								
	Added per Vehicle								
	Veh Extension	2.0	3.6	2.0	2.0	2.0	3.6	2.0	2.0
	Max Gap	2.0	3.6	2.0	2.0	2.0	3.6	2.0	2.0
	Min Gap	2.0	0.2	2.0	2.0	2.0	0.2	2.0	2.0
	Max Limit	30	60	30	40	30	60	30	40
	Max Limit 2								
	Adv. / Delay Walk								
	PE Min Ped FDW		1		1		1		1
	Cond Serv Check								
	Reduce Every		0.9				0.8		
	Yellow Change	3.4	4.5	3.4	3.9	3.4	4.4	3.4	3.9
	Red Clear	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0

Phase Timing - Bank 1 <F/1+Phase+Row>

RR-1 Delay	
RR-1 Clear	
EV-A Delay	0
EV-A Clear	0
EV-B Delay	0
EV-B Clear	0
EV-C Delay	0
EV-C Clear	0
EV-D Delay	0
EV-D Clear	0
RR-2 Delay	
RR-2 Clear	
View EV Delay	---
View EV Clear	---
View RR Delay	---
View RR Clear	---

Preempt Timing <F/1+E+Row>

Row		
	Permit	12345678
	Red Lock	
	Yellow Lock	
	Min Recall	
	Ped Recall	
	View Set Peds	3 6
	Rest in Walk	
	Red Rest	
	Double Entry	
	Max Recall	
	Soft Recall	2 6
	Max 2	
	Cond. Service	
	Man Cntrl Calls	
	Yellow Start	2 6
	First Phases	3 7

Phase Functions <F/1+F+Row>

Current Calculated Cycle Length: C/0 + B + F

	---	---	---	---	---
Phase 1					
Phase 2					
Phase 3					
Phase 4					
Phase 5					
Phase 6					
Phase 7					
Phase 8					
Max Initial					
Alternate Walk					
Alternate FDW					
Alternate Initial					
Alternate Extension					

Alternate Timing <F/1+Column+Phase>

Drop Number	7	<C/0+0+0>
Zone Number	7	<C/0+0+1>
Area Number	4	<C/0+0+2>
Area Address	62	<C/0+0+3>
QuicNet Channel (COM)	com17	(QuicNet)

Communication Addresses

(Outputs specified in Assignable Outputs at E/12?+A+E & F)

Exclusive Walk	0	<F/1+0+0>
Exclusive FDW	0	<F/1+0+1>
All Red Clear	0.0	<F/1+0+2>

Exclusive Ped Phase

Manual Plan
0 = Automatic
1-8 = Plan 1-8
14 = Free
15 = Flash

Flash Start	0	<F/1+0+E>
Red Revert	5.0	<F/1+0+F>
All Red Start	0.0	<F/1+C+0>

Start / Revert Times

Manual Offset
0 = Automatic
1 = Offset A
2 = Offset B
3 = Offset C

Manual Plan	0	<C/0+A+1>
Manual Offset	0	<C/0+B+1>

Manual Selection

Notes:

Free Leg 1 2 4 6 8 <C/1+F+0>

How to Set Page Access Code:
F/1 – C + 0 + F = 1

Row		Overlap							
		A	B	C	D	E	F	G	H
0	Load Switch Number								
1	Veh Set 1 - Phases								
2	Veh Set 2 - Phases								
3	Veh Set 3 - Phases								
4	Neg Veh Phases								
5	Neg Ped Phases								
6	Green Omit Phases								
7	Green Clear Omit Phs.								
8									
9									
A									
B									
C									
D	Green Clear								
E	Yellow Change								
F	Red Clear								

Overlap Assignments <E/29+Column+Row>

Fast Green Flash Phase	
Green Flash Phases	
Flashing Walk Phases	
Guaranteed Passage	
Simultaneous Gap Term	12345678
Sequential Timing	
Advance Walk Phases	
Delay Walk Phases	
External Recall	
Start-up Overlap Green	
Max Extension	
Inhibit Ped Reservice	
Semi-Actuated	
Start-up Overlap Yellow	
Start-up Vehicle Calls	12345678
Start-up Ped Calls	12345678

Specials <F/2+F+Row>

Row		
0	Exclusive Phases	
1	RR-1 Clear Phases	
2	RR-2 Clear Phases	
3	RR-2 Limited Service	
4	Prot / Perm Phases	
5	Flash to PE Circuits	
6	Flash Entry Phases	
7	Disable Yellow Range	
8	Disable Ovp Yel Range	
9	Overlap Yellow Flash	
A	EV-A Phases	2 5
B	EV-B Phases	4 7
C	EV-C Phases	1 6
D	EV-D Phases	3 8
E	Extra 1 Config. Bits	1_345
F	IC Select (Interconnect)	2

Configuration <E/125+E+Row>

Ext. Permit 1 Phases	
Ext. Permit 2 Phases	
Exclusive Ped Assign	
Preempt Non-Lock	12345678
Ped for 2P Output	2
Ped for 6P Output	6
Ped for 4P Output	4
Ped for 8P Output	8
Yellow Flash Phases	
Low Priority A Phases	
Low Priority B Phases	
Low Priority C Phases	
Low Priority D Phases	
Restricted Phases	
Extra 2 Config. Bits	3

Configuration <E/125+F+Row>

EV-A	
EV-B	
EV-C	
EV-D	
RR-1 *	---
RR-2 *	---
SE-1	0
SE-2	0

<E/125+C+Row>

Preemption Priority

(* RR-1 is always Highest, and RR-2 is always Second Highest)

Row

Phase 1	10
Phase 2	10
Phase 3	10
Phase 4	10
Phase 5	10
Phase 6	10
Phase 7	10
Phase 8	10

<C/5+2+Row>

Coordination Transition Minimums

Row

Extra 1 Flags
1 = TBC Type 1
2 = NEMA Ext. Coord
3 = Auto Daylight Savings
4 = EV Advance
5 = Extended Status
6 = International Ped
7 = Flash - Clear Outputs
8 = Split Ring

IC Select Flags
1 =
2 = Modem
3 = 7-Wire Slave
4 = Flash / Free
5 =
6 = Simplex Master
7 = 7-Wire Master
8 = Offset Interrupter

Extra 2 Flags:
1 = AWB During Initial
2 = LMU Installed
3 = Disable Min Walk
4 = QuicNet/4 System
5 = Ignore P/P on EV
6 =
7 = Reserved
8 =

Flash to PE & PE Non-Lock
1 = EV A 5 = RR 1
2 = EV B 6 = RR 2
3 = EV C 7 = SE 1
4 = EV D 8 = SE 2

8-0 Hour, Minute, Day-of-Week
8-1 Day-of-Month, Year, Month
8-F Seconds

Time and Date

Begin Month	0	<C/5+2+A>
Begin Week	0	<C/5+2+B>
End Month	0	<C/5+2+C>
End Week	0	<C/5+2+D>

Daylight Savings Time

Daylight Savings Date:
If set to all zeros, standard dates will be used.

INTERSECTION: EXECUTIVE DRIVE & GENESEE AVENUE — 233 Program

Row	Detector Name	C1 Pin Number	Attributes	Phase(s)	Assign	Delay	Carry-Over
01	2I2U	39	45_7_	2	123 8		1.8
02	6J2U	40	45_7_	6	123 8		1.8
03	4I6U	41	45_7_	4	123 8	10.0	
04	8J6U	42	45_7_	8	123 8	10.0	
05		43	45_7_	2	123 8		
06		44	45_7_	6	123 8		
07		45	45_7_	4	123 8		
08		46	45_7_	8	123 8		
09		47	67_	2	123 8		
10		48	67_	6	123 8		
11		49	67_	4	123 8		
12		50	67_	8	123 8		
13		55	45_7_	5	123 8		
14		56	45_7_	1 7	123 8		
15		57	45_7_	7	123 8		
16		58	45_7_	3	123 8		

Program Type:

	Ped / Phase / Overlap								Row
	1	2	3	4	5	6	7	8	
Walk									01
Don't Walk									02
Phase Green									03
Phase Yellow									04
Phase Red									05
Overlap Green									06
Overlap Yellow									07
Overlap Red									08

Redirect Phase Outputs <E/127+Column+Row>

Cabinet Type	0

<E/125+D+0>

Enable Redirection
(Enable Redirection = 30)

Max OFF (minutes)	5	<D/0+0+1>
Max ON (minutes)	60	<D/0+0+2>

Detector Failure Monitor

	1	Row
Output Port 1		01
Output Port 2		02
Output Port 3		03
Output Port 4		04
Output Port 5		05
Output Port 6		06
Output Port 7		07

Dimming <E/125+D+Row>

Row	Detector Name	C1 Pin Number	Attributes	Phase(s)	Assign	Delay	Carry-Over
17		59	45_7_	5	123 8		
18		60	45_7_	1 7	123 8		
19		61	45_7_	7	123 8		
20		62	45_7_	3	123 8		
21		63	45_7_	2	123 8		
22		64	45_7_	6	123 8		
23		65	45_7_	4	123 8		
24		66	45_7_	8	123 8		
25		67	2_	2	123 8		
26		68	2_	6	123 8		
27		69	2_	4	123 8		
28		70	2_	8	123 8		
29		76	45_7_	2	123 8		
30		77	45_7_	6	123 8		
31		78	45_7_	4	123 8		
32		79	45_7_	8	123 8		

Detector Assignments <E/126+Column+Row> <D/6+Column+Row>

Detector Attributes
1 = Full Time Delay
2 = Ped Call
3 =
4 = Count
5 = Extension
6 = Type 3
7 = Calling
8 = Alternate

Det. Assignments
1 = Det. Set 1
2 = Det. Set 2
3 = Det. Set 3
4 =
5 =
6 = Failure - Min Recall
7 = Failure - Max Recall
8 = Report on Failure

Number of Digits	
1 st Digit	
2 ed Digit	
3 ed Digit	
4 th Digit	
5 th Digit	
6 th Digit	
7 th Digit	
8 th Digit	
9 th Digit	
10 th Digit	
11 th Digit	
12 th Digit	
13 th Digit	
14 th Digit	
15 th Digit	

<C/5+D+Row>

Dial-Back Telephone Number

Disable Alarms
1 = Stop Time
2 = Flash Sense
3 = Keyboard Entry
4 = Manual Plan
5 = Police Control
6 = External Alarm
7 = Detector Failure
8 =

	0	Row
DELAY-A	0	A
DELAY-B	0	B
DELAY-C	0	C
DELAY-D	0	D
DELAY-E	0	E
DELAY-F	0	F

<D/0+B+Row> (seconds)

Delay Logic Times

Omit Alarm	

<C/5+F+0>

Disable Alarm Reporting

Time	0	<C/5+C+0>

Redial Time (minutes)
(View Redial Timer at E/2+D+6)

INTERSECTION: EXECUTIVE DRIVE & GENESEE AVENUE

Row	Time	Plan	Offset	Day of Week
	06 : 30	1	A	23456
	10 : 00	2	A	23456
	15 : 00	3	A	23456
	19 : 00	E	A	1234567

TOD Coordination <9/0.1+Row> (Bank 1)

Time	Funct.	Day of Week
00 : 01	E	1234567

TOD Function <7/0.1+Row>

Phases/Bits	Row
1	

<E/27+4+Row>

Day	Year	Month	Holiday Type

Holiday Dates <8/1.1+Row> (Bank 1)

Time	Plan	Offset	Holiday Type	Row

Holiday Events <9/1.1+Row> (Bank 1)

T.O.D. Functions:
0 =
1 = Red Lock
2 = Yellow Lock
3 = Veh Min Recall
4 = Ped Recall
5 =
6 = Rest In Walk
7 = Red Rest
8 = Double Entry
9 = Veh Max Recall
A = Veh Soft Recall
B = Maximum 2
C = Conditional Service
D = Free Lag Phases
E = Bit 1 - Local Override
Bit 4 - Disable Detector OFF Monitor
Bit 7 - Detector Count Monitor
Bit 8 - Real Time Split Monitor
F = Output Bits 1 thru 8

Plan Select:
1 thru 9 = Coordination Plan 1 thru 9
14 or E = Free
15 or F = Flash

Month Select:
1 = January
2 = February
3 = March
4 = April
5 = May
6 = June
7 = July
8 = August
9 = September
A = October
B = November
C = December

Cycle Timer:
Master: C/0 + A + 0
Ring A: C/0 + B + 0
Ring B: C/0 + D + 0

Interval Timer:
Ring A: F/0 + A + Interval Row
Ring B: F/0 + B + Interval Row

Master Plan: C/0 + A + 2
Current Plan: C/0 + A + 3
TOD Plan: C/0 + A + 5

Row	Time	Plan	Offset	Day of Week

TOD Coordination <9/0.2+Row> (Bank 2)

Time	Funct.	Holiday Type

Holiday TOD Function <7/0.2+Row>

Phases/Bits	Row

<E/28+Row>

Day	Year	Month	Holiday Type

Holiday Dates <8/1.2+Row> (Bank 2)

Time	Plan	Offset	Holiday Type	Row

Holiday Events <9/1.2+Row> (Bank 2)

INTERSECTION: EXECUTIVE DRIVE & GENESEE AVENUE

233 Program

Coord Extra
1 = Programmed WALK Time for Sync Phases
2 = Always Terminate Sync Phase Peds

Row	Plan Name →	Plan AM	Plan MID	Plan PM
01	Cycle Length	140	146	150
02	Phase 1 - ForceOff	99	76	96
03	Phase 2 - ForceOff	0	0	0
04	Phase 3 - ForceOff	17	18	40
05	Phase 4 - ForceOff	74	60	80
06	Phase 5 - ForceOff	90	76	17
07	Phase 6 - ForceOff	0	0	0
08	Phase 7 - ForceOff	31	17	33
09	Phase 8 - ForceOff	74	60	80
10	Ring Offset			
11	Offset 1	95	93	104
12	Offset 2			
13	Offset 3			
14	Perm 1 - End	14	15	18
15	Hold Release	255	255	255
16	Zone Offset	0	0	0

Coordination - Timing Plans <C/1+Plan+Row>

Row		Sync Phases
01		
02	Plan 1 - Sync	2 6
03	Plan 2 - Sync	2 6
04	Plan 3 - Sync	2 6
05	Plan 4 - Sync	
06	Plan 5 - Sync	
07	Plan 6 - Sync	
08	Plan 7 - Sync	
09	Plan 8 - Sync	
10	Plan 9 - Sync	
11	NEMA Sync	
12	NEMA Hold	
13		
14		
15	Coord Extra	
16		

Sync Phases <C/1+E+Row>

Row		Ped Adjustment	Perm 2 - Start	Perm 2 - End	Perm 3 - Start	Perm 3 - End	Reservice Time	Reservice Phases		Prefimed Phases	Max Recall	Perm 1 Veh Phase	Perm 1 Ped Phase	Perm 2 Veh Phase	Perm 2 Ped Phase	Perm 3 Veh Phase	Perm 3 Ped Phase
01																	
02																	
03																	
04																	
05																	
06																	
07																	
08																	
09																	
10																	
11																	
12																	
13																	
14																	
15																	
16																	

Coordination - Parameters <C/2+Plan+Row>

Row		Free Lag	Plan 1 - Lag	Plan 2 - Lag	Plan 3 - Lag	Plan 4 - Lag	Plan 5 - Lag	Plan 6 - Lag	Plan 7 - Lag	Plan 8 - Lag	Plan 9 - Lag	External Lag				
01																
02			2 4 6 8	2 4 6 8	2 4 6 8											
03																
04																
05																
06																
07																
08																
09																
10																
11																
12																
13																
14																
15																
16																

Lag Phases <C/1+F+Row>

Coordination Timing By:

Row	Column C		Column A		Column B		Column C		Column D		Column E		Column F	
1	Spec. Funct. 1		NOT-3		Max 2		Prefimed		Set Monday		Dial 2 (7-Wire)		Sim Term	
2	Spec. Funct. 2		NOT-4		System Det 1		Plan 1		Ext. Perm 1		Dial 3 (7-Wire)		EV-A	
3	Spec. Funct. 3		OR-4 (a)		System Det 2		Plan 2		Ext. Perm 2		Offset 1 (7-Wire)		EV-B	
4	Spec. Funct. 4		OR-4 (b)		System Det 3		Plan 3		Diraming		Offset 2 (7-Wire)		EV-C	
5	NAND-3 (a)		OR-5 (a)		System Det 4		Plan 4		Set Clock		Offset 3 (7-Wire)		EV-D	
6	NAND-3 (b)		OR-5 (b)		System Det 5		Plan 5		Stop Time		Free (7-Wire)		RR-1	
7	NAND-4 (a)		OR-6 (a)		System Det 6		Plan 6		Flash Sense	81	Flash (7-Wire)		RR-2	
8	NAND-4 (b)		OR-6 (b)		System Det 7		Plan 7		Manual Enable		Excl. Ped Omit		Spec. Event 1	
9	OR-7 (a)		Fig 3 Diamond		System Det 8		Plan 8		Man. Advance		NOT-1		Spec. Event 2	
A	OR-7 (b)		Fig 4 Diamond		Max Inhibit (nema)		Plan 9		External Alarm		NOT-2		External Lag	
B	OR-7 (c)		AND-4 (a)		Force A (nema)		DELAY-A		Phase Bank 2		OR-1 (a)		AND-1 (a)	
C	OR-7 (d)		AND-4 (b)		Force B (nema)		DELAY-B		Phase Bank 3		OR-1 (b)		AND-1 (b)	
D	OR-8 (a)		NAND-1 (a)		C.N.A. (nema)		DELAY-C		Overlap Set 2		OR-2 (a)		AND-2 (a)	
E	OR-8 (b)		NAND-1 (b)		Hold (nema)		DELAY-D		Overlap Set 3		OR-2 (b)		AND-2 (b)	
F	OR-8 (c)		NAND-2 (a)		Max Recall		DELAY-E		Detector Set 2		OR-3 (a)		AND-3 (a)	
10	OR-8 (d)		NAND-2 (b)		Min Recall		DELAY-F		Detector Set 3		OR-3 (b)		AND-3 (b)	

Assignable Inputs <E/126+Column+Row>

Row	Column C		Column A		Column B		Column C		Column D		Column E		Column F	
1	Phase ON - 1		Preempt Fail		Flasher 0		Free		NOT-1		TOD Out 1		Dial 2 (7-Wire)	
2	Phase ON - 2		Sp Evnt Out 1		Flasher 1		Plan 1		OR-1		TOD Out 2		Dial 3 (7-Wire)	
3	Phase ON - 3		Sp Evnt Out 2		Fast Flasher		Plan 2		OR-2		TOD Out 3		Offset 1 (7-Wire)	
4	Phase ON - 4		Sp Evnt Out 3		Fig 3 Diamond		Plan 3		OR-3		TOD Out 4		Offset 2 (7-Wire)	
5	Phase ON - 5		Sp Evnt Out 4		Fig 4 Diamond		Plan 4		AND-1		TOD Out 5		Offset 3 (7-Wire)	
6	Phase ON - 6		Sp Evnt Out 5				Plan 5		AND-2		TOD Out 6		Free (7-Wire)	
7	Phase ON - 7		Sp Evnt Out 6				Plan 6		AND-3		TOD Out 7		Flash (7-Wire)	
8	Phase ON - 8		Sp Evnt Out 7				Plan 7		NOT-2		TOD Out 8		Preempt	
9	Ph. Check - 1		Sp Evnt Out 8		NOT-3		Plan 8		EV-A		Adv. Warn - 1		Low Priority A	
A	Ph. Check - 2				NOT-4		Plan 9		EV-B		Adv. Warn - 2		Low Priority B	
B	Ph. Check - 3		Detector Fail		OR-4		Spec. Funct. 3		EV-C		DELAY-A		Low Priority C	
C	Ph. Check - 4		Spec. Funct. 1		OR-5		Spec. Funct. 4		EV-D		DELAY-B		Low Priority D	
D	Ph. Check - 5		Spec. Funct. 2		OR-6		NAND-3		RR-1		DELAY-C			
E	Ph. Check - 6		Central Control		AND-4		NAND-4		RR-2		DELAY-D			
F	Ph. Check - 7		Excl. Ped DW		NAND-1		OR-7		Spec. Event 1		DELAY-E			
10	Ph. Check - 8		Excl. Ped WK		NAND-2		OR-8		Spec. Event 2		DELAY-F			

Assignable Outputs <E/127+Column+Row>

INTERSECTION: TOWNE CENTER & EXECUTIVE

Group Assignment: NONE
Field Master Assignment: NONE
System Reference Number: 632

N/S Street Name: TOWNE CENTER
E/W Street Name: EXECUTIVE

Last Database Change: 8/6/2012 14:07

Change Record					
Change	By	Date	Change	By	Date
SUPERLOOP		5/12			

Notes:

Manual Plan
0 = Automatic
1-9 = Plan 1-9
14 = Free
15 = Flash

Manual Offset
0 = Automatic
1 = Offset A
2 = Offset B
3 = Offset C

Drop Number	7	<C/0+0+0>
Zone Number	7	<C/0+0+1>
Area Number	4	<C/0+0+2>
Area Address	47	<C/0+0+3>
QuicNet Channel	COM#5:	(QuicNet)

Communication Addresses

Manual Plan		<C/0+A+1>
Manual Offset		<C/0+B+1>

Manual Selection

Flash Start	0	<F/1+0+E>
Red Revert	5.0	<F/1+0+F>
All Red Start	5.0	<F/1+C+0>

Start / Revert Times

Exclusive Walk	0	<F/1+0+0>
Exclusive FDW	0	<F/1+0+1>
All Red Clear	0.0	<F/1+0+2>

Exclusive Ped Phase
(Outputs specified in Assignable Outputs at E/127+A+E & F)

Row	Column Numbers → / Phase Names →	Phase 1	2	3	4	5	6	7	8
0	Ped Walk	0	7	0	7	0	7	0	7
1	Ped FDW	0	20	0	20	0	19	0	21
2	Min Green	4	7	4	4	4	7	4	7
3	Type 3 Disconnect	0	0	0	0	0	0	0	0
4	Added per Vehicle	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	Veh Extension	2.0	3.8	2.0	5.3	2.0	3.8	2.0	5.4
6	Max Gap	2.0	3.8	2.0	5.3	2.0	3.8	2.0	5.4
7	Min Gap	2.0	0.2	2.0	0.2	2.0	0.2	2.0	0.2
8	Max Limit	30	60	30	40	30	60	30	40
9	Max Limit 2	0	0	0	0	0	0	0	0
A	Adv. / Delay Walk	0	0	0	0	0	0	0	0
B	PE Min Ped FDW	0	1	0	1	0	1	0	1
C	Cond Serv Check	0	0	0	0	0	0	0	0
D	Reduce Every	0.0	0.8	0.0	0.6	0.0	0.8	0.0	0.6
E	Yellow Change	3.4	3.9	3.4	3.9	3.4	4.3	3.4	3.9
F	Red Clear	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0

Phase Timing - Bank 1 <C+0+F=1>

	Max Initial	Alternate Walk	Alternate FDW	Alternate Initial	Alternate Extension
Phase 1	0	0	0	0	0.0
Phase 2	20	0	0	0	0.0
Phase 3	0	0	0	0	0.0
Phase 4	20	0	0	0	0.0
Phase 5	0	0	0	0	0.0
Phase 6	20	0	0	0	0.0
Phase 7	0	0	0	0	0.0
Phase 8	20	0	0	0	0.0

Alternate Timing <C+0+F=1>

RR-1 Delay	0
RR-1 Clear	0
EV-A Delay	0
EV-A Clear	0
EV-B Delay	0
EV-B Clear	0
EV-C Delay	0
EV-C Clear	0
EV-D Delay	0
EV-D Clear	0
RR-2 Delay	0
RR-2 Clear	0
View EV Delay	---
View EV Clear	---
View RR Delay	---
View RR Clear	---

Preempt Timing

Row		
0	Permit	12345678
1	Red Lock	
2	Yellow Lock	
3	Min Recall	2 6
4	Ped Recall	
5	View Set Peds	-----
6	Rest In Walk	
7	Red Rest	
8	Dual Entry	
9	Max Recall	
A	Soft Recall	
B	Max 2	
C	Cond. Service	
D	Man Cntrl Calls	
E	Yellow Start	2 6
F	First Phases	3 7

Phase Functions <C+0+F=1>

Overlap Assignments <C+0+E=29>

Row	Column Numbers -->	A	B	C	D	E	F	G	H
	Overlap Name -->								
01	Load Switch Number	0	0	0	0	0	0	0	0
02	Veh Set 1 - Phases								
03	Veh Set 2 - Phases								
04	Veh Set 3 - Phases								
05	Neg Veh Phases								
06	Neg Ped Phases								
07	Green Omit Phases								
08	Green Clear Omit Phs.								
09									
10									
11									
12									
13									
14	Green Clear	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	Yellow Change	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	Red Clear	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Extra 1 Flags
1 = TBC Type 1
2 = NEMA Ext. Cond
3 = Auto Daylight Savings
4 = Solid FDW on EV
5 = Extended Status
6 = International Ped
7 = Flash = Clear Outputs
8 = Split Ring

Extra 2 Flags
1 = AWB During Initial
2 = LMU Installed
3 = Disable Min Walk
4 = CalcNet/4 System
5 = Ignore P/P on EV
6 =
7 = Reserved
8 =

Preempt Priority <C+0+E=125>

(*RR-1 is always Highest, and RR-2 is always Second Highest)

Row		
17	EV-A	0
18	EV-B	0
19	EV-C	0
20	EV-D	0
21	RR-1 *	---
22	RR-2 *	---
23	SE-1	0
24	SE-2	0

Configuration <C+0+E=125>

Row	Column Numbers -->	1
25	Exclusive Phases	
26	RR-1 Clear Phases	
27	RR-2 Clear Phases	
28	RR-2 Limited Service	
29	Prot / Perm Phases	1 5
30	Flash to PE Circuits	
31	Flash Entry Phases	
32	Disable Yellow Range	
33	Disable Ovp Yel Range	
34	Overlap Yellow Flash	
35	EV-A Phases	2 5
36	EV-B Phases	4 7
37	EV-C Phases	1 6
38	EV-D Phases	3 8
39	Extra 1 Config. Bits	1,345
40	IC Select (Interconnect)	2

Configuration <C+0+E=125>

	1
Ext. Permit 1 Phases	
Ext. Permit 2 Phases	
Exclusive Ped Assign	
Preempt Non-Lock	12345678
Ped for 2P Output	2
Ped for 6P Output	6
Ped for 4P Output	4
Ped for 8P Output	8
Yellow Flash Phases	
Low Priority A Phases	
Low Priority B Phases	
Low Priority C Phases	
Low Priority D Phases	
Restricted Phases	
Extra 2 Config. Bits	3

Specials <C+0+F=2>

	1
Fast Green Flash Phase	
Green Flash Phases	
Flashing Walk Phases	
Guaranteed Passage	
Simultaneous Gap Term	12345678
Sequential Timing	
Advance Walk Phases	
Delay Walk Phases	
External Recall	
Start-up Overlap Green	
Max Extension	
Inhibit Ped Reservice	
Semi-Actuated	
Start-up Overlap Yellow	
Start-up Vehicle Calls	12345678
Start-up Ped Calls	12345678

Flash to PE & PE Non-Lock
1 = EV A 5 = RR 1
2 = EV B 6 = RR 2
3 = EV C 7 = SE 1
4 = EV D 8 = SE 2

IC Select Flags
1 =
2 = Modem
3 = 7-Wire Slave
4 = Flash / Free
5 =
6 = Simplex Master
7 = 7-Wire Master
8 = Offset Interrupter

Coordination Transition Minimums <C+0+C=6>

Row		
41	Phase 1	10
42	Phase 2	10
43	Phase 3	10
44	Phase 4	10
45	Phase 5	10
46	Phase 6	10
47	Phase 7	10
48	Phase 8	10

INTERSECTION: TOWNE CENTER & EXECUTIVE

Coord Extra
1 = Programmed WALK Time for Sync Phases
2 = Always Terminate Sync Phase Peds

Row	Column Numbers -->	Plan 1	2	3	4	5	6	7	8	9
	Plan Name -->									
00	Cycle Length	100	100	100	100	100	100	100	100	100
01	Phase 1 - ForceOff	55	55	55	55	55	55	55	55	55
02	Phase 2 - ForceOff	0	0	0	0	0	0	0	0	0
03	Phase 3 - ForceOff	20	20	20	20	20	20	20	20	20
04	Phase 4 - ForceOff	40	40	40	40	40	40	40	40	40
05	Phase 5 - ForceOff	55	55	55	55	55	55	55	55	55
06	Phase 6 - ForceOff	0	0	0	0	0	0	0	0	0
07	Phase 7 - ForceOff	20	20	20	20	20	20	20	20	20
08	Phase 8 - ForceOff	40	40	40	40	40	40	40	40	40
09	Ring Offset	0	0	0	0	0	0	0	0	0
0A	Offset 1	0	0	0	0	0	0	0	0	0
0B	Offset 2	0	0	0	0	0	0	0	0	0
0C	Offset 3	0	0	0	0	0	0	0	0	0
0D	Perm 1 - End	15	15	15	15	15	15	15	15	15
0E	Hold Release	255	255	255	255	255	255	255	255	255
0F	Zone Offset	0	0	0	0	0	0	0	0	0

Coordination - Bank 1 <C+0+C=1>

Row		Coord Extra
00	Plan 1 - Sync	2 6
01	Plan 2 - Sync	2 6
02	Plan 3 - Sync	2 6
03	Plan 4 - Sync	2 6
04	Plan 5 - Sync	2 6
05	Plan 6 - Sync	2 6
06	Plan 7 - Sync	2 6
07	Plan 8 - Sync	2 6
08	Plan 9 - Sync	2 6
09	NEMA Sync	
0A	NEMA Hold	
0B		
0C		
0D	Coord Extra	
0E		

Sync Phases <C+0+C=1>

Row		1	2	3	4	5	6	7	8	9
10	Ped Adjustment	0	0	0	0	0	0	0	0	0
11	Perm 2 - Start	0	0	0	0	0	0	0	0	0
12	Perm 2 - End	0	0	0	0	0	0	0	0	0
13	Perm 3 - Start	0	0	0	0	0	0	0	0	0
14	Perm 3 - End	0	0	0	0	0	0	0	0	0
15	Reservice Time	0	0	0	0	0	0	0	0	0
16	Reservice Phases									
17										
18	Pretimed Phases									
19	Max Recall									
1A	Perm 1 Veh Phase	12345678	12345678	12345678	12345678	12345678	12345678	12345678	12345678	12345678
1B	Perm 1 Ped Phase	12345678	12345678	12345678	12345678	12345678	12345678	12345678	12345678	12345678
1C	Perm 2 Veh Phase									
1D	Perm 2 Ped Phase									
1E	Perm 3 Veh Phase									
1F	Perm 3 Ped Phase									

Coordination - Bank 2 <C+0+C=2>

Row		1 2 3 4 5 6 7 8
20	Free Lag	2 4 6 8
21	Plan 1 - Lag	2 4 6 8
22	Plan 2 - Lag	2 4 6 8
23	Plan 3 - Lag	2 4 6 8
24	Plan 4 - Lag	2 4 6 8
25	Plan 5 - Lag	2 4 6 8
26	Plan 6 - Lag	2 4 6 8
27	Plan 7 - Lag	2 4 6 8
28	Plan 8 - Lag	2 4 6 8
29	Plan 9 - Lag	2 4 6 8
2A	External Lag	
2B		
2C		
2D		
2E		
2F		

Lag Phases <C+0+C=1>

Row	Column 9		Column A		Column B		Column C		Column D		Column E		Column F		Row
10	Spec. Funct. 1	0	NOT-3	0	Max 2	0	Prefimed	0	Set Monday	0	Dial 2 (7-Wire)	0	Sim Term	0	10
11	Spec. Funct. 2	0	NOT-4	0	System Det 1	0	Plan 1	0	Ext. Perm 1	0	Dial 3 (7-Wire)	0	EV-A	71	11
12	Spec. Funct. 3	0	OR-4 (a)	0	System Det 2	0	Plan 2	0	Ext. Perm 2	0	Offset 1 (7-Wire)	0	EV-B	72	12
13	Spec. Funct. 4	0	OR-4 (b)	0	System Det 3	0	Plan 3	0	Dimming	0	Offset 2 (7-Wire)	0	EV-C	73	13
14	NAND-3 (a)	0	OR-5 (a)	0	System Det 4	0	Plan 4	0	Set Clock	0	Offset 3 (7-Wire)	0	EV-D	74	14
15	NAND-3 (b)	0	OR-5 (b)	0	System Det 5	0	Plan 5	0	Stop Time	82	Free (7-Wire)	0	RR-1	51	15
16	NAND-4 (a)	0	OR-6 (a)	0	System Det 6	0	Plan 6	0	Flash Sense	81	Flash (7-Wire)	0	RR-2	52	16
17	NAND-4 (b)	0	OR-6 (b)	0	System Det 7	0	Plan 7	0	Manual Enable	0	Excl. Ped Omit	0	Spec. Event 1	0	17
18	OR-7 (a)	0	Fig 3 Diamond	0	System Det 8	0	Plan 8	0	Man. Advance	0	NOT-1	0	Spec. Event 2	0	18
19	OR-7 (b)	0	Fig 4 Diamond	0	Max Inhibit (nema)	0	Plan 9	0	External Alarm	0	NOT-2	0	External Lag	0	19
1A	OR-7 (c)	0	AND-4 (a)	0	Force A (nema)	0	DELAY-A	0	Phase Bank 2	0	OR-1 (a)	0	AND-1 (a)	0	1A
1B	OR-7 (d)	0	AND-4 (b)	0	Force B (nema)	0	DELAY-B	0	Phase Bank 3	0	OR-1 (b)	0	AND-1 (b)	0	1B
1C	OR-8 (a)	0	NAND-1 (a)	0	C.N.A. (nema)	0	DELAY-C	0	Overlap Set 2	0	OR-2 (a)	0	AND-2 (a)	0	1C
1D	OR-8 (b)	0	NAND-1 (b)	0	Hold (nema)	0	DELAY-D	0	Overlap Set 3	0	OR-2 (b)	0	AND-2 (b)	0	1D
1E	OR-8 (c)	0	NAND-2 (a)	0	Max Recall	0	DELAY-E	0	Detector Set 2	0	OR-3 (a)	0	AND-3 (a)	0	1E
1F	OR-8 (d)	0	NAND-2 (b)	0	Min Recall	0	DELAY-F	0	Detector Set 3	0	OR-3 (b)	0	AND-3 (b)	0	1F

Assignable Inputs <C+0+E=126>

Row	Column 9		Column A		Column B		Column C		Column D		Column E		Column F		Row
20	Phase ON - 1	0	Preempt Fail	0	Flasher 0	0	Free	0	NOT-1	0	TOD Out 1	0	Dial 2 (7-Wire)	0	20
21	Phase ON - 2	0	Sp Evnt Out 1	0	Flasher 1	0	Plan 1	0	OR-1	0	TOD Out 2	0	Dial 3 (7-Wire)	0	21
22	Phase ON - 3	0	Sp Evnt Out 2	0	Fast Flasher	0	Plan 2	0	OR-2	0	TOD Out 3	0	Offset 1 (7-Wire)	0	22
23	Phase ON - 4	0	Sp Evnt Out 3	0	Fig 3 Diamond	0	Plan 3	0	OR-3	0	TOD Out 4	0	Offset 2 (7-Wire)	0	23
24	Phase ON - 5	0	Sp Evnt Out 4	0	Fig 4 Diamond	0	Plan 4	0	AND-1	0	TOD Out 5	0	Offset 3 (7-Wire)	0	24
25	Phase ON - 6	0	Sp Evnt Out 5	0			Plan 5	0	AND-2	0	TOD Out 6	0	Free (7-Wire)	0	25
26	Phase ON - 7	0	Sp Evnt Out 6	0			Plan 6	0	AND-3	0	TOD Out 7	0	Flash (7-Wire)	0	26
27	Phase ON - 8	0	Sp Evnt Out 7	0			Plan 7	0	NOT-2	0	TOD Out 8	0	Preempt	0	27
28	Ph. Check - 1	0	Sp Evnt Out 8	0	NOT-3	0	Plan 8	0	EV-A	0	Adv. Warn - 1	0	Low Priority A	0	28
29	Ph. Check - 2	0			NOT-4	0	Plan 9	0	EV-B	0	Adv. Warn - 2	0	Low Priority B	0	29
2A	Ph. Check - 3	0	Detector Fail	0	OR-4	0	Spec. Funct. 3	0	EV-C	0	DELAY-A	0	Low Priority C	0	2A
2B	Ph. Check - 4	0	Spec. Funct. 1	0	OR-5	0	Spec. Funct. 4	0	EV-D	0	DELAY-B	0	Low Priority D	0	2B
2C	Ph. Check - 5	0	Spec. Funct. 2	0	OR-6	0	NAND-3	0	RR-1	0	DELAY-C	0			2C
2D	Ph. Check - 6	0	Central Control	0	AND-4	0	NAND-4	0	RR-2	0	DELAY-D	0			2D
2E	Ph. Check - 7	0	Excl. Ped DW	0	NAND-1	0	OR-7	0	Spec. Event 1	0	DELAY-E	0			2E
2F	Ph. Check - 8	0	Excl. Ped WK	0	NAND-2	0	OR-8	0	Spec. Event 2	0	DELAY-F	0			2F

Assignable Outputs <C+0+E=127>

Row	Column Numbers → / Phase Names →	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
10	Ped Walk	0	7	0	7	0	7	0	7
11	Ped FDW	0	15	0	15	0	15	0	15
12	Min Green	4	7	4	4	4	7	4	4
13	Type 3 Disconnect	0	20	0	20	0	20	0	20
14	Added per Vehicle	0.0	2.0	0.0	2.0	0.0	2.0	0.0	2.0
15	Veh Extension	2.0	4.0	2.0	2.5	2.0	4.0	2.0	2.5
16	Max Gap	3.0	6.0	3.0	3.0	3.0	6.0	3.0	3.0
17	Min Gap	0.5	2.0	0.5	1.5	0.5	2.0	0.5	1.5
18	Max Limit	20	30	20	25	20	30	20	25
19	Max Limit 2	30	50	30	40	30	50	30	40
1A	Adv. / Delay Walk	0	0	0	0	0	0	0	0
1B	PE Min Ped FDW	7	7	7	7	7	7	7	7
1C	Cond Serv Check	10	10	10	10	10	10	10	10
1D	Reduce Every	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1E	Yellow Change	3.0	4.0	3.0	3.0	3.0	4.0	3.0	3.0
1F	Red Clear	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0

Phase Timing - Bank 2 <C+0+F=2>

	1A	1B	1C	1D	1E
	---	---	---	---	---
Phase 1	0	0	0	0	0.0
Phase 2	20	0	0	0	0.0
Phase 3	0	0	0	0	0.0
Phase 4	20	0	0	0	0.0
Phase 5	0	0	0	0	0.0
Phase 6	20	0	0	0	0.0
Phase 7	0	0	0	0	0.0
Phase 8	20	0	0	0	0.0

Max Initial
Alternate Walk
Alternate FDW
Alternate Initial
Alternate Extension

Alternate Timing

Transition Type
0.X = Shortway
1.X = Lengthen
X.1 thru X.4 = Number of cycles when lengthing

Transition Type	0.3	<C/5+1+0>

TBC Transition

Lag Hold Phases		<C/5+1+A>

Coordinated Lag Hold Phases

Sync Output Time	0.0	<C/5+1+C>

7-Wire Master

Daylight Savings Date
If set to all zeros, standard dates will be used.

Begin Month	3	<C/5+2+A>
Begin Week	2	<C/5+2+B>
End Month	11	<C/5+2+C>
End Week	1	<C/5+2+D>

Daylight Savings Time

Time B4 Yellow	0.0	<F/1+C+E>
Phase Number	0	<F/1+C+F>

Advance Warning Beacon - Sign 1

Time B4 Yellow	0.0	<F/1+D+E>
Phase Number	0	<F/1+D+F>

Advance Warning Beacon - Sign 2

Long Failure	0.7	<F/1+0+6>
Short Failure	0.7	<F/1+0+7>

Power Cycle Correction (Default = 0.7)

Row	Column Numbers → / Phase Names →	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
10	Ped Walk	0	7	0	7	0	7	0	7
11	Ped FDW	0	15	0	15	0	15	0	15
12	Min Green	4	7	4	4	4	7	4	4
13	Type 3 Disconnect	0	20	0	20	0	20	0	20
14	Added per Vehicle	0.0	2.0	0.0	2.0	0.0	2.0	0.0	2.0
15	Veh Extension	2.0	4.0	2.0	2.5	2.0	4.0	2.0	2.5
16	Max Gap	3.0	6.0	3.0	3.0	3.0	6.0	3.0	3.0
17	Min Gap	0.5	2.0	0.5	1.5	0.5	2.0	0.5	1.5
18	Max Limit	20	30	20	25	20	30	20	25
19	Max Limit 2	30	50	30	40	30	50	30	40
1A	Adv. / Delay Walk	0	0	0	0	0	0	0	0
1B	PE Min Ped FDW	7	7	7	7	7	7	7	7
1C	Cond Serv Check	10	10	10	10	10	10	10	10
1D	Reduce Every	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1E	Yellow Change	3.0	4.0	3.0	3.0	3.0	4.0	3.0	3.0
1F	Red Clear	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0

Phase Timing - Bank 3 <C+0+F=3>

	2A	2B	2C	2D	2E
	---	---	---	---	---
Phase 1	0	0	0	0	0.0
Phase 2	20	0	0	0	0.0
Phase 3	0	0	0	0	0.0
Phase 4	20	0	0	0	0.0
Phase 5	0	0	0	0	0.0
Phase 6	20	0	0	0	0.0
Phase 7	0	0	0	0	0.0
Phase 8	20	0	0	0	0.0

Max Initial
Alternate Walk
Alternate FDW
Alternate Initial
Alternate Extension

Alternate Timing

Row	Detector Name	C1 Pin Number	Attributes	Phase(s)	Assign	Delay	Carry-over
00	I-2-U	39	45_7	2	123 8	0.0	1.8
01	J-2-U	40	45_7	6	123 8	0.0	1.8
02	I-6-U	41	45_7	4	123 8	0.0	1.8
03	J-6-U	42	45_7	8	123 8	0.0	1.8
04	I-2-L	43	45_7	2	123 8	0.0	0.0
05	J-2-L	44	45_7	6	123 8	0.0	0.0
06	I-6-L	45	45_7	4	123 8	0.0	0.0
07	J-6-L	46	45_7	8	123 8	0.0	0.0
08	I-4	47	67	2	123 8	0.0	0.0
09	J-4	48	67	6	123 8	0.0	0.0
0A	I-8	49	67	4	123 8	0.0	0.0
0B	J-8	50	67	8	123 8	0.0	0.0
0C	J-1	55	45_7	5	123 8	0.0	0.0
0D	I-1	56	45_7	1	123 8	0.0	0.0
0E	J-5	57	45_7	7	123 8	2.0	0.0
0F	I-5	58	45_7	3	123 8	2.0	0.0

Row	Detector Name	C1 Pin Number	Attributes	Phase(s)	Assign	Delay	Carry-over
10	J-9-U	59	45_7	5	123 8	0.0	0.0
11	I-9-U	60	45_7	1	123 8	0.0	0.0
12	J-9-L	61	45_7	7	123 8	0.0	0.0
13	I-9-L	62	45_7	3	123 8	0.0	0.0
14	I-3-U	63	45_7	2	123 8	0.0	0.0
15	J-3-U	64	45_7	6	123 8	0.0	0.0
16	I-7-U	65	45_7	4	123 8	0.0	0.0
17	J-7-U	66	45_7	8	123 8	0.0	0.0
18	I-12-U (Ped)	67	2	2	123 8	0.0	0.0
19	I-13-U (Ped)	68	2	6	123 8	0.0	0.0
1A	I-12-L (Ped)	69	2	4	123 8	0.0	0.0
1B	I-13-L (Ped)	70	2	8	123 8	0.0	0.0
1C	I-3-L	76	45_7	2	123 8	0.0	0.0
1D	J-3-L	77	45_7	6	123 8	0.0	0.0
1E	I-7-L	78	45_7	4	123 8	0.0	0.0
1F	J-7-L	79	45_7	8	123 8	0.0	0.0

Detector Assignments <C+0+E=126> <C+0+D=0>

Detector Attributes
1 = Full Time Delay
2 = Ped Call
3 =
4 = Count
5 = Extension
6 = Type 3
7 = Calling
8 = Alternate

Det. Assignments
1 = Det. Set 1
2 = Det. Set 2
3 = Det. Set 3
4 =
5 =
6 = Failure - Min Recall
7 = Failure - Max Recall
8 = Report on Failure

Ped / Phase / Overlap

Column Numbers →	1	2	3	4	5	6	7	8	Row
Walk	0	0	0	0	0	0	0	0	20
Don't Walk	0	0	0	0	0	0	0	0	21
Phase Green	0	0	0	0	0	0	0	0	22
Phase Yellow	0	0	0	0	0	0	0	0	23
Phase Red	0	0	0	0	0	0	0	0	24
Overlap Green	0	0	0	0	0	0	0	0	25
Overlap Yellow	0	0	0	0	0	0	0	0	26
Overlap Red	0	0	0	0	0	0	0	0	27

Redirect Phase Outputs <C+0+E=127>

Cabinet Type: 0 <E/125+D+0>

Enable Redirection
(Enable Redirection = 30)

Max OFF (minutes)	20	<D/0+0+1>
Max ON (minutes)	7	<D/0+0+2>

Detector Failure Monitor

		Row
Output Port 1		28
Output Port 2		29
Output Port 3		2A
Output Port 4		2B
Output Port 5		2C
Output Port 6		2D
Output Port 7		2E

Dimming <G+0+E=125>

Number of Digits	0
1 st Digit	0
2 ed Digit	0
3 ed Digit	0
4 th Digit	0
5 th Digit	0
6 th Digit	0
7 th Digit	0
8 th Digit	0
9 th Digit	0
10 th Digit	0
11 th Digit	0
12 th Digit	0
13 th Digit	0
14 th Digit	0
15 th Digit	0

<C+0+C=6>

Dial-Back Telephone Number

Disable Alarms
1 = Stop Time
2 = Flash Sense
3 = Keyboard Entry
4 = Manual Plan
5 = Police Control
6 = External Alarm
7 = Detector Failure
8 =

		Row
DELAY-A	0	3A
DELAY-B	0	3B
DELAY-C	0	3C
DELAY-D	0	3D
DELAY-E	0	3E
DELAY-F	0	3F

Delay Logic Times <C+0+D=0> (seconds)

Omit Alarm: _____ <C/5+F+0>

Disable Alarm Reporting

Time: 10 <C/6+C+0>

Redial Time (minutes)
(View Redial Timer at E/2+D+6)

Row	Time	Plan	Offset	Day of Week
0	00 : 00	0	0	
1	00 : 00	0	0	
2	00 : 00	0	0	
3	00 : 00	0	0	
4	00 : 00	0	0	
5	00 : 00	0	0	
6	00 : 00	0	0	
7	00 : 00	0	0	
8	00 : 00	0	0	
9	00 : 00	0	0	
A	00 : 00	0	0	
B	00 : 00	0	0	
C	00 : 00	0	0	
D	00 : 00	0	0	
E	00 : 00	0	0	
F	00 : 00	0	0	

TOD Coordination <C+0+9=0.1>
(Bank 1)

Time	Funct	Day of Week
00 : 00	0	
00 : 00	0	
00 : 00	0	
00 : 00	0	
00 : 00	0	
00 : 00	0	
00 : 00	0	
00 : 00	0	
00 : 00	0	
00 : 00	0	
00 : 00	0	
00 : 00	0	
00 : 00	0	
00 : 00	0	
00 : 00	0	
00 : 00	0	

TOD Function <C+0+7=0.1>

Column	Phases/Bits

<C+0+E=27>

Day	Year	Month	Holiday Type
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	

Holiday Dates <C+0+8=1.1>
(Bank 1)

Time	Plan	Offset	Holiday Type
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	

Holiday Events <C+0+9=1.1>
(Bank 1)

T.O.D. Functions
0 =
1 = Red Lock
2 = Yellow Lock
3 = Veh Min Recall
4 = Ped Recall
5 =
6 = Rest In Walk
7 = Red Rest
8 = Double Entry
9 = Veh Max Recall
A = Veh Soft Recall
B = Maximum 2
C = Conditional Service
D = Free Lag Phases
E = Bit 1 - Local Override
Bit 4 - Disable Detector OFF Monitor
Bit 5 - Disable Low Priority Preempt
Bit 7 - Detector Count Monitor
Bit 8 - Real Time Split Monitor
F = Output Bits 1 thru 8

Plan Select
1 thru 9 = Coordination Plan 1 thru 9
14 or E = Free
15 or F = Flash

Offset Select
A = Offset A
B = Offset B
C = Offset C

Month Select
1 = January
2 = February
3 = March
4 = April
5 = May
6 = June
7 = July
8 = August
9 = September
A = October
B = November
C = December

Row	Time	Plan	Offset	Day of Week
0	00 : 00	0	0	
1	00 : 00	0	0	
2	00 : 00	0	0	
3	00 : 00	0	0	
4	00 : 00	0	0	
5	00 : 00	0	0	
6	00 : 00	0	0	
7	00 : 00	0	0	
8	00 : 00	0	0	
9	00 : 00	0	0	
A	00 : 00	0	0	
B	00 : 00	0	0	
C	00 : 00	0	0	
D	00 : 00	0	0	
E	00 : 00	0	0	
F	00 : 00	0	0	

TOD Coordination <C+0+0=0.2>
(Bank 2)

Time	Funct	Holiday Type
00 : 00	0	
00 : 00	0	
00 : 00	0	
00 : 00	0	
00 : 00	0	
00 : 00	0	
00 : 00	0	
00 : 00	0	
00 : 00	0	
00 : 00	0	
00 : 00	0	
00 : 00	0	
00 : 00	0	
00 : 00	0	
00 : 00	0	
00 : 00	0	

Holiday TOD Function <C+0+7=0.2>

Column	Phases/Bits

<C+0+E=28>

Day	Year	Month	Holiday Type
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	

Holiday Dates <C+0+8=1.2>
(Bank 2)

Time	Plan	Offset	Holiday Type
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	

Holiday Events <C+0+9=1.2>
(Bank 2)

Row	Clear	Time	Ped Call	Hold	Advance	Force Off	Vehicle Call	Permit Phases	Ped Omit	Output
00		0								
01		0								
02		0								
03		0								
04		0								
05		0								
06		0								
07		0								
08		0								
09		0								
0A		0								
0B		0								
0C		0								
0D		0								
0E		0								
0F		0								

Special Event Schedule -- Table 1 <C+0+E=27>

Notes:

0 <E27+5+F>
Limited Service Interval

Row	Clear	Time	Ped Call	Hold	Advance	Force Off	Vehicle Call	Permit Phases	Ped Omit	Output
10		0								
11		0								
12		0								
13		0								
14		0								
15		0								
16		0								
17		0								
18		0								
19		0								
1A		0								
1B		0								
1C		0								
1D		0								
1E		0								
1F		0								

Special Event Schedule -- Table 2 <C+0+E=28>

Notes:

0 <E28+5+F>
Limited Service Interval

Min Time (seconds) | 4 | <F/1+0+8>
Min Green Before PE Force Off

Max Time (minutes) | 4 | <F/1+0+9>
Max Preempt Time Before Failure

Min Time (seconds) | 0 | <F/1+0+A>
Min Time Between Same Preempts
(Does Not Apply To Railroad Preempt)

Low Pri. Channel | | <E/125+C+8>
Disable Low Priority Channel

Low Priority
1 = Channel A
2 = Channel B
3 = Channel C
4 = Channel D

Delay Time (seconds) | 0 | <F/1+A+D>
Bus Delay

Max Time (seconds) | 0 | <F/1+A+E>
Max Early Green

Max Time (seconds) | 0 | <F/1+A+F>
Max Green Extension

Row	Time	Headway	Direction	Day of Week
0	00 : 00	0	0	
1	00 : 00	0	0	
2	00 : 00	0	0	
3	00 : 00	0	0	
4	00 : 00	0	0	
5	00 : 00	0	0	
6	00 : 00	0	0	
7	00 : 00	0	0	
8	00 : 00	0	0	
9	00 : 00	0	0	
A	00 : 00	0	0	
B	00 : 00	0	0	
C	00 : 00	0	0	
D	00 : 00	0	0	
E	00 : 00	0	0	
F	00 : 00	0	0	

Headway <C+0+9=2,1>

Headway Time
(minutes)
1 thru 9 = 1 thru 9
A = 10
B = 11
C = 12
D = 13
E = 14
F = 15

Low Priority Preemption (Bus Priority)

Only available with *Program 233RV2.B* (and above)
Note: Also see "Time of Day Functions", Function E, Bit 5 (Disable Low Priority)

233 Program

INTERSECTION: EXECUTIVE DR & JUDICIAL DR

Group Assignment:
Field Master Assignment:
System Reference Number:

N/S Street: Judicial Dr
E/W Street: Executive Dr

Last Database Change:
Timing sheets by: JMV
Approved by:
Timing implemented on: 5/27/2010

Judicial Dr | Executive Dr | Judicial Dr

Row	Phase Numbers --->	1	2	3	4	5	6	7	8
0	Ped Walk		7	7	7		7		
1	Ped FDW		22	20	20		23		
2	Min Green	4	7	7	7	4	7		
3	Type 3 Disconnect								
4	Added per Vehicle								
5	Veh Extension	2.0	4.4	3.3	3.3	2.0	4.4		
6	Max Gap	2.0	4.4	3.3	3.3	2.0	4.4		
7	Min Gap	2.0	0.2	0.2	0.2	2.0	0.2		
8	Max Limit	30	60	40	40	30	60		
9	Max Limit 2								
A	Adv. / Delay Walk								
B	PE Min Ped FDW								
C	Cond Serv Check								
D	Reduce Every		0.7	1.0	1.0		0.7		
E	Yellow Change	3.4	4.3	3.9	3.9	3.4	4.3		
F	Red Clear	1.0	1.0	1.0	1.0	1.0	1.0		

Phase Timing - Bank 1 <F/1+Phase+Row>

Row		E
0	RR-1 Delay	
1	RR-1 Clear	
2	EV-A Delay	0
3	EV-A Clear	0
4	EV-B Delay	0
5	EV-B Clear	0
6	EV-C Delay	0
7	EV-C Clear	0
8	EV-D Delay	0
9	EV-D Clear	0
A	RR-2 Delay	
B	RR-2 Clear	
C	View EV Delay	---
D	View EV Clear	---
E	View RR Delay	---
F	View RR Clear	---

Preempt Timing <F/1+E+Row>

Row		F
0	Permit	123456
1	Red Lock	
2	Yellow Lock	
3	Min Recall	
4	Ped Recall	
5	View Sat Peds	
6	Rest In Walk	
7	Red Rest	
8	Double Entry	
9	Max Recall	
A	Soft Recall	2 6
B	Max 2	
C	Cond. Service	
D	Man Cntl Calls	
E	Yellow Start	2 6
F	First Phases	4

Phase Functions <F/1+F+Row>

Current Calculated Cycle Length: C/0 + B + F

	9	A	B	C	D
	---	---	---	---	---
Phase 1					
Phase 2					
Phase 3					
Phase 4					
Phase 5					
Phase 6					
Phase 7					
Phase 8					
Max Initial					
Alternate Walk					
Alternate FDW					
Alternate Initial					
Alternate Extension					

Alternate Timing <F/1+Column+Phase>

Drop Number	13	<C/0+0+0>
Zone Number	12	<C/0+0+1>
Area Number	4	<C/0+0+2>
Area Address	177	<C/0+0+3>
QuicNet Channel	[illegible]	(QuicNet)

Communication Addresses

(Outputs specified in Assignable Outputs at E/1/27+A+E & F)

Exclusive Walk	0	<F/1+0+0>
Exclusive FDW	0	<F/1+0+1>
All Red Clear	0.0	<F/1+0+2>

Exclusive Ped Phase

Manual Plan: 0 = Automatic, 1-9 = Plan 1-9, 14 = Free, 15 = Flash

Flash Start	0	<F/1+0+E>
Red Revert	5.0	<F/1+0+F>
All Red Start	0.0	<F/1+C+0>

Start / Revert Times

Manual Offset: 0 = Automatic, 1 = Offset A, 2 = Offset B, 3 = Offset C

Manual Plan	14	<C/0+A+1>
Manual Offset	0	<C/0+B+1>

Manual Selection

Free Lag | 2 4 6 | <C/1+F+0>

How to Set Page Access Code:
F/1 – C + 0 + F = 1

Notes:

INTERSECTION: EXECUTIVE DR & JUDICIAL DR

Overlap Assignments

<E/29+Column+Row>

Row		Overlap 1	2	3	4	5	6	7	8
0	Load Switch Number								
1	Veh Set 1 - Phases								
2	Veh Set 2 - Phases								
3	Veh Set 3 - Phases								
4	Neg Veh Phases								
5	Neg Ped Phases								
6	Green Omit Phases								
7	Green Clear Omit Phs.								
8									
9									
A									
B									
C									
D	Green Clear								
E	Yellow Change								
F	Red Clear								

Specials

<F/2+F+Row>

Row		1
0	Fast Green Flash Phase	
1	Green Flash Phases	
2	Flashing Walk Phases	
3	Guaranteed Passage	
4	Simultaneous Gap Term	
5	Sequential Timing	
6	Advance Walk Phases	
7	Delay Walk Phases	
8	External Recall	
9	Start-up Overlap Green	
A	Max Extension	
B	Inhibit Ped Reservice	
C	Semi-Actuated	
D	Start-up Overlap Yellow	
E	Start-up Vehicle Calls	
F	Start-up Ped Calls	

Configuration

<E/125+E+Row>

Row		3
0	Exclusive Phases	
1	RR-1 Clear Phases	
2	RR-2 Clear Phases	
3	RR-2 Limited Service	
4	Prot / Perm Phases	
5	Flash to PE Circuits	
6	Flash Entry Phases	
7	Disable Yellow Range	
8	Disable Ovp Yel Range	
9	Overlap Yellow Flash	
A	EV-A Phases	2 5
B	EV-B Phases	4
C	EV-C Phases	1 6
D	EV-D Phases	3
E	Extra 1 Config. Bits	1 345
F	IC Select (Interconnect)	2

Configuration

<E/125+F+Row>

Ext. Permit 1 Phases	
Ext. Permit 2 Phases	
Exclusive Ped Assign	
Preempt Non-Lock	12345678
Ped for 2P Output	2
Ped for 6P Output	6
Ped for 4P Output	4
Ped for 8P Output	3
Yellow Flash Phases	
Low Priority A Phases	
Low Priority B Phases	
Low Priority C Phases	
Low Priority D Phases	
Restricted Phases	
Extra 2 Config. Bits	

Preemption Priority

<E/125+C+Row>

(*RR-1 is always Highest, and RR-2 is always Second Highest)

Row		0
0	EV-A	
1	EV-B	
2	EV-C	
3	EV-D	
4	RR-1 *	---
5	RR-2 *	---
6	SE-1	0
7	SE-2	0

Coordination Transition Minimums

<C/5+2+Row>

Row		2
0	Phase 1	0
1	Phase 2	0
2	Phase 3	0
3	Phase 4	0
4	Phase 5	0
5	Phase 6	0
6	Phase 7	0
7	Phase 8	0

Extra 1 Flags
1 = TBC Type 1
2 = NEMA Ext. Coord
3 = Auto Daylight Savings
4 = EV Advance
5 = Extended Status
6 = International Fed
7 = Flash - Clear Outputs
8 = Split Ring

IC Select Flags
1 =
2 = Modem
3 = 7-Wire Slave
4 = Flash / Free
5 =
6 = Simplex Master
7 = 7-Wire Master
8 = Offset Interrupter

Extra 2 Flags
1 = AWS During Initial
2 = EMU Installed
3 = Disable Min Walk
4 = QuicNet04 System
5 = Ignore PIP on EV
6 =
7 = Reserved
8 =

Flash to PE & PE Non-Lock
1 = EV A 5 = RR 1
2 = EV B 6 = RR 2
3 = EV C 7 = SE 1
4 = EV D 8 = SE 2

Time and Date
9-0 Hour, Minute, Day-of-Week
9-1 Day-of-Month, Year, Month
9-F Seconds

Daylight Savings Time

Begin Month	0	<C/5+2+A>
Begin Week	0	<C/5+2+B>
End Month	0	<C/5+2+C>
End Week	0	<C/5+2+D>

Daylight Savings Date:
If set to all zeros, standard dates will be used.

Version: 233 RV2
Revision: San Diego 1

INTERSECTION: EXECUTIVE DR & JUDICIAL DR

233 Program

Row	Detector Name	C1 Pin Number	Attributes	Phase(s)	Assign	Delay	Carry-Over
0	2I2U	39		2			1.8
1	6J2U	40		6			1.8
2	4I6U	41		4			1.8
3	3J6U	42	45_7	3	123 8		1.8
4	2I2L	43		2			1.8
5	6J2L	44		6			1.8
6	4I6L	45		4			1.8
7	3J6L	46	45_7	3	123 8		1.8
8		47					
9		48					
A		49					
B	3J8U	50	45_7	3	123 8		
C		55					
D		56					
E		57					
F		58					

Row	Detector Name	C1 Pin Number	Attributes	Phase(s)	Assign	Delay	Carry-Over
0		59					
1		60					
2		61					
3		62					
4	2I3U	63		2			1.8
5		64					
6	4I7U	65		4		10.0	
7	3J7U	66	45_7	3	123 8	10.0	
8		67					
9		68					
A		69					
B		70					
C		75					
D		77					
E		78					
F	3J7L	79	45_7	3	123 8		

Detector Assignments <E/126+Column+Row> <D/0+Column+Row>

Program Type:

	Ped /-Phase / Overlap								Row
	1	2	3	4	5	6	7	8	
Walk									0
Don't Walk									1
Phase Green									2
Phase Yellow									3
Phase Red									4
Overlap Green									5
Overlap Yellow									6
Overlap Red									7

Redirect Phase Outputs <E/127+Column+Row>

Cabinet Type	0

<E/125+D+0>

Enable Redirection
(Enable Redirection = 30)

Max OFF (minutes)	20	<D/0+0+1>
Max ON (minutes)	60	<D/0+0+2>

Detector Failure Monitor

	D	Row
		0
Output Port 1		1
Output Port 2		2
Output Port 3		3
Output Port 4		4
Output Port 5		5
Output Port 6		6
Output Port 7		7

Dimming <E/125+D+Row>

Detector Attributes
1 = Full Time Delay
2 = Ped Call
3 =
4 = Count
5 = Extension
6 = Type 3
7 = Calling
8 = Alternate

Det. Assignments
1 = Det. Set 1
2 = Det. Set 2
3 = Det. Set 3
4 =
5 =
6 = Failure - Min Recall
7 = Failure - Max Recall
8 = Report on Failure

	D
Number of Digits	
1 st Digit	
2 ed Digit	
3 ed Digit	
4 th Digit	
5 th Digit	
6 th Digit	
7 th Digit	
8 th Digit	
9 th Digit	
10 th Digit	
11 th Digit	
12 th Digit	
13 th Digit	
14 th Digit	
15 th Digit	

<C/5+D+Row>

Dial-Back Telephone Number

Disable Alarms
1 = Stop Time
2 = Flash Sense
3 = Keyboard Entry
4 = Manual Plan
5 = Police Control
6 = External Alarm
7 = Detector Failure
8 =

	B	Row
DELAY-A	1	A
DELAY-B	1	B
DELAY-C	0	C
DELAY-D	0	D
DELAY-E	0	E
DELAY-F	0	F

<D/0+B+Row> (seconds)

Delay Logic Times

Omit Alarm	#NAME?

<C/5+F+0>

Disable Alarm Reporting

Time	0	<C/5+C+0>

Redial Time (minutes)
(View Redial Timer at E/2+D+6

INTERSECTION: EXECUTIVE DR & JUDICIAL DR

Row	Column 9	Column A	Column B	Column C	Column D	Column E	Column F
0	Spec. Funct. 1	NOT-3	Max 2	Prefimed	Set Monday	Dial 2 (7-Wire)	Sim Term
1	Spec. Funct. 2	NOT-4	System Det 1	Plan 1	Ext. Perm 1	Dial 3 (7-Wire)	EV-A
2	Spec. Funct. 3	OR-4 (a)	System Det 2	Plan 2	Ext. Perm 2	Offset 1 (7-Wire)	EV-B
3	Spec. Funct. 4	OR-4 (b)	System Det 3	Plan 3	Dimming	Offset 2 (7-Wire)	EV-C
4	NAND-3 (a)	OR-5 (a)	System Det 4	Plan 4	Set Clock	Offset 3 (7-Wire)	EV-D
5	NAND-3 (b)	OR-5 (b)	System Det 5	Plan 5	Stop Time	Free (7-Wire)	RR-1
6	NAND-4 (a)	OR-6 (a)	System Det 6	Plan 6	Flash Sense	Flash (7-Wire)	RR-2
7	NAND-4 (b)	OR-6 (b)	System Det 7	Plan 7	Manual Enable	Excl. Ped Omit	Spec. Event 1
8	OR-7 (a)	Fig 3 Diamond	System Det 8	Plan 8	Man. Advance	NOT-1	Spec. Event 2
9	OR-7 (b)	Fig 4 Diamond	Max Inhibit (perma)	Plan 9	External Alarm	NOT-2	External Lag
A	OR-7 (c)	AND-4 (a)	Force A (perma)	DELAY-A	Phase Bank 2	OR-1 (a)	AND-1 (a)
B	OR-7 (d)	AND-4 (b)	Force B (perma)	DELAY-B	Phase Bank 3	OR-1 (b)	AND-1 (b)
C	OR-8 (a)	NAND-1 (a)	C.N.A. (perma)	DELAY-C	Overlap Set 2	OR-2 (a)	AND-2 (a)
D	OR-8 (b)	NAND-1 (b)	Hold (perma)	DELAY-D	Overlap Set 3	OR-2 (b)	AND-2 (b)
E	OR-8 (c)	NAND-2 (a)	Max Recall	DELAY-E	Detector Set 2	OR-3 (a)	AND-3 (a)
F	OR-8 (d)	NAND-2 (b)	Min Recall	DELAY-F	Detector Set 3	OR-3 (b)	AND-3 (b)

Assignable Inputs <E/126+Column+Row>

Row	Column 9	Column A	Column B	Column C	Column D	Column E	Column F
0	Phase ON - 1	Preempt Fail	Flasher 0	Free	NOT-1	TOD Out 1	Dial 2 (7-Wire)
1	Phase ON - 2	Sp Evnt Out 1	Flasher 1	Plan 1	OR-1	TOD Out 2	Dial 3 (7-Wire)
2	Phase ON - 3	Sp Evnt Out 2	Fast Flasher	Plan 2	OR-2	TOD Out 3	Offset 1 (7-Wire)
3	Phase ON - 4	Sp Evnt Out 3	Fig 3 Diamond	Plan 3	OR-3	TOD Out 4	Offset 2 (7-Wire)
4	Phase ON - 5	Sp Evnt Out 4	Fig 4 Diamond	Plan 4	AND-1	TOD Out 5	Offset 3 (7-Wire)
5	Phase ON - 6	Sp Evnt Out 5		Plan 5	AND-2	TOD Out 6	Free (7-Wire)
6	Phase ON - 7	Sp Evnt Out 6		Plan 6	AND-3	TOD Out 7	Flash (7-Wire)
7	Phase ON - 8	Sp Evnt Out 7		Plan 7	NOT-2	TOD Out 8	Preempt
8	Ph. Check - 1	Sp Evnt Out 8	NOT-3	Plan 8	EV-A	Adv. Warn - 1	Low Priority A
9	Ph. Check - 2		NOT-4	Plan 9	EV-B	Adv. Warn - 2	Low Priority B
A	Ph. Check - 3	Detector Fail	OR-4	Spec. Funct. 3	EV-C	DELAY-A	Low Priority C
B	Ph. Check - 4	Spec. Funct. 1	OR-5	Spec. Funct. 4	EV-D	DELAY-B	Low Priority D
C	Ph. Check - 5	Spec. Funct. 2	OR-6	NAND-3	RR-1	DELAY-C	
D	Ph. Check - 6	Central Control	AND-4	NAND-4	RR-2	DELAY-D	
E	Ph. Check - 7	Excl. Ped DW	NAND-1	OR-7	Spec. Event 1	DELAY-E	
F	Ph. Check - 8	Excl. Ped WK	NAND-2	OR-8	Spec. Event 2	DELAY-F	

Assignable Outputs <E/127+Column+Row>

INTERSECTION: LA JOLLA VILLAGE DR @ TOWNE CENT DR

Group Assignment:
Field Master Assignment:
N/S Street Name: TOWNE CENTRE
E/W Street Name: LA JOLLA VILLAGE

LA JOLLA VILLAGE | TOWNE CENTRE | LA JOLLA VILLAGE | TOWNE CENTRE

Phase Timing - Bank 1
F + Phase + Row

Row	Column # → / Phase # →	1	2	3	4	5	6	7	8
0	Ped Walk		7		7		7		5
1	Ped FDW		21		29		21		32
2	Min Green	4	10	4	4	4	10	4	4
3	Type 3 Limit								
4	Add/Veh								
5	Veh Extn	2.0	4.5	2.0	4.6	2.0	4.3	2.0	5.2
6	Max Gap	2.0	4.5	2.0	4.6	2.0	4.3	2.0	5.2
7	Min Gap	2.0	0.2	2.0	0.2	2.0	0.2	2.0	0.2
8	Max Limit	30	60	30	30	30	60	35	30
9	Max Limit 2								
A	Bus Adv								
B	Call to Phs								
C	Reduce By		0.1		0.1		0.1		0.1
D	Every		0.7		0.7		0.7		0.6
E	Yellow	3.4	4.5	3.4	4.3	3.4	4.3	3.4	4.0
F	Red Clear	1.5	1.0	1.0	1.0	1.0	1.0	1.0	1.0

<F Page>

E

Row	
0	RR-1 Delay
1	RR-1 Clear
2	EV-A Delay 0
3	EV-A Clear 0
4	EV-B Delay 0
5	EV-B Clear 0
6	EV-C Delay 0
7	EV-C Clear 0
8	EV-D Delay 0
9	EV-D Clear 0
A	RR-2 Delay
B	RR-2 Clear
C	View EV Delay ---
D	View EV Clear ---
E	View RR Delay ---
F	View RR Clear ---

F + E + Row

F

Row	
0	Permit 12345678
1	Red Lock
2	Yellow Lock
3	Min Recall 2 6
4	Ped Recall
5	Perls (View) 2 4 6 8
6	Rest In Walk
7	Red Rest
8	Dbl Entry
9	Max Recall
A	Soft Recall
B	Max 2
C	Cond Serv
D	Ped Lock 12345678
E	Yellow Start 2 6
F	1st Phases 3 7

F + F + Row

Max Initial	0
Red Revert	5.0
All Red Start	0.0

F + 0 + E
F + 0 + F
F + C + 0

Start / Revert Times

Drop Number	5
Zone Number	5
Area Number	4
Area Address	45
QuicNet Channel	COM 45

C + 0 + 0
C + 0 + 1
C + 0 + 2
C + 0 + 3
(QuicNet)

Communication Addresses

C + F + 0	F	Row
Free Lag	2 46 8	0

Lag Phases <C Page>

Overlap Timing

Row		Green Clear	Yellow Change	Red Clear	Load-Switch #
Overlap A	A				
Overlap B	B				
Overlap C	C				
Overlap D	D				

<F Page>
F + COLOR +

<D Page>
D + 0 + OVERLAP

Manual Plan	0
Manual Offset	0

C + A + 1
C + B + 1

Manual Selection

Manual Plan
0 = Automatic
1-8 = Plan 1-8
14 = Free
15 = Flash

Manual Offset
0 = Automatic
1 = Offset A
2 = Offset B
3 = Offset C

Downtime Flash	255 (minutes)

Downtime Before Auto Manual Flash
F + 0 + 8

Disable Ports	234

Disable Communication Ports
D + D + 9

Timing Sheet By: M2S
Approved By: FLG
Drawing Number: 25562-3-D
Timing Implemented On: 04/23/10

INTERSECTION: LA JOLLA VILLAGE DR @ TOWNE CENTRE DR

Row	Time	Function	Day of Week	Phases/Bits
0				
1				
2				
3				
4				
5				
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

Column

TOD Function

7 + ROW

T.O.D. Functions
0 = Permitted Phases
1 = Red Lock
2 = Yellow Lock
3 = Veh Min Recall
4 = Ped Recall
5 =
6 = Rest In Walk
7 = Red Rest
8 = Double Entry
9 = Veh Max Recall
A = Veh Soft Recall
B = Maximum 2
C = Conditional Service
D = Free Lag Phases
E = Bit 1 - Local Override
Bit 2 - Phase Bank 2
Bit 3 - Phase Bank 3
Bit 4 - Disable Detector OFF Monitor
Bit 7 - Detector Count Monitor
Bit 8 - Real Time Split Monitor
F = Output Bits 1 thru 4

<D Page>

D + F + ROW

Row		F
0		
1	RR Overlap A - Phases	
2	RR Overlap B - Phases	
3	RR Overlap C - Phases	
4	RR Overlap D - Phases	
5	Ped 2P	2
6	Ped 6P	6
7	Ped 4P	4
8	Ped 8P	8
9	Yellow Flash Phases	
A	Overlap A - Phases	1 8
B	Overlap B - Phases	
C	Overlap C - Phases	
D	Overlap D - Phases	
E	Restricted Phases	
F	Assign 5 Outputs	1

Configuration

E + F + ROW

<E Page>

Row		E
0	Exclusive Phases	
1	RR-1 Clear Phases	
2	RR-2 Clear Phases	
3	RR-2 Limited Service	
4	Prot / Perm Phases	
5	Overlap A - Green Omit	8
6	Overlap B - Green Omit	
7	Overlap C - Green Omit	
8	Overlap D - Green Omit	
9	Overlap Yellow Flash	
A	EV-A Phases	2 5
B	EV-B Phases	4 7
C	EV-C Phases	1 6
D	EV-D Phases	3 8
E	Extra 1 Config. Bits	1 345
F	IC Select (Interconnect)	2

Configuration

E + E + ROW

For access, set F + 8 + E = 1

Extra 1 Flags
1 = TBC Type 1
2 = NEMA Ext. Coord
3 = Auto Daylight Savings
4 = EV Advance
5 = Remote Download
6 = Special Event
7 = Pretimed Operation
8 = Split Ring Operation

IC Select Flags
1 =
2 = Modem
3 = 7-Wire Slave
4 = Flash / Free
5 =
6 = Simplex Master
7 = 7-Wire Master
8 = Offset Interrupter

Day of Week
1 = Sunday
2 = Monday
3 = Tuesday
4 = Wednesday
5 = Thursday
6 = Friday
7 = Saturday

Assign 5 Outputs
1 = Right Turn Overlap
2 = TOD Outputs
3 = EV Beacon - Steady
4 = EV Beacon - Flashing
5 = Special Event Outputs
6 = Phase 3 & 7 Ped
7 = Advanced Warning Sign
8 = Bus Advance

Time and Date
8-0 Hour, Minute, Day-of-Week
8-1 Day-of-Month, Year, Month
8-F Seconds

Disable Parity	0

D+B+0

Dial-Up Telephone Communications
(If set to a non-zero value, parity will be disabled)

Program Information
C + C + 0 = program
C + C + F = version

Remote Download
C + 0 + 4 = 1 -255
w/ E + E + E bit 5 on

INTERSECTION: LA JOLLA VILLAGE DR @ TOWN CENTRE DR

223 Program

Row	1 Delay	1 Carry-over
0		
1		1.8
2		
3		
4		
5		
6		
7		1.8
8		
9		
A		
B		
C		
D		
E	---	---
F	---	---

Detector Name	332 Input File	Detector Number
	1I1	14
	2I2U	1
	2I2L	5
	2I3U	21
	2I3L	25
	2I4	9
	3I5	16
	4I6U	3
	4I6L	7
	4I7U	23
	4I7L	27
	4I8	11
	1I9U	18
	3I9L	20
---	---	---
---	---	---

Row	2 Delay	2 Carry-over
0		
1		1.8
2		
3		
4		
5		
6		
7		1.8
8	10.0	
9		
A		
B		
C		
D		
E	---	---
F	---	---

Detector Delay & Carryover <D Page>

Detector Name	332 Input File	Detector Number
	5J1	13
	6J2U	2
	6J2L	6
	6J3U	22
	6J3L	26
	6J4	10
	7J5	15
	8J6U	4
	8J6L	8
	6J7U	24
	8J7L	28
	8J8	12
	5J9U	17
	7J9L	19
---	---	---
---	---	---

D + X (across) + ROW

Row	Detector Numbers	E
	1 2 3 4 5 6 7 8	12345678
	9 10 11 12 -- -- -- --	1234
	13 14 15 16 17 18 19 20	12345678
	-- -- -- -- 21 22 23 24	5678
	-- -- -- -- -- -- -- --	1234
	-- 25 26 27 28 -- -- --	2345

Active Detectors <D Page>

Row	0 Detector #
0	
1	System Det. # 1
2	System Det. # 2
3	System Det. # 3
4	System Det. # 4
5	System Det. # 5
6	System Det. # 6
7	System Det. # 7
8	System Det. # 8

System Detectors <D Page>

Max ON (min)	5	D+A+E
Max OFF (min)	60	D+A+F

Detector Failure Monitor

Phase Number		F+C+1
Time Before Yellow		F+C+3

Advance Warning Beacon - Sign 1

Phase Number		F+D+1
Time Before Yellow		F+D+3

Advance Warning Beacon - Sign 2

Long Failure	0.5	F+0+6
Short Failure	0.5	F+0+7

Power Cycle Correction (Default = 0.5)

INTERSECTION: LA JOLLA VILLAGE DR @ TOWNE CENTRE DR

663 Program

Coordination Timing By: KH&A
Implemented On: 10/13/2009

Row	Plan Name →	Column # → 1	2	3	4	5	6	7	8	9
			MID			AM	PM			
0	Cycle Length		146			140	150			
1	Phase 1 - ForceOff		111			102	96			
2	Phase 2 - ForceOff		0			0	0			
3	Phase 3 - ForceOff		32			33	21			
4	Phase 4 - ForceOff		77			77	67			
5	Phase 5 - ForceOff		16			18	82			
6	Phase 6 - ForceOff		0			0	0			
7	Phase 7 - ForceOff		40			37	67			
8	Phase 8 - ForceOff		77			77	36			
9	Ring Offset									
A	Offset A		140			13	93			
B	Offset B									
C	Offset C									
D	Permissive		17			17	17			
E	Hold Release		255			255	255			
F	Perf Shift		0			0	6			

Coordination <C Page>
C + Plan + ROW

Row	Time	Plan	Offset	Day of Week
0	06 : 30	5	A	23456
1	10 : 00	2	A	23456
2	16 : 00	6	A	23456
3	19 : 00	E	A	1234567
4				
5				
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

TOD Coordination
<9 Key with C+0+9=1>

Plan Select
1 thru 9 = Coordination Plan 1 thru 9
14 or E = Free
15 or F = Flash

	E	Row		F
		0	Free Lag	
Plan 1		1	Plan 1 - Lag	
Plan 2	2 6	2	Plan 2 - Lag	2 45 8
Plan 3		3	Plan 3 - Lag	
Plan 4		4	Plan 4 - Lag	
Plan 5	2 6	5	Plan 5 - Lag	2 45 8
Plan 6	2 6	6	Plan 6 - Lag	2 4 67
Plan 7		7	Plan 7 - Lag	
Plan 8		8	Plan 8 - Lag	
Plan 9		9	Plan 9 - Lag	
Coord Ped*		A	Coord Max *	
NEMA Hold		B	Coord Lag *	
		C		
		D		
		E		
		F		

Sync Phases
C + E + FUNCTION #

Lag Phases <C Page>
C + F + FUNCTION #

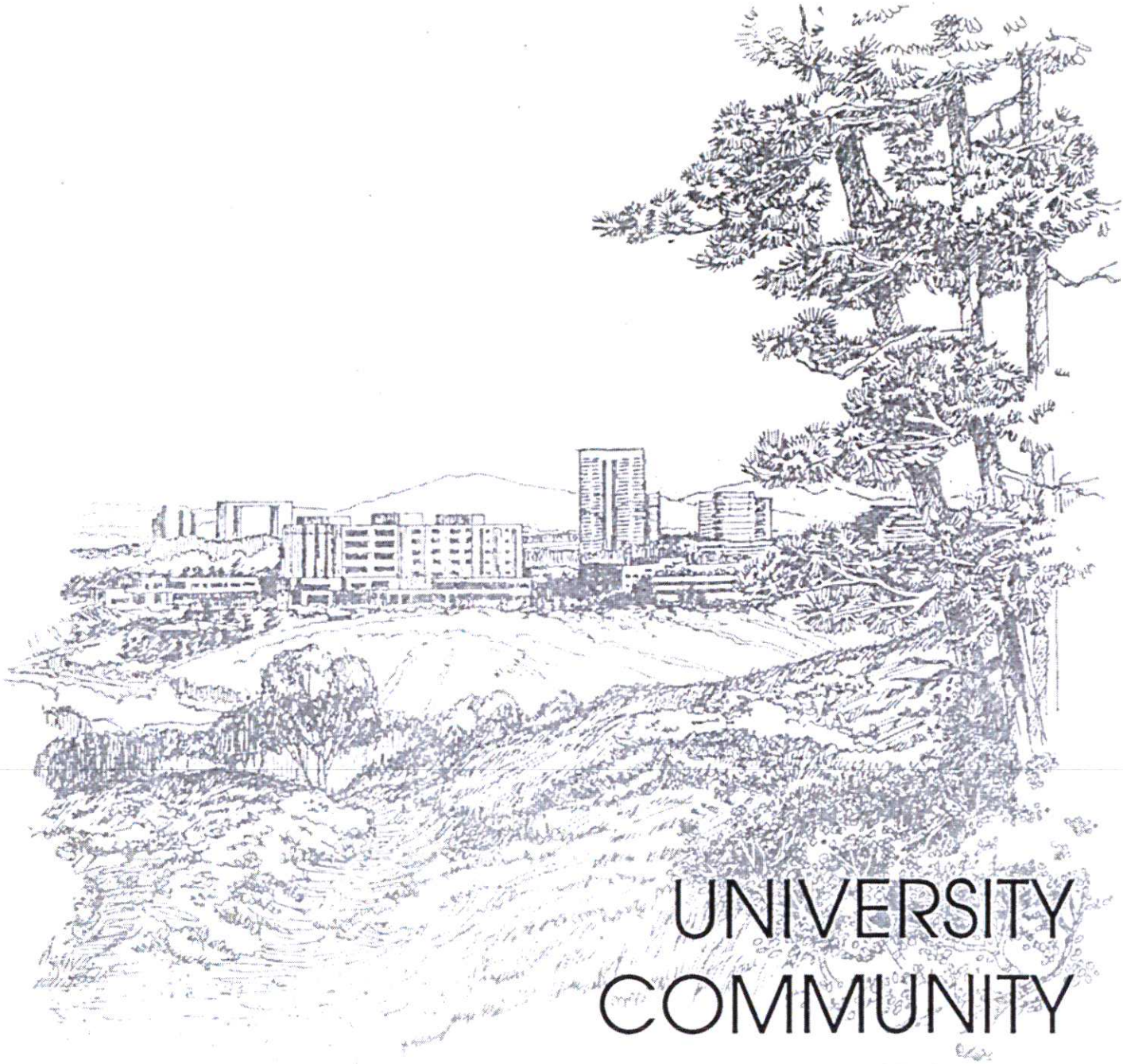
Transition Type	0

TBC Transition
C + D + D

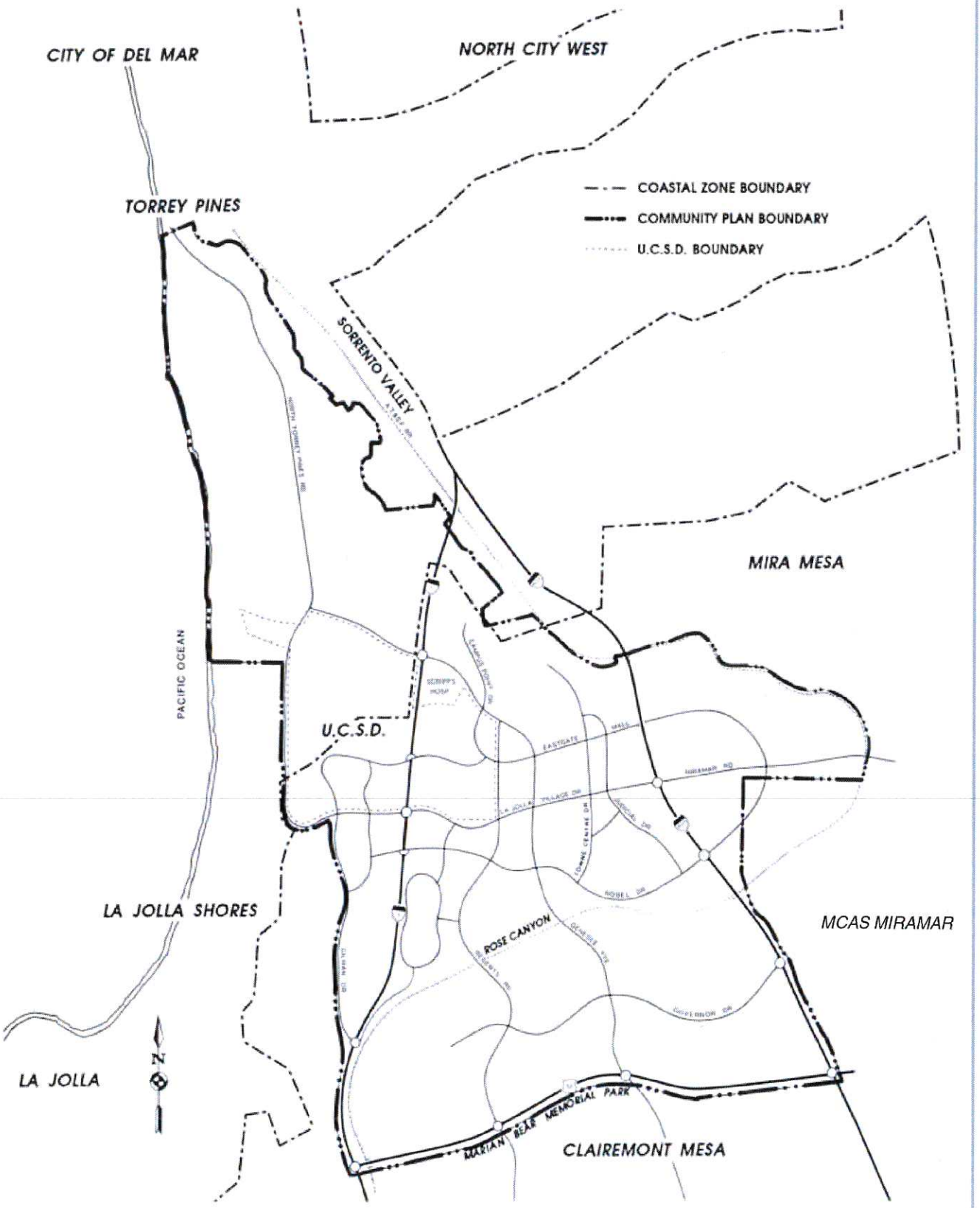
Transition Type
0 = Shortway
Non-zero = Lengthen

Location (I.D.)	Route	Dir	Period	Cars per green	Sec./ Cycle	(per lane) Veh./hr	Total # lanes	HOV
EB LJVD to SB 805 (72)	805	SB	1500 - 1900	2	7.2 - 12.1	996 - 593	2	Lt

The meters normally operate in a traffic responsive mode.
There are 15 separate rates or steps between the slowest and the fastest discharge rate that depend on the mainlane volumes.



UNIVERSITY COMMUNITY PLAN



Vicinity Map 3 FIGURE

University Community Plan

GENESEE AVENUE

Section A: Genesee Avenue: North Torrey Pines Road to I-5 (see **Figure 8**)

Street Classification: Six-lane primary arterial

Description of Existing/Proposed Improvements: This portion of Genesee is currently four-lanes with an 18-foot median. Steep topography characterizes both the north and south sides of the street. The widening is proposed to be accomplished within the existing right-of-way by narrowing the median to six feet. The components of this widening are to include:

a. A landscaped median (eight feet minimum width).

b. Contiguous sidewalks on the north side only.

c. Class II bike lanes in both directions.

d. No on-street parking.

Impact: Although widening within the right-of-way and the provision of a sidewalk on only one side causes little or no impact to the existing topography, the provision of a six-lane facility instead of the existing four-lane facility may preclude the landscaping of the median. (A minimum width of eight feet is needed to accommodate landscaping.) Median landscaping, however, would enhance the natural wooded character of the area and the entrance to the Torrey Pines area.

Mitigation(s): Given the topographical constraints of this road section, avoidance of this impact could be achieved by taking one foot from each side of the roadway to increase the median width to eight feet, thus enabling landscaping to be provided. This mitigation measure is strongly recommended.

Section B: Genesee Avenue: I-5 to Regents Road (see **Figure 8**)

Street Classification: Six-lane primary arterial with dual left-turn lanes

Description of Existing/Proposed Improvements: This portion of Genesee is a four-lane facility with an 18-foot median. The widening to six-lanes and construction of dual left-turn lanes are proposed to be located within the existing right-of-way by narrowing the median and removing existing on-street parking. The proposal calls for closing mid-block median breaks. Design components of the proposed widening are to include:

a. A landscaped median (eight feet minimum width).

b. Contiguous sidewalks.

JUDICIAL DRIVE

Section A: Judicial Drive: Eastgate Mall to Nobel Drive (see **Figure 8**)

Street Classification: Four-lane major

Description of Existing/Proposed Improvements: Judicial Drive is proposed to be constructed as a four-lane major street. Design of this road should include:

a. Landscaped (eight feet minimum width).

b. Non-contiguous sidewalks with landscaped parkways.

c. Class II bike lanes.

d. No parking.

Impact: None identified.

Mitigation(s): None identified.

TOWNE CENTRE DRIVE

Section A: Towne Centre Drive: Golden Haven to Eastgate Mall (see **Figure 8**)

Street Classification: Four-lane major

Description of Existing/Proposed Improvements: Towne Centre Drive is a four-lane facility which is almost complete. Non-contiguous sidewalks with landscaped parkways should be provided. Medians should be landscaped if feasible. No parking should be permitted.

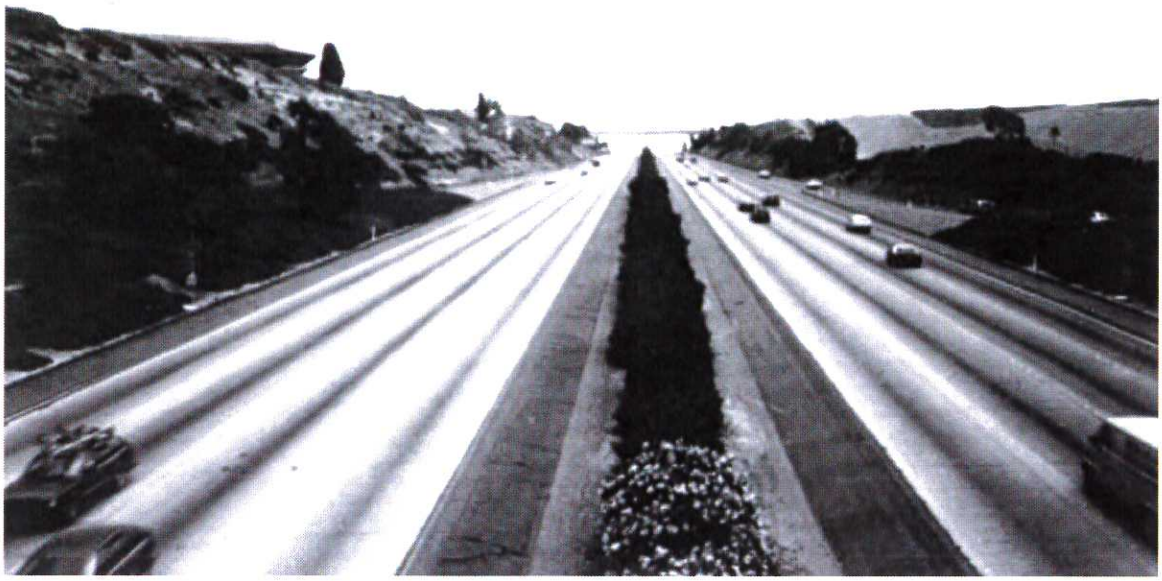
Impact: None identified.

Mitigation(s): None identified.

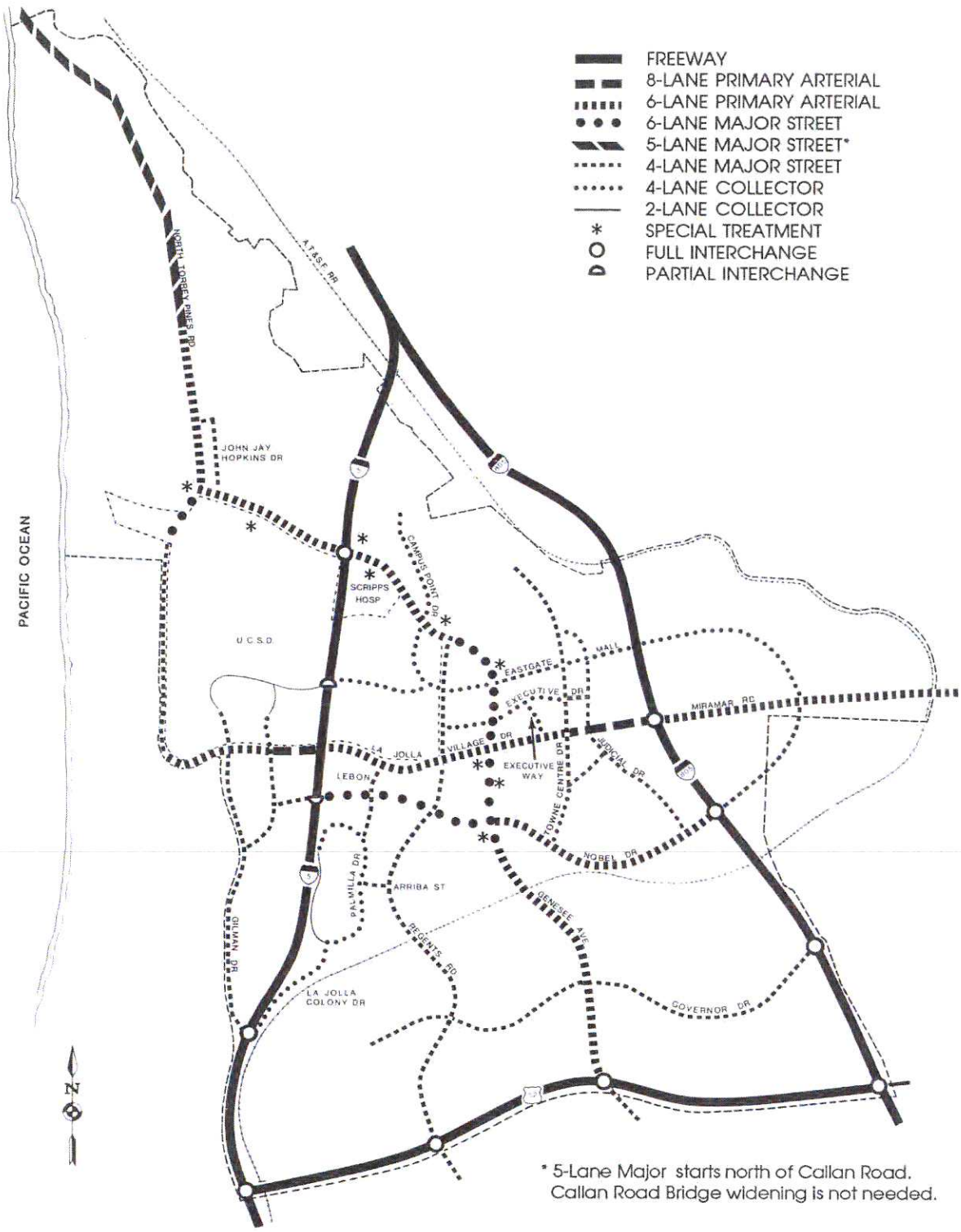
EXECUTIVE DRIVE

Section A: Executive Drive: Golden Haven to Eastgate Mall (see **Figure 8**)

Street Classification: Four-lane collector and LRT route.



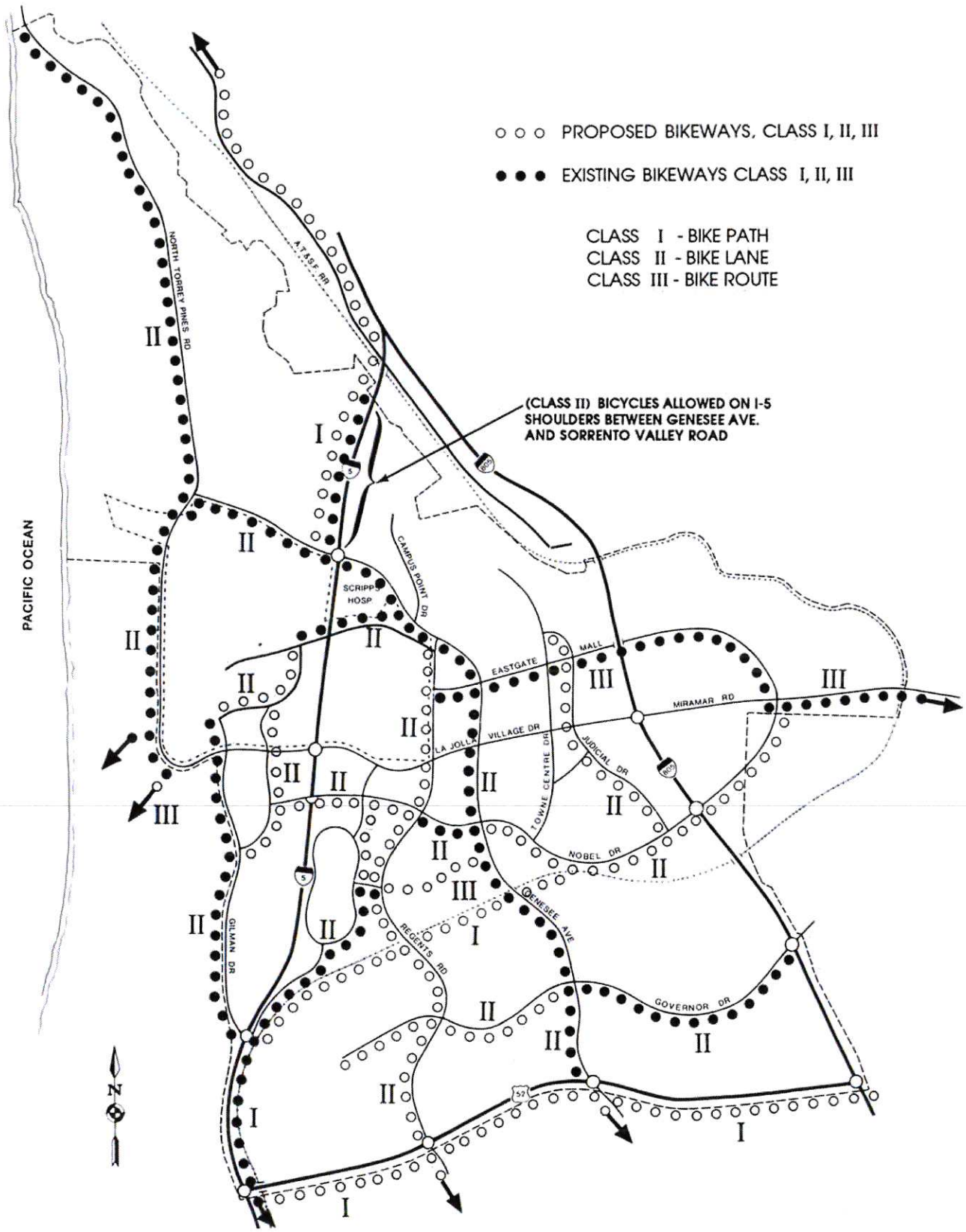
Transportation Element



Recommeded Street Network (Based on Community Plan Build-Out Land Uses/Development Intesities)

University Community Plan

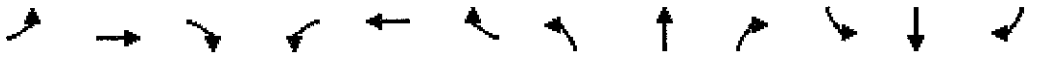
20 FIGURE



Bikeways
University Community Plan
23 FIGURE

Appendix C

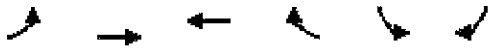
Existing Synchro Worksheets



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	40	128	38	48	156	458	141	1015	245	273	386	82
Future Volume (vph)	40	128	38	48	156	458	141	1015	245	273	386	82
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9	4.9	4.4	4.9	4.4	4.4	5.5		4.4	5.4	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91		0.97	0.91	
Frpb, ped/bikes	1.00	1.00	0.97	1.00	1.00	0.98	1.00	1.00		1.00	0.99	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.97		1.00	0.97	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1863	1533	1770	1863	1551	1770	4917		3433	4923	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1863	1533	1770	1863	1551	1770	4917		3433	4923	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	44	142	42	53	173	509	157	1128	272	303	429	91
RTOR Reduction (vph)	0	0	35	0	0	42	0	22	0	0	18	0
Lane Group Flow (vph)	44	142	7	53	173	467	157	1378	0	303	502	0
Confl. Peds. (#/hr)			10			21			5			4
Confl. Bikes (#/hr)			6			6			3			5
Turn Type	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA		Prot	NA	
Protected Phases	7	4		3	8	1	5	2		1	6	
Permitted Phases			4			8						
Actuated Green, G (s)	6.3	23.1	23.1	7.1	23.9	45.7	16.4	68.8		21.8	74.3	
Effective Green, g (s)	6.3	23.1	23.1	7.1	23.9	45.7	16.4	68.8		21.8	74.3	
Actuated g/C Ratio	0.04	0.17	0.17	0.05	0.17	0.33	0.12	0.49		0.16	0.53	
Clearance Time (s)	4.4	4.9	4.9	4.4	4.9	4.4	4.4	5.5		4.4	5.4	
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	4.2		2.0	4.2	
Lane Grp Cap (vph)	79	307	252	89	318	506	207	2416		534	2612	
v/s Ratio Prot	0.02	0.08		c0.03	0.09	c0.14	0.09	c0.28		0.09	0.10	
v/s Ratio Perm			0.00			0.16						
v/c Ratio	0.56	0.46	0.03	0.60	0.54	0.92	0.76	0.57		0.57	0.19	
Uniform Delay, d1	65.5	52.8	49.0	65.0	53.1	45.5	59.9	25.2		54.7	17.2	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.24	0.66		1.00	1.00	
Incremental Delay, d2	4.8	0.4	0.0	6.9	1.0	22.3	11.6	0.9		0.8	0.2	
Delay (s)	70.2	53.2	49.0	72.0	54.1	67.8	85.7	17.5		55.6	17.3	
Level of Service	E	D	D	E	D	E	F	B		E	B	
Approach Delay (s)		55.7			64.8			24.3			31.4	
Approach LOS		E			E			C			C	

Intersection Summary				
HCM 2000 Control Delay	37.1	HCM 2000 Level of Service	D	
HCM 2000 Volume to Capacity ratio	0.71			
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	19.2	
Intersection Capacity Utilization	72.3%	ICU Level of Service	C	
Analysis Period (min)	15			

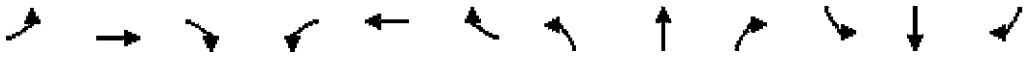
c Critical Lane Group



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	21	443	734	8	27	80
Future Volume (vph)	21	443	734	8	27	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.2	5.2		4.9	
Lane Util. Factor	1.00	0.95	0.95		1.00	
Frpb, ped/bikes	1.00	1.00	1.00		1.00	
Flpb, ped/bikes	1.00	1.00	1.00		1.00	
Frt	1.00	1.00	1.00		0.90	
Flt Protected	0.95	1.00	1.00		0.99	
Satd. Flow (prot)	1770	3539	3532		1654	
Flt Permitted	0.95	1.00	1.00		0.99	
Satd. Flow (perm)	1770	3539	3532		1654	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	23	492	816	9	30	89
RTOR Reduction (vph)	0	0	1	0	76	0
Lane Group Flow (vph)	23	492	824	0	43	0
Confl. Peds. (#/hr)				4		
Confl. Bikes (#/hr)				3		
Turn Type	Split	NA	NA		Prot	
Protected Phases	2	2	6		4	
Permitted Phases						
Actuated Green, G (s)	14.3	14.3	19.1		8.2	
Effective Green, g (s)	14.3	14.3	19.1		8.2	
Actuated g/C Ratio	0.25	0.25	0.34		0.14	
Clearance Time (s)	5.2	5.2	5.2		4.9	
Vehicle Extension (s)	3.5	3.5	3.5		2.0	
Lane Grp Cap (vph)	444	889	1185		238	
v/s Ratio Prot	0.01	c0.14	c0.23		c0.03	
v/s Ratio Perm						
v/c Ratio	0.05	0.55	0.70		0.18	
Uniform Delay, d1	16.2	18.5	16.4		21.4	
Progression Factor	1.00	1.00	1.00		1.00	
Incremental Delay, d2	0.1	0.8	1.9		0.1	
Delay (s)	16.2	19.3	18.2		21.5	
Level of Service	B	B	B		C	
Approach Delay (s)		19.2	18.2		21.5	
Approach LOS		B	B		C	

Intersection Summary			
HCM 2000 Control Delay	18.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	56.9	Sum of lost time (s)	15.3
Intersection Capacity Utilization	35.4%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	126	244	105	61	490	130	215	476	165	18	40	12
Future Volume (vph)	126	244	105	61	490	130	215	476	165	18	40	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	0.97	0.95		1.00	0.95		0.97	0.95		0.97	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.95		1.00	0.97		1.00	0.96		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	3433	3379		1770	3418		3433	3391		3433	3406	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	3433	3379		1770	3418		3433	3391		3433	3406	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	140	271	117	68	544	144	239	529	183	20	44	13
RTOR Reduction (vph)	0	49	0	0	26	0	0	33	0	0	10	0
Lane Group Flow (vph)	140	339	0	68	662	0	239	679	0	20	47	0
Confl. Peds. (#/hr)						1			1			4
Confl. Bikes (#/hr)						1			1			
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases												
Actuated Green, G (s)	8.3	25.6		5.1	22.4		10.4	25.4		1.3	16.3	
Effective Green, g (s)	8.3	25.6		5.1	22.4		10.4	25.4		1.3	16.3	
Actuated g/C Ratio	0.11	0.35		0.07	0.31		0.14	0.35		0.02	0.22	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	388	1178		122	1043		486	1173		60	756	
v/s Ratio Prot	0.04	c0.10		c0.04	c0.19		c0.07	c0.20		0.01	0.01	
v/s Ratio Perm												
v/c Ratio	0.36	0.29		0.56	0.63		0.49	0.58		0.33	0.06	
Uniform Delay, d1	30.1	17.3		33.1	22.0		29.1	19.6		35.6	22.5	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.6	0.1		5.4	1.3		0.8	0.7		3.3	0.0	
Delay (s)	30.7	17.4		38.5	23.2		29.8	20.3		38.9	22.6	
Level of Service	C	B		D	C		C	C		D	C	
Approach Delay (s)		20.9			24.6			22.7			26.8	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM 2000 Control Delay	23.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	73.4	Sum of lost time (s)	16.0
Intersection Capacity Utilization	49.8%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	126	276	59	94	519	36	147	8	83	4	4	12
Future Volume (vph)	126	276	59	94	519	36	147	8	83	4	4	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	6.1		4.4	5.6		4.4	4.9	4.4	4.4	4.9	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00	1.00	1.00	1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	0.99	1.00	0.99	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.97		1.00	0.99		1.00	1.00	0.85	1.00	0.89	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3438		1770	3499		1770	1863	1567	1770	1633	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	3438		1770	3499		1770	1863	1567	1770	1633	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	140	307	66	104	577	40	163	9	92	4	4	13
RTOR Reduction (vph)	0	22	0	0	6	0	0	0	59	0	11	0
Lane Group Flow (vph)	140	351	0	104	611	0	163	9	33	4	6	0
Confl. Peds. (#/hr)			1			3			2			1
Turn Type	Prot	NA		Prot	NA		Prot	NA	pm+ov	Prot	NA	
Protected Phases	5	2		1	6		3	8	1	7	4	
Permitted Phases									8			
Actuated Green, G (s)	7.4	19.6		4.9	17.6		6.0	17.4	22.3	0.5	11.9	
Effective Green, g (s)	7.4	19.6		4.9	17.6		6.0	17.4	22.3	0.5	11.9	
Actuated g/C Ratio	0.12	0.32		0.08	0.28		0.10	0.28	0.36	0.01	0.19	
Clearance Time (s)	4.4	6.1		4.4	5.6		4.4	4.9	4.4	4.4	4.9	
Vehicle Extension (s)	2.0	2.7		2.0	3.0		2.0	2.0	2.0	2.0	2.0	
Lane Grp Cap (vph)	210	1083		139	990		170	521	561	14	312	
v/s Ratio Prot	c0.08	0.10		0.06	c0.17		c0.09	0.00	c0.00	0.00	0.00	
v/s Ratio Perm									0.02			
v/c Ratio	0.67	0.32		0.75	0.62		0.96	0.02	0.06	0.29	0.02	
Uniform Delay, d1	26.2	16.2		28.0	19.4		28.0	16.2	13.1	30.7	20.4	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	6.1	0.1		17.4	1.2		55.9	0.0	0.0	4.1	0.0	
Delay (s)	32.3	16.4		45.4	20.5		83.9	16.2	13.1	34.7	20.4	
Level of Service	C	B		D	C		F	B	B	C	C	
Approach Delay (s)		20.7			24.1			56.9			23.2	
Approach LOS		C			C			E			C	

Intersection Summary			
HCM 2000 Control Delay	28.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	62.2	Sum of lost time (s)	19.8
Intersection Capacity Utilization	50.2%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	24	92	39	23	83	95	58	1297	342	57	356	27
Future Volume (vph)	24	92	39	23	83	95	58	1297	342	57	356	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	4.9		4.4	5.5		4.4	5.4	
Lane Util. Factor	1.00	0.95		0.97	0.95		0.97	0.91		0.97	0.91	
Frpb, ped/bikes	1.00	0.99		1.00	0.99		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.96		1.00	0.92		1.00	0.97		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3359		3433	3232		3433	4908		3433	5022	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	3359		3433	3232		3433	4908		3433	5022	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	27	102	43	26	92	106	64	1441	380	63	396	30
RTOR Reduction (vph)	0	37	0	0	92	0	0	24	0	0	4	0
Lane Group Flow (vph)	27	108	0	26	106	0	64	1797	0	63	422	0
Confl. Peds. (#/hr)			8			1			3			8
Confl. Bikes (#/hr)			1						2			2
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Actuated Green, G (s)	4.7	20.1		3.7	19.1		6.0	91.1		5.9	91.1	
Effective Green, g (s)	4.7	20.1		3.7	19.1		6.0	91.1		5.9	91.1	
Actuated g/C Ratio	0.03	0.14		0.03	0.14		0.04	0.65		0.04	0.65	
Clearance Time (s)	4.4	4.9		4.4	4.9		4.4	5.5		4.4	5.4	
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	3.6		2.0	3.8	
Lane Grp Cap (vph)	59	482		90	440		147	3193		144	3267	
v/s Ratio Prot	c0.02	0.03		0.01	c0.03		c0.02	c0.37		0.02	0.08	
v/s Ratio Perm												
v/c Ratio	0.46	0.22		0.29	0.24		0.44	0.56		0.44	0.13	
Uniform Delay, d1	66.4	53.1		66.9	54.0		65.3	13.5		65.4	9.3	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.09	0.72	
Incremental Delay, d2	2.0	0.1		0.6	0.1		0.8	0.7		0.8	0.1	
Delay (s)	68.4	53.1		67.5	54.1		66.1	14.2		71.9	6.8	
Level of Service	E	D		E	D		E	B		E	A	
Approach Delay (s)		55.5			55.6			16.0			15.1	
Approach LOS		E			E			B			B	

Intersection Summary				
HCM 2000 Control Delay	21.5	HCM 2000 Level of Service	C	
HCM 2000 Volume to Capacity ratio	0.50			
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	19.2	
Intersection Capacity Utilization	58.2%	ICU Level of Service	B	
Analysis Period (min)	15			

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	70	111	53	40	45	14	200	829	441	14	135	32
Future Volume (vph)	70	111	53	40	45	14	200	829	441	14	135	32
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	4.9		4.4	4.9		4.4	5.3	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.95		1.00	0.96		1.00	0.95		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3346		1770	3411		1770	3339		1770	3428	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	3346		1770	3411		1770	3339		1770	3428	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	78	123	59	44	50	16	222	921	490	16	150	36
RTOR Reduction (vph)	0	47	0	0	14	0	0	64	0	0	20	0
Lane Group Flow (vph)	78	135	0	44	52	0	222	1347	0	16	166	0
Confl. Peds. (#/hr)			5						2			1
Confl. Bikes (#/hr)			3						1			
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Actuated Green, G (s)	6.5	14.8		2.4	10.7		13.4	33.8		0.6	20.6	
Effective Green, g (s)	6.5	14.8		2.4	10.7		13.4	33.8		0.6	20.6	
Actuated g/C Ratio	0.09	0.21		0.03	0.15		0.19	0.48		0.01	0.29	
Clearance Time (s)	4.4	4.9		4.4	4.9		4.4	4.9		4.4	5.3	
Vehicle Extension (s)	2.0	5.3		2.0	5.4		2.0	3.8		2.0	3.8	
Lane Grp Cap (vph)	163	705		60	519		337	1607		15	1005	
v/s Ratio Prot	c0.04	c0.04		0.02	0.02		c0.13	c0.40		0.01	0.05	
v/s Ratio Perm												
v/c Ratio	0.48	0.19		0.73	0.10		0.66	0.84		1.07	0.16	
Uniform Delay, d1	30.2	22.8		33.6	25.6		26.3	15.8		34.8	18.4	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.8	0.3		32.5	0.2		3.5	4.2		255.5	0.1	
Delay (s)	31.0	23.1		66.0	25.8		29.8	20.0		290.3	18.5	
Level of Service	C	C		E	C		C	B		F	B	
Approach Delay (s)		25.5			41.9			21.3			40.0	
Approach LOS		C			D			C			D	

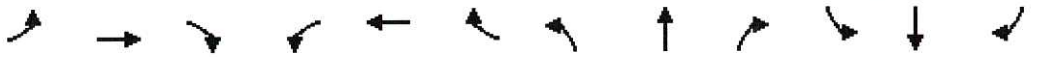
Intersection Summary				
HCM 2000 Control Delay	24.6	HCM 2000 Level of Service	C	
HCM 2000 Volume to Capacity ratio	0.68			
Actuated Cycle Length (s)	70.2	Sum of lost time (s)	19.0	
Intersection Capacity Utilization	66.9%	ICU Level of Service	C	
Analysis Period (min)	15			

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	211	316	62	4	32	20	108	287	166	91	44	16
Future Volume (vph)	211	316	62	4	32	20	108	287	166	91	44	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9			4.9		4.4	5.3		4.4	5.3	
Lane Util. Factor	1.00	0.95			0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00			1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00			1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.98			0.95		1.00	0.95		1.00	0.96	
Flt Protected	0.95	1.00			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3445			3323		1770	3329		1770	3384	
Flt Permitted	0.95	1.00			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	3445			3323		1770	3329		1770	3384	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	234	351	69	4	36	22	120	319	184	101	49	18
RTOR Reduction (vph)	0	15	0	0	20	0	0	76	0	0	13	0
Lane Group Flow (vph)	234	405	0	0	42	0	120	427	0	101	54	0
Confl. Peds. (#/hr)			1			3			2			2
Confl. Bikes (#/hr)												1
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	4	4		3	3		5	2		1	6	
Permitted Phases												
Actuated Green, G (s)	15.4	15.4			6.0		6.4	16.5		6.4	16.5	
Effective Green, g (s)	15.4	15.4			6.0		6.4	16.5		6.4	16.5	
Actuated g/C Ratio	0.24	0.24			0.09		0.10	0.26		0.10	0.26	
Clearance Time (s)	4.9	4.9			4.9		4.4	5.3		4.4	5.3	
Vehicle Extension (s)	3.3	3.3			3.3		2.0	4.4		2.0	4.4	
Lane Grp Cap (vph)	427	831			312		177	860		177	875	
v/s Ratio Prot	c0.13	0.12			c0.01		c0.07	c0.13		0.06	0.02	
v/s Ratio Perm												
v/c Ratio	0.55	0.49			0.13		0.68	0.50		0.57	0.06	
Uniform Delay, d1	21.2	20.8			26.5		27.7	20.1		27.4	17.8	
Progression Factor	1.00	1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.5	0.5			0.2		7.8	0.7		2.7	0.0	
Delay (s)	22.7	21.3			26.7		35.5	20.9		30.1	17.9	
Level of Service	C	C			C		D	C		C	B	
Approach Delay (s)		21.8			26.7			23.7			25.2	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM 2000 Control Delay	23.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	63.8	Sum of lost time (s)	19.5
Intersection Capacity Utilization	49.7%	ICU Level of Service	A
Analysis Period (min)	15		

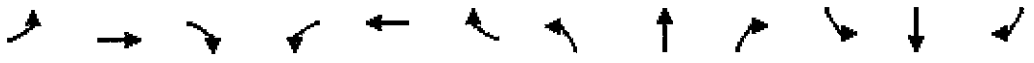
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	256	1032	119	356	1620	1172	142	160	310	182	36	17
Future Volume (vph)	256	1032	119	356	1620	1172	142	160	310	182	36	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.5	5.5	4.9	5.3	5.3	4.4	5.0	4.9	4.4	5.3	
Lane Util. Factor	0.97	0.91	1.00	0.97	0.86	0.86	0.97	1.00	0.88	0.97	0.95	
Frpb, ped/bikes	1.00	1.00	0.99	1.00	0.99	0.97	1.00	1.00	0.99	1.00	0.99	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.96	0.85	1.00	1.00	0.85	1.00	0.95	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	3433	5085	1562	3433	4596	1327	3433	1863	2756	3433	3339	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	3433	5085	1562	3433	4596	1327	3433	1863	2756	3433	3339	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	269	1086	125	375	1705	1234	149	168	326	192	38	18
RTOR Reduction (vph)	0	0	66	0	38	220	0	0	37	0	15	0
Lane Group Flow (vph)	269	1086	59	375	2235	446	149	168	289	192	41	0
Confl. Peds. (#/hr)			1			9			6			12
Confl. Bikes (#/hr)						1			1			1
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	
Protected Phases	5	2		1	6		3	8	1	7	4	
Permitted Phases			2			6			8			
Actuated Green, G (s)	13.9	66.6	66.6	19.2	72.6	72.6	12.5	26.1	45.3	8.3	21.6	
Effective Green, g (s)	13.9	66.6	66.6	19.2	72.6	72.6	12.5	26.1	45.3	8.3	21.6	
Actuated g/C Ratio	0.10	0.48	0.48	0.14	0.52	0.52	0.09	0.19	0.32	0.06	0.15	
Clearance Time (s)	4.4	5.5	5.5	4.9	5.3	5.3	4.4	5.0	4.9	4.4	5.3	
Vehicle Extension (s)	2.0	4.5	4.5	2.0	4.3	4.3	2.0	5.2	2.0	2.0	4.6	
Lane Grp Cap (vph)	340	2419	743	470	2383	688	306	347	891	203	515	
v/s Ratio Prot	0.08	0.21		c0.11	c0.49		0.04	c0.09	0.04	c0.06	0.01	
v/s Ratio Perm			0.04			0.34			0.06			
v/c Ratio	0.79	0.45	0.08	0.80	0.94	0.65	0.49	0.48	0.32	0.95	0.08	
Uniform Delay, d1	61.6	24.5	20.0	58.5	31.6	24.4	60.7	50.9	35.8	65.6	50.7	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	11.1	0.6	0.2	8.6	8.7	4.7	0.4	2.4	0.1	47.1	0.1	
Delay (s)	72.8	25.1	20.2	67.1	40.3	29.1	61.1	53.3	35.9	112.7	50.8	
Level of Service	E	C	C	E	D	C	E	D	D	F	D	
Approach Delay (s)		33.3			41.1			46.3			98.7	
Approach LOS		C			D			D			F	

Intersection Summary			
HCM 2000 Control Delay	42.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	20.1
Intersection Capacity Utilization	81.4%	ICU Level of Service	D
Analysis Period (min)	15		

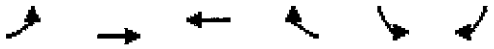
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	19	130	61	156	187	248	54	416	89	488	1109	36
Future Volume (vph)	19	130	61	156	187	248	54	416	89	488	1109	36
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9	4.9	4.4	4.9	4.4	4.4	5.5		4.4	5.4	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91		0.97	0.91	
Frpb, ped/bikes	1.00	1.00	0.97	1.00	1.00	0.98	1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.97		1.00	1.00	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1863	1536	1770	1863	1552	1770	4936		3433	5054	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1863	1536	1770	1863	1552	1770	4936		3433	5054	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	21	144	68	173	208	276	60	462	99	542	1232	40
RTOR Reduction (vph)	0	0	57	0	0	78	0	19	0	0	2	0
Lane Group Flow (vph)	21	144	11	173	208	198	60	542	0	542	1270	0
Confl. Peds. (#/hr)			9			17			2			7
Confl. Bikes (#/hr)			5			8			3			8
Turn Type	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA		Prot	NA	
Protected Phases	7	4		3	8	1	5	2		1	6	
Permitted Phases			4			8						
Actuated Green, G (s)	4.3	22.8	22.8	18.0	36.5	63.1	8.1	53.4		26.6	72.0	
Effective Green, g (s)	4.3	22.8	22.8	18.0	36.5	63.1	8.1	53.4		26.6	72.0	
Actuated g/C Ratio	0.03	0.16	0.16	0.13	0.26	0.45	0.06	0.38		0.19	0.51	
Clearance Time (s)	4.4	4.9	4.9	4.4	4.9	4.4	4.4	5.5		4.4	5.4	
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	4.2		2.0	4.2	
Lane Grp Cap (vph)	54	303	250	227	485	699	102	1882		652	2599	
v/s Ratio Prot	0.01	0.08		c0.10	c0.11	0.05	0.03	0.11		c0.16	c0.25	
v/s Ratio Perm			0.01			0.07						
v/c Ratio	0.39	0.48	0.04	0.76	0.43	0.28	0.59	0.29		0.83	0.49	
Uniform Delay, d1	66.6	53.2	49.4	58.9	43.1	24.2	64.3	30.1		54.5	22.1	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.13	0.77		1.00	1.00	
Incremental Delay, d2	1.7	0.4	0.0	12.7	0.2	0.1	5.4	0.4		8.5	0.7	
Delay (s)	68.2	53.6	49.4	71.6	43.3	24.3	78.3	23.6		63.0	22.7	
Level of Service	E	D	D	E	D	C	E	C		E	C	
Approach Delay (s)		53.7			42.8			28.9			34.8	
Approach LOS		D			D			C			C	

Intersection Summary				
HCM 2000 Control Delay	36.6	HCM 2000 Level of Service	D	
HCM 2000 Volume to Capacity ratio	0.61			
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	19.2	
Intersection Capacity Utilization	74.2%	ICU Level of Service	D	
Analysis Period (min)	15			

c Critical Lane Group



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	73	701	466	30	26	62
Future Volume (vph)	73	701	466	30	26	62
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.2	5.2		4.9	
Lane Util. Factor	1.00	0.95	0.95		1.00	
Frpb, ped/bikes	1.00	1.00	1.00		1.00	
Flpb, ped/bikes	1.00	1.00	1.00		1.00	
Frt	1.00	1.00	0.99		0.90	
Flt Protected	0.95	1.00	1.00		0.99	
Satd. Flow (prot)	1770	3539	3501		1661	
Flt Permitted	0.95	1.00	1.00		0.99	
Satd. Flow (perm)	1770	3539	3501		1661	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	81	779	518	33	29	69
RTOR Reduction (vph)	0	0	5	0	59	0
Lane Group Flow (vph)	81	779	546	0	39	0
Confl. Peds. (#/hr)				3		
Confl. Bikes (#/hr)				4		
Turn Type	Split	NA	NA		Prot	
Protected Phases	2	2	6		4	
Permitted Phases						
Actuated Green, G (s)	18.2	18.2	15.2		8.1	
Effective Green, g (s)	18.2	18.2	15.2		8.1	
Actuated g/C Ratio	0.32	0.32	0.27		0.14	
Clearance Time (s)	5.2	5.2	5.2		4.9	
Vehicle Extension (s)	3.5	3.5	3.5		2.0	
Lane Grp Cap (vph)	567	1133	936		236	
v/s Ratio Prot	0.05	c0.22	c0.16		c0.02	
v/s Ratio Perm						
v/c Ratio	0.14	0.69	0.58		0.16	
Uniform Delay, d1	13.7	16.8	18.1		21.4	
Progression Factor	1.00	1.00	1.00		1.00	
Incremental Delay, d2	0.1	1.8	1.0		0.1	
Delay (s)	13.9	18.6	19.0		21.5	
Level of Service	B	B	B		C	
Approach Delay (s)		18.2	19.0		21.5	
Approach LOS		B	B		C	

Intersection Summary				
HCM 2000 Control Delay	18.7	HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio	0.55			
Actuated Cycle Length (s)	56.8	Sum of lost time (s)	15.3	
Intersection Capacity Utilization	40.2%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	28	484	219	158	286	11	128	33	73	136	416	80
Future Volume (vph)	28	484	219	158	286	11	128	33	73	136	416	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	0.97	0.95		1.00	0.95		0.97	0.95		0.97	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	0.99		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.95		1.00	0.99		1.00	0.90		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	3433	3356		1770	3518		3433	3146		3433	3445	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	3433	3356		1770	3518		3433	3146		3433	3445	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	31	538	243	176	318	12	142	37	81	151	462	89
RTOR Reduction (vph)	0	54	0	0	3	0	0	63	0	0	16	0
Lane Group Flow (vph)	31	727	0	176	327	0	142	55	0	151	535	0
Confl. Peds. (#/hr)			4			4			1			1
Confl. Bikes (#/hr)			1			2						2
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases												
Actuated Green, G (s)	2.1	26.8		13.2	37.9		7.8	18.1		7.9	18.2	
Effective Green, g (s)	2.1	26.8		13.2	37.9		7.8	18.1		7.9	18.2	
Actuated g/C Ratio	0.03	0.33		0.16	0.46		0.10	0.22		0.10	0.22	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	87	1096		284	1626		326	694		330	764	
v/s Ratio Prot	0.01	c0.22		c0.10	0.09		0.04	0.02		c0.04	c0.16	
v/s Ratio Perm												
v/c Ratio	0.36	0.66		0.62	0.20		0.44	0.08		0.46	0.70	
Uniform Delay, d1	39.3	23.7		32.1	13.1		35.0	25.3		35.0	29.4	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	2.5	1.5		4.0	0.1		0.9	0.0		1.0	2.8	
Delay (s)	41.8	25.2		36.1	13.1		36.0	25.4		36.0	32.2	
Level of Service	D	C		D	B		D	C		D	C	
Approach Delay (s)		25.9			21.1			31.2			33.0	
Approach LOS		C			C			C			C	

Intersection Summary				
HCM 2000 Control Delay	27.6	HCM 2000 Level of Service	C	
HCM 2000 Volume to Capacity ratio	0.64			
Actuated Cycle Length (s)	82.0	Sum of lost time (s)	16.0	
Intersection Capacity Utilization	60.5%	ICU Level of Service	B	
Analysis Period (min)	15			

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	552	118	64	205	1	124	0	127	51	71	106
Future Volume (vph)	10	552	118	64	205	1	124	0	127	51	71	106
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	6.1		4.4	5.6		4.4		4.4	4.4	4.9	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00		1.00	1.00	1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00		0.99	1.00	0.99	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00		1.00	1.00	1.00	
Frt	1.00	0.97		1.00	1.00		1.00		0.85	1.00	0.91	
Flt Protected	0.95	1.00		0.95	1.00		0.95		1.00	0.95	1.00	
Satd. Flow (prot)	1770	3446		1770	3537		1770		1565	1770	1679	
Flt Permitted	0.95	1.00		0.95	1.00		0.95		1.00	0.95	1.00	
Satd. Flow (perm)	1770	3446		1770	3537		1770		1565	1770	1679	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	11	613	131	71	228	1	138	0	141	57	79	118
RTOR Reduction (vph)	0	21	0	0	1	0	0	0	95	0	69	0
Lane Group Flow (vph)	11	723	0	71	228	0	138	0	46	57	128	0
Confl. Peds. (#/hr)						1			3			4
Confl. Bikes (#/hr)						1						1
Turn Type	Prot	NA		Prot	NA		Prot		pm+ov	Prot	NA	
Protected Phases	5	2		1	6		3	8	1	7	4	
Permitted Phases									8			
Actuated Green, G (s)	0.5	22.0		4.2	26.2		6.9		20.9	2.8	12.6	
Effective Green, g (s)	0.5	22.0		4.2	26.2		6.9		20.9	2.8	12.6	
Actuated g/C Ratio	0.01	0.34		0.06	0.40		0.11		0.32	0.04	0.19	
Clearance Time (s)	4.4	6.1		4.4	5.6		4.4		4.4	4.4	4.9	
Vehicle Extension (s)	2.0	2.7		2.0	3.0		2.0		2.0	2.0	2.0	
Lane Grp Cap (vph)	13	1157		113	1414		186		499	75	322	
v/s Ratio Prot	0.01	c0.21		c0.04	c0.06		c0.08		c0.01	0.03	c0.08	
v/s Ratio Perm									0.02			
v/c Ratio	0.85	0.63		0.63	0.16		0.74		0.09	0.76	0.40	
Uniform Delay, d1	32.5	18.3		29.9	12.6		28.4		15.6	31.0	23.1	
Progression Factor	1.00	1.00		1.00	1.00		1.00		1.00	1.00	1.00	
Incremental Delay, d2	162.2	1.0		7.6	0.1		13.0		0.0	32.7	0.3	
Delay (s)	194.7	19.3		37.5	12.7		41.4		15.7	63.7	23.4	
Level of Service	F	B		D	B		D		B	E	C	
Approach Delay (s)		21.8			18.5			28.4			32.5	
Approach LOS		C			B			C			C	

Intersection Summary				
HCM 2000 Control Delay	24.1	HCM 2000 Level of Service	C	
HCM 2000 Volume to Capacity ratio	0.53			
Actuated Cycle Length (s)	65.5	Sum of lost time (s)	19.8	
Intersection Capacity Utilization	57.9%	ICU Level of Service	B	
Analysis Period (min)	15			

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	38	77	62	153	250	119	73	402	48	84	1223	123
Future Volume (vph)	38	77	62	153	250	119	73	402	48	84	1223	123
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	4.9		4.4	5.5		4.4	5.4	
Lane Util. Factor	1.00	0.95		0.97	0.95		0.97	0.91		0.97	0.91	
Frpb, ped/bikes	1.00	0.99		1.00	0.99		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.93		1.00	0.95		1.00	0.98		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3278		3433	3348		3433	4997		3433	5005	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	3278		3433	3348		3433	4997		3433	5005	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	42	86	69	170	278	132	81	447	53	93	1359	137
RTOR Reduction (vph)	0	59	0	0	46	0	0	8	0	0	6	0
Lane Group Flow (vph)	42	96	0	170	364	0	81	492	0	93	1490	0
Confl. Peds. (#/hr)			4			4			1			5
Confl. Bikes (#/hr)						2			3			4
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Actuated Green, G (s)	6.8	21.3		11.3	25.8		7.7	80.0		8.2	80.6	
Effective Green, g (s)	6.8	21.3		11.3	25.8		7.7	80.0		8.2	80.6	
Actuated g/C Ratio	0.05	0.15		0.08	0.18		0.06	0.57		0.06	0.58	
Clearance Time (s)	4.4	4.9		4.4	4.9		4.4	5.5		4.4	5.4	
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	3.6		2.0	3.8	
Lane Grp Cap (vph)	85	498		277	616		188	2855		201	2881	
v/s Ratio Prot	0.02	0.03		c0.05	c0.11		0.02	0.10		c0.03	c0.30	
v/s Ratio Perm												
v/c Ratio	0.49	0.19		0.61	0.59		0.43	0.17		0.46	0.52	
Uniform Delay, d1	64.9	51.8		62.2	52.3		64.0	14.3		63.8	17.9	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.18	0.52	
Incremental Delay, d2	1.6	0.1		2.8	1.0		0.6	0.1		0.6	0.6	
Delay (s)	66.6	51.9		65.1	53.3		64.6	14.4		75.6	9.9	
Level of Service	E	D		E	D		E	B		E	A	
Approach Delay (s)		55.0			56.7			21.4			13.7	
Approach LOS		E			E			C			B	

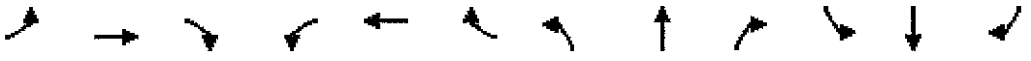
Intersection Summary				
HCM 2000 Control Delay	26.5	HCM 2000 Level of Service	C	
HCM 2000 Volume to Capacity ratio	0.55			
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	19.2	
Intersection Capacity Utilization	62.4%	ICU Level of Service	B	
Analysis Period (min)	15			

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	47	148	251	179	14	178	171	77	26	819	77
Future Volume (vph)	20	47	148	251	179	14	178	171	77	26	819	77
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	4.9		4.4	4.9		4.4	5.3	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.98		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.89		1.00	0.99		1.00	0.95		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3088		1770	3496		1770	3358		1770	3489	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	3088		1770	3496		1770	3358		1770	3489	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	22	52	164	279	199	16	198	190	86	29	910	86
RTOR Reduction (vph)	0	137	0	0	6	0	0	44	0	0	7	0
Lane Group Flow (vph)	22	79	0	279	209	0	198	232	0	29	989	0
Confl. Peds. (#/hr)			3			2			2			1
Confl. Bikes (#/hr)			4						2			2
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Actuated Green, G (s)	2.1	14.8		15.3	28.0		11.2	40.0		2.2	30.6	
Effective Green, g (s)	2.1	14.8		15.3	28.0		11.2	40.0		2.2	30.6	
Actuated g/C Ratio	0.02	0.16		0.17	0.31		0.12	0.44		0.02	0.34	
Clearance Time (s)	4.4	4.9		4.4	4.9		4.4	4.9		4.4	5.3	
Vehicle Extension (s)	2.0	5.3		2.0	5.4		2.0	3.8		2.0	3.8	
Lane Grp Cap (vph)	40	502		297	1076		218	1477		42	1174	
v/s Ratio Prot	0.01	0.03		c0.16	c0.06		c0.11	0.07		0.02	c0.28	
v/s Ratio Perm												
v/c Ratio	0.55	0.16		0.94	0.19		0.91	0.16		0.69	0.84	
Uniform Delay, d1	43.9	32.7		37.3	23.1		39.3	15.3		44.0	27.9	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	9.0	0.3		35.6	0.2		35.9	0.1		32.7	5.9	
Delay (s)	52.9	33.0		73.0	23.4		75.2	15.4		76.7	33.8	
Level of Service	D	C		E	C		E	B		E	C	
Approach Delay (s)		34.9			51.4			40.4			35.0	
Approach LOS		C			D			D			C	

Intersection Summary			
HCM 2000 Control Delay	39.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	90.9	Sum of lost time (s)	19.0
Intersection Capacity Utilization	72.6%	ICU Level of Service	C
Analysis Period (min)	15		

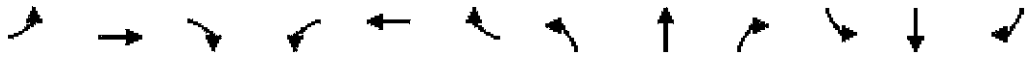
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	22	33	102	178	360	98	44	68	10	12	242	35
Future Volume (vph)	22	33	102	178	360	98	44	68	10	12	242	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9			4.9		4.4	5.3		4.4	5.3	
Lane Util. Factor	1.00	0.95			0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.99			1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00			1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.89			0.98		1.00	0.98		1.00	0.98	
Flt Protected	0.95	1.00			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3107			3403		1770	3467		1770	3465	
Flt Permitted	0.95	1.00			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	3107			3403		1770	3467		1770	3465	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	24	37	113	198	400	109	49	76	11	13	269	39
RTOR Reduction (vph)	0	97	0	0	13	0	0	8	0	0	11	0
Lane Group Flow (vph)	24	53	0	0	694	0	49	79	0	13	297	0
Confl. Peds. (#/hr)			2						1			4
Confl. Bikes (#/hr)						1						2
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	4	4		3	3		5	2		1	6	
Permitted Phases												
Actuated Green, G (s)	10.2	10.2			19.4		3.1	20.1		0.8	17.8	
Effective Green, g (s)	10.2	10.2			19.4		3.1	20.1		0.8	17.8	
Actuated g/C Ratio	0.15	0.15			0.28		0.04	0.29		0.01	0.25	
Clearance Time (s)	4.9	4.9			4.9		4.4	5.3		4.4	5.3	
Vehicle Extension (s)	3.3	3.3			3.3		2.0	4.4		2.0	4.4	
Lane Grp Cap (vph)	257	452			943		78	995		20	881	
v/s Ratio Prot	0.01	c0.02			c0.20		c0.03	0.02		0.01	c0.09	
v/s Ratio Perm												
v/c Ratio	0.09	0.12			0.74		0.63	0.08		0.65	0.34	
Uniform Delay, d1	25.9	26.0			23.0		32.9	18.2		34.5	21.3	
Progression Factor	1.00	1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.2	0.1			3.1		10.8	0.1		45.4	0.4	
Delay (s)	26.1	26.1			26.1		43.7	18.3		79.9	21.7	
Level of Service	C	C			C		D	B		E	C	
Approach Delay (s)		26.1			26.1			27.4			24.0	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM 2000 Control Delay	25.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.46		
Actuated Cycle Length (s)	70.0	Sum of lost time (s)	19.5
Intersection Capacity Utilization	54.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	34	1428	123	362	1357	295	187	45	520	875	305	184
Future Volume (vph)	34	1428	123	362	1357	295	187	45	520	875	305	184
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.5	5.5	4.9	5.3	5.3	4.4	5.0	4.9	4.4	5.3	
Lane Util. Factor	0.97	0.91	1.00	0.97	0.86	0.86	0.97	1.00	0.88	0.97	0.95	
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.98	1.00	1.00	0.99	1.00	0.99	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.94	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	3433	5085	1563	3433	4789	1335	3433	1863	2765	3433	3305	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	3433	5085	1563	3433	4789	1335	3433	1863	2765	3433	3305	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	36	1503	129	381	1428	311	197	47	547	921	321	194
RTOR Reduction (vph)	0	0	90	0	1	120	0	0	63	0	72	0
Lane Group Flow (vph)	36	1503	39	381	1458	160	197	47	484	921	443	0
Confl. Peds. (#/hr)						5			4			12
Confl. Bikes (#/hr)			1			1						2
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	
Protected Phases	5	2		1	6		3	8	1	7	4	
Permitted Phases			2			6			8			
Actuated Green, G (s)	3.8	41.9	41.9	20.9	59.7	59.7	12.4	19.0	39.9	38.4	44.7	
Effective Green, g (s)	3.8	41.9	41.9	20.9	59.7	59.7	12.4	19.0	39.9	38.4	44.7	
Actuated g/C Ratio	0.03	0.30	0.30	0.15	0.43	0.43	0.09	0.14	0.28	0.27	0.32	
Clearance Time (s)	4.4	5.5	5.5	4.9	5.3	5.3	4.4	5.0	4.9	4.4	5.3	
Vehicle Extension (s)	2.0	4.5	4.5	2.0	4.3	4.3	2.0	5.2	2.0	2.0	4.6	
Lane Grp Cap (vph)	93	1521	467	512	2042	569	304	252	788	941	1055	
v/s Ratio Prot	0.01	c0.30		c0.11	0.30		0.06	0.03	c0.09	c0.27	0.13	
v/s Ratio Perm			0.02			0.12			0.08			
v/c Ratio	0.39	0.99	0.08	0.74	0.71	0.28	0.65	0.19	0.61	0.98	0.42	
Uniform Delay, d1	67.0	48.8	35.2	57.0	33.1	26.2	61.7	53.6	43.4	50.4	37.5	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	1.0	20.4	0.3	5.1	2.2	1.2	3.5	0.8	1.0	23.9	0.5	
Delay (s)	67.9	69.2	35.6	62.1	35.3	27.4	65.2	54.5	44.4	74.2	37.9	
Level of Service	E	E	D	E	D	C	E	D	D	E	D	
Approach Delay (s)		66.6			39.0			50.2			61.2	
Approach LOS		E			D			D			E	

Intersection Summary			
HCM 2000 Control Delay	53.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	20.1
Intersection Capacity Utilization	86.1%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Appendix D

Existing With Project Synchro Worksheets

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	40	157	38	50	159	460	141	1015	259	287	386	82
Future Volume (vph)	40	157	38	50	159	460	141	1015	259	287	386	82
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9	4.9	4.4	4.9	4.4	4.4	5.5		4.4	5.4	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91		0.97	0.91	
Frpb, ped/bikes	1.00	1.00	0.97	1.00	1.00	0.98	1.00	1.00		1.00	0.99	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.97		1.00	0.97	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1863	1533	1770	1863	1551	1770	4909		3433	4923	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1863	1533	1770	1863	1551	1770	4909		3433	4923	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	44	174	42	56	177	511	157	1128	288	319	429	91
RTOR Reduction (vph)	0	0	35	0	0	41	0	25	0	0	18	0
Lane Group Flow (vph)	44	174	7	56	177	470	157	1391	0	319	502	0
Confl. Peds. (#/hr)			10			21			5			4
Confl. Bikes (#/hr)			6			6			3			5
Turn Type	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA		Prot	NA	
Protected Phases	7	4		3	8	1	5	2		1	6	
Permitted Phases			4			8						
Actuated Green, G (s)	6.3	23.3	23.3	7.3	24.3	46.3	16.4	68.2		22.0	73.9	
Effective Green, g (s)	6.3	23.3	23.3	7.3	24.3	46.3	16.4	68.2		22.0	73.9	
Actuated g/C Ratio	0.04	0.17	0.17	0.05	0.17	0.33	0.12	0.49		0.16	0.53	
Clearance Time (s)	4.4	4.9	4.9	4.4	4.9	4.4	4.4	5.5		4.4	5.4	
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	4.2		2.0	4.2	
Lane Grp Cap (vph)	79	310	255	92	323	512	207	2391		539	2598	
v/s Ratio Prot	0.02	0.09		c0.03	0.10	c0.14	0.09	c0.28		0.09	0.10	
v/s Ratio Perm			0.00			0.16						
v/c Ratio	0.56	0.56	0.03	0.61	0.55	0.92	0.76	0.58		0.59	0.19	
Uniform Delay, d1	65.5	53.7	48.9	65.0	52.8	45.0	59.9	25.7		54.8	17.4	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.24	0.67		1.00	1.00	
Incremental Delay, d2	4.8	1.4	0.0	7.6	1.0	20.9	11.5	0.9		1.2	0.2	
Delay (s)	70.2	55.0	48.9	72.5	53.9	65.9	85.8	18.0		56.0	17.5	
Level of Service	E	E	D	E	D	E	F	B		E	B	
Approach Delay (s)		56.6			63.5			24.8			32.2	
Approach LOS		E			E			C			C	

Intersection Summary			
HCM 2000 Control Delay	37.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	19.2
Intersection Capacity Utilization	73.1%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	21	500	740	8	30	80
Future Volume (vph)	21	500	740	8	30	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.2	5.2		4.9	
Lane Util. Factor	1.00	0.95	0.95		1.00	
Frpb, ped/bikes	1.00	1.00	1.00		1.00	
Flpb, ped/bikes	1.00	1.00	1.00		1.00	
Frt	1.00	1.00	1.00		0.90	
Flt Protected	0.95	1.00	1.00		0.99	
Satd. Flow (prot)	1770	3539	3532		1657	
Flt Permitted	0.95	1.00	1.00		0.99	
Satd. Flow (perm)	1770	3539	3532		1657	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	23	556	822	9	33	89
RTOR Reduction (vph)	0	0	1	0	77	0
Lane Group Flow (vph)	23	556	830	0	45	0
Confl. Peds. (#/hr)				4		
Confl. Bikes (#/hr)				3		
Turn Type	Split	NA	NA		Prot	
Protected Phases	2	2	6		4	
Permitted Phases						
Actuated Green, G (s)	15.4	15.4	19.6		8.2	
Effective Green, g (s)	15.4	15.4	19.6		8.2	
Actuated g/C Ratio	0.26	0.26	0.34		0.14	
Clearance Time (s)	5.2	5.2	5.2		4.9	
Vehicle Extension (s)	3.5	3.5	3.5		2.0	
Lane Grp Cap (vph)	465	931	1183		232	
v/s Ratio Prot	0.01	c0.16	c0.24		c0.03	
v/s Ratio Perm						
v/c Ratio	0.05	0.60	0.70		0.20	
Uniform Delay, d1	16.1	18.8	16.9		22.2	
Progression Factor	1.00	1.00	1.00		1.00	
Incremental Delay, d2	0.1	1.1	2.0		0.2	
Delay (s)	16.1	19.9	18.9		22.4	
Level of Service	B	B	B		C	
Approach Delay (s)		19.8	18.9		22.4	
Approach LOS		B	B		C	

Intersection Summary			
HCM 2000 Control Delay	19.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	58.5	Sum of lost time (s)	15.3
Intersection Capacity Utilization	35.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	126	244	105	61	490	130	222	476	165	20	40	12
Future Volume (vph)	126	244	105	61	490	130	222	476	165	20	40	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	0.97	0.95		1.00	0.95		0.97	0.95		0.97	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.95		1.00	0.97		1.00	0.96		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	3433	3379		1770	3418		3433	3391		3433	3406	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	3433	3379		1770	3418		3433	3391		3433	3406	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	140	271	117	68	544	144	247	529	183	22	44	13
RTOR Reduction (vph)	0	50	0	0	26	0	0	33	0	0	10	0
Lane Group Flow (vph)	140	338	0	68	662	0	247	679	0	22	47	0
Confl. Peds. (#/hr)						1			1			4
Confl. Bikes (#/hr)						1			1			
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases												
Actuated Green, G (s)	8.3	25.6		5.1	22.4		10.5	25.5		1.3	16.3	
Effective Green, g (s)	8.3	25.6		5.1	22.4		10.5	25.5		1.3	16.3	
Actuated g/C Ratio	0.11	0.35		0.07	0.30		0.14	0.35		0.02	0.22	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	387	1176		122	1041		490	1176		60	755	
v/s Ratio Prot	0.04	c0.10		c0.04	c0.19		c0.07	c0.20		0.01	0.01	
v/s Ratio Perm												
v/c Ratio	0.36	0.29		0.56	0.64		0.50	0.58		0.37	0.06	
Uniform Delay, d1	30.2	17.3		33.1	22.0		29.1	19.6		35.7	22.6	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.6	0.1		5.4	1.3		0.8	0.7		3.8	0.0	
Delay (s)	30.7	17.5		38.5	23.3		29.9	20.3		39.5	22.6	
Level of Service	C	B		D	C		C	C		D	C	
Approach Delay (s)		21.0			24.7			22.8			27.3	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM 2000 Control Delay	23.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	73.5	Sum of lost time (s)	16.0
Intersection Capacity Utilization	49.8%	ICU Level of Service	A
Analysis Period (min)	15		

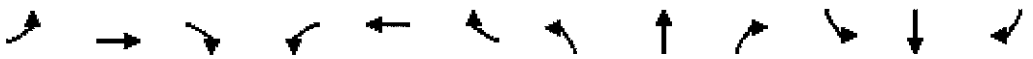
c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	126	278	59	111	519	36	36	147	8	83	4	4
Future Volume (vph)	126	278	59	111	519	36	36	147	8	83	4	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	6.1		4.4	5.6			4.4	4.9	4.4	4.4	4.9
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00			1.00	1.00	0.99	1.00	0.99
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.97		1.00	0.99			1.00	1.00	0.85	1.00	0.89
Flt Protected	0.95	1.00		0.95	1.00			0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	3438		1770	3499			1770	1863	1567	1770	1633
Flt Permitted	0.95	1.00		0.95	1.00			0.95	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	3438		1770	3499			1770	1863	1567	1770	1633
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.92	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	140	309	66	123	577	40	39	163	9	92	4	4
RTOR Reduction (vph)	0	22	0	0	6	0	0	0	0	59	0	11
Lane Group Flow (vph)	140	353	0	123	611	0	0	202	9	33	4	6
Confl. Peds. (#/hr)			1			3				2		
Turn Type	Prot	NA		Prot	NA		Prot	Prot	NA	pm+ov	Prot	NA
Protected Phases	5	2		1	6		3	3	8	1	7	4
Permitted Phases										8		
Actuated Green, G (s)	7.4	19.6		4.9	17.6			6.0	17.4	22.3	0.5	11.9
Effective Green, g (s)	7.4	19.6		4.9	17.6			6.0	17.4	22.3	0.5	11.9
Actuated g/C Ratio	0.12	0.32		0.08	0.28			0.10	0.28	0.36	0.01	0.19
Clearance Time (s)	4.4	6.1		4.4	5.6			4.4	4.9	4.4	4.4	4.9
Vehicle Extension (s)	2.0	2.7		2.0	3.0			2.0	2.0	2.0	2.0	2.0
Lane Grp Cap (vph)	210	1083		139	990			170	521	561	14	312
v/s Ratio Prot	c0.08	0.10		0.07	c0.17			c0.11	0.00	c0.00	0.00	0.00
v/s Ratio Perm										0.02		
v/c Ratio	0.67	0.33		0.88	0.62			1.19	0.02	0.06	0.29	0.02
Uniform Delay, d1	26.2	16.3		28.4	19.4			28.1	16.2	13.1	30.7	20.4
Progression Factor	1.00	1.00		1.00	1.00			1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	6.1	0.1		42.8	1.2			128.7	0.0	0.0	4.1	0.0
Delay (s)	32.3	16.4		71.1	20.5			156.8	16.2	13.1	34.7	20.4
Level of Service	C	B		E	C			F	B	B	C	C
Approach Delay (s)		20.7			28.9				109.0			23.2
Approach LOS		C			C				F			C

Intersection Summary			
HCM 2000 Control Delay	41.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.55		
Actuated Cycle Length (s)	62.2	Sum of lost time (s)	19.8
Intersection Capacity Utilization	52.1%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	12
Future Volume (vph)	12
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frpb, ped/bikes	
Flpb, ped/bikes	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.90
Adj. Flow (vph)	13
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Confl. Peds. (#/hr)	1
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	27	92	39	23	83	95	58	1307	342	57	357	27
Future Volume (vph)	27	92	39	23	83	95	58	1307	342	57	357	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	4.9		4.4	5.5		4.4	5.4	
Lane Util. Factor	1.00	0.95		0.97	0.95		0.97	0.91		0.97	0.91	
Frpb, ped/bikes	1.00	0.99		1.00	0.99		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.96		1.00	0.92		1.00	0.97		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3359		3433	3232		3433	4909		3433	5022	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	3359		3433	3232		3433	4909		3433	5022	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	30	102	43	26	92	106	64	1452	380	63	397	30
RTOR Reduction (vph)	0	37	0	0	92	0	0	23	0	0	4	0
Lane Group Flow (vph)	30	108	0	26	106	0	64	1809	0	63	423	0
Confl. Peds. (#/hr)			8			1			3			8
Confl. Bikes (#/hr)			1						2			2
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Actuated Green, G (s)	4.9	20.3		3.7	19.1		5.7	91.1		5.7	91.2	
Effective Green, g (s)	4.9	20.3		3.7	19.1		5.7	91.1		5.7	91.2	
Actuated g/C Ratio	0.04	0.15		0.03	0.14		0.04	0.65		0.04	0.65	
Clearance Time (s)	4.4	4.9		4.4	4.9		4.4	5.5		4.4	5.4	
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	3.6		2.0	3.8	
Lane Grp Cap (vph)	61	487		90	440		139	3194		139	3271	
v/s Ratio Prot	c0.02	0.03		0.01	c0.03		c0.02	c0.37		0.02	0.08	
v/s Ratio Perm												
v/c Ratio	0.49	0.22		0.29	0.24		0.46	0.57		0.45	0.13	
Uniform Delay, d1	66.3	52.9		66.9	54.0		65.6	13.5		65.6	9.3	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.09	0.72	
Incremental Delay, d2	2.3	0.1		0.6	0.1		0.9	0.7		0.8	0.1	
Delay (s)	68.6	53.0		67.5	54.1		66.5	14.3		72.7	6.8	
Level of Service	E	D		E	D		E	B		E	A	
Approach Delay (s)		55.6			55.6			16.0			15.2	
Approach LOS		E			E			B			B	

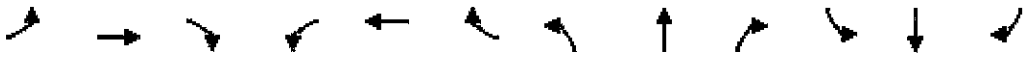
Intersection Summary			
HCM 2000 Control Delay	21.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	19.2
Intersection Capacity Utilization	58.3%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	89	111	53	44	47	14	200	867	441	14	135	32
Future Volume (vph)	89	111	53	44	47	14	200	867	441	14	135	32
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	4.9		4.4	4.9		4.4	5.3	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.95		1.00	0.96		1.00	0.95		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3346		1770	3414		1770	3344		1770	3428	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	3346		1770	3414		1770	3344		1770	3428	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	99	123	59	49	52	16	222	963	490	16	150	36
RTOR Reduction (vph)	0	47	0	0	14	0	0	56	0	0	20	0
Lane Group Flow (vph)	99	135	0	49	54	0	222	1397	0	16	166	0
Confl. Peds. (#/hr)			5						2			1
Confl. Bikes (#/hr)			3						1			
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Actuated Green, G (s)	7.9	15.1		3.6	10.8		13.6	37.3		0.6	23.9	
Effective Green, g (s)	7.9	15.1		3.6	10.8		13.6	37.3		0.6	23.9	
Actuated g/C Ratio	0.11	0.20		0.05	0.14		0.18	0.50		0.01	0.32	
Clearance Time (s)	4.4	4.9		4.4	4.9		4.4	4.9		4.4	5.3	
Vehicle Extension (s)	2.0	5.3		2.0	5.4		2.0	3.8		2.0	3.8	
Lane Grp Cap (vph)	185	671		84	490		320	1658		14	1089	
v/s Ratio Prot	c0.06	c0.04		0.03	0.02		c0.13	c0.42		0.01	0.05	
v/s Ratio Perm												
v/c Ratio	0.54	0.20		0.58	0.11		0.69	0.84		1.14	0.15	
Uniform Delay, d1	31.9	25.0		35.1	28.0		28.8	16.4		37.3	18.4	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.5	0.3		6.5	0.2		5.2	4.2		291.3	0.1	
Delay (s)	33.4	25.4		41.6	28.3		34.0	20.6		328.6	18.5	
Level of Service	C	C		D	C		C	C		F	B	
Approach Delay (s)		28.2			33.8			22.4			43.0	
Approach LOS		C			C			C			D	

Intersection Summary				
HCM 2000 Control Delay	25.5	HCM 2000 Level of Service	C	
HCM 2000 Volume to Capacity ratio	0.70			
Actuated Cycle Length (s)	75.2	Sum of lost time (s)	19.0	
Intersection Capacity Utilization	68.0%	ICU Level of Service	C	
Analysis Period (min)	15			

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	211	316	62	4	32	34	108	309	166	93	46	22
Future Volume (vph)	211	316	62	4	32	34	108	309	166	93	46	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9			4.9		4.4	5.3		4.4	5.3	
Lane Util. Factor	1.00	0.95			0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00			0.99		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00			1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.98			0.93		1.00	0.95		1.00	0.95	
Flt Protected	0.95	1.00			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3445			3250		1770	3338		1770	3354	
Flt Permitted	0.95	1.00			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	3445			3250		1770	3338		1770	3354	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	234	351	69	4	36	38	120	343	184	103	51	24
RTOR Reduction (vph)	0	15	0	0	33	0	0	67	0	0	18	0
Lane Group Flow (vph)	234	405	0	0	45	0	120	460	0	103	57	0
Confl. Peds. (#/hr)			1			3			2			2
Confl. Bikes (#/hr)												1
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	4	4		3	3		5	2		1	6	
Permitted Phases												
Actuated Green, G (s)	15.4	15.4			7.9		6.2	17.0		6.2	17.0	
Effective Green, g (s)	15.4	15.4			7.9		6.2	17.0		6.2	17.0	
Actuated g/C Ratio	0.23	0.23			0.12		0.09	0.26		0.09	0.26	
Clearance Time (s)	4.9	4.9			4.9		4.4	5.3		4.4	5.3	
Vehicle Extension (s)	3.3	3.3			3.3		2.0	4.4		2.0	4.4	
Lane Grp Cap (vph)	413	803			389		166	859		166	863	
v/s Ratio Prot	c0.13	0.12			c0.01		c0.07	c0.14		0.06	0.02	
v/s Ratio Perm												
v/c Ratio	0.57	0.50			0.11		0.72	0.54		0.62	0.07	
Uniform Delay, d1	22.4	22.0			25.9		29.1	21.1		28.8	18.5	
Progression Factor	1.00	1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.9	0.6			0.1		12.4	1.0		5.1	0.1	
Delay (s)	24.2	22.5			26.1		41.4	22.1		33.9	18.6	
Level of Service	C	C			C		D	C		C	B	
Approach Delay (s)		23.1			26.1			25.7			27.4	
Approach LOS		C			C			C			C	

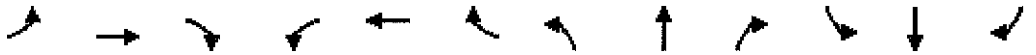
Intersection Summary			
HCM 2000 Control Delay	24.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	66.0	Sum of lost time (s)	19.5
Intersection Capacity Utilization	50.4%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	258	1032	119	356	1620	1207	142	162	310	186	36	17
Future Volume (vph)	258	1032	119	356	1620	1207	142	162	310	186	36	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.5	5.5	4.9	5.3	5.3	4.4	5.0	4.9	4.4	5.3	
Lane Util. Factor	0.97	0.91	1.00	0.97	0.86	0.86	0.97	1.00	0.88	0.97	0.95	
Frpb, ped/bikes	1.00	1.00	0.99	1.00	0.99	0.97	1.00	1.00	0.99	1.00	0.99	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.96	0.85	1.00	1.00	0.85	1.00	0.95	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	3433	5085	1562	3433	4591	1327	3433	1863	2756	3433	3339	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	3433	5085	1562	3433	4591	1327	3433	1863	2756	3433	3339	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	272	1086	125	375	1705	1271	149	171	326	196	38	18
RTOR Reduction (vph)	0	0	66	0	39	222	0	0	36	0	15	0
Lane Group Flow (vph)	272	1086	59	375	2251	464	149	171	290	196	41	0
Confl. Peds. (#/hr)			1			9			6			12
Confl. Bikes (#/hr)						1			1			1
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	
Protected Phases	5	2		1	6		3	8	1	7	4	
Permitted Phases			2			6			8			
Actuated Green, G (s)	14.1	66.2	66.2	19.2	72.0	72.0	12.5	26.2	45.4	8.6	22.0	
Effective Green, g (s)	14.1	66.2	66.2	19.2	72.0	72.0	12.5	26.2	45.4	8.6	22.0	
Actuated g/C Ratio	0.10	0.47	0.47	0.14	0.51	0.51	0.09	0.19	0.32	0.06	0.16	
Clearance Time (s)	4.4	5.5	5.5	4.9	5.3	5.3	4.4	5.0	4.9	4.4	5.3	
Vehicle Extension (s)	2.0	4.5	4.5	2.0	4.3	4.3	2.0	5.2	2.0	2.0	4.6	
Lane Grp Cap (vph)	345	2404	738	470	2361	682	306	348	893	210	524	
v/s Ratio Prot	0.08	0.21		c0.11	c0.49		0.04	c0.09	0.04	c0.06	0.01	
v/s Ratio Perm			0.04			0.35			0.06			
v/c Ratio	0.79	0.45	0.08	0.80	0.95	0.68	0.49	0.49	0.32	0.93	0.08	
Uniform Delay, d1	61.5	24.7	20.2	58.5	32.4	25.4	60.7	50.9	35.7	65.4	50.3	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	10.5	0.6	0.2	8.6	10.4	5.4	0.4	2.4	0.1	43.1	0.1	
Delay (s)	72.0	25.4	20.4	67.1	42.8	30.8	61.1	53.4	35.8	108.5	50.5	
Level of Service	E	C	C	E	D	C	E	D	D	F	D	
Approach Delay (s)		33.5			43.1			46.3			95.6	
Approach LOS		C			D			D			F	

Intersection Summary			
HCM 2000 Control Delay	43.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	20.1
Intersection Capacity Utilization	82.9%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	19	133	61	168	213	260	54	416	90	489	1109	36
Future Volume (vph)	19	133	61	168	213	260	54	416	90	489	1109	36
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9	4.9	4.4	4.9	4.4	4.4	5.5		4.4	5.4	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91		0.97	0.91	
Frpb, ped/bikes	1.00	1.00	0.97	1.00	1.00	0.98	1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.97		1.00	1.00	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1863	1537	1770	1863	1552	1770	4935		3433	5054	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1863	1537	1770	1863	1552	1770	4935		3433	5054	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	21	148	68	187	237	289	60	462	100	543	1232	40
RTOR Reduction (vph)	0	0	57	0	0	76	0	19	0	0	2	0
Lane Group Flow (vph)	21	148	11	187	237	214	60	543	0	543	1270	0
Confl. Peds. (#/hr)			9			17			2			7
Confl. Bikes (#/hr)			5			8			3			8
Turn Type	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA		Prot	NA	
Protected Phases	7	4		3	8	1	5	2		1	6	
Permitted Phases			4			8						
Actuated Green, G (s)	4.2	23.0	23.0	19.1	37.9	64.5	8.0	52.1		26.6	70.8	
Effective Green, g (s)	4.2	23.0	23.0	19.1	37.9	64.5	8.0	52.1		26.6	70.8	
Actuated g/C Ratio	0.03	0.16	0.16	0.14	0.27	0.46	0.06	0.37		0.19	0.51	
Clearance Time (s)	4.4	4.9	4.9	4.4	4.9	4.4	4.4	5.5		4.4	5.4	
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	4.2		2.0	4.2	
Lane Grp Cap (vph)	53	306	252	241	504	715	101	1836		652	2555	
v/s Ratio Prot	0.01	0.08		c0.11	c0.13	0.06	0.03	0.11		c0.16	c0.25	
v/s Ratio Perm			0.01			0.08						
v/c Ratio	0.40	0.48	0.04	0.78	0.47	0.30	0.59	0.30		0.83	0.50	
Uniform Delay, d1	66.7	53.1	49.2	58.4	42.7	23.6	64.4	31.0		54.6	22.8	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.15	0.78		1.00	1.00	
Incremental Delay, d2	1.8	0.4	0.0	13.3	0.3	0.1	6.0	0.4		8.6	0.7	
Delay (s)	68.4	53.5	49.3	71.6	42.9	23.7	79.9	24.6		63.1	23.5	
Level of Service	E	D	D	E	D	C	E	C		E	C	
Approach Delay (s)		53.6			42.7			30.0			35.4	
Approach LOS		D			D			C			D	

Intersection Summary				
HCM 2000 Control Delay	37.2	HCM 2000 Level of Service	D	
HCM 2000 Volume to Capacity ratio	0.63			
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	19.2	
Intersection Capacity Utilization	75.0%	ICU Level of Service	D	
Analysis Period (min)	15			

c Critical Lane Group

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	73	707	516	33	26	62
Future Volume (vph)	73	707	516	33	26	62
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	5.2	5.2		4.9	
Lane Util. Factor	1.00	0.95	0.95		1.00	
Frpb, ped/bikes	1.00	1.00	1.00		1.00	
Flpb, ped/bikes	1.00	1.00	1.00		1.00	
Frt	1.00	1.00	0.99		0.90	
Flt Protected	0.95	1.00	1.00		0.99	
Satd. Flow (prot)	1770	3539	3501		1661	
Flt Permitted	0.95	1.00	1.00		0.99	
Satd. Flow (perm)	1770	3539	3501		1661	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	81	786	573	37	29	69
RTOR Reduction (vph)	0	0	5	0	59	0
Lane Group Flow (vph)	81	786	605	0	39	0
Confl. Peds. (#/hr)				3		
Confl. Bikes (#/hr)				4		
Turn Type	Split	NA	NA		Prot	
Protected Phases	2	2	6		4	
Permitted Phases						
Actuated Green, G (s)	18.9	18.9	16.1		8.2	
Effective Green, g (s)	18.9	18.9	16.1		8.2	
Actuated g/C Ratio	0.32	0.32	0.28		0.14	
Clearance Time (s)	5.2	5.2	5.2		4.9	
Vehicle Extension (s)	3.5	3.5	3.5		2.0	
Lane Grp Cap (vph)	571	1143	963		232	
v/s Ratio Prot	0.05	c0.22	c0.17		c0.02	
v/s Ratio Perm						
v/c Ratio	0.14	0.69	0.63		0.17	
Uniform Delay, d1	14.0	17.2	18.6		22.1	
Progression Factor	1.00	1.00	1.00		1.00	
Incremental Delay, d2	0.1	1.8	1.4		0.1	
Delay (s)	14.2	19.0	19.9		22.3	
Level of Service	B	B	B		C	
Approach Delay (s)		18.6	19.9		22.3	
Approach LOS		B	B		C	

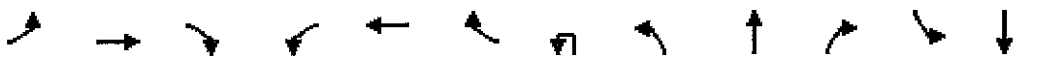
Intersection Summary			
HCM 2000 Control Delay	19.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	58.5	Sum of lost time (s)	15.3
Intersection Capacity Utilization	41.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	28	490	219	158	289	11	181	35	73	136	416	80
Future Volume (vph)	28	490	219	158	289	11	181	35	73	136	416	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	0.97	0.95		1.00	0.95		0.97	0.95		0.97	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	0.99		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.95		1.00	0.99		1.00	0.90		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	3433	3357		1770	3518		3433	3153		3433	3445	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	3433	3357		1770	3518		3433	3153		3433	3445	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	31	544	243	176	321	12	201	39	81	151	462	89
RTOR Reduction (vph)	0	51	0	0	3	0	0	61	0	0	16	0
Lane Group Flow (vph)	31	736	0	176	330	0	201	59	0	151	535	0
Confl. Peds. (#/hr)			4			4			1			1
Confl. Bikes (#/hr)			1			2						2
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases												
Actuated Green, G (s)	2.1	27.0		13.5	38.4		9.8	20.5		7.9	18.6	
Effective Green, g (s)	2.1	27.0		13.5	38.4		9.8	20.5		7.9	18.6	
Actuated g/C Ratio	0.02	0.32		0.16	0.45		0.12	0.24		0.09	0.22	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	84	1067		281	1591		396	761		319	754	
v/s Ratio Prot	0.01	c0.22		c0.10	0.09		c0.06	0.02		0.04	c0.16	
v/s Ratio Perm												
v/c Ratio	0.37	0.69		0.63	0.21		0.51	0.08		0.47	0.71	
Uniform Delay, d1	40.7	25.3		33.3	14.1		35.3	24.9		36.5	30.6	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	2.7	1.9		4.3	0.1		1.0	0.0		1.1	3.1	
Delay (s)	43.5	27.2		37.7	14.1		36.3	24.9		37.6	33.7	
Level of Service	D	C		D	B		D	C		D	C	
Approach Delay (s)		27.8			22.3			32.1			34.6	
Approach LOS		C			C			C			C	

Intersection Summary				
HCM 2000 Control Delay	29.2	HCM 2000 Level of Service	C	
HCM 2000 Volume to Capacity ratio	0.65			
Actuated Cycle Length (s)	84.9	Sum of lost time (s)	16.0	
Intersection Capacity Utilization	62.1%	ICU Level of Service	B	
Analysis Period (min)	15			

c Critical Lane Group

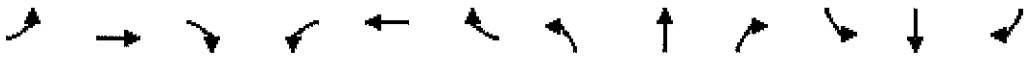


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	10	552	118	66	205	1	4	124	0	127	51	71
Future Volume (vph)	10	552	118	66	205	1	4	124	0	127	51	71
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	6.1		4.4	5.6			4.4		4.4	4.4	4.9
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00		1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00			1.00		0.99	1.00	0.99
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00		1.00	1.00	1.00
Frt	1.00	0.97		1.00	1.00			1.00		0.85	1.00	0.91
Flt Protected	0.95	1.00		0.95	1.00			0.95		1.00	0.95	1.00
Satd. Flow (prot)	1770	3446		1770	3537			1770		1565	1770	1679
Flt Permitted	0.95	1.00		0.95	1.00			0.95		1.00	0.95	1.00
Satd. Flow (perm)	1770	3446		1770	3537			1770		1565	1770	1679
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.92	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	11	613	131	73	228	1	4	138	0	141	57	79
RTOR Reduction (vph)	0	21	0	0	1	0	0	0	0	95	0	69
Lane Group Flow (vph)	11	723	0	73	228	0	0	142	0	46	57	128
Confl. Peds. (#/hr)						1				3		
Confl. Bikes (#/hr)						1						
Turn Type	Prot	NA		Prot	NA			Prot	Prot	pm+ov	Prot	NA
Protected Phases	5	2		1	6			3	3	8	1	7	4
Permitted Phases											8		
Actuated Green, G (s)	0.5	22.0		4.2	26.2			6.9		20.9	2.8	12.6
Effective Green, g (s)	0.5	22.0		4.2	26.2			6.9		20.9	2.8	12.6
Actuated g/C Ratio	0.01	0.34		0.06	0.40			0.11		0.32	0.04	0.19
Clearance Time (s)	4.4	6.1		4.4	5.6			4.4		4.4	4.4	4.9
Vehicle Extension (s)	2.0	2.7		2.0	3.0			2.0		2.0	2.0	2.0
Lane Grp Cap (vph)	13	1157		113	1414			186		499	75	322
v/s Ratio Prot	0.01	c0.21		c0.04	c0.06			c0.08		c0.01	0.03	c0.08
v/s Ratio Perm										0.02		
v/c Ratio	0.85	0.63		0.65	0.16			0.76		0.09	0.76	0.40
Uniform Delay, d1	32.5	18.3		29.9	12.6			28.5		15.6	31.0	23.1
Progression Factor	1.00	1.00		1.00	1.00			1.00		1.00	1.00	1.00
Incremental Delay, d2	162.2	1.0		9.1	0.1			15.3		0.0	32.7	0.3
Delay (s)	194.7	19.3		39.1	12.7			43.8		15.7	63.7	23.4
Level of Service	F	B		D	B			D		B	E	C
Approach Delay (s)		21.8			19.0				29.8			32.5
Approach LOS		C			B				C			C

Intersection Summary			
HCM 2000 Control Delay	24.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	65.5	Sum of lost time (s)	19.8
Intersection Capacity Utilization	58.3%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	106
Future Volume (vph)	106
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frpb, ped/bikes	
Flpb, ped/bikes	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	0.90
Adj. Flow (vph)	118
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Confl. Peds. (#/hr)	4
Confl. Bikes (#/hr)	1
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	
Intersection Summary	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	38	77	62	153	250	119	73	403	48	84	1232	126
Future Volume (vph)	38	77	62	153	250	119	73	403	48	84	1232	126
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	4.9		4.4	5.5		4.4	5.4	
Lane Util. Factor	1.00	0.95		0.97	0.95		0.97	0.91		0.97	0.91	
Frpb, ped/bikes	1.00	0.99		1.00	0.99		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.93		1.00	0.95		1.00	0.98		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3278		3433	3348		3433	4997		3433	5004	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	3278		3433	3348		3433	4997		3433	5004	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	42	86	69	170	278	132	81	448	53	93	1369	140
RTOR Reduction (vph)	0	59	0	0	46	0	0	7	0	0	6	0
Lane Group Flow (vph)	42	96	0	170	364	0	81	494	0	93	1503	0
Confl. Peds. (#/hr)			4			4			1			5
Confl. Bikes (#/hr)						2			3			4
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Actuated Green, G (s)	6.8	21.3		11.3	25.8		7.7	80.0		8.2	80.6	
Effective Green, g (s)	6.8	21.3		11.3	25.8		7.7	80.0		8.2	80.6	
Actuated g/C Ratio	0.05	0.15		0.08	0.18		0.06	0.57		0.06	0.58	
Clearance Time (s)	4.4	4.9		4.4	4.9		4.4	5.5		4.4	5.4	
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	3.6		2.0	3.8	
Lane Grp Cap (vph)	85	498		277	616		188	2855		201	2880	
v/s Ratio Prot	0.02	0.03		c0.05	c0.11		0.02	0.10		c0.03	c0.30	
v/s Ratio Perm												
v/c Ratio	0.49	0.19		0.61	0.59		0.43	0.17		0.46	0.52	
Uniform Delay, d1	64.9	51.8		62.2	52.3		64.0	14.3		63.8	18.0	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.16	0.52	
Incremental Delay, d2	1.6	0.1		2.8	1.0		0.6	0.1		0.6	0.6	
Delay (s)	66.6	51.9		65.1	53.3		64.6	14.4		74.6	10.1	
Level of Service	E	D		E	D		E	B		E	B	
Approach Delay (s)		55.0			56.7			21.4			13.8	
Approach LOS		E			E			C			B	

Intersection Summary			
HCM 2000 Control Delay	26.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.55		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	19.2
Intersection Capacity Utilization	62.6%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	22	47	148	284	196	14	178	174	77	26	819	77
Future Volume (vph)	22	47	148	284	196	14	178	174	77	26	819	77
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	4.9		4.4	4.9		4.4	5.3	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.98		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.89		1.00	0.99		1.00	0.95		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3088		1770	3500		1770	3360		1770	3489	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	3088		1770	3500		1770	3360		1770	3489	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	24	52	164	316	218	16	198	193	86	29	910	86
RTOR Reduction (vph)	0	137	0	0	6	0	0	43	0	0	7	0
Lane Group Flow (vph)	24	79	0	316	228	0	198	236	0	29	989	0
Confl. Peds. (#/hr)			3			2			2			1
Confl. Bikes (#/hr)			4						2			2
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Actuated Green, G (s)	2.1	14.7		15.7	28.3		9.7	39.4		2.2	31.5	
Effective Green, g (s)	2.1	14.7		15.7	28.3		9.7	39.4		2.2	31.5	
Actuated g/C Ratio	0.02	0.16		0.17	0.31		0.11	0.43		0.02	0.35	
Clearance Time (s)	4.4	4.9		4.4	4.9		4.4	4.9		4.4	5.3	
Vehicle Extension (s)	2.0	5.3		2.0	5.4		2.0	3.8		2.0	3.8	
Lane Grp Cap (vph)	41	501		306	1093		189	1461		42	1213	
v/s Ratio Prot	0.01	0.03		c0.18	c0.07		c0.11	0.07		0.02	c0.28	
v/s Ratio Perm												
v/c Ratio	0.59	0.16		1.03	0.21		1.05	0.16		0.69	0.82	
Uniform Delay, d1	43.8	32.6		37.4	22.9		40.4	15.6		43.9	26.9	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	13.0	0.3		60.2	0.2		78.6	0.1		32.7	4.5	
Delay (s)	56.8	33.0		97.6	23.1		119.0	15.6		76.5	31.4	
Level of Service	E	C		F	C		F	B		E	C	
Approach Delay (s)		35.3			65.9			58.5			32.7	
Approach LOS		D			E			E			C	

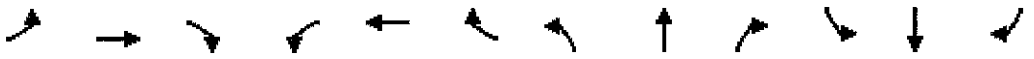
Intersection Summary			
HCM 2000 Control Delay	46.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	90.6	Sum of lost time (s)	19.0
Intersection Capacity Utilization	74.4%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	22	33	102	178	360	99	44	70	10	24	262	85
Future Volume (vph)	22	33	102	178	360	99	44	70	10	24	262	85
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9			4.9		4.4	5.3		4.4	5.3	
Lane Util. Factor	1.00	0.95			0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.99			1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00			1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.89			0.98		1.00	0.98		1.00	0.96	
Flt Protected	0.95	1.00			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3107			3402		1770	3468		1770	3396	
Flt Permitted	0.95	1.00			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	3107			3402		1770	3468		1770	3396	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	24	37	113	198	400	110	49	78	11	27	291	94
RTOR Reduction (vph)	0	97	0	0	13	0	0	8	0	0	30	0
Lane Group Flow (vph)	24	53	0	0	695	0	49	81	0	27	355	0
Confl. Peds. (#/hr)			2						1			4
Confl. Bikes (#/hr)						1						2
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	4	4		3	3		5	2		1	6	
Permitted Phases												
Actuated Green, G (s)	10.2	10.2			19.6		3.1	19.5		1.3	17.7	
Effective Green, g (s)	10.2	10.2			19.6		3.1	19.5		1.3	17.7	
Actuated g/C Ratio	0.15	0.15			0.28		0.04	0.28		0.02	0.25	
Clearance Time (s)	4.9	4.9			4.9		4.4	5.3		4.4	5.3	
Vehicle Extension (s)	3.3	3.3			3.3		2.0	4.4		2.0	4.4	
Lane Grp Cap (vph)	257	452			951		78	964		32	857	
v/s Ratio Prot	0.01	c0.02			c0.20		c0.03	0.02		0.02	c0.10	
v/s Ratio Perm												
v/c Ratio	0.09	0.12			0.73		0.63	0.08		0.84	0.41	
Uniform Delay, d1	25.9	26.0			22.9		32.9	18.7		34.3	21.9	
Progression Factor	1.00	1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.2	0.1			3.0		10.8	0.1		93.1	0.5	
Delay (s)	26.1	26.2			25.8		43.8	18.8		127.4	22.4	
Level of Service	C	C			C		D	B		F	C	
Approach Delay (s)		26.2			25.8			27.6			29.3	
Approach LOS		C			C			C			C	

Intersection Summary				
HCM 2000 Control Delay	27.0	HCM 2000 Level of Service	C	
HCM 2000 Volume to Capacity ratio	0.49			
Actuated Cycle Length (s)	70.1	Sum of lost time (s)	19.5	
Intersection Capacity Utilization	56.7%	ICU Level of Service	B	
Analysis Period (min)	15			

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	34	1428	123	362	1357	298	187	45	520	905	307	186
Future Volume (vph)	34	1428	123	362	1357	298	187	45	520	905	307	186
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	5.5	5.5	4.9	5.3	5.3	4.4	5.0	4.9	4.4	5.3	
Lane Util. Factor	0.97	0.91	1.00	0.97	0.86	0.86	0.97	1.00	0.88	0.97	0.95	
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.98	1.00	1.00	0.99	1.00	0.99	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.94	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	3433	5085	1563	3433	4789	1335	3433	1863	2765	3433	3305	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	3433	5085	1563	3433	4789	1335	3433	1863	2765	3433	3305	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	36	1503	129	381	1428	314	197	47	547	953	323	196
RTOR Reduction (vph)	0	0	90	0	1	121	0	0	63	0	78	0
Lane Group Flow (vph)	36	1503	39	381	1458	162	197	47	484	953	441	0
Confl. Peds. (#/hr)						5			4			12
Confl. Bikes (#/hr)			1			1						2
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	
Protected Phases	5	2		1	6		3	8	1	7	4	
Permitted Phases			2			6			8			
Actuated Green, G (s)	4.5	42.7	42.7	20.9	59.8	59.8	12.1	19.0	39.9	37.6	44.2	
Effective Green, g (s)	4.5	42.7	42.7	20.9	59.8	59.8	12.1	19.0	39.9	37.6	44.2	
Actuated g/C Ratio	0.03	0.31	0.31	0.15	0.43	0.43	0.09	0.14	0.28	0.27	0.32	
Clearance Time (s)	4.4	5.5	5.5	4.9	5.3	5.3	4.4	5.0	4.9	4.4	5.3	
Vehicle Extension (s)	2.0	4.5	4.5	2.0	4.3	4.3	2.0	5.2	2.0	2.0	4.6	
Lane Grp Cap (vph)	110	1550	476	512	2045	570	296	252	788	922	1043	
v/s Ratio Prot	0.01	c0.30		c0.11	0.30		0.06	0.03	c0.09	c0.28	0.13	
v/s Ratio Perm			0.03			0.12			0.08			
v/c Ratio	0.33	0.97	0.08	0.74	0.71	0.28	0.67	0.19	0.61	1.03	0.42	
Uniform Delay, d1	66.3	48.0	34.7	57.0	33.0	26.1	62.0	53.6	43.4	51.2	37.8	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.6	16.7	0.3	5.1	2.1	1.3	4.3	0.8	1.0	38.6	0.5	
Delay (s)	66.9	64.7	35.0	62.1	35.2	27.4	66.3	54.5	44.4	89.8	38.3	
Level of Service	E	E	D	E	D	C	E	D	D	F	D	
Approach Delay (s)		62.5			39.0			50.4			71.7	
Approach LOS		E			D			D			E	

Intersection Summary				
HCM 2000 Control Delay	54.9	HCM 2000 Level of Service	D	
HCM 2000 Volume to Capacity ratio	0.90			
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	20.1	
Intersection Capacity Utilization	87.0%	ICU Level of Service	E	
Analysis Period (min)	15			

c Critical Lane Group

Appendix E

Cumulative Projects Information